



THE GRAPHIC ESSAY OF AN ARCHITECTURAL ADVENTURE

E L L I S S U M



ELISYUM

Architecture as a Recovery and Treatment Tool



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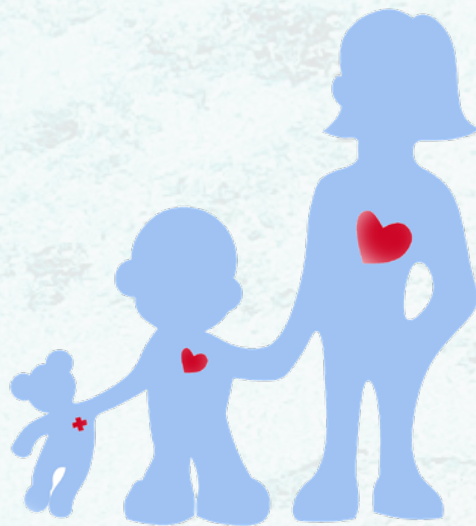
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Titel:

Elisyum- a Graphic Essay of Architecture as a Recovery and Treatment Tool



LUND
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Thank you Elin, Per-Johan, Anna, Ann, Min.....

Abstract

The idea of orienting the design process towards the well-being of the patient is not something new in the world of architecture. That the form follows the function is usually but what must be taken into account is the dynamics of the process of understanding human needs. With each day that passes, complex changes of different kinds affect the human being and society as a whole in an unalterable trajectory.

The disciplines and the arts try to follow this trajectory and sometimes even to get ahead of it. Architecture is an art of humanist nature par excellence, since it tries to create spaces for life and emotions, but delving into certain aspects of a person's life, one can reach the question: should the architects' skills be extrapolated towards aspects as concrete and sensitive as, for example, the medical field of childhood cancer?

The interest for a more in-depth look at the role that architecture can claim in the treatment and healing process came after reading some studies that affirmed that in the case of cancer, the psychological factor had a much greater negative impact both on the patient and on his family than the disease itself.

This thesis tries to bring the reader the necessary information to understand the complex process that begins from the moment of receiving a cancer diagnosis to the point in which the hospital environment takes over the universe of the affected child. Focusing on the two perspectives of the hospital environment - what it represents and what it inspires - this thesis searches to build a dialogue between the patient, the factors of influence and the architecture.

The principles outlined and extracted throughout this thesis constitute the creative vector of the graphic proposal that comes to complete this work.

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The northern beaches
of Loma.
Foto 1: the author 2023





INTRODUCTION

The idea of the Elysium project has arisen in a first phase from the intention of delving into the dynamics of the architect/architectures roles and how these ones adjust to the changing demands of a multifaceted society.

Starting from the basic definitions that describe the architecture, my intention was to extrapolate the social role of the architect, integrating it into a mainly healing context. In this way, the architect should come to identify and answer questions that dematerialize the classical formulations and demonstrate the capacity for transformation and for updated meanings of the architecture.

With almost 400,000 kids suffering from cancer each year (WHO 2021), my research will aim to analyze the implications of cancer treatment effects in pediatric patients, initiating a debate on the position of the architecture both in the healing process and in the prevention of trauma.

The following research is based mainly on the analysis of four sources of information:

1. Speciality literature on childhood cancer, psycho-oncology, psychology of children with long-term hospitalizations, researches on the recovery of sick children.
2. Studies on the therapeutic effects of terrestrial/marine nature.
3. Specialized literature on construction of hospital centers.
4. The interviews carried out by the author with medical personnel specialized in childhood cancer, child psychologists and relatives of children affected by cancer.

The treatment of serious diseases that have marked our century such as cancer for example, depends largely on the pharmaceutical industry, early detection and treatment technologies but this would only be a simplified approach.

Extensive studies that I have used for this research document with great precision not only the implications of this disease in all the dimensions of the patient's life, but also the factors that could have a great influence on the complex process of healing.

The existence or lack of certain stimuli like family support, own space, educational programs and information can mark critical points in this process, and it is precisely here where the possibilities for new visions open.

The following data and descriptions regarding the disease have the role of introducing the reader to the complex relation between a cancer diagnosis followed by its treatments and the effects of it, along the uncertain path to the complete healing or to the death.

At the same time, this field investigation try to raise awareness and sensitize about a real existing problem in the system that affects the quality of life of child patients and theirs families.

As we will see below, this complex diagnosis/treatment/effects/results- relationship depends on many factors and variables that can radically influence the result, and which dinamic transforms this relationship into a true algorithm.

Inevitably at this point the questions arise:

How would be possible for architecture to claim an more active role in this algorithm?

Would it be justified to move away from rational and traditional principles and push design in a radical way towards the well-being of the patient, even more so when it comes to a child?

What would happen if we try it? WHAT IF?



View Through a Window may Influence Recovery from Surgery (Ulrich.1984)

Kid with leucemia

Foto 2: medonline.at 2017 downloaded 2023

DIRECT RESEARCH



ÄR DU EN FÖRÄLDER ELLER VÅRDNADSHAVARE TILL ETT BARN SOM UPPLEVER ELLER HAR UPPLEVT SVENSK CANCERVÅRDSMILJÖ?

Du kan vara med och påverka den svenska framtida cancervårdsmiljön. Jag letar efter föräldrar som vill medverka i ett samtal kring dem och deras barns uppfattning om den sjukhusmiljö de har vistats i. Syftet är att kunna designa framtidens behandlingsklinik, skapat baserad på barnens behov. En plats som är ett hem, en miljö för lek, lärande och lugn.

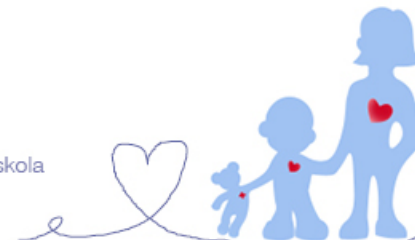
Behandlingshemmet är till en början designad inom ramen av en examensuppsats i arkitektur, med hög potential att förverkligas.

Samtalen kommer vara utformade som ni finner bäst. Jag kommer ha förberett några frågor, men känn er fria att komma med egen input om ni vill. Vi kan ses digitalt, fysiskt eller prata via mail.

Återkom till mig innan sista januari 2023 om ni vill vara med och bidra med er kunskap och era erfarenheter.

Tack för er tid!

Vänliga hälsningar
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Direct dialogue and observation as data sources for this thesis.

Initially, the intention of this thesis was to exclusively use as a basis information obtained directly from the interest group, in this case children affected by cancer and their families. Health personnel and administrative personnel from the local hospital setting have subsequently been added to this group.

But given the complexity of the subject, it has been necessary to resort -in order to establish references- also to specialized readings.

In this section I will refer exclusively to the survey carried out for this thesis and will explain what it consisted of. The study carried out on the time spent by the children in the aquarium will be described in the second part of the project when I will justify the constructive choices.

In the first phase, four interest groups have been identified:

A **first group** that includes children who have gone through this experience and relatives.

A **second group** includes medical personnel directly involved in the treatment of childhood cancer, and this includes both doctors and nurses.

A **third group** refers to the executive-administrative staff of the medical units dedicated to this disease.

A **fourth group** included psychological personnel specialized in sick children.

Children and family.

To contact family groups, the announcement that appears at the beginning of this chapter has been published on the media channels of the Association of Children Sick with Cancer (Barn Cancer Fonden), in addition to using my own channels and relationships. A total of 18 contacts have been established with families of children who have gone through one form or another of cancer.

Of this number, only 13 reports have provided very relevant data for the survey, the other 5 reports contributing more from the perspective of the relatives, given the fact that they were children of a very early age (2-4 years of age).

The pattern of the interview consisted of a base of questions - around 27 questions and a totally free conversation in which the family had the possibility to relate the experience from their perspective and in their own way.

The information compiled through this group brings the following relevant data:

Most of the reports coincide in the opinions about the hospitalization experience from the perspective of the children and from that of the relatives. The lack of spaces, the possibilities of personalizing the environment, the social, economic or other changes that this experience has brought about, the need for integration programs and coping with both the direct and secondary effects of the disease, were the main themes of the interviews.

The broader debate has been provoked, however, by the two questions that **have been present for all the groups**:

1. What is considered to be the position of architecture/architect in the healing process?
2. If there was an "open bar" from an architectural point of view, how would they themselves build the hospital for their children?

Medical staff

In order to contact the medical staff, direct visits have been made to the hospital units. Of the 4 specialists contacted, three have agreed to give their point of view in short conversations with a reduced number of questions, a situation due to the intense schedule that the medical staff has. The group included two doctors and a nurse. The questions to this small group have referred - among others issues to the current working conditions of the personnel dedicated to childhood cancer, degree of emotional involvement in the job, objective and subjective needs of the personnel involved. A reduced set-three questions have referred to the special and specific needs of the affected children and their families from the perspective of the medical staff, and another set to the immediate needs of the medical staff in order to generally improve the healing process.

Executive-administrative staff

An attempt has been made to contact three senior management officials and an interview has been obtained with probably the most suitable person for this study, from the perspective of the quantity and quality of the information obtained. The interview has contained a set of about 50 questions that have provided a large amount of specific information with reference to the special needs of children affected by some form of cancer as well as children affected by so-called "rare diseases", whose effects they bear many similarities with those of cancer. In addition, in this interview, the situation of pediatric patients with a pessimistic diagnosis has been discussed, putting into discussion the possibility of designing specific spaces for this group.

The most relevant information obtained from this interview refers precisely to the limitations of the pediatric cancer patient and how these limitations are reflected both in the design of the environment and in the nature of the materials used. It was precisely after this interview that it became clear that pediatric cancer is a world apart, where the same theories and rules of the rest of the medical field do not always work.

Specialists in child psychology

Of the three professors at the Lund University specializing in child psychology, none have agreed to be interviewed for this thesis.

Conclusions:

It is quite true that the number of surveyed groups is quite small for very edifying conclusions to be generalized. The time allocated to this part of my thesis was quite short - a total of three months. My interest was mainly to find a certain number of real references, from accounts obtained first-hand with my own questions, which provide me with information that will serve me together with the studies carried out by specialized researchers, as a guide in the design process.

In this way, at least virtually, I have been able to involve everyone who has taken the trouble to dedicate their time answering to my questions into the design process, creating in this way something like a common vision.

I. CANCER PEDIATRIC PATIENTS SPECIAL CONDITION- medical perspective

When we talk about treating childhood cancer, we should NOT think of small adults

(Jesús Sánchez Ruiz, Molecular Biologist, 2018-*Differences Between Childhood Cancer and Adult Cancer*)

Childhood cancer has its own biological, psychological and social characteristics and effects, which differentiate it to a large extent from cancer in adults

(Mendez et al . *Atencion Psicologica en el Cancer Infantil-PSICOONCOLOGÍA*. Vol. 1 pag 139. 2004).

1. The cancer diagnostic and the fear

Key words: childhood cancer, psychological impact

Numbers

Every year in Europe some 15,000 children are diagnosed as new cancer patients and it can be said that it is the disease with the highest number of deaths among infant patients (Hernandez 2020). Currently, Europe enjoys a high cure rate, around 80% while in countries without economic and technological development this rate is between 10 and 20%.

It should also be remembered that underdeveloped countries are the ones that present 80% of the total number of childhood cancers that are registered in the entire world.

Even with this promising percentage in Europe, cancer is the first cause of death in children due to disease. From the perspective of numbers, childhood cancer cannot be considered a frequent disease, but rather a rare disease, representing only 3% of all cancers (Hernandez 2020).

Cancer-its mechanism

In the specialized literature can be find that what we group today under the name of CANCER is in fact a large and diverse number of diseases and conditions(Méndez et al. 2004).

What these have in common is the uncontrolled growth and spread of abnormal cells in the body. While normal, healthy cells grow, divide, and then die, cancer cells continue to divide and accumulate, forming tumors that take over healthy tissue. Cancer cells have the ability to travel through the lymphatic system or blood to other parts of the body to continue multiplying (Méndez et al. 2004).

Causes of childhood cancer

The causes of most childhood cancers are not known. About 5% of all cancers in children are caused by an inherited mutation. It is thought that the most cancers in children, as well as in adults, arise as a result of mutations in genes that cause uncontrolled cell growth and ultimately cancer (Hernandez 2020).

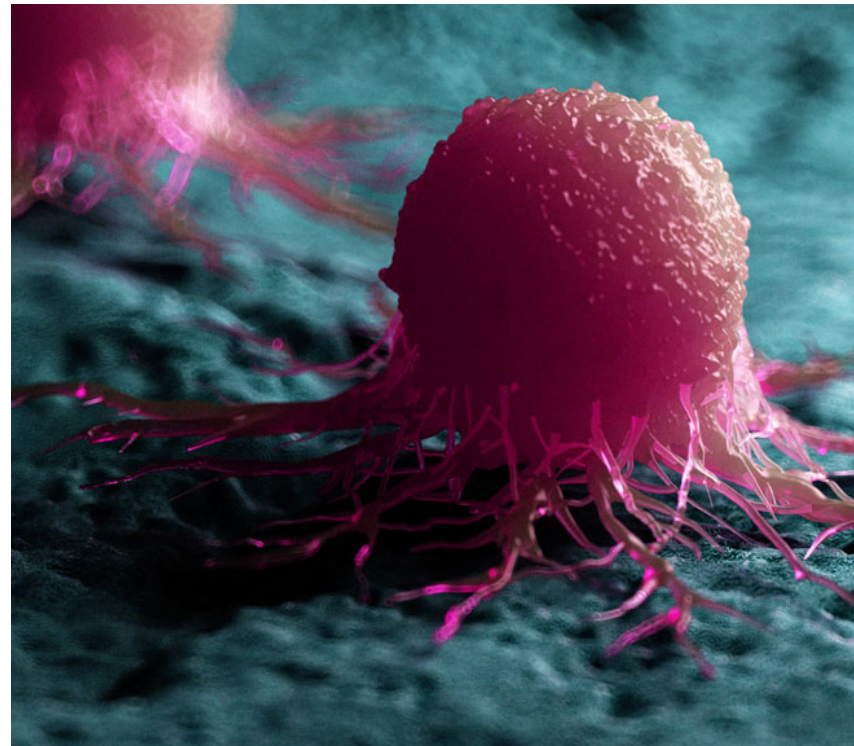
The important thing is to understand the difference from the biological point of view between cancer in adult patients and childhood cancer. In adults, this multiplication of cells that can mutate and generate the disease can be associated with the processes that arise in the human body with age and with the increase in risk factors such as alcohol or smoking. In the case of the child patient, these factors cannot be taken into account, which limits the ability of medical researchers to design cancer prevention strategies in children (Ruiz 2019)

Cancer diagnostic- a breaking point

A diagnosis of cancer in a pediatric patient involves a wide range of emotions that will depend on their level of development, age, support from family and friends. Fear, anger, loneliness and depression are the main feelings that can take over the child patient (Delgado Hernandez 2020).

At the moment the diagnosis is confirmed, we are already witnessing an apparent resting of identity of the child since the child becomes a patient and therefore the target of treatments and complex medical procedures that almost always constitute a new and hostile world for them.

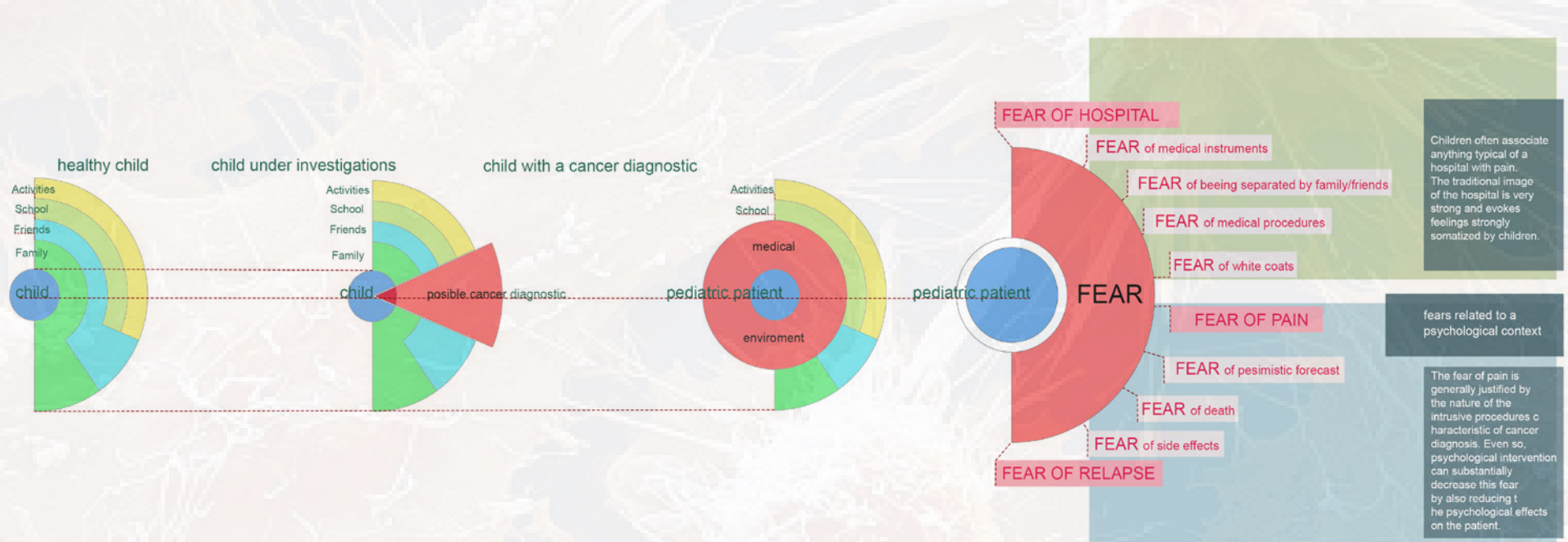
Only the status of “patient” itself carries connotations of suffering and pain for the one affected by this disease (Jencks 1995).



Cancer cell invading healthy cell.
Foto 3: <https://www.nsta.org>

Hierarchy of priorities in environmental circles of the healthy child vs cancer patient

This diagram represents a graphic expression of the changes in a child’s environment caused by a cancer diagnosis and is supported by the conclusions drawn by the author based on the information provided by the interviewed families.



These conclusions are also supported by studies related to the psychological impact of the diagnosis in the pediatric patient. In this way, it is considered that in the case of childhood cancer, *the most traumatic experiences are related to hospitalization, medical procedures, side effects of treatment and the need for isolation, affecting them not only physically and mentally but also at a mental level. social and school, both in the hospital and at home* (Juan Manuel Ortigosa et al - *Psychological Coping With Invasive And Painful Medical Procedures In The Treatment Of Childhood And Adolescent cancer: The Cognitive-Behavioural Approach* pag 413)

The results of numerous studies reveal that following a cancer diagnosis, children begin to suffer from sleep problems, anxiety, dependency, reactions also shared by the rest of the family. Especially during childhood is when long periods of hospitalization lead to greater effects, assuming for the patient the separation from his family and a new environment related to pain and death (Casales 2015). Both the disease as well as the treatment itself or even the idea of hospitalization cause a wide range of effects in the patient whose severity is comparable to that of the disease itself.

Faced with the perspective of hospitalization, children may manifest anticipatory anxiety about medical procedures. They also feel disturbed by the fear of cures, white coats and medical instruments and procedures, by taking certain drugs, by sleep and by pain. (Xavier Méndez*, Mireia Orgilés*, Sofía López-Roig** and José Pedro Espada** PSYCHOLOGICAL CARE IN CHILDHOOD CANCER 2004 page 141)

The general problem with cancer treatments is that it tend to be long-lasting, intensive and especially intrusive, assuming long stays or numerous visits to the treatment center. During this treatment, which often involves numerous transfers between different health centers, the affected child faces a series of extremely stressful and painful procedures such as surgery combined with chemotherapy, or blood extraction (Méndez et al 2004).

One of the especially painful procedures is the extraction of bone marrow for the biopsy necessary to detect leukemia, a form of cancer with a greater preponderance among children.

The process consists of introducing a thin needle between the 4th and 5th lumbar vertebra to take a sample of cerebrospinal fluid or, where appropriate, to inject a drug (Alvarez and Marcos, 1995)

Other procedures are better tolerated but generally have side effects that also represent a stress factor for the patient. For example nausea, vomiting, anemia and hair loss are only the most visible of the side effects of chemotherapy (Méndez et al 2004).

Medical environment-human environment

The treatment of childhood cancer requires, in addition to the already mentioned painful procedures, sometimes long or frequent periods of hospitalization. In this way, a new environment is introduced into the patient's life in which the child must continue with her life and with part of her routines, but also new interactions - with the medical staff in this case. It is precisely the medical staff that detects and evaluates the physical and emotional changes that the pediatric patient presents (Hernandez 2020).

Children very quickly develop responses conditioned by the anxiety they feel in the face of potentially painful procedures, leading to phobia of needles or sleep problems (Alvarez and Marcos, 1995). This fact represents a serious inconvenience for the medical personnel who must carry out the therapies, since they can find very violent reactions on the part of the patient, such as screaming or physical opposition. These reactions make the work of medical personnel even more difficult, in addition to increasing the stress of the family members, often leading to the need to repeat the process (Alvarez and Marcos, 1995).

2. Cancer- a family disease

Key words: family, mood disorder, anxiety

Many parents consider their child's illness as a death sentence, without any hope (Anaís Delgado Hernández -*Aspectos psicológicos de la oncología infantil y la actuación de enfermería: una revisión bibliográfica* Pag 11)

I have considered it necessary to briefly state these aspects of the disease and its direct effects precisely to highlight the mechanism that leads to serious effects of a psychological and social order not only on the patient, but to the same extent on the family.

The diagnosis of cancer is always an unexpected and traumatic experience. The quality of life of the affected child changes radically and entails implications in the lives of the parents, which is why this situation is usually considered a family disease (Hernandez 2020).

When a child falls ill, the whole family falls ill with it, so the treatments must be comprehensive and refer to the entire family nucleus. For any family, regardless of its ability to adapt, cancer is a destabilizing element that requires putting into operation the personal resources that are available (Casales, *El Cancer en la Infancia y Adolescencia: Consecuencias en el paciente, la familia y papel del asociacionismo* 2015)

Unlike adult patients, children are closely linked to and depends on the family environment. Their room in the house where their parents live, the surroundings and the social ties specify a well-determined environment for a child. Any change or disturbance in this environment has the capacity of affecting even healthy children. Separating parents, renovating a home or moving to another city can have very different effects on a child than on adults.

Alterations in their reference system attract- in most of the cases, changes in behavior or even new habits.

The implications of a cancer diagnosis are much more radical, given the fact that it forces the child and their family to accept a new

reality that entails a change of priorities and that, in addition - although in a small percentage (Sanchez Ruiz 2019) - has the possibility of ending up in a death.

From the moment of diagnosis, the children acquire a new status - that of a patient, but they continue to be children with a social and family circle who must face a new environment imposed by the perspective of hospitalization and which is always associated with the most traumatic experiences (Ortigosa, Mendez and Riquelme 2009). According to the parents interviewed for this research, children already diagnosed who had started some forms of treatment have had difficulties continuing in the social circle they had.

The transformations due to the treatment, the fatigue, the time that they had been absent from the school environment or from the circle of acquaintances have visibly affected their relationships with others. The fact of not being able to maintain continuity in the studies or in other activities in which the child participated before the diagnosis breaks the relationship between the child and his previous life.

In addition, I have been able to understand from the accounts of the families interviewed that that a child affected by this disease usually loses an average of one year or even two years of student life, which can be a serious problem and a setback for the child's life once the child has recovered.

According to the survey carried out, even the mere fact that the child had received the diagnosis had provoked certain reactions and attitudes in the school environment.

Without intending to go further than a simple conclusion, the family members surveyed consider that society is not always prepared or knows how to react to a child visibly affected by treatment and trying to lead a normal life.

A diagnosis with repercussions on the family

The spectrum of emotions that the sick child faces is matched by the other members of the family and especially by the parents. From the emotional perspective, the family can experience a very wide spectrum of feelings such as anger, guilt or denial (Hernandez 2020)

According to the parents surveyed, questions such as: “why my son” or “how could we have avoided it” may arise. It is also common for the family to find it difficult to accept the diagnosis and therefore look for other specialists who can confirm the situation.

Once the diagnosis is accepted and treatment started, mood disorders and anxiety manifestations generally increase, leading to situations in which marital problems worsen or even new conflicts appear (Mendez et al 2004)

A study carried out in Spain on a group of parents of 26 children who have successfully completed cancer treatment collects their testimonies about how they experienced the diagnosis and the treatment period. All described the entire period associated with their children’s illness and pain as a very intense experience, an experience accompanied by feelings such as helplessness or guilt (Mendez et al 2004).

The same emotional traits are present in the group of relatives interviewed for this study. At the first impulse of not believing/ accepting the diagnosis is added the need to quickly make a decision regarding treatment and how to deal with the situation. Another feature of this diagnosis is that it also leaves the relatives and the patient uncertain about the final result of the treatment and - in the case of a cure - the risk that the disease will return (Mendez et al 2004).



Foto 4: <https://wechope.org/support/talking-about-your-childs-cancer-diagnosis-with-family-and-friends/>

II. THE PHYSICAL SPACE AND TRAUMA PREVENTION

Firstly, no patient should be asked, however kindly and however over-worked the hospital staff, to sit in a corridor without further inquiry, immediately after hearing they have an estimated three to four months left to live

(Maggie Keswick Jencks, A View From The Front Line, 1995, pg 20)

90% of the time in the hospital we have spent waiting in the corridors (mother of a 9 years old girl with cancer- Sweden 2022)

He had neither the time nor the space to do something to feel at home (mother of an 11-year-old boy with leucemia-Sweden 2022).

1. The space and the cancer patient's needs

Maggie Jencks had understood this aspect-and she was not the only one-when she emphasized the importance of *being able to have a warm and friendly space, a small haven where cancer patients (...) could help themselves get back on their feet.* (Maggie's Centres: Marching On by Marcia Blakenham pg 28)

Next I am going to describe the routine for a year of a family of a 10-year-old boy with cancer in a region of Sweden. This is an extract from one of the interviews carried out with the relatives of children affected by any form of cancer and which presents common elements with the other stories.

The possible problems that can be deduced is due solely to a problem of physical space and has nothing to do with the professionalism or dedication of the medical personnel involved in the treatment.

The only objective is to highlight the importance of the simple existence of available physical spaces and what a difference it would make.

After the diagnosis they had started treatment at a medical center located about 40 kilometers from their residence. From the beginning there was a fundamental problem: the lack of rooms for children. Parents would gather in the hallways waiting for the child to receive a location. Once the child received a bed, it was expected that the child would be ready for treatment - in this situation, chemotherapy. The relatives used to take turns waiting for them to continue through the corridors. Once the treatment had been administered, the time was awaited when the child would feel well enough - pigg was the Swedish expression used - to be sent home. This entire process took a couple of days or more. But once home, complications arose related to the child's delicate state of health -usually infections that meant taking the child to emergency services at a different medical facility.

Other hours or days waiting with parents in the hallways. As soon as the child was stabilized and back at home, it was time for a new dose of treatment.

Perhaps the problem needs to be approached from different points of view: The general opinion of those interviewed has been that both for the child and the family, a prolonged admission to the hospital would have been more convenient instead of repeated visits. This opinion is also supported by the medical staff interviewed. In the ideal situation, a prolonged stay instead of intermittent visits would have obvious benefits for both the family and the child and therapy.

Reasons

The surveyed group had to answer- among others- to the following question:

Do you think that it would have been better for you in general if the child had benefited from a longer stay in the hospital instead of having to take him or her repeatedly for treatment?

My expectation on this question was actually that the parents would always choose for the child to be at home as much as possible. I was wrong in my supposition:

From the family point of view, in the case of a prolonged stay, the child would have the opportunity to adapt better to the hospital environment, have continuity and new routines, which would positively affect the child's mental health.

The main problem related to the hospitalization of the child, in the opinion of the parents surveyed, consists in the fact that - due to the lack of spaces that allow a longer stay - the children have not even had an opportunity to personalize in any way their space.

And this is not the only aspect.

Parents -which in this situation represents one of the main pillars for the comfort and well-being of the sick child (Delgado 2020), should also take care of themselves and be able to put aside their worries, fears and feelings. This reality is reflected in their answers. The parents consider that, if the child had benefited from a continuous hospitalization, even if for a longer time, the following advantages would have been observed:

Obviously, the family would have saved a lot of time, stress, fatigue and worries regarding the child's situation. Knowing their children in a safe environment, with the necessary care, in a stable environment, the family would also have been able to resume part of their own routines and maintain a much more positive attitude.

Children channel most of what relatives are feeling and it is important that parents do not reflect negative aspects (Casales 2020).

Space as context and support for trauma prevention programs

Although the social aspect is one of the points of relevant importance in the integration process of the child patient, it is not the only one that requires physical space. Since the 1960s, psychology has actively sought to design and apply strategies that help pediatric patients and their relatives-parents, especially to face the disease and its effects with minimal emotional exhaustion (Ortigosa, Mendez and Riquelme 2009). Initially, it was about designing information programs and strategies to establish trust between the patient and the medical staff.

Currently, four general areas can be named in which research related to psychological intervention in the case of pediatric patients has focused (Ortigosa, Mendez and Riquelme 2009):

- Understand and reduce pain caused by medical therapies
- Recognize the consequences of the diagnosis in the long term
- Understand the distress caused during the diagnosis and after
- Know the importance of social relationships.

Simplifying, it can be stated that psychology has advanced programs for the prevention of trauma and pain that can be applied both during the diagnostic phase and during the treatment period (Mendez et al 2004). In addition to specialized personnel, these programs require infrastructure, space, and time. In many of these programs, the presence of the parents or the closest relatives/friends is required. We will briefly go through these strategies that can significantly improve the life of the pediatric oncology patient.

Distracting strategies

Basically it is about withdrawing the child patient's attention from the source of pain and redirecting it towards another type of stimulus, constituting one of the fundamental mechanisms found in most psychological therapies applied to pediatric patients (Mendez et al 2004). Distraction, imagination and relaxation/breathing exercises are the essential therapeutic ingredients to try to alleviate childhood discomfort generated by invasive medical procedures (Alvarez and Marcos 1996)

The target is to train the child to reach a certain degree of physical and situational mastery.

Oriented towards pain reduction, music therapy, hypnosis, filmed and audiovisual modeling are also used.

In the case of younger children, the strategy that stands out is the game. Here we can talk about the therapeutic game, development game and distraction game (Ortigosa et al 2009).

2. The child and the hospital

Leaving aside for the moment the psychological intervention in the prevention of traumas, we will be able to concentrate on the physical "container" of these programs: the hospital and its dependencies. At this point, an important question would be:

Is the child affected by cancer the one who must adapt / get used to the hospital or is the hospital environment the one who has to adapt / transform itself to respond to the vision and needs of the child?

Pediatric cancer patients, especially those undergoing chemotherapy, become conditioned by different elements of a physical nature. Often children suffer from nausea and vomiting even before the start of therapy at the time of entering the hospital. These reactions are the result of the association between the side effects of therapies already experienced and environmental stimuli such as the appearance of a nurse, waiting rooms or certain odors (Mendez et al 2004).

Studies show that patients who can benefit from a family environment that does not have much in common with the typical hospital environment - and here elements such as layout, color, lighting, openings, etc. stand out - demonstrate a much higher degree of connection with the environment (DuBose et al 2018).

The waiting room environment managed in such a way that it can offer a distraction for the pediatric patient such as music or games can contribute to making the medical environment less hostile.

In the situation of long-term hospitalizations, a good strategy to improve the comfort of the patient is to allow him to take objects or toys with him. In this way, the pediatric patient has the possibility of a better connection with the new environment, creating a more familiar environment (Mendez et al 2004).

III. MAGGIE'S CENTER- Human Dimension Orientated Architecture

Simply put, Maggie's centers are places where people feel at home and cared for.
(Raskin 2019)

Above all what matters is not to lose the joy of living in the fear of dying.
Maggie Keswick Jencks 1994

At the moment most hospital environments say to the patient, in effect: 'How you feel is unimportant. You are not of value. Fit in with us, not us with you'. With very little effort and money this could be changed to something like: 'Welcome! And don't worry. We are here to reassure you, and your treatment will be good and helpful to you'. Why shouldn't the patient look forward to a day at the hospital?
Maggie Keswick Jencks-A View From The Front Line 1994



First Maggie's center in Edinburgh by architect Richard Murphy
Foto 5: <https://citythreepointzero.files.wordpress.com/2012/downloaded 2022>

1. A human dimension of healing architecture

key words: healing, homelike feeling, well-being

*Healing is a holistic, transformative process of repair and recovery in mind, body, and spirit resulting in positive change, finding meaning, and movement towards self-realization of wholeness, regardless of the presence or absence of disease. Healing may or may not include cure, defined as the eradication of physical symptoms of illness or disease (Firth et al, *Healing- a Concept analysis*. 2015)*

At the moment the artist and landscape designer Maggie Keswick Jencks decided to start the innovative project that would later bear her name, she was already been battling cancer for years, a battle she unfortunately lost in 1995, shortly before the first center with his name in 1996. (Raskin 2019).

By then she had managed to mobilize prominent names in architecture such as Frank Gehry and Richard Murphy for the creation of a new space in which the fight against cancer could be carried out under different conditions, *nothing like the cold, institutional environment Maggie had found herself in* (BBC 2016).

Living first-hand the long process from diagnosis to its premature end, Maggie has been inspired to reformulate the value of a patient's time and the importance of the physical space in which they carry out their fight against the disease.

Her response was *A View from the Front Line*, an essay written in 1994 that describes the experience of being diagnosed with cancer and what it is like to live with the diagnosis.



A creative writing session at Norman Foster's Maggie's Centre in Manchester

Foto 6: © Philip Durrant

The fact that more than a thousand people have already used the first Maggie's center in the first year of operation demonstrates the strength of the Maggie Jencks legacy. From 2016 to the present moment, twenty-one Maggie's centers have been built in the United Kingdom and three in the world with the participation of important names such as Norman Foster or Zaha Hadid (Raskin 2019).

2. What is a Maggie's center?

According to Maggie herself, in the beginning she knew only what such a center should not be:

Nothing like dreary and dimly lit hospital waiting spaces, spaces that have little to do with the vitality and hope of patients (Jencks 1994).

Patients like Maggie needed a space where they could feel comfortable, away from the clinical context, where they could feel at home, communicate and receive information, have contact with light and nature, where they could meet and support other people going through cancer.

It is not a treatment clinic, but a complement at least necessary and totally opposite to a traditional treatment clinic.

What the people affected by cancer discover at a Maggie's Center may help them put a different perspective on what is happening to them and make a profound difference to their experience of living with cancer (Blackenham 2007).

Maggie Jencks understood the urgent needs of a human being who had been diagnosed with cancer and her legacy reflects this.



Up and below: Maggie's Center in Leeds, by the Heatherwick Studio
foto 7 and 8: Hufton +Crow, 2023



After documenting the services provided by the centers, I consider that it can be affirmed that the current Maggie's centers do not offer specific facilities for children, although it would be perhaps wrong to say that they are mainly oriented towards adults, but clearly they can be defined as spaces oriented towards the well-being of the cancer patient.

Although there have already been studies or previous investigations that bring attention to the potential of light or nature or color in the treatment of certain conditions and their effects, Maggie Jencks had the will and the ability to materialize at least part of these principles.

In my opinion, the greatest merit of Maggie Jencks' vision is not only to materialize spaces for those who struggle with this disease but also to push architecture towards an another dimension in its already important role in the healing process.

What Maggie Jencks unfortunately has not been able to witness is precisely the change that she herself had initiated, since the first center - the one in Edinburgh opened in 1996 (Raskin 2019)

The initiative for new Maggie's Centers comes mainly from doctors and consultants who have seen how important this synchronization of medical care and support is, and how well it works at a hospital which has a Maggie's Center operating nearby(Blackenham 2007).

There are currently 21 centers in operation in the UK, all linked to hospitals in the public health network. In addition, there are three other Maggie Centers around the world: one in Hong Kong, one in Tokyo, and one in Barcelona (Raskin 2019).

It is important to remember that Maggie's centers are spaces adjacent to the medical units that only complete a deficit in the planning of the traditional clinic/hospital concept.



Maggie's Dundee in Scotland, UK
Photo 9 © YDAM via www.azahner.com downloaded 2023



Edward Williams Architects' proposal for a Maggie's Center in UK
Foto 10: via www.edwardwilliamsarchitects.com, downloaded 2023



Maggie's center in Fife-Scotland by Zaha Hadid, finished 2006
Foto 11: /www.worldconstructionnetwork.com downloaded 2023

IV. ARCHITECTURE-THE POTENTIAL LINK BETWEEN CURE AND HEALING

The days of sterile, institutional children's hospitals and pediatric clinics are fading. All over the world, architectural firms are designing imaginative spaces, from colorful climbing structures for toddlers to sophisticated private areas for teens. The use of lots of natural light and scenic views are popular (Donna Jackel, 2022 , *Revolutionary pediatric health care facilities soothe, engage children*, Rochester Bussiness Journal)

The environment cannot cause healing to occur but can facilitate engagement in behaviors and emotions that support healing; the environment can induce physical and emotional responses such as happiness, joy, and relaxation; and the built environment can enhance individual control and functionality—all of which are antecedents to healing (Du Bose et al, 2018, *Exploring the Concept Of Healing Spaces*, pg 47)

Health is "a state of perfect (complete) physical, mental and social well-being, and not merely as the absence of disease".(WHO 2020)

"Architecture, in its conception, must be rigorous and at the same time human, since in its spaces the human being tends to go through deficiencies and go through critical moments of his life" (Bruno Reinheimer- *Arquitectura y Diseno en los Espacios de Atencion de la Salud*, 2020)



Ann&Robert H. Lurie Children's Hospital of Chicago, completed 2012

Foto 12: www.scb.com, downloaded 2023

1. One environment-two contexts

key words: anticipatory fear, burnout, work environment

The hospital environment is considered to be *a world into itself*, separated from the rest (Linebaugh 2013). One of the most particular aspects of the medical environment represents it - in my opinion, its “bipolarity”. By this term I mean the double projection that a given context can have at the same time.

The hospital represents one of the central elements of human society (Linebaugh 2013). For a large majority of people who are not professionally related to this environment, the simple image of a hospital can lead to associations of unwanted situations due to the fact that the most common relationship between a person and a hospital is that of patient-health center.

As we have already detailed before, the person who acquires the status of patient is already subject to stimuli from the medical environment that is different from other people who do not have any diagnosis. But at the same time, the hospital represents a complex professional and human character system, being the workplace of many professionals at the same time as spaces dedicated to teaching and research.

The burnout syndrome and the hospital environment

A large part of these professionals have as a daily routine to come into contact with the patient and therefore with their fears. In this way, throughout the research or therapy phases, both staff and patients share the same spaces and the same environment with its stimuli.

According to the surveys carried out for this study, the medical staff who come into contact with the pediatric patient also perceive a part of their concerns.



Ann & Robert H. Lurie Children's Hospital of Chicago, CT scanner
Foto 13: www.powerconstruction.com, downloaded 2023



The Royal Children's Hospital
Foto 14: John Gallings, downloaded 2023

Even the physical context - the hospital and its facilities - can affect the staff in the same way as the patients are affected.

In recent years, special emphasis has been placed on the study of the risks of psychological conditions in medical personnel in general and in resident physicians in particular.

A study carried out by a group of researchers from Barcelona-Catalonia and published in 2021 in the National Library of Medicine points to the weight of the work environment as a key element in cases of psychological exhaustion or burnout syndrome, with percentages of 60% of affected personnel in radiology and surgery residents, and 40% in oncology and family medicine personnel. The main factors of this condition are the hostile work environment, poor working conditions and high workload (Navines et al 2021).

An extensive study carried out in Sweden on 1300 members of the union of young doctors-SYLF (Sveriges Yngre Läkarens Förening) reveals that a third of the respondents consider leaving the medical field, one of the main reasons being the precarious work environment (Berglund 2019).

The difficulty that medical staff have to disconnect from the work environment and avoid excessive emotional involvement leads specialists to recommend that doctors, especially at the beginning of their careers, reserve a well-determined time for their own life and for their hobbies, with the purpose of maintain the balance between work and personal life (Marques 2023).

Strictly referring to the hospital environment, what is emerging as an efficient strategy for the prevention of Burnout syndrome is the provision of exclusive spaces for the relaxation of medical personnel, although in general there is an increasing tendency to eliminate this type of spaces from hospitals (Navines et al 2021).



Excessive workload and hostile work environment can affect the mental health of the staff (Navines et al 2021)

Foto 15: Getty images via : www.vardfokus.se, downloaded 2023

2. The hospital- the meeting point between a healing space and optimal work environment

Changing perceptions

To more efficiently illustrate the complexity of this context and how can be transformed, we can separate the medical environment into two basic interconnected components: a “software” part and a “hardware” part (see diagram below)

What we would call the **Software** includes all the components of the medical field that do not have an express physical materiality:

- techniques -procedures -therapies
- technologies that are in the possession of health professionals and used to combat/prevent diseases, etc.

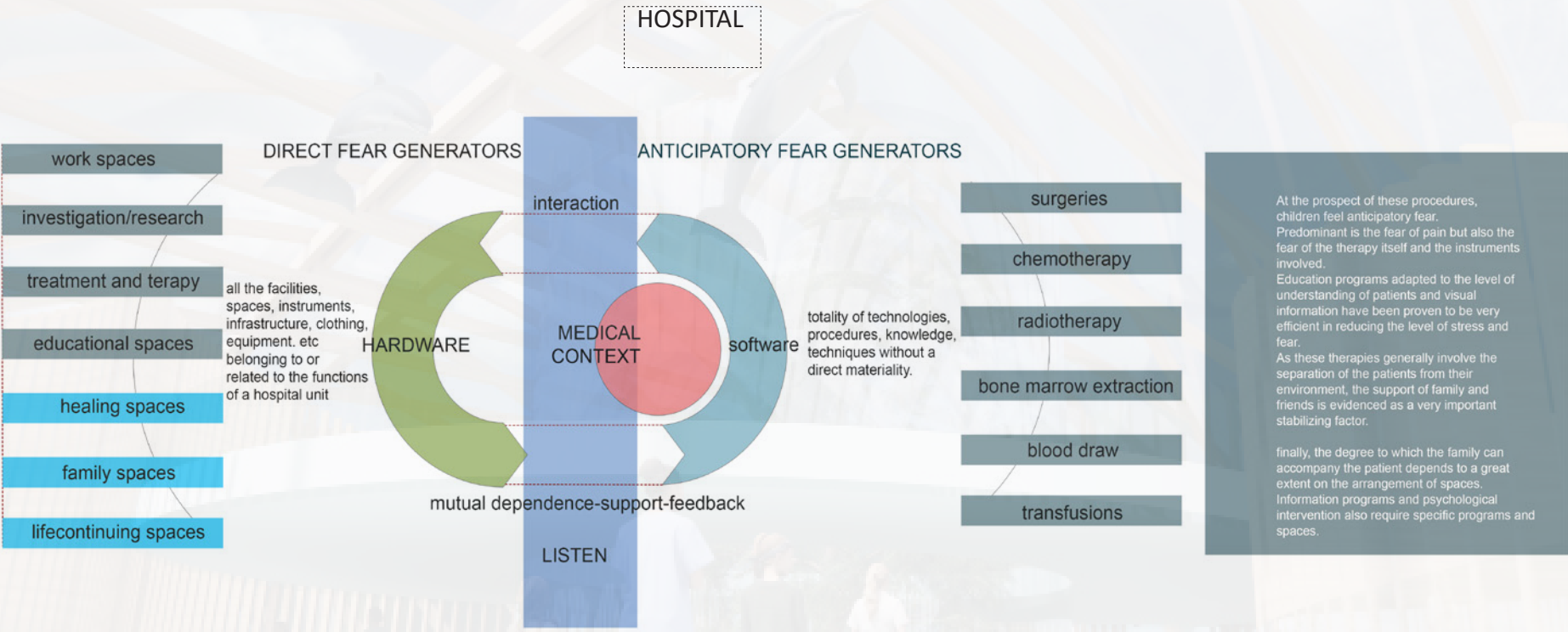
The character of these elements is mainly scientific and does not allow significant alterations. What can be changed is the perception that the pediatric patient may have regarding these therapies. From this side of the medical field, the strategies for approaching the child patient are related to distraction, communication - always depending on the level of development of the patient, with familiarization programs for the child and his family both with the medical procedures that make up the treatment, as with the hospital facilities (Mendez et al 2004).

A study recently published by the Vall d’Hebron hospital in Catalonia-Spain, affirms that the use of these informative kits that familiarize children with the radiotherapy room through virtual reality glasses has the ability to reduce the anxiety of Children in treatment by 50% before entering accelerator and inclusive manage to avoid sedation (Lobez 2023)



Medical staff of the Vall d’Hebron hospital-Catalonia-Spain. The staff presents the information kit in 3D digital format that familiarizes the pediatric patient with the processes and the radiotherapy room through virtual reality glasses.

Foto 16: via <https://www.linkedin.com/pulse/el-gran-%C3%A9xito-de-i-am-ready-es-reducir-las/?originalSubdomain=es>, downloaded 2023



The HOSPITAL

- represents : the container for the medical environment
work place, therapy place, educational space
- is the physical space where: painful procedures are performed (surgeries, blood draw, etc)
- must become : healing place, family space, lifecontinuing space

The hospital- a lifecontinuing place

A large part of cancer treatment therapies involve visible and annoying side effects, which can lead to children with cancer feeling marginalized in their usual circles, even more so when there are periods of absence from routine activities such as school (Mendez et al. to 2004).

The mother of a 9-year-old girl from Skåne interviewed for this study says that when her daughter tried to integrate into the classes after a relatively long period of absence and with visible effects of chemotherapy, she felt treated in a strange way by educational staff, since these staff seems not to be prepared for such a situation. But precisely the possibility of continuing with some of the routines prior to diagnosis is an important factor in normalizing the experiences (Mendez et al 2004).

In the fifth international congress of school organization-1998, the doctor in psychology Claudia Grau Rubio highlighted the importance that the possibility of continuing with the studies had for the pediatric cancer patient, this assuming for the cancer patient a message of hope in the future. and the possibility of continuing to develop social and cognitive skills.

With this purpose, Grau defended the model of an integrated school/hospital educational program that, in addition to good communication/collaboration between doctors-family-teachers, special spaces prepared in hospitals (Grau. 1998).

An important point to keep in mind is that the doctor-patient relationship is the basis of all medical acts (Maurinio 2023), where communication and trust are the main elements.



The hospital school program of Cincinnati Children's searches to provide normalization during hospital stays and to develop and maintain the academic skills (<https://www.cincinnatichildrens.org/service/c/cancer-blood> 2023)

Foto 17: www.cincinnatichildrens.org



Teachers help hospitalizad kids keep up in school

Foto 18: David Zalaznik

Humanizing the hospital

The **Hardware** of the medical environment refers to the part provided with materiality. Here can be included everything from medical instruments, uniforms, to the appearance of the hospital, the facilities or the physical location of the facilities. Generally, these elements have the capacity to generate strong reactions and anticipatory fear in the pediatric patient (Mendez et al 2004).

According to De Bello (2000) *the humanization of the hospital structure* can be carried out through:

- Remove the drama of the hospital building transforming the appearance of the facades, the material, incorporating interior yards, openings.
- Remove the hospital from the urban context and place it in areas with a lot of vegetation, good views and try a low-rise construction.
- The interiors should benefit from different furniture, the use of pastel colors and bright colors, seeking to eliminate the white colour.

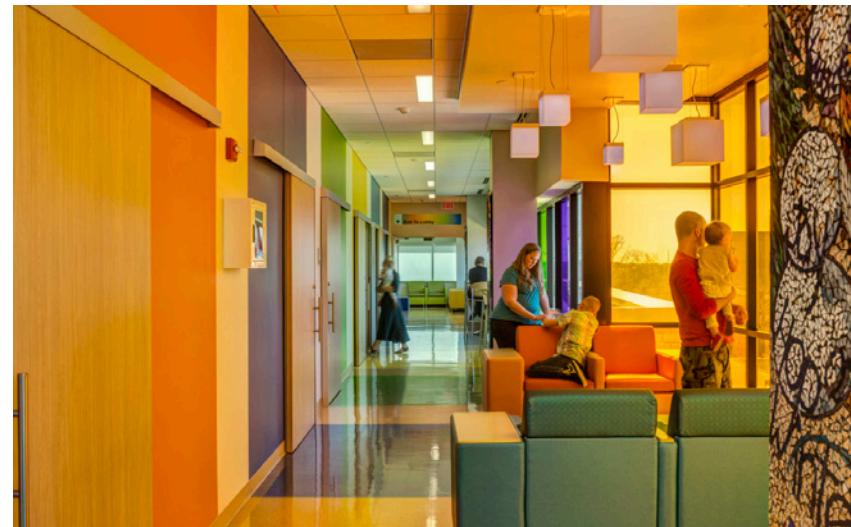
From the 1990s to the present, many medical centers have adhered to at least part of these principles, and Detroit Medical Center is one of them. It appears that the developers of the Children's Hospital of Michigan - the HED firm - have chosen to involve both medical staff and healthcare providers, patients, families and community members in the facility design process (healthcaresnapshot.com 2023).

The exterior in bright colors and inspired by the children's buildings blocks is far from the somber and serious appearance of classic hospitals meanwhile the interiors seek a design oriented towards both the patient and the staff involved, minimizing waiting times and improving orientation (healthcaresnapshot.com 2023).

The hospital emplacement is outside the urban areas and can be appreciated the wide spaces designated for the circulation of which the facilities are planned.



Detroit Medical Center – Children's Hospital of Michigan
Foto 19: John D'Angelo, downloaded 2023



Detroit Medical Center – Children's Hospital of Michigan
Foto 20: Justin Maconochie downloaded 2023

The built environment and the healing process- design strategies

In a rich-documented study entitled *Exploring the Concept of Healing Spaces* and published in 2018 in The Center of Health Design, researchers Du Bose et al identify and collect seven design strategies that generate environmental variables with an impact on the psychological aspect of the patient (the study focuses on hospitalized patients in general and does not make references on children or on patients affected by a specific disease such as cancer), in the social aspect, self-efficacy and functionality:

-Single rooms, East facing windows, presence of plants inside the hospital, patients housed in areas away from noise zone, windows facing nature, acoustic ceiling tiles, the presence of art, photographs that induce calm.

Only three of these strategies will be discussed below, returning to the others in the presentation of the project.

Single rooms

For the pediatric patient in general and the cancer patient in particular, hospitalization supposes a separation from the rest of life at the psychological level (De Bello 1999).

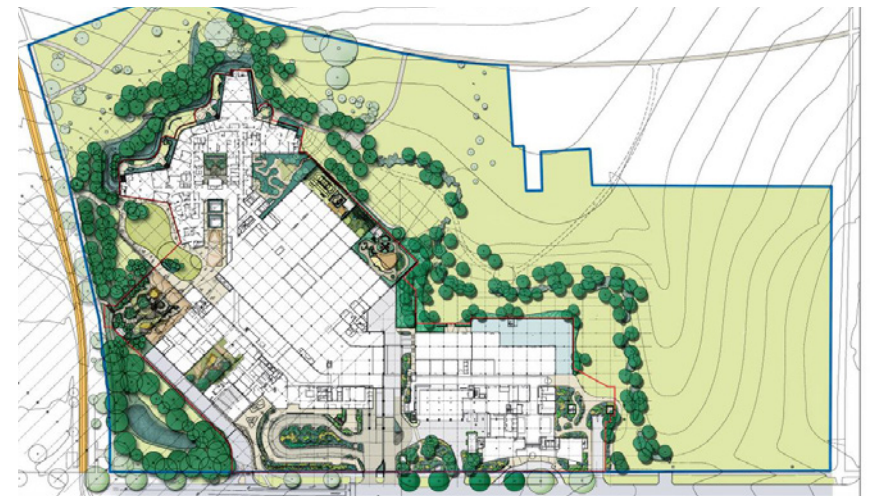
The possibility of having their own space that the child can personalize and create an environment that reminds him of his home, of the environment in which he felt safe and protected, constitutes the common element to which all the relatives interviewed for this thesis have referred to. Privacy is one of the most important aspects for the pediatric patient (De Bello 1999).

Also from the perspective of psychological coping with pain and anxiety, one of the basic strategies consists of allowing the pediatric patient to personalize the space they occupy through photographs, toys or the presence of those closest to them (Mendez et al 2004).



THE ROYAL CHILDREN'S HOSPITAL MELBOURNE

Foto 21: Billard Leece Partnership and Bates Smart 2011, downloaded 2023



THE ROYAL CHILDREN'S HOSPITAL MELBOURNE The hospital is designed in such a way that it can allow a true dialogue between the natural landscape and the built volume.

Foto 22: John Gollins 2012, downloaded 2023

East facing windows-a window view of nature

The use of natural light and the landscape as elements that facilitate healing has its roots in antiquity. Since ancient times the Greeks have practiced the cult of Asclepius - for the Romans Aesculapius, a son of Apollo. The temples dedicated to this healer served as places for therapies and complex rituals and were always located in close proximity to abundant nature, hot springs and views of the sea (Martin 2018).

These places turned out to be true healing spaces that were governed by the Greek motto that said that *physical illness can induce spiritual and emotional crises* (Lindebaugh 2013 pg 28).

It is worth mentioning that these temples used as true hospitals have coexisted and their cult has been followed at the same time with the development of the Greek medical sciences, without ever entering into conflict but rather complementing each other (Martin 2018).

Roger S Ulrich (1994) describes in *View through a Window May Influence Recovery from Surgery* the surprising results of an experiment carried out on two different groups of patients who had undergone surgical intervention. The findings revealed that the mere existence of a window facing nature in hospitalized rooms could influence the length of hospital stay and the amount of analgesics used to relieve pain.

In pediatric cancer patients, aggressive therapies such as chemotherapy cause the destruction of healthy red blood cells, resulting in a high degree of fatigue (Mendez et al 2004), which justifies Lindebaugh's (2013) recommendation that views through the windows should be accessible from the patient's bed and, to the extent possible, that would exist plants in the hospitalized patient's room.

3. Instead of conclusions

The purpose of this first part of my thesis is not to draw conclusions, given the fact that the complexity of this topic seems to increase with each new study found and it is difficult - if not even risky - to try to draw conclusions based on generalizations.

Up to now I have encountered some difficulty finding studies based on experiments or surveys carried out on representative groups of pediatric cancer patients. Most of the studies found and whose conclusions have been referenced in my thesis collect results from experiments carried out on groups of adults with different pathologies. In addition, the texts that explicitly refer to psychological coping in the case of childhood cancer use a very well-founded base in theories and also in extrapolations of results from studies carried out on adults. From what I have been able to understand after the many hours of reading for this thesis, cancer is a world apart, a condition that, due to its complexity and its implications, far exceeds the concept of a simple disease.

Even more so when those who suffer it are the children who in themselves are already a universe of dynamism vectorized by curiosity and hope.

The project below tries to build itself as a graphic essay, as a materialization of several of the principles mentioned above, some of which are even taken to the extreme. It does not seek to be a rational or economically viable proposal, but rather an architectural expression that does not neglect rational principles but understands that it steps above conventional lines.

Surrealistic, successful or impossible? Difficult to answer, but what if it was done?

LOCATION:

LOMMA-SWEDEN

LATITUDE: 55°40'20" N

LONGITUDE: 13°04'06" E

ELEVATION ABOVE SEA LEVEL: 2 M = 06 FT

PURPOSE:

CLINIC SPECIALIZED IN PEDIATRIC CANCER AND
RARE DISEASES

CONTENT:

SPACES FOR PEDIATRIC PATIENTS WITH SPECIAL NEEDS
RADIOTHERAPY AND CHEMOTHERAPY CENTER
BIOLOGICAL PROVES EXTRACTION AND ANALYSIS CENTER
PREPARATORY CLINIC FOR SURGERY
POST-SURGERY RECOVERY
CANCER TISSUE RESEARCH AND ANALYSIS

POTENTIAL CAPACITY:

40 LONG-TERM PATIENTS

13 PATIENTS PESSIMISTIC PROGNOSIS

20 PATIENTS IN TRANSIT

38 MEDICAL PERSONNEL

9 ADMINISTRATIVE STAFF

20 TECHNICAL/AUXILIARY STAFF

PARAMETERS:

TOTAL AREA: 19,000 M2

ELEVATION OF 1ST SURFACE LEVEL: 250CM

HIGHEST POINT ABOVE SEA LEVEL: 3900CM

DEEPEST UTIL LEVEL: -1400CM

E L L I S S Y U M



1. INTRODUCTION: A DISRUPTIVE MODEL OF TARGETING

Project's Intentions

The previous in-depth study of the description of childhood cancer with all that this implies -both physically and psychologically- aims to place at the center of the debate that this thesis proposes the very special nature of the spectrum of experiences and needs of the children affected by cancer. In addition to the pediatric patient, family members and medical personnel complete the list of human factors necessary in the healing process.

From this perspective, the "humanization" (De Bello 1999) of the medical environment is imposed as one of the basic purposes of this project.

Pediatric patients, their families and the medical staff are the main actors who come to be cured, live and work in the hospital environment, an environment that - always according to the evidence - needs to be renewed or even reinvented in many aspects. By placing the human factor and its special needs at the center of the design process, Elisyum aims to unite two complex purposes:

1. Materialize a true physical support for programs, new content and technologies that together emerge in the synergy of healing.
2. Obtain a dynamic material and psychological context favorable to the healing process at the same time with an environment oriented towards the human factor involved.

Design strategies

With the purpose of radically changing the way in which the hospital and its environment influence the healing process and how the hospitalization experience is lived by all the actors involved, the design process has been based on three main strategies:

1. Location.

Change the context in which the hospital is developing its environment. The new hospital seeks to leave the urban emplacement towards an environment that arouses fascination, curiosity and positive associations.

2. Physical appearance.

Break from all perspectives the traditional image of the hospital and its dependencies. From the first sight, the new facilities must have the capacity to remove the thought of the sick children from the negative associations related to pain, fear, death.

3. Programming

Based on well-known principles that facilitate the improvement of hospitalization experiences - safety, functionality, flexibility and privacy (De Bello 1999), the new spaces are reoriented to create true support for the healing process.

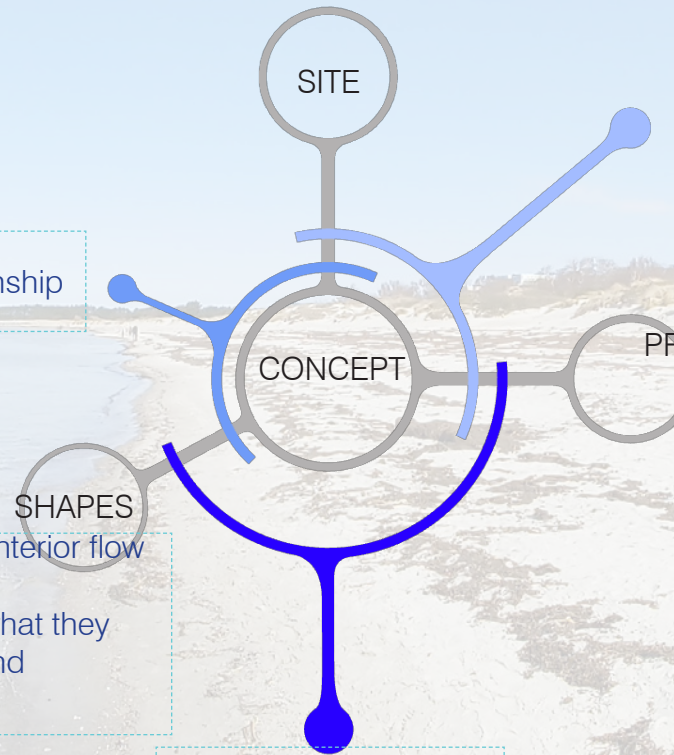
50% of the project consists of the challenge of implementing the concept in the chosen place.

the environmental context is chosen to provoke positive associations and provoke curiosity, at the same time with the purpose of facilitating a complete immersion of the new environment in nature

collaborative relationship

relationship of interdependence

* the particularities of the chosen place affect the layout of the program while increasing its possibilities.



The program includes elements of a certain rigidity that correspond to the purpose of the project.

Main objectives continue to be:

- *Operability
- *Effectiveness
- *Responding to real needs
- *Connection
- *Autonomy.

Other aspects come to complete and improve the main objectives.

The exterior forms, materials and the interior flow are marked by a strong intentionality. Children understand mainly through what they see, their intelligence being intuitive and associative

- arouse curiosity
- intriguing
- comfortable
- inspire security
- categorically built for children

rationality and fantasy

2. DESIGN STRATEGIES - THE SITE

The choice of the place has not been random. From the earliest phases of this project there was the intention - more than opening a window towards nature, to bring nature into the project. But nature is diverse and can offer several contexts. Most of the studies refer to what we generally call vegetation- green spaces.

What I have found least in the papers studied were data on the tolerance level of children affected by some form of cancer - especially those who are already in the treatment phase - towards direct contact with what nature can suppose (bacteria, allergens). In addition, this was one of the aspects on which the interviewed professionals have emphasized the most, that the ideal medium for the pediatric cancer patient is a flexible one, which can be adapted to the sensitivities of each one. The fact that a part of the children in therapies cannot have direct contact with the plants or the earth was one of the decisive vectors for the choice of the marine context before terrestrial nature.

In addition, this context offered the great challenge of entering the structures below the water level, creating spaces with a dynamic view of the seabed.

This advantage was largely ensured by the conformation of the local seabed, which ensures a very uniform and moderate transition from the shore to the depth.

By bringing patients and their family environment in a context of great potential for recreational activities and open views, distraction is facilitated. Redirecting the attention of the pediatric patient from the origin of the pain towards other types of stimuli such as pleasant sights and attractive activities constitutes the basis of psychological coping with pain and anxiety (Mendez et al 2004).

LOCATION: NORTH LOMMA- SCANIA-SWEDEN**SITE PURPOSE:**

- REMOVE THE PROJECT FROM THE URBAN CONTEXT
- FACILITATE FREE IMMERSION IN THE DIFFERENT DIMENSIONS OF CONTROLLED NATURE
- CHANGE THE PERCEPTION OF WHAT A CLINIC IS FROM THE PERSPECTIVE OF ITS LOCATION
- TAKE ADVANTAGE OF THE ASSOCIATION THAT EXISTS BETWEEN THE BEACH AND LEISURE ACTIVITIES/VACATION FOR CHILDREN
- OPENING TO NEW SPACES-PROGRAMS-EXPERIENCES
- TAKE ADVANTAGES OF ELEMENTS AS: SEA BREEZE, TIDES, EXPOSURE TO SOLAR RADIATION

MORPHOLOGICAL ADVANTAGES OF THE PLACE

- THE SITE IS SEPARATED FROM THE URBAN CONTEXT
- NATURAL BARRIER BETWEEN THE SITE AND URBAN AREAS
- LOW DENSITY URBAN AREA, LOW BUILDINGS PROFILE
- 200 DEGREE ANGLE OF VIEW FREE OF URBAN OBSTACLES
- LOW GROUND ELEVATION
- CONSTANT PROFILE OF THE SEABED
- WEAK OCEAN STREAMS
- EXISTENCE OF PROTECTION DIKE

CHALLENGE

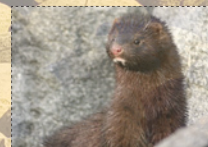
THE PLACE REPRESENTS A HIGHLY CIRCULATED SPACE, BOTH BY RESIDENTS BUT ALSO BY A LARGE NUMBER OF TOURISTS. THE PRESERVATION OF THE CONTEXT REPRESENTS ONE OF THE BIGGEST CHALLENGES IN THE IMPLEMENTATION OF THE PROJECT.

SEAWILDLIFE OF INTEREST*Mielga*

F2

Thornback Ray

F3

Mink

F4

Seal

F5

Porpoise/Tumlare

F1

ELISYUM

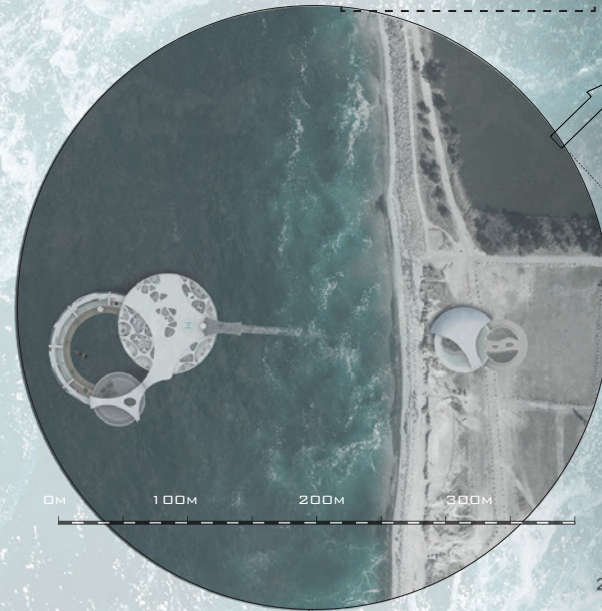
STRATEGIC SITUATION:

- EXISTING /DEVELOPED LOGISTICS NETWORK
- THE SITE IS LOCATED A SHORT DISTANCE FROM THE MOST IMPORTANT MEDICAL CENTERS IN THE REGION
- ACCESS TO THE MAIN FACILITIES: DIRECT THROUGH THE PASSAGE, AIR AND BY THE SEA
- THE URBAN CENTER OF LOMMA AT 1 KM
- REDUCED TRAFFIC MOST OF THE YEAR

DISADVANTAGES

- LARGE INFLUX OF TOURISTS DURING THE SUMMER MONTHS
- THE PLACE REPRESENTS A HIGHLY CIRCULATED SPACE, BOTH BY RESIDENTS BUT ALSO BY A LARGE NUMBER OF TOURISTS.
- THE PRESERVATION OF THE CONTEXT REPRESENTS ONE OF THE BIGGEST CHALLENGES IN THE IMPLEMENTATION OF THE PROJECT.

THE MORPHOLOGY OF THE SEABED PRESENTS A GREAT ADVANTAGE DUE TO ITS UNIFORMITY AND STABILITY, LACKING SUBMARINE CURRENTS AND SUDDEN CHANGES IN DEPTH.



HELSEINGBORG HOSPITAL 34 KM NORTH

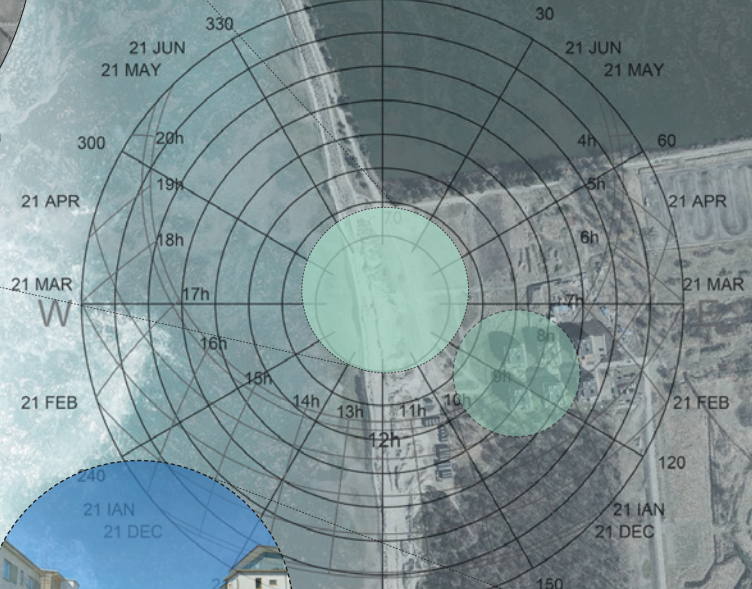


DESIGN STRATEGIES- THE SITE

LUND UNIVERSITY HOSPITAL 9 KM EAST



SUN INCIDENCE ANGLE DEGREE



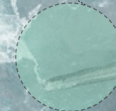
MALMÖ UNIVERSITY HOSPITAL 18 KM SOUTH



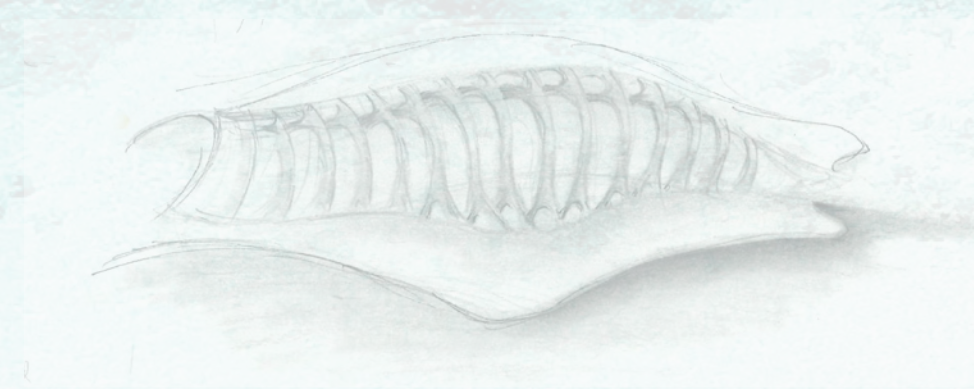
WIDE FIELDS OF VIEW LACKING THE URBAN CONTEXT



AERATED URBAN CONTEXT: WIDE ROADS, AVAILABLE PARKING, LOW BLOCKS, GREEN AREAS



2.2. DESIGN STRATEGIES - SHAPES



External appearance- inspiration and purpose

The first sketches have already sought for this project organic forms that are easy to assimilate and associate from the first sight with things that can cause distraction and even the “wow” factor in children.

Given the chosen location, I have tried to allude to elements that may be compatible with the context or even complete it, such as structures inspired by marine fauna. The sea constitutes a medium with many unknowns still and with limited access, which can increase the fascination of the little ones and not only. Basically we can talk about three main purposes of the forms in the Elisyum project:

1. Design to break the stereotypes of the “traditional” hospital and the associations that this vision can provoke
2. Design to facilitate other associations, arouse curiosity, intrigue, amuse and distract.
3. Find the ways that can facilitate the desired content and programming while maintaining the principles of security, flexibility, circulation

1st. stage

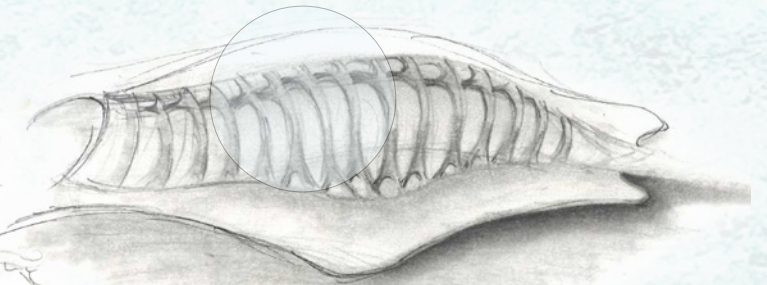
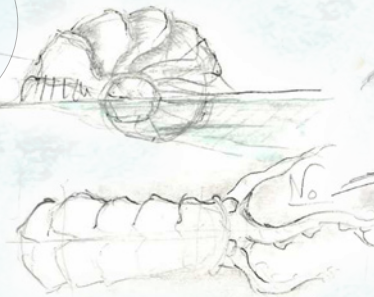
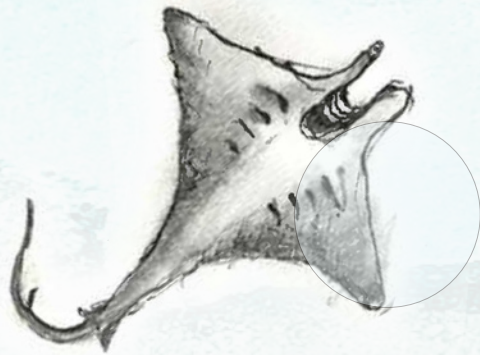
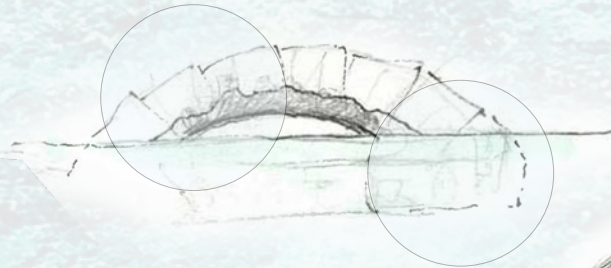
Forms in static movement
Intriguing situation
Unusual postures
Structures interacting with the context
Obvious associations

2nd. stage

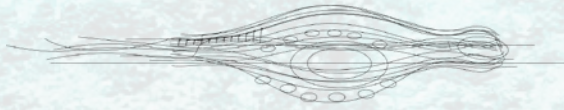
Looking for a way to obtain useful spaces beyond appearance while a mixed location -beach and sea is currently the most studied solution

3rd. stage

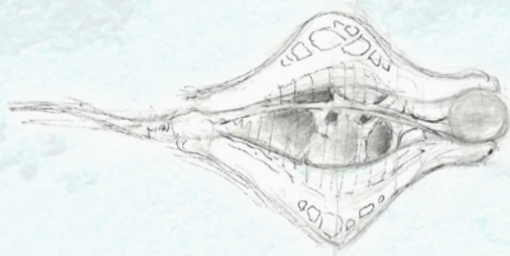
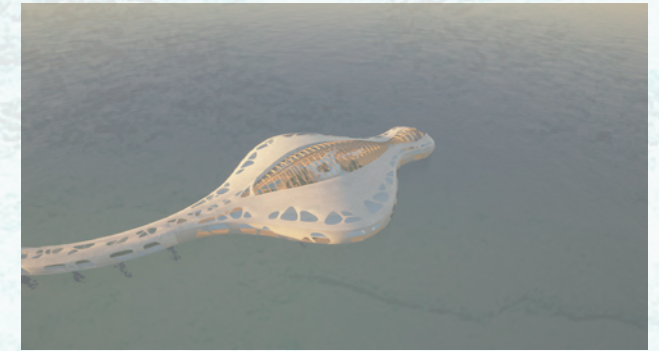
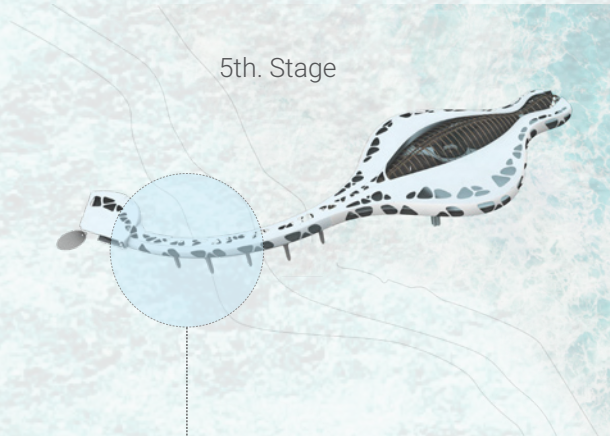
Seeking to give visibility to the interior mechanisms, building spaces that provoke and allow glimpses.



4th. Stage



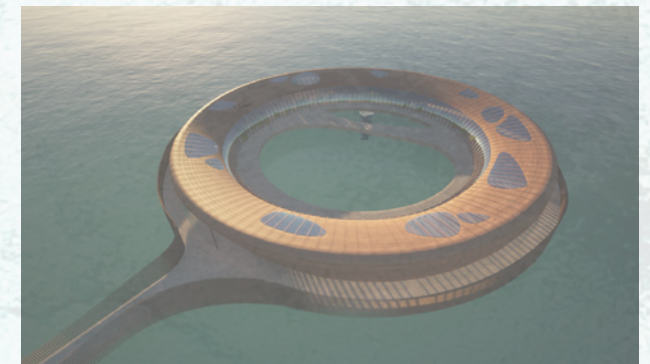
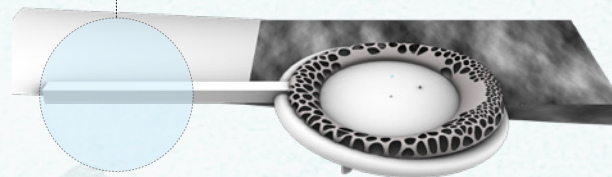
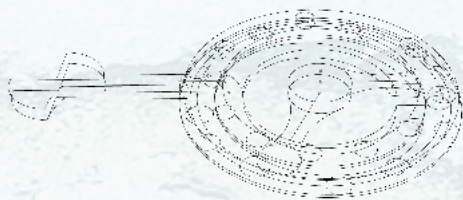
5th. Stage

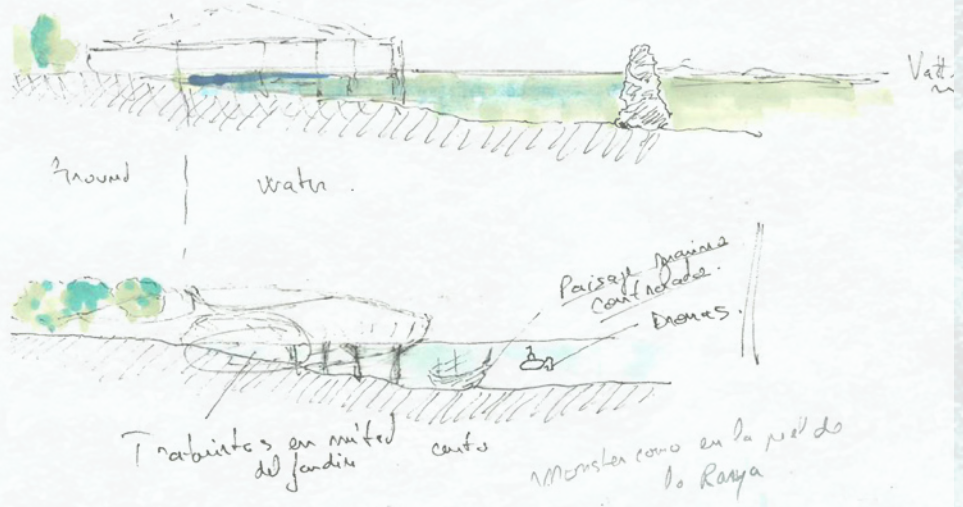


The visible link with the beach raises certain problems in addition to practically cutting off an area that -depending on the season- can be very busy. A footbridge, however high it may be, would be a certain disturbance in the landscape, although it would allow traffic. On the other hand, a low corridor, which would follow the level of the ground and the water, would be a real barrier.

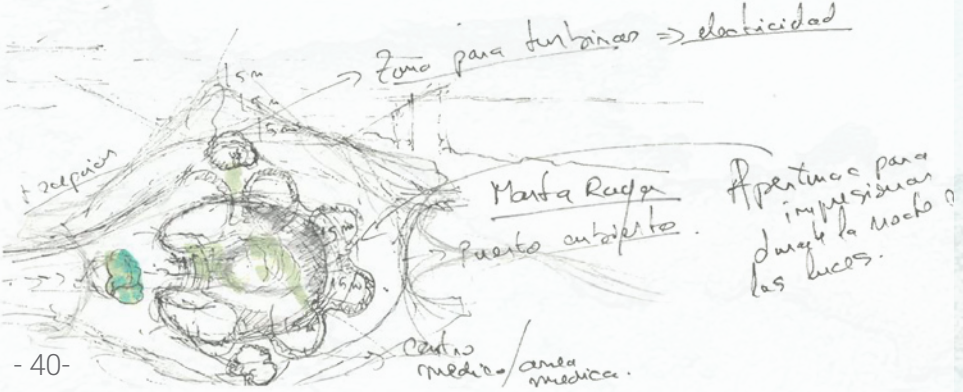
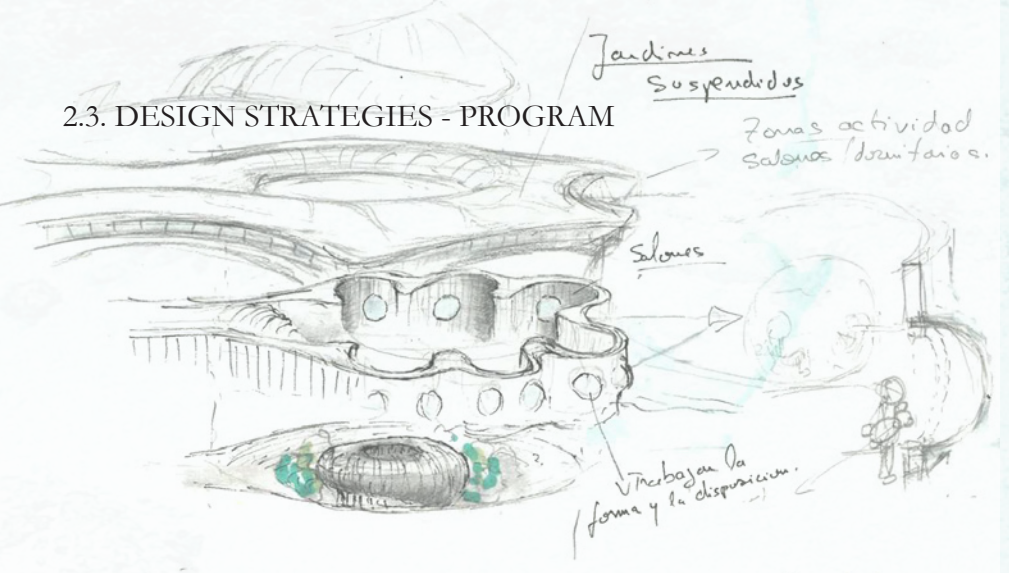
The digitization of the sketches has made it possible from an early stage to analyze the quality of the spaces and the potential of the designs.

The possibility of applying textures and integrating the shapes in the context have opened up several possibilities, while taking the project to a turning point: realism/rationalism vs disruptive design.





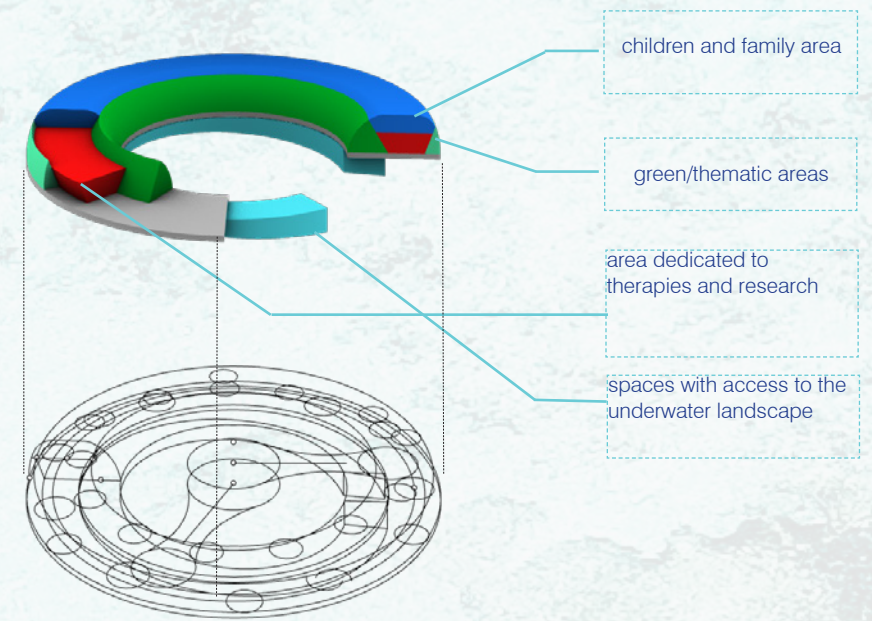
2.3. DESIGN STRATEGIES - PROGRAM



Program- internal shapes

The programming part of Elisyum can probably be considered the one that has needed the most time and has undergone the most variations. The creation of the interior spaces and the implementation of the principles that have already been accumulating throughout the theoretical investigation have repeatedly affected the final appearance of the project.

Orientation, layout, openings, submerged structures, isolated but interconnected areas, circularity and other principles have only laid the foundations for the spaces in which critical sectors had to come together.

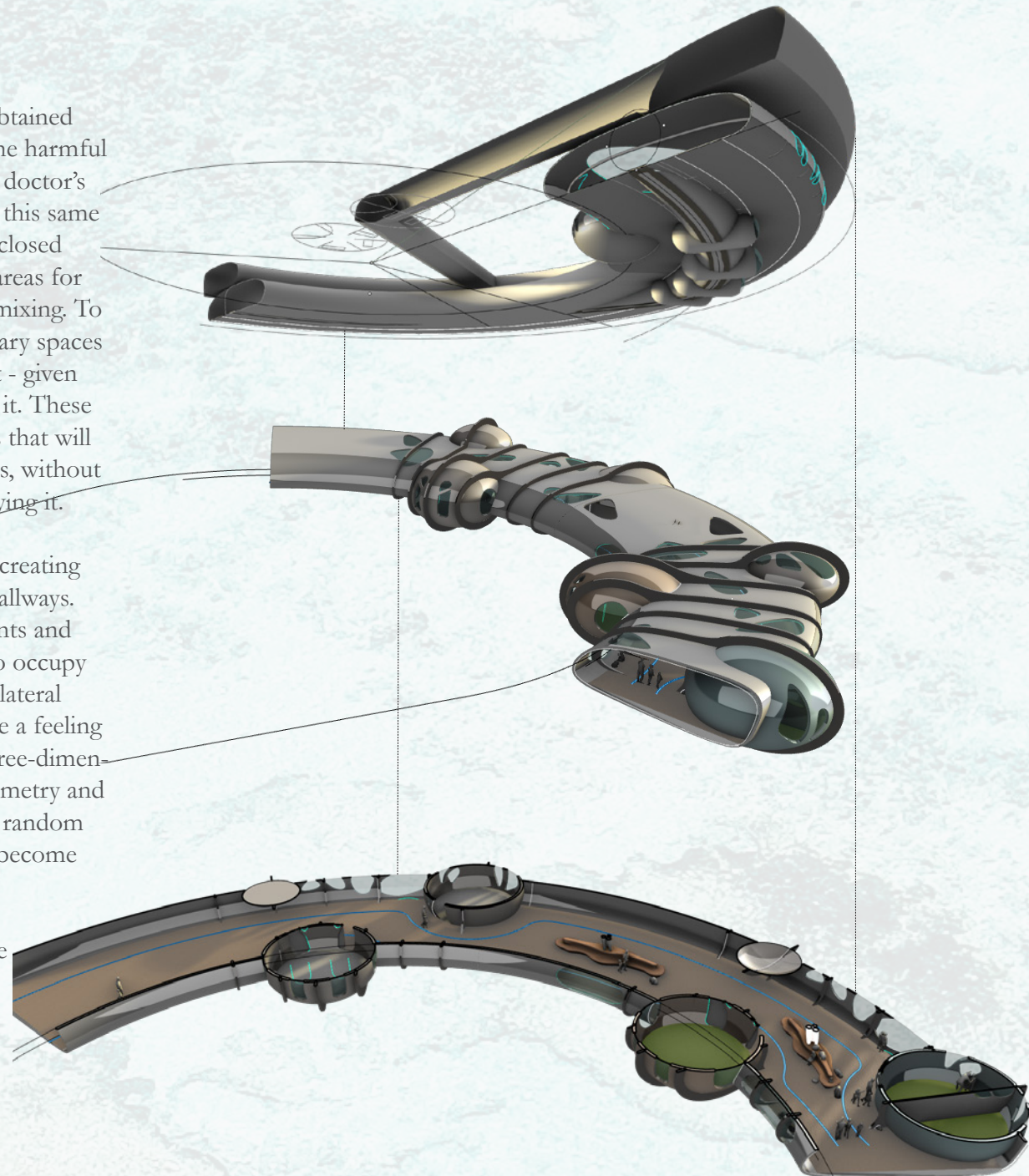


The diagram shows the clear differentiation between areas that potentially generate fear and pain and those that come to change the perception of the hospital environment. The intention is not to keep them separate or to hide critical areas from affected children. Rather, it is about making visible and demystifying what happens in these areas, filtering and softening what the patient sees and understands, removing the fear of something unknown.

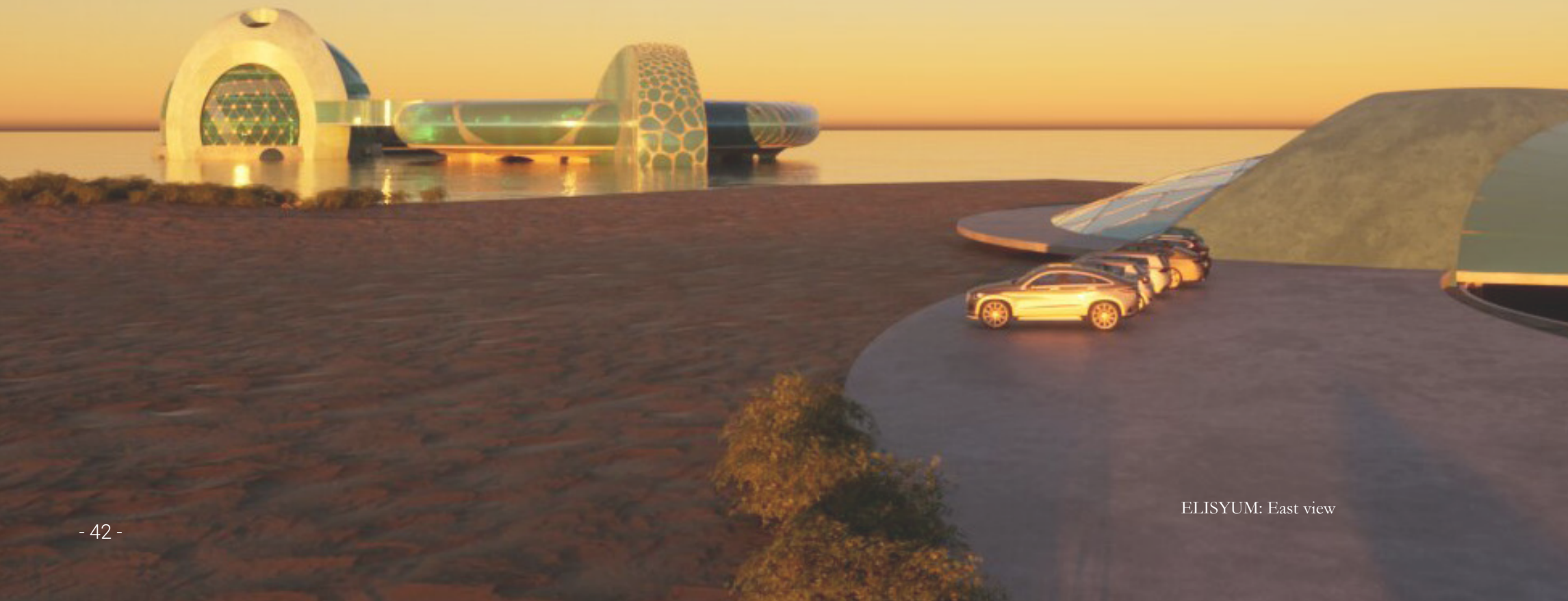
As previously mentioned, a different context had to be obtained within the new spaces, with sufficient capacity to dilute the harmful associations to pain and fear that essential spaces such as doctor's offices and therapy or evidence collection areas cause. In this same context, which seeks to eliminate visible barriers such as closed walls or straight corridors with no exits, the recreational areas for staff and patients still have to interact, but without fully mixing. To meet this challenge, I have proposed designing intermediary spaces that do not impede the view towards the other sector but - given its strong thematic character - changes the perception of it. These kinds of spaces can be large aquariums or glazed gardens that will serve as real separating screens between two specific areas, without the intention of totally preventing access, but rather delaying it.

Another peculiarity of the new programming is to avoid creating spaces expressly dedicated to flow, such as corridors or hallways. From the data collected directly, I can mention that patients and their relatives generally feel discomfort when they have to occupy narrow spaces affected by constant movement with only lateral openings, which - according to the respondents - generate a feeling of encumbrance. In the first phases of analysis of the three-dimensional space for programming, the need to break the symmetry and uniformity of the design through the implementation of random modules such as those that can be seen in the image has become evident.

In this way, spaces with a certain degree of privacy can be created that even allow personalization through objects and toys by the occupants.



VI. PROJECT PRESENTATION



1 INTERACTING WITH THE SITE

The first impression is important

Unlike other types of projects, the interaction with the location is intentionally pushed towards obtaining an effect of surprise, leaving the expectations of those who visit the place for the first time.

But at the same time, the way in which the implementation of the project in the place affects the existing context and the habitual use of the site are the aspects that have needed the most attention.

Variants of the early phases of the project kept the clinic's connection to the shoreline visible through a closed walkway, which strongly affected the context of the site (see workflow diagram).

Being located in the middle of a place very popular with tourists and residents, the complex practically broke the beach in two.

In addition to the strong visual impact, the walkway and adjacent facilities had to be raised to a certain height above the sea level and the beach floor, which created a new context with many spaces and undesirable angles.

Given the particularities of the local seabed and the programs to be implemented with Elisyum, the possibility of installing the project only with one of the views entering the sea and with the other part - which corresponded to the entrances and parking - on the shore was left aside.

As can be seen in the diagram- site analysis, the seabed reaches a depth of 5 meters to 100 meters from the coastline.

The optimal solution seemed to be to split the clinic installations in two parts:

One part - the main one where the programs and characteristic spaces of a clinic were going to be implemented - was going to enter the sea approximately 135 meters.

The other part, consisting of the facilities dedicated to reception, electricity, water, drainage management, etc., were going to remain on the shore, without affecting the busy strip of beach but occupying a part of a wide parking lot located behind the sand dunes. (Photo).



Wide spaces without a specific use separate the strip of beach from the road and urbanized areas.
Foto by the author

The connection between the two complexes takes advantage of the low elevation of the site and is designed in the form of a tunnel. The particularity of this tunnel resides in the fact that it passes underground only 40 meters after which its roof is open towards the water and the seabed, from which it practically emerges to connect to the main complex. This solution has also made it possible to maintain a low height and a contextual morphology in the facilities on the shore.

By breaking the visible link between the part located on the ground and the main body, the visual impact is increased while generating high levels of curiosity. May also count on an “aura” of mystery and the unexpected. Far from being reminiscent of a hospital, the first sight of Elisyum is unexpected and generates the “wow” factor.

ELISYUM

INTERACTING WITH THE SITE

The parking areas and regular access to the facilities are located behind the low sand dunes in an area already provided with infrastructure.

Sand dunes with an elevation of 2 meters and covered with dense vegetation delimit the strip of beach.

The tunnel ensures, in addition to access to the facilities, the connection of water supplies, electricity, internet.

ENTRE-RAMPS

SHORE SIDE-RECEPTION

150 M TUNNEL

ATRIUM

CLINIC

DOMES

RING

0M

50M

100M

200M

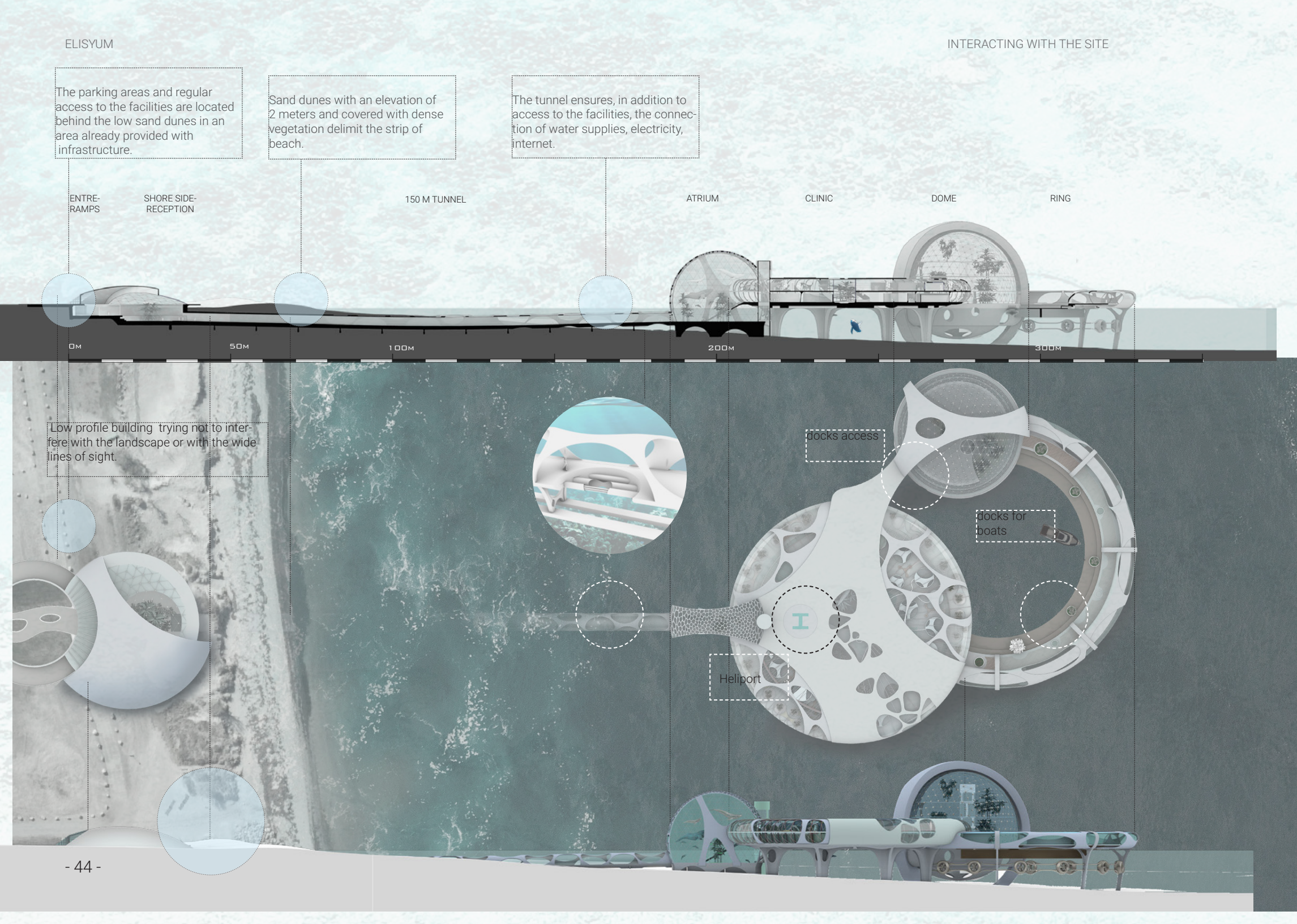
300M

Low profile building trying not to interfere with the landscape or with the wide lines of sight.

docks access

docks for boats

Heliport



2. SHORE SIDE AND CONEXION

The access.

Access to the Elisyum facilities is ensured through three points:

1. A land access located about 50 meters from the water line. At this point are installed administrative offices, reception and technical rooms. These facilities have two accesses, one at ground level for staff and another access via a ramp that is connected to the tunnel. This access point is provided for long-term parking and also has quick access for ambulances.
2. Both the ground facilities and the clinic itself are provided with signalized landing platforms for helicopters.
3. Elisyum is provided with its own boat dock in the inner part of the ring, which ensures protection even when the storm is marked by intense waves. Access to this dock is calculated to allow access for different classes of vessels, including those used for emergency tasks or fire fighting.

The tunnel

More than a simple direct connection between the ground and the clinic, the tunnel is a veritable umbilical cord of supplies. From a constructive point of view, it is made up of a central core of pre-fabricated 150mm PLEXIGLAS shapes, embedded in a resin-based concrete exoskeleton. The base fixed on the seabed constitutes a second structure that houses the tubes and the connections between the reception and the clinic.

In previous versions, the connection was made through a walkway, whose orientation and shape were designed to predispose the pediatric patient to positive expectations.

The visitor does not lose sight of the sky or the environment at all, experimenting a slight ascent towards the clinic whose spaces gradually open up, providing more openness with each step.



Renderings of the previous version of the corridor that joins the two parts. Visitors do not lose sight of where they are and where they are going.

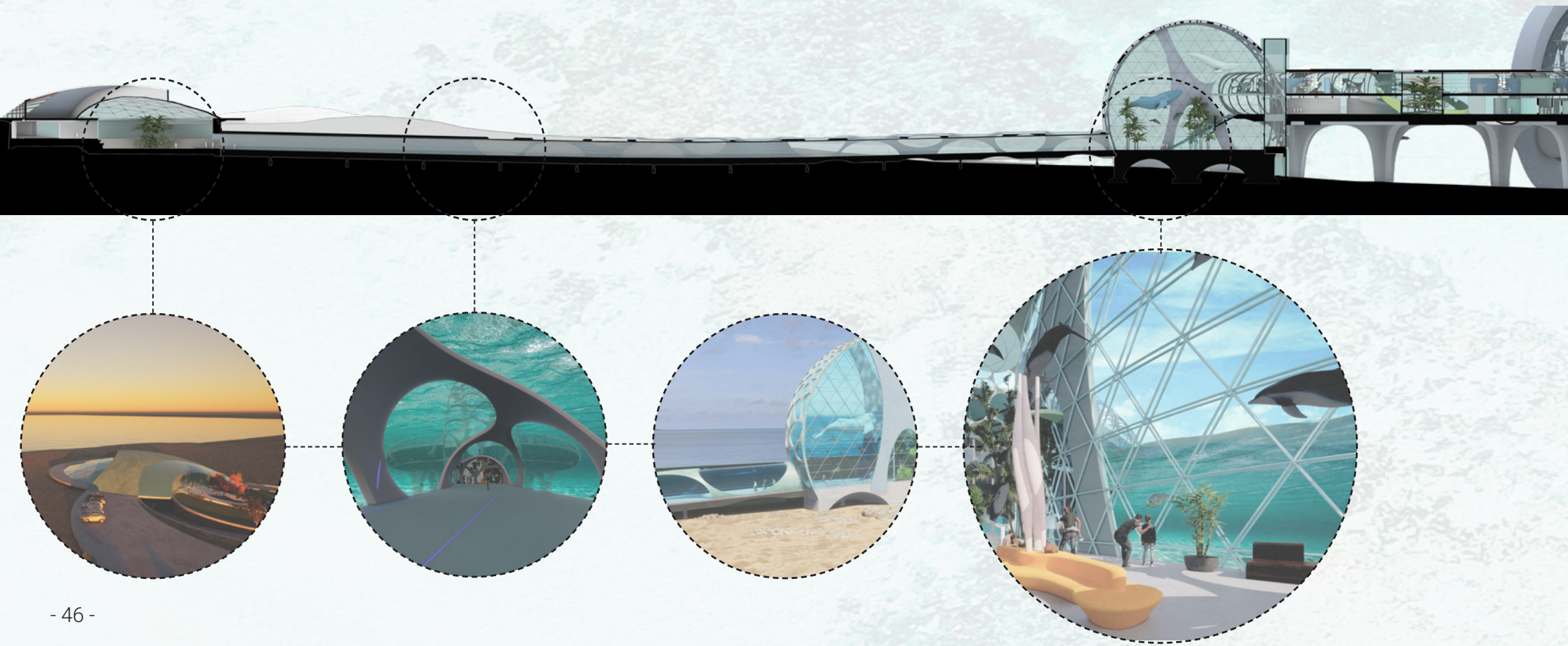
Fotos by the author



The submerged tunnel experience has a similar purpose but the means to achieve it are different. .
 In the final variant of Elisyum the visitor leaves the wide spaces of the reception to enter a wide tunnel artificially illuminated for the first 40 meters and whose sides house a true museum of the history of underwater life. In this sector, the visitor follows the indicator lights on the ground and experiences a gentle descent, while at each step they can glimpse more of the sunlight filtered by the 3 meters of water. Gradually, the tunnel re-emerges from its bed of sand, to go up again, each time leaving the exit of the tunnel in a wide atrium to be guessed.

The Atrium

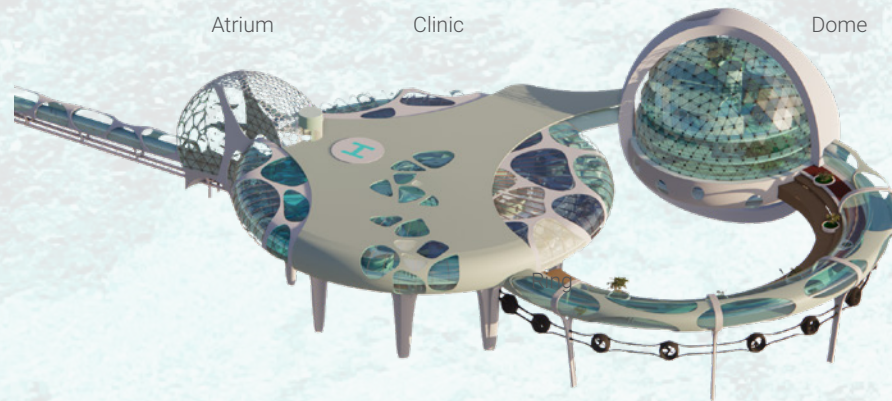
The tunnel experience - although with open views towards the bottom of the sea - finds its antithesis in the hall, the abruptly open space where the visitor once again sees the sky and is lifted off the weight of the walls of water. It is in fact a metaphor that refers to the meaning of the name chosen for the project-Elisyum. The patients leave the shore their sorrows and submerge in the darkness. But the darkness does not last long and a world apart begins to glimpse. When they finally pass from this they find a different place that is only thought to ease their sufferings. Children are carried away by what they see and understand that they are no longer in a hospital. They are in Elisyum...



3 PROGRAM AND CONTENT - THE CLINIC

Principles behind the shapes

Leaving aside the connections with the shore, three different structures with differentiated use come to compose what is called Elisyum. The main body of this complex is the Clinic, followed by the Ring and connected through it to the Dome.



The reason behind the decision to move the clinic towards the sea is complex.

On the one hand, the ideal location for this concept should be one free from the urban context, where the projected buildings can benefit from natural light at all times.

Also, an important advantage was to find a location that ensures a high quality of views through the windows or openings of the building, wherever the patients or staff are. In this way, the situation of choosing which of the groups of people present in the building would ensure the best view would not exist.

In the chosen context, thanks also to the low degree of urbanization and the relatively low profile of the few buildings in the neighbourhood, this goal is achieved. By breaking the apparent link with the earth and projecting a circular structure, it also creates a feeling of being on an island, which increases the fascination of children.

Precisely to strengthen this effect, the Ring has been projected. Low in elevation above sea level, the ring structure does not alter the view of the upper level of the Clinic, a level dedicated exclusively to the accommodation of children and their families or visitors.

Principles behind the volumes

Referring again to the early phases of this project, different typologies of structures and volumes have been studied. Long structures, successions of apparently randomly arranged spaces or large open volumes have been considered.

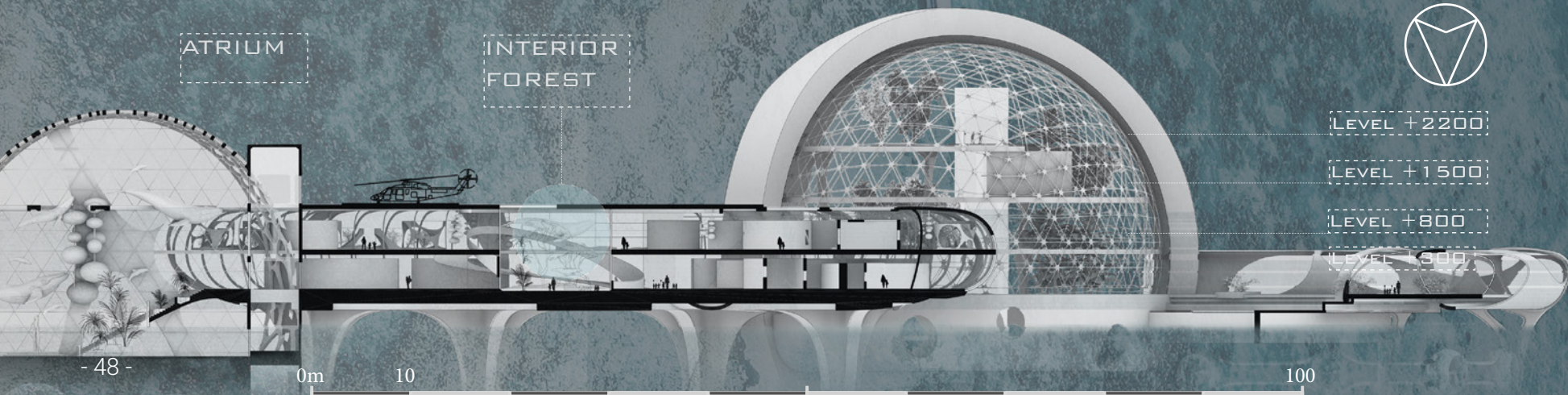
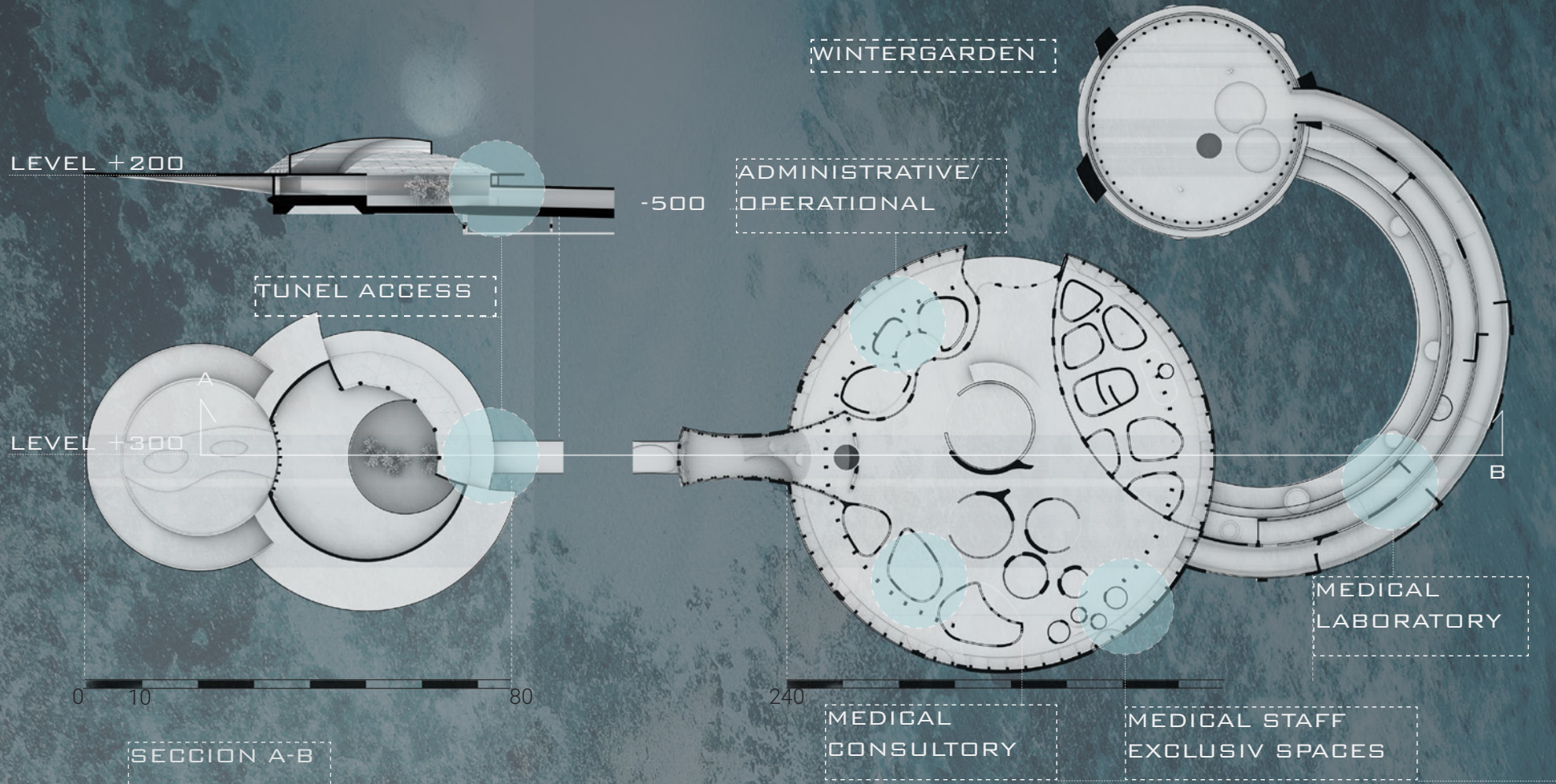


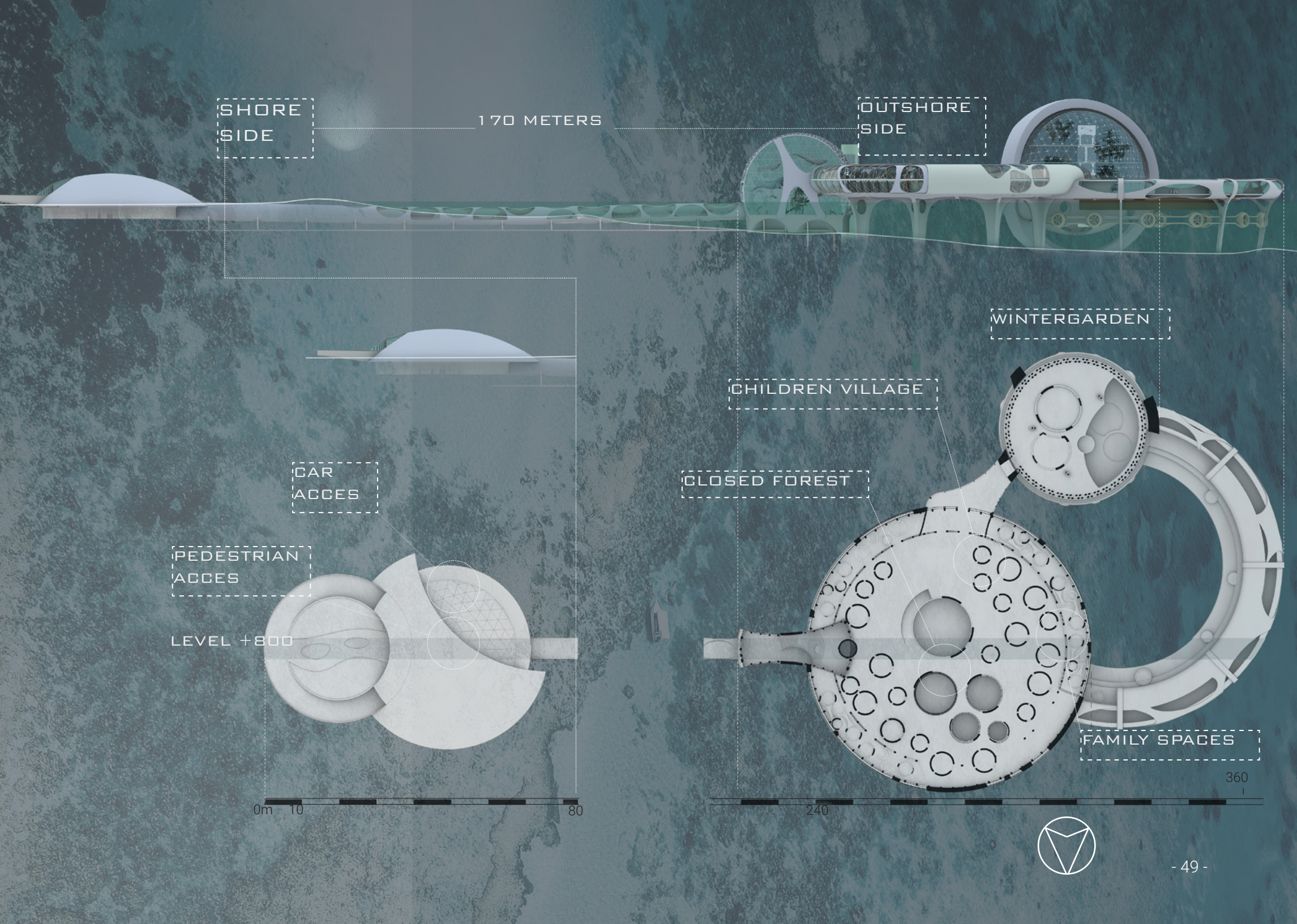
Finally, it was a structure of reduced elevation but with a large surface area that best allowed the implementation of one of the most important principles of this project: bringing the natural environment inside.

The surface marine environment does not stand out for its richness and diversity. Putting the weight of the entire project on just one point - the location of the clinic on the beach - would have been a strong limitation on the potential of the project.

Although from the perspective of the exterior Elisyum seeks a certain degree of integration, what has to do with space and interior programming the project aims to obtain its own assembly of contexts.

Generally, an extensive structure raises the problem of access of natural light in the central parts, with the sides being the most exposed.





SHORE
SIDE

170 METERS

OUTSHORE
SIDE

WINTERGARDEN

CHILDREN VILLAGE

CLOSED FOREST

CAR
ACCES

PEDESTRIAN
ACCES

LEVEL +800

FAMILY SPACES

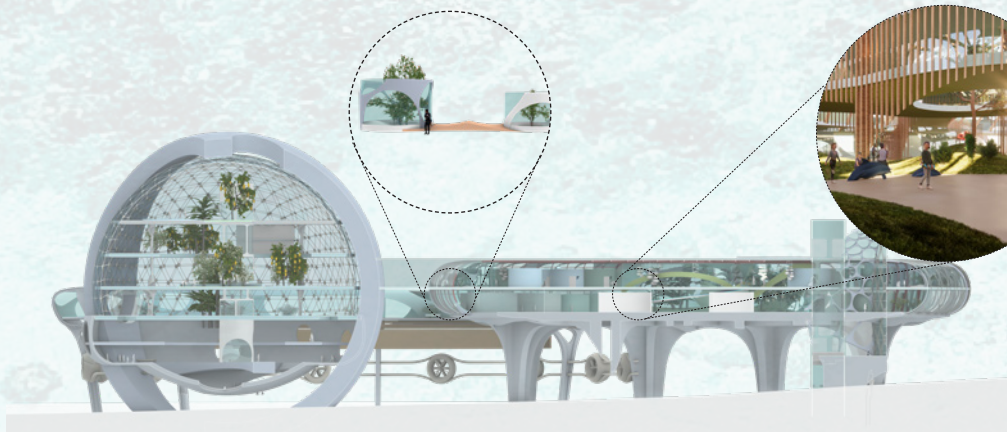
0m 10 80

240 360



The solution in this case is materialized by wide openings both on the sides and in the roof. If a metaphor were used to describe the effect of these openings, it would be like “transforming a monolith into a perforated space.”

In addition to allowing light to penetrate the entire volume and allowing the views to reach the horizon, the openings in the roof correspond to several partially enclosed gardens with free access for children whose condition does not limit direct contact with nature.



This kind of gardens of different sizes and kinds of vegetation can also be found on the ground floor where the areas with specific medical content are located.

Although the complex has a part mainly dedicated to vegetation - the Dome - green areas tend to be omnipresent throughout the entire space of the building, softening the atmosphere of facilities that originally still comprised a medical clinic.

To summarize this section, it could be said that the greenery and the views to the outside constitute the common denominator of the new environment.

An open space for everyone at all times

One of the most important principles of evidence-based design is a barrier-free environment. Control over their own situation in an environment where child patients are not limited or restricted considerably increases the degree of connection and adaptation to the environment in which they are hospitalized (Du Bose et al 2016). Therefore, in the entire volume of the complex, an attempt is made to restrict the use of opaque walls.

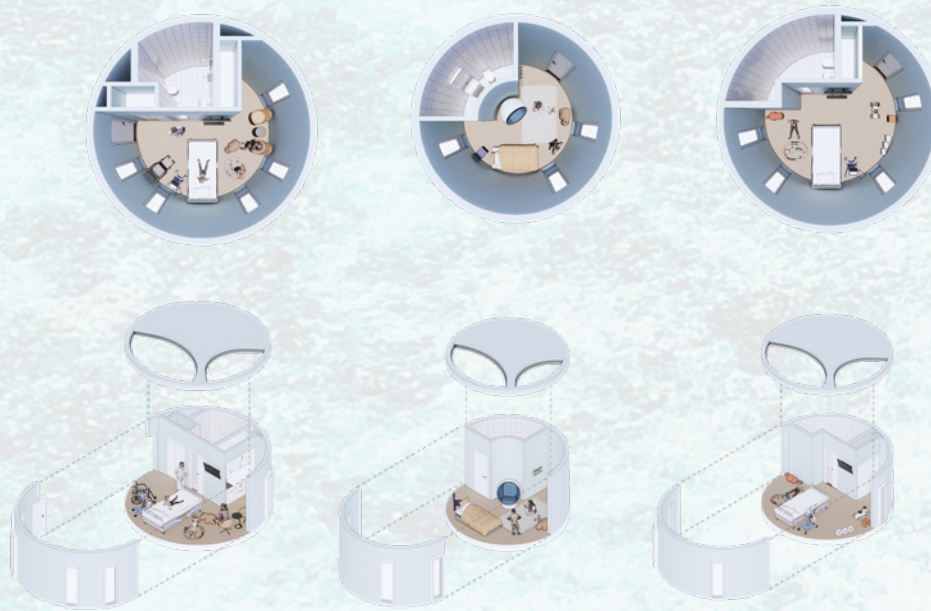
The areas for therapy and collection of tests are delimited from the spaces for general use by true partially enclosed gardens.

In the area for the consulting rooms, the design has also been changed, separating each room and avoiding creating corners or closed hallways.

Instead of joining wall to wall in the usual way, the consulting and therapy rooms are true independent cells that are grouped among the green spaces.



The result of this programming is that spaces appear that can be assigned to the exclusive use of medical personnel, who only have to leave the cabinets to change the environment.



Three different variants of modules for patients. Those represented here have vertical walls and different surfaces.

By eliminating part of the visual barriers and facilitating access, patients always have the possibility to see even a part of what is happening inside the medical cabinets, a fact that added to the programs to familiarize children with the therapies and its possible effects considerably reduce anticipatory fear (Mendez et al 2004).

The rooms for children and their families are designed in the same way, eliminating shared rooms.. By having a single module for himself, the child patient has an easier time adapting to his new condition. In addition, the patient modules are designed in such a way that openings in their roofs can allow the child lying in his bed to see the sky. This detail completes the views through the usual windows and at the same time counteracts a possible feeling of cloistered children who, for medical or other reasons, cannot easily leave their beds.

Following the same principle of facilitating circulation, the stairs disappear from the interior design in favor of the ramps . In this way, even for those who need a chair to get around, an impediment is eliminated. The only existing staircase in the entire complex is the one that connects the atrium with the first floor of the clinic. Given the wide, mostly open spaces inside, strategies are also needed to facilitate the orientation of patients in the complex. One of these strategies is to use different colors for the children's rooms in addition to allowing them to personalize certain exterior surfaces through drawings or colored spots. For example, patients remember if their room was blue or green and turn to the area where that color predominates.



It may be easier for children to remember a certain color or a certain shape that predominates in the area in which they are accommodated.

Luminated color markings are also available on the floor and walls. Essentially, the intention from this perspective is to create an environment of safety and easy access in which child patients feel free to move around or occupy spaces no matter what time of day.

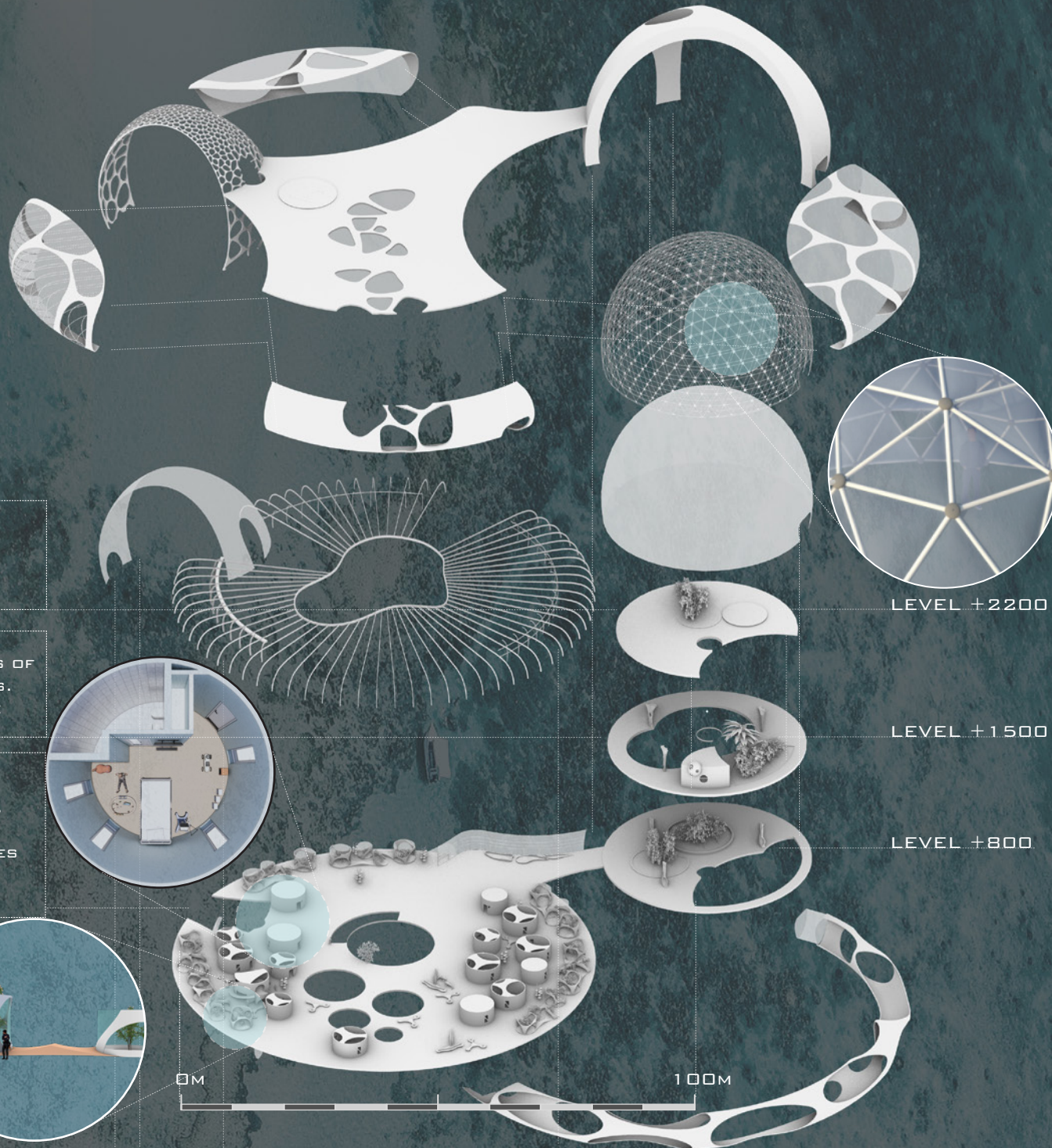
N-W EXPLODED ISOMETRIC PERSPECTIVE



THE HIGHEST LEVEL OF THE COMPLEX IS MADE UP OF A CONCERT HALL, A SMALL GARDEN AND THE PLANETARIUM FACILITIES.

THE LEVEL IS ISOLATED TO A CERTAIN EXTENT AND IS DEDICATED TO THE STAYS OF PATIENTS WITH A PESSIMISTIC PROGNOSIS. THE LEVEL HAS ITS OWN MEDICAL OFFICE

THE LEVEL DEDICATED TO THE ACCOMMODATION OF CHILDREN. INCLUDES DIFFERENT TYPES OF SPACES, COMMON AREAS, ACCESS TO THE GREENHOUSE AND DIFFERENT EXCLUSIVE SPACES FOR THE USE OF THE RELATIVES OF THE PATIENTS.



N-W EXPLODED ISOMETRIC PERSPECTIVE

THE LEVEL CONTAINS THE PART DEDICATED TO MEDICAL PROCEDURES, ADMINISTRATIVE OFFICES, RECEPTION, TECHNICAL ROOMS. THE FLOOR COMMUNICATES WITH LEVEL 200 OF THE GREENHOUSE, WHICH CONTAINS COMMON SPACES/CHILDREN'S PLAYGROUND.

THE TUNNEL EXIT CORRESPONDS TO LEVEL -500 WHERE THE MAIN HALL IS LOCATED.

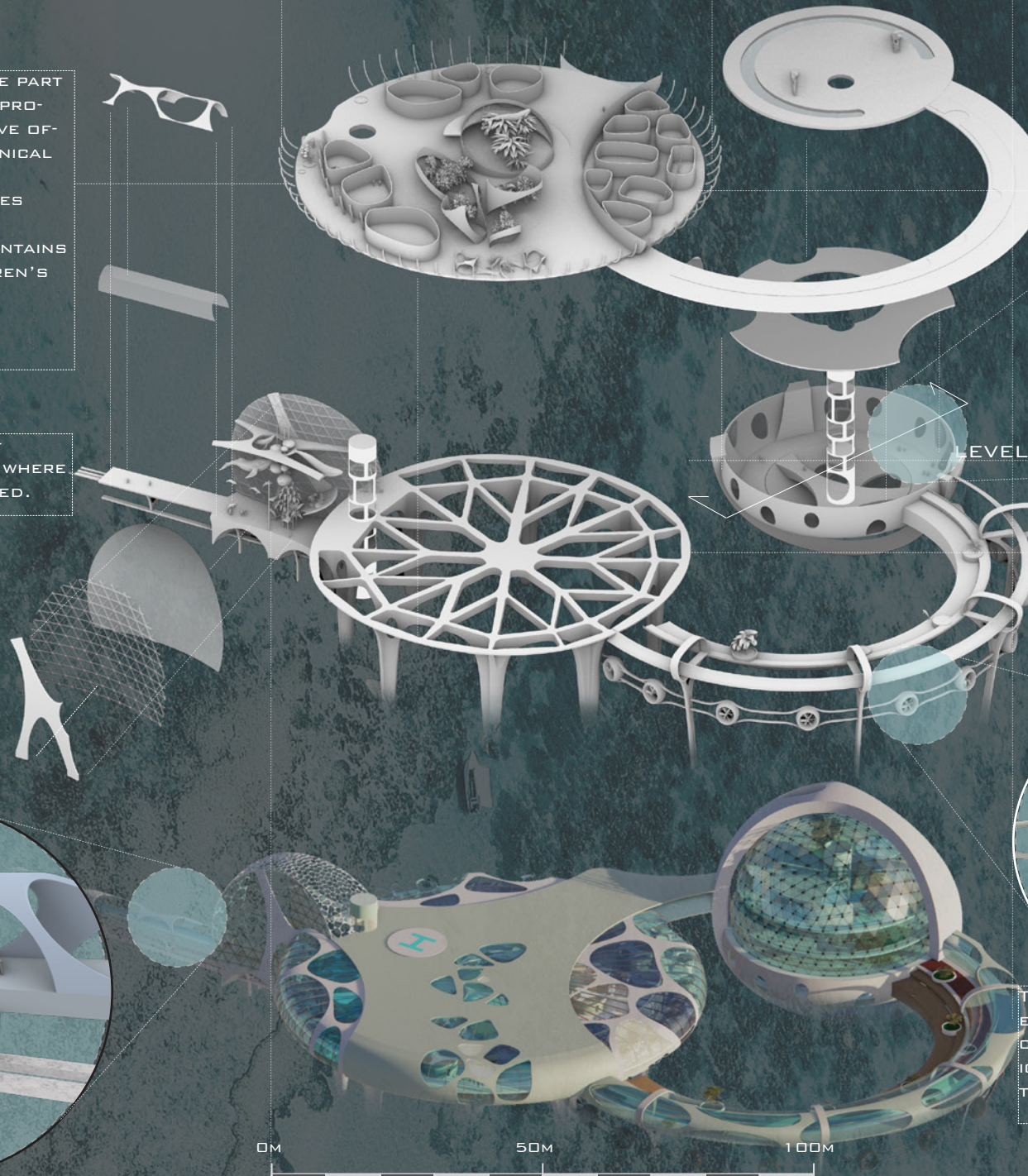
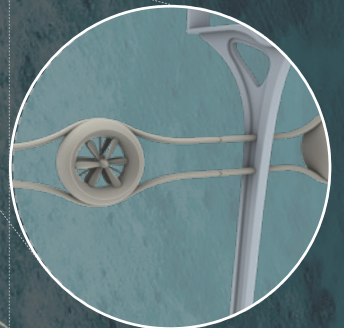
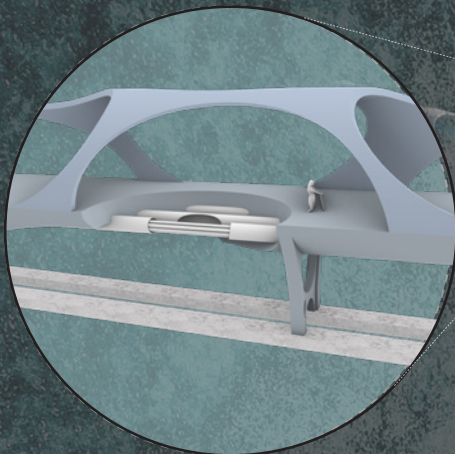
LEVEL +300

LEVEL -300

LEVEL +200

THE FACILITY HAS ITS OWN ELECTRIC GENERATING GROUP COMPOSED OF PHOTOVOLTAIC CELLS AND UNDERWATER TURBINES.

0M 50M 100M



4 PROGRAM AND CONTENT - THE DOME



Elisyum, South side view outside the marine environment

Life must go on

The Dome refers to the greenhouse-like structure that is the upper part of a sphere of 40 meters in diameter, of which 17 meters are submerged. The dome and its content can be accessed directly from the floor destined to the accommodations of the children and the connection between the 7 levels that make up this complex is ensured by two elevators and a system of ramps.

The initial purpose of this structure was to house spaces for educational and leisure activities for long-term hospital patients, a place where regardless of the weather situation, children can feel like outside while still being in a controlled environment. Subsequently, spaces for child patients with a pessimistic diagnosis have been added to this program.

The Dome is separated from the Clinic mainly to increase the comfort of the children who in this way can perceive these spaces as exclusively dedicated to themselves.

Places to play, explore, read or simply rest are combined with spaces where children can continue with a part of their education.

Precisely the presence of these facilities are the ones that most increase the feeling of normality and hope, since children see at least a part of their routines following their course (Mendez et al 2004). To further promote the feeling of normality and security in children, the presence of any element - including staff clothing - that refers to a hospital was limited. Mostly educators, free time monitors and children are the ones who give life to this place.

But perhaps it is precisely the least visible part of this structure that can arouse the most fascination for children due to its content: the rooms with access to the seabed.

The potential of this kind of spaces has been in the objective of this project since the first sketches, motivated mainly by the evident interest that children show for this mysterious world and Elisyum has been specially designed to respond to these needs of the little ones.

Most of the data that will be presented below comes from a scientific article entitled *Marine Biota and Psychological Well-Being: A Preliminary Examination of Dose-Response Effects in an Aquarium Setting*, published in 2016 by a group of researchers from different universities and comes to practically justify the attention dedicated in the project to this dimension.

As the same text states, it seems that there is a real lack of studies and research on the relationship between the benefits of the underwater environment and health, although the experiments that have been carried out show very encouraging results (Cracknell et al 2016).

This is not quite understandable in the context in which especially the underwater environment turns out to be one of the preferred environments and that can have more restorative effects on the human being (Cracknell et al 2016).

One of the explanations for the considerable psychological benefit of this medium that is offered in the aforementioned text consists of the fact that this environment is capable of acting in three directions: arousing fascination, generating the feeling of being away, and showing compatibility.

These three elements are precisely what Elisyum wants to mean for pediatric cancer patients.

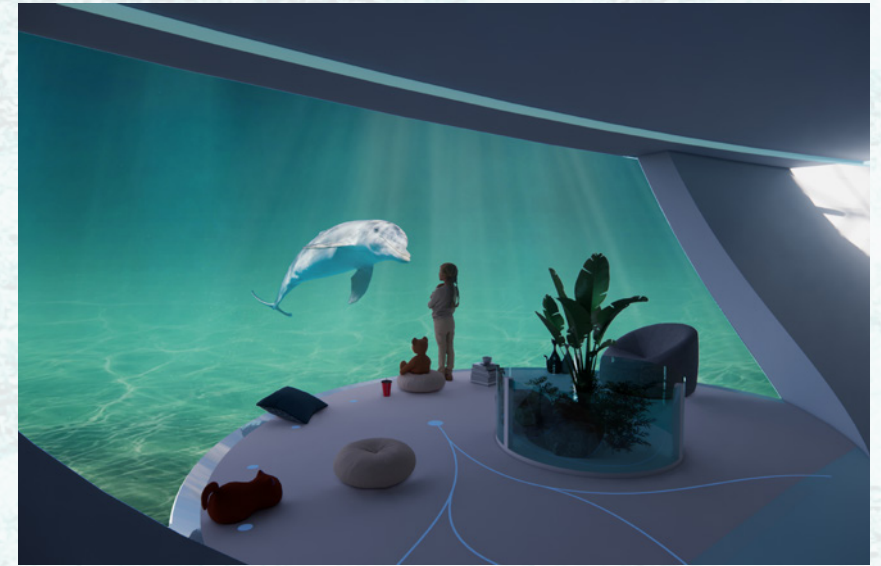
Why submerged spaces instead of aquariums?

It has been proven that aquariums - an aquatic environment of small size and controlled biota - show great potential to generate psychological benefits, but the degree of fascination that the underwater environment can arouse is directly related to the diversity and perceived size of this environment. (Cracknell et al 2016). The image of the hall of Royal's children's hospital in Sydney is very popular precisely because of its aquarium -see page 23.

With the purpose of understanding what kind of spaces children are most attracted to when visiting an aquarium, the author of this thesis has carried out a short study in the Blue Planet Aquarium in Copenhagen. For the space of two visits of 2 hours each, the duration of the children's stays in front of different types of aquariums has been observed and noted. The result easily shows that the children have preferred the wide rooms that corresponded to large aquariums where there were facilities to sit without being in the flow of visitors.

The location of the project in the marine environment facilitates this potential.

Instead of designing one more simple attraction, think of spaces to live, that provide diversity and motivation, that fascinate and distract



It is precisely these kinds of spaces that are part of project's proposal: wide and open spaces where children and their loved ones do not have to come just for a walk, where there are no schedules and where even everyone who needs can find their own place, personalize it, share it, or just being there in their thoughts.

A space where they can find their own ways to continue with life and recover, as well as in the mysterious world that they will have before their curious eyes.

After all, this project is not about a particular place or an exclusively physical dimension of a building or a clinic, but rather about a state of mind that children affected by serious diseases such as cancer reach when they lose their fear of pain and death. A state of mind that I dare to call ELISYUM.

Reflections and questions

Working on this project has finally turned out to be quite a different task from what I initially thought it would be. In the first phases the dominant feeling was that of being on the way to discover something, of guessing a formula that can give solutions.

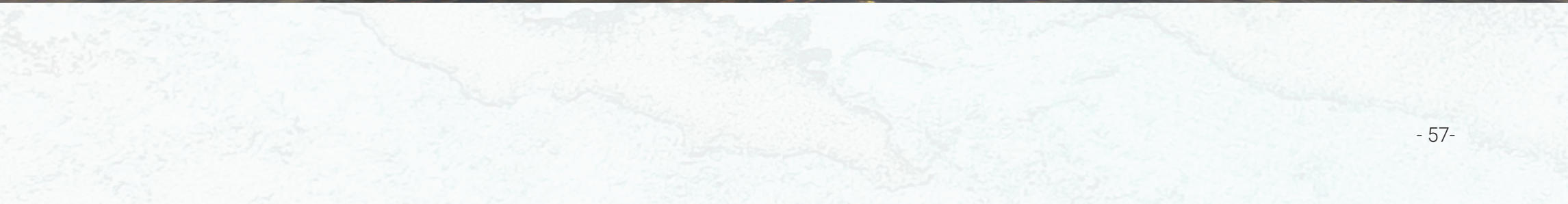
My most frequent questions were of the type: what can be done, what is needed, how can it be solved, how could the architect get more involved? Perhaps from a certain perspective my approach had not been adequate. The solutions - I understood later were not lacking. But what almost at the end of the project I still don't understand is why - with the multitude of knowledge that we have - are there so few projects that actually apply it? Where is the point at which the architect loses the courage to dare to propose something different?

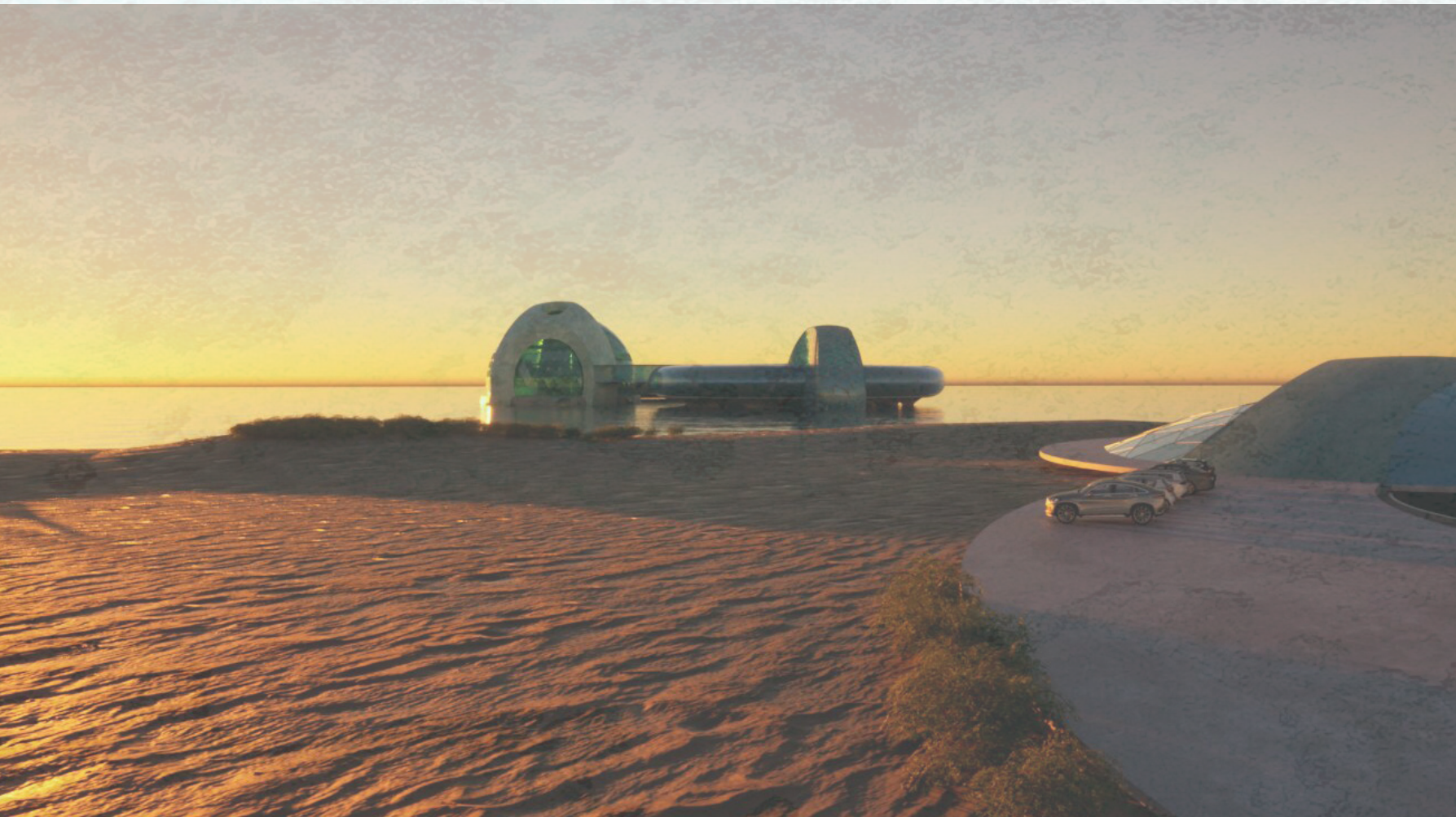
In my opinion, even the most advanced projects -I mean strictly the context that makes up the object of my thesis- continue to show caution in the implementation of a different architectural expression. There are restaurants and hotels that open up the views from their lounges to the bottom of the sea. There are hotels and train stations that fascinate with their interior gardens and the best views and locations are always chosen for the most exclusive residences. But it is difficult to find these elements in a hospital project, even is it is about a hospital for children. Why? It may be that in this job there are those who often ask "what if it doesn't work?"

My answer and question at the same time is still:
what if we would try it?

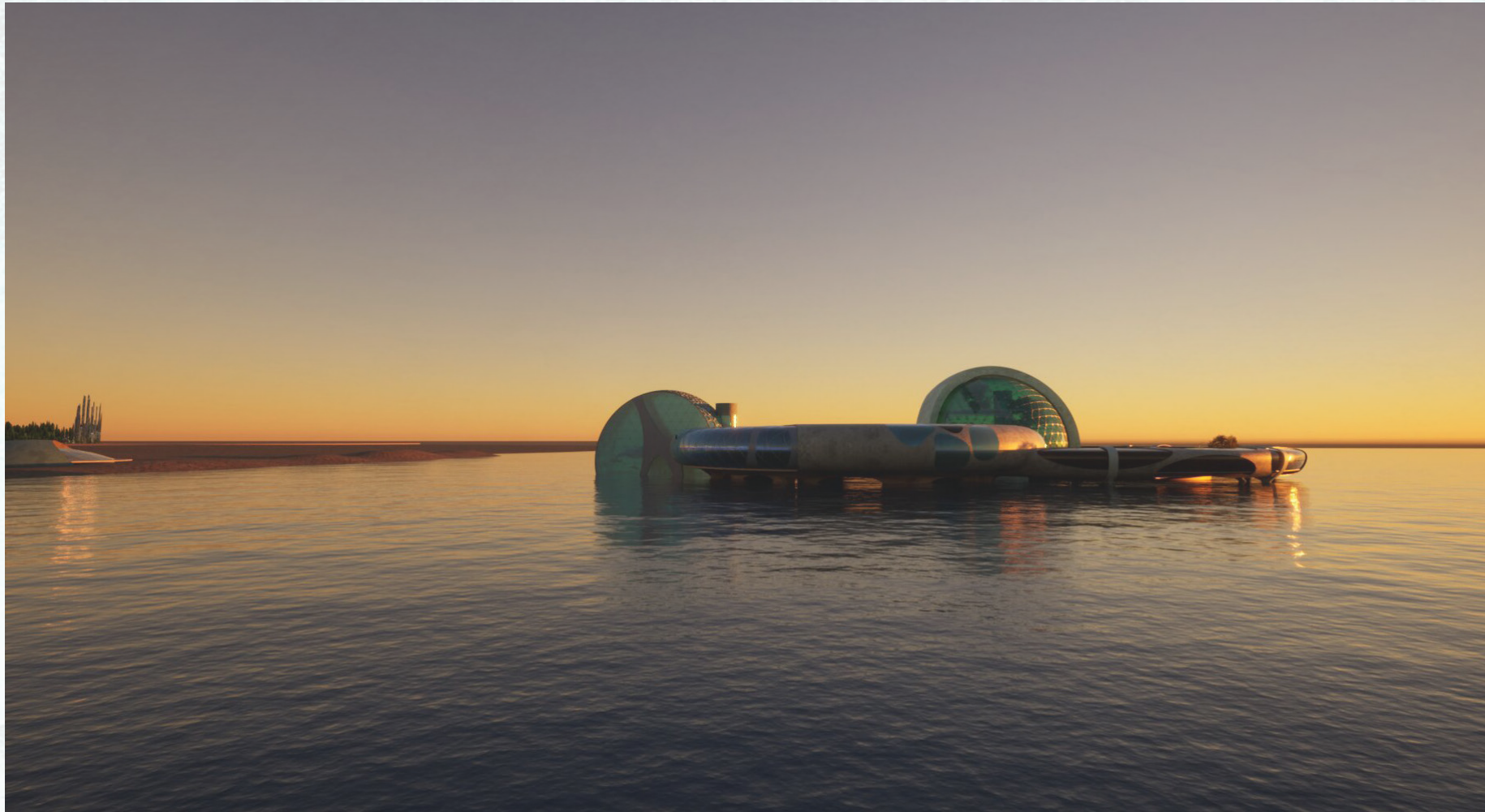


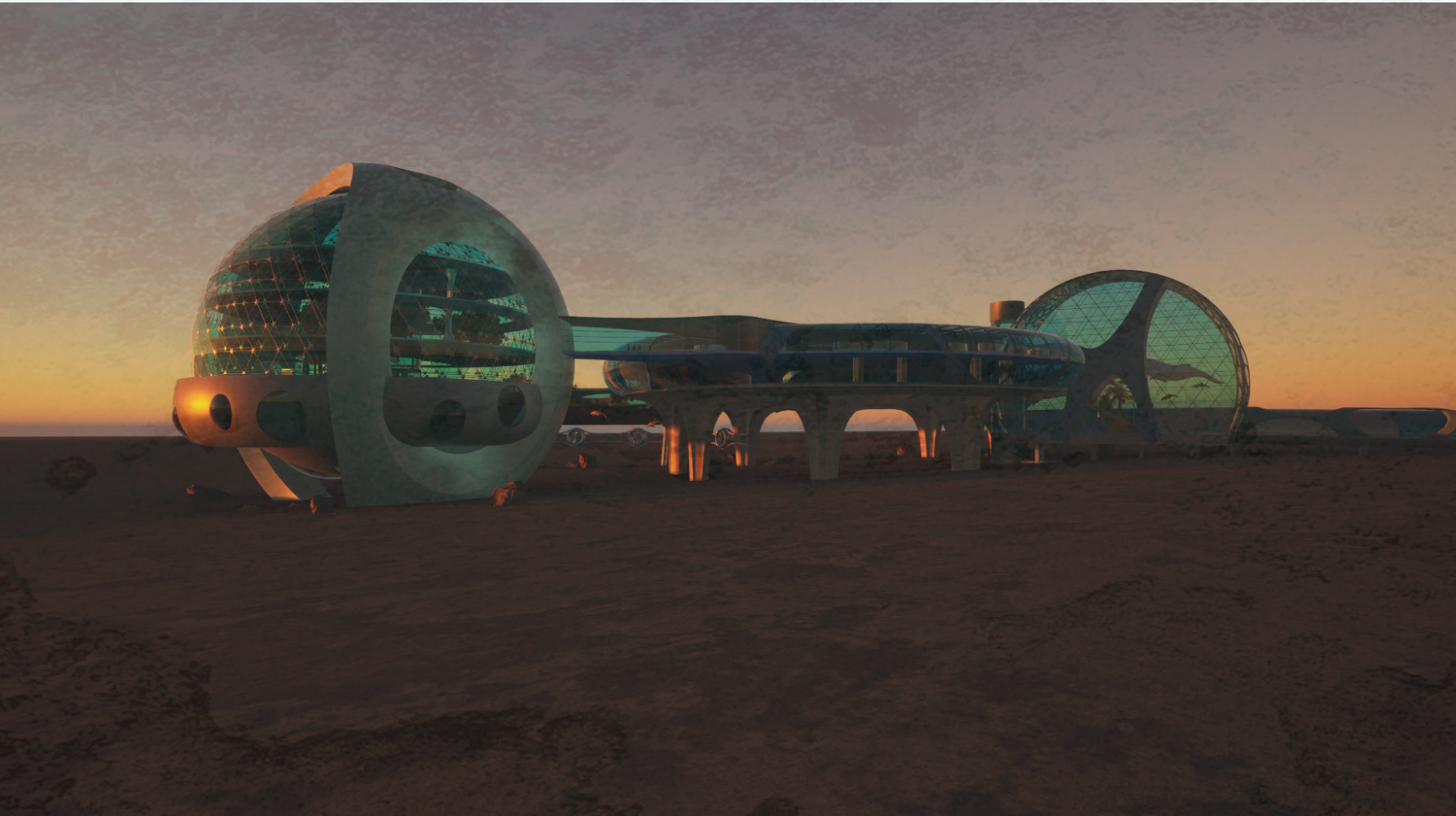
VIII. RENDERINGS GALLERY-
An immersion into three-dimensionality through the image





Approaching the Elisyum from the shore the apparent lack of connection with the mainland becomes more evident. Given the uncertainty about how to access the clinic, the solution of the tunnel and the experiences it entails become more unexpected and surprising.

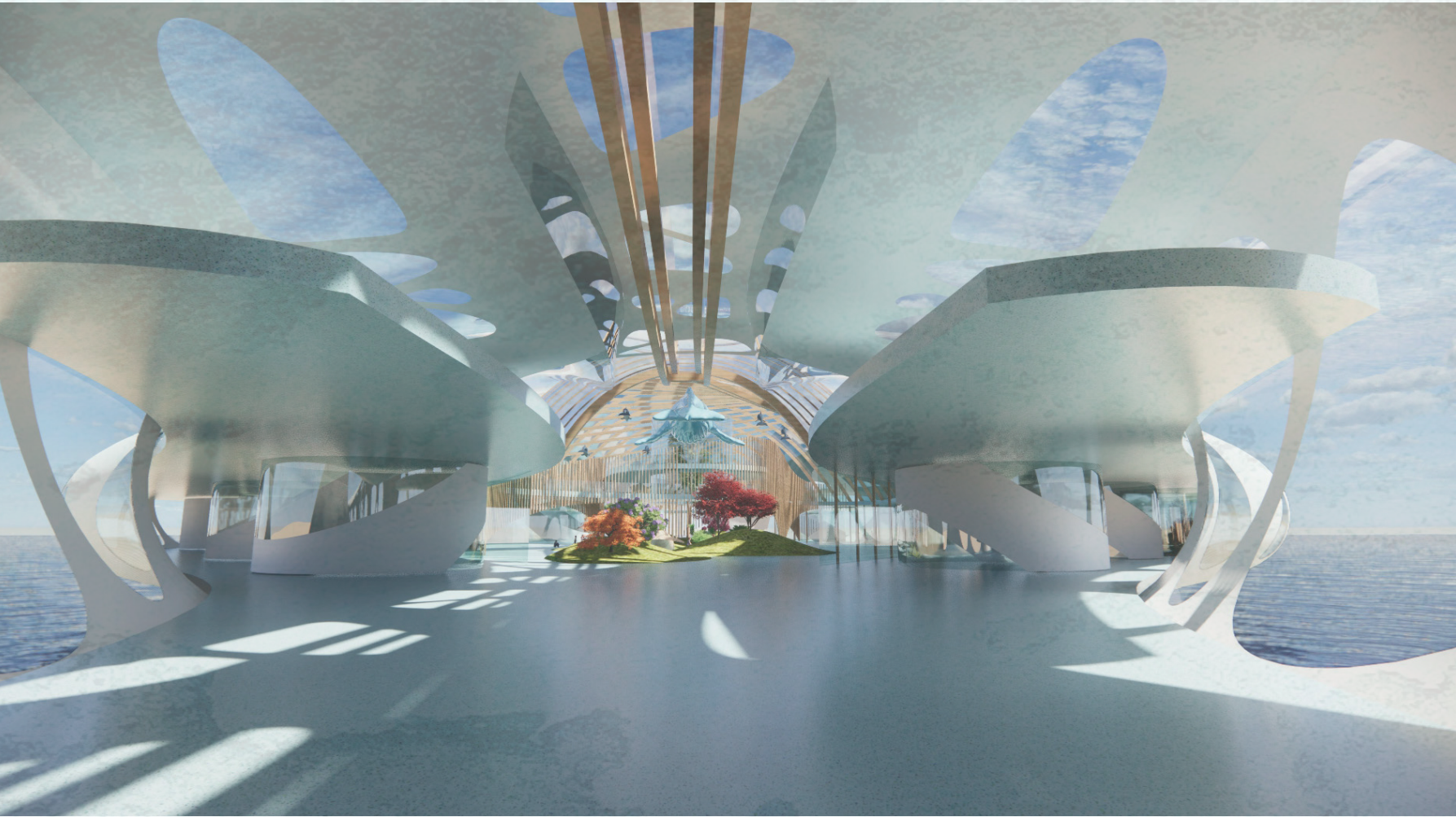




How Elîsyum would interact with the place in a hypothetical scenario in which the sea would change its configuration ?

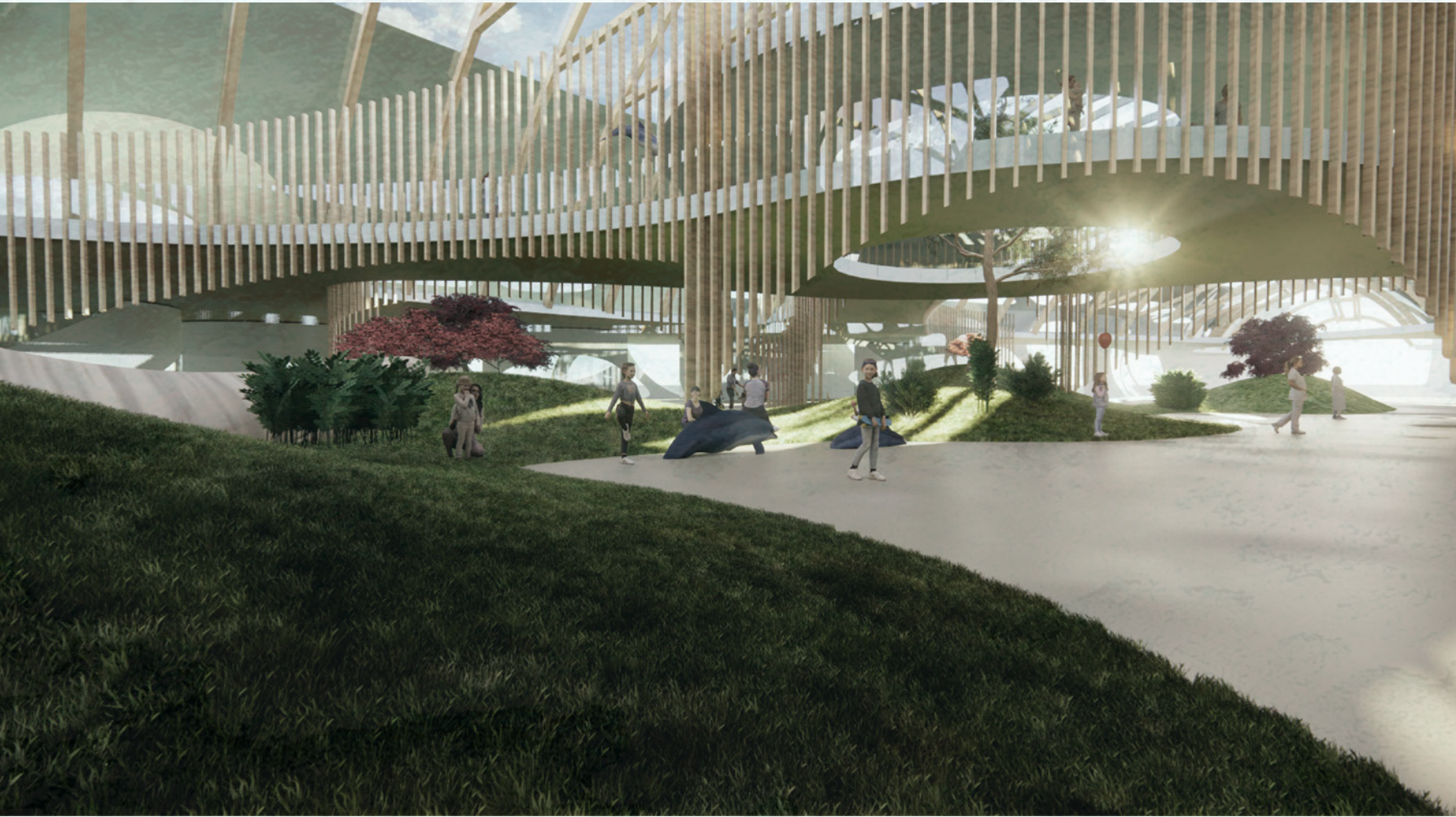


The entire journey from the shore to the submerged spaces of Elisyum is thought of as a succession of experiences in which non-conventional shapes, openings and islands of vegetation are responsible for motivating child patients.





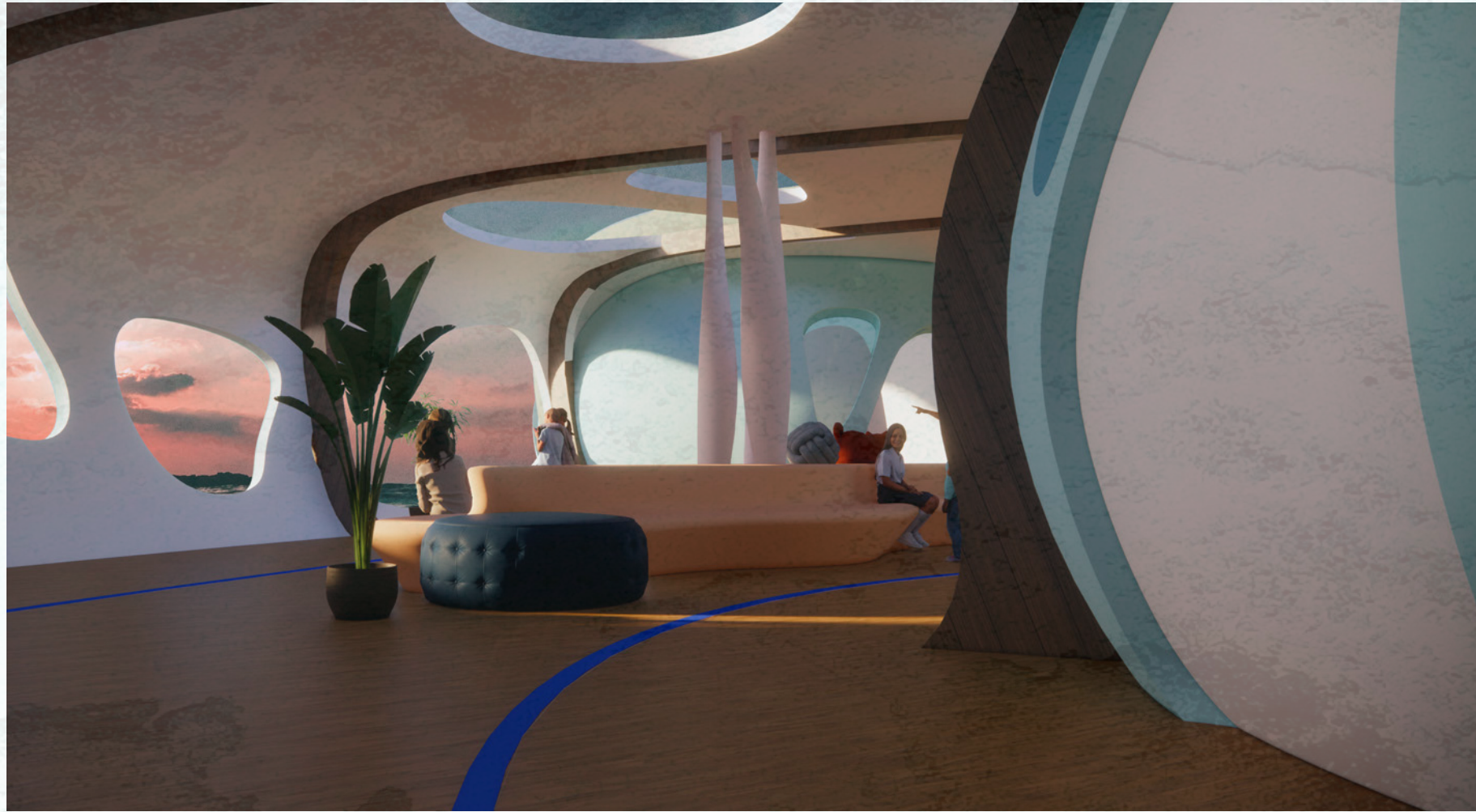
Without dead-end corridors, without closed spaces for the view and always being able - wherever somebody would look - to find a piece of sky, sea or something green and alive.



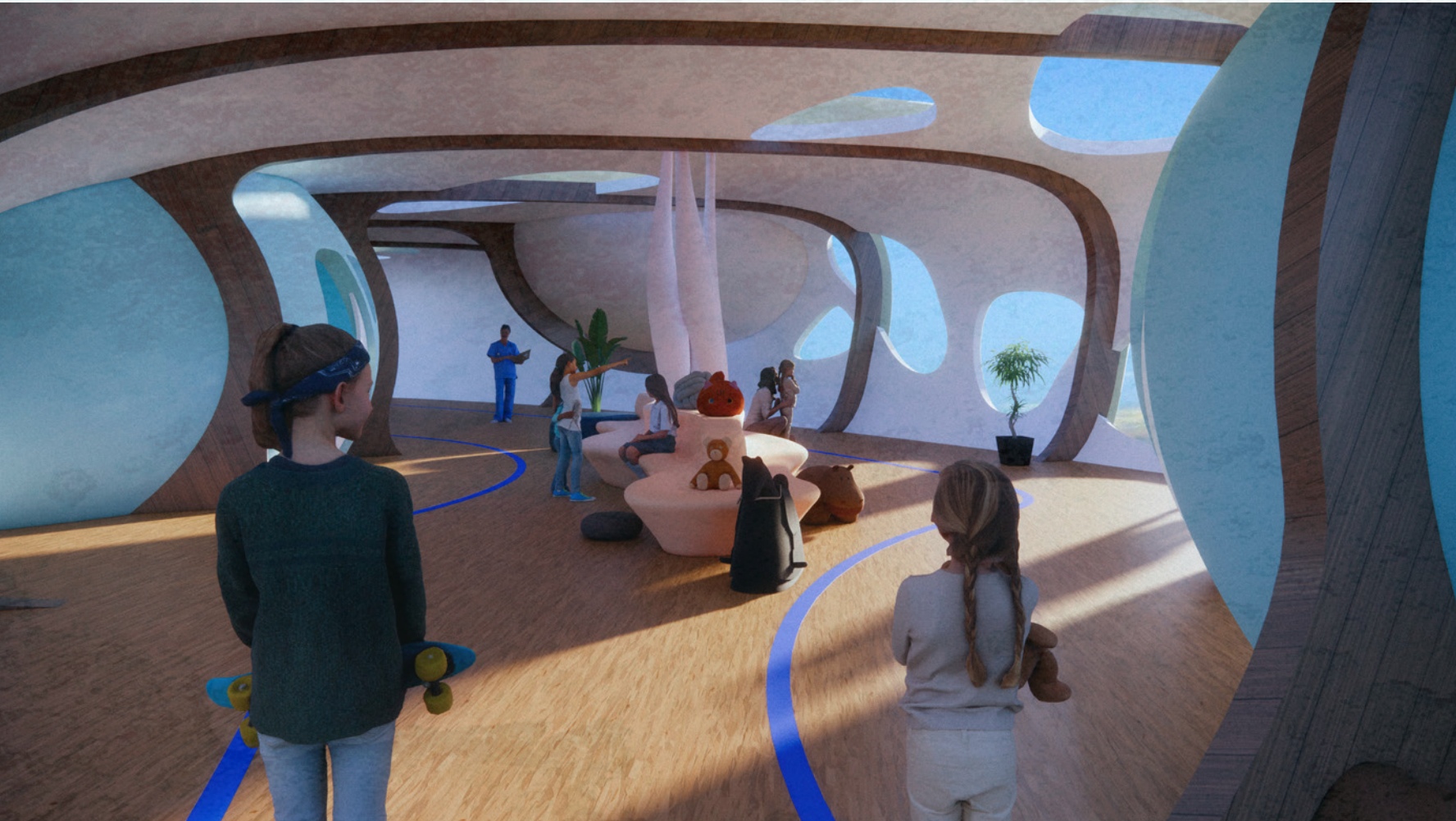


The main idea of the design process was to model “possibilities” rather than physical dimensions. Children affected by this type of illness - not to limit ourselves only to cancer - go through a wide spectrum of experiences and feelings, therefore it is to be expected that they need to express themselves or manifest themselves in many ways. The possibility that everyone can make a space or a view their own, even for a short time, can only improve their moods and ensure a passage to intimacy.



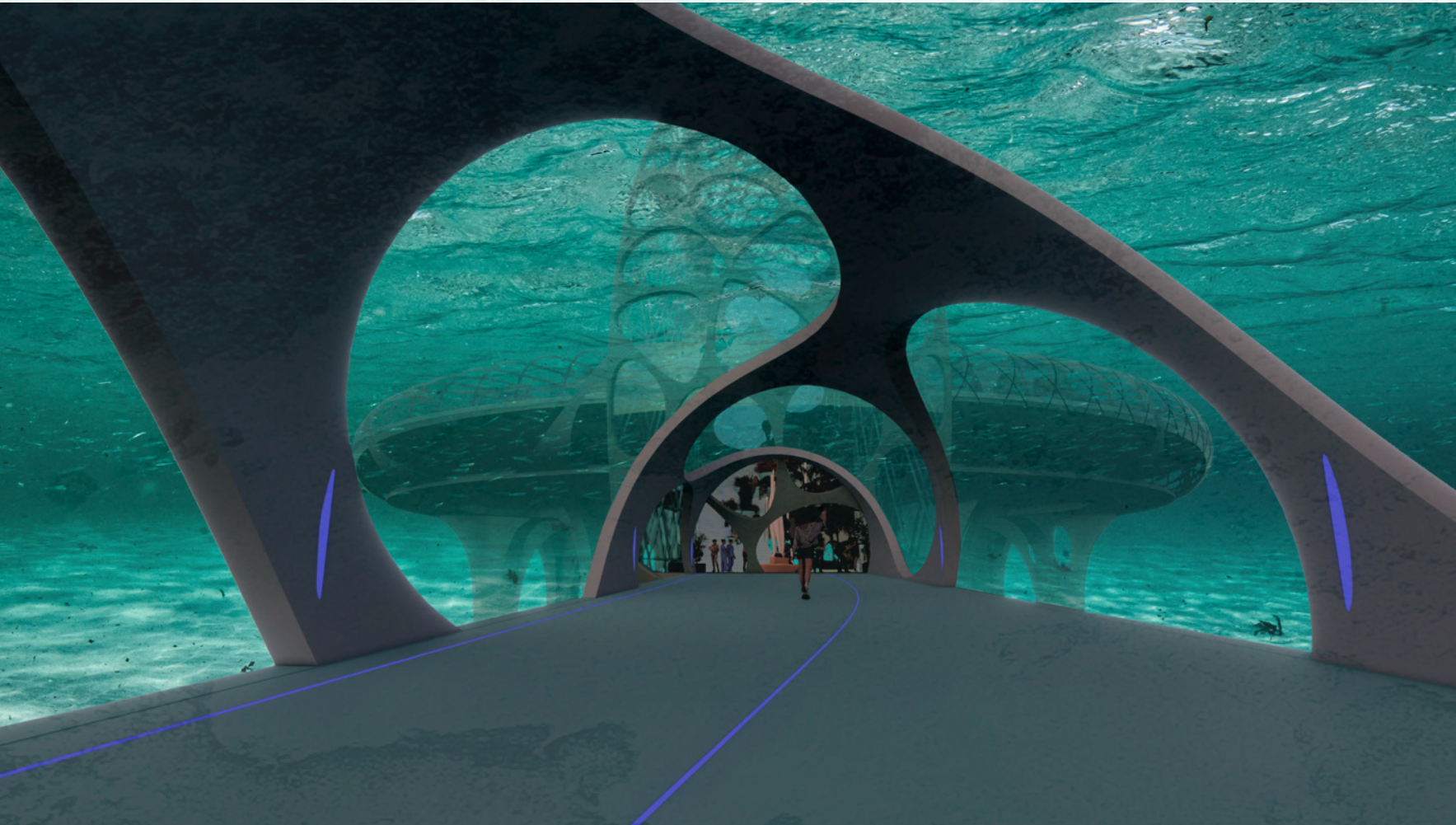


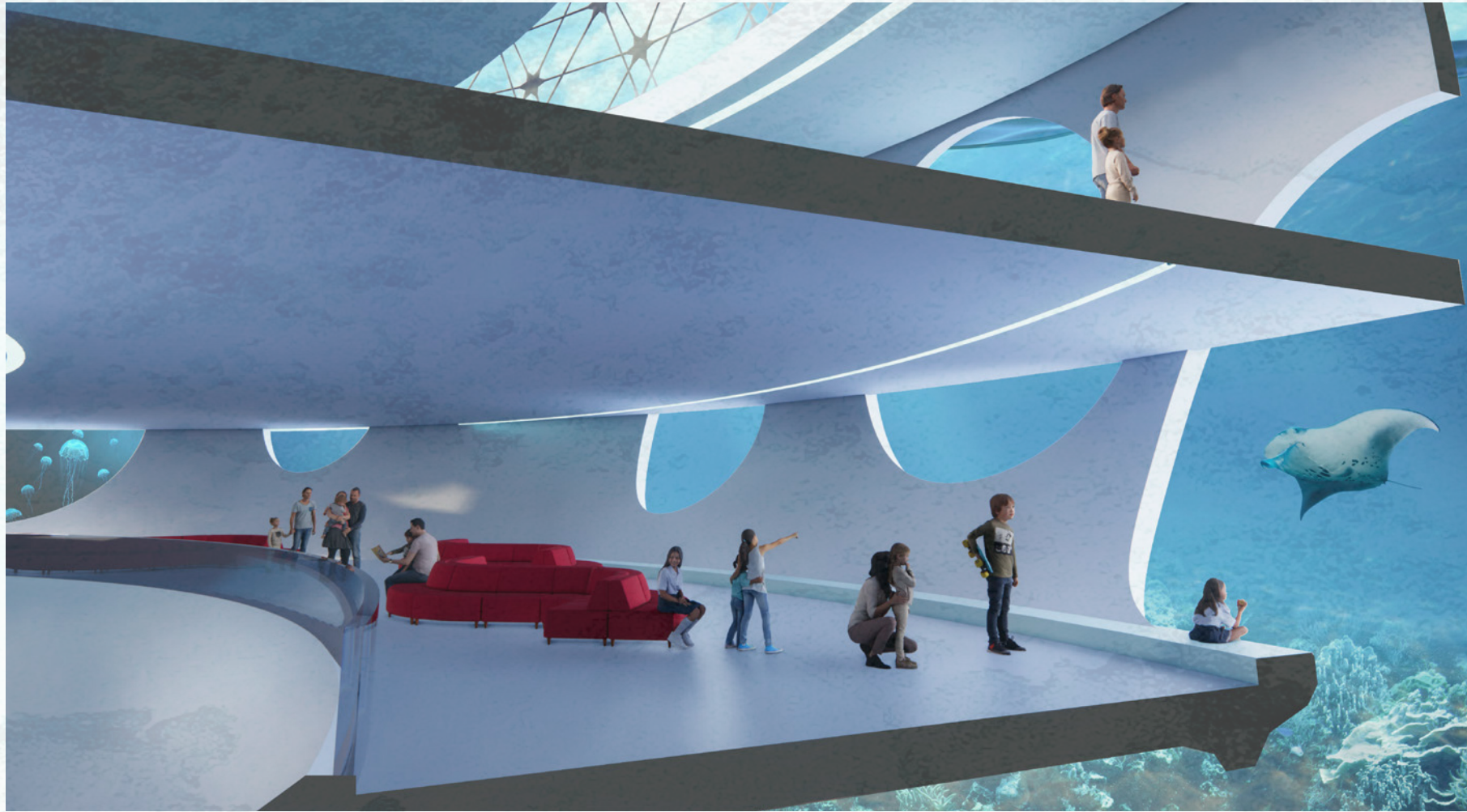
Not forgetting that we are designing for children, for children who suffer pain and fear, was one of the principles always present in the design process. Playful shapes, varied colors, fantasy elements, openings towards a mysterious world, real but safe at the same time were only a part of the ingredients that come to compose this architectural adventure.

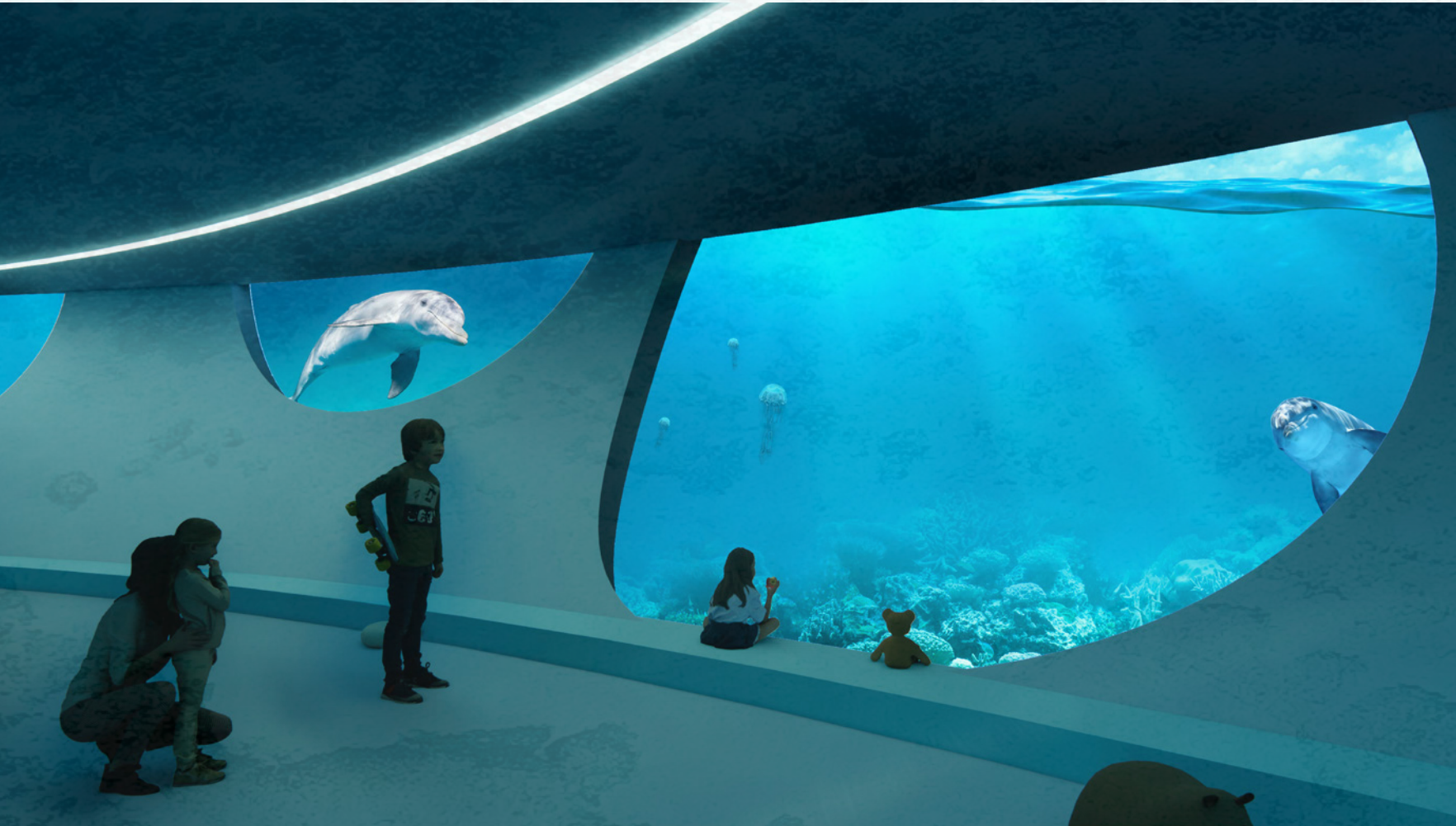


*It is no longer a hospital, it is a place where they can feel safe, continue playing and learning.
A place where they can simply get on with their lives.*





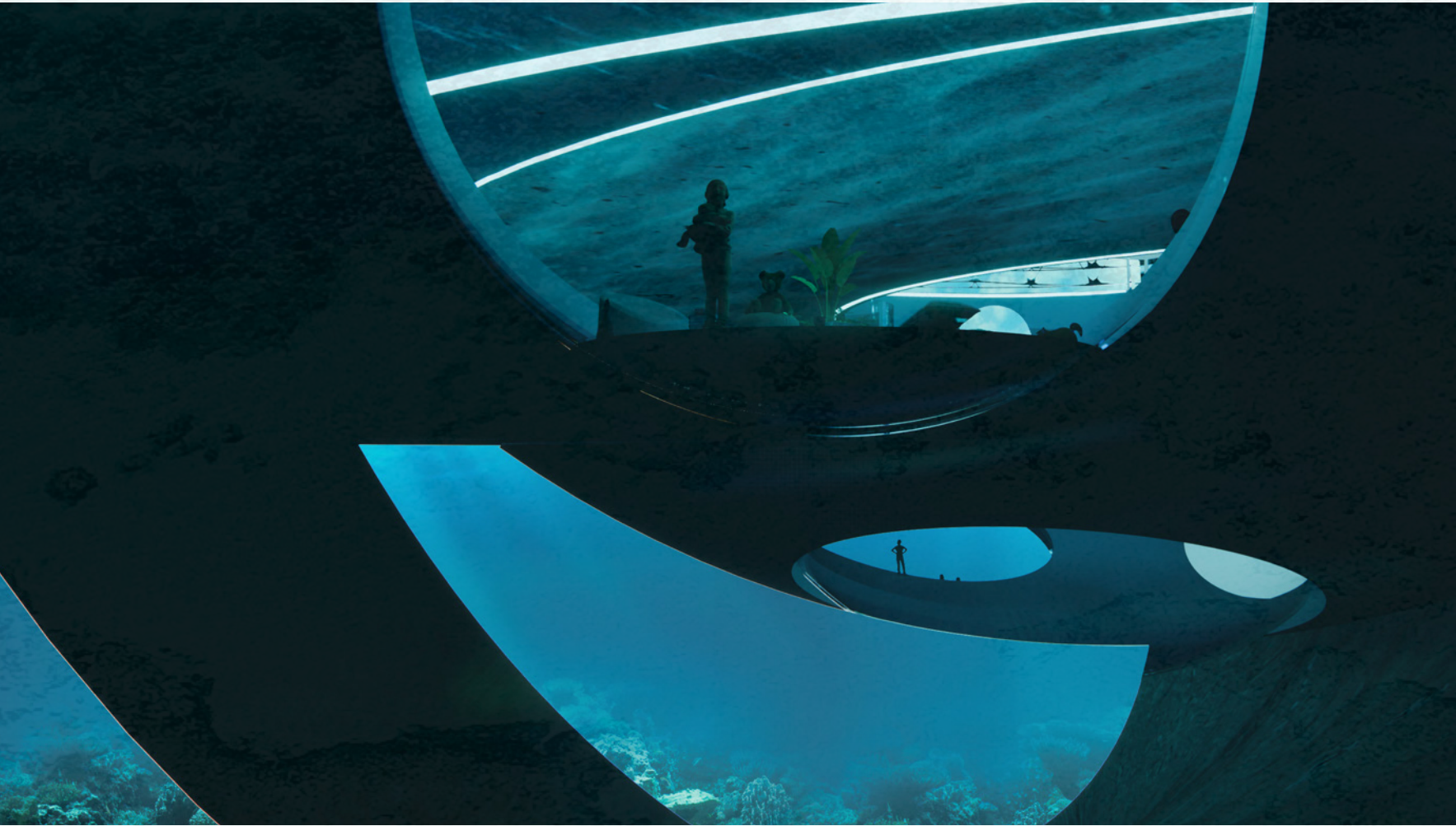




Without schedules and without programming, children are free to make any corner their own at any time.



Sometimes a child may just need to be with himself.





The end of this journey...
Good bye Elisyum

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