

The Sea as Island borderscaping the Mediterranean Basin

P5 Thesis Report June 2023

Myrto Karampela-Makrygianni | 5616220 All the visual material have been produced by the author unless stated otherwise. The title pages have been adapted from the work of Imran Mir.

First Mentor | Maria Luisa Calabrese Second Mentor | Heidi Sohn

TU Delft | Faculty of Architecture & the Built Environment MSc Architecture, Urbanism & the Building Sciences

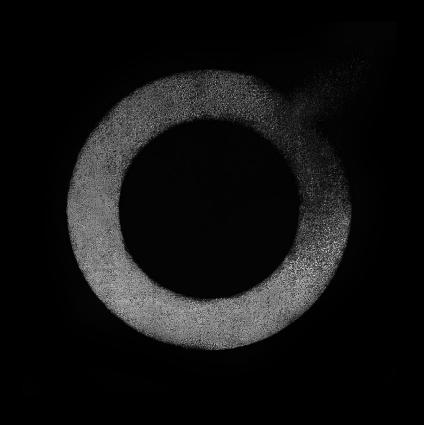
'To live in the world means essentially that a world of things is between those who have it in common, as a table is located between those who sit around it; the world, like everything in-between, relates and separates men at the same time.'

Hannah Arendt (1958). The Human Condition

## Contents

Motivation8Positioning10Research Scope12Problematization14Problem Statement16Research Question(s)18Methodology20Research Framework22Theoretical Framework24Conceptual Framework28
Research Scope 12 Problematization 14 Problem Statement 16 Research Question(s) 18  Methodology 20 Research Framework 22 Theoretical Framework 24 Conceptual Framework 28
Problematization 14 Problem Statement 16 Research Question(s) 18  Methodology 20 Research Framework 22 Theoretical Framework 24 Conceptual Framework 28
Problem Statement 16 Research Question(s) 18  Methodology 20 Research Framework 22 Theoretical Framework 24 Conceptual Framework 28
Research Question(s) 18  Methodology 20 Research Framework 22 Theoretical Framework 24 Conceptual Framework 28
Methodology20Research Framework22Theoretical Framework24Conceptual Framework28
Research Framework 22 Theoretical Framework 24 Conceptual Framework 28
Theoretical Framework 24 Conceptual Framework 28
Conceptual Framework 28
ı
A1
Analytical Framework 30
Monographies 32
Transitional Territory 34
Accumulation-Clearance 36
Palimpsest 38
Transpositions 40
Transgression 42
City   Human 44
City   More-than-Human 45
More-than-City   Human 46
More-than-City   More-than-Human 47
Composite 48
Territorology 50
Geopolitics - Kinopolitics 52
Topos - Form 58
Habitat - Interaction 62
Matter - Substance 68
Synthesis 76
Simulad Variables
Situated Knowledge 82 Proximal Distance 84
Collection of Figures 86
e e e e e e e e e e e e e e e e e e e
Human vs More-than-human processes 86 Material Conditions of Liminality 94
Inventory of (Mediterranean) Islands 102
Proximal Construction of Touch 110

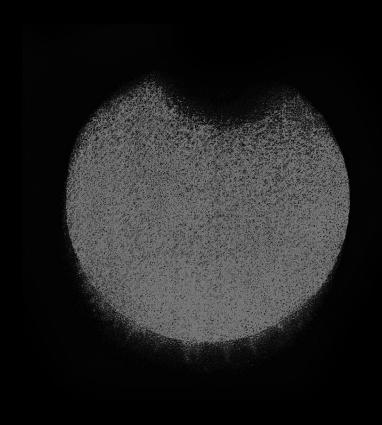
Speculative (Re)Fabulation	112
Julia as SF (string figure)	114
Diffraction Composition	118
Topos - Form	118
Matter - Substance	120
Zoe-Politics	122
Site & Sight	124
Project of Sympoiesis	126
Medianatureculture Scenario	128
Diffraction Alteration	130
Topos - Form	130
Matter - Substance	136
Zoe-Politics	142
Unknowability	148
Weaving Worlds	150
Non-Scalability	152
Conclusions	156
Synecdoche	158
Reflection	164
Process & Alignment	166
Methods & Approach	168
Evaluation & Significance	170
Limitations & Further Research	172
Bibliography	174



Abstract

The Mediterranean Basin - defined and restricted by its own boundness - embodies a mesocosm for the network of Critical Zones containing in its dense space all the fragilities, urgencies and uncertainties that characterize living in the 21st century, while being the world's most appropriated, militarized and instrumentalized sea. In its deep - and often intentionally obscured oceanic space – the notion of coexistence is constantly negotiated through overlapping (re)territorialization processes, accelerated climatic or geological transformations, and increased interaction between its complex human and more-than-human assemblages, especially in light of the emerging climate crisis. As the focus of urbanization shifts from the land to the sea, the question of sympoiesis and response-ability becomes central for the establishment of a counter paradigm for the worlding of the sea; opposed to the prevailing processes of domination, expulsion and colonization that accompany anthropogenic practices in the state-regime nexus. This counter paradigm arises from the understanding of borderscapes as critical in-between conditions of proximities, intensities, and assimilations whose investigational mapping can induce soft territorial acts and practices of care.

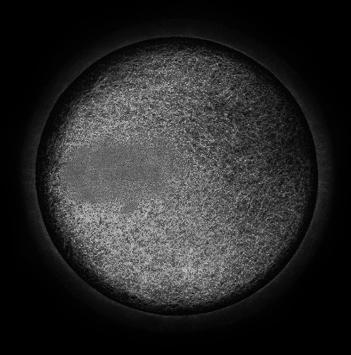
In this context, the aim of this thesis is twofold: firstly, to critically map the Mediterranean Basin painting its fragmentary portrait as a sociocultural product of interconnected and conflicting political, cultural, historical and environmental forces - while simultaneously revealing situated traces of immanence and resistance - and secondly, to experiment with soft territorial acts and practices of care in the process of deterritorialization and creation of a new common ground for the neglected Mediterranean human and more-than-human entities. To do so, the thesis project revolves around the concept of the island as an in-between space of viscosity that reconceptualizes the spatiotemporal understanding of the boundary; connected to the prototypical human territorial act. The conceptual experimentation lands to the discovery of the ephemeral volcanic formation of Julia island that becomes the speculative (re)fabulation of a conscious act of extraterritoriality bridging the natural and the praxeological space through processes of terraforming. Using Julia, then, as a synecdoche for the whole Mediterranean Basin, the project concludes by weaving an alternative model not only for the understanding and the planning of the sea but generally for the inhabitation - or more precisely cohabitation – of the 'damaged' planet.



Personal Motivation

The following thesis is developed in a crucial moment of my process of becoming; it marks a conscious attempt to answer whether (urban) design can be part of a counterforce against the dominant practices of world-making that have participated in the development of the Anthropocene and the total urbanization of the planet disrupting its ontological pluralism. Understanding design not merely as neutral but as a deeply political act - whose meanings, frameworks, values, and representations entail a conscious position with considerable consequences - has initiated a personal quest for the incorporation of caring practices in my projects. This quest, as embodied in the following thesis project, directs an intertwining of research-by-design and design-by-speculation - in the meaning given by Haraway (2016) in her book Staying with the Trouble: Making Kin in the Chthulucene - methodologies with an activist position envisioning my definition of the designer's role in light of the complex earth-posed urgencies.

In this sense, the motivation of the thesis project is not primarily directed by the site selection – although the preoccupation with the Mediterranean Sea that has shaped me and allow for practices of living-with to inoculate the design development was deemed essential - but by the process selection. I have been struggling for quite some time already with the simplifications required for a project to offer convincing solutions to problems whose complexity is often impossible to even grasp, especially if studied in their global scale interdependencies. Searching, then, a counter methodology to deal with problems - as a potentially activist designer - led to the understanding of philosophy not merely as a medium of reflection but as a crucial medium of production through the development and the experimentation with concepts. This experimentation, as a design process, doesn't necessarily promise a resolution or a holistic healing but it induces multiplicity and allows transformation acknowledging sites as processes of becoming. Design, then, isn't only preoccupied with things – in fact it presupposes an attribution of active agency to things breaking the subject-object division - but also with processes, relations, temporalities, and conditions that contribute in the question of co-existence. In that sense, this research is about the possibility to be a designer in one's own terms focusing in the neglected things, valuing traces of immanence and resistance - the significant minor stories - and caring.



Positioning

'You want me to land on Earth? Why?

— Because you're hanging in midair, headed for a crash.

- TI THE THE ALL TO A
- How is it down there?
  - Pretty tense.
  - A war zone?
- Close: a Critical Zone, a few kilometers thick, where everything happens.
  - Is it habitable?
  - Depends on your chosen science.
    - Will I survive down there?
    - Depends on your politics.'

Bruno Latour (2014). Critical Zones

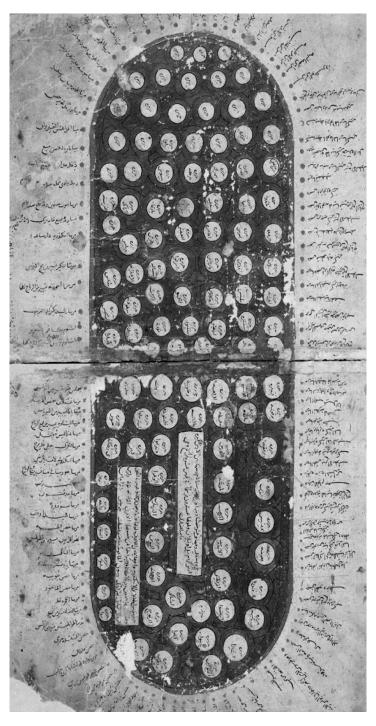
## Research Scope

Intra-Touching

Set in the framework of the Critical Zones (Latour, 2014), the following research aims to develop a counterproject for the coexistence between human and more-than-human entities using the lens of borderscapes in the transitional reality of the Anthropocene that shifts the focus from land to water (Linton,2014) – and specifically towards the sea. Deriving from the understanding that each case of symbiosis is profoundly topological and contextual, the site of the Mediterranean Basin is selected as a historic mesocosm of the (human) processes of territorialization and inhabitation which have resulted in the absolute urbanization, colonization, and operationalization of its thick oceanic surfaces.

In the specific context of the Mediterranean Basin, then, the thesis intends to produce a transitional reading which allows the deconstruction of established archetypical dichotomies that have shaped Western thinking and inhabitation patterns: land/water, bounded/unbounded, culture/nature, bios (political life)/zoe (bare or animal life), human/non-human, body/environment, subject/object, representation/represented, real/virtual or discursive/material. Based on this transitional reading, the research aims to elaborate upon the Politics of Movement-Flux; a conceptual and contextual paradigm with the potential to reconfigure an interface between the aforementioned dichotomies shifting the design focus towards soft territorial acts, practices of care and sympoiesis, and speculative (re)fabulations as methods for knowing in being. (Barad, 2003)

This development of the in-between – embodying the situated temporalized space of a borderscape - is rendered possible through the archaeological-like discovery of traces of immanence and resistance in parallel to the decoding of the complex power structures that direct the interplay of geopolitical, cultural, historical, environmental, and geological forces shaping the Mediterranean Basin as a sociocultural product. Thus, striving for the founding of a common ground not upon dominating relations of power but upon multiplicity of appearances, the cartography research aims to reveal the significant minor stories or the critical details that can direct the thesis' intention to induce a conscious act of deterritorialization and reterritorialization connecting the natural, the phenomenal, and the praxeological space. This act, beyond embodying the counterproject, is meant to guide a transitional design process which links the design of things with the design of processes, conditions, relations, and temporalities.



Map of the Mediterranean Sea in Medieval Islamic Views of the Cosmos From The Urbanization of the Sea: from Concepts and Analysis to Design, by N. Couling & C. Hein, 2020, Nai010 publishers

#### **Problematization**

The Sea as Object

The ecological crisis of the 21st century – as manifested through the sea level rise and the various water crises – shifts the focus from the land to the ocean making it the new frontier for human occupation and activity. As an urbanized entity – occupied, imagined, and produced through a long process of negotiation between historical, political, cultural, and environmental forces – the seascape embodies and exhibits all the processes of commercialization, legislation, and politization associated with intensified transformation of nature in the state-regime-nexus. (Schmid,2020) In this embodiment, the sea as a complex thick space, characterized by depth, movement, and change over time, remains rendered in a convenient state of blankness. (Couling & Hein, 2020)

The oceanic territories, invisible and largely unexplored, are precisely drawn to designate zones of control and jurisdiction and are surveilled by a complex web of border agencies, anti-immigration missions, satellite imaging and real-time tracking technologies that paint the picture of the solid sea. (Bocchi, Brambilla & Scott, 2015) These superimposed hard-edge statal borders and the related borderzone territories direct an increased fragmentation, militarization and instrumentalization of the sea – above and below its surface – that devoid it from its cultural relevance and historical continuity. (Topalovic, 2014) Examining the urbanization of the sea through its borders, then, relates to their general problematic as territorial technologies used in the Capitalocene (Moore, 2016) to legalize exploitation and ritualize displays of violence and expulsion threatening the livability of the complex human and more-than-human assemblages that transgress them.

The Mediterranean Basin constitutes a primal space of this border superimposition and conflation produced and maintained through constant conflict. (Braudel, 1995) Being a historic place of crises, a palimpsest of natural, political, and cultural frontiers that extend way beyond its sea space and the most securitized waterway on Earth, it remains a central embodiment of global power dynamics manifested in the coexistence between violence and leisure. (Lahoud, 2013) This inconceivable coexistence becomes even more prominent in light of the emerging ecological crisis that alters the sea-land boundary challenging the very understanding of urbanization in its space and altering the dynamic between established territorialization patterns.

'The ocean's vast circulatory body is saturated with corporate carbon bodies, proximally related to weaponized ocean defense bodies, home to decimated fish bodies, along with each human body partaking in the hydrologic cycles. (...) The deluge without an end is systemically created and justified by the monopoly on legitimate violence. It is this form of violence that makes the sea complicit and violent by "forces that precede, enable, facilitate, provoke, and restrict" life".' (Zyman,2019)



Dymaxion Map\_from the Land as Islands to the Sea as Islands

#### Problem Statement

The Sea as Subject

The Mediterranean Basin constitutes a historic mesocosm for processes of territorialization and inhabitation that have resulted in its absolute urbanization, colonization, and operationalization. Although remaining a highly commodified sea whose image revokes diachronic imaginations and narratives, it embodies and conceals in its dense body the most orchestrated legalization of practices of violence, expulsion and exploitation that restrict the production and the maintenance of a common ground for its complex human and more-than-human assemblages.

This coordinated legalization – founded in the primal object-subject dichotomy of Western thinking – has been rendered possible through deterministic processes of simplification that have resulted in the selection of certain worlds, narratives and things at the expense of others which are not only invisibilized and neglected but intentionally expelled, eliminated, or sacrificed through expressive and functional territorial acts. Such territorial acts – manifested in the state-regime nexus through border-drawing practices and outline projections – tend to defy notions of in-between in the attempt to tame unruly places and to compress complexity.

As a de facto complex and unrully space of overlapping territorial scales and formats, then, the Mediterranean Basin embodies what Latour (2014) defines as Critical Zones requiring an in-depth understanding of its vertical and horizontal composition of political, social, cultural, and natural processes in order to allow for sympoietic systems to emerge in its (constantly) transitional reality. It is only through such sympoietic systems that a common ground can be shaped in the congested Mediterranean territories constituting a counterparadigm of deterritorialization and reterritorialization founded not only in the design of things but also in the development of processes, conditions, connections, and relations of care.



View of the Mediterranean at Maguelonne by Gustave Courbet

# Research Question(s)

Intra-touching

What are the design possibilities for the borderscapes, especially the ones contained in water?

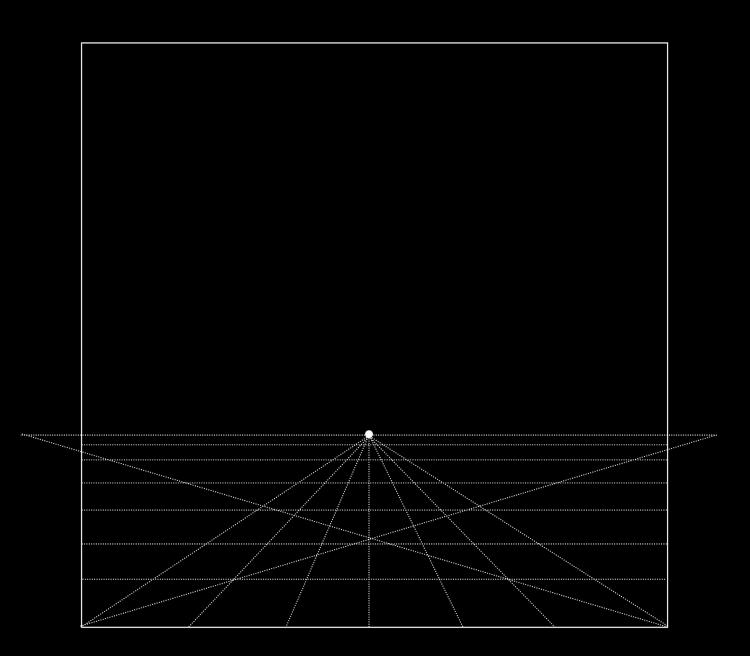
What are the methods, elements, and conditions for a co-construction of a common ground?

How can borderscapes direct the creation of a common ground between human and more than human entities in the Mediterranean Basin through an inverse understanding of the sea as island?

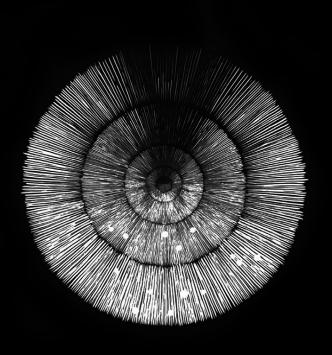
How does the inverse understanding of the sea as island guide thetransitioning to an onto-epistem-ology of intra-touching?

What does the specific case of the Mediterranean has to offer in the understanding of sea urbanization?

"The world is an ongoing open process of mattering through which "mattering" itself acquires meaning and form in the realization of different agential possibilities." (Barad, 2003)



View of the Mediterranean at Maguelonne by Gustave Courbet\_Grid Lines



Methodology

'The problem poses itself as a question which the concept, among other things, attempts to address. The concept never answers or solves the problem; it transforms it, replaces it with other problems. **Problems do not engender solutions but induce action and thus experimentation.**'

Elizabeth Grosz (2003). Deleuze, Theory and Space

#### Research Framework

## Methodology & Process

Attempting to answer the aforementioned questions, the following research framework is developed establishing the key moments of the thesis in the context and the timeline of the Graduation Studio. It is divided into five main parts: the Positioning, the Transitioning, the Experimenting, the Designing, and the Exhibiting which correspond to the main presentation moments and the given deliverables of the studios. These frames are themselves meant to act as operational methods playing the role of abstract machines/diagrams that guide the development of the project from its initial analysis stage to the interaction with the audience.

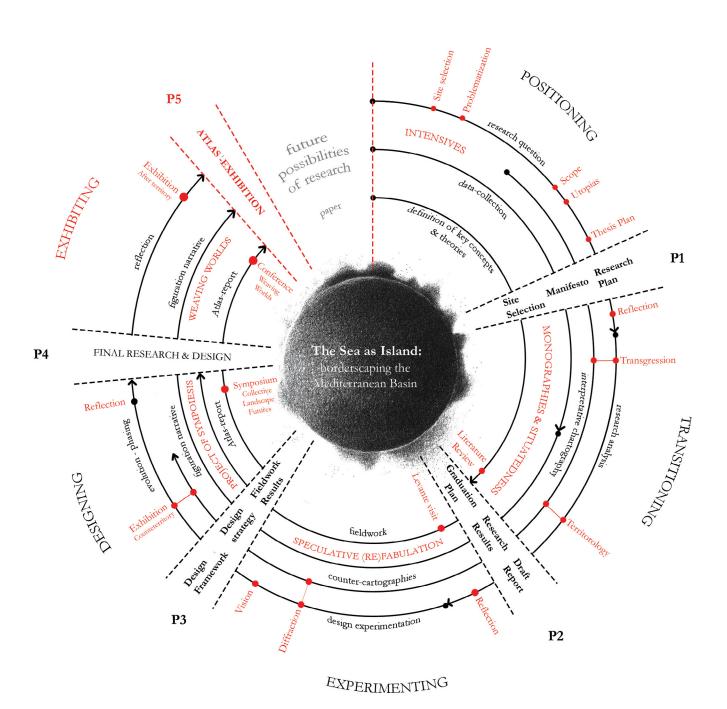
Specifically, the **Positioning frame** includes the development of the scope, the problematization, the research question, the site selection, the data collection and the definition of key theories and concepts that drive the thesis project. It revolves mainly around the context of the intensives of 'Accumulation-Clearance' and 'Geographical Urbanism' that have set the tone of my thesis' **Critique** – as explained in the Positioning and Methodology chapters – initiating critical cartographies around the notions of Transition, Transposition and Transgression.

Then, the **Transitioning frame** completes the content of the Monographies Chapter through the parallel thematic investigations Geopolitics, Topos, Habitat, Matter of the Territorology Inquiry. This chapter gathers the main body of Analysis combining literature and interpretative critical cartographies and leading to the Synthesis that critically reflects on the findings guiding the project definition. The Synthesis results in the Situated Knowledge chapter which combines the data-driven cartographies with acupunctural site visits to define the design process as a proximal construction of touch.

In this context, the **Experimenting** frame revolves around the **Action** which tests the concept – the sea as island – in the context of the site and in relation to the uncertainties, vulnerabilities, concerns, and crises that have been analyzed in the previous chapter. The Action is elaborated in the Speculative (Re)Fabulation chapter through the overarching Diffraction inquiry – also developed through the thematic investigations Matter, Topos, and Zoe-Politics – which continues during the next chapters.

Finally, the **Designing frame** is concerned with the development of the **Form** continuing the overarching Diffraction inquiry and elaborating upon the different components and timeframes of the project through the Project of Sympoiesis and the Weaving Worlds chapters. This frame, then, is interconnected to the **Exhibiting frame** which is rendered crucial in the intended context of sympoiesis connecting the development of the urban project to its (human) audience through the participation in conferences, symposiums and exhibitions that aim to raise exposure, to form collectives and to situate the research in the broader academic or scientific discourses.

In the design process no object, process or agent is granted primacy. The project, thus, is a plurality of proposals, a stubborn exercise, and an awareness of not being in front of the world but inside its provocations. (Boano, 2022)



Research & Process Framework

### Theoretical Framework

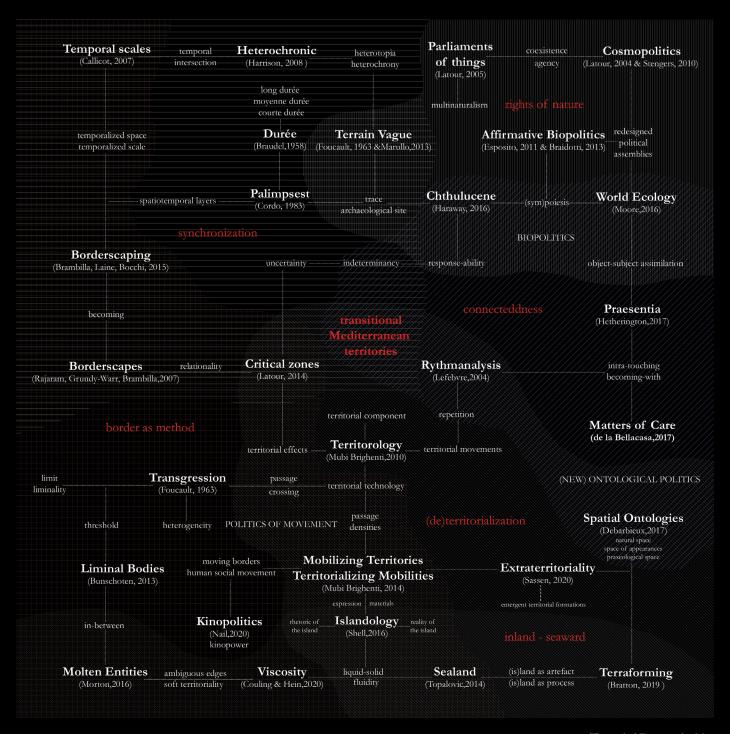
## Literature Underpinning

As part of the Research Overview, the theoretical framework is constructed to summarize the theories and concepts that are used in the development of the thesis project. Attempting to apply the conceptual experimentation as a counter paradigm for the design process in the context of the Critical Zones of the 21st century, the selected theories are deeply connected to the different parts of the research shaping a map of overlapping concept areas deriving from the notion of **Transitional Mediterranean Territories** and connecting the theoretical to the topological.

#### Rights of Nature Area

The notion of Transition is - in the context of this thesis - adopting the theory of the Chthulucene (Haraway, 2016) to move beyond the critique implied by either the concept of the Anthropocene (Crutzen & Stoermer, 2000) or the concept of the Capitalocene (Ruccio, 2011) towards a new paradigm of thinking for the design of transitions. The adoption of the Chthulucene, then, is meant to guide a dual process of rethinking history to trace neglected counternarratives to the prevailing world-making practices, and of consciously initiating processes of sympoiesis that disrupt established dichotomies of subject-object and human-non-human entities leading to the theory of the World Ecology (Moore, 2016). The concept of the World Ecology establishes a new ontological politics movement that presupposes an acknowledgement of agency and active participation of nature in worlding practices. This acknowledgement points towards the redesign of political assemblies connecting to the theory of Affirmative Biopolitics (Esposito, 2011 & Braidotti, 2013); developed in the effort to challenge individual immunity and to direct towards plurality. In parallel, the redesigned political assemblies tie to the concept of the Parliaments of Things (Latour, 2015) which embodies a prerequisite condition for his theory of Cosmopolitics (Latour, 2015); also directing towards multinaturalism. Under these foundations, the Rights of Nature theorization is positioned in the center of the design process in the current transitional reality highlighting the Mediterranean territories as primarily political entities whose conceptualization brings forward questions of agency, active participation, sympoiesis, plurality and coexistence.

'Concepts are points of multiplicity, connections of components, which share borders with other concepts, are marked by irregular contours, and have an improper or imperfect fit.' (Grosz,2003)



Theoretical Framework - Map

### Literature Review

Theoretical Underpinning

#### Connectedness Area

Deriving from these questions, the second theory area involved in the shaping of this thesis methodology begins from the concepts of the Chthulucene (Haraway, 2016) and the World Ecology (Moore, 2016) but focuses on the establishment of an in-between space characterized by infra-touching and object-subject assimilation. These theories - which currently haven't altered the legal definitions of object and subject - direct practices of becoming-with that are essential for the definition of the concept of Matters of Care (de la Bellacasa, 2017) or the concept of Praesentia (Hetherington, 2017). Both these concepts emphasize the importance of proximity building upon a haptic perspective of the world that can induce caring acts founded not in established patterns of domination but in the power of response-ability. Such acts - aiming for regeneration, repair, maintenance, or protection – fit Arendt's praxeological space defined in the theory of Spatial Ontologies (Debarbieux, 2017) as a fundamentally political, contextual, and fragile spatiality.

## (De)Territorialization

The political understanding of space is the focus of the third study area that adopts the theory of Territorology (Mubi Brighenti, 2010) to decode the configuration of the territory through its technology, component, movements, and effects. The conceptualization of the Territory through its construction and not through its historic definition becomes crucial for the development of this thesis since its connection to territoriality, boundness and sovereignty is put under question following Elden's (2010), Paasi's (2003) and Sassen's (2010) critique on its flattening in the frame of the state-regime nexus. Understanding, thus, Territorialization through mobility in the context of the Politics of Movement ties it to the concept of Mobilizing Territories, Territorializing Mobilities (Mubi Brighenti, 2014) which traces both the functional and the expressive characteristics of territory-making in acts of fluidity, density, and passage. These acts are also what Sassen locates in the center of her theory of Extraterritoriality (Sassen, 2020) that describes emergent territorial formations which bypass the national formats of territory connecting the natural, the phenomenal and the praxeological space as defined in the theory of Spatial Ontologies (Debarbieux, 2017)

#### Inland - Seaward

On this sympraxis of the material and the expressive the framework locates the fourth theory area which translates the concept of Mobilizing Territories, Territorializing Mobilities (Mubi Brighenti, 2014) to the archetype of the island; a translation with added contextual significance in the Mediterranean Basin. The concept of Islandology (Shell, 2016) encompasses the expressive in the rhetoric of the island and the material in the reality of the island understanding territorialization through fluidity, ambiguity, and continuity. The notions of fluidity and ambiguity, then, connect to the theories of Viscosity (Couling & Hein, 2020) and Molten Entities (Morton, 2016), while the notion of continuity connects to the theory of Sealand (Topalovic, 2014) constituting a new conceptual lexicon of the Inland - Seaward meeting.

#### Border as Method

In parallel, the Politics of Movement shape the fifth theory area that adopts the concept of Transgression (Foucault, 1963) to understand boundary-making territorial acts not through their stabilization but through their crossing. Transgression is highlighted in the context of the border-limit as that which guides the research process of this thesis from a thinking in terms of archetypical dichotomies to a thinking of the in-between, the liminal, the relational, the sympoietic; embodied in the concept of Liminal Bodies (Bunschoten, 2013). The notion of the Liminal Bodies, then, in the context of the transition, connects to the theory of Borderscapes (Rajaram, Grundy-Warr, Brambilla, 2007) that defines temporalized spaces of increased densities, multiplicities and uncertainties - even in the state-regime nexus.

## **Synchronization**

The element of the temporal - as embodied in the Borderscapes - shapes the last theory part emphasizing the notion of Transgression not only in the spatial but also in the **Tempo**ral Scales (Callicott, 2017). This transgression is translated to the concept of the Heterochronic (Harrison, 2008) which in combination with the Heterotopic (Foucault, 1963) results in the concept of the Terrain Vague (Foucault, 1963 & Marullo, 2003). The Terrain Vague, in its notion of a trace, ties back to theory of the Chthulucene (Haraway, 2016) completing a cycle of interconnected concepts.

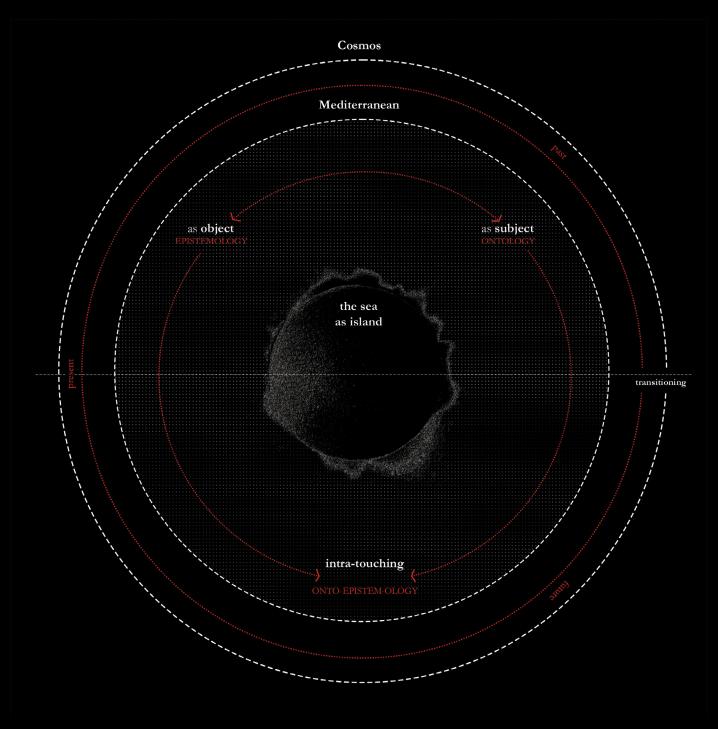
## Conceptual Framework

The Sea as Island

Guided by the previously elaborated Theoretical Framework and by the research questions, the Conceptual Framework synopsizes the main goal of this thesis: to create a common ground between human and more-than-human entities in the Mediterranean Basin through an inverse understanding of the sea as island. The concept of the island is used to highlight an intentional blurring of dichotomic conditions both contextually and conceptually. Conceptually, the rhetoric of the island guides a counterprocess to the objectification of the sea realized during modernity and emphasized by its recognition as a body with a solid and unmodified outline. This counterprocess, though, doesn't signify a subjectification that reinstates the sea in its old ontological understanding - especially elaborated in the Mediterranean context through its situated mythologies. It introduces a transition to an onto-epistem-ology (Barad, 2003) of intra-touching and object-subject assimilation that understands the outline not as a limit but as a prototypical common ground.

Contextually, then, the volcanic formation of Julia embodies simultaneously material and expressive components of the Island defining a 'free' space - terra nulla in its jurisdictional characterization – that acts as a **synecdoche** for the entire Mediterranean Basin. Expanding further, the Mediterranean Basin plays the role of a mesocosm for the Cosmos encompassing in its restricted space all the vulnerabilities, uncertainties, crises, and concerns that define urbanization in the ocean space. The Sea as Island, thus, contains the potential to participate in a new spatial onto-epistem-ology inducing a conscious territorial act that disrupts the current territorialization practices, transitioning towards sympoietic systems, and reinstating the Sealand as a continuous viscous space. In this sense, it leads towards a new era of Terraforming that directs the construction of a common ground for the human and more-than-human assemblages deriving from the neglected or sacrificed significant minor stories and consisting not only of things but also of relations, processes, conditions, connections, and inhabitation patterns. This new era ties back to the overarching scope of this thesis: its realization in the context of the Chthulucene (Haraway, 2016) that directs a possibility to discover traces of livability in the ruins of a 'damaged' and 'troubled' planet, and that aspires for counterprevailing worlding practices.

'Being a thing doesn't mean having solid edges, then. In fact, it means the opposite; being a thing means having ambiguous edges.' (Morton, 2016)



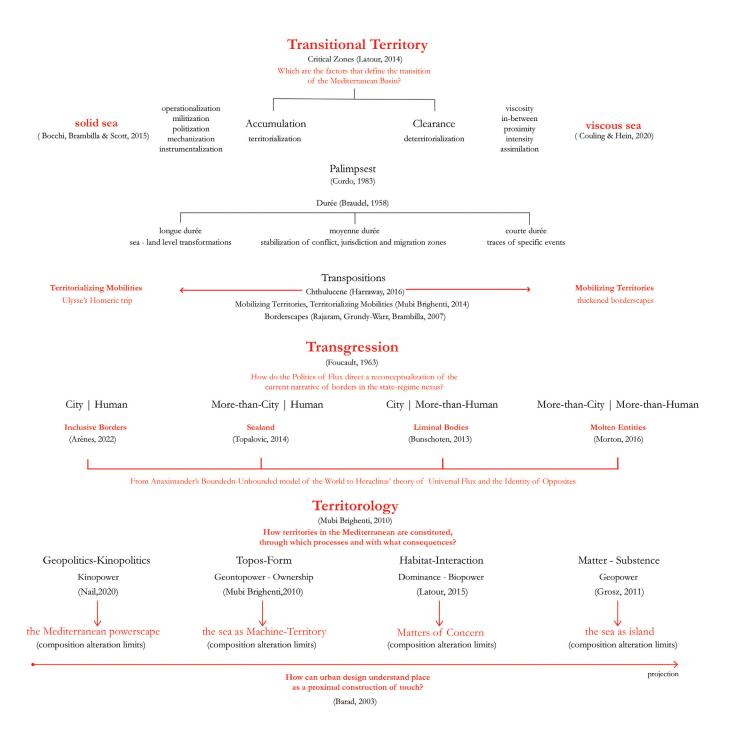
Conceptual Framework

## Analytical Framework

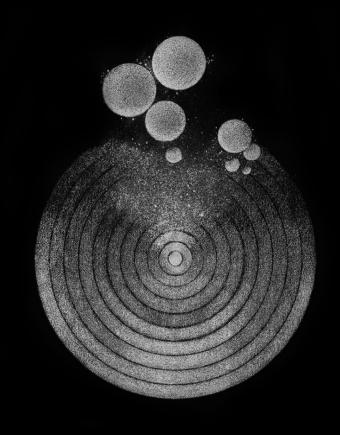
Monographies & Literature Review

In this context, the following Analytical Framework – meant to present the initial and fundamental guides of the thesis - elaborates upon the Transitioning frame examining the investigations through their theoretical references and methodological connections. As mentioned in the Overview Research Framework, the first inquiry regards the very notion of the Transitional Territory attempting to answer which are the factors that direct the transitions of the Mediterranean Basin – both topologically and theoretically. To do so it studies its portrayal as a Critical Zone (Latour, 2014) through the lenses of Accumulation and Clearance translated as the solid and the viscous sea accordingly. Then, it deals with the element of time in this transition using the concepts of the Palimpsest (Cordo, 1983) and Durée (Braudel, 1958) to decode the different temporal scales of the Mediterranean. Concluding, it uses the material of this study to apply the Transpositions which combine the Chthulucene (Haraway, 2016), Mobilizing Territories, Territorializing Mobilities (Mubi Brighenti, 2014) and Borderscapes (Rajaram, Grundy-Warr & Brambilla, 2007) theories to investigate two parallel scenarios for the future deterritorialization and reterritorialization processes. Subsequently, the second inquiry adopts the concept of Transgression (Foucault, 1963) to investigate how do the Politics of Flow direct a reconceptualization of the current narrative of borders in the state-regime nexus. In this direction, it documents the different types of transgressions connected to the City | Human, More-than-City | Human, City | More-than-Human and More-than-City | More-than-Human in the following categories: Inclusive Borders (Arenes, 2022), Sealand (Topalovic, 2014), Liminal Bodies (Bunschoten, 2013) and Molten Entities (Morton, 2016). The completion of this documentation marks a turning point from the Anaximander's model of the world - based on the dichotomy between the Bounded and the Unbounded - to Heraclitus's theory of the Universal Flux and the Identity of Opposites. Finally, the last inquiry uses the concept of Territorology (Mubi Brighenti, 2010) to understand how are the territories in the Mediterranean constituted, through which processes and with which consequences. To answer, it follows four parallel investigations titled Geopolitics-Kinopolitics, Topos-Form, Habitat-Interaction and Matter-Substance to develop four portrayals of the Mediterranean: as powerscape, as machine-territory, as a matter of concern and as island gradually shifting the focus towards the specific Mediterranean context and asking how can urban design understand place as a proximal construction of touch (Hetherington, 2003) and not merely as a representation. (Barad, 2003)

'The abandonment of the temporal metaphor – diluted by a war between the past and the future implied in the present – is followed by a spatial metaphor that puts the map in the center not merely as a navigation tool but as a reading of unexpected escape routes.' (Boano, 2022)



Analytical Framework



Monographies

'It matters what matters we use to think other matters with; it matters what stories we tell to tell other stories with; it matters what knots knot knots, what thoughts think thoughts, what descriptions describe descriptions, what ties tie ties. It matters what stories make worlds, what worlds make stories.'

Donna Haraway (2016). Staying with the Trouble

## Transitional Territory

The Monographies chapter consists of the different thematic investigations that examine the selected site in relation to its situated socio-ecological and geopolitical processes outlining both the focus and the multiplicity of the upcoming (urban) project. It begins with a research on the very essence of the Mediterranean basin as a Transitional Territory in constant tension restricted by its own spatio-temporal boundness. The notion of transition is not limited in the current climatic instability – that tends to challenge its historic quality as a stable climatic environment, ideal for human appropriation – but incorporates different conditions of fragility, criticality and risk that portray the Mediterranean territories as a dynamic space of Accumulation. (Lahoud, 2013)

This Accumulation is first and foremost a superimposition of frontiers (Braudel, 1995) consisting of different territorial, political, natural, and temporal boundaries that direct the territorialization of the sea and the legalization of acceptable levels of destruction and violence. In this extremely dense space – both spatially and temporally - the Clearance embodies an intention of deterritorialization followed by an intention of reterritorialization. In the context of this investigation, Clearance is understood as a conscious shift towards viscosity; a shift that replaces the symbolic understanding of borders as a space of division with the natural understanding of boundaries as in-between conditions of proximities, intensities, and assimilations. (Lahoud, 2013) The resulting drawing illustrates this in-between reading through the tracing of the Mediterranean sub-basins; created in the continuous body water from the relational movement of the currents.

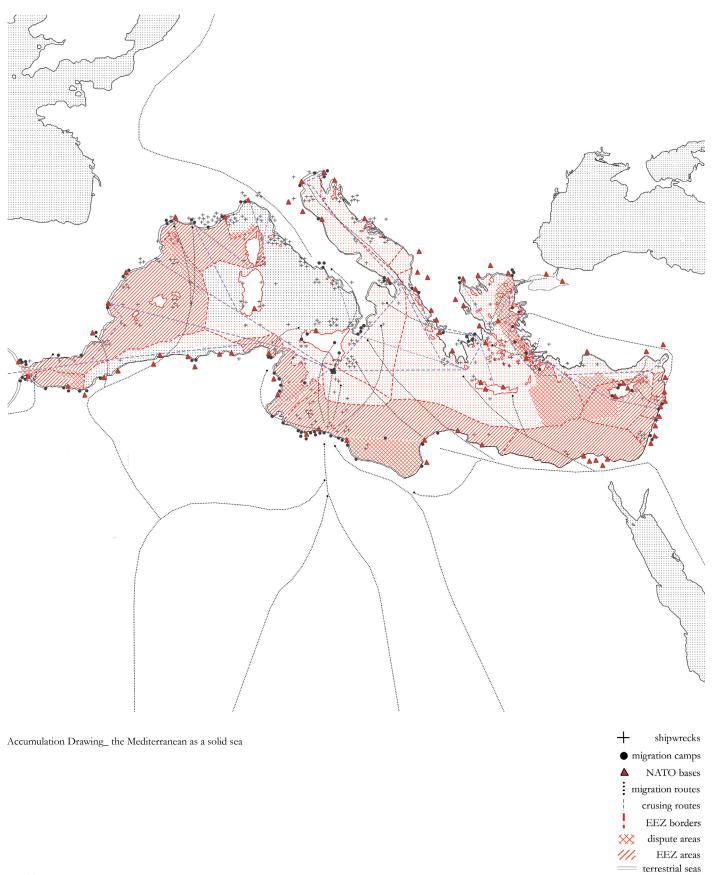
The processes of territorialization and deterritorialization, though, are not only manifested spatially but remain dependent on the temporal scales that affect the history of the Mediterranean territories. (Corboz, 1983) This Palimpsest is painted by the interaction between the longue durée (environmental-geological history), the moyenne durée (social history) and the courte durée (individual history) in the dense site of the sea. (Braudel, 1995) In the context of this inquiry, the content of these durée is translated – accordingly – as the zone formed by the varied water level, as the stabilization of conflict, jurisdiction, and migration zones

and as the traces of specific events in the Mediterranean site. The produced drawing portrays Braudel's understanding of the Mediterranean as a territory brought together by its overlapping conflicts and frontiers. (Braudel,1995)

This perspective of the Mediterranean – as a space of dense in-betweens and as a place of viscosity - becomes the base for the final part of the Transitional Territory inquiry, the Transpositions. The Transpositions elaborate upon alternative territorial concepts for the Mediterranean basin that focus on transitional spaces for the creation of a common ground. In that sense, the first investigation drawing visualizes the Homeric route of Ulysses' trip revealing a different form of historic-cultural continuity that derives from patterns of navigation and connections through the sea space. This perspective follows the idea that the creation of a common ground in the Mediterranean Sea can be based on a nomadic perception of space and time; one based upon selected patterns of movement. In this context, the second investigation uses the thickening of the current borders as a new zone for the embodiment of deterritorialization-reterritorialization acts that produce the common ground of the Mediterranean giving form to the notion of borderscapes.

## Transitional Territory

## Accumulation - Clearance



natura areas

 $^{\prime}$ A possible perspective for looking at a new unfolding Mediterranean is by understanding the future of its borders. (Petrov, 2013)



shipwrecks +
sunken cities ×
main currents |
Aegean sea |
Adriatic sea |
Levantine sea |
Ionian sea |
Alboran sea |
Tyrrhenian sea |
Ligurian sea |

Clearance Drawing \_ the Mediterranean as a viscous sea

# Transitional Territory

Palimpsest









I retain the firm conviction that the Turkish Mediterranean lived and breathed with the same rhythms as the Christian, that the whole sea shared a common destiny, a heavy one indeed, with identical problems and general trends if not identical consequences.' (Braudel, 1995)

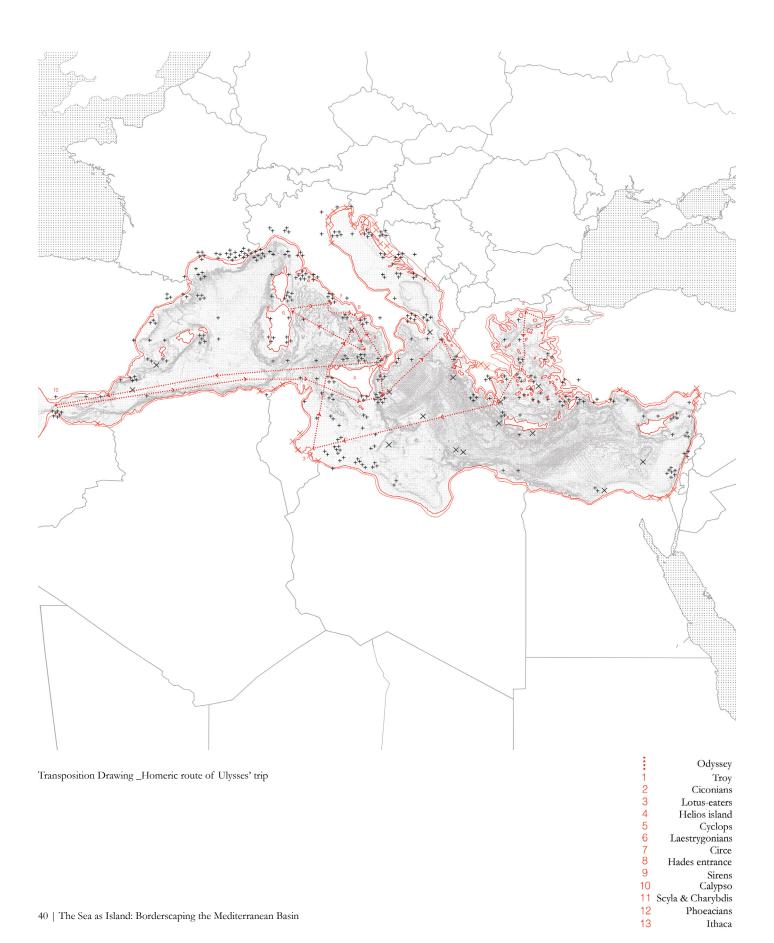


Palimpsest Drawing \_ longue durée, moyenne durée and courte durée

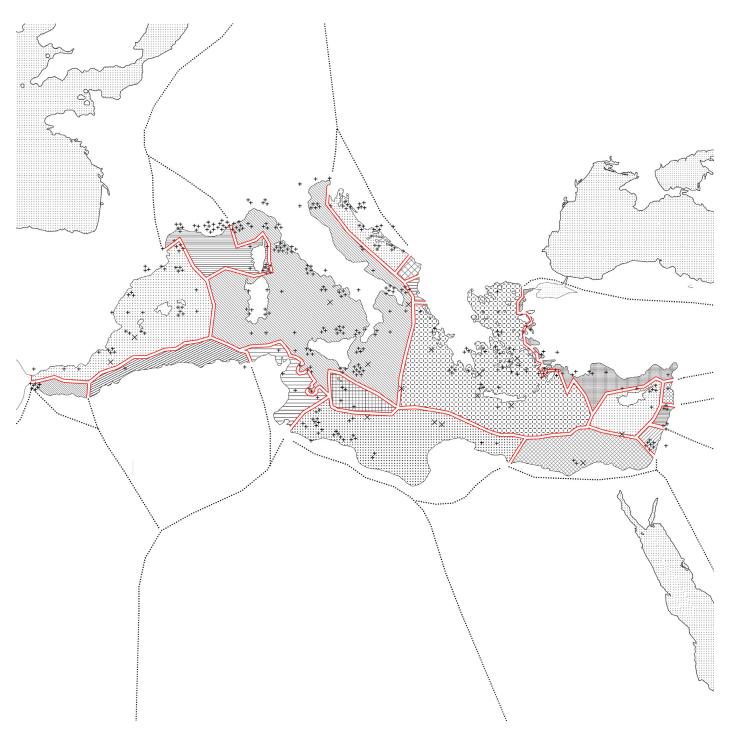
shipwrecks	+
sunken cities	$\times$
portscapes	•
shipping routes	
current outline	<b>:::</b>
SLR 2100 outline	1//
lowest outline	1

# Transitional Territory

### Transpositions



'Mediterranean frontiers are not just sites of new "world" orders, but also pivot points between geographical and utopian imaginations.' (Petrov, 2013)



Transposition Drawing \_ thickened borders as no man's land

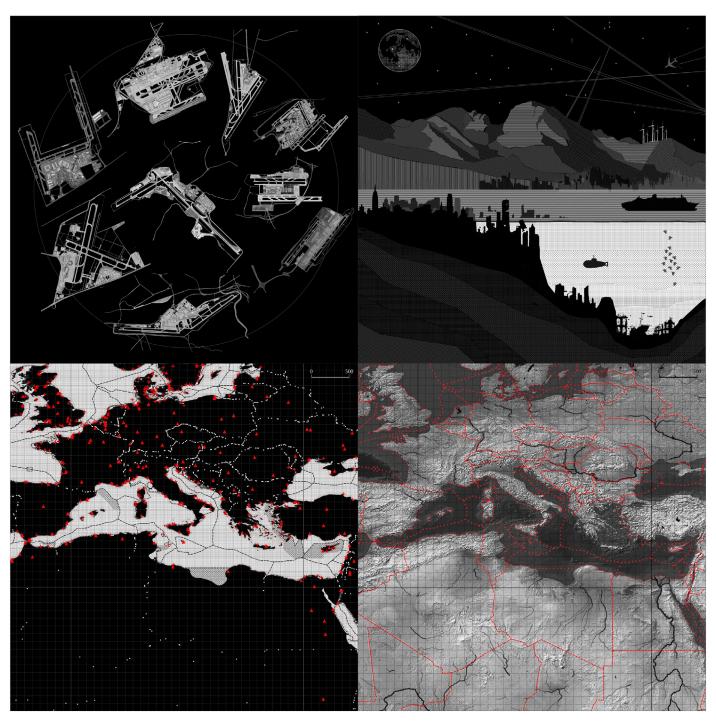
### Transgression

The Transgression exploration, then, derives from the conceptual dichotomy between the Peras and the Apeiron; the Bounded and the Unbounded; the Limit and the Unlimited as established in Western thinking already from antiquity through Anaximander's philosophy. (Callicott, 2007) This dichotomy, in Anaximander's concept, is not merely epistemological but also spatial; embodied in the boundary between land and water and contextualized in the Mediterranean. The current disruption of this spatial boundary in the Anthropocene, though, marks a reconfiguration of Anaximander's conceptual dichotomy that revolves around motion and can result in a reconceptualization of the current narrative of borders in the state-regime nexus. (Hsiang & Bendis, 2016)

Motion is translated as the act of Transgression which creates the Border-Boundary the very moment that defies it. Understood, then, through moments of passage, thresholds or crosspoints, Transgression brings together the two sides of the border-boundary in a simultaneous act of conflict and openness that produces a space of heterogeneity (Doron, 2010) while vizibilizing the weakening of sovereign authority overs its territory, and the production of non-national territorial formats (Sassen, 2017). In parallel, the act of Transgression expands its conceptual connotation to emphasize a conscious obviation of the division between human and more-than-human or the division between city and more-than-city.

In this context, the following pages document the different forms of crosspoints: the inclusive borders embodied in transportation nodes, the porous interface of land and water as emphasized by the sea rising water levels, the infrastructural intersections with jurisdictional national borders and the topographical boundaries that characterize the broader Mediterranean area. Each of the investigations-drawings offers a different interpretation of Transgression in the city/human more-than-city/more-thanhuman spectrum creating a matrix for the reconfiguration of Anaximander's conceptualization of the world. The revisited spatio-temporal model presents the broader Mediterranean area as painted by the densities of its thresholds instead of its border-boundaries.

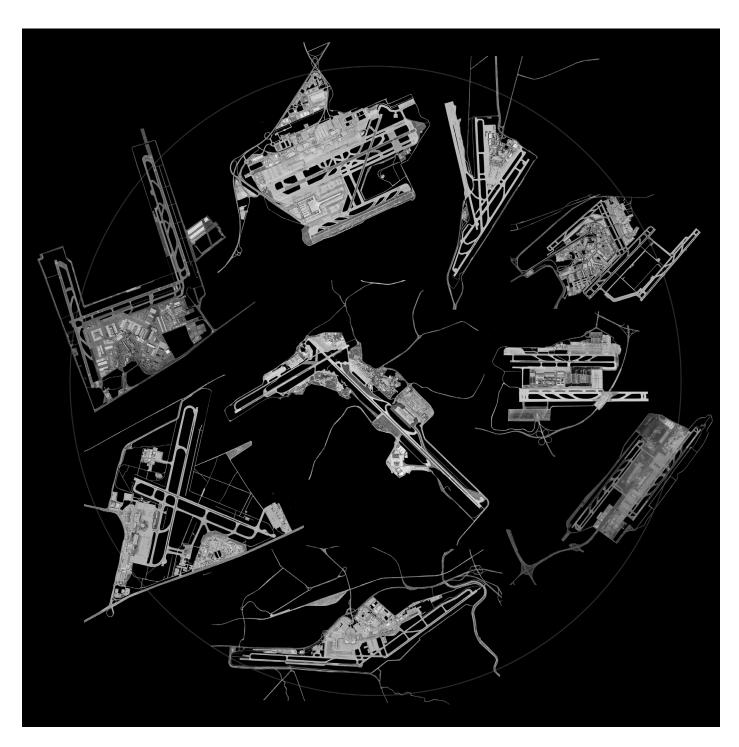
"The limit opens violently onto the limitless, finds itself suddenly carried away by the content it had rejected and fulfilled by this alien plenitude that invades it to the core of its being [..] to face the fact of its imminent disappearance, to find itself in what it excludes.' (Foucault,1980)



Matrix Drawing

# Transgression

### City | Human & City | More-than-Human



Inclusive Borders

'The distinction between natural and artificial borders posed by early border theorists cannot be maintained. This is the case not because borders today are radically different than they used to be, but because throughout history "natural" borders as borders were always delimited, disputed, and maintained by "artificial" human societies?

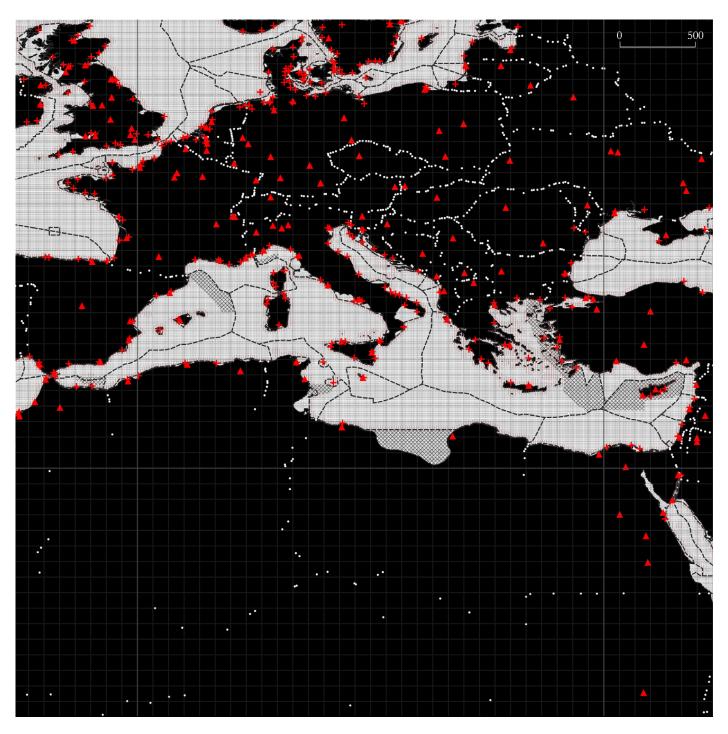
(Nail, 2020)



Sealand

# Transgression

More-than-City | Human & More-than-City | More-than-Human



Liminal Bodies

<sup>■</sup> Terrestrial sea

— EEZ in the sea

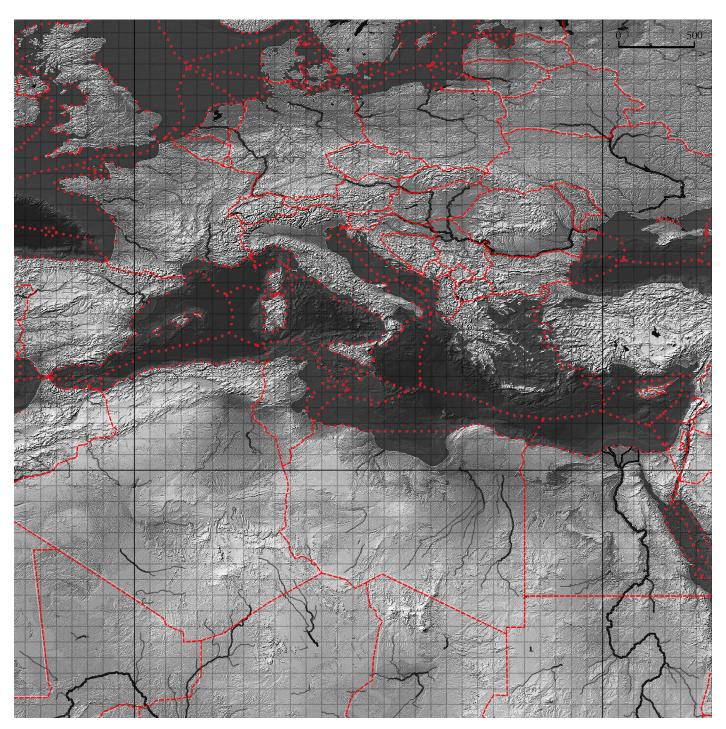
■ Conflict areas

+ Airport Points

• Port Points

• Crosspoints

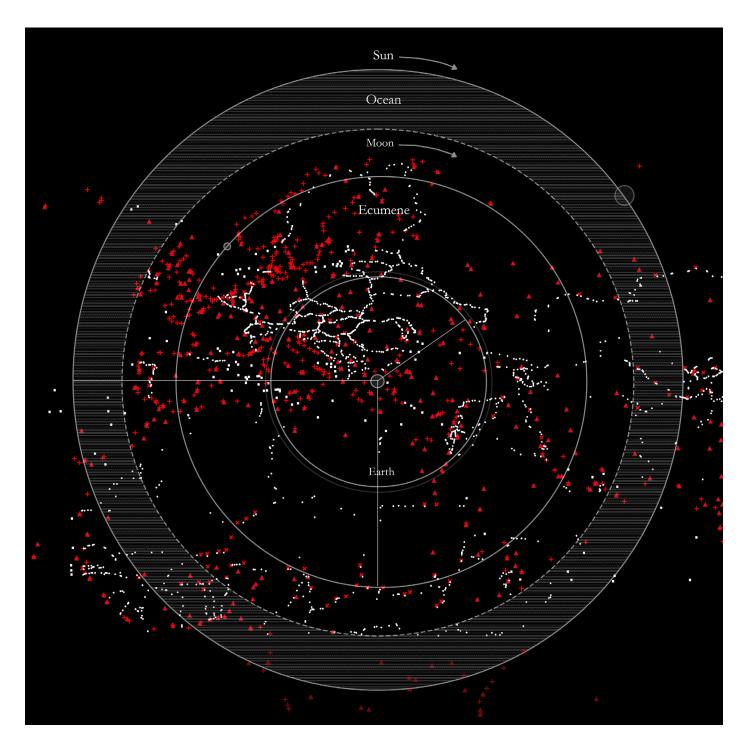
Within a single landscape, living territories overlap, and any moment involves crossing thresholds, so that living things constantly evolve along, within, and across borders. (Arènes,2022)



Molten Entities

# Transgression

### Composite



Revised Anaximander's Model of the World through Heraclitus' Theory of Flux and Identity of Opposites

'ἀρχὴ ... τῶν ὄντων τὸ ἄπειρον ... ἐξ ὧν δὲ ἡ γένεσίς έστι τοῖς οὖσι, καὶ τὴν φθορὰν εἰς ταῦτα γίνεσθαι κατά τὸ χρεών διδόναι γὰρ αὐτὰ δίκην καὶ τίσιν ἀλλήλοις τῆς ἀδικίας κατὰ τὴν τοῦ χρόνου τάξιν. Άθάνατον [...] καὶ ἀνώλεθρον.'

'The Non-Limited is the original material of existing things; further, the source from which existing things derive their existence is also that to which they return at their destruction, according to necessity; for they give justice and make reparation to one another for their injustice, according to the arrangement of Time. [The Non-Limited is immortal [...] and indestructible.'

Anaximander (c. 600BC). Anaximander Fragment

The analysis, then, continues around the science of Territorology - as defined by Mubi Brighenti (2010) in his paper On Territorology: Towards a General Science of Territory - seeking to investigate how territories in the Mediterranean are constituted, through which processes and with what consequences. In that sense, each of the selected lenses: Geopolitics, Topos, Habitat and Matter is used to examine territorial acts and relations that define the expressive and functional components of the Mediterranean territories through their different borderscapes. These individual examinations engage with the situated issues of the Mediterranean context identifying critical locations, decoding the complex relation between borders and thresholds - as embodied in the state-regime nexus - and revealing the concealed temporalities that tend to dictate the rhythms of the Mediterranean territories.

The site of the Mediterranean Sea is understood as a highly complex socio-cultural space where territories manifest simultaneously in different scales and degrees of visibility, in a state of prolongation and dynamic transformation. Thus, it is rendered necessary to move through scales and locations in a piecemeal - and often intentionally subjective - manner that emphasizes and focuses on the elements of immanence and resistance assembled through the methodology of Composition - Alteration - Limits directed by the studio. The tracing of these elements is intrinsically connected to the concept of Heterotopia of crisis and compensation, described by Michel Foucault (1987) as a space with a precise and well-functioning role within society, a role of waste control.

Deriving from the Heterotopia, the investigation shifts its focus from the understanding of past territorial acts towards emergent acts of Deterritorialization and Reterritorialization of the Mediterranean Sea. In this frame, the creation of territory is understood primarily as a manifestation of power and as a conscious symbolic process that projects the immaterial into the material creating and reproducing social order, geographic context and meaning. (Mubi Bughenti, 2010) Each boundary-drawing act is a territorial act since it generates deterritorializing and reterritorializing effects. (Paasi, 2003)

symbolic shape

#### Geopolitics - Kinopolitics

Which are the patterns of social movement related to territorial acts in the Mediterranean?

#### Kinopower

migration flows + moving borders

(Political Equator)

established routes arrival points expansion by expulsion

conflict zones border-control interventions supra-national juristiction

#### the Mediterranean powerscape

Heterotopia of crisis and compensation the living and dead body of the migrant

#### Topos - Form

Which are the traces of appropriation of the Mediterranean Sea?

Geontopower - Ownership

infra - structures

sea surface  $\longrightarrow$  shipping

underwater ---- cables pipelines

ocean floor -→ sea mines oil contracts

the sea as Machine-Territory

Heterotopia of crisis and compensation the wastescapes

#### **Territorology**

How territories in the Mediterranean are constituted, through which processes and with what consequences?

#### Habitat - Interaction

What worlds are being maintained and at the expense of which other?

Dominance - Biopower

environmental threats vs conservation frameworks

climate change anthropogenic activities prevalence of other species

european natura areas restricted fishing zones

Matters of Concern in the Mediterranean

Heterotopia of crisis and compensation Species Red Exinction list

#### Matter - Substence

What are the Mediterranean territories made of?

Geopower

climatic & geomorphological processes

sea level rise sedimentation - erosion litteral cell movement tectonic plates movement volcanic activity

geopolitical processes

terraforming

the sea as island

Heterotopia of crisis and compensation the land

geographic shape

Territorology Analytical Framework

Geopolitics - Kinopolitics

The Territorology inquiry begins with the theme of Geopolitics which, in the context of this thesis, adopts the concept of Kinopolitics – as defined by Thomas Nail (2020) in his paper Borders, Migrants and Writing – to describe the complex patters of human social movement related to territorial acts. The adoption of this concept entails the understanding of the material historical condition of circulation - either in the form of migration or in the form of nomadic movement – as a primitive factor for the production and reproduction of the state-regime nexus and as a consistent rhythm in the Mediterranean territorialization process.

The following pages, thus, consist of two parallel investigations around the notion of Kinopolitics and Kinopower; one focusing on the figures of migration as disregarded but essential social constituents in the global power dynamics that shape state structures and one seeking to decode the multiplication of borders as actors also in movement. The first one unfolds from a global perspective taking into account the Political Equator concept – as introduced by Teddy Cruz to describe the world's most contested border clusters - to look upon flow patterns in the Mediterranean Sea and its highly securitized waterways. This examination is, then completed by the second part which derives from the understanding of border as a continually changing process; fluctuating along complex material, social, cultural, and historical fluctuations of power that shape thick horizontal and vertical borderscapes of continuous negotiation and movement. (Nail, 2020) In the case of the Mediterranean Sea, these overlapping areas of power are clearly visible both in the extensive conflict zones along the north-south axis of the Basin, and in the border-control interventions that define new type of jurisdictional geographies in a much broader area.

As the division between migrants and citizens is projected to reach its Limit (Nail, 2020) - especially in light of the emerging climate crisis and the expected climate-induced migration - it becomes clear that deterritorialization and reterritorialization processes in the Mediterranean Sea entail a conscious dealing with the current Heterotopias of crisis and compensation currently contained in the migrants' living and dead bodies.

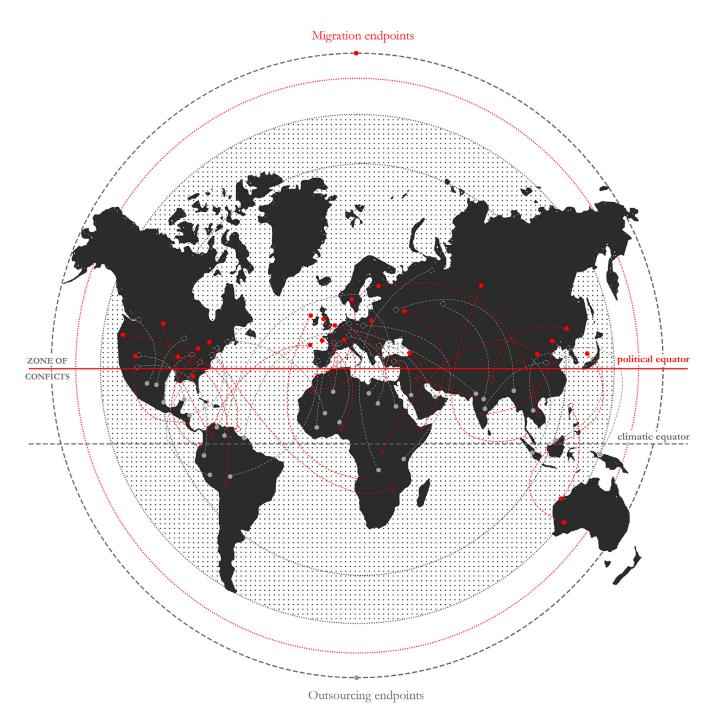
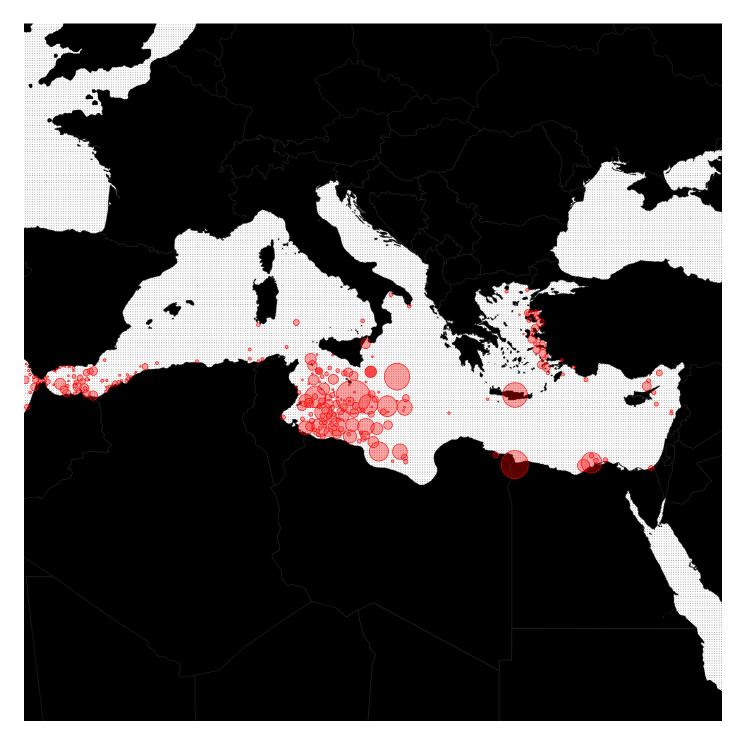
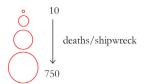


Diagram adapted from the Political Equator Project

### Geopolitics - Kinopolitics

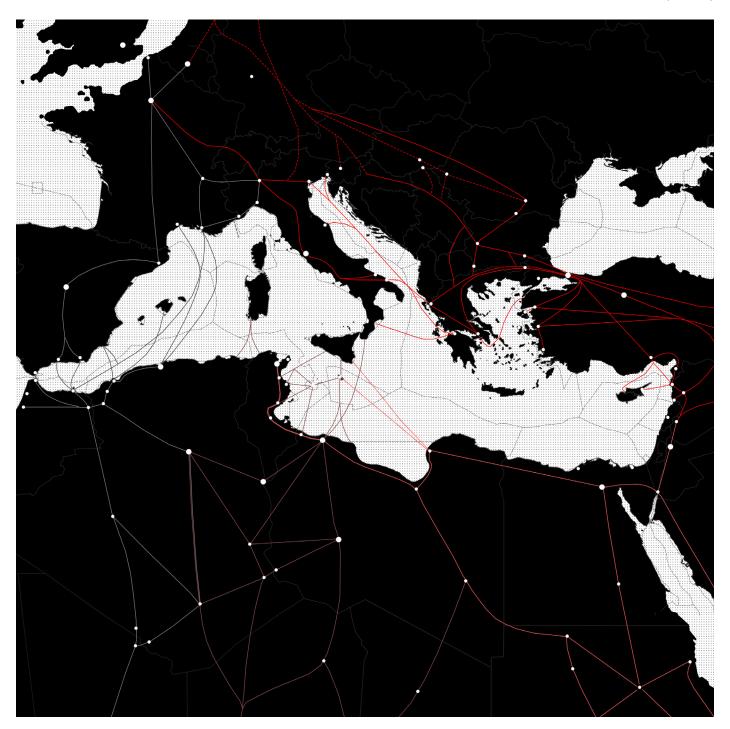


Limit Drawing \_ the migrant figure: disrupted routes



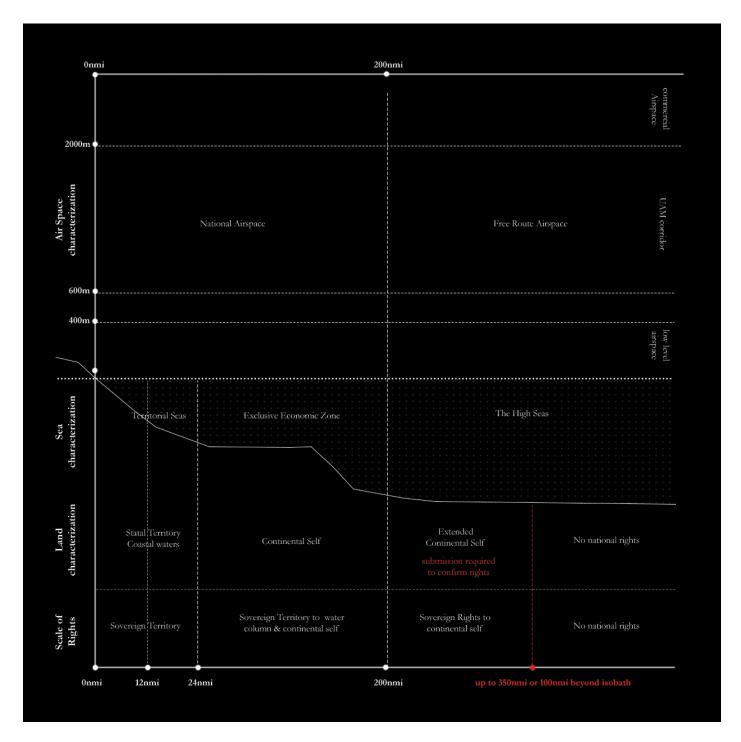
"The expansion of Western civilization required, and continues to require, the continual expulsion of migrant populations. (...) Migrants are not marginal or exceptional figures, as they have so often been treated, but rather the essential lever by which all hitherto existing societies have sustained and expanded their social form.'

(Nail, 2020)



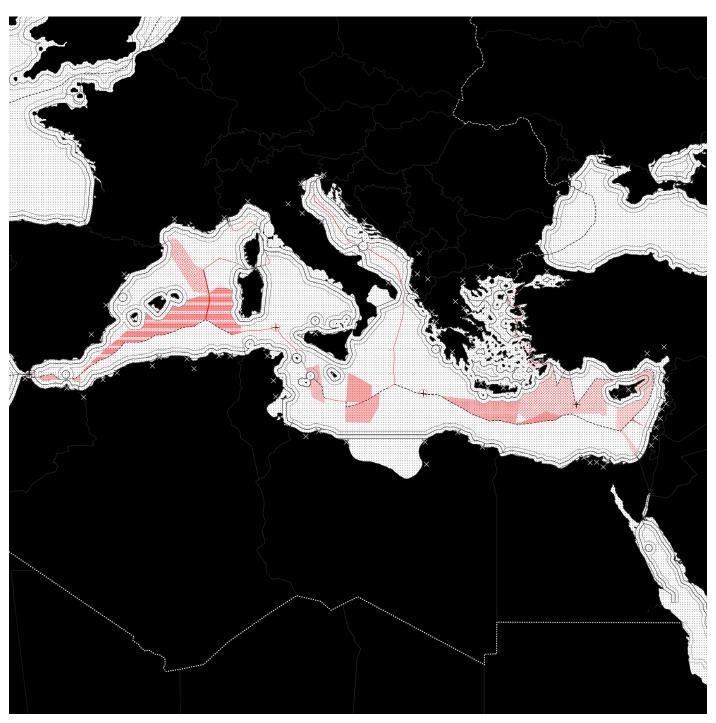
Composition Drawing \_ the migrant figure: realized routes

### Geopolitics - Kinopolitics



Alteration Drawing \_ the moving vertical borders

'Spatial demarcation is always an incision that will leave scars; their beginnings are casual, their obliteration almost impossible.' (Schoonderbeek, 2010)



border control operations
NATO military bases

12nmi national territorial sea
24nmi national territorial sea
established EEZ borders
EU external borders
EU sub-saharan borders
Algerian EEZ claims
French EEZ claims
Tunisian EEZ claims
Turkish EEZ claims
Egyptian EEZ claims
Libyan EEZ claims
Libyan EEZ claims

Composition Drawing \_ the moving horizontal borders

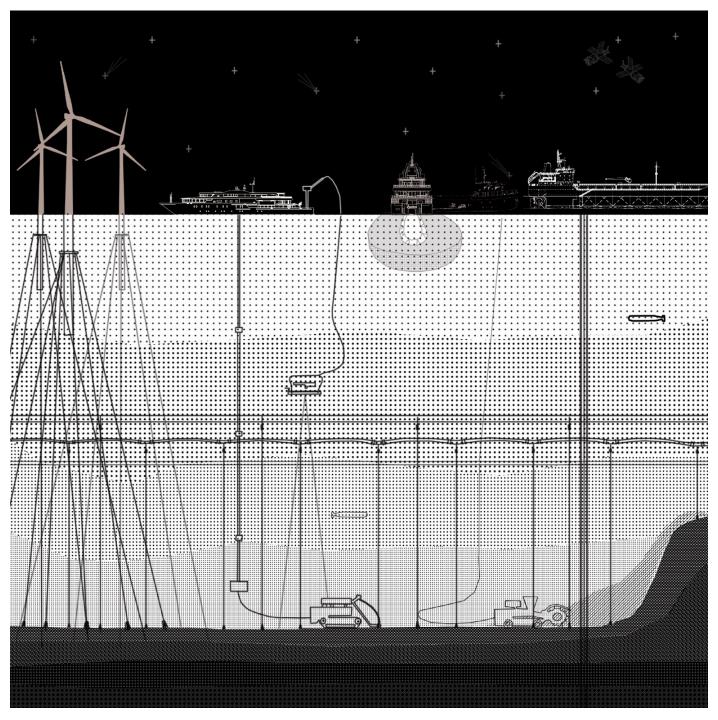
Topos-Form

The Territorology inquiry continues by shifting the focus from the patterns of social movement that constitute the Mediterranean oceanic territories to the understanding of these territories not only as access points to resources but also as resources (Mubi Brighenti, 2010) This shift implies the acknowledgement of the Mediterranean Sea as primarily a Machine-Territory whose solidification (Sideli, 2022) - resulting from the exercising of what Povinelli (2015) defines as **Geontopower** to describe the governance patterns that distinguish between life and non-life – can be traced in the overlaying of transborder networks, dedicated structures and forms of labor that have dictated its total appropriation and urbanization (Lefebvre, 1970).

In this context, the following pages consist of a concentrated investigation of the different continental infra-structures that portray the machinic condition of the Mediterranean Sea deep below its surface and far beyond national formats of territory. Each of the selected layers associates those infra-structures not only with their groundplan location - and the implied exploitation rights through the correlation with statal borders - but also to the various depths of the Sea that they occupy. Spatial occupation is deemed more important than material permanence directing a portrait that visualizes not only evident constructions but also repeated logistic flows or projected occupation grids through their spatiotemporal footprints. The outcome illustrates the unknown and often intentionally concealed space of the sea as a very densely occupied territory whose representation becomes essential for the understanding of the power relations that operationalize it. These relations dictate the misalignment between territory and statal authority over its land-terrain and the abolition of the national notion of borders. (Sassen, 2013)

In parallel, the portrayal of the Machine-Territory - beyond facilitating a deconstruction of its second nature and, thus, a deconstruction of the modernity subject-object division (Longhin, 2021) - attributes to the human-induced functions the same metabolic limitations with every machine function: their waste. This becomes the subject of the final part of the Topos investigation extending the urbanization-operationalization study from the inhabited sea territory to the surrounding urbanization cores that are inextricably depended upon the occupation and the absorption rate of the Mediterranean Sea; now reaching its breaking point.

"Territory needs to be understood through representation, appropriation and control, broadly understood as the workings of power." (Elden, 2010)



Composition Drawing \_ the appropriated sea

overall: tracking & mapping atmosphere: energy production surface: shipping & fishing underwater: cables, pipes & supports ocean floor: extraction & mining

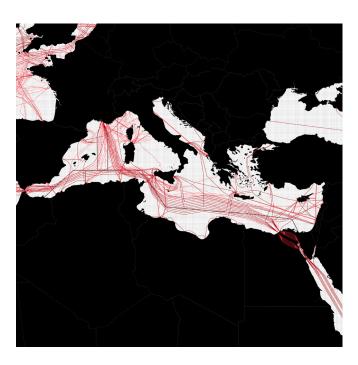
### Topos-Form



Shipping Lines (average)



Extraction Activities



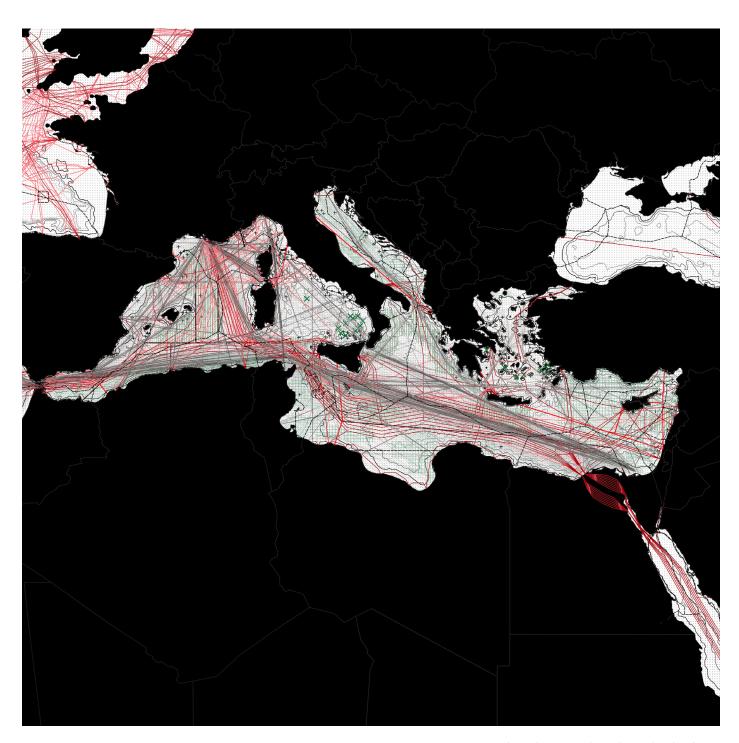
Underwater Cables & Pipes



Ocean Topography

"To occupy a space, to live in a space means to initiate a conscious attempt to live by inhabiting a place simultaneously territorializing one's existence. In the act of using space, the appropriation of space is a fundamental and inevitable act of being."

(Schoonderbeek, 2010)



Alteration Drawing\_the urbanized sea

shipwrecks	+
deep sea mining	$\times$
shipping lanes	
oil pipes	_
electric cables	
telecommunication cables	_
unspecified cables	_
oil extraction contracts	
oil exploration contracts	
oil development contracts	
bathymetry contours	=

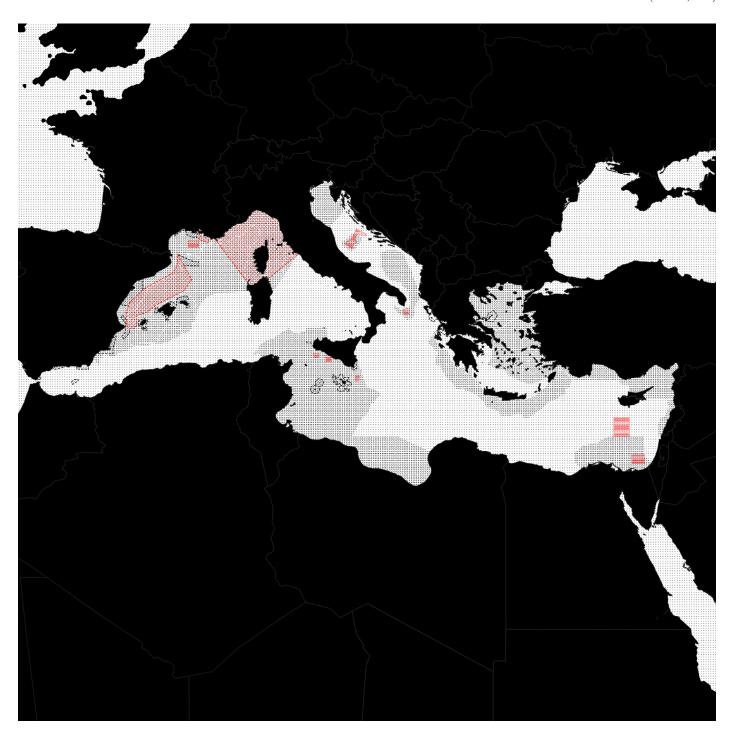
#### Habitat-Interaction

Moving forward, the inquiry in the theme of Habitat extends beyond the notion of territory as experienced by human towards the territorial motifs and counterpoints of more-than-human assemblages in the Mediterranean Sea. This study presupposes the understanding of territory as a bridge-mechanism between conditions of possession and ownership; resulting from the overarching exercising of Biopower which defines the patterns of life and death as objects of governance and dictating relations of dominance. These relations of dominance highlight the fundamental condition of heterogeneity that summarizes the complex co-existence of different material subjects and agencies in the Mediterranean Sea territories. (Mubi Brighenti, 2010)

In the following pages, then, the Habitat study focuses on the various conflicts that arise from the creation of the Machine-Territory in the Mediterranean Sea when examined in relation to the fragile oceanic ecosystems and their delicate rhythms. The underlying question in the center of this examination, what worlds are being maintained and at the expense of which other - borrowed from the critical reflection of Puig de la Bellacasa (2017) in the book Matters of Care: Speculative Ethics in More Than Human Worlds – presumes the adoption of the concept Matters of Concern-Matters of Care to stress connotations of vulnerability, trouble and worry associated with the study of things (Latour, 2008). Thus, the investigation delves into the different layers that illustrate uncertainty and conflict induced towards the nonhumans from the alteration of the sea environment – especially in light of the emerging climate crisis and the subsequent Sixth Extinction. Simultaneously, it reflects upon the role of bordering devices in the maintenance or destruction of the Habitat worlds visualizing conservation frameworks developed in different jurisdictional scales - either transnational or sub-national. (Sassen, 2013)

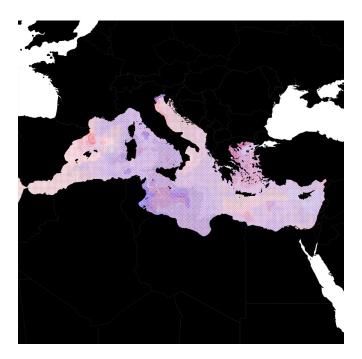
Then, in order to shift ontological perspective and represent mediations of materiality and agency as co-enacted by more-thanhumans (Papadopoulos,2011), the Habitat Theme adopts the viewpoint of the Caretta Caretta Sea Turtle species. This view-point presents an alternative narration of 'soft' territorial acts (Bode & Yarina, 2022) introducing the boundary violation also in relation to the different planetary temporal scales (Callicott,2007).

'The environmental immortality of the most disturbing of all anthropogenic changes imposed on nature - the sixth great extinction event in the 3.5 billion biography of planet Earth - can only be persuasively articulated as the boundary violation of the evolutionary temporal scale by the cultural.' (Callicott, 2007)

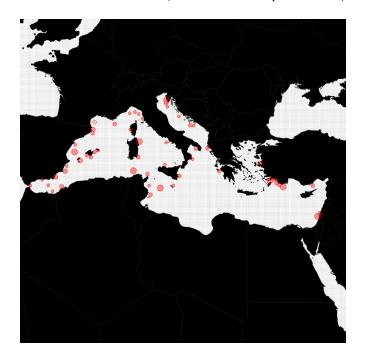


Composition Drawing\_conservation frameworks as borders

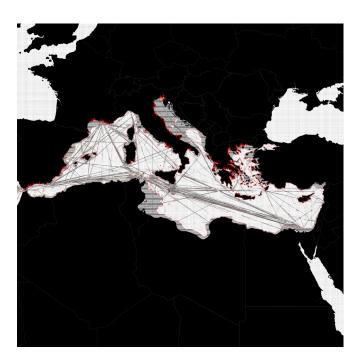
### Habitat-Interaction



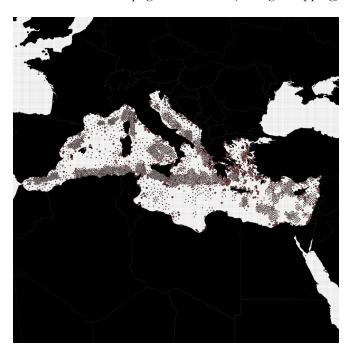
Climatic transformations (acidification - temperature rise)



Invasive non-indigenous species (concentrations)

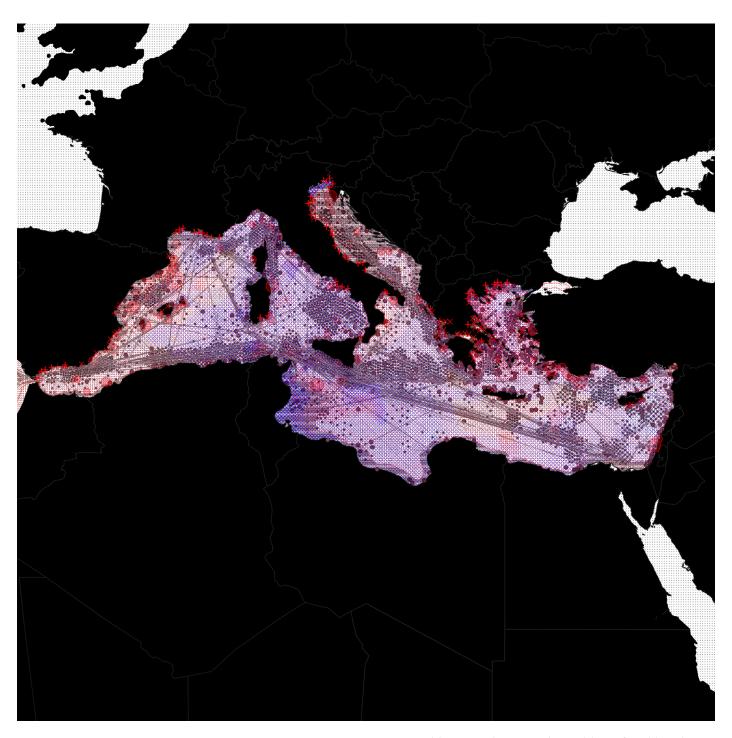


Anthropogenic activities (fishing - shipping)



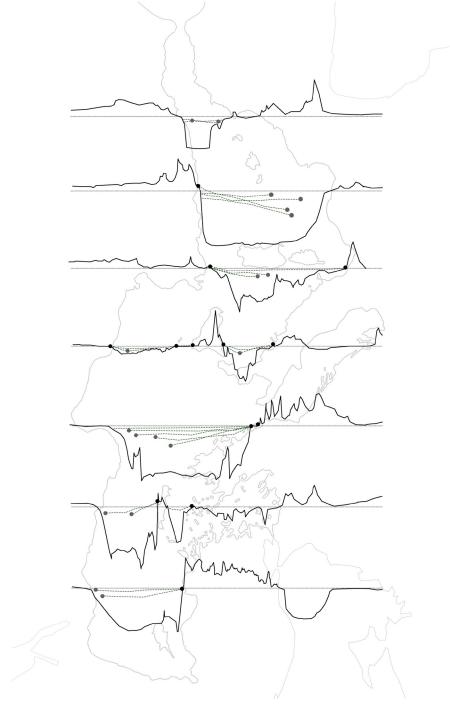
Anthropogenic processes (oil spills& microplastics)

Because technological [and more generally cultural] evolution is much more rapid than genetic evolution, we transform ecosystems faster than other biota can adapt. ' (Angermeier, 2000)



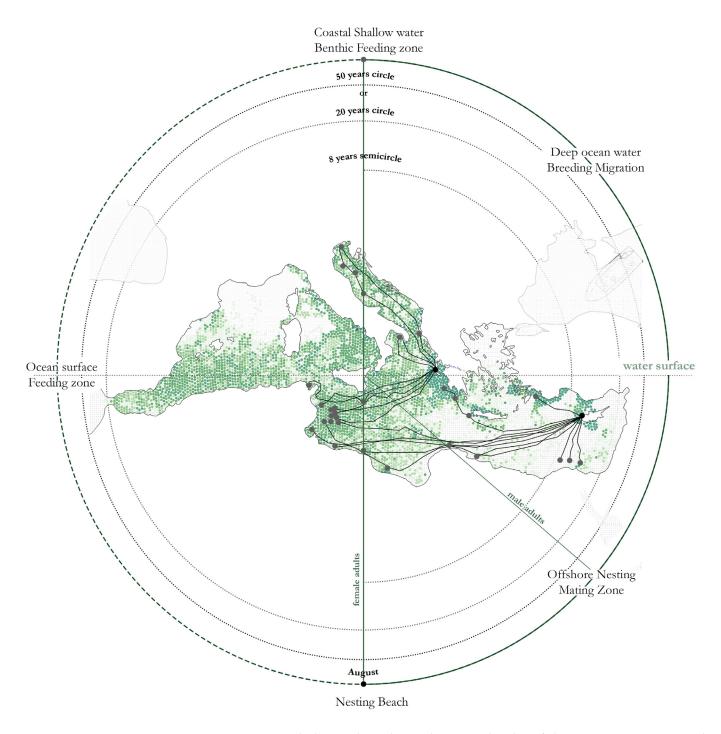
Composition Drawing\_superimposition of Habitat threats

### Habitat-Interaction



Alteration Drawing \_ the lateral movement of the Caretta Caretta sea turtles in the Basin

"Caring for" a nonhuman in a way that doesn't objectify it appears as a particularly non innocent process involving "non-harmonious agencies and ways of living that are accountable both to their disparate inherited histories and to their barely possible but absolutely necessary joint futures". (Haraway,2016)



Limit Drawing\_ the spatiotemporal scales of the Caretta Caretta sea turtle

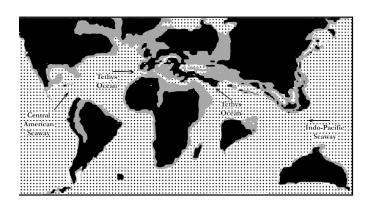
Matter-Substance

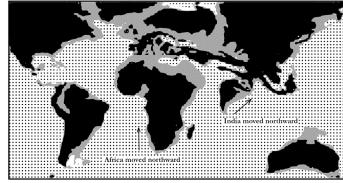
In the final part of the Territorology investigation, the theme of Matter connects the territory as process with its constitution as a physical space dependent on the geomorphological and the climatic temporal scales and conditions. Beyond searching what the Mediterranean territories are made of (Callicott, 2007), the concept of Geopower – as defined by Elizabet Grosz (2011) – is used to illustrate the relation between Earth and its complex human and more-than-human assemblages as an out-come of often clashing forces. These forces direct the geopolitical transformation of the geophysical through the mediation of political technologies (Elden, 2010); through the definition of territories and through deliberate processes of terraforming.

In that sense, the Matter study begins with tracing the main processes that affect the physical shaping of territories in the Mediterranean portraying the sea as a mobile and dynamic space characterized by a fluid boundary between solid and liquid, between land and sea. (Oloriz Sanjuan, 2019) This mapping reveals the identity of the Mediterranean as historically one of the most geodynamic places on Earth; now in extensive pressure also under the transformations induced by the climate crisis. The interplay between geodynamic and climatic transformations in the Anthropocene remains defining in the most primitive acts of territorialization which remain dependent upon the finitude of the land. Land – in the view of Anderson (1974) – is a natural monopoly since it can define its own perimeters of power.

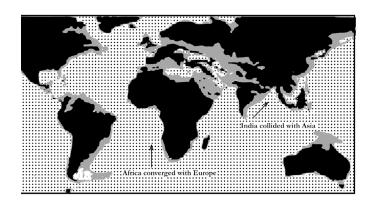
In this context, – and following the same methodology with the previous themes - the Matter study focuses on cases of disruptive transgressions in the land-sea boundary that produce new series of de-territorialization and reterritorialization processes defining heterotopian spaces. Among them, the temporal volcanic formation of the Ferdinandea/Graham/Julia island is selected as an embodiment of land acting as both the site and the stake of struggle (Elden, 2010). The island's rising and setting in the center of the Mediterranean Basin marks an intersection between geomorphological, cyclical, and historical notions of time (Oloriz Sanjuan, 2019) that defies the established powerscape directing the formation of the Machine-Territory challenging current notions of spatio-temporal borders.

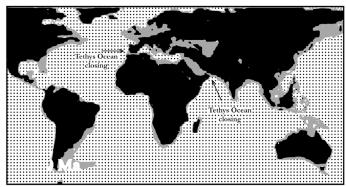
The relations between the earth and its various forces, and living beings and their not always distinguishable forces, are forms of Geopower, if power is to be conceived as the engagement of clashing, competing forces. Power – the relation between humans, or perhaps even between living beings – is a certain, historically capitalization on the forces of Geopower.' (Grosz, 2011)



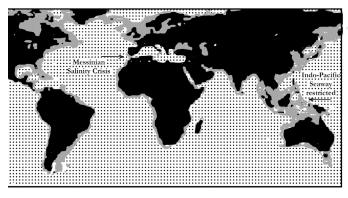


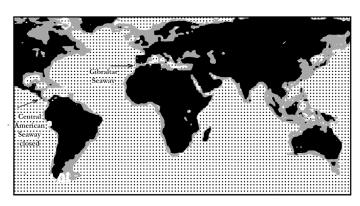
65 Ma 50 Ma





35 Ma 20 Ma





5.7 Ma Present

Diagram of the Genesis of the Mediterranean Basin from the Tethys Ocean

### Matter-Substance



River Discharge Layer



Geodynamic movements Layer

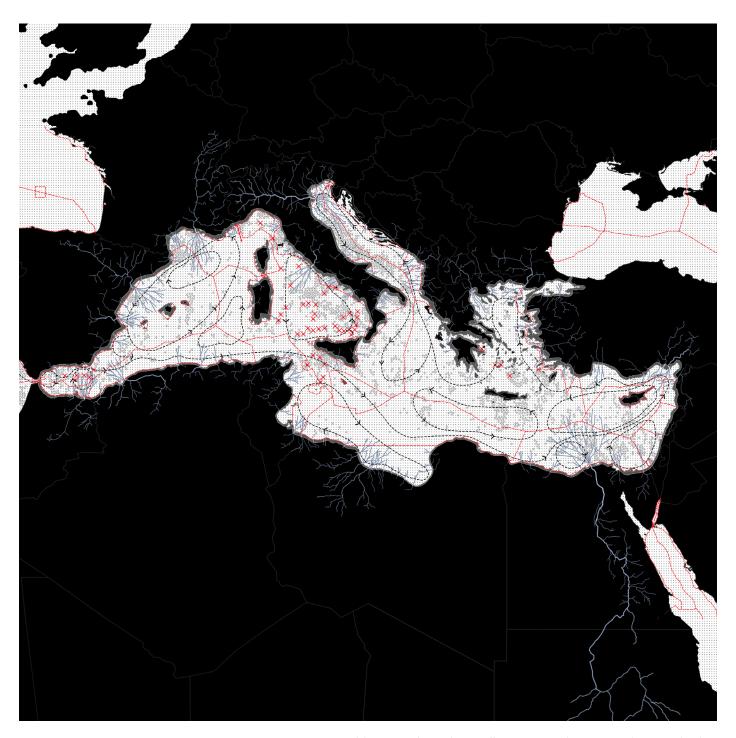


Littoral Cell Movement Layer



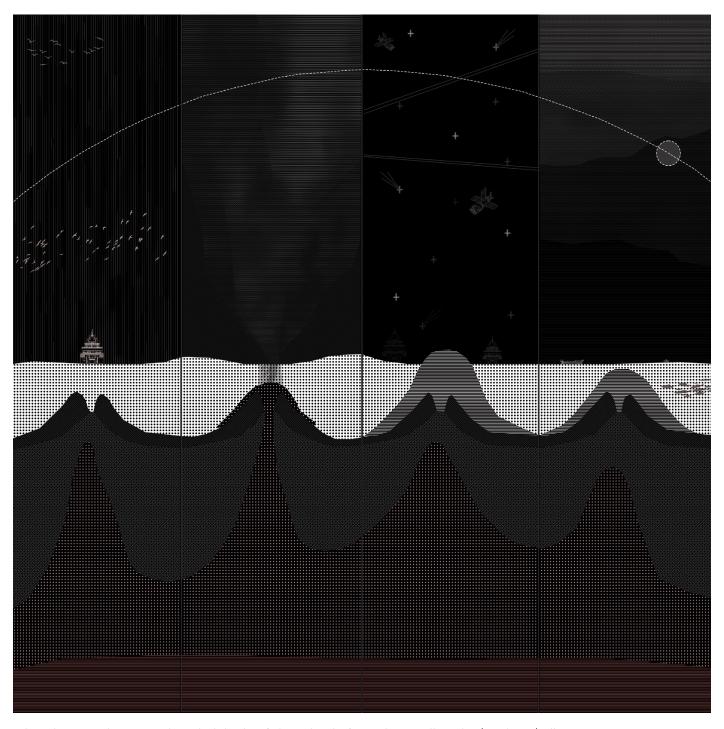
Sedimentation Cores Layer

Before life emerges as such, before it has even the possibility of emergence, matter must already contain the immaterial, the capacities to make sense or to have meaning? (Grosz, 2011)



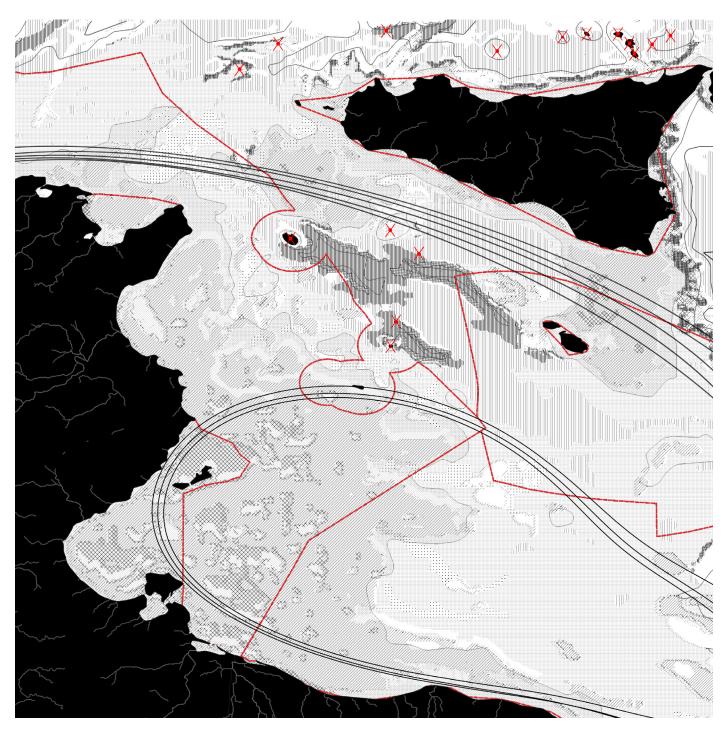
Composition Drawing \_the Mediterranean substance under constitution

Matter-Substance



Alteration Drawing\_Genesis and Finitude of the volcanic formation Ferdinandea/Graham/Julia

Life capitalizes on the two-faced orientation of the earth and its forces erupting into materiality as a bounded and self-producing cohesion that is also always 'thinking', that is to say, is always oriented by the senses of the earth inherent in itsmateriality.' (Grosz, 2011)

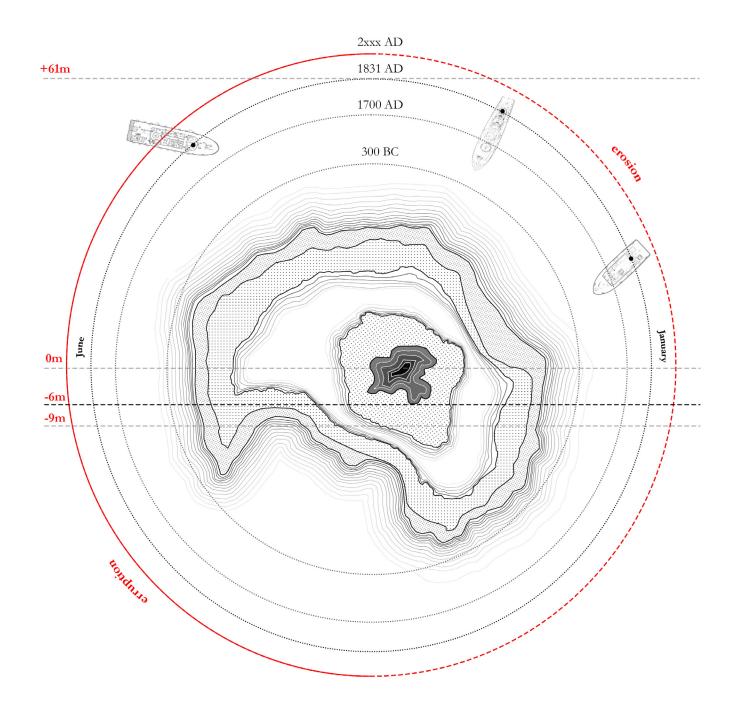


Alteration Drawing \_Zoom in the borderscapes around the sunken volcanic formation of Ferdinandea/Graham/Julia

River discharges	_
Littoral cell movement	
EEZ border configurations	
Volcanic activity	×
Littoral cell movement	
Underwater mountains	
Underwater low shelf	***
Underwater medium shelf	
Underwater high shelf	

#### Territorology

#### Matter-Substance



Limits Drawing\_temporalities of Genesis and Finitude of the volcanic formation Ferdinandea/Graham/Julia

'It is true that from the deserted island it is not creation but re-creation, not the beginning but a re-beginning that takes place. The deserted island is the origin, but a second origin. From it everything begins anew. The second origin is thus more essential than the first, since it gives us the law of repetition, the law of the series, whose first origin gave us only moments. But this theme, even more than in our fantasies, finds expression in every mythology.'

Gilles Deleuze. (1953-1974). Desert Islands and other texts.

#### Territorology

Synthesis

Concluding the parallel inquiries presented in the Monographies chapter, a counter reading of the Mediterranean is revealed. The dense seascape - no longer simplified to a water body but portrayed as a viscous space under constant transformation, movement, and interaction - contains in its various depths all the remnants of the different worlds, times, and processes that produce, threaten or connect its complex human and more-than-human assemblages in an often forgotten knot of interdependencies that ties them to the Cosmos. (Zyman, 2019) Studying the Mediterranean, then, not only uncovers its crises and vulnerabilities induced by its historic politicization and operationalization - that define it as a machinic powerscape - but also enables the tracing of all the situated narratives and things which are neglected, forgotten or intangible. Shifting the focus, thus, to these findings guides a counternarrative for the creation of a common ground in the Mediterranean initiating a process of sympoiesis in the Chthulucene. (Haraway, 2020)

The essence of **Transition** – as explored in the first inquiry – beyond referring to the Climatic Crisis and its subsequent transformations in the mesocosm of the Mediterranean embodies this transitory moment between current and intentioned territorial acts; between the Accumulation of solid borders and the Clearance of place-making in a context of flows. This transition is de facto connecting the element of place and the element of time giving life to the concept of Borderscapes (Rajaram, Grundy-Warr, Brambilla, 2007) and its accompanying theorization as a place of passage, becoming and relationality. In the specific case of the Mediterranean basin - being the oldest inhabited and appropriated sea - the borderscapes are characterized by extreme densities of conflicts, passages and routes that direct a Palimpsest (Cordo, 1983) of temporalized spaces, scales and intangible connections. Every boundary-drawing act and every historic-mythologic passage of the Mediterranean Sea space is irreversibly inscribed in its material and expressive history defining a dual process of Mobilizing Territories and Territorializing Mobilities (Mubi Brighenti, 2014). This irreversibility indicates an understanding of the effects of territorial acts as permanent, even if the territories that they define are only ephemeral. The Homeric route of Ulysses' trip or the old borders between

Stato da Mar and the Ottoman Empire are still subscribed in the material and the symbolic space of the Mediterranean preserving interweaving narratives and residual forms of proximities in a space of constant movement and Viscosity (Couling & Hein,2020).

In this context, the notion of **Transgression** (Foucault, 1963) – as investigated in the second part of the Monographies chapter - derives from the politics of movement to interpret the Mediterranean territories through their constitution from the territorial technology of the border. The concept of Transgression doesn't only define the border through the act of its crossing - simultaneously producing and defying it - but also marks a critical point for the philosophical theorems that have directed life in the Mediterranean. In fact, it signifies a conscious transition from Anaximander's model of the world that has historically shaped western thinking through the dichotomy of the bounded and the unbounded - resulting in a misinterpreted understanding of territory as a de facto bounded entity, especially in the state-regime nexus - to Heraclitus' theory of Universal Flux and the **Identity of Opposites**. If, then, everything is in constant movement and transformation, the Mediterranean borderscapes consist not of lines but of Liminal Bodies (Bunschoten, 2013) that embody all the in-between conditions, the negotiations and the conflicts that have historically shaped the area's common identity and trajectory. In that sense, the liminal bodies constitute the primal spaces for the creation of a common ground that bridges not only the two sides of the border but also inherent divisions between cities and non-cities, humans, and non-humans.

This creation of a common ground, though, entails a conscious act of deterritorialization and reterritorialization that bridges the concept of Transgression to the concept of Mobilizing Territories and Territorializing Mobilities through the notion of **Territorology** (Mubi Brighenti,2010). Territorology – as studied through the parallel situated investigations of Geopolitics, Topos, Habitat and Matter – maps the different processes and the hidden consequences of territorial acts in the Mediterranean space defining critical scapes of urgency while discovering Heterotopic (Foucault, 1963) and Heterochronic (Harrison, 2008)

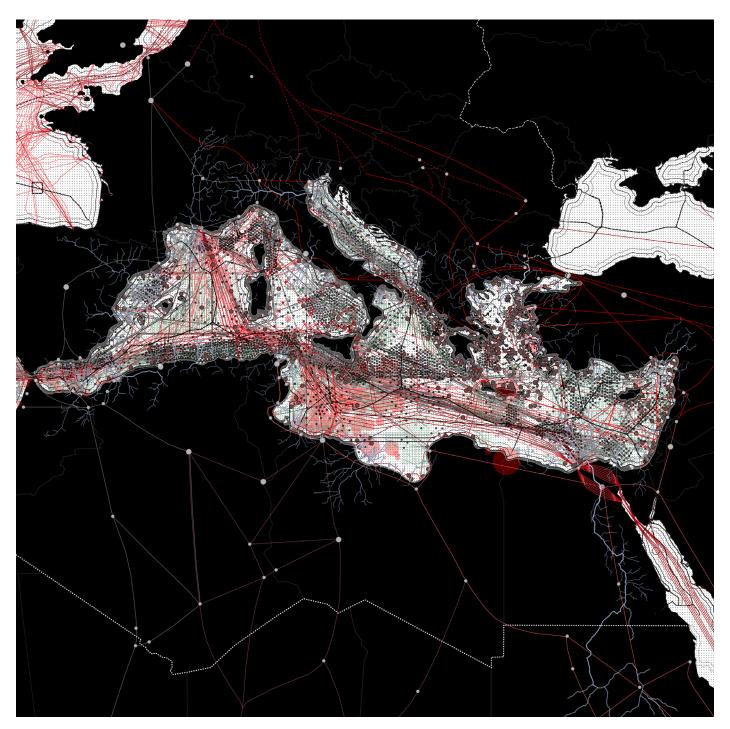
#### Territorology

Synthesis

traces that can guide the intended sympoiesis process. Under these goals, the parallel investigations explore the material and expressive densities that fill the space of the sea - often portrayed as empty - confirming the theoretical hypotheses that the borderscapes are in fact the centers of all the acts that produce the Mediterranean Territories and that their multiplication is a direct outcome of these concentrated densities. Conflicting borders, specified migration routes, daily shipwrecks that turn the sea into a necropolis, multileveled infrastructural networks, permanent shipping lanes, extensive underwater exploration or mining areas, frequent oil spills and microplastics clusters, borderless vulnerable ecosystems, ambiguous edges between land and water, sedimentation and erosion concentrations or increased volcanic formations are only but a few of the layers that paint the picture of the Mediterranean Basin as a fully urbanized space challenging national interpretations of territorial formats.

In this condensed interpretation of the Mediterranean – as shown in the following Synthesis Map through the overlay of the four parallel investigations – different shapes, scales, and temporalities of territory co-exist and contradict each other defining relational Terrain(s) Vague (Foucault, 1963 & Marullo, 2013) that embody notions of Extraterritoriality (Sassen, 2020). These emergent territorial formations, beyond revealing human and more-thanhuman territorial acts that transgress the political technology of the border as a result of a complex negotiation between Kinopower, Geopower and Biopower, offer the ground for a conscious reconnection between the natural, the phenomenal and the praxeological space - constituting Hannah Arendt's Spatial Ontologies (Debarbieux, 2017) of territorialization. This meeting of the triple ontology of space is translated in the context of the Mediterranean Sea - both rhetorically and physically - to the notion of the island. The Mediterranean islands are not just outcomes of multiple genesis events connected to the interplay between geological and climatic processes but are primarily geopolitical containing and magnifying all the conflicting processes, conditions, relations, and things that characterize the entire basin. Historically, man's conceptual and material appropriation of the Mediterranean Sea – its territori'The sea holds in reserve that which has been banished, not letting it vanish.'

(Zyman, 2019)



Synthesis Drawing\_Overlay of the Geopolitics-Kinopolitics, Topos-Form, Habitat-Interaction & Matter-Substance

#### Territorology

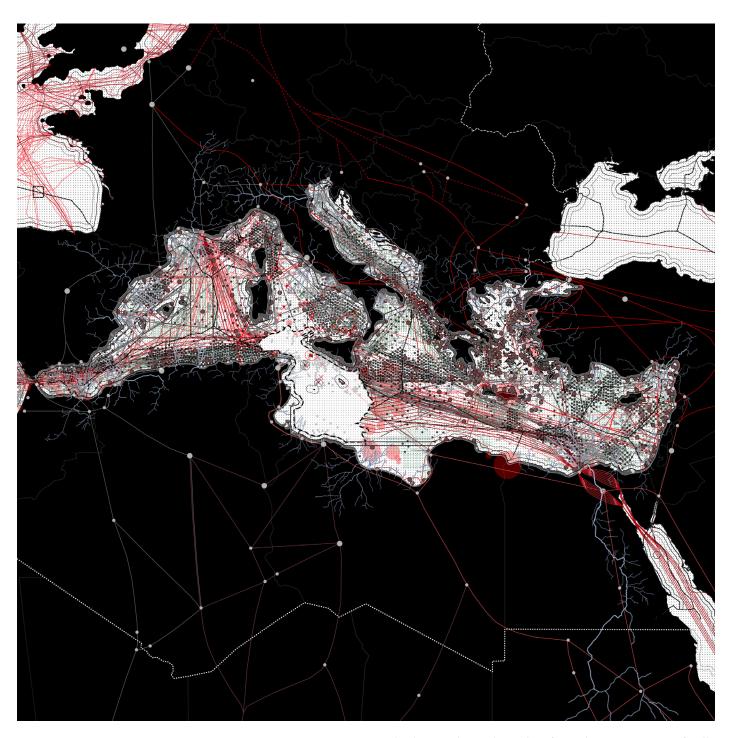
Synthesis

alization – has been executed and directed through its multiple islands and through the understanding of land as what is found across islands (peraiai); as the potential extension of the island.

The (Mediterranean) island, as a Liminal Body and as an embodiment of the Sealand (Topalovic, 2014) condition, is, thus, an archetypical territory whose fundamental material finitude converts its soil into its most valuable resource and its repository of cultural, biological, and geological history. Its physical appearance or disappearance involves unprecedented effects of deterritorialization-reterritorialization processes that retrieve all the questions of inhabitation and appropriation of the oceanic territories in favor of certain worlds, narratives, and things and in the expense of others. In that sense, the discovering of the ephemeral Ferdinandea/Graham/Julia volcanic island formation at the center of the Mediterranean powerscape cannot be merely bypassed as an anecdote with defined spatial and temporal boundaries that simulates autopoietic systems. From the moment of its initial formation and the subsequent disruption in the established order of things – an order of superimposition and conflation in Lahoud's words (2013) - till its ephemeral disappearance and its expected reappearance the island in its Terra Nulla status holds the power of an unexpected world that can completely transform the functional and expressive relations currently shaping the Mediterranean basin's space if understood through a narrative of sympoiesis.

In this setting of the Chthulucene, the Monographies chapter could not conclude with a set of statements-answers but with a set of further questions that will guide the following chapters. What does it mean to be an ephemeral island in the Mediterranean context? Who inhabits this island and what worlds are being disrupted by this inhabitation? What processes does the conservation of the Mediterranean island entail and what kind of intentions does it evoke? How can the Terraforming (Bratton, 2019) practices for the conservation of its soil avoid a colonization paradigm and engage practices of care, sympoiesis and response-ability? And finally, how can it participate or evoke the construction of Parliaments or Compositions of things (Latour, 2014) in the Critical Zone of the Mediterranean?

The thalassic waters are the burial-at-sea-waters of "fragments of lives and pieces of time" submerged — residence time and residual time alike.' (Zyman, 2019)



Synthesis Drawing\_Disruption from the appearance of Julia



Situated Knowledge

'The "knower" does not stand in a relation of absolute externality to the natural world being investigated — there is no such exterior observational point.

We do not obtain knowledge by standing outside of the world; we know because "we" are of the world.'

Karen Barad (2012). New Materialism: Interviews & Cartographies

Starting to unpack these questions, the Situated Knowledge chapter consists of the different site investigations that constitute a parallel inquiry to the Monographies. Besides complementing the interpretation of the Mediterranean, as a congested but dynamic space defined by its boundary conditions, these investigations elaborate upon the understanding of the (Mediterranean) territory as an ongoing project whose traces of immanence and resistance are irreversibly engraved in its material constitution. This elaboration overcomes the incapability to orchestrate a documentation process that would manage to represent the entirety of the continental scale of the Mediterranean Basin through an acupuncture methodology which combines the literature review, the critical mappings, and the different cartographies with a more situated and subjective research. Developing this proximal type of knowledge is deemed crucial as a supplement to the geographical urban design approach that lacks partiality, implication, and complicity.

In fact, the Situated Knowledge inquiry revolves around the underlying question how can urban design understand place as a proximal construction of touch. (Hetherington, 2003) To answer, it develops three parallel examinations: on the interface between human and more-than-human processes, on the material conditions of liminality, and on the inventory of (Mediterranean) islands. Through these examinations, which define a different form of incomplete cartographies (Wall, 2021) open for modifications, additions and elaborations, the research emphasizes the interrelations between meaning and materiality, between processes and things.

As subjects of the photo documenting process the objects-phenomena observed and represented through the different site investigations bring forward the minglings between object and subject positions that are essential in the reconstruction of an onto-epistem-oology and in the quest for a place of encounter. (Hetherington, 2003) The atmosphere of place, the inhabitation patterns, the different natural-cultural elements, the guiding lines, the material textures, the altering light conditions, the fluid boundaries between land and sea; they all participate in the creation of a collection of figurations that act as a prototype for the subsequent experimentation with speculative (re)fabulations, processes of sympoiesis and weaving worlds practices. (Haraway, 2016)



Human vs More-than-Human Processes



Sewage system ending: Beirut, Lebanon

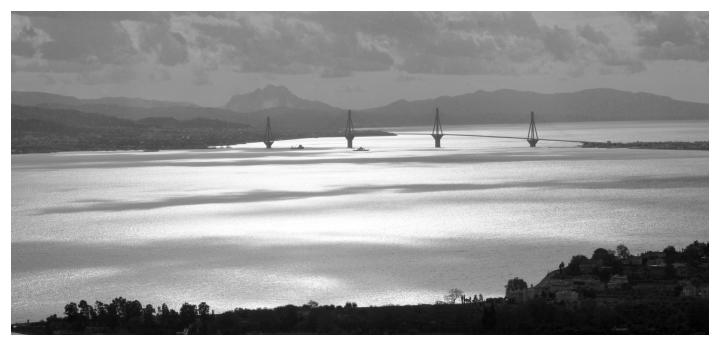


Fishing decks: Messolonghi, Greece

Water has built society and territory. Sharing water defined codes of living together, rights of possession, use, and distribution.' (Domingues,2020)



Salterns: Messolonghi, Greece



Bridges: Rion, Greece

Human vs More-than-Human Processes



Ports: Volos, Greece



Fisheries: Zamboni, Greece

Water is deeply embedded in varied contexts and in constant renegotiation over its ownership, management, and use, not only as a purely economic resource but also as a symbol of sovereignty, power, identity or citizenship.' (Domingues,2020)



Coastal factories: Drepano, Greece



Extraction sites: Fokida, Greece

Human vs More-than-Human Processes

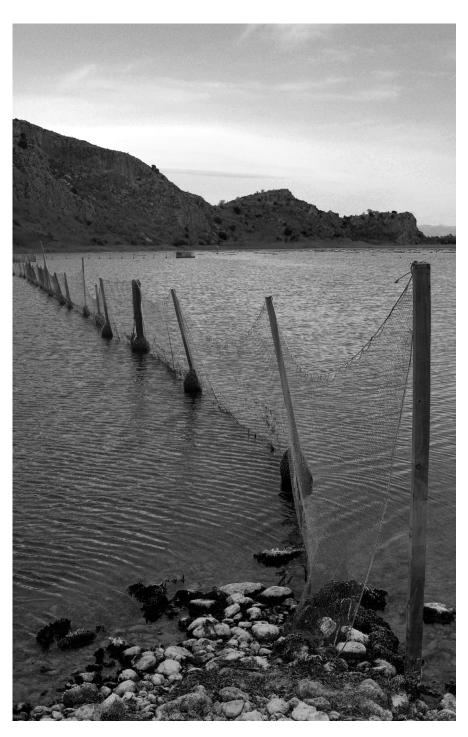


Salt pans: Messolonghi, Greece



Salt pans: Xwejni, Malta

Water has certainly always been an intense site and agent of planetary terraforming, but in an Anthropocene narrative, this shapeshifting is figure either as a result of our attempts to control water or as an out of control response by water to these attempts at control.' (Neimanis,2017)



Fish farming: Kalogria, Greece

Human vs More-than-Human Processes



Cruise ships: Katakolo, Greece



Commodified edges: Vai, Greece

"Three distinct ways of seeing water often run through and become entangled in its varied situations: the water as chemical substance, the water as a resource, the water as a commodity." (Domingues,2020)



Touristic vs immigration routes : Turkey - Greece

Material Conditions of Liminality



Dying Reefs: Beirut, Lebanon



Landfills: Beirut, Lebanon

'At the meeting of sea and land, there are ever two kinds of edges: the horizon and the edge of the sea. One is clean and sharp, and still, (though it is not actually there). The other is unruly and messy it curls and sinks, makes noise, demarcating nothing. (..) Both horizon and sea's edge -as things- are imaginary.'

(Schoobnderbeek, 2010)



Successive peninsulas: Beirut, Lebanon

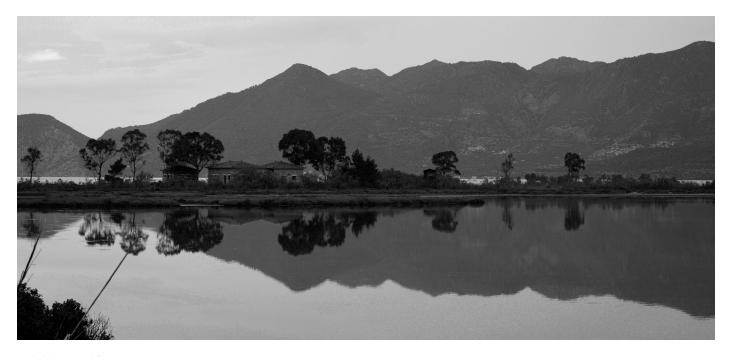


Traces of ancient coastal urbanization: Batroun, Lebanon

Material Conditions of Liminality

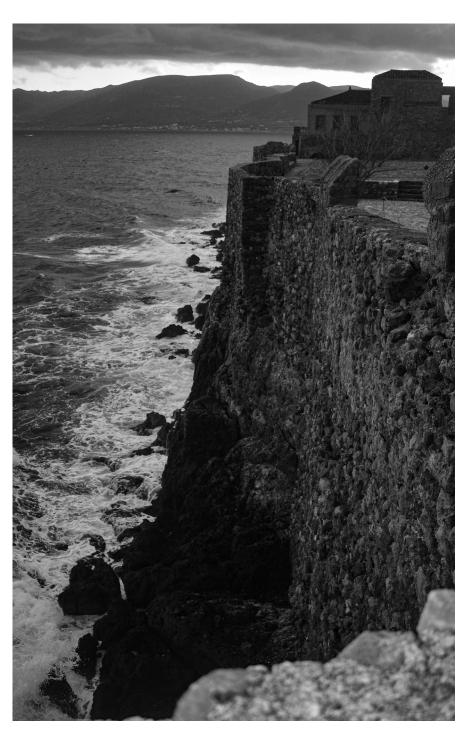


Salt lakes: Kalogria, Greece



Salt lakes: Psiftra, Greece

'Liminality denoted something found in between things. Referring to notions of threshold and interval, it also means a space of time. Thus the liminal braces not only such notions as openness, porosity, breach and relationship but also of process and transformation.' (Avermaete, 2010)



Appropriated vertical boundaries: Monemvasia, Greece

Material Conditions of Liminality

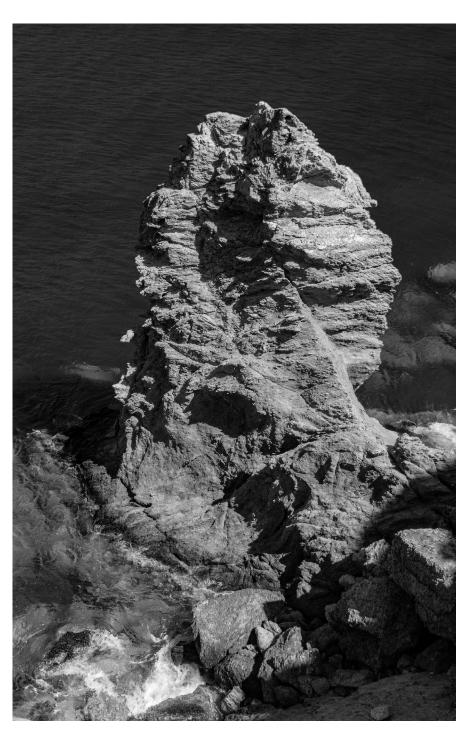


Inhabited cavities: Matala, Greece



Curved edges: Billingshurst Cavern, Malta

Liminal space can become the laboratory for an intensified experience that offers new opportunities. ' (Schoobnderbeek, 2010)



Rock Formations: Vai, Greece

Material Conditions of Liminality



Shallow sea lakes: Mpalos, Greece



Landslide beaches: Lefkada, Greece

"The edge between land and sea is neither land nor sea, but both; and neither waste nor sand but both; (containing) also living plants and creatures and their by-products and billions of micro-biota." (Schoobnderbeek, 2010)



Shipwreck remains: Gytheio, Greece

Inventory of (Mediterranean) Islands



The alternative island: Mpalos, Greece



The isolated island: Spinaloga, Greece

'Some islands drifted away from the continent, but the island is also that toward which one drifts; other islands originated in the ocean, but the island is also the origin, radical and absolute.' (Deleuze, 1953-1974)



The uninhabited island: Kavousi, Greece



The deserted island: Argolic Gulf, Greece

Inventory of (Mediterranean) Islands



The regulating island: Greece - Turkey borders



The mythological island: Gramvousa, Greece

'Humans can live on an island only by forgetting what an island represents. Islands are either from before or for after humankind.' (Deleuze, 1953-1974)



The regulating island: Turkey - Greece borders



The inhabited island: Monemvasia, Greece

Inventory of (Mediterranean) Islands



The original island: Monemvasia, Greece



The archipeLagic island: Meropi, Greece

'Dreaming of islands — whether with joy or in fear, it doesn't matter — is dreaming of pulling away, of being already separate, far from any continent, of being lost and alone — or it is dreaming of starting from scratch, recreating, beginning anew.' (Deleuze, 1953-1974)



The abandoned island: Palaiomonemvasia, Greece



The forgotten island: Trizonia, Greece

Inventory of (Mediterranean) Islands



The continental island: Crete, Greece



The disappearing island: Pontikaki, Greece

'Humans can drift toward an island that is nonetheless originary, and they can create on an island that has merely drifted away. On closer inspection, we find here a new reason for every island to be and remain in theory deserted.' (Deleuze, 1953-1974)



The sacred island: Kalamaki, Greece

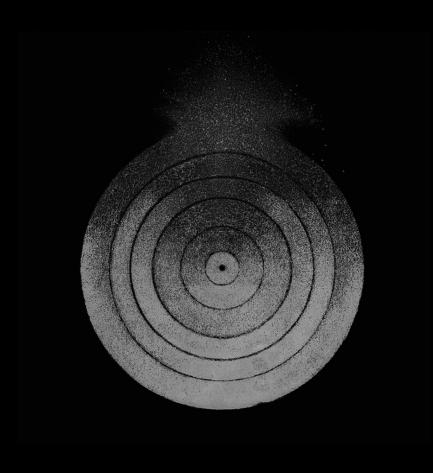
Starting from the interface between human and more-thanhuman processes inquiry, the site investigation reveals the same fragmentary portrait of the Mediterranean as solid sea with the Monographies emphasizing the boundary conditions as the most critical space of territorialization. Concentrating on the triple identity of 'modern water' as resource, chemical substance, and commodity (Domingues, 2020), the investigation seeks to document practices or landscapes that get involved in the definition of the elemental condition of water. Even though the selected photos can only function as samples, they do manage to criticize the understanding of water as neutral and placeless bringing forward different local waters whose currents conceal toxicities, viscosities and materialities connected to intensities of power exercised from the land. In this context, the 'Anthropocene water' is clearly illustrated as an attempt of control that preserves the current narrative even when it attempts to theorize water as the most critical point of collaborative survival. (Neimanis, 2017)

Focusing more on the conditions of liminality, then, the second inquiry directs the overall thesis shift from the Anthropocene to the Chthulucene. This shift, in the context of the photo documentation, is seen as an investigation of the sealand boundary which allows processes of territorialization, deterritorialization and reterritorialization to bring different forms of marginality and belonging together. The condition of liminality – discusses in detail in the Transgression subchapter – is rendered crucial for the establishment of a direction towards hydrocommons; understood here both as common ground for different waters, and for human and more-than-human entities which interact shaping each other. (Neimanis, 2017) Inhabitation imprints, extended spaces of meeting between salt and fresh water, cavities, sculpted seaside sites, ruins, landslides, artificial edges, or ephemeral scapes are only but a few of the conditions documented in this site inquiry that highlights the (Mediterranean) island – and its peraiai – as the archetypical geopolitical and symbolic condition of territorialization and sea urbanization.

Elaborating upon this archetype, then, the last inquiry takes the form of an inventory of (Mediterranean) islands which fol-

lows the conceptual reversal of the sea as island to initiate the process of (re)fabulation revolving around the finding of Julia. In this inventory - following the methodology of the 'Desert Island' project (MAP Office, 2009) - each island becomes a figure-figuration that represents a possible trajectory for an ephemeral island; its intentional conservation, its potential inhabitation, its worlding capacity. As a multifaceted entity, then, the Mediterranean Island embodies an alternative imaginary of living, an isolated prison or necropolis, an uninhabited – at least from humans – material shape, an archetypical deserted body, a regulating control point, a mythological or sacred container, an inhabited laboratory of human urbanization, an original space that became place, an abandoned or failed narrative of mankind, a forgotten trace, an archipelagic entity - extending to its peraiai, a continental structure, a disappearing phenomenon.

These trajectories, contained within unique minglings between the material and the discursive, are only but a few of the possibilities for the co-evolution of islands and their finite soil. Although they synthesize only a partial composition map of the different worlds coexisting, even when invisibilized, in the Mediterranean Basin, they do demonstrate the capacity of an island to embody speculative worlding processes and to direct different paradigms for the development of common worlds acting as a Pascalian void for the sea. This reversal takes advantage of the shapeshifting power of water to develop an extended understanding of terraforming while it reinstates the understanding of ephemerality as an inherent characteristic of both oceanic and continental islands' nature.



Speculative (Re)Fabulation

'What are your lines? What map are you in the process of making or rearranging? What abstract line will you draw, and at what price, for yourself and the others?'

Deleuze & Guattari (1988). A Thousand Plateaus

In this context, Julia seamount embodies Sloterdijk's (2016) definition of **islands as world models within the world**, bridging the real and the virtual in its ephemeral space. Its rhythm of appearance and disappearance defines a critical timeplace which not only presents various possibilities for different perceptions, experiences, or engagements (Wolfe, 2010) but contains already a living counter-paradigm of coexistence on a damaged earth through unexpected combinations and entanglements illustrating its potential to play the role of a **Speculative (Re)Fabulation** in the attempt to develop a common ground for the human and more-than-human assemblages in the Mediterranean Basin. This notion of the Speculative (Re)Fabulation arises from Haraway's (2016) **string figure methodology** establishing a shifted focus on the invisible and the neglected as a way of staying with the trouble – present, entangled, response-able and accountable.

In the question what stories can the invisible and the neglected worlds say about living and dying in response-ability on a damaged planet the ephemeral island responds by constantly stirring the patterns of cohabitation, by simultaneously inducing different relational material-semiotic knottings, by cultivating partial and open-ended connections or multispecies becomings, by provoking complex processes of living and dying with unexpected outcomes and – more importantly – by challenging knowledge delimitations through the focus on the critical situated details. (Haraway, 2016) This embodied focus on the detail – beyond tying back to the situated research inquiry and proving to be a crucial element for the development of an actual link between being and response-ability – challenges the very process of knowing space.

Under this challenge both the Speculative (Re)Fabulation and the Sympoiesis inquiries become nested within an overarching investigation on Diffraction developed around the question how can we obtain knowledge about the world as part of the world in its different becomings. The notion of Diffraction, as described in Barad's thinking (2012), is meant as an allegory of the relation between social and scientific – understood here as the mediating prosthetic process of knowing the world that takes the form of an interface of experience. (Neimanis,

2017) This relation is founded upon a prototypical condition of 'exteriority-within' which bridges the gap between representation and represented emphasizing the very process of knowledge as an in-between, capable of mingling object and subject positions or discursive and material practices through the very act of its performance. (Barad, 2012)

The understanding of knowledge as not only proximal but also intra-active - exercising agency, reconfiguring relata and defining causality (Barad, 2012) - is translated into a conceptual and contextual merging of Julia as site and Julia as sight. In that sense, knowing Julia becomes a matter of not just observing and documenting its geological, hydrological, ecological, or geopolitical manifestations, conditions, processes, and relations that determine its current Composition, but also actively engaging in conscious agential cuts directing Alteration. The movement from Composition to Alteration follows the overall thesis methodology of investigation but elaborates upon the Alteration as an informed Composition able to synopsize the territorial reframing towards the construction of a common ground.

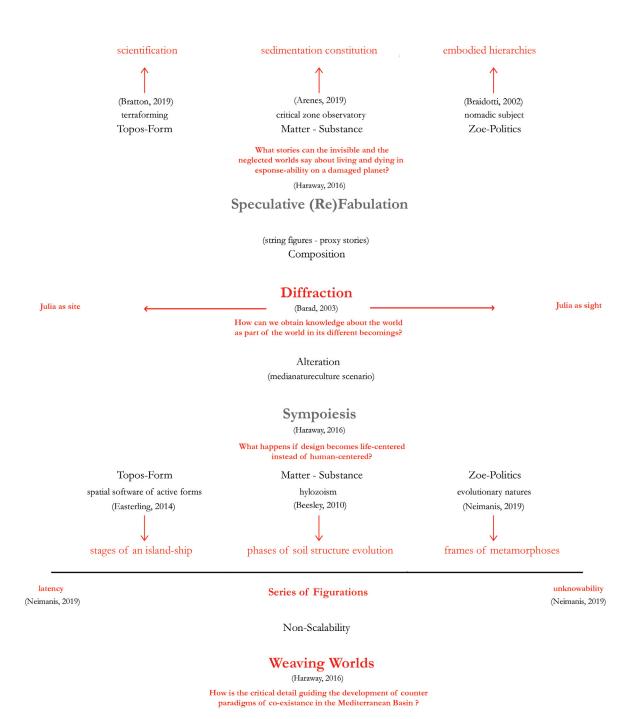
This reframing directs the transition from the methodology of string figures to the methodology of proxy stories which, besides uncovering existing material-semiotic couplings that can direct worlding processes (Haraway, 2016), act as amplifies and sensitizers (Neimanis, 2017) constructing 'syncretic assemblages' of knowledge (Alaimo, 2010). In the context of Julia, these 'syncretic assemblages' emphasize the necessity for an embodied kind of knowledge; a knowledge that is found not through observation but through a conscious process of becoming-with. (Neimanis, 2017) This becoming-with is explored in the Sympoiesis inquiry which takes the form of a project around the dual nature of Julia - as site and sight.

The concept of Sympoiesis – describing 'collectively-producing systems without self-determined spatiotemporal boundaries (Haraway, 2016) - is understood in the context of the Chthulucene and in the case of Julia as a revised notion of

terraforming extended over the molding of relations, processes, conditions, and things (Bratton, 2019). This notion of terraforming goes along a conscious move from the biopolitical to the biocenotic that underlines the displacement of human life (bios) in favor of the nonhuman (zoe) and the subsequent shift towards what Braidotti (2019) calls 'medianaturecultures'. The Project of Sympoiesis, then, develops to respond to the emerging question what happens if design becomes life-centered instead of human-centered starting from the most critical resource of the ephemeral island: its soil.

This focus is guided – both in the (Re)Fabulation and in the Sympoiesis inquiry – by three main themes: **Topos, Matter and Zoe-Politics** which brings together the Habitat and the Geopolitics in order to examine coexistence in the future collective landscape of Julia. Through these selected themes the overarching Diffraction investigation manages to establish continuity with the methodology followed for the analysis and the critical mapping of the Mediterranean Basin testing its value when examining the critical detail and associating actual beings with their response-abilities (Haraway, 2016). This association takes the form of a figuration narrative which borrows a new cultural mythology to develop a series of speculations for the future collective landscapes of Julia as geographic portraits. (Ghosn & Hadi Jazairy, 2018)

The Diffraction investigation concludes with the Weaving Worlds inquiry which highlights the potential of Julia collective seascape to act as a synecdoche for the Mediterranean seamounts updating the counter reading of the whole Basin through the ephemerality of its islands. In this inquiry, Julia embodies a situated nomadic subject (Braidotti, 2019) which provides intra-active knowledge for its entire kinship. In that sense, the critical detail reveals a constellation of critical details in the form of invisible or neglected worlds-stories that contain in their materialization 'eruptions of unexpected liveliness, and contaminated and nondeterministic, unfinished, ongoing practices of living in the ruins' (Tsing, 2015) guiding the development of counter paradigms of co-existence.



Diffraction Analytical Framework

## Diffraction Composition

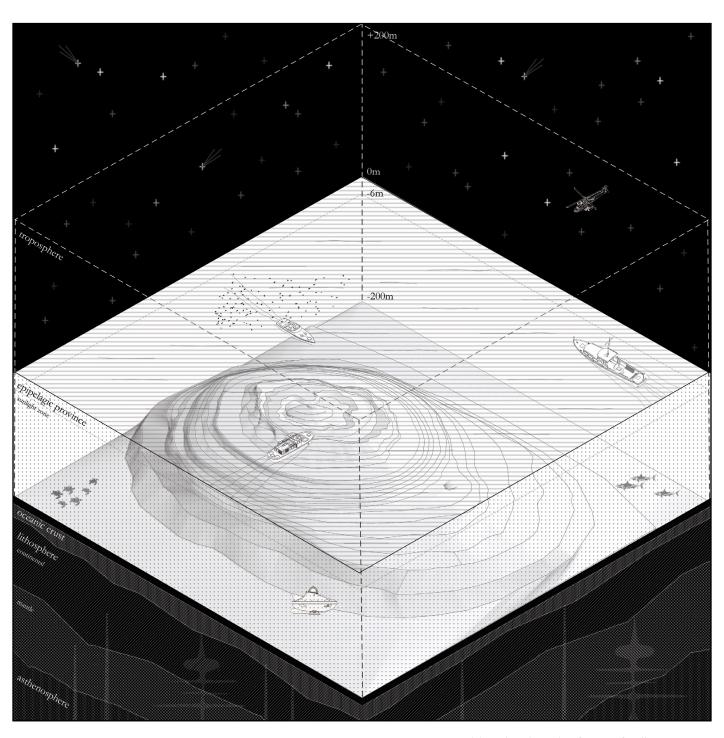
Topos - Form

As part of the Composition, then, the Topos - Form theme derives from Latour's (2013) argument that common worlds are currently built upon the foundation of **scientification**. In fact, as a subject of scientific research, Julia seamount – mostly known as **Empedocles volcano** – in Graham Volcanic Field constitutes a very well-documented case, especially in the context of the recent marine environmental focus on Mediterranean seamount systems. Its rise as an ephemeral island may be forgotten in the prevailing stories of the Mediterranean and its figure may be well-hidden approximately seven meters below the surface of the sea, but it remains essential for the understanding of monogenetic volcanic fields and the study of post-eruptive transitions from island to shoal stages.(Cavallaro & Coltelli, 2019)

Currently understood as an enigmatic object - whose re-eruption is certain but indefinite - in the sea floor of the shallow epipelagic water of the Strait of Sicily, Julia's shapeshifting capacity remains unseen in its representation as a consistent form with specific shape, measured dimensions and solid edges. Although its mapping has rendered its recognition and its potential appropriation for extractive activities possible, it nevertheless neglects its viscosity and its latency (Neimanis, 2017) that are exactly the qualities allowing it to act as a string figure. Processes of submarine and subaerial erosion that constantly sculpture its shape, exchange of oceanic and volcanic fluids or gases that expand in a territory way larger than the one contained within its scientific characterization, or sudden disruptions in the sealand continuum are only but a few of Julia's morphological characteristics that remain largely unknown not as phenomena but as inducers of relations. (Barad, 2012)

In that sense, it becomes evident that the notion of Topos in the case of Julia is inextricably connected to its Matter through the overlapping material processes that constantly transform it producing attachments and detachments in its constitutional systems. Its current condition is only a frame of its geological portrait that could express its virtuality through a complex process of making space and becoming part of its different morphodynamic processes.

"The world is 'not a secret to be revealed' by us humans. It is rather in a constant process of emergence.' (Barad, 2008)



Composition drawing\_the figure of Julia seamount

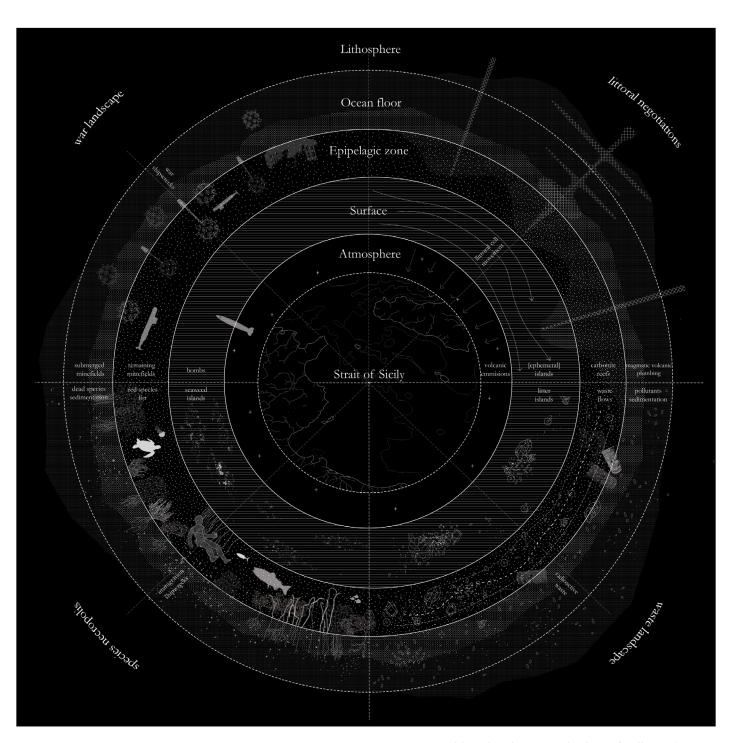
## Diffraction Composition

Matter - Substance

Shifting the focus to the **Matter - Substance theme**, then, is rendered essential for the examination of the material processes that constitute the complex landscape of Julia. To do so, the following investigation threats the broader site as a **Critical Zone Observatory (CZO)** in charge of tracing the imprints of the aforementioned invisible and moving phenomena. These imprints become embedded in the different layers of the site: the ocean floor, the epipelagic zone, the water surface, and the atmosphere through past and ongoing sedimentation processes that blur the vertical boundaries of Julia as CZO (Arenes, 2019) illustrating the sea's capacity to contain all the remnants of lost stories, worlds, things.

Following Arenes' 'gaia-graphy' technique to give depth to the oceanic layers, to highlight the terrestrial cycles and to elaborate upon the current human impact, the investigation moves to document how geopolitical events, anthropogenic processes, species exterminations and geologic-climatic transformations become engraved into the materiality of the site altering the very constitution of its substance. War landscapes, waste landscapes, species' necropoles or littoral negotiations are all contained within the sediments of Julia defining concentrations of carbon and helion, alkali basalts and black coarse tephra soil horizons, deposits of red corals and human remnants, or 'heavy metals' accumulations, and evoking complex entanglements of matter and meaning.

If it is the substance of Julia that contains previous Speculative Fabulations, then, the Refabulation requires a process of alteration specifically targeting the constitution of its matter which is often forgotten if not neglected as finite resource. (Neimanis, 2017) In this process, the apparatus of the CZO is rendered obsolete since it is based upon the division between site and sight, while a reconfiguration of Julia's matter requires a mingling between the two under the overarching Diffraction examination. This mingling entails the understanding of Julia as a material body de facto inseparable from its environment or as a watery milieu (Irigaray, 1958) whose solidity ensures differentiation without restricting permeability and exchange. (Neimanis, 2017)



Composition drawing\_constitution of Julia's substance

## Diffraction Composition

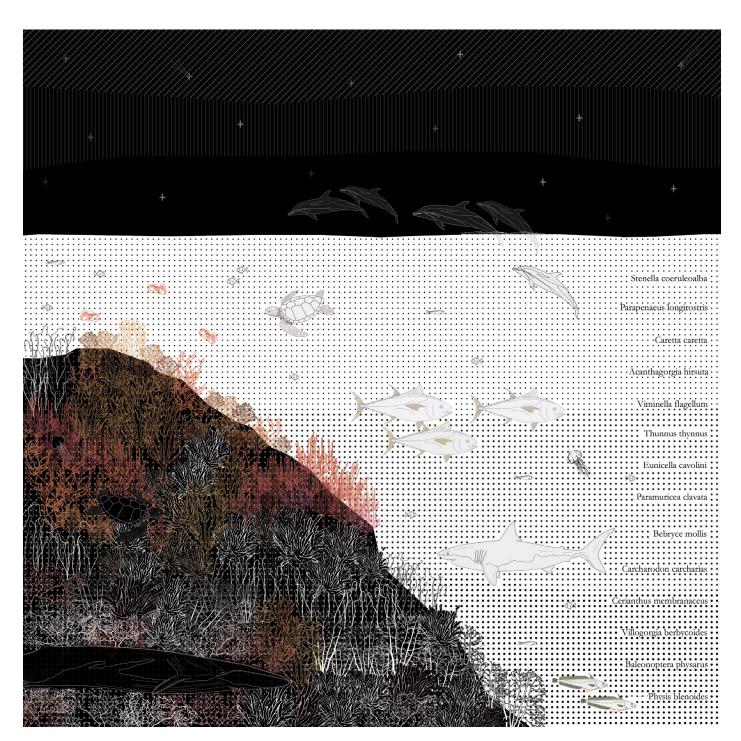
Zoe-Politics

This permeability and exchange are, in fact, the subjects of the **Zoe-Politics theme** which studies the aforementioned processes not merely as phenomena but as embodied relations. Set in the extended edge of the ongoing extinction (Haraway, 2016) – that has already been mapped in the Monographies chapter – the investigation moves to observe the **crystallized hierarchies** that define a new type of biopolitics, the politics of **bare or animal life, zoe**. These hierarchies express potentia, affect the various bodies' capacity to evolve and to form relations, and embody spatiotemporal limits (Braidotti, 2002) whose obviation is only rendered possible through intentional agential cuts in the dual configuration of site and sight. (Barad, 2012)

In fact, the study of these hierarchies connects to the scientific field of ecology which documents the **different species** observed in the broader area **as well as their spatial limits** expressed through invisible vertical boundaries in the section of the water body. In the specific case of Julia – being one of the most biodiverse and vulnerable ecosystems of the Mediterranean Basin both as a seabed community and as a breeding-feeding ground – these species catalogues mainly consist of threatened animals and plants already documented in the **IUCN Red List.** Deep patches of red corals, extensive black and azooxanthellate coral meadows, significant migratory communities of large pelagic fish and humans, and important nursery areas for commercial species are only but a few of the entities that compose the complex human and more-than-human assemblages of Julia. (Marin, Aguilar & Garcia, 2011)

These assemblages constitute the site producing its form and its substance and remaining inextricably dependent on its various processes. Julia, then, as a metamorphosing space characterized by its ephemerality – appearing at times as shoal and at times as island – and its latent explosivity embodies a string figure that leads not towards savior but towards mutation, contamination, evolution, and response-ability for the interconnected stories of living and dying. (Haraway, 2016) Its zoe-politics can't remain restricted in the representation of its hierarchies as frozen moments of balance but demand active implication in the processes that produce and challenge them, especially in light of the Sixth Extinction.

"We' are all in this together, but 'we' are not all the same, nor are 'we' all 'in this' in the same way." (Braidotti, 2002)



Composition drawing\_hierarchies of human and more-than-human assemblages

Concluding the first part of the overarching Diffraction inquiry, the Speculative (Re)Fabulation study deals with the question of the stories that Julia can say about living and dying in response-ability on a damaged planet by opening up more observations. Julia indeed contains in its triple ontology, as Topos, Matter and Zoe-Politics, the latent potential to invoke new worlds and new living patterns. This invocation, though, is not only a matter of archaeological research and methodological observation. It is, first and foremost, a matter of entanglement that dictates a knowledge process which bridges the material and the discursive, the site and the sight through open-ended experimentations with situated concepts, theories, and relations.

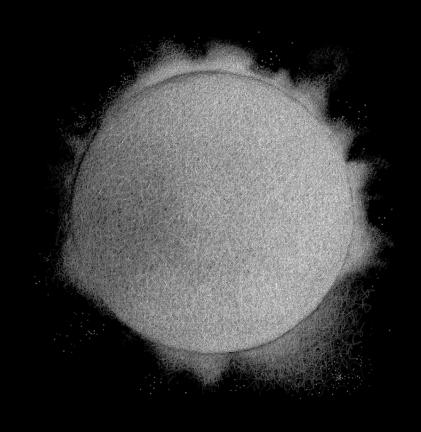
Each of these experimentations simultaneously derives and creates a set of questions answered not through generalized cognitive processes but through situated and proximal practices; through a performance that generates the conditions for a common ground. In the case of Julia, and moving forward from the Composition studies, this performative knowledge starts from a set of observations that trigger the Alteration project. Through the theme of Topos, it becomes clear that the most significant (re)fabulating quality of Julia – completely dismissed in its representations – is its embodiment as **an active form** capable of retaining an unfolding relationship between potentials. (Easterling, 2014)

This shapeshifting capacity is not merely an outcome of appropriation or intervention but a constitutive factor of Julia's materialization. Its physical fabric, besides consisting of all the traces of past and ongoing events, as shown in the Matter investigation, contains the potential for involved dwelling. (Beesley, 2010) Understanding the **substance as living** through the decomposition of organic and inorganic material becomes a key moment for the Diffraction process dictating a terraforming approach that is essential for the construction of a common ground of knowledge and for the portraying of Julia as body.

In the process of embodiment, as mediated through the living substance, the Zoe-Politics theme illustrates the condition of entanglement as foundational for the creation of **holobiomes** in

which a common world is constituted bit by bit (Haraway, 2016) through Sympoiesis. The produced sympoietic arrangements require a more proximal and relational reading than the one followed for the depicting of hierarchies, acknowledging the process of co-evolution as a force that renders the individual entities insufficient for the understanding of their sophisticated and transforming knottings. These knottings, then, can only be truly studied through intentional processes of participation, belonging and contamination which bring forward the notion of the zoe-centered embodied subject. (Braidotti, 2019)

The zoe-centered embodied subject, as a transversal body embedded in a network of relational linkages and produced through an ongoing process of defamiliarization, characterizes the transition of the Diffraction inquiry - and the project - from the Speculative (Re)Fabulation phase to the Sympoiesis phase. It seals the realization that Julia contains indeed a speculative quality which directs a more-than-representational approach of knowing and projecting, while it bridges the virtual and the real in the figure of the ephemeral island.



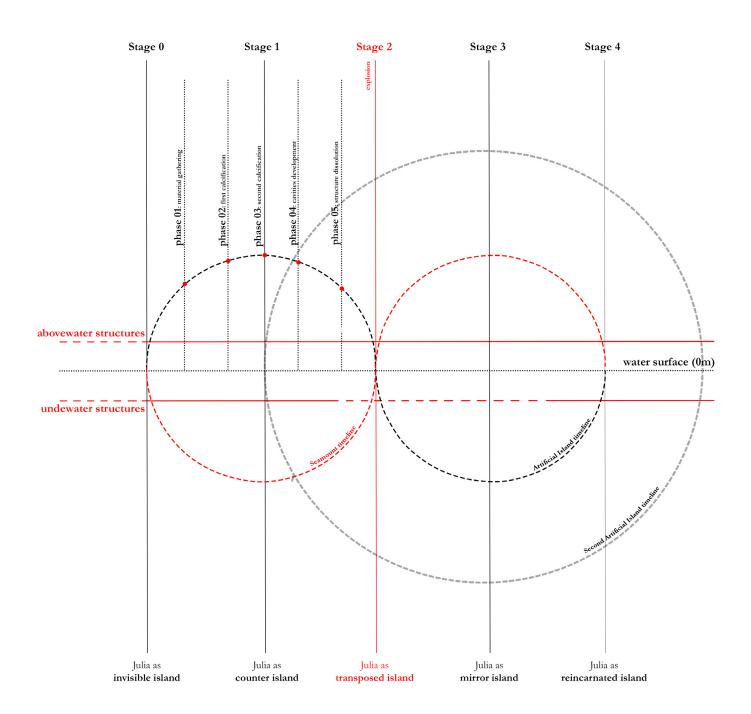
Project of Sympoiesis

'Figurations are performative images that can be inhabited. Verbal or visual, figurations are condensed maps of the whole world.'

Donna Haraway (1997). The Visual Speculum in the New World Order

In this context, the Project of Sympoiesis combines the concepts of the active form, the living substance and the holobiomes to explore the reterritorialization of Julia; and through its synecdochical relation the reterritorialization of the Mediterranean Basin. To do so it aims at the construction of a medianatureculture which bridges the embedded, the embodied and the technologically mediated through the merging of the nature-culture divisions, the shifted focus to the bare-animal life (Braidotti, 2019) and the conscious deployment of cyborgs (Haraway, 1991) for the site-sight terraforming. This construction becomes possible through the understanding of infrastructure not as physical auxiliary networks but as the hidden spatial software that makes the active forms and their complex relatings possible. (Easterling, 2014) In the case of Julia this software targets its most finite resource, its soil, initiating a terraforming process guided by hylozoism. (Beesley, 2010) The development of a hylozoic ground-environment entails, both contextually and conceptually, processes of meta-morphoses, and embodies the co-extensivity of bodies in their environment-territories (Braidotti, 2002) tying to the notion of evolutionary natures. (Neimanis, 2019)

The Project of Sympoiesis, then, borrows the cyborg elaboration explored in the experimental design Acqua Alta conducted in 2011 by Mengyi Fan & Joseph Justus to develop a medianatureculture scenario for Julia. This scenario, set in the intersection of the intense geological and climatic transformations around the seamount, takes advantage of the material mutations and concentrations to initiate a sophisticated mechanical process of soil production. Understood not only as a topological mesh but as a thick surface of living substance that gradually assimilates its decomposing mechanical parts, this hylozoic ground hosts in its cavities - above and below the water surface - new patterns of inhabitation, co-evolution and living-dying entanglements. Its process of formation, evolution and appropriation is elaborated in the thematic investigation of Topos, Matter and Zoe-Politics which - as shown in the following diagram - follow a storytelling methodology to develop a series of figurations speculating upon the different phases and trajectories of Julia's sympoietic arrangements. These figurations are not merely representations-projections but tools driving to alternative realities.



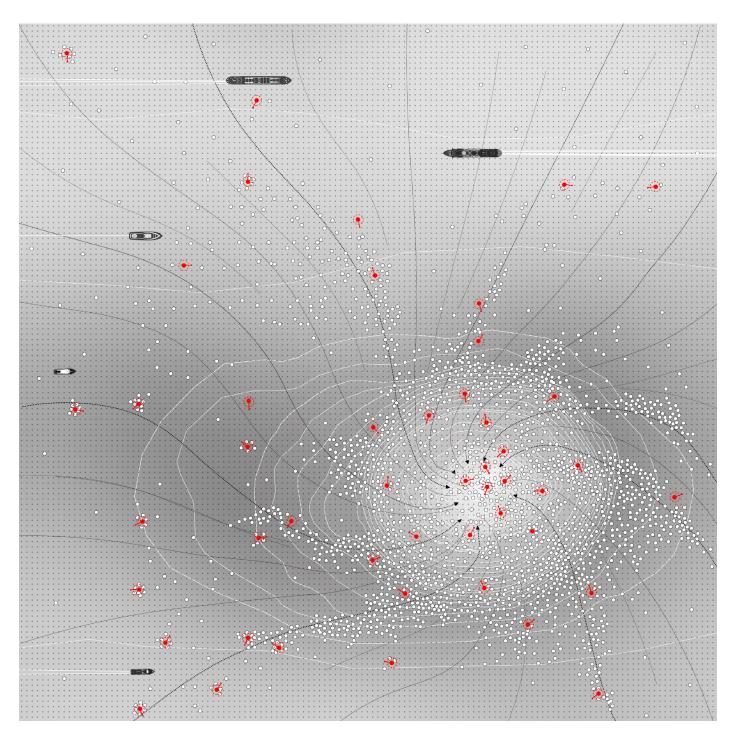
Diffraction Project Framework

Topos - Form

Specifically, in the Topos theme the project speculates upon the different formations of Julia as technonature tying back to its island rhetoric. As an ephemeral island, Julia retains an inherent capacity for soft territoriality which remains in the center of the reterritorialization approach even during the terraforming process. In fact, its ephemerality constitutes a crucial element of the sympoiesis ensuring co-evolution and directing a counter-paradigm for the sea urbanization based on viscosity and transformability instead of permanency. As an 'artificial' island Julia embodies the figuration of Deleuze's (1974) island-ship challenging established spatiotemporal boundaries and dichototomies between sedentary and nomadic, material and discursive, and developing as an active form (or as a network of active forms).

This development as a transformable active form is ensured by a **technonatural spatial software** that induces sympoiesis between entities and claims accountability for the consequences of its force, even when they are rendered invisible and unknown. (Easterling, 2014) This technonatural spatial software consists of the **dissolvable filtration cyborgs** which act as both material collectors and distributors following carbon and calcium concentrations around the seamount. Floating in the surface, the cyborgs pump water in and out of their filters leading to calcium carbonate formations that will later accumulate into elaborate soil structures. As these structures evolve above and below the water surface, the cyborgs themselves undergo calcification becoming parts of the island-ship(s). (Fan & Justus, 2011)

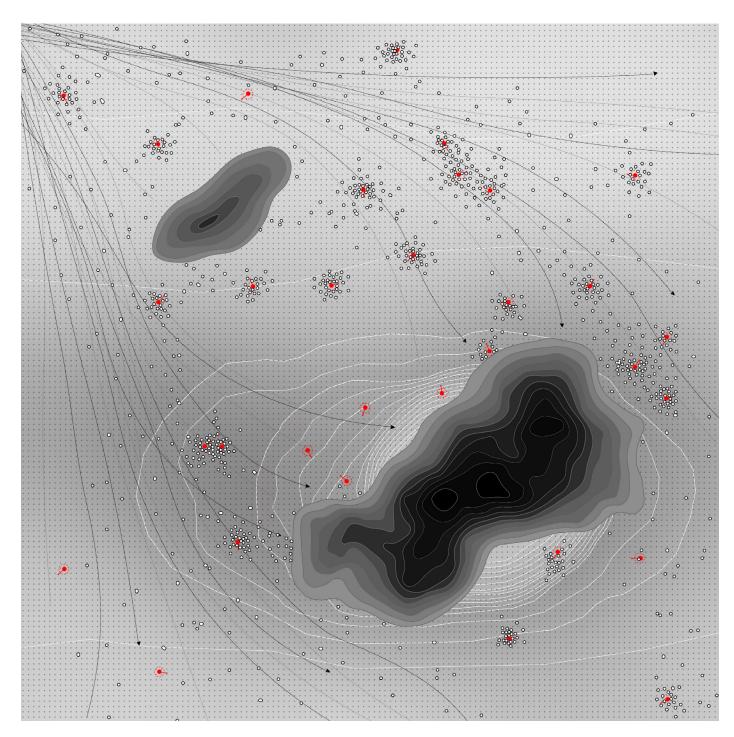
The island-ship as a transformable and moveable structure is speculated to go through **five main stages** that describe its process of formation and its interaction with Julia seamount. In the **invisible island stage**, Julia remains in its shoal condition while the cyborgs surround it gathering its expanded substance. Then, in the **counter island stage**, the calcification grows a reverse island on top of Julia creating a diffused connective tissue. The eruption leads to the **transposition island stage** in which the counter island dissolves while the calcium-carbon concentrations direct its formation elsewhere. In the subsequent post-eruptive period, this formation coexists with the ephemeral volcanic island defining the **mirror island stage**. As the ephemeral island erodes, signifying a second death, the surrounding formations take over concluding in the **reincarnation island stage**, which entails the latent potential for a differing repetition. (Neimanis, 2017)



Alteration drawing\_invisible island stage



Topos - Form

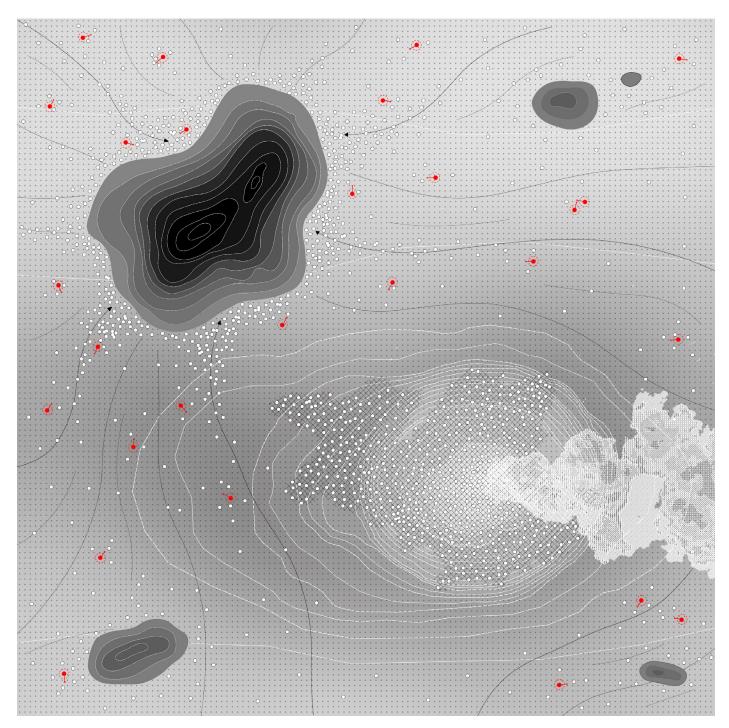


Alteration drawing\_counter island stage



'Active forms are markers of disposition, and disposition is the character of an organization that results from the circulation of these active forms within it.(...) Disposition does not describe a constant but rather a changing set of actions from which one might assess agency, potentiality, or capacity.'

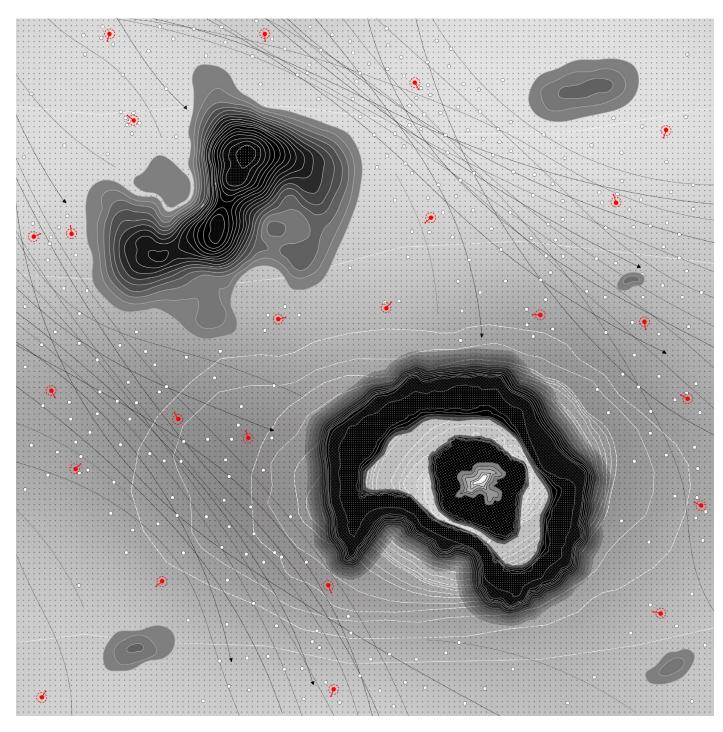
(Easterling, 2014)



Alteration drawing\_transposition island stage



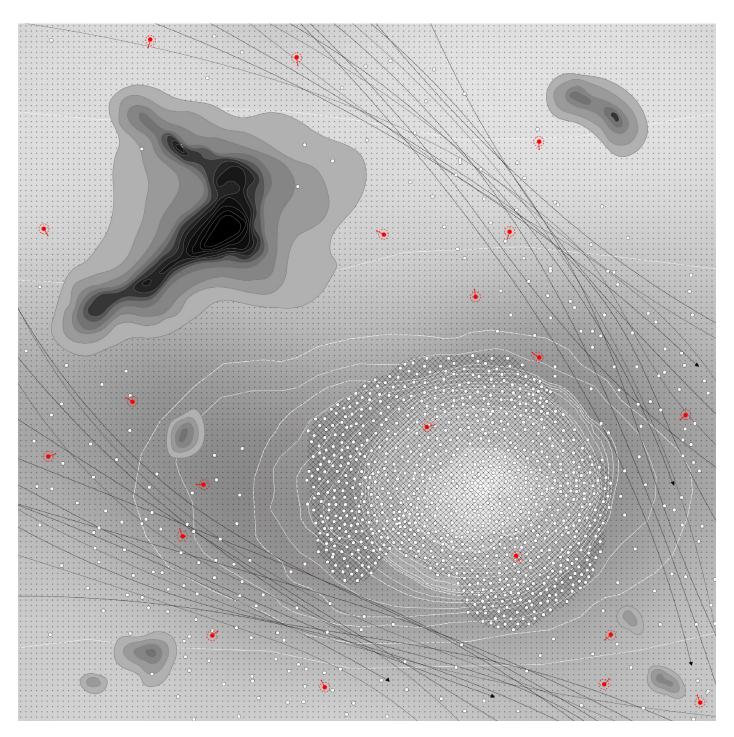
Topos - Form



Alteration drawing\_mirror island stage



'A spatial software of active forms may be able to deliver what a world of weak standards and weak urban design cannot. (...) Often what is needed in these landscapes is not a way to drive the development machine forward but a way to put it in reverse.' (Easterling, 2014)



Alteration drawing\_reincarnation island stage



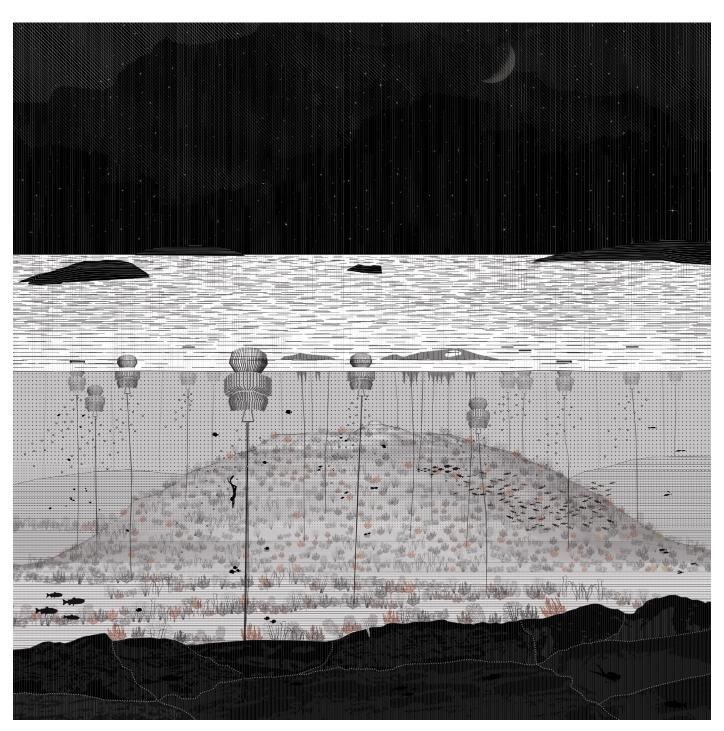
Matter - Substance

The genesis and evolution of this soil structure is the focus of the Matter theme which elaborates upon the materializations of Julia. Understanding the substance as living entails a shift towards hylozoism which in turn directs the development of a synthetic and evolving ecology. (Beesley, 2010) It is in this sense that terraforming becomes sympoietic instead of solutionist, consciously employing conceptual models to develop technical systems whose realization challenges the concepts they were founded upon (Bratton, 2019) tying back to the overarching Diffraction inquiry. The synthetic soil doesn't only require the design of a conventional geotextile to stabilize still zones for the performance of life (Manaugh, 2010) but the intrusion into the complex spatiotemporal cycles of living entities and the responsiveness to living processes. (Armstrong, 2010)

This intrusion starts in the carbon-rich saltwater zones where carbonates usually fall through the water column either dissolving or depositing in the ocean floor. The cyborgs interrupt this process using water concentrical currents around the seamount to gather carbonates, and forcing a sudden state change that leads to the **generation of Calcium Carbonate**; commonly found in limestone landscapes, stalagmites and stalactites caves and various shell or marine skeletons. In its artificial generation it creates a **skin-structure** which evolves **in stratified layers** over and below the sea surface gradually accumulating sediments and giving rise to cavities of inhabitable space. (Fan & Justus, 2011)

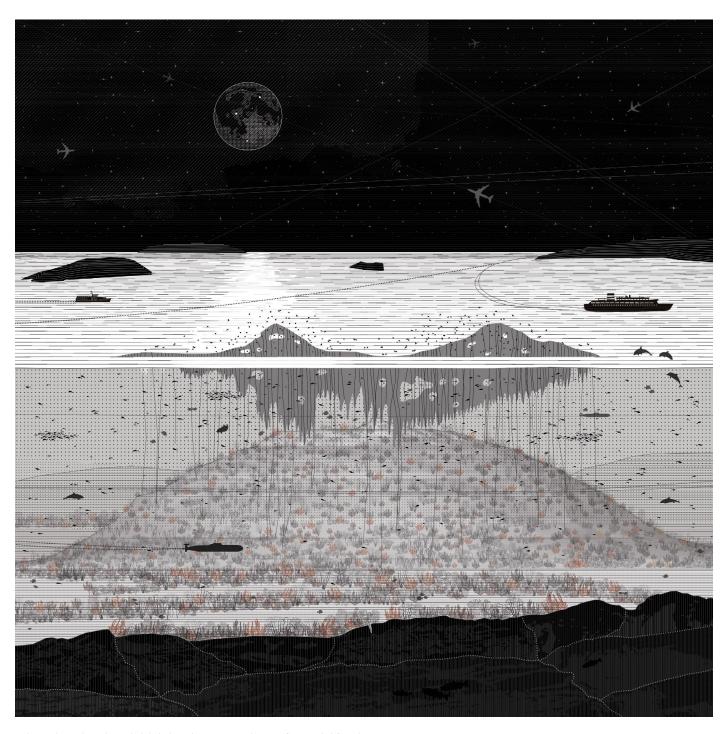
The evolution of this skin-structure is realized in five main phases, each of which coincides with a different geometry. In the cyborg intrusion phase the structure only consists of the submerged prosthetic devices that start to execute their material gathering. When the first calcification takes place the initial development phase is activated producing a partially floating and partially submerged soil layer that already triggers inhabitation patterns. These patterns are elaborated during the second calcification which leads to the second layer development phase expanding the skin structure towards the ocean floor. As oxygen intrudes the structure altering the calcium carbonite stratification it moves to the inhabitable cavities development phase which allows appropriation both above and below the water surface. These two last phases can be repeated adding complexity and layers in the structure but eventually lead to the dissolution phase during which the structure no longer grows and succumbs to erosion processes.

'Soil and ground are always formed by their context, above and below. (...) Soil genesis involves processes that develop layers or horizons in the soil profile. These processes involve additions, losses, transformations, and translocations of material that compose the soil. (...)' (Spiller, 2010)



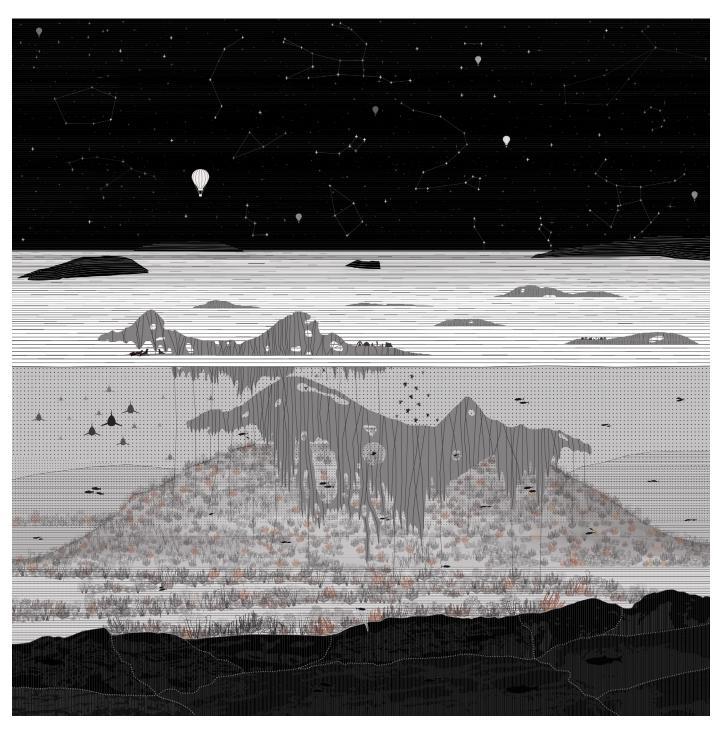
Alteration drawing\_cyborg intrusion phase

Matter - Substance



Alteration drawing\_initial development phase (first calcification)

"The hourglass, as if viscous, halts the flowing time. Rivers and turbulences, liquids and sand. Watch laminar layer of water brings a grain, an atom of sand with it. Time flows, water flows, sand flows, atoms fall...' (Serres, 1983)



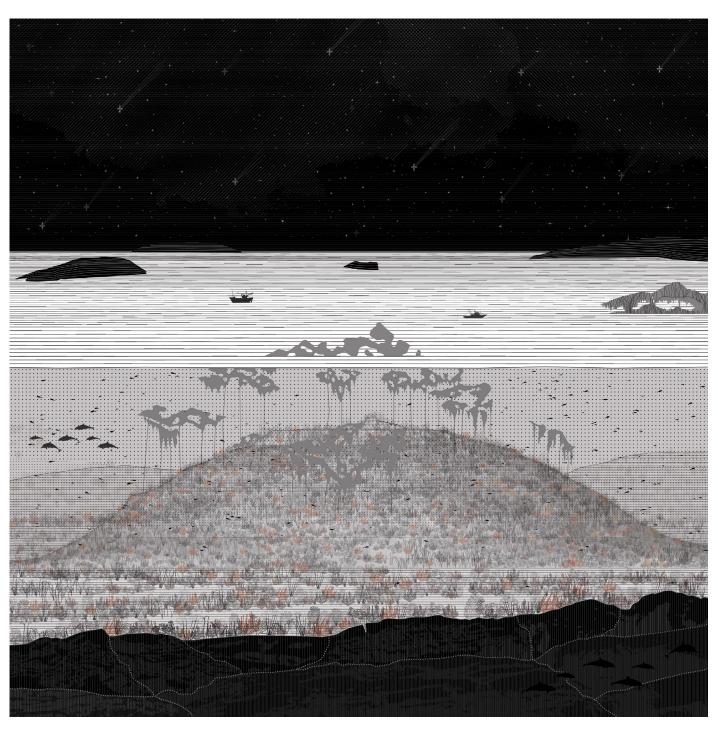
Alteration drawing\_second layer development phase (second calcification)

Matter - Substance



Alteration drawing\_inhabitable cavities development stage

"There is not an atom missing since the world has been a world; liquid is not liquid, it is the most solid, most resistant, most permanent of beings in the world." (Serres, 1983)



Alteration drawing\_structure dissolution

Zoe-Politics

Between the cyborg intrusion and the dissolution phase the hylozoic ground evolves to a hylozoic environment where a rich texture of synergies, tensions, and contradictions emerges considering new subjectivities and more-than-human agencies. The creation of this hylozoic environment becomes the focus of the Zoe-Politics theme which narrates possible trajectories for the collective landscape futures of Julia. These trajectories – similarly to the constitution of the artificial soil – derive from an attempt to imitate nature and life but end up revealing other ways of being in the world that have been invisibilized, neglected or even sacrificed as the price of the prevailing practices of knowing and being (Wolfe, 2010) tying to the notion of evolutionary natures. (Neimanis, 2019)

In fact, as the calcium carbonate structures grow and die, simulating a living organism capable of responsive actions, metabolic processes and moving assemblies, they form a distributed network of active forms, sympoietic arrangements and integrated systems incorporating the 'intruder' in their mattering. (Humphrey, 2010) While the center of attention remains connected to the seamount and its volcanic capacity to increase viscosity and transformability, the software's potential for adaptability and distribution affects a much broader area that can extend up to Julia's continental shelf – tying back to its geopolitical definition. Constituting, then, a conceptual and contextual common ground, its inhabitation initiates an open-ended process for human and more-than-human entities whose coexistence creates metabolic mutations - metamorphoses - trespassing metaphysically-grounded boundaries but remaining embedded within the living-dying process of zoe. The dissolution of the island – both in its volcanic and its hylozoic state - highlights its in-between status as a sustainable subject constituted of interconnections but contained and restricted by its own corporeal materiality. (Braidotti, 2002)

Rendered in this in-between **nomadic subject status** and exercising its **zoe-political rights**, Julia obliviates citizenship and develops as a post-colonial geography whose inhabitation cavities bring forward the question of primordial living systems in the medianatureculture world order. Sealand interfaces, artificial reefs, integrated litter densities, appropriation structures, official or unofficial cemeteries, pearl cultivations, caretta caretta breeding coasts, alien species concentrations, affirmative or parasitic interspecies connections are only but a few of the possibilities for living at sea and interacting with the water in the various island states of Julia.

There is no border where evolution ends and history begins, where genes stop and environment takes up, where culture rules and nature submits, or vice versa. Instead, there are turtles upon turtles of naturecultures all the way down. Every being that matters is a congeries of its formative histo-(Haraway, 2002)



Alteration drawing\_detail of inhabitation structures



Alteration drawing\_detail of caretta caretta breeding coast

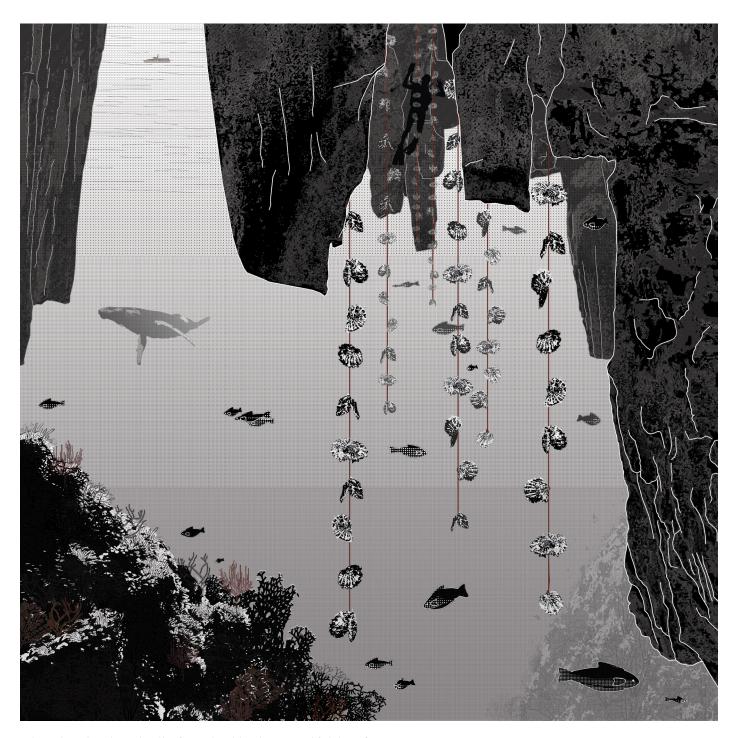
'Life 'began.' This origin, as much fable as strategic assumption, is not only obscure, but is in a certain sense impossible to understand as a locatable or knowable entity, a definite point in time, a single chemical reaction, for it is an origin 'that is not one' that is always already implicated in multiplicity or difference, in a constellation of transformations, an event that imperceptibly affects everything? (Grosz,2004)



Alteration drawing\_detail of sealand interface

## Diffraction Alteration

Zoe-Politics



Alteration drawing\_detail of pearl cultivation & artificial reef

The world is 'not a secret to be revealed' by us humans. It is rather in a constant process of emergence.' (Barad, 2008)



Alteration drawing\_detail of cemetary as artificial reef

Julia's development as a hylozoic environment completes the Project of Sympoiesis and with it the overarching inquiry of Diffraction. As an **evolutionary nature** – both in its existing and its speculative fabulation – Julia is constantly reading, writing and rewriting itself in an ongoing biography (Neimanis, 2017) that reveals space to be foundationally virtual; containing simultaneously multiple dimensions for different modes of embodiment, perception, or arrangement. (Wolfe, 2010) This **inherent spatial and material virtuality** that diffuses actualized bodies in their suspended or invisible zones of potentiality renders conventional knowledge – preoccupied with order and certainty – obsolete.

The shift towards a proximal knowledge, then, signifies a **selective preoccupation with latency** attributing response-ability in the evaluation of the open possibilities and their consequences: the stories they tell, the knottings they induce, the worlds they create, the things they neglect, the transformations they allow, the ways they interfere in the zoe processes of living and dying. It is in this sense that knowing becomes neither explicitly conceptual nor explicitly contextual since ideals do provide markers for orientation and methodologies for selection but lived experiences presuppose situatedness; they are performed somewhere, sometime, somehow (Neimanis, 2017) and they lead to specific outcomes, to specific marks on bodies. (Barad, 2012)

These specific outcomes and these specific marks are gestated in a contingent process of repetition and differentiation that simultaneously defines an embodiment in-common, a kinship, and a locational limit, firstly in a body's virtuality, and subsequently in a body's knowledge capacity; marking the interrelation between site and sight. Diffraction, thus, revolves around the notion of **unknowability** expressing not a kind of ontological refusal but the realization of the mere fact that knowing is not factual but processual and relational; always delimited by one's specificity and always intentional, even when concealed. (Neimanis, 2017)

In the specific case of Julia – and its synecdochical relation to the Mediterranean Basin – knowing through the elaborated medianatureculture scenario intends to reveal ways to develop and design collective landscapes in the form of weaving worlds capable of co-evolution and resistance against knowledge that colonizes, knowledge that oppresses, knowledge that operationalizes or knowledge that masters. Although the speculation remains open, completing a series of figuration portraits of life in Julia, the deployment of the island archetype – symbolizing a second origin and a different world model - as well as the imitation of a primordial first nature - even if produced through a biosynthetic process executed by cyborgs - manage to dissolve origin stories revealing the world in its ongoing emergence. In this process, the introduction of structures and the amplification of possibilities performs as a defamiliarization act that increases complexity triggering interspecies enfoldings - especially between human and other-than-human entities - while consciously staying with the trouble. (Haraway, 2016)

Weaving Worlds

'Knowing is a direct material entanglement, a cutting-together apart, where cuts do violence but also open up and rework the agential condition of possibility.

There is not knowing from a distance. (...)

Objectivity is about accountability to marks on bodies, and responsability to the entanglements of which we are part.'

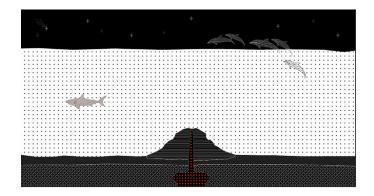
Karen Barad (2012). New Materialism: Interviews & Cartographies

In the **Weaving Worlds inquiry**, then, the effects of the Project of Sympoiesis are seen in relation to not only Julia's extended continental shelf but the constellations of seamounts in the Mediterranean Basin. Every seamount – similarly to Julia – goes through the same main states: the formation of magmatic plumbing below the oceanic crust state, the initiation of the explosive activity state, the explosive state, the island and carbonite reef state, the end of the magmatic activity state and the final break-out or erosion state. During this evolution it fluctuates between being an island and being a shoal in temporal scales that vary in each specific location embodying a prototypical differing through repetition act. In this sense, Julia is understood not only as an individual body but as a representational member of its entire kin. (Cavallaro & Coltelli, 2019)

This notion of kinship, as extended through the already established thinking towards more-than human entities and assemblages, becomes the leading concept to tie back Julia to the Mediterranean context not through transcalar expansion but through transformable relations. As such, it dictates the employment of the same tactic of differing through repetition that already describes evolutionary natures allowing scales to arise from frictions which inform figurations, events, or projects. (Tsing, 2012) Focusing on frictions instead of scalable units keeps the overarching Diffraction inquiry's focus on string figures, sympoietic arrangements, unexpected relations and complex entanglements between matter and meaning.

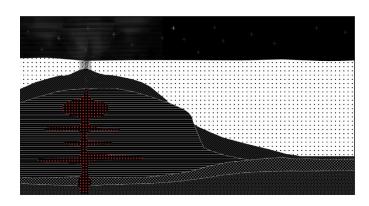
In that sense, the knowledge Julia offers for its kin is not restrictive, dictating a standardized typological dissection followed by a neat encompassing of the small scale under the large, but affirmative, prioritizing emergence. What remains constant is the defamiliarization that allows **knowing by speculation** to uncover the latent localized potential and to develop as performance. The common variable is the very act of Clearance – both as contextual and conceptual – which requires the conscious effort of revealing the situated traces of immanence and resistance, of following their threads even in unknown, troubled or damaged paths, of engaging into practices, relations, and processes that constitute collective landscapes and common grounds, and of triggering mutations or multispecies entanglements.

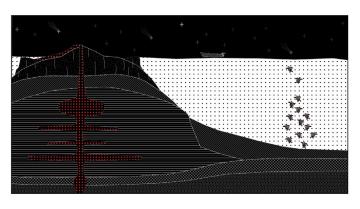
'Systems are constituent of series that communicate through their differences, and display linkages and internal resonances: 'none is either opposed or analogous to another. Each is constituted by differences, and communicates with the others through differences of differences'.'



state 01: the formation of magmatic plumbing

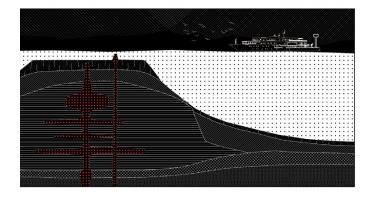
state 02; the initiation of the explosive activity

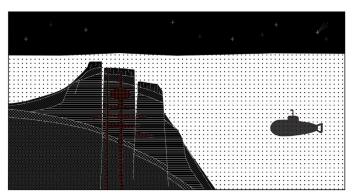




state 03: the explosive phase

state 04: islans and carbonite reefs

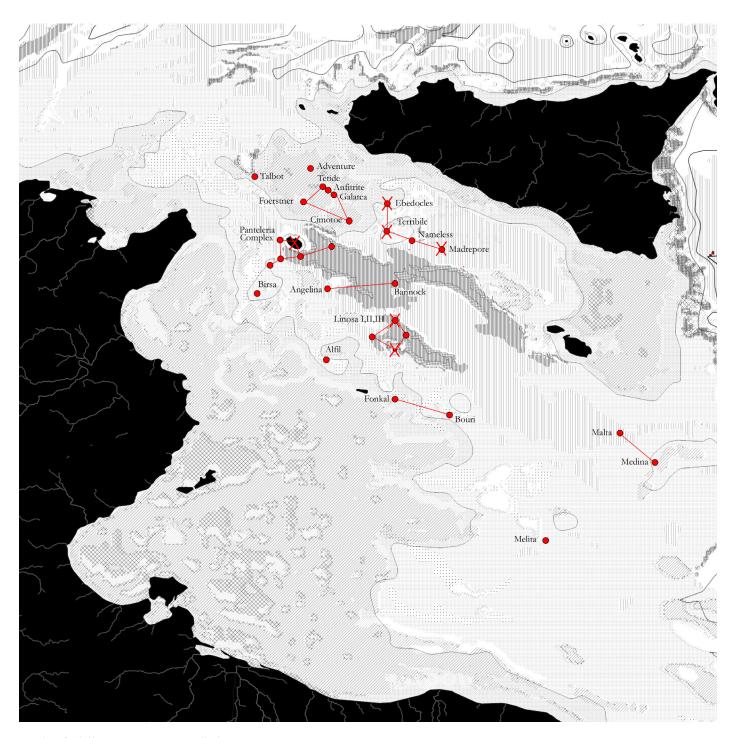




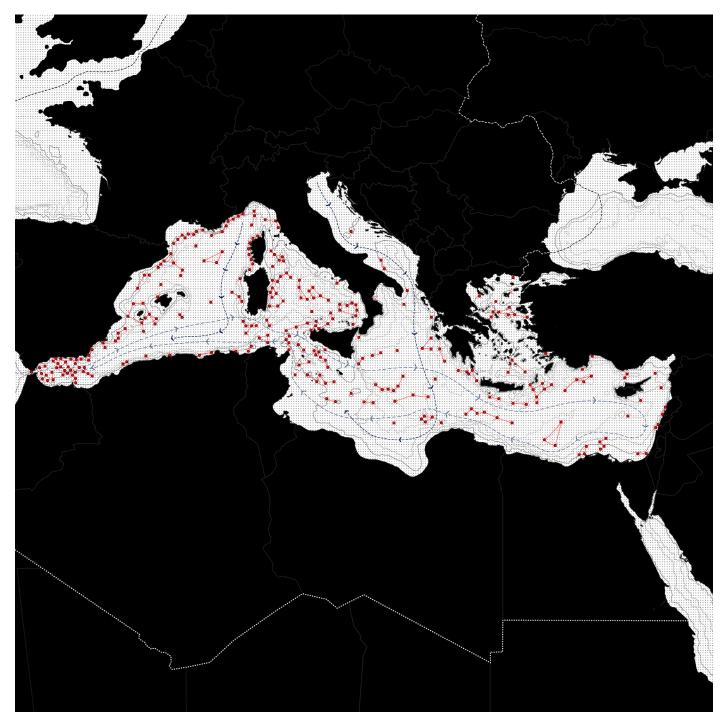
state 05: end of magmatic activity

state 06: breakout and erosion

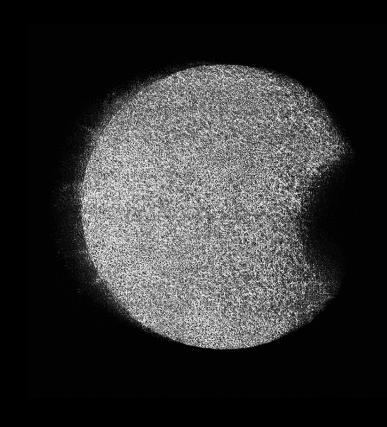
Seamount states



Strait of Sicily seamount constellations



Mediterranean Basin seamount constellations



Conclusion

'We are stuck with the problem of living despite economic and ecological ruination. Neither tales of progress nor of ruin tell us how to think about collaborative survival.'

Anne Lowenhaupt Tsing (2017). Art of Living on a Damaged Planet

In this context, the thesis' overarching aim to establish a counterparadigm for the worlding of the sea as a way of thinking about collaborative survival in a 'damaged' and 'troubled' planet was addressed by the development and the testing of a speculative research-by-design methodology that moved to highlight the significance of minor stories in the challenging of the prevailing processes of domination, expulsion, and colonization which define anthropogenic inhabitation patterns. In this process, the initial hypothesis of borderscapes, as critical temporalized spaces of intensity, resistance and immanence that can direct agential cuts of fissure, was confirmed, and even further emphasized through their understanding as embodiments of conceptual and contextual contradictions and states of exclusion. This shift - also reflected upon the guiding concept and context of the (ephemeral) island - marked a guiding principle of focus for the constant state of transition and the ungraspable planetary scales characterizing the Critical Zones; a focus directed towards the spaces of crisis and transgression that embody otherness and solicit for partial knowledge, knowledge though diffraction.

In the case of the Mediterranean Basin – proved to be an inconceivably unknown space though this borderscape lens, and besides its presumed visibleness - this focus was soon revealed to require a conscious process of incompleteness, proximity, and subjectivity both in the literature-cartographic analysis and in the development of the methodological plateaus or the workflow. In fact, the evolution of the thesis project, as seen in the assembling of this report, was an accurate analogy of the methodology followed for the construction of a common ground not founded upon a one-dimensional process of reflection but upon the multiplicity – or even transmutation – of the diffraction. Concepts, theoretical formations, and experimental representational or speculative cartographies acted not as narration tools in a predefined trajectory from the problematization towards the solution, but as abstract machines whose appearance at pertinent intervals triggered transformable relations, entanglements, and unexpected evolutions; discussed throughout the report at the end of each chapter in the form of conclusions-transitions between the different parts of the thesis.

In this sense, the critical mapping of the Mediterranean emerged exactly from this process of constant reading, writing, and rewriting of the processes, relations, things, and theories that result from the complex interplay of Kinopower, Geontopower, Biopower, and Geopower. Moving contingently from the notion of Transition to the notion of Transposition, Transgression, and, finally, Territorology, it centered the problematization around the current territorialization and deterritorialization processes, restructuring the focus to the borderscapes not only as temporalized spaces, but also as overlaying and contradicting territorial formats, and as the par excellence embodiments of different residence times. Understanding, then, the Mediterranean Territories through their borderscapes and their situated narratives as ongoing projects approaching limit conditions and questioning which worlds are the ones that could be ending - and which are the conditions of response-ability and accountability accompanying these living and dying worlds painted its fragmentary portrait as a composition of overlaying densities, scars and transformable relations that emerge through contradictions, decode embedded power structures, and reveal matters of concern.

These matters of concern - approached not merely as residual forms of proximities but also as in-between conditions of intensities, negotiations, conflicts, and assimilations between diverse living systems and prevailing contextual-conceptual dichotomies - guided the revealing of traces of immanence and resistance in the neglected and sacrificed worlds, stories, things, processes, and theories of the Mediterranean Basin. The focus, then, towards the neglected and the sacrificed was essential not only as a catalogue of all these things that embody the heterotopias of crisis and compensation in the understanding of the Mediterranean as a social apparatus, but as a parallel narrative of soft territorial acts founded in transgression and ephemerality which can direct processes of reterritorialization and symbiogenetic imaginations. In this sense, the critical cartographies of the Mediterranean Basin revolved and revealed the significant minor stories as gestational bridges towards virtuality and latency; containing within them zones of potentiality that can guide collaborative survival and collective landscape futures in the context of the Chthulucene. As places of emergence, development, and eruption, the significant minor stories retain their heterotopic and heterochronic quality not having been exhausted through action in the past and not elaborating upon an anticipated future from the present regimes. (Boano, 2022)

In fact, it is exactly this quality that allowed the creation of a common ground between human and more-than-human entities in the Mediterranean Basin through the triple elaboration of Speculative (Re)Fabulation, Sympoiesis, and Weaving Worlds. Specifically, the Speculative (Re)Fabulation derived from the dynamic of the unexhausted possibilities contained within the significant minor stories, and embraced uncertainty, indeterminacy, and divergence. Using the island figure - embodying the archetypical borderscape - to bridge the material and the discursive through a multiplicity of world models, the research methodology remained consciously subjective and selective using certain minor stories as string figures in the elaboration of counterforms of knowledge directed through latency; forms of knowledge that don't assume to be complete inducing operationalization, colonization, or domination, but that remain open-ended, incomplete and proximal claiming accountability for the alterations caused by their de facto prosthetic function.

In this sense, the very notion of the 'common' or the 'collective' was first and foremost understood as knowing-in-being and knowing-through-being which in terms pointed towards collectively produced systems without self-defined spatiotemporal boundaries tying to the notion of Sympoiesis. In the context of the Mediterranean Basin, and moving forward with the methodology of figurations, this involvement in the functional and expressive constitution of territories through the significant minor stories was founded upon a decentering of (hu)man in the exercise of agency and in the evaluation of bios (political life) as of higher value than zoe (bare or animal life). This shift, although not intended from the beginning of the process, was deemed crucial for the establishment of a counterparadigm for the worlding of the sea that can allow not just co-existence but transgressive co-evolution; realized through un-

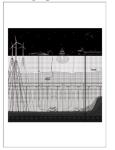
expected interactions, entanglements, or arrangements induced by a conscious methodology of participation in contingent and dynamic patternings between human and morethan-human holobionts. The medianatureculture scenario presented in the project section of the thesis, thus, was developed not as the answer to the question of living in a damaged planet but as an elaboration-speculation of what other futures are and could be there if design dared to test concepts without aiming for controlled and definite results but while staying with the trouble.

These intentions of multiplicity and speculation of unexhausted or unanticipated futures, as embodied in the ephemeral Mediterranean island of Julia and its capacity of a second origin, were the drivers of the Weaving World process which is meant to describe the proposal for an alternative model for the co-habitation of the Critical Zones based on differing through repetition and not on scalability. It is in this context that the island reveals to be a synecdoche of the Mediterranean Basin – and its seamount constellations - not only as a typical space of crisis and transgression that ties to the historical process of its occupation and total urbanization but as a critical detail that contains in its figuration an alternative world model able to initiate in each manifestation as event an agential cut of Clearance and a different process of territorialization. As a synecdoche, then, Julia and its speculation defines – both conceptually and contextually – a space of extended defamiliarization by radicalizing empirical experience and by responding to questions with concepts that lead not to definite answers but to further actions and experimentations.

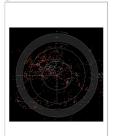
Concluding this ongoing methodology of speculation, then, could not lead to a synopsis but to a wrapping up statement of the roads taken and the ones virtually there but not yet explored in the short timeframes of the graduation. In the model of differing through repetition, as elaborated in the Weaving Worlds, it is the very process of repeating that allows evolutionary natures to take form retaining their activeness and producing new types of knowledge. It would be, thus, crucial to continue this open-ended process of experimentation by repeating it letting a different material-discursive entanglement to emerge and observing the transformable relations that it induces. This repetition, though, remains weak if conducted under the same thinking processes that have directed the god-eye view of the contemporary (urban) designer. It calls, thus, for its elaboration in the context of a collective – understood not as a common ground of mutual compromises and manifestations of prevailing voices but as a place of multiplicity, contradiction, and even conflict that consciously remains with the trouble – where its desirable trajectories would be sculpted through active and ephemeral knottings.

This elaboration – as initiated through the Transtitional Territories Studio under the framework of the territory as shared project and as expanded through the selective participation in relevant symposiums, conferences, and manifestos – builts upon the notion of exhibition as urban project testing through the case of Julia the potential of the collective gaze in the development of shared counterparadigms for the inhabitation of the (Mediterranean) islands and their oceanic territories. In this process, it is the very essence of the collective that becomes subject to the same conditions of differing by repetition as the project or the methodology, involving its members-viewes and their de facto specific retinal experiences in the performative and transformative act of the gaze. Emerging, then, through vision's constitutive negativity - which defines what is in relation to what it is not - the exhibition as urban project opens through the active involvement of multiplicity the road for an extension of the critique towards other neglected worlds, stories and trajectories, and, in the case of the historically colonized and operationalized Mediterranean, towards postcolonial and anticolonial futures; a direction touched but not delved upon throughout the thesis which remained loyal to its intention to acknowledge emergence over discovery and to speak about specific waters, specific bodies, and specific scars avoiding globalizing generalizations and solidifying certainties.

monographies\_lines of inquiry drawings & island investigations











situated research\_collection of figurations & film clips











wall elements

inhabitation patterns\_human & more-than-human perspective









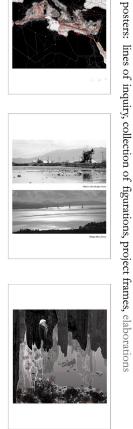
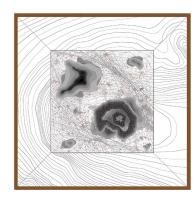


table elements

Mediterranean Synthesis\_powerscape layers



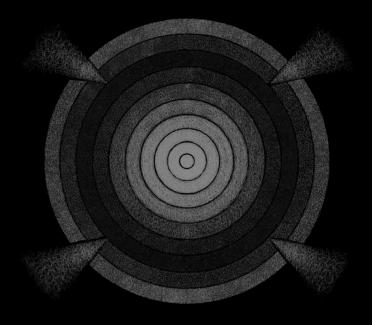




Julia Island Synthesis\_spatiotemporal layers

objects-models, atlas, booklets, scripts

Exhibition as Urban Project Diagram\_the string figure of Julia



Reflection

'The relationship between knowledge and water is not simple, but understanding this relationship seems also to be a question of distinguishing between kinds of knowledge – knowledge that commoditizes and colonizes, knowledge that generates necessary anger and action, knowledge that heals. Knowledge that builds communities, or knowledge that fractures them. Knowledge that responds, or knowledge that masters'

Astrida Neimanis (2017). Bodies of Water: Posthuman Feminist Phenomenology This thesis research-project derived from a personal quest of becoming urban designer in the midst of the complex urgencies and fragilities of the Anthropocene. It became clear to me – already during the course of my studies - that the current level of complexity associated with urbanization processes defies conventional approaches of solutionism and reveals significant delimitations of knowledge; usually connected to prevailing worlding practices in the state-regime nexus. Attempting, then, to go beyond such approaches and delimitations pointed towards a conscious Transition to paradigms of 'living with the problem' (Grosz, 2012) or 'staying with the trouble' (Haraway, 2016) that remain skeptical of concrete outcomes or narratives of savior. Instead, these paradigms suggested the adoption of theory critique, experimentation, and concepts as essential methodologies for the development of a design process capable of responding to the ongoing transitions of the 21st century Critical Zones.

In this context – and revolving around the very notion of Transition as both contextual and conceptual shift – my interest in ocean urbanization in light of the ongoing water crisis was marked by a deliberate decision to simultaneously transgress my personal delimitations of knowledge, and to search for alternative ways of coexistence in a 'troubled' planet through the development and the testing of a combined methodology of theoretical inquiry, critical analysis and conceptual experimentation. This research by design methodology, defined in the Inland-Seaward framework of the Transitional Territories studio, was directed by the understanding of the water crisis as not merely an environmental matter but also a socio-ecological one produced through dominating water imaginaries and complex material entanglements that territorialize and deterritorialize water rendering it placeless.

Realizing that it is precisely the contemporary water imaginary who has allowed – if not directed — its operationalization, appropriation, universalization, and transformation into a critical site of political praxis, was essential to recognize oceanic territories as ongoing projects whose analysis and design presupposes the challenging of land-based territorial arts and the tracing of counter-acts and alter-imaginaries of living with water. In this process, situatedness was deemed critical not only for the mapping or the

experimenting but also for the understanding of knowledge as necessarily performative and proximal; produced through active interrelations between the material and the discursive and differentiated across various aqueous milieus. In the case of this thesis, then, the quest for situatedness drove the final site selection to the specific sea bounded system of the Mediterranean Basin which, being the water body that I was personally inextricably connected with while growing up, was defined as a mesocosm for the study of ocean urbanization in congested conditions of crises.

The selection of a continental site – through this back-and-forth process of design, critique, and reflection cultivated by the TT studio's collective thinking - sealed my interest to understand planetarity and planetary urbanization not only as a top-down data-driven process of knowing Gaia and its concatenation of crises but also as a way to find the critical or neglected embedded details and to test how they can update our knowledge systems and our humancentric - or more precisely man-centric - worlding practices. In that sense, it used the same methodologies in the different interconnected scales - defined not as nested units but as relational bodies – always focusing on the conditions of transgression, liminality and in-between to explore the urban project as a curating practice in urgent need to give voice to those that don't have voice and to develop a practice of becoming-with its human and more-than-human audiences.

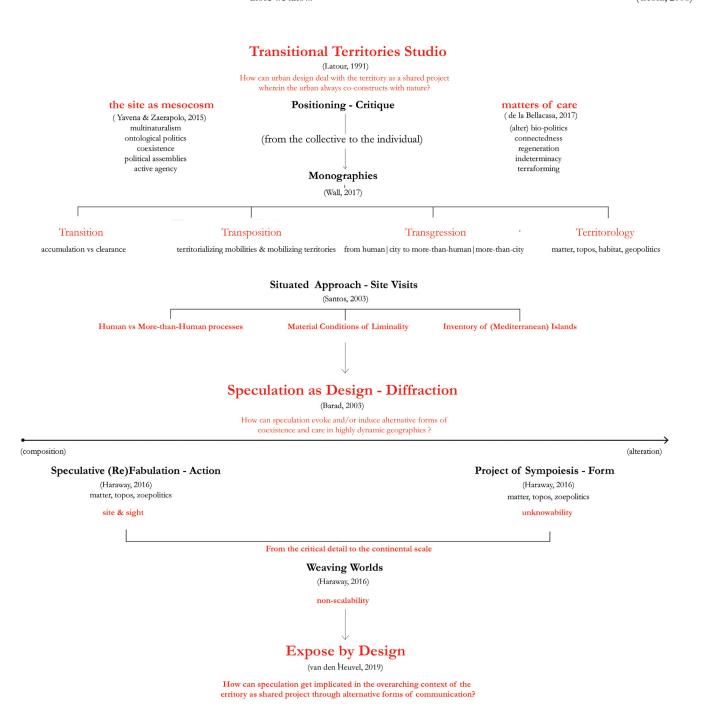
This redefinition of what an urban project is – and what it can or needs to be - entails the same attention to latency as the medianatureculture scenario elaborated throughout the report for the co-evolution of Julia; embodying a critical event that bridges real and virtual through its materialization. Acting as a cognitive and physical disruption, Julia reveals the limit of our current worlding practices and demands the cultivation of an artistic methodology of speculation as a bridge towards real transdisciplinarity and as a counterweight to the objectification currently exercised by our narrow understanding of science. Situated speculation, then, is suggesting a methodological turn in the way we analyze, represent and design responding to my initial quest for becoming a transitional designer developing counter-projects.

This methodological shift towards speculation as a design approach was inspired from the analytical-projective approach directed by the Transitional Territories studio during the collective mapping phases. Although the site selection was individual, the shared initial investigations and the extensive feedback sessions were foundational for the understanding of analysis and design not as sequential—leading with certainty from the one to the other—but as oscillational—simultaneously updating and challenging each other. The Accumulation-Clearance dipole, which was first implemented in the site selection phase and later elaborated in the Deterritorialization-Reterritorialization approach, directed the understanding of space as gestational; already containing within its current composition the signs of immanence and resistance that can lead to its alteration, and already dictating its spatiotemporal limits.

In this sense, the produced incomplete cartographies of the studio investigations – titled as Transition, Transgression and Territorology in the Monographies chapter – built up a very strong data-driven layered basemap while highlighting fragility, latency, and temporality through experimental representations of scales, relations, possibilities, subjectivies, agencies, contradictions, or narratives. Between the two – the first following the conventional urban, or even planetary, design process and the second consisting of various artistic figurations – the project's approach was evaluated, always in coordination with the given feedback, in need of situatedness. This requirement was fulfilled through the acupunctural field work that combined photo documentation and storyboard techniques to develop an embedded figuration narrative – elaborated in the Situated Knowledge chapter.

Combining the conceptual and the contextual, then, led into the Diffraction inquiry-approach which translated the neomaterialistic thinking into an intentional speculative project bridging the site and the sight of the synecdochical island. Through this bridging, that followed the same analytical-projective methodology established by the TT studio in the first part and that used all feedback sessions, presentations or exhibitions as moments of reflection and redirection, the design process was broken into three constitutional parts: the Speculative (Re)Fabulation, the Sympoiesis, and the Weaving Worlds which tested the concepts elaborated by Haraway (2016) in a materialization scenario. Meant to embody the assessment of speculation as design approach, the project concluded by intentionally evoking a nonscalability approach to emphasize the politics of location.

'Art is intensely political not in the sense that it is a collective or community activity (which it may be but usually is not) but in the sense that it elaborates the possibilities of new, more, different sensations than (Grosz, 2008) those we know.'



Graduation Approach Framework

## Evaluation & Significance

Scientific Relevance

The thesis takes place in a crucial moment for the study of extended more-than-city urbanization and specifically - in light of the generalized water crisis - the urbanization of the sea. The notion of 'Anthropocene water' shifts the focus to the hydrosphere while intensive extraction practices make the ocean the new frontier for human occupation. Operationalized, instrumentalized, militarized, politicized, and commercialized the largely underexplored or intentionally obscured oceanic territories are densely inhabited and radically appropriated violating unknown spatiotemporal boundaries, restraining flows, disrupting fragile ecosystems, and systemizing expulsion through land-based territorial practices. As urban designers start acknowledging the space of the sea as a crucial subject for their discipline, its reconceptualization becomes urgent requiring a consistent methodology not only for the conducting of analysis, mapping and scientific observation but first and foremost for the development of speculations, imaginaries and entanglements that oppose the prevailing urbanization practices.

In parallel, this shifted focus to more-than-city urbanization in relation to the extended consequences of the interconnected ecological crises even in traditional urban spaces dictate the need for a new breed of transdisciplinary, territorial and transitional designers to emerge; capable of transgressing conventional cognitive and disciplinary boundaries in order to establish new ways of knowing and inhabiting the world as part of complex human and more-than-human assemblages. In this process it is the very practice of urban design that is challenged requiring the emergence of new methodologies to imagine living under different paradigms and with different consequences.

Set between these two challenges, the thesis' speculative methodology offers a foundation for the reconceptualization of living in extreme environments of crises paying attention to the critical details, the neglected stories, the sacrificed worlds and the unexpected entanglements. Using theories and concepts as bridges between reality and virtuality, it moves to contextualize a staying with the trouble approach in order to evaluate its capacity to lead to the creation of collective landscapes even in the ruins of our current living patterns. Coupling art and science in its exploratory matterings, it arguments against conventional disciplinary and conceptual dichotomies, while by employing non scalability it challenges the modernistic ideal of endless expansion.

The challenging of endless expansion no matter the consequences becomes even more crucial in the site-specific case of the Mediterranean Basin whose importance as an urbanized entity is historically validated and societally undeniable. Being the world's most colonized and militarized sea, the Mediterranean is still the scene of violence that unites and defines the three surrounding continents. It is the 'table' that, in the words of Lahoud (2013) 'binds together the consequences of Western industrialization, global carbon emissions, aerosol dispersio patterns, sea surface temperatures, monsoons, precipitation, pastoralists, herders, farmers, cultivars, migratory routes, treaties, coast guards, statistical models, satellite imagery, and detention centers' in a diachronic accumulation of societal implications which extend from human to non-human entities and assemblages.

Living and dying processes are constantly renegotiated in its deep oceanic space although response-abilities are mostly invisibilized and accountability remains largely out of the question, especially when it comes to the Mediterranean more-than-human bodies. In this sense, the very essence of the common ground is foundationally ruptured and entirely mediated through colonization processes; rendered possible through the recognition of bios (political life) as superior to zoe (animal or bare life). Even the act of knowing – as executed through science - becomes a conscious attempt for thingification which deprives bodies from their inherent agency, latency and capacity.

In this setting – and avoiding to implicate itself in solutionist approaches - the thesis becomes relevant by challenging the established order of things and by reinstating sympoiesis as the essential practice of becoming-with, of forming relations and of evolving without necessarily expanding and definitely without violating the circles of living and dying. Using the archetypes of the island and the cave to speculate a second origin, it decenters state-oriented narratives of agency and citizenship to fabricate a post-colonial geography. This post-colonial geography, then, presupposes an obviation of archetypical divisions of subject/object, nature/culture, bios/zoe re-establishing the in-between as a leading condition for the establishment of counter-paradigms for coexistence in the Anthropocene.

This notion of **post-colonial geography** is at the center of the thesis' ethical and contextual limitations challenging whether a second origin can be the counter-weight to the prevailing power structures that have been dictating living and dying in the Mediterranean Basin and more broadly in the oceanic territories. Although the figure of the ephemeral island and its synecdochical relation to the Mediterranean Basin evokes a very powerful figuration narrative about alternative conditions of co-existence and co-evolution, the dominating reality of necropower – describing colonization effects more precisely than both notions of biopower and geontopower - dictates a continuous revolving around death, even through its negation. Accountability to living and dying patterns, then, demands further analysis on the relation between politics - in all its appearances as geopolitics, kinopolitics, biopolitics, zoe-politics - and death, especially in a historically colonized space.

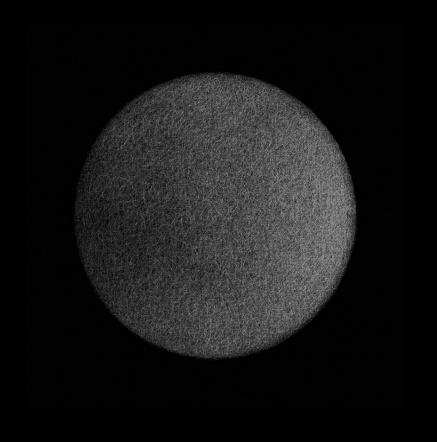
Active decolonization, although speculative, does require defamiliarization and does presuppose approaches of staying with the trouble, but it also demands accountability about the already existing marks on bodies. This type of accountability is tied to a line of inquiry around Necropolitics – defined by Mbembe (2003) to describe the surplas value of death in the capitalist sovereignity regime – which was not prioritized in the timeframes of the current report although it was understood as essential for the continuation of the speculative methodology, the testing of the actual consequences of the shifted focus towards zoe (bare or animal life) instead of bios (political life), and the mingling of archetypical divisions between subject/object, ontology/epistemology, material/discursive, nomadic/sedentary.

In fact, the in-between, besides being the essential condition for entanglement, sympoiesis, weaving, tentacularity, viscosity or transformation, is also devoid innocence in the occupational approach of sovereignty. It has already been expressed and used in the establishment of the condition of sacrifice; embodied in the situated narratives of the Mediterranean sea in the figures of the slave, the migrant, the stateless, the life surplass – in its human and non-human manifestation. Invoking, then, any in-between condition – especially in the world's most appropriated and

militarized sea - entails significant ethical considerations, violates invisible limits and demands careful consideration of the ways prevailing practices of violence invade and colonize even the most well-intended attempts for Clearance and alternative ways of co-existence. Similarly, the nomadic subject, although transgressive, embedded, potentially sustainable and definitely compliant to the watery milieus of the Mediterranean, can be weaponized on the base of its ephemeral belongings and its subsequent unaccountability. (Mbembe, 2019)

In this light, and staying with the ethical considerations, the next step of the Diffraction investigation – as developed through the Speculative (Re)Fabulation, the Project of Sympoiesis and the Weaving Worlds inquiries – would most probably be a **counter** study of the consequences. Although the sympoietic arrangements are de facto open to transformations, mutations and surprising change, the elaboration of a medianatureculture scenario for Julia initiates a very prominent disruption in the established living patterns in the Mediterranean threatening to completely obviate life as it was known. It may be the case that this disruption is desirable, but it does need to gain accountability towards its own consequences; the worlds it sacrifices, the bodies it kills, the relations it cuts, the stories it neglects, the spatiotemporal boundaries it transgresses, the orders it establishes, the possibilities it leaves open, the states of exemption it evokes.

In this setting, then, the Reflection chapter could not conclude with a set of statements-answers but with a set of further questions that will guide the continuation of the research besides the thesis completion. What does it mean to be not only response-able but truly accountable to the consequences of your implication in zoe processes of living and dving? What is the relation between (zoe)politics and death in sympoietic arrangements? How can the method of speculation as design ensure that knowledge doesn't become colonizing, oppressing or mastering? How can speculation extend beyond the limits of its scenario and towards an open system of knowledge? How can a curational approach establish already a materialized collective landscape? What other possibilities does the curational urban project evoke? How does it inform sea urbanization processes?



Bibliography

Addington, M. (2010). Architecture of Contingency. In Beesley, P., Hylozoic Ground: Liminal Responsive Architecture, (pp. 66-77). Riverside Architectural Press

Aranda, J. & Kirksey, E. (2020). Toward a Glossary of the Oceanic Undead: A(mphibious) through F(utures). *E-flux Journal 'The Ocean'*, 112

Arènes, A., Latour. B. & Gaillardet, J. (2018). Giving depth to the surface: An exercise in the Gaia-graphy of critical zones. *The Anthropocene Review, 5(2), 120-135* 

Arènes, A. (2022). Borders. In Aït-Touati, F., Arène, A. & Axelle, G. Terra Forma: A Book of Speculative Maps, (pp. 102-121). MIT Press

Armstrong, M. (2004). Wired to the World, Chained to the Home: Telework in Daily Life by Penny Gurstein. NWSA Journal, 16, 240-242

Armstrong, R. (2010). Hylozoic Ground Chemistries & Unanswered Questions in the Origins of Life. In Beesley, P., *Hylozoic Ground: Liminal Responsive Architecture*, (pp. 124-141). Riverside Architectural Press

Barad, K. (2003). Posthumanist Performativity: Toward an Understanding of How Matter Comes to Matter. *Signs*, 28 (3), pp. 801-831. https://www.jstor.org/stable/10.1086/345321

Beesley, P. (2010). Hylozoic Ground: Liminal Responsive Architecture. Riverside Architectural Press

Boano, C. (2020) Progetto minore: Alla ricerca della minorità nel progetto urbanistico. Lettera Ventidue..

Bode, C. & Yarina, L. (2020). Thick Representations for Oceanic Space. In Couling, N. & Hein, C. (editors). *The Urbanization of the Sea: from Concepts and Analysis to Design.*, (pp. 55-60). Nai010 publishers.

Braidotti, R. (2002). Between the no longer and the not yet: on bios/zoe-ethics. *Filozofski Vestnik*, 23(2). https://ojs.zrc-sazu.si/filozofski-vestnik/article/view/3441

Braidotti, R. (2006). Transpositions: On Nomadic Ethics. Polity Press

Braidotti, R. (2015). Posthuman Feminist Theory. In Disch, L. & Hawkesworth, M. *The Oxford Hand-book of Feminist Theory*. Oxford University Press.

Braidotti, R. (2019). The Critical Posthumanities, or, is Medianatures to Naturecultures as Zoe is to Bios?. *Cultural Politics*, 12(3). https://doi.org/10.1215/17432197-3648930

Brambilla, C., Bocchi, G., & Laine, J. (2015). *Borderscaping: imaginations and practices of border making*. Routledge.

Bratton, B. (2019). The Terraforming. Strelka

Braudel, F., Coarelli, F., & Aymard, M. (1990). The Mediterranean: Space and history, Champs Flammarion

Callicott, JB. (2007) Lamarck Redux: Temporal scales as they key to the boundary between the human and natural worlds. In Brown, C. & Tadvine, T., *Nature's Edge: Boundary Explorations in Ecological Theory and Practice*, (pp. 19-34). State University of New York Press.

Campell, T. & Sitze, A. (2013). Biopolitics: A reader. Duke University Press.

Cavallaro, D. & Coltelli, M. (2019). The Graham Volcanic Field Offshore Southwestern Sicily (Italy) Revealed by High-Resolution Seafloor Mapping and ROV Images. Frontiers in Earth Science, 7 (31),https://doi.org/10.3389/feart. 2019.00311

Colomina, B. & Wigley, M. (2016). Are we human? Notes on an archaeology of design. Lars Muller Publishers

Corner, J. (1999). The Agency of Mapping. In Cosgrove, D. (editor). *Mappings*. Reaktion Books. Couling, N., & Hein, C. (2020) Viscosity, In Couling, N. & Hein, C. (editors). *The Urbanization of the Sea: from Concepts and Analysis to Design*. Nai010 publishers.

Crampton, J., & Elden, S. (2007). *Space, Knowledge and Power: Foucault and Geography*. ASHGATE Debarbieux, B. (2017) Hannah Arendt's spatial thinking: an introduction. *Territory, Politics, Governance, 5:4*, 351-367. https://doi.org/10.1080/21622671.2016.1234407

Deleuze, G. (2014). Desert Islands and Other Texts: 1953-1974. MIT Press

Deleuze, G. (2013). Immanence: A Life. In Campell, T. & Sitze, A. (2013). *Biopolitics: A reader.* Duke University Press.

Domingues, A. (2020). Troubled Waters: An inquiry into water's modes of existence. E-Flux Architecture.

Drienken, H. (2013). Beyond "Mediterraneanis": A view from Cultural Anthropology. In Petrov A. (editor). New Geographies: Mediterranean, (pp. 145-152). Harvard University Press

Dolphijn, R., & van der Tuin, I. (2012). New Materialism: Interviews & Cartographies. MPublishing Dvorak, G. (2020). Ocean Sensing and Navigating the End of this World. E-flux Journal The Ocean', 112

Elden, S. (2010) Land, Terrain, Territory. *Progress in Human Geography, 34:6*, 799–817. https://doi.org/0.1177/0309132510362603

Elden, S. (2013). The Birth of Territory. University of Chicago Press

Elden, S. (2021). Terrain, politics, history. *Dialogues in Human Geography, 11(2), 170–189*. https://doi.org/10.1177/2043820620951353

Easterling, K. (2014). Extrastatecraft: the power of infrastructure space. Verso.

Foster, N. (1988). Vision and Visuality. Bay Press.

Foucault, M. (1977). The Archaeology of Knowledge & the discourse on language. Pantheon Books New York.

Gabrys, J. (2019). S/pacific Islands: Some Reflections on Identity and Art in Contemporary Oceania. E-flux Journal 'Navigation Beyond Vision', 101

Ghosn, R. & Jazairy, H. (2018). Geostories: Another Architecture for the Environment. Actar

Gottesman, R. (2013) The Wanderings of Io: Spatial readings into Greek Mythology. In Éditions de l'École des hautes études en sciences sociales. *Dossier: Mères et maternités en Grèce ancienne*, 239-263., Daedalus. https://doi.org/10.4000/books.editionsehess.2963

Grosz, E. (2008) Chaos, territory, Art: Deleuze and the Framing of the Earth. Columbia University Press Grosz, E. (2003). Deleuze, Theory, And Space. Log, 1, 77-86. https://www.jstor.org/stable/41764951 Grosz, E. (2001). Architecture from the outside: Essays on Virtual and Real Space. Writing Architecture Series.

Haraway, D. (2015). Anthropocene, Capitalocene, Plantationocene, Chthulucene: Making Kin. Environmental Humanities, 6, 159-165

Haraway, D.(2016). Staying with the Trouble: Anthropocene, Capitalocene, Chthulucene. In Moore, J.(editor). *Anthropocene or Capitalocene? Nature, History, and the Crisis of Capitalism,* (pp. 34-77). Kairos books.

Haraway, D. (2019). The Biopolitics of Postmodern Bodies: Constitutions of Self in Immune System Discourse. In Campell, T. & Sitze, A. (2013). *Biopolitics: A reader.* Duke University Press.

Helmreich, S. (2016). How to Hide an Island. In Daou, D., & Pérez-Ramos. P. (editors). New Geographies: Island, (pp. 84-89) Harvard University Press

Hetheringthon, K. (2002). Spatial textures: place, touch, and praesentia. *Environment and Planning A*, 35, 1933-1944. https://doi.org/10.1068/a3583

Horden, P. & Purcell, N. (2000) *The Corrupting Sea: A Study of Mediterranean History*. Wiley Blackwell Hsiang, J. & Mendis, B. (2016). The City of 7 Billion. In Daou, D., & Pérez-Ramos. P. (editors). *New Geographies: Island*. (pp. 204-211). Harvard University Press

Humphrey, J. (2010). Integrated Systems: The Breathing Circle. In Beesley, P., *Hylozoic Ground: Liminal Responsive Architecture*, (pp. 78-85). Riverside Architectural Press

Kumar Rajaram, P., & Grundy-Warr, C. (2007). Borderscapes: Hidden Geographies and Politics at Territory's Edge. University of Minnesota Press.

Lahoud, A. (2013). The Mediterranean, A new Imaginary. In Petrov A. (editor). New Geographies: Mediterranean, (pp. 81-100). Harvard University Press

Latour, B.(1993). We have never been modern. Harvard University Press.

Latour, B.(2015). Waiting for Gaia: Composing the Common World through Arts and Politics. In Yaneva, A. & Zaera-Polo, A. (editors). What Is Cosmopolitical Design? Design, Nature and the Built Environment, (pp. 1-2-0). ASHGATE

Lefebvre, H. (1992). Rhythmanalysis: Space, Time and Everyday. Continuum

Leontidou, L.(1990). The Mediterranean city in transition: Social change and urban development. Cambridge University Press

Lo Presti, L. (2020). Like a Map Over Troubled Water: (Un)mapping the Mediterranean Sea's Terraqueous Necropolitics. *E-flux Journal 'Navigation Beyond Vision'*, 109

Lowenhaupt Tsing, A. (2012). On Nonscalability: The Living World Is Not Amenable to Precision-Nested Scales. *Common Knowledge*, 18:3, 505-524

Lowenhaupt Tsing, A. (2015). The Mushroom at the End of the World: On the Possibility of Life in Capitalist Ruins. Princeton University Press

Longhin, E. (2021). Shaped by Power: The Machine-Territory of the Piave River. *Architectural Design Theory*, 8:1, https://doi.org/165-181.10.17454/ARDETH08.13

Manaugh, G. (2010). Synthetic Geology Landscape Remediation in an Age of Benign Geotextiles. In Beesley, P. *Hylozoic Ground: Liminal Responsive Architecture*, (pp. 50-55). Riverside Architetural Press Massey, D. (2005). For Space. SAGE

McGee, A. (2013). The New Colossus of Islands and Origins. In Petrov A. (editor). *New Geographies: Mediterranean*, (pp. 209-214). Harvard University Press

Mbembe, J. (2003). Necropolitics. Public Culture, 15(1), 11-40

Mbembe, J. (2013). Necropolitics. In Campell, T. & Sitze, A. (2013). *Biopolitics: A reader*. Duke University Press.

Mezzadra, S. & Neilson, B. (2013). Border as Method, or, the multiplication of labor. Duke University Press Moore, J. (2015). Capitalism in the Web of Life: Ecology and the Accumulation of Capital. Verso Books.

Moore, J.(2016). Anthropocene or Capitalocene? Nature, History, and the Crisis of Capitalism. Kairos books.

Morton, T. (2016). Molten Entities.In Daou, D., & Pérez-Ramos. P. (editors). New Geographies:

Island, (pp. 72-74) Harvard University Press

Mosse, D. (2008). Epilogue: The Cultural Politics of Water - A Comparative Perspective. *Journal of Southern African Studies*, 34(4)

Mubi Brighenti, A. (2010). On Territorology: Towards a General Science of Territory. *Theory, Culture & Society, 27:1*, 27-52. https://doi.org/10.1177/0263276409350357

Mubi Brighenti, A. (2014). Mobilizing territories, territorializing mobilities. *Sociologica*, 1, 1-25.https://doi.org/10.2383/77043

Nail, T. (2015). The figure of migrant. Stanford University Press.

Nail, T. (2016). Theory of the border. Oxford University Press.

Nail, T. (2020). Borders, Migrants, and Writing, Konturen, 11. 152-173

Nail, T. (2022). What Is the Philosophy of Movement?. Mobility Humanities, 1:1, 09-25

Neimanis, A. (2017). Bodies of Water: Posthuman Feminist Phenomenology. Bloomsbury Academic

Olóriz Sanjuán, C. (2019). Landscape as Territory: A Cartographic Design Project. Actar

Paasi, A. (2003). Territory. In Agnew, J., Mitchell, K., & Gerard T. (editors 2003). A Companion to Political Geography, (pp.109-122). Blackwell.

Pezzani, L. (2013). Between Mobility and Control: The Mediterranean at the Borders of Europe. In Petrov A. (editor). *New Geographies: Mediterranean*, (pp. 303-314). Harvard University Press

Povinelli, E. (2020). The Ancestral Present of Oceanic Illusions: Connected and Differentiated in Late Toxic Liberalism. *E-flux Journal 'The Ocean'*, 112

Puig de la Bellacasa, M.(2011). Matters of Care: Speculative Ethics in More Than Human Worlds. University of Minnesota Press

Ricci, M. (2013). Middle Sea Ciry: The Med Net Atlas Project. In Petrov A. (editor). *New Geographies: Mediterranean*, (pp. 245-254). Harvard University Press

Sassen, S.(2008). Territory, Authority, Rights: From Medieval to Global Assemblages. Princeton University Press.

Sassen, S.(2010). When Territory Deborders Territoriality. *Territory, Politics, Governance, 1:1*, 21–45. http://.doi.org/10.1080/21622671.2013.769895

Schmid, C. (2020). Analyzing Extended Urbanization: A Territorial Approach. In Couling, N. & Hein, C. (editors). *The Urbanization of the Sea: from Concepts and Analysis to Design*. (pp. 93-106) Nai010 publishers.

Schoonderbeek, M. (2010). Border Conditions. TU Delft Architecture Series

Shell, M. (2016). Islandology. In Daou, D., & Pérez-Ramos. P. (editors). New Geographies: Island. (pp. 44-49) Harvard University Press

Silva, M. (2020). Mining the Deep Sea. E-flux Journal 'Navigation Beyond Vision', 109

Spiller, N. (2010). Liberating the Infinite Architectural Substance. In Beesley, P. Hylozoic Ground: Liminal Responsive Architecture, (pp. 50-55). Riverside Architectural Press

Staniscia, S. (2013). The Island Paradigm and the Mediterranean. In Petrov A. (editor). New Geographies: Mediterranean, (pp. 255-264). Harvard University Press

Terranova, T. & Chambers, I. (2021). Technology, Postcoloniality and the Mediterranean. *E-flux Jour-nal Dialogues on Recursive Colonialisms, Speculative Computation, and the Techno-social'*, 123

Topalovic, M., Hortig, H., & Krautzig, S. (2014). Architecture of Territory: Sea Region: Singapor, Johor, Riau Architecture of Territory: Sea Region: Singapor, Singap

Vastinhpout, W. (2013). Braudel's Donkey: Historians and the Mediterranean as a Political Project. In Petrov A. (editor). *New Geographies: Mediterranean,* (pp. 101-110). Harvard University Press Humphrey, Wolfe, C. (2010). Queasy Posthumanism Hylozoic Ground. In Beesley, P. *Hylozoic Ground: Liminal Responsive Architecture,* (pp. 56-65). Riverside Architectural Press

Wurtz, M. & Rovere, M. (2015). Atlas of the Meditterranean Seamounts and Seamount-like structures. IUCN. Yaneva, A. (2015). What Is Cosmopolitical Design? In Yaneva, A. & Zaera-Polo, A. (editors). What Is Cosmopolitical Design? Design, Nature and the Built Environment, (pp. 1-2-0). ASHGATE