A DIALOGUE BETWEEN HUMAN AND NATURE

architecture as a medium for the perception

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How can an artificial element strengthen the connection between humans and nature, and help individuals to perceive and establish a new dialogue with it?

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The aim of this research is to show how humans are able to establish a direct connection with nature, even when using artificial intervention. In fact, through human imagination and its expression in the creative action, a rapprochement is possible in the world, between nature and individuals; humans should not be only observers but rather collaborative partners.

The graft within architectural object and landscape, needs to create a symbiosis between nature and artifice, where both, while managing to hold their own identity and recognition, are designed and modified in such a way that the result of their synergy is better than the two single individuals. This new synergy need to be able to prepare the ground for the engagement of that artefact that through its artificiality creates and reveals a landscape, or a place that did not exist before. The graft is an operation that should strengthens, gives and shows the meaning of the place.

The architectural object should become a medium for humans’ perception of the natural environment.

The research wants to lead to a design that is meant to be inspires for the users, to connect the built environment with the natural one in an intimate and contemplative way.
Most of the arguments and concepts touched in the research are expressed and explained also through the use of photographs which sometimes can be more communicative than words. The research, therefore is implemented by a visual diary that tries to show in a sort of vision, the meaning of the whole research.
The structure of this research is made of three main chapters:
Man is nature; The in-between realm; The body memory;
And a fourth one, which serves as an introduction for the design project
and, at the same time works as conclusion for the first part.
The contents of each chapter, is a combination of theoretical research,
reference projects, and experimentations made on the basis of the
knowledge acquired from the theoretical part.
The first chapter focuses mainly on the relationship between human
and nature in a philosophical an historical way. It gives an overview on
how we have been interacting with the land during the history and how
we see this connection now.
The second chapter is more related to the kind of formal interpretation
that I want to give to the design, in relationship to the philosophical ide-
ology of the first one. In this section there is a combination of theory and
and case studies on contemporary architectural projects that in my opinion
translate well the kind of space and geometrical composition that I want
to achieve in my design.
The third chapter instead, focuses more on the way we perceive ar-
chitecture and the space: a sensorial perception. Also in this cas ex-
periments are combined with theory in order to build up a background
knowledge for the subsequent design process.
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The relationship binding individuals and the environment is of primary importance, since nature is the background to the framework of our existence.

In fact, we are destined to blossom and decompose in its vast array, but our ambition and talents combined, challenge us for something more than just survival.

We aspire to make a mark, to write down our observations and actions in the landscape in an attempt to understand and embrace ourself and the space in which we live.
Man is part of nature itself, and at the same time is also in a way autonomous subject that, depending on the situation, can assume the role of ally and partner or opponent and sometimes even enemy. The relationship between man and nature is one of the crucial issues of the twenty-century from which, as a matter of fact depends also much of the future quality of life of mankind. It is good to realize that, we are part of a unique system.

Today we know quite well what ‘Man’ is. Is an animal, a part in all respect of natural cycles, he feed himself, he grows, he reproduces and dies like other mammals. The concept of Man being part of the nature, might be easier accepted if we consider the planet earth not only in the present moment, but also as a cycle of the million of years of its life, during which it saw the rise and fall of mountains, moving continents, drying inland seas, deserts formation, succession of warm and cold periods, appearing of new animal species, including humans and entire plant extinction, as a result of catastrophic events.

Never the less it can be said that nature has also dynamic rhythms, different times from the one of human kinds. Nature follows its essential physical low of necessity; it does not know the concept of wanting or discretionary needs. Relentless in its beauty and expressive power, still its devastating destructive energy is visible to all.

The attraction towards nature has always therefore been quite conflicting, since on one hand we are attracted to it but on the other hand we are sub-
missive and powerless against its power. Somehow it might be because in the depth of nature we are able to discover our deepest self but since we have no control over it we feel somehow lost and in danger. Therefore, is easy to understand why the relationship between man and nature always existed, even if during the history it has experienced different stages.
In the depth of nature we are able to discover our deepest self.
‘Back to the roots’ used to justify the need for change in our way of living. In the context of Environmental crisis is an expression that implies there was a time in the history when mankind had some sort of favourable relationship with nature that was lost and is missed today. Something that resembles the biblical Garden of Eden, a place of peace and harmony between all animate and inanimate beings.

The relationship between man and nature and the ensuring worldwide threat to the ecological balance are both crucial issues of the twenty-century from which, as a matter of fact depends also much of the future quality of life of mankind. Against all logics, our society based on functionalism and technology, is still seeking a technological solution to a crisis generated by this same technology. The realization that the crisis facing the environment is being caused by man, started just recently to be gradually accepted. Man is part of nature itself, therefore it is good to realize that, we are part of a unique system. The attempts, is hence a way back to nature, considered as the only space which allows sensory perception and instinct, space in which a relationship between man and the environment becomes possible again.
One of the clearest signs of human intervention on the land is the building activity. Nowadays, the reasons why we build could be plenty, but if we go back to the primitive experience, it is possible to see how the first need that human kind tried to satisfy was the need of protection.

History shows clearly that the instinctive need for security and ease is the essential reason why started to build.

The cave is the very first habitable environment, where humans for the first time dealt with their most basic need, shelter, through conscious intervention. The cave allowed them to feel protected from harm and free from anxiety or doubt, and the minute they went inside, they gained a very different understanding of who they were and began to evolve in a way that was quite different from what would have happened if they had stayed outside.

The story of the evolution of the interior is thus a reflective history of us and our intrinsic need to improve our experience of the world. This is the reason why we design.

The first attempts to building - tents and huts - were appropriated from the shape of the cave. They often took on a circular shape, which is both easy to construct and responds to the outward radiation of the fireplace. The idea of shelter that the cave offered was not lost or forgotten, but survives in trace form, as recreated and adapted in other types of dwelling when people spread across the world.
Somehow the experience of the cave was a prelude to what only much later would become permanent shelter.

In my opinion, the fundamental DNA of the spaces we build today should be the same as that of the crude shelter humans originally made.

It is the same in architecture as in all other arts: its principles are founded on simple nature, and nature’s processes clearly indicates its rules.

If we look at man in his primitive state, without any aid or guidance other than his natural instincts is easy to understand that he is basically in a need of a place where to rest.
THE SHELTER:

A shelter can be defined as a structure affording protection from rain, wind, or sun. In a wider sense, anything that can serve as a screen or a place of refuge, from the weather or other dangers. It provides also: the state of mind of being sheltered; the state of being protected from elements and security from attack.

Is important to note that the definition also suggests a sensory or emotional experience. These feelings of protection were captured in the first build environment and must continue to be addressed in the space we build today for human life.

Even in its most minimal forms early shelter satisfied - or attempted to satisfy - emotional and sensory desires that the outside world alone could not provide.
FIRE PLACE:

Fire is what first brought people together, forming a community around the comfort of a controlled source of warmth. This, in turn, led to the epochal discovery of language. This first ‘gathering of men’, brought them into ‘conversation with one-another’ whereas before there had only been ‘purely individual … utterance of sound’. (Vitruvius, The Book on Architecture)

The ‘fireplace’ is able to create a simple but well known experience: sitting around the fire, enjoying the warmth and watching the flames are part of common memory. It is a moment of connection and share within humans and nature.
Early humans sought a place for personal safety, but the ability to enjoy sensory pleasures privately and without fear of danger gave rise to a new range of experiences, chief among them comfort. Finding the cave was the beginning of making void space habitable for discovery, nature and well-being, and not simply survival.

The paintings in the earliest caves - regardless of their original purpose - where an intentional change of the wall surface, possibly for the purpose of adornment or to claim the territory, but certainly beyond any basic functional requirements. The paintings are evidence of that need that humans have to go beyond simple survival, but also to express themselves and better their sensory perception. Therefore is easy to understand how the design and the creative process, in general describes how human's mind identify and solves problems in a way to satisfy us functionally, physiologically and aesthetically at the same time.

If looking at the history we can then define different main reasons why we intervene on this land, examples could be seen in buildings for worship (churches, temples etc), recognition (representative buildings), or orientation.
“Throughout the history of human race, architecture, the mother of all arts, has supplied shrines for religion, homes for the living, and monuments for the dead.”
As a general definition a need is something that is necessary for organisms to live a healthy life. Each of us is motivated by needs. Our most basic needs are inborn, and they have been evolving over tens of thousands of years. To most psychologists, need is a psychological feature that arouses an organism to action toward a goal, giving purpose and direction to behaviour. The most widely known academic model of needs was proposed by psychologist Abraham Maslow in his paper "A theory for human Motivation" in the 1943. Abraham Maslow's Hierarchy of Needs helps to explain how these needs motivate us all.

In his theory, he proposed that people have a hierarchy of psychological needs, which range from security to self-actualization. Maslow's Hierarchy of Needs states that we must satisfy each need in turn, starting with the firsts, which deals with the most obvious needs for survival itself. Only when the lower order needs of physical and emotional well-being are satisfied, we are concerned with the higher order needs of influence and personal development.

If looking at the theory from a wider perspective the last three steps, in a way, show also why we differ from other creatures on earth, and the reason why we are not only looking to satisfy basic ones.
self-actuation

physiological

safety

love/belonging

self-esteem

security of: body, employment, resources, morality, family, health, property

friendship, family, sexual intimacy

achievement, respect, respect by others, morality, family, sexual intimacy

creativity, spontaneity, problem solving, lack of prejudice, acceptance of facts

security of: body, employment, resources, morality, family, health, property

self-esteem, confidence, achievement, respect of others, respect by others

morality, family, sexual intimacy

breathing, food, water, sex, sleep, homeostasis, excretion

security of: body, employment, resources, morality, family, health, property

self-esteem, confidence, achievement, respect of others, respect by others

morality, family, sexual intimacy

breathing, food, water, sex, sleep, homeostasis, excretion
Architecture might be the most striking exhibit of our understanding of nature as it is identified with civilization. It is not a coincidence that we started distinguishing civilizations with the settlement of the first cities. Architecture and urbanization were always a visible sign of human progress because of the contrast with nature – cities were established in the wilderness and step by step they became a safe haven for people and their activities. Since architecture fulfill one of the most basic human need, need for a shelter, it has inadvertently become synonymous of a barrier that protects people from the dangers of the beastly nature, harsh climate and so on.

Architecture, at the same time can be considered as a complex discipline, where technical and artistic knowledge blend together, and obviously influence each other. The architect, while developing a project, will remember, compare choose and rework a huge stock of possible solutions, coming to the final outcome step by step.

An architecture that wants to establish a dialogue with nature must, at the same time develop a dialogue with humans, architecture become the connector between the two elements that are part of the same system. By dealing with humans’ perception, architecture need to be able to create feelings and certain atmospheres. Therefore, is not only the shape per-se important, but also the reaction that this shape provoke on humankind. The goal is an architecture able to communicate. Architecture is physically present in the space and therefore can be perceived by our senses and influences our perception.
Basically architecture could be defined as a difficult “art” made of simple elements, is like a kind of oratory made of shape and feelings. We, as human beings, have to stay constantly in strong relation with what is all around us, whether this is pure nature or artificial object, and therefore buildings are one of the most common presences in our life.

The sins of architecture emerge from its very nature as an artificial construction, but are also the results of why and how we have built over the centuries. The act of making a building assumes that the land we walk on is not enough. We must enclose a space with walls and put a roof over our heads to protect ourselves.

Therefore, if looking at the history, at the beginning buildings were just elements for the protection or place for worship or to help the orientation, subsequently they became objects for the defence, and in more recent time for recognition. Nowadays, they can be seen as monuments to our ability to gather material, form it according to abstract principles, and make buildings that stands tall and proud while sheltering an interior that is rational and functional. Is also true, though that in recent years, new currents of thought, have once again become more aware of the reality of the land and the fact that we are inevitably closely linked. Architects have become more and more fascinated by landscape. Instead of seeing buildings as autonomous appearances on the land, they understand them as part of the land that happens to coalesce or congeal into a solid structure.

Architecture in this sense is not the making of something new, but
reformation, of what already exists in a form that accepts the mark of human intervention.

If we think of an architecture made of light, shapes, materials, symbols, we could imagine an object that proposes itself as a dissolved and soft presence; transgressive but not piercing, uninhibited, unusual, obviously artificial, but not arrogant, authoritative, not authoritarian. This kind of approach tent to a type of architecture that lies horizontally, wedging and compressing in the free spaces. Moreover, is undeniable that humans beings are part of the nature their self, and as inhabitants of the earth they perceive and learn form it, with the experience and the memory. The nature’s inspiration should therefore be natural and somehow unintentional, and should comes only from the simple fact that we live in this world, we grow up and change in it, we think and we remember. All this transforms in ‘lived experience’ which will influence all our actions, decisions and therefore designs.
The sublime experience can be translated as a feeling of belongings to nature. Sublime is the feeling of being part of a whole, which is bigger than us. A whole that we can not completely understand even if we are part of it. Since we don't understand it completely, on one hand we are attracted from it, but on the other hand we are scared. There is a dual presence of fear and attraction that immobilize us in front of the beauty and power of nature. This wonderful and majestic presence makes us feel complete but at the same time disoriented and lost. The sublime is experienced by humans as a titanic aspiration towards perfection, the rediscovery of nature as an expression of the absolute, the centrality of the sensible world and emotions against the one of exaltation of pure reason generated from the Enlightenment movement.

The romantic period sees men's relationship with nature as its central discussion. Man is able to find his true identity only in contact with it. And nature represents all the beauty and harmony of which man can enjoy. Nice is then anything that, aesthetically speaking, arouses in man a feeling of pleasure and harmony. Moreover, in the Romance period the sublime is the manifestation of the power of nature, in front of which man, inert, understands his membership and at the same time inferiority. The romantic sublime, leave man amazed and breathless, it involves an act of contemplation of humans in front of nature. Man is there, in front of him is the concrete manifestation of the power
of nature, and he is not able to control it and block it, he is only able to look at it and put himself in connection with his deeper being.

In the 1970 Immanuel Kant returns to the concept of sublime in the ‘Critique of Judgment’, enlarging it and distinguishing it in two different ones: The ‘dynamic sublime’ (expression of annihilating power of nature, in front of which man becomes aware of his limit) and the ‘mathematical sublime’ (which arises from the contemplation of immobile, majestic and timeless nature).

In front of the magnificence of nature man at first feels a sense of loss and frustration, but also recognised, through the sublime experience, his belongings and somehow his superiority. As only being capable of creation of moral action, he is placed on top of all creatures.

At the first type of sublime could belong frightening phenomena such as hurricanes or large waterfalls; at the second type spaces without ending like the desert, ocean and the sky. And is to this second group of landscapes that I’m relating with my project.

According to Kant, the contemplation of this spectacle causes the mind to become aware of his own rational limitations and to recognize the possibility of a dimension that exist beyond the clear rationality, to be experienced on a purely emotional way.
In the well known Friedrich’s painting, ‘Wanderer above the Sea of Fog’ realized in 1818, a man is standing looking at the majesty of nature. The man depicted is facing backwards in such way that he does not attract our attention on him, but rather he helps us to relate to the nature in front of him. He is not the main character of the painting; he is like an instrument, there to help viewers’ perception. He is a medium that connects us with what is in front of him.

In this case the man is the medium, and in the same way architecture can be the medium for our perception of nature, the contemplation and the sublime experience. Likewise in the painting, the architectural object should not be the protagonist of the space but rather an instrument to help our perception and to guide our experience through the space.
The architecture of the twentieth century can be identified in the separation between man and nature. The causes are to be found in the Cartesian dominant thought, characterized by a clear separation between matter and spirit, between abstract thought and nature.

The understanding of nature had radically changed during the time and the Western point of view on it nowadays is to be considered mainly technocratic and utilitarian. Nature started to be seen as a commodity and a fount of resource. There is a general lost connection and lack of mere contemplation.

This dichotomous concept of nature is present as well today due to the same basis for political and social order present in the Western world and all the derivatives of the Enlightenment era. We feel we are justified to use all the resources as we please and we continue to see ourselves very much apart from nature and in need to “reconnect”. The common ground for our cognitive split is deeply rooted in the Western modernization and reflects the very core of the reigning democratic capitalism, which is the conviction that people are not the same as other natural objects. The consequence of this alienation, is that we feel we either own every display of nature and we can treat it as a commodity (even as an aesthetic one), or that we are threatened by it and must gain control over it in order to survive. This ontological base is displayed in virtually every manifestation of human activity, and architecture is one of the most prominent ones.

This vision had led to the construction of urban areas with no connection...
to the outside world where the natural environment has disappeared to give way to the human artifice.

Design is a deliberate intervention in our environment to ameliorate the condition of our existence.

Sadly, this critical component of human identity has been insufficiently acknowledged. We continue to view the relative success of civilization primarily in technological terms, to perpetrate the myth of progress mainly through mechanical-technical means, rather than by measure of human advancement and self-knowledge and relationship with nature.

The ancient architecture instead, was a measuring instrument and a reference between the cosmos and man, was able to place the man in communion with the universe. Old agglomerations are perfectly integrated in the context, and they create a symbolic relationship with it.

Contemporary design must find a balance between the issues that technology and modern society have created while honouring primal desires, between external world and the inner self, and between function and beauty.

The design profession necessarily must deal with our fundamental sensory, cognitive, and bodily needs as we embrace even more sophisticated and exclusive technological and industrial advancements that threaten to further distance us from our basic humanity.

The goal is to find a new way of design that must rediscover the past.
symbolism, the original humans needs and the human instinct, while using the new technology. A balance with the primitive and the progress.

As shown in the comparative pictures, the earliest forms of ‘shelter’ maintained a delicate balance with the natural world, sometimes literally, as in dwellings nestled in a cliff side. Early designers were cognizant of the role that human interventions had on natural surroundings, a sensitivity that have perhaps been lost, as the world we inhabit has been transformed into one entirely of human design.
The work of the Canadian photographer Eduard Burtynsky focuses on industrial landscapes and the transformation that nature accused through the industry implantation. They are a strong documentation of the men’s exploitation of the land. They can be taken as an example and as a critic of the way we treat nature, somehow these images function as reflecting pools of our times. These images are meant as metaphors to the dilemma of our modern existence; they search for a dialogue between attraction and repulsion, seduction and fear. We are drawn by desire - a chance at good living, yet we are consciously or unconsciously aware that the world is suffering for our success. Our dependence on nature to provide the materials for our consumption and our concern for the health of our planet sets us into an uneasy contradiction.

The illustrations that follow, taken from the photographer, are tragic and wondrous at the same time, they conjure up feelings of remorse and self-disgust for all of humanity.
“The in-between is a discourse on the need for architecture to reconcile spatial polarities such as inside-outside”

“Man still breathes both in and out. Architecture should do the same”

Aldo Van Eyck
How can we formally articulate this connection between different realms such as the artifice and natural?

“That’s what I feel, an outside and an inside and me in the middle, perhaps that’s what I am, the thing that divides the world in two, on the one side the outside, on the other side the inside, that can be as thin as foil, I’m neither one side nor the other, I’m in the middle, I’m the partition, I’ve two surfaces and no thickness.”

Samuel Beckett, The Unnameable

This quote is from Samuel Beckett’s novel, The Unnameable, published in 1953 as the third and final entry to his ‘Trilogy’ of novels. These brief few lines, taken from the monologue of the unnamed protagonist, begin to open up the idea of an ‘in-between’ place. The words of Beckett’s protagonist identify the place which best describes where he feels he is positioned in life - in the middle, neither one place nor another, belonging to neither yet surrounded by and reliant on what it is he feels he exists between. This description of the ‘in-between’ is, of course, a nonphysical space. It is more an attitude or a feeling towards his existence, yet the imagery provokes a more spatial understanding of his world; the interface between outside and inside, the divide between two worlds, the existence of two surfaces so closely related. But what is most striking is the identification of a third element; the middle, as its own entity. One which has a presence, to the protagonist, just as strong and relevant as the conditions it exists between. He
describes it as a physical place, or position, as it is somewhere, which he feels, he occupies and within which he feels he can exist—however despairingly.

The in-between realm is therefore the discussion between two different realms that even if completely different have a reciprocal relationship.

Those different identities, in a way relate to each other and they are able to exist because of the existence of its opposite dimension.

Likewise, the “twin phenomenon” can be described as a reciprocal relationship between two opposite qualities, such as mass and void, which depend on each other for their meaning.

In my research, the in-between realm is explored and understood as a transitional moment between artifice and nature. A perception process that goes from the inside to the outside and occur in the transitional moment which is define and emphasised by the building layout.
Meanwhile researching the concept of ‘transition’ and how to formally express it in the design, I identified the Zen approach to the design as a good example. Not only for the formal expression but also for the meaning of each gestures, and the way of confronting life and the connection between human beings and natural environment.

Zen’s ultimate goal is to archive a state of nothingness, nirvana, in a being through meditation and enlightenment. It conceives of one absolute state where the subject and the thinker merge into one, and there is no barrier between the self and the other. Zen principles strips away the unnecessary and leaving the essentials. It also promote the idea of imperfection and incompleteness. They believe one should be as close to nature as possible. Beauty consists of their surrounding to be simple, unadorned, imperfect, asymmetrical, unsophisticated, and limited. With this drastic ideas of beauty in mind, instead of a shelter from nature architecture became a place for one to meditate and feel closer to nature. Architecture become unadorned, simple, and incomplete, because it is easier to blur the line between object and self when things are simple. Zen architecture is nature.

If the idea for the individual was to blur the line between object and self, the idea for architecture was to blur the line between the exterior and interior.

In the Zen design practice, points and lines that drew the outline of the temples or the gardens were designed to communicate something more than a
mere physical presence of a useful or social structure. Zen is also considered an art of living, a way of being and, especially in terms of perception leads us to see and appreciate the true nature, the function of each being, each act and each object. The Zen approach applied to the design and architecture sees the almost fanatical search for simplicity of the expression in:
- the empty and multi-purpose spaces;
- the construction materials left freely exposed to communicate their sincerity;
- the use of indirect and soft lighting;
- the search for unity between indoor and outdoor spaces;

The goal is the essence and the perception. Zen temples and building in general, are like spatial narrative, a sheaf of vistas which define but not limit.

In Zen design the objects are usually metaphorical not just simple elements related to functions. The exquisite traditional Japanese house has been compared to an outsized umbrella erected over the landscape, not dominating its surroundings but providing a shaded space for living amid nature. The Japanese house is one of those all too rare earthly creations that transcend the merely utilitarian, that attend as closely to man’s interior needs as to his physical comfort.
A book that has been a great source of inspiration and also a deeper understanding of Japanese culture is In Praise of Shadows, written by Junichiro Tanizaki. In Praise of Shadows reminds us of other realms, other feelings that architectural space can evoke, ways of designing for repose, reflection, and solitude in a world that places emphasis on striving, action, and noise. It presents a different way of envisioning space, less “hot” and dynamic and more deep and subtle.

According to the author, architecture should not be flashy. It would be so cutting edge to design the anti-flashy, the anti-“hot”, the anti-sexy, anti-innovation yet innovative, in a way. It would take a subtle hand and a high measure of restraint in an era when it is possible to design and build just about anything out of anything.

As Tanizaki concludes:

“I have thought that there might still be somewhere, possibly in literature or in the arts, where something could be saved.” Could the shadow world of subtle phenomena also be saved in architecture? Can we turn off some of the lights? A few, at least? Can we have just a little less of the shiny and bright? What on earth would a shadowy skyscraper look like? And not just shadowy in terms of light, but in its elemental qualities, its material sensation, the way it “stands”. The shadow gives shape and life to the object in light. It also provides the realm from which fantasies and dreams arise. The art of chiaroscuro is a skill
of master architect too. In great architectural spaces, there is a contrast, deep breathing of shadow and light; shadow inhales and illumination exhales light.
There is a strong connection between the volume and the space created by the forms. Plastic arts, but also architecture are, as a matter of fact, a function of the space. The space cannot be considered as something external to the form; something that just surrounds the volume, but rather those volumes contributes to create the space that becomes a presence itself. This space must be able to be perceived as well as the form in which it occurs. The space created has expressive properties, it transposes the material that surrounds it in motion, it determines the proportions and it scans its rhythms.

The strong separation of exterior and interior, or between object and its surrounding disappears. Is not the form itself to affect the artist actions, but rather the relation between the form and its surrounding, the connection that arise between them, the link between full and empty. Therefore, the space between the forms is not a simple lack of something or the nothingness, but rather a hidden dimension, retracted and not visible without which the shape could not take place.

The same for example, applies to the silence, which gives to the sound a chance to exists and to unfolds in its modulations. The vacuum, guards inside itself each possible spatial configuration, and preserves the invisible source of all presences. Is the matter of being able to listen to “the sound of emptiness” coming to shape the material, and this applies to any form of expression, be it sculpture, architecture or even painting. Is by limiting the space, that the space all of the sudden becomes perceptible as a presence, and it is through the matter that the space can be shaped and
defined, is therefore clear how the two appearances are inseparable.
Is the whole that is able to makes sense out of the details and the different components of the space.
THE IN-BETWEEN REALM

2.5 Case study research

This case study research has been made on a compositional level. The three analysed projects' floor plans have been intuitively decomposed in their primary compositional elements. This in order to capture and reveal the inner structure and compositional rules used by the architects.

After splitting the different tools used for the composition, a painting has been made for each of the project, in order to intuitively try to express and grasp a deeper understanding of their framework.

The analysed projects:

TADAO ANDO | Vitra Congres Centre
MIES VAN DER ROHE | The Barcelona Pavilion
PETER ZUMTHOR | Vals Therms
planes
pure geometrical forms
orthogonal irregular grid
rotated irregular grid

DYNAMIC SPACE

TADAO ANDO | Vitra Congres Centre
abstract interpretation
abstract interpretation
volumes

orthogonal regular grid

orthogonal irregular grid

MATERIAL SPACE

PETER ZUMTHOR | Vals Therms
After being analysing the compositional rules of the design composition, a step forward has been made. Which are the physical elements that we actually use to shape the space? which are the primary elements?

Three main element has been identified as space shapers: the pillar, the plane and the volume.

This primary elements help us to define architectural spaces. They can be use as separation of different realms: inside - outside; inside - inside; outside - outside.

They become the space structure, and in relation to the way they are used they can create complete different interaction between the users and the space.
Tridimensional investigation
landmark
punctual object

rhythm
regular | irregular

grid
regular | irregular

free movement
fluid space
landmark
punctual object
rhythm
grid
freedom in the movement

PILLAR
divide
welcome
protect
direct
dynamism
define the path
THE WALL

A wall cuts the space, it’s almost violent

The wall is a LIMIT
it breaks the continuity
but it can at the same time help the CONNECTION

refuse ← aggressive ← violent ← separate ← welcome

defensive ← protective ← connect
landmark  spatial hierarchy  material space  free movement
atmosphere  sculpture  fluid space
materiality
hierarchy
fluid space
atmosphere
division
darkness and light

fluid space

VOLUMES
At the same time there is an added quality linked to the space which is the value that we attribute to it. And in this precise moment the space become a place.

The concept of space, according to Bachelard in his book The Poetic of Space, is intended both as an open space of the great horizons (in other words, sky, sea, desert etc) or the bounded one of the home. The home is seen as a space of ‘intimate immensity’ where all our experiences can take place, being at home could be translated in being with themselves, a place where to shelter and find yourself. The house protects us physically from many different factors such as the cold, wind, rain, but it also protect our privacy, it become the image of intimacy. According to the philosopher, the house protects the dreams especially because it allows us to dream in pace. In fact, in humans, material places become symbols and imagery, therefore we can say that in addition to inhabit them we are inhabited as well, and then choosing them means to determine also the colour, the memory and the smells of it.

The SPACE is not perceived as a solid volume to be filled in with pictures and objects, but something unlimited and incalculable which can only be suggested by the relationship between the users and the objects.
repetition  scale and proportion  prospective  shadows
repetition  scale and proportion  prospective  material  shadows
I do not believe in experience.
I think that is conservative.
I believe in perception, that is another thing.
It is more risky and more progressive.

Eduardo Chillida
This chapter of the research is dedicated to the senses, seen as the only means that can lead to a real perception of the world and therefore of the built environment. All this to develop an ‘architecture of the senses’, an architecture able to create atmosphere and feelings.

When we enter a building or we see a room, in a fraction of a second we have a feeling about it. One word for it is atmosphere. We perceive atmosphere through our emotional sensibility, which is a form of perception that works incredibly quickly, and which we humans evidently need to help us survive.

The only way to perceive is the sensible sphere. The pure perception leads to a higher level of knowledge. This statement wants to bring the attention on the sensorial experience that one can have meanwhile walking through the space, whether this is architectural or natural.

The bodily experience could be compared to a storage of memories and experiences that combine together lead us to a different level of knowledge, based on the sensorial experience. The world is reflected in the body, and the body is projected onto the world. We remember though our bodies as much as through our nervous system and brain.
The senses do not only mediate information for the judgment of the intellect; they are also a means of articulating sensory thought. I believe that every touching experience of architecture is multi-sensory; qualities of matter, space, and scale are measured equally by eyes, ears, nose, skin, tongue, skeleton and muscles. Architecture involves five realms of sensory experience, which interact and influence each other. A walk through a forest or a Japanese garden, for instance, is invigorating and healing because of the essential interaction of all sense modalities reinforcing each other; our sense of reality is thus strengthened and articulated.

Man is part of the world and its through his physical experience that he can relate to it. There is no inner man; man is in the world, it is within the world that he knows himself. Architecture could be seen as the art of reconciliation between ourselves and the world, and this mediation takes place through the senses.

The goal is to develop a sensory architecture in opposition to the prevailing visual understanding of the art of building.

If architecture can be said to have a poetic meaning we must recognize that what it says is not independent of what it is. Architecture is not an experience that words translate later. Like the poem itself, it is its figure as presence, which constitutes the means and the experience.
The only way to perceive is the sensible sphere. The pure perception leads to a higher level of knowledge.
3.2 Abstraction of the elements

Abstraction is the quality of dealing with ideas rather than events. It deals with memory and finds its rest in one's own mind. Memory of something known in the past, that help us in constructing our body of words and behaviour towards things.

By expressing the natural element with a picture of it, an image or a noise, rather than having it physically, the memory of it can be surprisingly much more enriching than real element. The whole point of the design is to capture the things that people normally overlook and repose them in a new way, in order to generate thoughts and feelings.
ABSTRACTION OF NATURE
creating natural feelings with architecture
The sensation of sun rays filtered by trees' tops.
use of natural fibres

holes in the sailing

positioning of constructing material
The calming sound and feeling of heavy rain.
Rain Room is a hundred square metre field of falling water through which it is possible to walk, trusting that a path can be navigated, without being drenched in the process.

As you progress through The Curve, the sound of water and a suggestion of moisture fill the air, before you are confronted by this carefully choreographed downpour that responds to your movements and presence.
The change in prospective can give to the users a completely different perception of nature.
Photography and in the same way architectural must create a composition able to point out views, feelings, and sensations. By framing the world around us we are able to focus on certain elements that usually we tend to overlook. By selecting only part of the view and enhancement is made on the perception of nature.
This landscape arise from the sublime of the enraged sky, and from the silence of a mute landscape, shadowless, almost surreal.
the perception of the space
CURVILINEAR AND SOFT ELEMENT
working with the contrast

STRAIGHT AND LINEAR CUT
the perception of the space

FRAMING THE WORLD
VERTICAL ELEMENT  HORIZONTAL VIEW
working with the contrast
I want to cut pieces of the sky.

'FRAMING THE WORLD'
The percep of the body and the image of the world turn into one single con-
tinuous existential experience; there is no body separated from its domicile
space, ad there is no space unrelated to unconscious image of the perceiv-
ing self.
Architecture is essentially an extension of nature into the man-made realm,
providing the ground for perception and the horizon of experiencing and
understanding the world. It is not an isolated and self-sufficient artefact; It
directs our attention and existential experience to wider horizons.
Architecture strengthens the existential experience, one’s sense of being
in the world, and this is essentially a strengthened experience of self. But
even more, an architectural space frames, halts, strengthens and focuses
our thoughts, and prevents them from getting lost.
Architecture is the art of reconciliation between ourselves and the world,
and this mediation takes place through the senses and spaces that have
emotional resonance can be said to evoke a range of responses.

The timeless task of architecture is to create embodied existential meta-
phors that concretes and structure man’s being in the world.
Images of architecture reflect and externalize ideas and images of life; ar-
chitecture is able to materialize our images of ideal life. Buildings and towns
enable us to structure, understand, and remember who we are. Architecture
enable us to place ourselves in the world and create a connection with it.
All experience implies the acts of recollecting, remembering and compar-
ing. An embodied memory had essential role as the basis of remembering
a space or a place. Our home and domicile are integrated with our self-identity; they become part of our body and being.

In memorable experience of architecture, space matter and time fuse into one single dimension, into the basic substance of being, that penetrates the consciousness. We identify ourselves with this space, this place, this moment and these dimensions, as they become ingredients of our very existence. Architecture can be seen as an art of mediation and reconciliation. Architecture, more fully than other art form, engages the immediacy of our sensory perceptions. The passage of time, light shadow and transparency; colour phenomena, texture, material and detail all participate in the complete experience of architecture. Architecture is able to simultaneously awake all the sense and all the complexity of perception.

Architecture by Unifying foreground, middle ground, and distant views, ties perspective to detail and material to space. Only an architectural object itself offers the tactile sensation of textured stone surfaces and polished wooden pews, the experience of light changing with movement, the smell and the resonant sound of space, the bodily relations of scale and proportion. All these sensations combine within one complex experience, which becomes articulate and specific and at the same time wordless. The building speaks through the silence of perceptual phenomena.
Inwardly the structure is a medium to lead one’s attention exteriorly. The form is a function of the purpose, the contemplation of nature.
3.5

A presence in the space

The space will be anonymous until you place limits on it. Before my works were protagonists, now they should become means to make the space protagonist. And this is not anonymous anymore.
To certain extends seems natural to join and compare architecture with art, specially with sculpture, since they do not only addresses similar themes but also works with the same materials and same space. A lot of similarities can be found between sculpture and architecture, and that might be due to the fact that both are creative expressions and both deal with spaces and humans in an interactive way. So basically architecture can be considered like sculpture but with an added value, which is basically the function, to which follows the technical part.

Even if we are more used to speak about feeling e perception when we are looking at an artistic masterpiece, is undeniable that architecture is closely linked to art, and moreover architecture influences, with its continuous presence, our everyday life. Architecture is made by humans for humans and the interaction between architectural object and subject that uses it, is an issue to be not entirely missed.
“They go out into the desert and onto the oceans. There, where it is loneliest, they engage in their games with elements. Generally, only a camera observes their activities. Their transient works are quickly scattered by the wind, washed over by water. As well, where this works enjoy the protection of museums - and are continually renewed and maintained - they are homage to the past. A new myth of nature has infected the fine arts”

John Anthony Thwaites | Land Art definition | 1969
I see the Land Art experience as a reference for my design in the way those artists approached the landscape and in the way they were able to create a strict connection between the work of art and the environment. Those two realities, the sculpture and the land, where firmly dependent on each other. This is the kind of relationship that I want to achieve in my design.

If looking back at the history, though landscape and nature in general, have always been important themes in literature and art, but each time with a different meaning and different approach. In ancient pastoral poetry it was the idyllic setting of rural life. Since the 14th century, the landscape’s forms and colours have been recorded, drawn and translated into art. In the 18th century nature was the first spring of inspiration in philosophical writings, where for example a view of incomprehensibly distant mountains served to describe the feeling of sublime. In the 20th century, all landscapes images that contradict our customary viewing habits have become emblematic of the cultural programmes of Surrealism, Expressionism and Futurism. The representation of nature was a manifestation of another way of seeing and perceiving the world and the art. But is just around the 1968 that landscape as an art theme, took on an unexpected, anti-symbolic dimension, when a small group of American and European artist developed designs, concepts and projects employing new and unconventional techniques and materials, and different location and dimensions. The landscape was no longer just described in text or depicted in paintings, but also used as an artistic material.
Since then, there has been a radical shift in the way nature interacted with art, especially in terms of medium: from the canvas to the earth. And the way viewers were getting in touch with the new art: no more a passive observation, but rather an interactive and sensorial experience in the space.

Land Art is an artistic movement, in which the language investigation simultaneously invests the more proper linguistic aspect of art, and those related to its cultural and physical context. Both areas starts from the same motive: the goal is to dramatically expand the possible scope of art until it coincides with the whole reality, both physical and mental. The main element, is therefore the interest in the creative process; by acting on the territory is implicit the idea of the insufficiency of the traditional understood artwork, but instead, is the idea itself and the conceptual operation the main concern, which bring into play the eternal relationship between man and the world. What art covers is something that keeps on change, which does not need to get to a point that is final in respect of time and space. The common idea that, the work is an irreversible process that ends with a static icon-object, it is now outdated. The artwork is not anymore an object but the process.

The dimension of natural sublime, in which those artists intervene, is radically opposed to the cold, artificial and geometric monumentality of the metropolis. The choice of the locations fall always on open fields, far away from the cities and urbanization. Very often they chose the extensive desert areas.
of Nevada, Utah, Arizona and New Mexico. The desert is seen as unspoilt, meditative natural environment, in contrast to the complexity of the cities, where elements like the endless expanses, arid ground, cloudless sky, scorching sun, remoteness, silence and desolation come to play a central role. The perception of the boundless space and the unique quality of the experience of nature, become therefore their main concerns. In a way, they are wanting to lead humans to listen the world that is all around them, all the sounds, colours and all his fragrances, hear what’s around us even when is the sound of the silence. The Land Art’s works are like ‘instruments’ able to guide the viewer and his perception through the space.

Somehow, those interventions want also to emphasize spatial orientation. The kind of landscape chosen, in fact is usually a neutral ground, which provides the individual with no spatial orientation and, hence, with no existential security. By placing an object into an open field is possible to transform the nameless site into a recognizable place.

To summarize, I see the Land Art movement as a reference for my design in the way those artists approached the landscape and in the way they were able to create a strict connection between the land, the art object and the human perception of it.
What characterizes James Turrell’s artistic development, is definitely the constant research on the relationship between light, space and the viewer. He wants people to be able to perceive the light almost as a physical presence, he want to ensure that the quality and the feeling of light itself, in some ways is really close to the touch. His approach is not to take possession of nature, but rather is to put the viewer in touch with it. Consistently with the land art’s thinking, in regards to the relationship between object and space, also Turrell wants his works not to be a look on something, but a look into something, not a placement of a mass but an intervention in the space, not objects in a room but rather the room itself. In terms of scale and usability, to some extent his works are almost closer to architecture rather than to the commonly understood plastic arts.

His aim is to realize an ‘architecture’ made of light and space, a topological architecture. This does not mean that he does not take care of perimeters and shapes, but instead he wants to make more relevant what is located in the interstice, what is in between the objects. It is a very simple architecture, the architecture of light.
By framing the unlimited sky is possible to give a tangible presence to it, and at the same time to put the user in communication with it.
Nancy Holt must be considered as one of the few women who actively participated in the Land Art Movement. Holt began her artistic career as a photographer and as video maker artist, and this involvement with photography and camera optics definitely influenced all her subsequent Land Art’s works, which are literally ‘seeing devices’, fixed points for tracing the position of the sun, Earth and stars.

Another of her main concerns where related to the perception of time and space. Her works always deal with the issues of how people perceive time and space, the various monumental works that she realized blend and complete the environment in which they arise. Her works usually do not merely sit in their environments, but are made of the land, stand on it and are created to be harmonious with it. Moreover, the artist always deal with the human scale in relation to the work she creates, people are allowed to interact with the works and become more aware of space, of their own visual perception, and of the order of the universe. Holt strongly believe that people have within them a basic need to observe the sky, and that is why with her works, she tries to create an intimate connection to nature and stars which, as a matter of fact, is important to remember, had always been considered as means of human orientation.

Sun Tunnels is one of her most intimate and expressive work. It took from 1973 to 1976 to be installed in the remote area of the Great Basin Desert in the northwest Utah. The installation consists in four concrete tubes, each of
which was almost six metres long, three meters in diameter, and many tons in weight, placed in two lines to form an open X shape. The Sun Tunnels are axially oriented on the sun’s farthest position above the horizon during summer and winter solstices. Drilled holes of different sizes embellish each of the four concrete elements and their patterns correspond to four constellations. The concrete tubes concentrate the view of the landscape and the light, sharpening one’s perception of the seemingly boundless desert panorama. Despite their industrial production, the Sun Tunnels do not seem out of place because both their colour and their material fit into the desert landscape. The artist conceived the work as inseparable from the site, because of the specific local topographic contour, formed the piece down in the last detail. The artwork become like a landmark in to the open field.
“The panoramic view of the landscape is too overwhelming to take in without visual reference points. The view blurs out rather than sharpens. Through the tunnels, parts of the landscape are framed and come into focus.”

Nancy Holt
by limiting the unlimited is possible to give human scale to the infinite
With the change of scale or the strict selection of certain elements reality can be altered and all of the sadness becoming the representation of something different than it actually is. Therefore reality is relative and is strictly linked to our sensory perception of things and on our memories of those experiences.

“The meaning of a work of art lies not in its forms but in the images transmitted by the forms and the emotional forces that they carry.”

Juhani Pallasmaa
sand drawings - Therschelling
sand drawings - Therschelling
4. CONCLUSION

In a way, what the research wants to demonstrate is, how primary elements such as: light, simple shapes, natural materials and symbolism should become the main tools for the design process. This kind of architecture that the research leads toward, can be considered almost as a critic against the usual design, where the architectural objects are usually designed as protagonists in the space without any dialogue with the nature and the surrounding. Hence, in my design product the architectural object becomes a medium for humans’ perception of the natural environment.

Inwardly the structure should be a medium to lead ones attention exteriorly and create an intimate connection between the two. Architecture is the transitional point, is the edge between nature and artifice and it is on this precise edge that the dialogue takes place. This edge should defines but not limits, should be like a filter, a transitional space able to create a tension but at the same time be a connection between two different realms such as nature and build environment.

The architectural object is considered as an enhancement of the natural landscape, a spatial research to achieve a place for harmony between human and nature. The same goes for the shape of the architectural object. Inside the condition of being in a pure form with an instantly understandable geometry, the space washes away any attention towards the architecture itself. Ultimately the form is a function of the purpose, the contemplation of nature.
THE SPATIAL INTERVENTION WANT TO REMINDS US:

Of the essence of human life
Of the existence of different realms
Of other feelings that architectural spaces can evoke
Of ways of designing for repose, reflection and solitude in a world that usually places emphasis on striving, action and noise

The goal is a different way of envisioning spaces, less “hot” and dynamic and more deep and subtle
After analysing all the previous topics and references, I came to conclusion that the architectural object that I want to design must be explored as interplay between nature and a composition of forms. This exploration focuses on the relationship between inside and outside in order to create a place for the contemplation, which unites nature with the man-made.

Architecture involves the interaction between nature and the man-made. Because architecture must be built upon the land, a relationship is established between the architecture and its surrounding. While there are several types of relationships that can be established, this thesis project deals with one in which a dialogue is created between the two. The architecture acts in response to nature.

Playing with forms in architecture sparks an interaction between a person and his spatial world. This interaction can provide a feeling of freedom and sense of discovery. The interaction between a person and this spatial world is the simulation and catalyst for creativity.

The goal is to create a space which can become like a "house of inspiration", which will engage individuals with themselves and others, and where nature would serve as a common source of inspiration and meditation. The final design will be a composition of forms which uses the relationship of the inside-outside in order to reveal the qualities of the location and unite the artificial object with nature.
The task of architecture is not to entertain us, or to suffocate us with impressions of witty formal investigations, but to create the silence, calmness and concentration that would allow us to experience the beauty of the world and life around us. Architecture should be humble.

The architectural product must be composed by a sequence of spaces able to point out views, feelings, and sensations.
The project will be a conscious intervention in the island of Terschelling. Terschelling is an island in the North sea, part of the Netherlands’ territory, one of the West Frisian Island belonging to the interstitial zone called Wadden Sea.

The landscape in this area is characterised by a continuous transition between different kind of landscapes, part of which natural and part of which modified by humans.

The project will be a transitional element in its own and connector at the same time, since it is placed on the border between the wildest part of the island, in the extreme east (the Boschplaat | east Terschelling) and the most touched part of the island on the west.

It is understood that the wild nature on the island is beautiful in its pure state and that this beauty could never be recreated. This project, however, is about creating an architectural space which reveals the beauty and the soul of the island in new way.

From north to south a straight path will shelter and direct the users movement, and at the same time connects the different buildings.

This straight ‘line’ will go from the sea to the dunes, from the pound to the prairie and from the prairie to the bushes following a common language.

A linear route will permeates the nature with a diachronic rhythm, touching the land, fading away, merging and rising again in the mute maritime landscape.

This Island could be considered as a perfect location for people to hide, to
rest, to disconnect from cities and listen to the silence. In a three-dimensional landscape a symbolic dissection of nature opens the body of the earth to the blind eyes of everyday visitor. Soil, water and air reveal their hidden presence, unveiling the invisible realities that are under our eyes constantly but that nobody sees. This architecture is understood as a series of spatial experiences that guide people to the rediscovery of their inner self and the natural world.

The immense emptiness of the dune’s landscapes, radiate a strange appeal and emotional power. These setting erase the traces of man and evoke an experience of timelessness. The almost total absence of vegetation exposes the naked skin of the earth and turns the landscape into a tactile and muscular experience. The landscape becomes like an extension of the human skin. The sublime vastness of the location provides a ‘tabula rasa’ for the design of this new creative element, which will be capable of putting into connection man and nature. Here, among nature’s heart will stand the new intervention, a building with a concept of nature’s elements and spiritual retreat.

Simplicity is the key word in the whole project. This building is created for physical and spiritual rest and so it has to be as clean of detail as possible. In this space one can relax and be in one with themselves and nature. This project provides a most natural enclosed environment that isolates you from
the outside world but doesn’t allow you to lose contact with it. The design process of the building is therefore relying predominantly on intuition. The design should be able to provide a space of intimate experiences; the sound, smells, tactile qualities, and moods should be in a way considered more important than the object itself. The act of seeing through the window or entering the door is considered as first moment of interaction. An architecture that develops in its deliberate simplicity, that gently nudges people on to a more engaging multisensory experience and heightens the awareness of actually being in the place.

Great effort was invested to minimize the physical impact of the buildings insertion in such a fragile environment, while at the same time attempting to create a place that would serve as a backdrop to life and strengthen the sacred connections to the awe-inspiring mystical landscape.

Our experience and sensibilities can evolve through reflective and silent analysis. To open ourselves to perception, we must transcend the mundane urgency of “things to do”. We must try to access that inner life which reveals the luminous intensity of the world. Only through solitude we can begin to penetrate the secret around us. An awareness of one’s unique existence in space is essential in developing a consciousness of perception. In a way it can be said that we shape the building and the building shape the nature and us.
The subtle modulation of sharp edges, cleanliness and smooth surfaces are what stimulate our senses and therefore our perception.
Architecture is a kind of anatomy

Architecture is like a body; movement, balance, distance and scale are felt unconsciously through the body as tensions in the muscular system and in the position of the skeleton and inner organs. In a way, the works interacts with the body of the observer and the experience somehow mirrors these bodily sensations of the maker.
The SPINE is able to hold the whole structure, to allow the movement and also to give a sense to the whole.
Breaking the geometric rigidity of the line, while maintaining its meaning and its directional function.
Even if just by the use of horizontal lines is visible from this drawings how many different compositions is possible to create. Therefore even when using the simplest elements is possible to create a certain level of complexity.
The transitional moment
from darkness to light

dissolving matter

from being lost to being guided
Dissolving matter
landscape I how the building dialogues with the landscape
the building 1 floorplan - elevation
the building | cross sections
labyrinth | initiation
sky | transition

Light View Sound Proved
horizon | contemplation

LIGHT VIEW PROVED
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