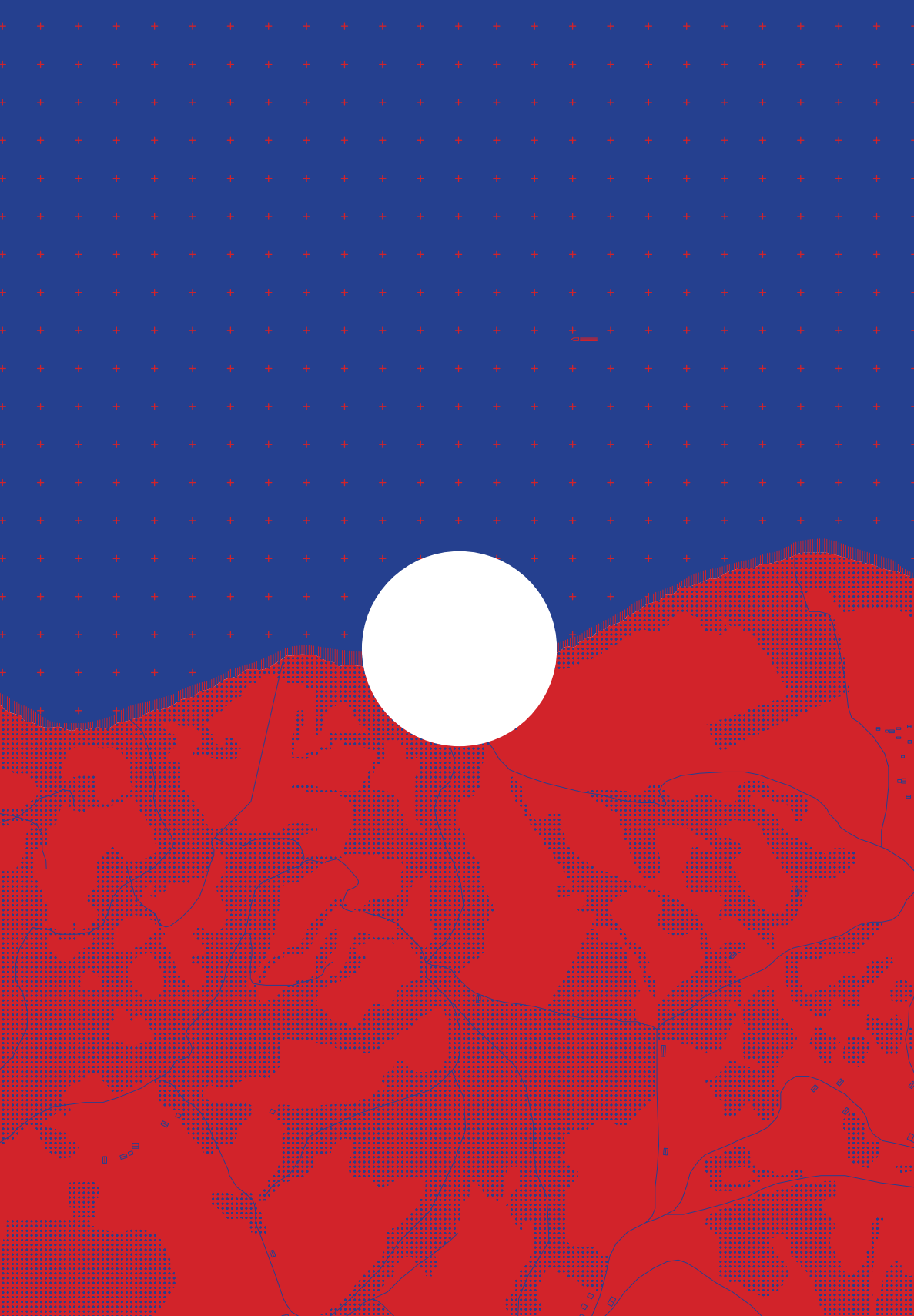




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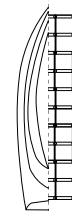
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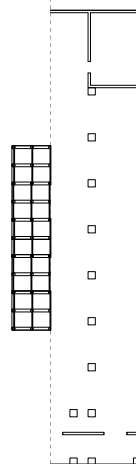
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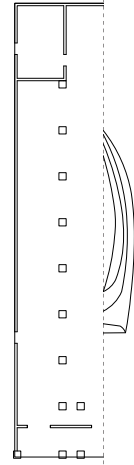
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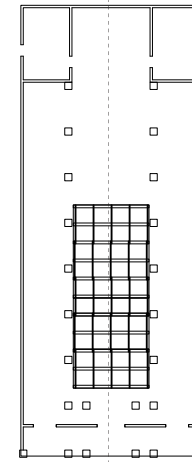
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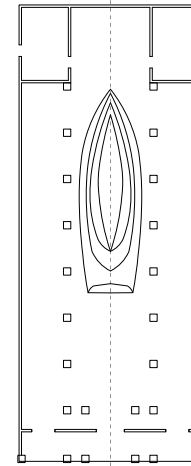
M A R











C H I L O É

“
A
la deriva
en el bote de
madera, remando
como a tropiezos, la
orilla se acerca con el gris
curvado de la isla; su trazado
liquido y arenoso, los montes que se
precipitan hacia el fiordo, parabólicos,
como una serpiente sin escamas. Arriba se
cierra el cielo nublado, cargado de agua. El
mar apenas se mueve bajo la quilla, calmo,
como después del temporal, mientras recaló
lentamente. Ancló junto a la punta de una
rampa de piedra, baja en altura, larga y angosta.
La rampa está cubierta de moluscos, de algas,
de crustáceos; las fisuras verticales que la cortan
semejan ciertas cortezas tectónicas, o un sin fin
de quebradas sobre el océano. La estructu-
ra, tan compacta y salvaje, se mezcla en su
declive con la arena emblanecida, como
si llevara siglos cavando un túnel
bajo la tierra. Mirada al pasar, la
rampa parece el lomo de algún
ser reptante, fosilizado en
la tarea de abrir una
caverna.
”

JOSÉ JOAQUÍN SAAVERDA GÓMEZ,
XXIX, RENOVAL.

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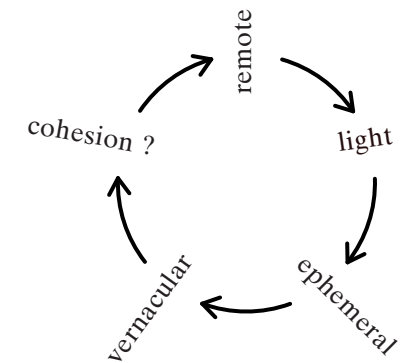
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OVERTURE

PROLOGUE



This research is based on a remote geographical location. Remote defined as “situated far from the main centres of population; distant.” In contrast to globalism; global networks, technologies, societies, crisis, uses of resources, economics and consumption, this study of a remote space is a way of understanding other systems which apply on one hand concepts of permeability, durability and adaptation, and on the other hand concepts of control and extinction.

To study the architecture of a Chiloé not only means to consider its technical and constructive specificities but also other external aspects, ie. a more anthropological approach, which reflect themselves onto the built heritage. As a result this research will try to understand how in it’s physical aspect; the architecture found on this specific island, illustrates its remoteness taking into account its evolution, available resources, traditions and cultural symbols.

During a discussion with the architect Edward Rojas, in his office in Castro, on the 14th of October 2015, he stated: “all types of constructions in Chiloé are part of the same world”. This specific world is a complex composition of three territories: Maretorio, Bordemar and Territorio, resulting from three specific conditions present around the island: the sea, the earth and the seaside. These three territories will be studied to picture their intrinsic character within Chiloé’s architecture.

To bring to light the interactions between the main types

of architecture found on this remote world, they will be explored through four techniques: symmetry, stratification, shift, and hybridization. These tools of investigation will enable to understand and answer the five initial speculations. Next to these four techniques, the action of narrating will also be important. Eight tales will construct a general condition for Chiloé, giving another point of view on its architecture. The fundamental results of this exploration will then be used as a base for a project.

Five initial speculations:

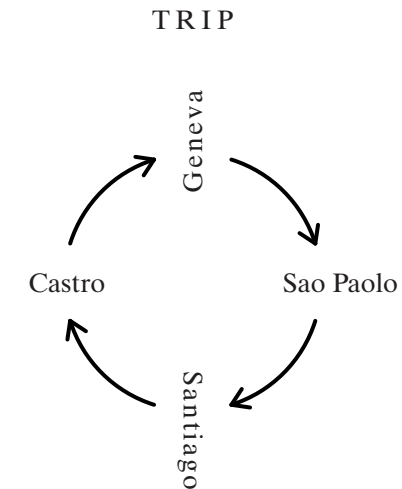
What makes the three territories live together? Is their cohesion a result of conquests, use of resources, their inhabitants or architecture?

Were these three territories at some point treated as separate entities?

How can the study of architecture through concepts of symmetry, shift, stratification and hybridization bring to light its essence?

What makes the architecture of Chiloé's archipelago, as a result, so subtly fragile and ephemeral?

Is the survival of this specific vernacular architecture sustainable or is it disappearing with globalization?



“Perhaps one by chance has to come celebrate in the actual place to see, to mark, to inscribe; things only remain close to us when we have made the first step towards them.”¹

The trip, journey or Travesia, expressed in the verses of Amereida, gives a fundamental insight to the reason for travelling to the archipelago of Chiloé.

‘Travesias’ have been organised by the university of Valparaiso since 1965. They permit architecture students to go on excursions annually.

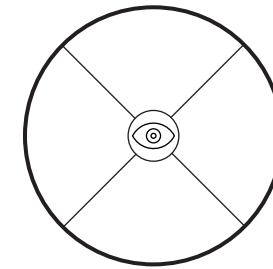
For this research, studying and exploring architecture could also be made through the experience of a journey. This experience, taking its form through the action of seeing, hearing, and learning was a tour into Chiloé's architecture. The intangible culture and history of this island, mainly transmitted and communicated orally, was the main reason for this trip. The journey to Chiloé took place between the 2nd and the 17th of October 2015.

This written paper is the result of this trip. The character of the place and its essence will be depicted by the method of changes of states in architecture lying in “between” different territories. The composition of the research will use different techniques and documents.

TELESCOPE

As a result of having been immersed in the culture for a short while, a few hours, a few days; gave the possibility to understand the most precise words of their language, and translate with sensibility, their knowledge.

The study intended as an exploration, the tool of the telescope introduces this research.



The telescope, an optical instrument originally helping in the observation of remote objects, serves for two purposes in this research. On one hand it helps the observation and investigation of a point in space placed far away: Chiloé, an island in the south of Chile, on the border of Patagonia, with a perimeter of approximately 8394 km², a population of 170 000 inhabitants, and coordinates: N 42° 35' 51", S 73° 52' 59".

On the other hand it creates a distance between the analysed subject and the researcher. This distance is an opportunity to understand a territory situated in what is a still biased country: Chile. This research has used this country, as a case study, trying to understand its history. As an example, the constitution of Chile still remains unchanged since 1980 or since the dictatorship. The opportunity of looking at this territory, history and architecture with an open mind, helped to understand its essence and brought new ideas to light.

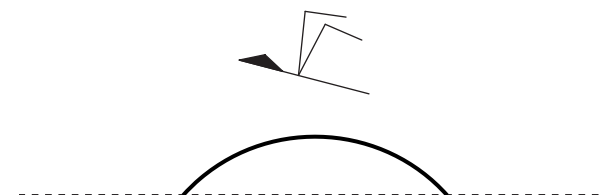
The telescope, as a physical tool, conducts through its lenses, the study of three characteristic architectural types: the wooden boats or lanchas chilote, the pile houses or palafitos and the Jesuits churches of the circular missions placed on the three territories: territory, bordemar, maretorio. It portrays their specificities, similitudes and differences.

The telescope also points out the overlapping of architectural elements. The effect of overlapping, intended as a palimpsest or a figurative accumulation or superposition of elements, reinforces the

fundamental ideas of design over time. It gives a new perspective of the territories and space.

Ultimately, the aim of the telescope is to reveal the essence of a remote place and express its particular identity. This tool will therefore guide the reader into different levels of representation and construction methods. The specific format of its diameter of 34mm serves as an introduction to this book, and focuses on the different evolutions in architecture.

CHILHUÉ



Chiloé was called, by its native people the Chonos and Huilliches: “between the tides”². Chilhué, derived from the Huilliche words Hue, meaning “place” and chil or chille, meaning “black-headed seagull”: hence, land of seagulls as the place where the people settled on the very edges of the archipelago, on the seashore.

The associations and inherent value of the name chosen by its native people, which then evolved to become Chiloe, provides the key to understand this inhabited territory and the Chilote’s way of living. It also expresses a strong presence of an imaginary world and mythology in their culture, related to natural phenomenon and the creation of the archipelago.

The inhabitants of Chiloé want to basically stay close to the sea to survive. The resulting metaphor is a constructed world made of small houses as dots spreaded randomly on the territory of the archipelago. The relationship between the frame of built architectures and the untouched vastness of the territories of the archipelago, which describes this association, is detailed in the first document: Triptych I³.

Today, Chiloé is unfortunately not only known as a fragmented division of land and sea, but also for the presence of big businesses which simultaneously cultivate and abuse its primary resources. These abuses lay in contrast to the native beliefs, being strongly connected to an untouched territory.

‘Chiloé in its first contact with history’⁴ is a record made by numerous explorations of the most southern part of our globe. In Walter Hanisch record of the Captain of southern routes, he describes:

“Es Chiloé una isla singular, que mira a un mar interior y se halla rodeada de innumerables islas.

En 1540 la divisó Alonso de Camargo.

En 1553 la descubrió Francisco de Ulloa.

Y el 28 de febrero de 1558 entró en la poesía con Ercilla:

‘Y al fin una mañana descubrimos de Ancud el espacioso y fértil raso, y al pie del monte y áspera ladera un extendido lago y gran ribera. Era un ancho archipiélago poblado de innumerables islas deleitosas, cruzando por el uno y otro lado góndolas y piraguas presurosas . . .’

Martin Ruiz de Gamboa tomó posesión de la isla grande de Chiloé en 1567, con 110 hombres, y fundó la ciudad de San Antonio de Castro a orillas del rio Gamboa, llamando a la provincia Nueva Galicia, por ser gallego el gobernador Rodrigo de Quiroga, que había ideado y llevado adelante la empresa.

Y con estos primeros pasos Chiloé entró en la historia.”⁵

In this short poem and these few sentences, the sense of remoteness and untouched ground is clear. The precious resources of wood, water and innumerable islands are described, as well as the presence of native people crossing the sea in their small canoes. In contrast to this unknown beautiful ground, the list of conquests and possessions that happened on Chiloé, also makes it part of the brutal history of colonization.

Chilhué, then became Nueva Galicia, named after the Spanish orders, as a memory of their hilly lands back home. In the middle of the 16th Century, the Spanish Crown occupied Chiloé, to control the southernmost part of South America. It also became the access door to the American continent and was the uttermost inhabited

territory of the colonial reign of Chile of Spain. This resulted in the construction of forts that were strategically placed close to the seashore to have a control on all territories. Interestingly, they were opposite to any kind of indigenous architecture found until then on the island.

The Jesuits also occupied Chiloé in 1608. The missionaries designed a specific design of evangelisation for the archipelago called the circular mission, due to its location and spread out territories. They tried to create missionary centres and built many churches along the shore. The edifices erected mostly close to the sea became landmarks for both sailors and travellers.

The importance of their presence and work is still apparent today on the island.

The representation of both powers on the archipelago caused a lot of problems. The colonists had to gradually adopt the lifestyle of the natives.

The island was finally called Chiloé in 1826, when it became part of the Chilean republic. However, still today, its native inhabitants don’t feel completely Chilean.

Finally, the description of Chiloé made by Charles Darwin in his book ‘Voyage of the Beagle’⁶ is a good explorer’s introduction to the island. In Chapter 13, he not only writes about the trip to Chiloé but also details the great earthquake of Valdivia in 1835. He mentions the trip with Captain Fitz Roy, which would subsequently and dramatically change the future of the entire Patagonia and its native populations:

“This island is about ninety miles long, with a breadth of rather less than thirty. The land is hilly, but not mountainous, and is covered by one great forest, except where a few green patches have been cleared round the thatched cottages. From a distance the view somewhat resembles that of Tierra del Fuego; but the woods, when seen nearer, are incomparably more beautiful.”

“In winter the climate is detestable, and in summer it is only a little better. I should think there are a few party of the world, within the temperate regions, where so much rain falls. The winds

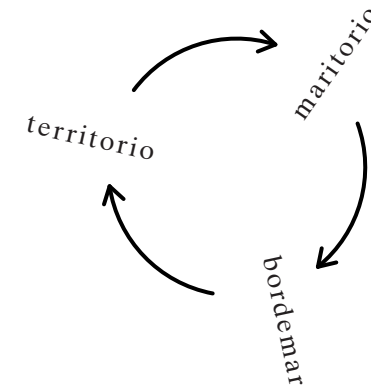
are very boisterous, and the sky always clouded: to have a week of fine weather is something wonderful.”

“The forests are so impenetrable, that the land is nowhere cultivated except near the coast and on the adjoining islets.”

“The inhabitants, like those of Tierra del Fuego, move about chiefly on the beach or in boats.”

I TERRITORIES

TERRITORIES



Maritorio, bordemar and territorio, shortly described in *El reciclaje insular* by Edward Rojas, are expressed as the specific conditions of the environment of Chiloé. These three territories, appropriated by the Chilotes, as a result, gave birth to three site-specific types of architecture.

The Triptychs, attached in the annexe, explore and aim to reconstruct these three territories. Triptych I looks at the totality of the archipelago of Chiloé whilst Triptych II examines a specific island situation where the three territories are bonded together. The study of this specific location on a territorial scale is also an announcement against horizontal flat and plane global conditions. A result of course caused by global capitalist development. In contrast, the qualities of the archipelago of Chiloé are made possible by its location. It is detached from the main land.

To define these three territories in this chapter is also a way of exploring territorial limits and limits in general: “Limits are strong. They make you aware of an inside/outside dichotomy and point to the alternatives.”⁷

They also make us aware of two ideas that emerged during the 1960s when the world was visualized for the first time as a totality: the first saw the world as “one world” and the second as a “whole earth”.⁸ The second idea regarded and viewed the planet as on organic unity of territorial life. Chiloé was an example of this unity. However due to the drastic evolutions and changes it has endured over the past decade, it is leaning more to the first idea of a 37 “one world” of globalisation,

MARITORIO

where universal abuse of resources and territories are present.

A possible interpretation to find the equilibrium between these limits can be found in Peter Sloterdijk's philosophical writings about the evolution of the condition of our world. In *Sphären III: Schäume*, he proposes to see "our contemporary condition as one of "Global Foams"; or as a society of aggregate microspheres or "worlds" in which each bubble is a world in a room. According to this framework, each world is simultaneously with and connected to all others by a flexible boundary."⁹ The flexible boundary of Chiloé could be its remote condition linking it to the metaphor of a bubble in a room.

To treat the three territories of Chiloé as one or as separate entities enables one to create a discourse. It approaches the speculations made in the prologue and creates a flow of inspirations to understand its architecture.

Maritorio is a strong element in the compilation of the three existing territories in this unique geographical situation.

In a research conducted by the catholic university of architecture of Valparaíso in 1971, entitled "Maritorios de los Arquipiélagos de la Patagonia Occidental,"¹⁰ Maritorio comes through as an analogue concept of territory. The word in itself is born in Valparaíso, with the purpose of studying the reason for the location of the Chilean coastal cities. Intended as the original word "territory", with the meaning of funding conquered land, it can be easily applied to the magnitude of the ocean and the sea. Therefore the concept of Maritorio is a geographical one that combines ideas of communication, richness, adversity and conquests. It also helps to determine the foundation of areas of populations and a nation. Chiloé being part of Chile, these same conclusions can be taken into consideration about the importance of its borders with the ocean.

The Maritorio, clearly represented in the movie "El botón de Nàcar"¹¹ of Patricio Guzmán, can be seen as the native territory of all indigenous population of southern Chile. Water, being the very essence of survival and Maritorio, their territory of existence.

An important representative element resulting from this live on the sea, is the existence of the fogón, "fireplace", which laid at the centre of the small pagodas, with which the people would live, eat and travel. The spatial transposition of the fogón is now found in the ar-

chitecture of the seaside and territory of Chiloé. It is evident and placed in the centre of the wooden houses. This relation to simple necessities and archaic spatial solution expresses the link to their original territory: the sea. It also shows the precarious and ephemerality of architecture built out of wood in opposition to the power of fire.

By introducing the concept of Maritorio, also means to raise the question of its cohesion with the other two territories. During the various historical explorations of South America and the invasion of the Spanish Crown, the territory was invaded mostly from the sea. Of course, they were then able to conquest the seaside and the land. This ultimately resulted in the fragmentation of a complex native nomadic territory, which would simply navigate through sea currents and sporadically use the territory.

Maritorio can be divided into two entities: the ocean and the sea, which co-exist on both sides of the island of Chiloé, one offering its protection and the other being an inhabitable limit defining the end of the continent.

To understand the importance of this territory of the sea for this remote place, an interesting on going project is being done at the department of the social sciences of the university Los Lagos, Chile, part of the ATLAS program. They are investigating the very patrimony of the Maritorio of Chiloé, depicting and understanding its interactions between the material and symbolic use of spaces, representations, ways of living and the aspect of time which gives possibilities to link it together with its sea territory. For them, the Maritorio is looked at as a zone of interstitial displacement and de territorialisation that configure different imaginary identification of this marine environment. The entire study also proposes a new methodology for the future development of the archipelago. Proyecto N°1121204¹² will be over at the end of the year 2016 and is carried out by anthropologists and other specialists.

To consider this territory as the base and very essence for its native people and their architectural constructions is a way of expressing how a bodiless substance can create a built and materialistic architectural heritage on its seaside and land.

Maritorio, is the protagonist 40 of all territories of Chiloé.

Turning back to Edward Rojas' description of three types of architecture: "arquitectura marítima, arquitectura bordemarina y arquitectura terrestre"¹³, he finds a way of expressing how each territory permitted the creation of a specific architecture responding as a spatial synthesis to its environment. He introduces the pile construction, as being the solution in its conception, to the migration of the populations of Chiloé, from the countryside to the seaside. Today this has become a real form of inhabiting the seaside and a new urban organisation of space.

The Bordemar, stands as a link between Maritorio and Territorio, offering refuge, food, commerce, communication and links to the outside world. The sea tides regulate its border bringing a rhythm to the life of Chiloé's inhabitants. The sea level falls (ebb and flow) in a cycle of six hours. A difference felt between 6 to 7m in altitude and going down up to 300m in longitude.

The concept of 'el reloj chilote'¹⁴, or chilote clock as the embodiment of the sea tides brings together the dependence and relation of the people to their territory. Not only does the sea mean a space for their houses, but also acts as a food source, found directly in the ground under their pile houses.

The economy and survival of the inhabitants of Chiloé is mainly linked to the harvest of molluscs and fishing. They are able to exploit these resources, living close to the 41 sea or on the coastline. This

TERRITORIO

characteristic life condition is the result of pile construction and a seaside urbanism.

Edward Rojas further explains this concept by saying that all cities of the archipelago are placed on the seaside and can be therefore called: 'ciudades bordemarinas'. In them, one recognizes an urbanism and architecture that express the strong relation between the earth and the sea.

'El hecho palafito', or pile fact, is a spatial synthesis between the duality earth-sea. The inheritance of the territory bordemar that finishes into the cultural built architecture of Chiloé, can be considered as patrimony, and as an adequate answer to the past, valid for the present time, and bringing a lesson for the future.

The result of the relation between the earth and the sea is the word "varar": run ashore or staying arrested into the sand, as a derivative of the specific territorial situation of the sea tides in Chiloé. The boats conceived and made with the support of two side keels, permit them to stay lying on their side when the sea tide is low without breaking up.

By introducing the concept of spatial connections found on the seaside of Chiloé, one can depict more easily how the three types of architecture found on the island are spatially or technically linked.

The territorio, or land territory of Chile and Chiloé, is beautifully constructed in Emma Malig's work for the movie *El Botón de Nacar*. This cartographical representation, 15m long, is a silhouette of Chile, textured as a wrinkled skin, standing as the metaphor to introduce the concept of a fragmented country brought back together in one piece.

The territory of Chile standing in between the Andes and the long coastline of 6435km is always represented in books and guides in three parts: the north, the centre and the south. This image of discontinuity also lies at the very essence of the archipelago of Chiloé being composed of more than 40 islands.

The territory of Chiloé is part of the X region of Chile, denominated 'Región de los lagos' or region of the lakes. Its territory is connected to the main land through the Canal of Chacao at its north border.

The definition of territory here is intended in its geographical or physical reality. In addition, it is also considered as an anthropological concept that holds and builds a relation between the physical ground and man. In Chiloé, the territory mixes mythology, traditions and religions.

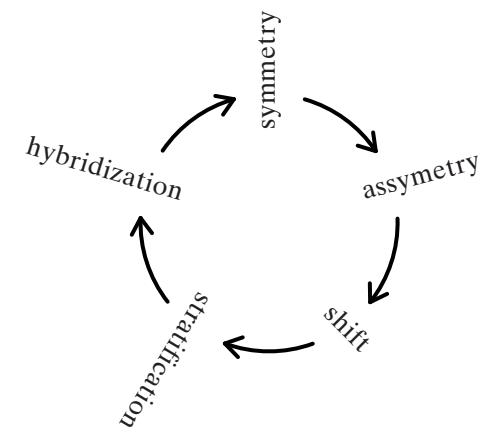
Culturally and historically, the territory became important when the Huilliches and Chonos occupied the island, already 12'000 years ago, to plant potatoes and cultivate molluscs. It was of course also important due to its rich supplies of native wood, 43 which fed the need to build

all types of architecture and daily life objects. Therefore, the territory of Chiloé was the base for the development of its typical architecture and a specific way of living of its inhabitants.

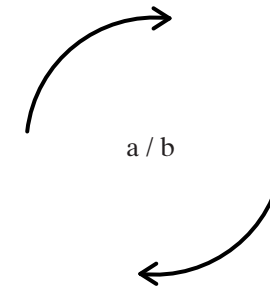
The native symbiosis between resources, territory and men, was altered by El Espinillo, a bush of yellow flowers introduced to mark the properties of the Spanish dominion. Since then it has been invading the entire territory of Chiloé. This plant, acting as a weed, which is the very sign of colonization, is also a metaphor for all the pejorative colonisations' effects which happened in Chiloé.

Through the Triptych I, one will understand the direct relationship between the ground and the sea, or the territorio and maritorio. Even the earth of Chiloé is porous and lets through the drift and shift of water onto its surface. The image of a body made of earth and run through by veins of seawater is the very representation of Chiloé's archipelago.

II TECHNIQUES



TECHNIQUES



The exploration of three types of architecture existing on three types of territories is done through the use of four techniques of analysis.

Symmetry connects them. Asymmetry its antonym, compares them. Shift introduces poetical surrealist interpretation of space. Stratification and hybridization ultimately express the complexity and continuous fluctuation of elements in space.

They are all connected by the concept of 'between', which uses the formula of "a/b"¹⁵ found in the writings of Marcel Duchamp. This algebraic comparison: a, being the exposition and b the possibilities, doesn't end up in the point c, but gets its importance through the sign (-), intended as a ratio which expresses a state of "in between".

The word 'between' found in the title of research 'arquitectura entre tierra y mar' addresses the problem of this research: architecture is positioned in between physicality and liquidity, between the continent and the sea, between a culture of movement and physical foundations. Ultimately, it loses its definition of statics and creates a world of tensions. The territories create fusions, hybridizations, and transformations. They can overlap different layers of scales, ranging from territorial reading up to constructive details.

As well as grasping essential changes of states and undefined territorial limits found 'between' different architectures, the word

SYMMETRY

“between” from its etymology: *betweonum* or “be+two”; also brings a new possible interpretation of 3 architecture in an open system.

When “a” is the boat and “b” the church, the house on pile is not “c” but the factor “/” or between. Traditionally, “a / b” defines and separates two variants. In this case the parameter “/” links or joins the three types of architecture and positions them together. The “/” or between becomes permeable and cannot divide different variants on a same flat surface.

Symmetry has two main significances. The first, a pure representation of harmonious, beautiful and balanced proportions and the second a more precise mathematical definition, where an object is invariant to a transformation, such as a reflection including other transformations too.

Symmetry as a technique of understanding is treated differently in the fields of science, nature, arts and mathematics. For mathematicians:

“symmetry may be observed with respect to the passage of time; as a spatial relationship; through geometric transformations such as scaling, reflection, and rotation; through other kinds of functional transformations; and as an aspect of abstract objects, theoretic models, language, music and even knowledge itself.”¹⁶

It is therefore interesting to use the art of symmetry of the mathematicians, as a consideration for spatial relationships over the territories of Chiloé. The passage of time also enables the reading and understanding of the evolution of its architecture.

The choice to use symmetry as a technique of analysis for this research came directly from the design of boats by the carpenters in Chiloé. Their study of forms and structure is done through the realisation of small dismountable wood models, which were then reproduced for this research. The intangible knowledge passed through by each generation is recorded mainly through the existence of these models. During the

SHIFT

conception process of boats, symmetry is then transmitted from the model over to technical drawings on paper. By scaling up the drawings made from the base of these 3D wood models, the carpenters are able to shape the final structure of a boat, scale 1:1.

Secondary, through the comparative drawings of the nave of the boats and the churches of Chiloé, a game of symmetry was drawn. It is represented in the annexe as a sense of evolution of knowledge taken from the boat carpenters to the church builders.

The telescope overlaying these three types of architecture by using the technique of symmetry, also wanted to represent an idea of evolution as a palimpsest. The succession of elements in an abstract space over sheets of tracing paper was a way of decomposing architecture to bring out and show the essence of it.

Finally the research for performance, in the construction of boats, dismounts through the use of symmetry and models, the complexity of its construction into simple forms. Craftsmanship is able to shape complex structure by turning them back into simple elements. This technique was certainly used to build the missionary churches, which had to be produced in an easy and reproducible way.

On the other hand, the technique of asymmetry, wants to destabilize certain concepts of knowledge and conception in architecture. It gives the possibility of breaking the rigidity of design to bring to light the craft and handmade architecture. Asymmetry ultimately expresses how each architecture can adapt itself to a specific site or territory to be unique for this very reason.

Shift intended as movement or displacement is used as a technique of analysis in this research to understand the interactions between the territories as much as the elements of composition of architecture.

The tradition of shift lying at the base of Chiloés native population still plays an important role in the cultural and social mores of today. In the Tale Minga, the tradition of moving houses will be illustrated to represent the technique of shift on the territory. It is also present in the maps Triptych I and II, with the shift of water on the territory and the shift of the houses from the inland towards the seaside.

Therefore, shift is the opposite of a limit. The technique blurs it to show that the territories can join together and enrich the architectural patrimony of the archipelago. Architecture is seen as related to different territories and attached by very light and ephemeral foundations onto the ground. It is a representation of movement on the margins of the world.

‘Al margen’¹⁷, on the fringes, by Alberto Sato, as an introduction to Smiljan Radics work, describes these subtle limits very sensitively.

“A necessary condition for speaking of the end of the world is that a centre of reference or a point of departure exists. In the contemporary world of incertitude, of Unified Theory, or Chaos, the centre becomes blurred”¹⁸

STRATIFICATION

and register the different shifts was a way of finding a reference point or the essence of a remote place. As a metaphor, shift is like a wind that stirs different elements into space to create new combinations and spatial compositions.

The study of stratification is mainly done by archaeologists and geologists, which try to understand history by decomposing the different layers of the ground.

In this research, stratification is a way of discerning the different spaces and architectural elements present on the island, starting from the territory, to the foundations and finally to the structure and the facade composing its architecture. It also reinforces the idea of a palimpsest as the accumulation of different symmetries and elements super imposed on top of each other.

Triptych II represents a possible stratification, by overlapping three realities. The existing territory of Rilan, is covered at first by a new urban seaside condition and then by the ruins of its future disappearance. It points out the subtle existence of its foundation.

A second interpretation using the technique of the cadavre exquis, is the stratification of the three types of architecture onto a structural drawing. By super imposing the three, one can put them in relation and understand differences of scale, complexity, structure as well as similitudes in a spatial condition and technical composition.

Stratification is also personalised into the structural model of the pile construction made for this research. The decomposition of the architecture into the foundations, 55 structure, roof and skin

HYBRIDIZATION

explores the essence of its conception and how they relate one to each other. The use of a same material makes it possible to understand how detailed solutions and facades are found both on the pile construction and the churches as well as for the boats and the churches.

The different architectures, appearing as versatile objects on the territories of the archipelago through stratifications, also demonstrate that their existence is only 200 years old.

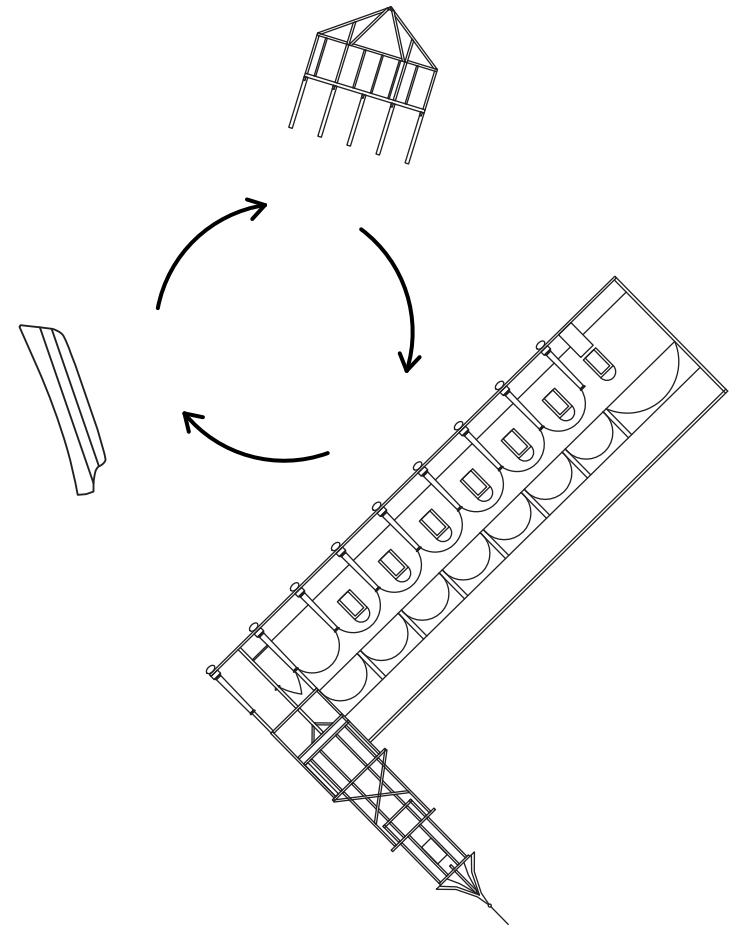
Architectural hybridization are rare. Breeding two species or types is complicated and the result is hardly subtle.

Through the three techniques, symmetry, shift and stratification, one is maybe able to get closer to the understanding of hybridization. At the essence of this research is an accumulation of elements brought together, which construct a plausible cohesion of different architectures. The technical and spatial hybridization are the conclusion of the maps, drawings and models shown in the annexe.

A substantial hybridization is the nave, that is described in the Tale “Pelasgians” and illustrated in the drawing “the Nave” . The boat structure transposed and flipped 180° into the very centre of the nave of the churches in Chiloé was also used by the Vikings in Norway and in the roman period in France. This same technique of construction is as a result of a strong and unique craftsmanship and expresses the ingenuity used for these constructions.

The fascination of joining a boat, a house and a church together is like the dream of Fitzcarraldo to transport a steamship over a steep hill. Hybridization is a dangerous guideline for the project, because it could create a monster as much as a subtle understanding of a remote place and its built heritage.

II.II ARCHITECTURE



ARCHITECTURE

The three types of architecture of this analysis are the dalca or wooden boat, the pile houses and the churches. Each type will be briefly described, as deeply analysed and represented through the vehicle of drawings, models, sketches and photography . Each type will be summarized through the following five points: history, elements of composition, structure, material and use. Gottfried Semper will serve as a reference point.

In comparison to our European background, which followed the ancient Egyptians, Greek and Roman architecture, Chiloé's architectural history is very short. Despite this, the same essence in its evolution could be described as follows:

“One fact stands firm: that the most varied constituent parts of older civilizations were deposited here and intermingled and in a great metamorphosis of people shot together (like Parian marble) from sedimentary conditions into a crystal clear independence.”¹⁹

Semper consequently explained that the first signs of human settlements, “where the whole took order and shape,” were concentrated around the hearth. This first element of architecture considered as the “Urzustand” or primitive condition is the hearth. To depict the evolution of architecture of Chiloé we can clearly connect it to the element of the fogòn or hearth.

This physical centrality in the first sign of human settlements was connected to primitive needs and archaic necessities, where the scenario of scarcity laid at the base of its foundation. In Chiloé it is still present and acts as a vital part of the home life of its inhabitants.

The architecture of Chiloé also represents how “like its great teacher, nature, it can still choose and apply its material according to the laws conditioned by nature.”²⁰ Being light and ephemeral and built out of wood, it is the direct answer to simple survival needs. These natural symbols also lay at the essence of living in an extreme part of the world.

As for the three other remaining elements: the roof, enclosure and mound, they too have a specific function in Chiloé. The roof element is perhaps the most evolved and complex of all four using the knowledge of the boat carpenters and the structure of boats.

The third concept of wall or enclosure, here remains very subtle due to its balloon frame construction covered by wooden tiles. As a result, its power of protection is ephemeral and remains in a primitive state compared to solid brick, stone, cement or adobe walls.

The fourth element, the mound, is here detached from the ground through the use of piles structures in Chiloé. It enables to protect the fire and the living spaces as the architecture lies by the sea.

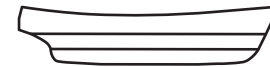
To be able to thoroughly describe the three case studies chosen for this research, one should also work on and explain the term: vernacular architecture. As the relationship between man and its natural inhabitat in Chiloé is deeply rooted in its domestic and native appropriation of space.

Paul Oliver introduced the term “vernacular” in its Encyclopedia of Vernacular Architecture of the World in 1997. He described an architecture constructed from local materials as well as the ability of building an environmental structure through the coherent organisation of forms and space, while expressing a determined culture and philosophical collectivity. This term is appropriate for Chiloé as it is inherent in its native architecture.

For each described type of architecture, a small folder

of pictures can be found in the annexe to illustrate visually their own specificities. They go along with the description of the five points of its architecture.

TYPE I : BOAT



The first and most primitive architecture of the archipelago of Chiloé is the boat, lancha chilote or dalca.

History:

The lancha chilote was a means of transportation for the native population Chonos, who became extinct around the 1870s. Today, the lancha chilote has evolved from fishing boats to navigating sailing boats or yachts. Its primary function: is to enable movement. Furthermore, it also allows fast, easy communication and transportation around the islands. These functions have remained constant throughout the course of history.

Shipbuilding was an important labour present on the island. It is said that the carpenters of the great Spanish ships also used the knowledge and resources of Chiloé to build and repair their huge ships. In exchange, they left construction techniques and tools on the island. This transfer of knowledge also caused the enhancement of the traditions of carpenters who got into contact with other immigrants and navigators coming from Germany, Norway, Scotland, France and Belgium.²¹

During the Spanish colonisation, the dalca was replaced due to its small size by one-masted broad beamed sloop or launch. Made entirely of easily available material, it was built to carry a great quantity of cargo. The civilized or European world, brought its Mediterranean boats that were tarred all over, gaff-rigged⁶⁷ and built with a structure on

a centre keel. The sublime civilized life brought from outside ultimately seduced the natives.

Elements of composition:

The lancha chilote or dalca was made originally out of three wooden boards, which were hand-sewn. It was curved upwards on both end sides by means of water and heat.

“The boards were sewn together using fibbers passed through holes drilled into the boards’ edges and they were carefully caulked, again with fibbers.” ²²

They were then replaced by wooden sloops now seen less and less often.

Structure:

The structure of the boats mimics the whale skeleton. The primary structure is made of the following main elements; the keel, stem and sternpost, which can range between six to twenty meters in length. The secondary structure, made of frames, is nailed and bolted down by the keelson that is placed over the keel.

The elements of the frames can be folded when needed in two ways. Originally, the carpenters would look in the woods for the right piece of bent wood for the frames, but today they also use a steam box.

Material:

The main native woods used for the construction of the dalcas where the Alerce (*fitzroya cupressoides*) and Ciprés (*cupressus*) wood. Today the keel, strongest part of the boat, is made out of curved trees of Ulmo (*eucryphia cordifolia*), Quiaca (*caldecluvia paniculata*), Tenio (*weinmannia trichosperma*) or Coigüe (*nothofagus nitida*) : red woods.

“The native “cypress” is very strong and seaworthy yet light. Nonetheless, today red “mañio” and “c-precillo” are the most commonly used woods because 68 of their price and availability.

Quiaca is extremely malleable when steamed. Planks placed below the waterline will be of “tique” or “olivillo”; of “arrayán” or “ulmo”; as these are the woods most resistant to shipworm.” ²³

Being completely made out of wood, means that the boat must be repaired continuously. Wood, reacting strongly to salt water and collisions; in effect, it is a material with a living soul that remains susceptible to its extreme context.

Use:

These boats were originally intended as houses. It could accommodate a family and would contain a fireplace at its centre. The boat was used for fishing, eating as well as travelling all around Patagonia. The boat was also a means of communication, which was integral to the Spanish conquests that of the Jesuits. Due to its size and its shape, it was the easiest way to move around and conquer the territory of Chiloé. The shallow draft of the dalcas permitted the navigation around inaccessible waterways by bigger boats or ships.

Appearing as a strong adaptable architectural figure, both as a tool of conquest and communication, carries the boat to the centre of all types of architecture and territories in the history of Chiloé.

Today the boats are built in an Astillero. The construction methods and traditions are still passed orally within families of carpenters called ‘carpinteros de ribera’ ²⁴. On the island one can still find 12 main Astilleros that transfer their craft as a form of education and life. This art of building has remained the same and its expertise was acclaimed and used by the Jesuits to build their churches, as they were the only big built structures found on the island.

In ‘Elogio de la piragua’ ²⁵ or a tribute to the canoe, Hanisch is able to grasp the very essence of the boat, its people and Chiloé:

“La isla de Chiloé. la grande y las pequeñas, se unen a la tierra firme por el puente inestable de la piragua. Todas las empresas isleñas tienen que contar con 69 la navegación. La emprende-

TYPE II : PILOTIS

dora isla con sus propios medios, humildes pero eficaces, realiza empresas notables y rutinarias: los alerzales cordilleranos dan las tablas, mono producto, verdadero oro de las islas; las misiones circulares llevan en dalcas la salvación eterna a todos los puntos del territorio; las expediciones a las cordilleras, a Nahuelhuapi y a los canales y archipiélagos del sur amplían los horizontes más allá de las aguas circundantes y hasta los caminos a Valdivia y Osorno se han de descubrir desde el sur por navegantes andariegos, verdaderos anfibios de rutas infatigables.”



Pile construction is named under palafitos or vivienda palafitica in Chiloé.

History:

Pile construction is a type of architecture used since the Neolithic time. It was continuously re-used in different time period and in various different sites on the globe. This type of architecture can be found in Chiloé since the republican era, at the beginning of the 1800. At this time with the maritime commercial boom on the pacific, the cities of Ancud, Castro and other smaller cities became key harbours for the interchanges of goods. The important migration of the population from the countryside to the seaside is the reason for the establishment and construction of pile houses. The necessity of living back close to the sea resulted in the illegal appropriation of the seaside territories. The pile construction mainly built on the outskirts of the cities was cheap and allowed everyone to live close to the commercial centres.

Pile construction cannot be introduced without citing the concerns of Le Corbusier about its ground qualities. They exist on the seaside of Chiloé in a very simple and archaic way but still represent the ideology of a loose and free ground.

“La construction sur pilotis, voilà la grande réforme libératrice, vers laquelle ont soupiré toutes les grandes époques de l’architecture, sans pouvoir y atteindre, faute 71 d’en posséder le moyen tech-

nique. Péristyles, patios, arcades du cloître, partout le besoin se manifeste d'un sol libre qui pénètre le plus avant possible sous le couvert de la maison.”²⁶

The pile construction existent in Chiloé is very ephemeral. Due to the 1960 Maremoto, which devastated and destroyed most of the seaside of the archipelago, most houses had to be rebuilt. Since then the same borders where re inhabited but the constructions are very simply made and are only 55 years old.

Elements of composition:

The pile construction in Chiloé is a type between a house and a dock; between a rural and an urban construction: the patio transforming itself into a terrace and the fence into a balcony rail.

The centre of the pile construction is a room with a fireplace, which acts as the kitchen and the heating system of the house. It is the heart and the stomach of the house:

“Para los chilotes, el corazón y el estómago de la vivienda se concentran en la cocina. Es, en definitiva, el cálido sitio donde convergen los intereses culturales y económicos. Al calor del fogón se tejen las leyendas y los mitos.”²⁷

Structure:

The main structure of the pile construction is made of four parts: the foundation or piles, the balloon frame system, the roof and the covering tiles.

The piles are simply strong tree trunks that are normally 1/8 longer than the main wall of the house, and have a larger diameter of 1/12 of its length. They range between 4 to 7 meters.

The balloon frame construction is light and placed directly on the piles. The modular construction permits a spatial flexibility inside the houses, where the windows and walls can be

placed in a secondary phase. The size of the main structure does not vary much from one pile house to the other.

The roof structure is also made out of wood and is placed on top of the balloon frame construction. The roof is normally high-pitched due to the extreme weather conditions on the island.

The tiles of Alerce simply cover the entirety of the balloon frame construction and are both the external skin of the roof and the walls. Wood used is impermeable and protects ephemerally the inside of the house. The variety in colour and shape of the tiles, gives an identity to the house. Each family creates its own pattern and colour to differentiate itself from its neighbours. The tiles are then applied with the help of a specialized tile carpenter.

Material:

The types of wood used for the pile construction are the Coigüe (*nothofagus nitida*) that can reach up to 40m. It is used especially for the piles due to its strength. The balloon frame is mainly made out of Mañio (*podocarpus nubigena*) or Guaitecas cypress (*cupressus*), as well as the roof structure. For the exterior cladding, Alerce (*fitzroya cupressoide*), a millenium tree only found in the 10 region of Chile, is used due to its great impermeable qualities.

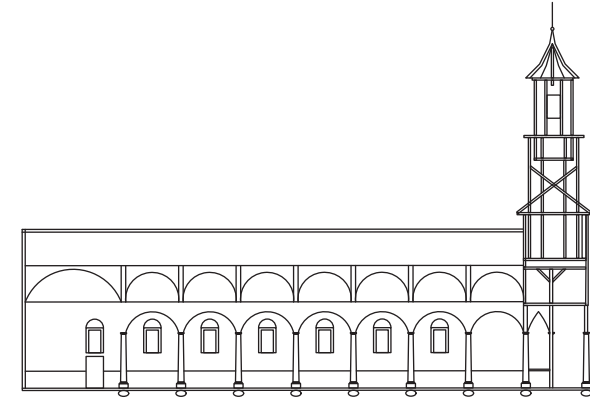
Use:

This type of architecture is mainly used for housing, but also for markets, restaurants and shops, which profit from a near proximity to the sea.

An interesting element of the houses on pile is the double facade. On one side it faces the street connecting itself to the city life and on the other side it faces the sea and commercial life. The main wooden passageways act as connectors between the two lives.

This popular architecture developed on the sea shore of Chiloé is the perfect harmony between human necessities, the climate, and the territory.

TYPE III : CHURCH



The church is one of the most developed and complex type of architecture found on the archipelago of Chiloé. Only built out of wood, the craftsmanship needed to build these structures is magnificent.

History:

Since 2000, the UNESCO has listed 16 wooden churches of Chiloé. They represent a unique form of outstanding ecclesiastical wooden architecture. Between the 17th and 18th centuries, the Jesuits were able to establish their circular missions and to build more than 150 churches all over Chiloé's archipelago. This type of architecture mixed with European basilica models and indigenous craftsmanship shows a full integration of landscape and territory. The typology of these churches is known as the Chiloé School of Wooden Churches.

The position of the churches on the seaside is key to understanding the importance of the sea as a main way of communications, exportations and trade. The required elements for the building of a church expressed by the Jesuits were; a flat field with access to fresh water or rivers, a good pier and a protected area against the strong wind.

The introduction of a system of religious buildings on the island of Chiloé also introduced the first sense of civilization and urbanity. In contrast, the native people were isolated populations scattered over the territory.

Elements of composition:

Most of the churches have a very similar spatial disposition. They are planned as basilicas with a main nave and two smaller side aisles. They have a main entrance with a frontal portico and a back apse. The tower placed symmetrically at the centre of the front facade of the church is a very important element, both for the composition and signification of these churches, with their surrounding environment. The religious and landscape references of the tower are mixed together to become a guide for the population, the Jesuits, the navigators and the night passenger.

The construction process of a church, starts with the laying of foundations made of stones or small piles of wood. Next, the structure of the main nave is placed with perimeter walls and partition walls. The central barrel vault is then placed on top of pillars and is the most specific element of the church, which recalls the boat structures. The church is then covered with alerce to protect it from the extreme climatic conditions. The last part of the church is to place the front facade and to build the tower on top of it. The tower was built, as a separate element from the main structure of the building, in three branches.

The important elements that change and vary in the different churches is the ornamentations and the use of classical orders. It is mainly concentrated on the main facade, the columns, and the interior spaces. The windows found in different numbers on the facade and of different shapes, i.e., the oculus, reflect classical inspirations as a way of decorating the churches. The use of colours in the ornamentation and different types of exterior cladding also gives each church its own identity.

Structure:

The structural and constructive model of the missionary churches of Chiloé was unique and didn't follow variations. The craftsmanship and knowledge of the carpenters of Chiloé, mastering the use of native woods and big scale structures permitted the survival of this religious architectural school of construction.

The base structure is mainly connected and sustained by a system of assembling and dowels. The use of nails is nearly inexistent. The entire structure of the church is like a wooden mecano that sits on its pile or stone foundation. On top of this, the principal horizontal volume is a totally independent structure acting separately, from the front tower or vertical volume.

The structure is more complex than the balloon frame structure and can react easily to the vibrations of earthquakes for example.

The pitch roof is used as in the pile construction against the strong winds and rainstorms.

Material:

The churches are mainly built with the following types of wood, with a minimum section of 5x5. The Alerce (*fitzroya cupressoides*) is used for the exterior cladding, as the pile construction, the Guaiteca Ciprés (*cupressus*) is also used for exterior cladding and the main structure, the Coigüe (*nothofagus nitida*), Ulmo (*eucryphia cordifolia*) and Luma (*amomyrtus luma*) for the structure, and the Mañío (*podocarpus nubigena*), Cinnamon (*drimys winteri*) and Laurel (*laurelia sempervirens*) for the interior cladding.

Use:

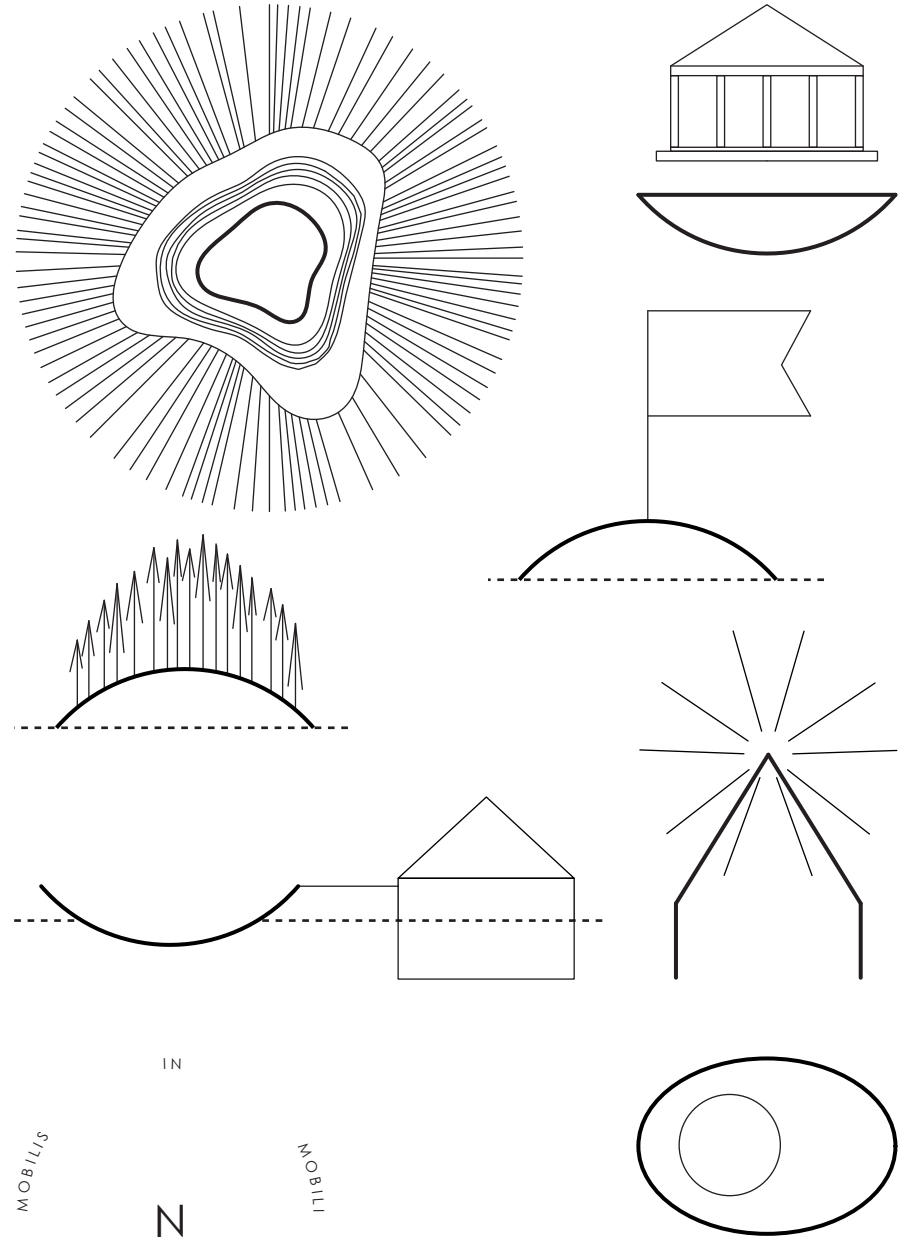
The building of the churches was an introduction to the concept of the temple into the life of the indigenous people of Chiloé. The Jesuits were able to install a space for prayers, religion and social reunions in the culture and traditions of the indigenous people. Before, there was no fixed place where people would meet together.

The figure of the Church also became the new centre which would organise the rest of the urban fabric. Therefore, the esplanade or square, built in front of most of the churches was a new urban characteristic which enabled the reunion of the communities. Next to the temple was a graveyard, which ended the lewd rites of the native people of Chiloé.

Today the churches still remain important for the social life of the inhabitants of Chiloé and are buoyed by tourism and renovation. Many churches have and are being repaired by the Fundacion de las Iglesias de Chiloé which maintains most of them in a good state.

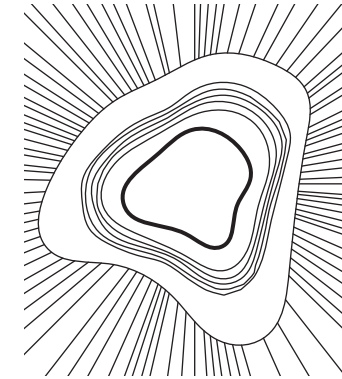
The church as a fundamental type of architecture of the archipelago of Chiloé is also the oldest construction found on the island, i.e. some of them being more than 200 years old.

III TALES



TALE I

standing “in the eye of the volcano” ²⁸



Isolated communities and territories appear today as real exceptions.

The pejorative character that was associated to seclusion, isolation, remoteness or resilience is now transforming itself into a fascination or a way of escaping the big metropolis. Our interconnected society in the restless search of speed is also trying to escape from it.

Looking at remoteness means on one hand:

An authentic, protective and untouched ground.

On the other hand:

A way of being disconnected, out of reality.

Chiloé lies exactly in between these two realities. It was able to stay authentic and untouched for a long time but has been slowly invaded and is now in the process of losing its remoteness completely.

As a matter of fact in November 2012, the first airbus landed on the island. In August 2015, the first mall was opened in Castro. The Chacao Channel Bridge was supposed to have been inaugurated in 2012 but has fell until now by the wayside.

This bridge, as such, would open the last territorial remoteness of this archipelago by creating a direct route between the continent and the island. This new strip of fake land, sponsored by a Chinese firm would be the longest bridge in South America with a total length of 2,635 m.

Therefore, Chiloé stands in the eye of the volcano, on the very edge of a decisive explosion:

“Being at the centre of the action, beginning of the 21st Century, Chiloé was challenged by its own unique traditions and external alien traditions. The tourism boom, the arrival of salmon companies and fish farming industries, and the over-exploitation of the sea and forest, deeply changed the ancient relationship between man and his environment, as well as land occupation and architecture. Big tensions aroused between the archaic, the modern and the contemporary.”²⁹

New aerial and territorial routes having already slowed down the antiques navigation system, the internal and external remoteness present on Chiloé is now disabled by tourism.

Finally in the last decade of the last millennium, Chiloé had to confront the challenge of finding the synthesis between its origins and the effects of exterior colonisations.

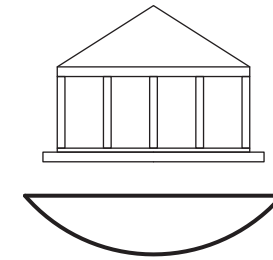
This remoteness strangely remains a paradigm, considering that Chiloé was the captain of the southern routes a few centuries ago:

“La isla de Chiloé, con su aislamiento secular, fue un perpetuo estímulo a un viaje por la blanda ruta de las aguas. Sus caminos se abren sobre el mar interior y exterior. Sus vías de comunicación son surcadas por los carruajes de las aguas, desde la dalca y piragua primitiva hasta otros medios de comunicación mas expeditos o modernos. Sus caminos van a Lima, con su comercio; aun 84 sur en demanda del Estre-

cho, de los ingleses y de los Césares; al norte continental en prosecución de la laguna de Nahuelhuapi, o de Osorno en busca de la continuidad con el resto de Chile; al este tras el oró vegetal de los alerces o los fugitivos Césares. El sur le ofrece tentaciones colonizadoras con pueblos indígenas: chonos, caucahues, calenes y taijatafes. Las capillas de la evangelización, dalcas de madera orientadas al viaje celestial, se unían en sus enlaces terrestres y celestes cruzando las aguas del mar entre cantos de vientos y de olas. Por eso Chiloé es capitana de rutas australes.”³⁰

TALE II

pelasgians



The Pelasgians used to speak a language that was considered barbaric. They were strangely the indigenous, most primitive and ancient people of the Greek world.

The Pelasgians, were either the ancestors of the Greeks or preceded the Greeks in Greece. They were simply the inhabitants of the Aegean Sea region, with a culture advent to the ancient Greeks.

The Pelasgians are the start of a long line of Ancestors. Ancestors and ancient influences that strangely came together, to embrace each other in some of the architectural heritage of Chiloé.

“The ancient Greek word for “sea”, pelagos, comes from the same root, *plak-, as the Doric word plagos, “side” (which is flat), appearing in *pelag-skoi. Ernest Klein therefore simply interpreted the same reconstructed form as “the sea men”, where the sea is the flat.”³¹

The nomads or native people of Chiloé are also people of the sea. They were the starting point of this study of the evolution of Chiloé. Through them it enabled to extract a small part of the history of Chile too. Beautifully expressed in the movie “El botón de nácar” of Patricio Guzmán, the disappearance and extermination of an entire native population of nomads of the sea in Patagonia also meant the destruction of the knowledge and sciences linked to the Maritorio territory.

This broad evolution of architecture between water and earth can also be observed in other civilizations such as the Ancient Greeks, the Vikings, the Venice kingdom and even the French gothic churches.

The Ancient Greek who built the first stone and marble temples did use the crafts of wood carpenters to adapt well-known construction techniques to new materials.

As described in chapter II of Vitruvius fourth book:

Point 2: “So each scantling preserves its proper place and style and arrangement. In view of these things and of carpenter’s work generally, craftsmen imitated such arrangements in sculpture when they built temples of stone and marble. For they thought these models were worth following up.”³²

Not only was the transposition of knowledge used for structural elements it was also for the creative conceptions of temple ornaments.

Point 1: “Now since the origins and discovery of the orders of columns have been described above, it does not seem foreign to my purpose if I speak in the same way about their ornaments: how they came about, and from what principles and origins they were invented. In all buildings timbering, called by various names, is used in the upper parts; as in name, so in practice, it has uses for various things.”³³

The close relationship between nature and man was strongly felt in the answers used for the conception of their architecture:

Point 5: “For, by an exact fitness deduced from the real laws of nature, they adapted everything to the perfection of their work, and approved what they could show by argument, to follow the method of reality. And so they handed down the symmetry and proportions of each order as determined from these beginnings.”³⁴

Therefore, Vitruvius gives us a lecture into the very essence of the evolution of architecture: wooden ancient

Greek temples started a cycle of religious constructions. They evolved, from a primary resource of wood, to be built out of stone, marble, metal etc. In then end, churches being built again as original pieces of wood on the island of Chiloé are the conclusion of this very cycle.

The Viking, second major ancestor, was a population of great navigators and conquerors. The complex wooden ship structures, which they developed, were maybe the most evolved to ever be built. The Longship or Norse ship was an impressive slim, long and narrow ship, which could travel and adapt to different types of water.

The transmission of their naval craft can also be found in their temples. An example, is the still existing, Borgund Stave Church, found in Lardal, Norway. This stave church made out of a single nave represents the very complexity of elements and shapes developed with a unique resource of wood.

This remaining Stave Church, of the so-called Sogn-type, was built around 1180 and 1250 AD. The presence of a main nave, complex wooden joints working as locks and scissor joints beams for the structure of the roof may all come from the craftsmanship of boat builders. Adding the fact that as in Ancient Greece, the ornaments used were the same carved dragonheads found on the prows of Norse ships.

Another potent naval society was the Republic of Venice. Based on economy and trades the society developed amazing wooden structures both on the sea as on the Veneto region. A way of conquering land was again done through religious or civic buildings.

One of the most impressive examples is the Basilica Palladiana in Vicenza. The work of symbiosis done by Palladio using marble, stone and wood reflects the high standard craftsmanship available during the Renaissance in Italy. The nave of the existing Palazzo della Ragione as a huge structural wood piece again represents the inversed ships of its time.

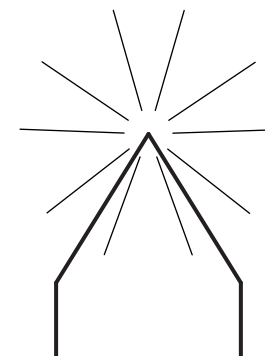
Another example of wooden nave churches is the model

of the ship's keel roof built in the remaining churches of Santa Caterina a Mazzorbo, Santo Stefano and San Polo in Venice. The shape of these naves, using the practical constructive solution available and being located close to the Arsenal, certainly have a recall to the marine Venetian life.

Other symbolic elements of the life of this fake island are the gondolas and the pile construction, which hold the entire city together. They remain very close to the dalca and the palafito of Chiloé and create a subtle environment for isolated territories. It is as if the elements found on these islands between water and earth were boundlessly predictable.

TALE III

lighthouses



The circular mission was an annual visit of all churches built and founded on the territory of the archipelago of Chiloé. It lasted from September to May. The circular path planned by the Jesuits around Chiloé was a way of keeping control over the territory and embracing the new evangelized souls.

As the Jesuits first entered Chiloé, in the 17th century, they had to adapt to the island conditions. Moving around on small dalcas taken from the natives, they were able to reach the most remote villages of the island.

Their continuous movement over the three territories permitted them to grasp the essence of the island. As a matter of fact, they were able to establish numerous chapels and churches dotted around the entire archipelago.

These religious places were:

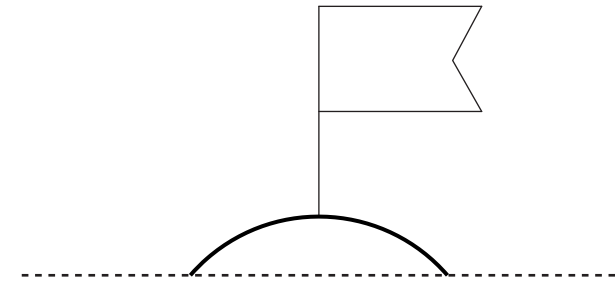
“erected by the sea, by the jetty, in a ceremonial square around which the towns developed on the edge of the water. The church tower became the landmark, both of sailors and travellers, while a sacred space was reserved for burying the dead.”³⁵

The new landmark acting as a lighthouse became a reference point of refuge. As a result, being the captain of the southern routes, Chiloé built itself with churches and light- 91 houses. Having more than

150 churches on its archipelago also meant having more than 150 towers lit, shining out to sea.

This physical print on the territory enabled a connection between the boats, the Maritorio, the pile construction and the bordemar, as well as religion on the territory.

TALE IV a sense for property



It was believed that the unison of man and its natural environment on the archipelago was the representation of the great respect of man for its resources due to the strong dynamics of nature.

Dynamics which were expressed by recurrent water tides, unpredictable climate, extreme seasons and natural disasters such as earthquakes and maremotos, which always occurred in Chile.

This great respect was also displayed in the low conquest and abuse of land properties. As a matter of fact, the character of lightness and ephemerality, intrinsic to the architecture of Chiloé, was also a result of these ancient beliefs.

Unfortunately the personal trip in October 2015, revealed these beliefs close to completely vanishing.

“Some light on why the architecture is not only constructed from wood but is also simple and ephemeral is, its main purpose being to provide shelter rather than last forever. Despite the availability of quality wood, the early inhabitants did not create large settlements and buildings. This says much about the attitude of these people. As the poet Lionel Lienlaf put it, “The Mapuche people did not build cities because creating a city always means killing a river.”³⁶

The sense of property on the archipelago has changed.

TALE V

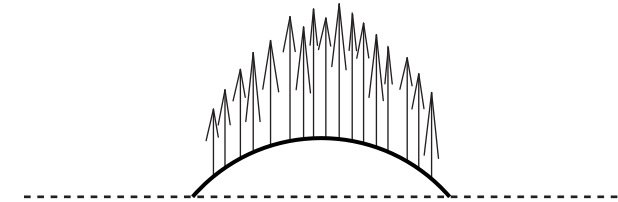
woods

In contrast to native beliefs, today's cadastral plans and the profiteering over illegal land is extreme. The palafitos, or pile construction in Castro, are for example not registered in the cadastral plans of the city and plagued today by tourism and massive restructuration. This paradigm is finally brought to the light, as the use of this illegal land is no longer for personal use but for commercial benefits.

Secondarily, the intense land property has been transferred from the territorio over to the maritorio. Acquired illegally by big salmon companies the sea territory is now abused and is only able to survive with the speculations of big Chilean enterprises.

This new and different sense of property for each territory, forms part of a bigger globalized picture of our world. As such, Chiloé loses its remoteness and rich natural resources.

One of the last beauties of the non-appropriation of its territory by the native population is their tradition of moving houses or Minga (see next chapters). The character of movement in a physical architectural form creates a connection and keeps a dynamic over the three territories.



"Fine wood, the best export of Chiloé from colonial days, was shipped along the American seaboard as far as San Francisco."³⁷

Wood, the most precious resource found on the island, was crowded for centuries among other smaller commerce such as livestock, potatoes, wool, algae and shellfish for exportation. The map II in Tryptich I shows the extension of its border on the island's territory.

Enrique S. Simpson already described in 1871, in his summary of the explorations of the archipelagos of the Chonos and Gaitucas how this millenary resource was taken away from its territory:

"Lamentable es ver el desperdicio con que se explota esta riqueza, que constituye el principal porvenir de la provincia. Por un árbol que se aprovecha, se destruyen a lo menos diez, sin contar retoños, y esto no es exageración."³⁸

As such the origin or root of Chiloé's architecture lays in its major resource: wood. A root, significant for its direct link between the ground and the growth of a plant, is the analogy to the evolution and existence of the architecture of this archipelago.

This pillar of life gave birth to a unique authentic art of building and craft in Chiloé. This art or "cultura de la madera", i.e. culture of wood is sensed by the infinite exploration of 95 the mechanical qualities and

original properties of the material, reaching and obtaining any kind of model or physical form out of it.

A craftsmanship, gained from the carpenters, masters of tiles, carpintero de ribera up to smaller artisans, intended as a mean of transition, guiding them into time and space, with the continuous use of a same material.

The specific resulting architecture of this craft, is like a living organism constantly mutating and therefore bending itself, reacting to extreme conditions, being repaired, recycled and finally reused.

Adapting models and technique of construction for the carpenters, also meant creating new architecture models on the archipelago. The most impressive cohesion between the craft of the boat builders and the expectations of the Jesuits in founding churches over the territory gave result to an inversed boat structure right at the centre of the spatial morphology of the churches.

Wood construction in a wider context is also part of the architectural heritage of Chile, expanding itself over more than 4300 km. Other examples of this culture of wood can be found in the very north in Iquique, in the center with the Ciudad Abierta and the old mines of Sewell and in the Tierra de Fuego, south of Patagonia.³⁹

These examples are able to show the range of expressive possibilities one can create with the use of wood. Through formal experimentation, art and poetry, the design of architecture gave new meanings.

As Dr. Khaled Saleh Pascha expresses in his thesis:

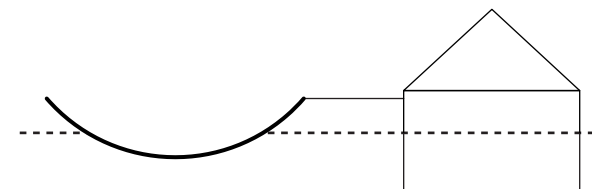
“Their geographical and climatic adaptability, their special design options-ties and their rootedness in traditional regional manufacturing techniques illustrate the benefits of wood constructions. They show the versatile use of possible-ties of wood as a construction material, wherein each of the set-showed examples, despite the uniformity in building materials, has a very individual character, demonstrating the diversity and high quality of design of wooden architecture in Chile.”⁴⁰

Scientifically speaking and to conclude with this wood section, the biodiversity of millenary native trees found in the tenth region of Chile and on the archipelago of Chiloé, is still majestic. Between the Alerce, Araucaria, Canelo, Cipres de las Guaitecas, Coigüe, Mañio, Roble, Tineo, Ulmo... the variety of types of wood size, shapes, colours and physical properties is infinite.

TALE VI

minga

movida de casa



Looking far out into the sea, a house was moved and drafted by two fishermen's boat. The wooden corpse, sinking half way into the water, had its beautiful roof still floating over the surface.

La Minga solidaria or movida de casa as:

"A house advancing along a field or sailing up the channels is perhaps the image that best reflects the spirit of this culture of the Chiloé people themselves."⁴¹

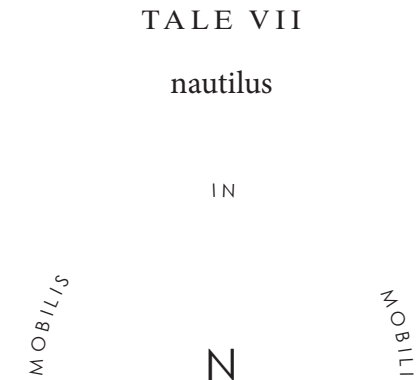
As a symbol of movement and traditions, la Minga grasps the essence of the island, its architecture and its evolution over three territories.

The lack of sense of property and the generous re-use of resources with the help of neighbours, family members and the society in general is the very proof of an oral culture found all over the archipelago.

Most of the moved architecture includes houses, but the peculiar church of Tey was drifted over more than 10 km on land in 1999. This event, recorded in a movie⁴² is a surreal historical event. To adapt the roads, the electricity pole and its new location was a work done over months. This time, the territory and its people had to adjust themselves to their architecture.

To conclude, the physical root of architecture in Chiloé, does not lay in a fixed position but in the never-ending possibility of movement and adaptation. This typical culture is:

“like the landscape that takes us from land to sea; like the roads that take us to towns and villages that are hybrids of the urban and the rural, where the boundaries of countryside and city merge, for they are neither one nor the other, but both things at the same time.”⁴³



The figure of the boat is the mysterious key that reveals the essence of the architecture of the archipelago. A moving wooden structure ready to stand against all the unexpected caprice of the sea.

Mysteries and mythologies are part of the culture of the island of Chiloé with beings that live on land and in the sea.

The boat illustrated and seen by two very strong and opposite European myths also gave birth to other interpretations of a same culture of the sea.

Mythologies as a way of decrypting the society and its more were used by Roland Barthes in his own compilation of Mythologies to depict the French culture of mass consumption in the 1950s.

For him the boat, ‘Nautilus’ and ‘drunken ship’⁴⁴, can be criticized as clear physical and spatial appropriation: The sweetest feeling of appropriation and confinement being the results of the archetype or dream of the mysterious island. This mysterious island only reachable by sea is the very appropriation of the world by boat. This object as a totally finished and thought space is absolute in itself. This perfect enclosure, symbolised by the Nautilus, is the very paroxysm of an interior world kept safe from the exterior world. The ship ultimately becomes the very representation of a safe space in continuous movement.

the ocean, is Noas' arch. A wooden arch being the very symbol of salvation and unification of all species, preserving and bringing a re birth to nature.

“Die Arche ist das autonome, das absolute, das kontextfreie Haus, das Gebäude ohne Nachbarschaft.”⁴⁵

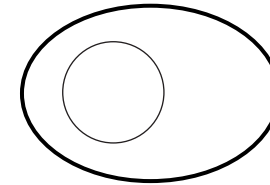
“Die Arche-Noah-Episode des Alten Testaments legt offen wie der Hausbau zur Erlösung vom nassen Übel führen kann. Weil das absolute Haus, wenn es errichtbar wäre, ein frei flottierendes Gebäude sein müsste, hätte es die Binding des relativen Hauses an Boden und Nachbarschaft aufzulösen. Ein Gebäude kann ein absolutes nur sein, wenn es sich völlig dekontextuiert und weder an Landschaften noch an Nebengebäuden haftet; es dürfte nur noch soviel an Boden besitzen, wie zu ihm selbst gehört - es hätte keinen Keller, sondern einen Kiel, kein Fundament, sondern ein Navigationssystem.”⁴⁶

This apotheosis of a free absolute construction, as an arch or a boat, described in Chapter III - Arches, city walls, world limits and immune systems, in *Sphären III* by Peter Sloterdijk could be a possible answer to celebrate the absence of foundations and the liberty of movement on the territories of Chiloé.

As such, the existing nave, hanging on its opposite side on the top of the heads of the believers in the churches of Chiloé is like a sacrilege to its original function. In the end, these mythologies of boats still reveal the never ending presence of the sea where the sky and the territory meet together and support all kinds of wooden moving structures.

TALE VI

the egg



An egg on the table cut in two is both a hard shell and a soft mass, a protective cover and a contained aggregate, a white pureness with a central yellow bulb, a symmetrically and imperfect object in the form of an oval, deriving from a circle or cycle.

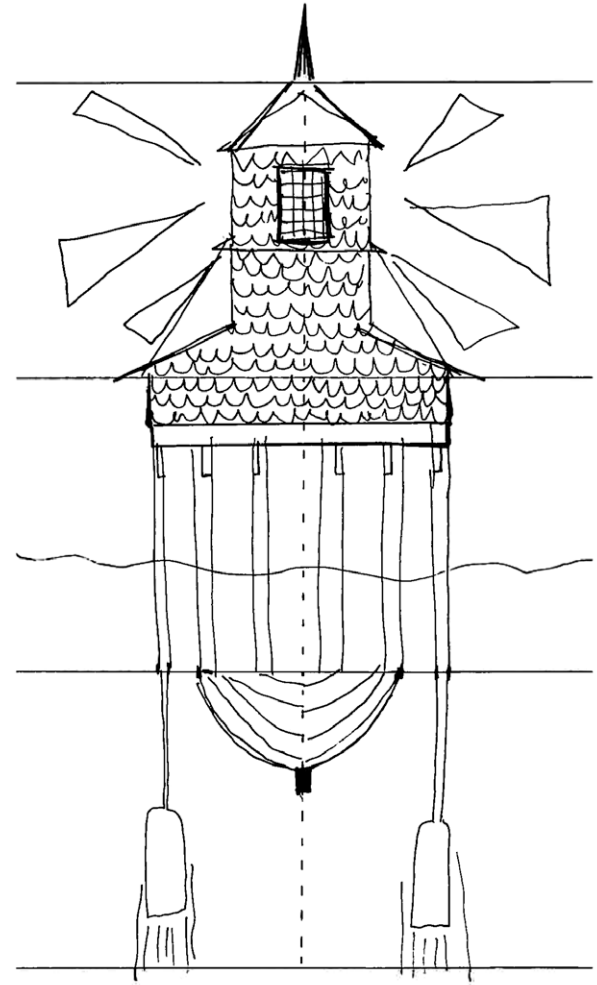
The symbol of the egg being a pure form composed of different parts is like the hybridization of all territories and types of architecture into a unique form. As a collection of all the elements part of this thesis, the egg would in return grasp the essence of them all.

The exterior of the egg intended as the strong protective figure of the boat and the interior as the intangible rich centre of Chiloé's traditions.

This strange composition derives from the technique of the *cadavre exquis*. It is able to create a drastic final image of the hybridization of the different types of architecture existing on the archipelago (see overture 2.0).

The Egg stands finally as the birth of a project and a new starting point.

OVERTURE 2.0



OVERTURE 2.0

“building on the edge of infinity”

This research is an investigation of the condition of an isolated territory. A study carried out on the archipelago of Chiloé, part of the long Chilean coastline, ultimately describing an entire country. Chile with its extreme geographical borders is an isolated territory. To the rest of the world, an island in itself.

The territory of the sea, as the protagonist, shapes the very borders of this island. As explored in this research, in all architectural aspects, the relation to the sea is the base of most of its existence and symbiosis.

The construction of these different thoughts will now be the starting point for an architectural project, taking into account these simple conditions:

“no vivimos en los bordes”
we don't live on the borders

“vivimos al borde”
we live at the border

“vivir en los contornos de una figura | frente a su mar de dentro | es nuestro modo”⁴⁷
to live on the outlines of a figure | in front of its sea from the inside | in our own way

These conditions bring two important contrasting identities into the architecture of Chiloé. On one hand the houses and churches built on the territory and the seaside are light and ephemeral dispersed in small unities over the territory. On the other hand the boat structures are very firm and tough to handle the extreme conditions of the sea. These two opposing necessities create a solid ground for the design of a project.

The project will be as an Ode, like Pablo Neruda who wrote for himself elemental Odes to the world, the bees, the bicycle, the salt, the lemon, the market. It is a wish to place the existing conditions of Chiloé, as notions of poetry and symbolism for a future architectural composition.

The project also wants to be similar to the work started by Vicente Zegers and Natalia Assler, young boat constructors in Chiloé, originally from Santiago. They were looking into nourishing the ancestral knowledge of shoreline carpenters in Chiloé, giving it a new value, instead of trying to make something contemporary and different.

Architecture becoming a motor, moving in and around its natural environment, relating and connecting itself to it, instead of staying separate from its vastness.

Ultimately, the boat, symbol of movement, embodies the historical essence of the architecture of Chiloé, not used as Fritzcarrales's infiltration into the territory of the Amazonia with the nave, but as a closing cycle bringing architecture from its territorial ground back into the sea.

By hybridizing three characteristic architectures and using their own construction techniques, there is a possibility for a new poetic. Pointing out and expressing as well, a thought on punctual architecture, instead of territorial invasions and occupations of land to feed economic appetites.

To extend the project, another trip, or act of travelling will be the starting point for the creation of a new archive of continuous existing reflections...

ANNEXE

NOTES

1. See Cancha, Chilean Soilscares, by the Pavilion of Chile at the 13th International Architecture Exhibition - La Biennale di Venezia, p.114
2. See Chiloé, Arquipiélago de Chiloé, guía de arquitectura, an architectural guide, p.13
3. Look at Tryptich I, Annexe.
4. See La isla de Chiloé, Capitana de rutas australes, Walter Hanisch, p.11
5. See La isla de Chiloé, Capitana de rutas australes, Walter Hanisch, p. 11-12
6. See Voyage of the Beagle, Charles Darwin, p.290
7. See Flat primitive by Neyran Turan in San Rocco 8, p.112
8. See Flat primitive by Neyran Turan in San Rocco 8, p.114
9. Ibid.
10. See study Maritorios de los Arquipiélagos de la Patagonia Occidental, p.2

11. See on http://www.lemonde.fr/cinema/visuel/2015/10/29/le-bouton-de-nacre-le-chili-cet-archipel-memoriel_4799563_3476.html
12. See on <http://complejidadterritorial.ulagos.cl/portfolio-item/proyecto-n-1121204-geoantropologia-de-los-imaginaros-del-mar-interior-de-chiloe-itinerarios-de-temporalidades-y-apropiaciones-socio-culturales-maritimas/>
13. See El reciclaje insular by Edward Rojas
14. See Tesis Habitat de Bordemar by Maria Paz Gonzales Smith, p. 75
15. See The Writings of Marcel Duchamp, p.28
16. See definition of symmetry in Wikipedia
17. See Monography of Smiljan Radic by 2G , n.44, p.4
- 18.. Ibid.
19. See The four elements of architecture by Gottfried Semper, p. 101
20. See The four elements of architecture by Gottfried Semper, p. 102
21. See Introduction, Maestros de Ribera by Vicente Zegers, p.7
22. See Ibid., p. 12
23. See Ibid., p. 75
24. See Ibid.
25. See La isla de Chiloé, Capitana de rutas australes by Walter Hanisch, p.23
26. See LC et Francois de Pierrefeu, La maison des hommes, Paris. Plan, 1942, p. 86

27. See Tesis Habitat de Bordemar by Maria Paz Gonzales Smith, p.90
28. See En el ojo del volcàn, Reciclaje insular by Edward Rojas, p.15
29. See Chiloé, Arquipiélago de Chiloé, guía de arquitectura, an architectural guide, p.46
30. See La isla de Chiloé, Capitana de rutas australes, Walter Hanisch, p.11
31. See Wikipedia, Pelasgians
32. See Chapter II, point II, Book IV, by a translation of Vitruvius, <http://www.vitruvius.be/boek4h2.html>
33. See Chapter II, point I, Book IV, by a translation of Vitruvius, <http://www.vitruvius.be/boek4h2.html>
34. See Chapter II, point V, Book IV, by a translation of Vitruvius, <http://www.vitruvius.be/boek4h2.html>
35. See Chiloé, Arquipiélago de Chiloé, guía de arquitectura, an architectural guide, p.33
36. See Chiloé, Arquipiélago de Chiloé, guía de arquitectura, an architectural guide, p.39
37. See Maestros de Ribera by Vicente Zegers, p. 15
38. See Viajes de exploraciòn por los archipiélagos australes, Enrique M.Simpson, p. 83-84
39. See Thesis Die historische Entwicklung des Holzbaus in Chile, the history of wood construction in Chile, by Khaled Saleh Pascha

BIBLIOGRAPHY

40. See Thesis Die historische Entwicklung des Holzbaus in Chile, the history of wood construction in Chile, by Khaled Saleh Pascha, p.3
41. See Chiloé, Arquipiélago de Chiloé, guía de arquitectura, an architectural guide, p.42
42. See <https://www.youtube.com/watch?v=7T6lnzK56Rw>
43. See Chiloé, Arquipiélago de Chiloé, guía de arquitectura, an architectural guide, p.44
44. See Mythologies by Roland Barthes, p. 86
45. See Sphären III by Peter Sloterdijk, p.251
46. Ibid., p.252
47. See Amereida by Ediciones Universitarias de Valparaíso, p.18-23

BAHAMON Alejandro et ALVAREZ Ana Maria. *Habitat lacustre, l'architecture: du vernaculaire au contemporain*. Paris: L'inédite, 2009.

BARTHES Roland. *Mythologies*. Paris: Editions du Seuil, 1957.

BERG COSTA Lorenzo. *Restauracion Iglesias de Chiloé*. Santiago: Editorial Universitaria, 2005.

BURACCHIO Christian, SANTIBANEZ Tali. *El jardín de las iglesias*. Chiloé, Castro: DESPLIEGUE, 2011.

DARWIN Charles. *The voyage of the Beagle*. London: Wordsworth Edition, 1996.

DEVABHAKTUNI Sony, GUAITA Patricia, TAPPARELLI Cornelia. *Building Cultures Valparaíso*. Lausanne: EPFL Press, 2015.

DONOSO Max Saint. *Las iglesias de la fin del mundo*. Santiago: Ograma, 2006.

ELMUDESI Barbara, ROJAS Edward. *Palafitos de Castro, Chiloé, patrimonio vernacular contemporáneo*. Santiago: Impresiones, 2014.

ESCUELA DE ARQUITECTURA UCV. *amereida*. Valparaíso: EDICIONES UNIVERSITARIAS DE VALPARAÍSO, 2011.

GONZALES DE AGÜEROS Fray Pedro. *Descripción historial de Chiloé. 1791*. Santiago: Universidad de Santiago, 1988.

GROSS, Patricio. *Arquitectura en Chile, desde la prehispanidad al centenario*. Santiago: C y C impresores, 2015.

GUARDA Gabriel O.S.B. *Iglesias de Chiloé*. Santiago: Ediciones Universidad de Chile, 1984.

GUARDA Gabriel O.S.B. *Monumento Cartographica Chiloensis*. Chile: Pehuen Editores, 2008.

GUARDA Gabriel O.S.B. *La tradición de la madera*. Santiago: Universidad Católica de Chile, 1995.

GUINDANI Silvio et DOEPPER Ulrich. *Architecture vernaculaire, territoire, habitat et activités productives*. Lausanne: Presses polytechniques et universitaires romandes, 1990.

HANISCH Walter. *La isla de Chiloé, Capitana de ruta australes*. Santiago: Alfabeta Impresores, 1982.

JUNTA DE ANDALUCIA. *CHILOÉ, guía del arquitectura, an architectural guide*. Andalucía: Escandon Impresores, 2006.

KOOLHAAS Rem. *Delirious New York*. New York: The Monacelli Press, 1994.

MONTECINOS Hernán. *Las Iglesias Misionales de Chiloé*. Santiago: Universidad de Chile, Facultad de Arquitectura y Urbanismo, 1995.

ORELLANA RODRIGUEZ Mario. *Chile en el siglo XVI: Aborígenes y Españoles, el proceso de aculturación, Segunda edición*. Santiago: LOM ediciones, 2005.

RAITH Karin. *Die Unterseite der Architektur*. Wien: Springer-Verlag, 2008.

ROJAS Edward. *El reciclaje insular*. Bogotá: ESCALA, 1996.

SAAVEDRA GOMEZ José Joaquín. *Renoval*. Chile: Imbucho Ediciones, 2015.

SANOUILLET Michel, PETERSON Elmer. *The Writings of Marcel Duchamp*. Boston: Da Capo Press, 1989.

SEMPER Gottfried. *The four elements of architecture and other writings*. Cambridge: Cambridge university press, 1989.

SIMPSON Enrique M. *Viajes de exploración por los archipiélagos australes*. Temuco: Ofqui Editores E.I.R.L., 2011.

SLOTTERDIJK Peter. *Sphären II, Globen*. Frankfurt am Main: Suhrkamp Verlag, 1999.

ZEGERS Vicente. *CHILOE, Maestros de Ribera, Un oficio ancestral*. Santiago: Empresa Editora Zig Zag, S.A., 2003.

Secondary bibliography:

ARAVENA Alejandro, JACOBELLI André. *ELEMENTAL, Incremental housing and participatory design manual*. Allemagne: Hatje Cantz Verlag, 2012.

BRANDT Andreas. *Haus und Landschaft in Asien*. Berlin: Alpheus Verlag, 2011.

DIAMOND Jared. *Effondrement, Comment les sociétés décident de leur disparition ou de leur survie*. Paris: Editions Gallimard, 2006.

GARGIANI Roberto. *Rem Koolhaas / OMA*. Bari: Editori Laterza, 2006.

GUGGER Harry. *Barents Lessons*. Germany: Park Books, 2012.

HEJDUK John. *Victims*. London: Spin Offset, 1986.

MAY John. *Handmade houses & other buildings, the world of vernacular architecture*. London: Thames and Hudson, 2010.

OLGIATI Valerio. *The Images of Architects*. The Name Books, 2015.

OLIVER Paul. *Built to Meet Needs. Cultural Issues in Vernacular Architecture*. Routledge, 2006.

VELLINGA Marcel, OLIVER Paul, BRIDGE Alexander. *Atlas of Vernacular Architecture of the World*. Routledge, 2008.

Publications:

Fundacion Amigos Iglesias de Chiloé. *PATRIMONIO (5)*. Chile, 2009.

Monography Smiljan Radic. *2G (44)*. Barcelona: Editorial Gustavo Gili, 2007.

Patrimonios religiosos de Quinchao. Museo de la Evangelización de la Iglesia Santa María de Loreto de Achao/Fondo Nacional del Libro y la Lectura. Santiago, 2008.

PINCHART Maria Pilar, VALDES Bernardo. *CANCHA Chilean Soils-capes. Pavilion of Chile, 13th Biennale di Venezia*. Barcelona: NORA ERA, 2012.

Thesis:

PAZ GONZALES SMITH Maria. “Habitat de bordemar”. Valladolid, Spain, 2013.

SALEH PASCHA Khaled. “Die historische Entwicklung des Holzbaus in Chile”. Internacionales Holzbau-Forum, 2012.

SÁNCHEZ José Marcelo Bravo. “La Cultura Chilota y su expresión territorial en el contexto de la globalización de la Economía”. Santiago, 2014.

ESCUELA DE ARQUITECTURA UCV. “Maritorios de los Arquipiélagos de la Patagonia Occidental”. Valparaiso, 1971.

Articles:

DE LA SOTTA LAZZERINI Paola. “The wooden tiles in Chiloe, Chile: Study of edge termination in the towns of Achao Curaco Velez and Villa Quinchao”, in: *Revista de Urbanismo (21)*, 2009, I.S.S.N. 0717-5051.

GRIMA Joseph. Isola delle Rose, in: *DOMUS (971)*, 2013, pp. 1-6.

MIGAYROU Frédéric. Aldo Rossi, Teatro del Mondo, 1979, Dossier 7, in: *La Tendenza, Exposition Centre Pompidou*. Paris: Edition Centre Pompidou, 2012, pp. 122-127.

SALINAS Ignacio y BERG Lorenzo. “La conservacion de las iglesias de Chiloé, Rilán un caso de intervención”, in: *Revista de arquitectura (3)*, 1992, pp. 34-39.

TURAN Neyran. “Flat Primitive” in: *SAN ROCCO (8) What’s wrong with the primitive hut?*, 2013, pp. 108-114.

DISCUSSIONS

VILLANUEVA Antonio Sahady, GASTELO Felipe Gallardo, SÁNCHEZ José Bravo. "La dimensión territorial del espacio religioso chilote: fusión ejemplar del patrimonio tangible con el intangible", in: *Revista geografica Norte Grande (42)*, 2009, pp. 41-57.

Films:

El botòn de Nàcar. Dir. Patrizio Guzman. France, 2015. Film.

Nostalgia for the light. Dir. Patrizio Guzman. United Kingdom, 2010. Film.

Corn Island. Dir. George Ovashvili. Georgia, 2014. Film.

Sand Wars. Dir. Denis Delestrac. 2013. Film

Fitzcarraldo. Dir. Werner Herzog. West Germany, 1982. Film

Iglesia Tey. <https://www.youtube.com/watch?v=7T6lnzK56Rw>.

Chiloé, Una comarca encantada. AL SUR DEL MUNDO / 1994 - CANAL 13C CHILE. <https://www.youtube.com/watch?v=toBIJfkyZA>

Architect. Francisca Larrain, Santiago, October 2015.

Architects. Jonas Retamal & Laura Houssin, Castro, October 2015.

Boat builders & designers. Vicente Zegers & Natalia Assler, Rilàn, October 2015.

Foundation. Fundacion de las iglesias, Macarena Olmanacid, Castro, October 2015.

Architect. Edward Rojas, Castro, October 2015.

Architect. Alejandro Aravena, Santiago, October 2015.

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