

EP_{5n}
449

ON THE

EDGE OF



EP_{sn}

44g

Dima Atchan

200602563

ARCH 508 DESIGN THESIS I

Fall 2009/2010

American University of Beirut - FEA - Department of Architecture and Design

Table of Contents

Flying Architecture	5	Jeffery Laudenslager Sculptures	35
Monologue	9	Monologue	35
The Dream : The Metaphore		Take-Off Position: The Structure	
Étienne-Louis Boullée	11	The Flarke	37
Eero Saarinen	13	Monologue	39
Monologue	15	 	
 		Richard Horden	41
In Motion		Monologue	41
Leonardo da Vinci	17	Monologue	43
 		Monologue	45
Hanging In Between		 	
Santiago Calatrava	19	Pause	47
Monologue	25	Monologue	49
Kinetic Structures		Synthetical Monologue	51
Buckminster Fuller, Tensegrity	27	 	
Monologue	27	Lightness as a Medium	53
 		Vision	55
Chuck Hoberman	31	{between bracket}: Tension	57
		Monologue	59

The Rush	61
Monologue: The Rush and Flying Architecture	63
The Cliff	65
I or...	73
Monologue or...Others	75
The Site	81
An Overview	83
Population	85
The Landscape	89
The Networks	93
A Natural Obstacle	93
Monologue	97
Saints Valleys as Inspiration	101
Just Like the Cocoon: Nature as Inspiration	105
Monologue	107

Me...Flying	109
In the Process of Flying: Attempts	113
Ice Hotel	129
Building the Ice Hotel	131
The Program	133
Solitude in Public	135
Closing Monologue	135
My Program: The Habitat	139
Areas Estimation	139
References	140

Monologues all through the book echo my personal reflections and future intentions to be implemented during the design phase.



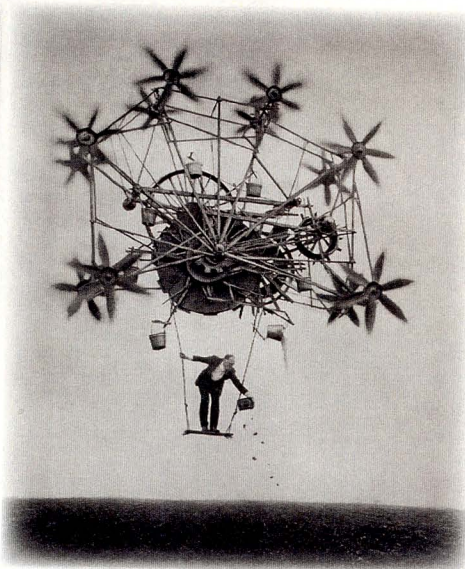
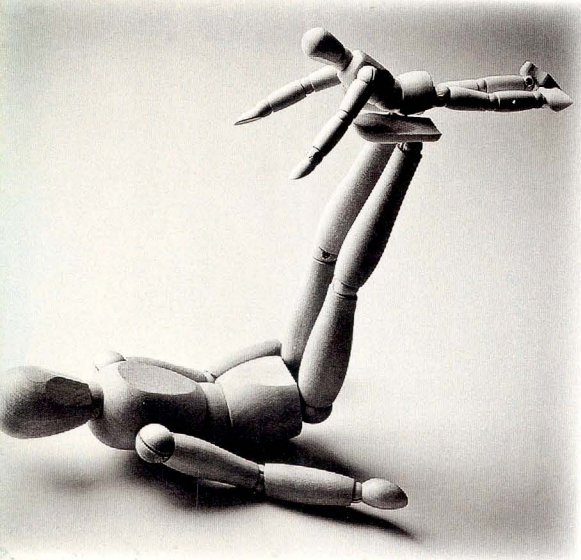
Flying Architecture

The title of this chapter is formulated of two independent words, each one implying a whole different field of interest. Flying implies the sky and architecture implies the ground, however both terms complement the one interest of mine...

Flying is the action to be moving in the air with or as with, wings; it is to be moving lightly or swiftly for it is intended for rapid movement through the air. It is to move through the air in a controlled manner using aerodynamic forces.

Moreover, flying is to rise and be carried by the wind, it is similar to floating but in space or void. I would like to view the sky and all its elements; wind, air and clouds; as an immensely vast space with unseen limits, and where no walls or other obstacles obstruct your view or mine, or paralyze my movements. The sky is a space where my sightlines would expand freely and liberally without biasness and social or political prejudice.

From there, I come up with another definition of the term flying, it is to flee or escape a certain reality, it is to be detached from it, at least virtually. Also it is to deserve a new freedom, to become able to fly and leave the nest, to become independent as a human and find our different ways, faiths, write our story and discover the self. This is why booming adults in Western societies depart for a trip travelling and living by themselves; they practically isolate themselves and live alone, like adventurers to know more about their capabilities to sustain themselves and potential to endure. It is a totally personal choice where those people will quit all life's luxury to satisfy their thirst to know. They usually choose faraway places, where echoes and vibrations of civilization are unperceived, where no distractions are present, they leave to live in nature, or climb mountains. They leave to



live in rough settings and landscapes to meditate and isolate their mind to load it with the fullness and pleasure of such a lifetime experience.

Since we are talking about human interests, architecture has always been one for me. It is an art and science of designing structures on paper and erecting them on sites. It is a universal language found everywhere in our world since antiquity.

“Architecture, of all the arts, is the one which acts the most slowly, but the most surely, on the soul.”

(Ernest Dimnet, 2002, *What We Live By*)

It is true, architecture is too slow when compared to flying objects or creatures. What I mean by that is that architecture since the foundation of humans has been considered a static rigid shelter, and after this taken for granted stance by the human factor, architecture evolved in space and time but still static since the acropolis, however it was shaken by some ornamentation and decorative techniques during the Baroque and Classic periods. More dynamic approaches were introduced with Neo-Expressionism, Modernism and till our times with Contemporary architecture.

Some new theories were found about architecture as a machine, architecture in motion, space and architecture but the built structures remained grounded and rooted in earth, it never took off to fly swiftly in space and rise high, thus defeating gravity effects.

Therefore, how can architecture fly?



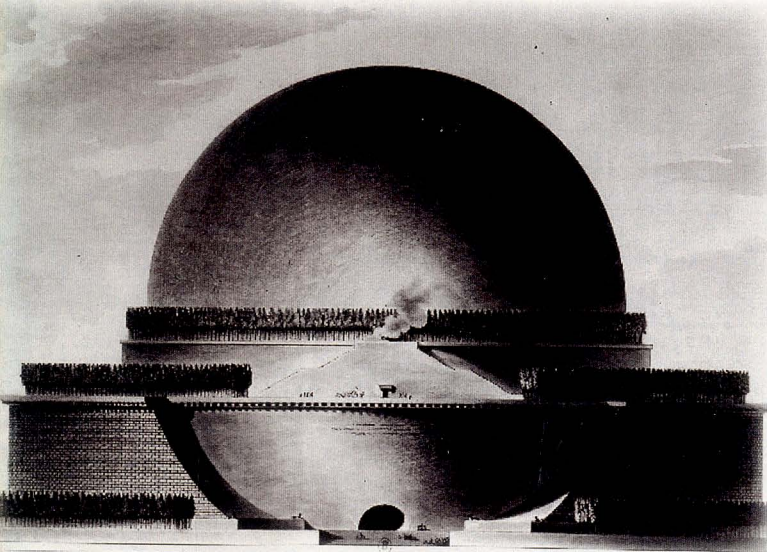
Monologue

Logically, we all acknowledge the incapability of architecture to fly, but we seem to be in constant denial. At least I am. Architecture is the grounded, abiding by the gravity effect medium, however flying is totally the opposite. If I narrow such a question down to perceive it from another perspective, to perceive it on a more real and humane scale; how can a human fly? How can I fly?

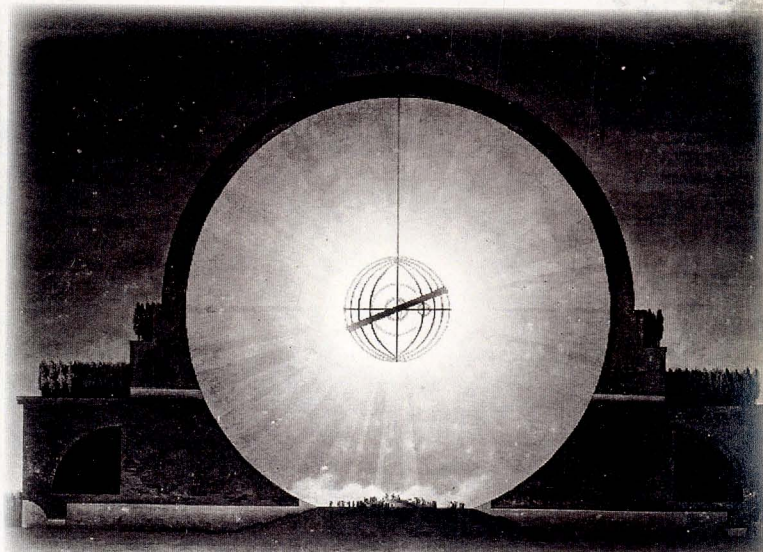
Simply I would say I cannot, however as human kind we incline to have ways to mitigate and distort the reality; we adapt it to our needs so it can best suit us people. So technically and realistically, I cannot fly, but virtually I can feel like flying.

This sensation is present whenever one feels that he needs more air, or more space in life; whenever one feels like being alone, just by the oneself that he/she knows better than anyone else, to cure it and to rest the soul and mind.

Many architects tried and still trying to convey this sensation through architecture and they, somehow partially or totally, succeeded in doing so depending on the architectonics they employed while treating this topic. **Conveying the possibility of flying architecture is my aim, through my own personal research, and references to other architects.**



During the daylight, artificial starlight was implemented.



During the night, surface of sphere perforated to view the glittering sky.

(http://en.wikipedia.org/wiki/%C3%89tienne-Louis_Boull%C3%A9)

The Dream

The Metaphor

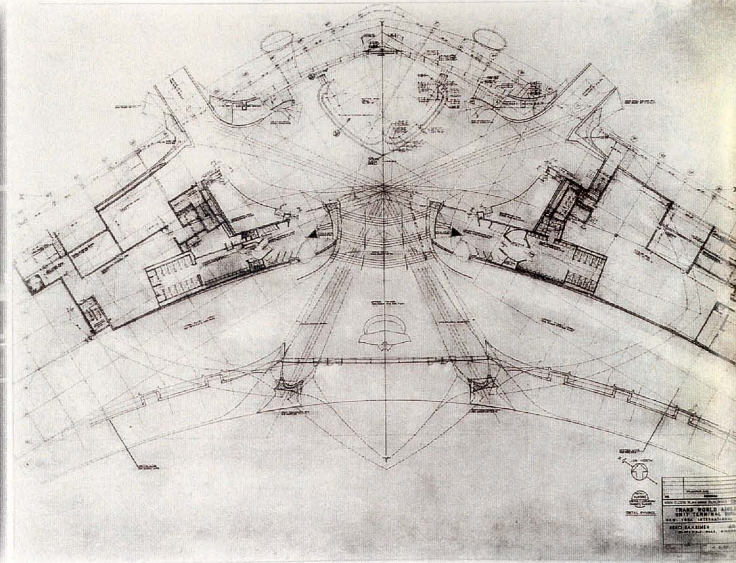
Étienne-Louis Boullée: {one of the principal practitioner of the active architecture during the 18th century, around 200 years ago} “What I call giving character to a piece of work is the art of employing in any production all the means that belong and that are relative to the subject in question, so that the spectator does not experience any sentiment other than those the subject ought to inspire, that are essential to him and which he is capable of feeling”.

Project for an Isaac-Newton-Memorial, 1784

Cenotaph for the English scientist Isaac Newton, which would have taken the form of a sphere 150 m (490 ft) high embedded in a circular base topped with cypress trees. Though the structure was never built, its design was engraved and circulated widely in professional circles.

(http://en.wikipedia.org/wiki/%C3%89tienne-Louis_Boull%C3%A9)

Similarly, Eero Saarinen, a more contemporary architecture of the 20th century, described his own strategy; his main target is to convey the essence of the structure emotionally to acknowledge the purpose and the meaning of the building. Conveying significant meaning of the inspirational purpose of architecture is for him a fundamental principal of the art of architecture.



Román, Antonio. (2003) Eero Saarinen: An Architecture of Multiplicity. New York: Princeton Architectural Press.

Eero Saarinen

Project: The TWA Terminal, Queens New York, 1956-62

Saarinen's terminal for TWA is sculpted as a symbol of flight - abstract, and not intentionally as a landing eagle as it has often been described.

'...a building in which the architecture itself would express the drama and specialness and excitement of travel... a place of movement and transition... The shapes were deliberately chosen in order to emphasize an upward-soaring quality of line. We wanted an uplift.' Eero Saarinen (Román, 2003)

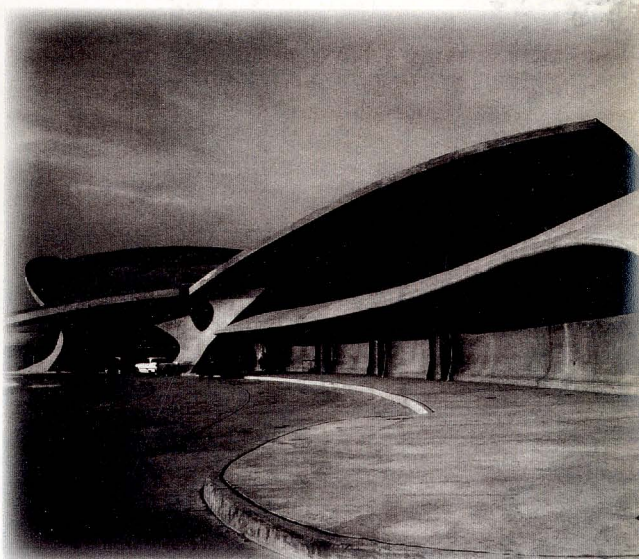
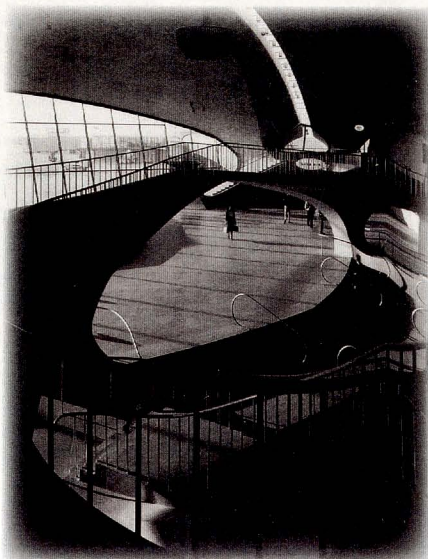
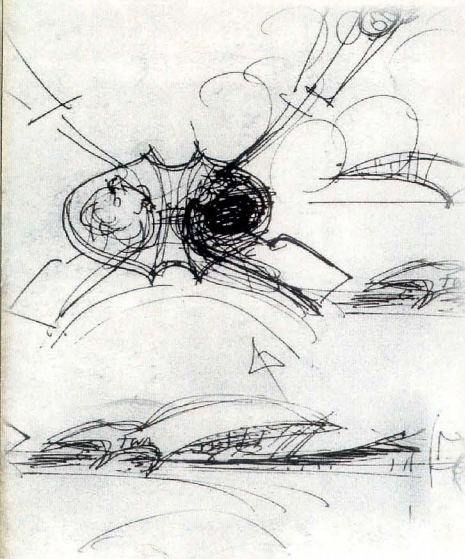
Foot traffic did not follow rectilinear lines, in fact upon meeting an obstacle people pursued curved paths, unconsciously observing laws similar to those of aerodynamics.

Saarinen principal objective was to design a building in which the architecture itself would express the drama and the specialness an excitement of travel. This is evident in the shell-like roofline; its swooping, uplifted roof was specifically intended to convey a feeling of motion and lightness.

Taking into consideration Saarinen's passion in sculpture, the TWA terminal' shape is considered a shell encompassing the many functions of an airport. Its structural conservatism did not withdraw the originality of the space underneath the shell-like roof.

Saarinen described his first proposal for the terminal as a 'pigeon-toed' and later referred to the building as a "Leonardo da Vinci flying machine".

By taking the passenger's impression and experience to its limit, Saarine was able to fulfill his primary intention; wherever he went in the terminal, the passenger would be able to sense the excitement of travel, and evoke the



Román, Antonio. (2003) *Eero Saarinen: An Architecture of Multiplicity*. New York: Princeton Architectural Press.

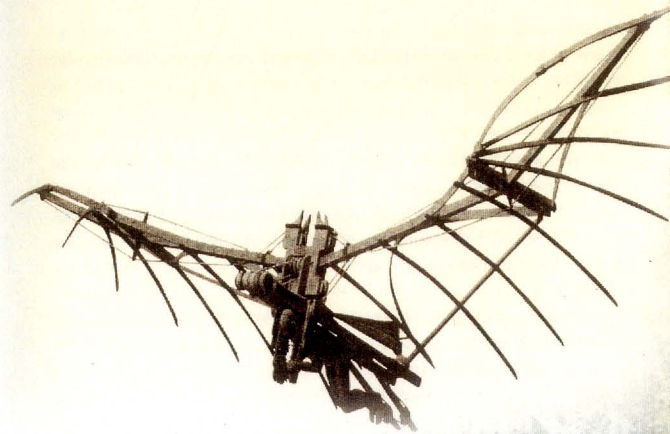
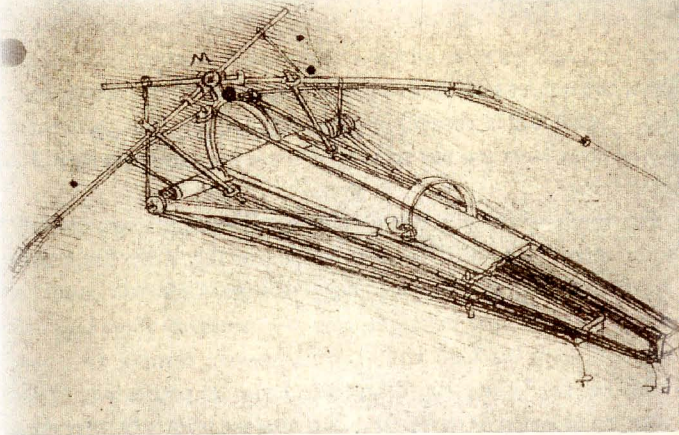
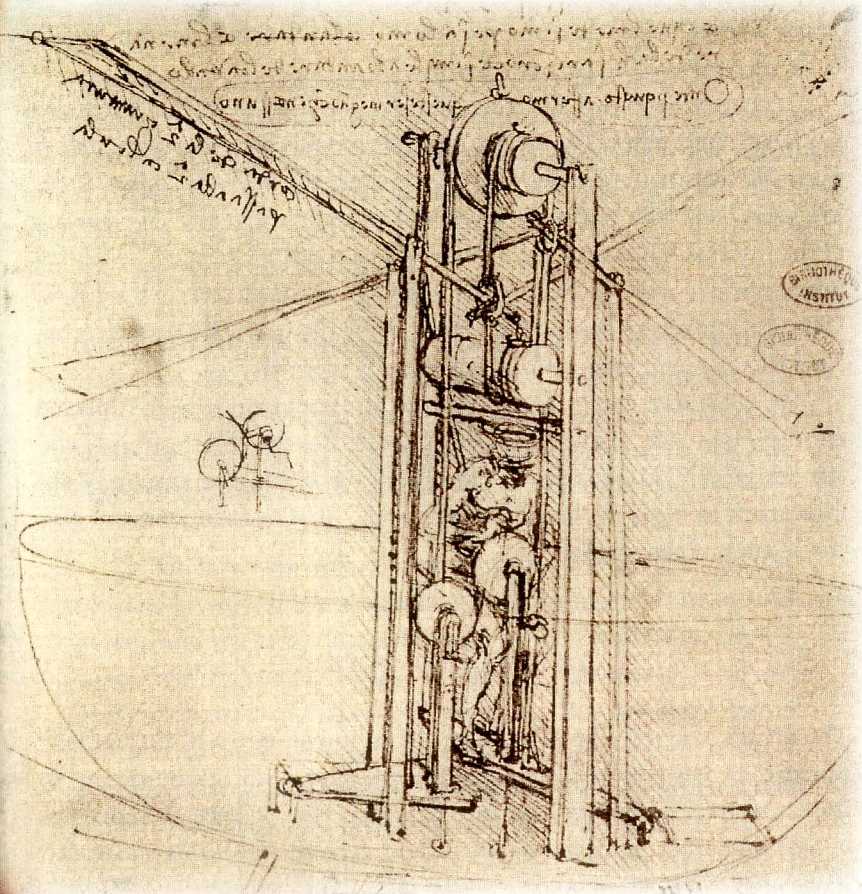
wonder of flight, at:

the information desk, central space, check-in counter, lounge area, boarding gates, baggage claim areas, and the footbridge between the mezzanines...etc

He created a dynamic space, a non-static architecture; he tried to take the discipline imposed by the concrete shell vault and to give it non-static quality. (Román, 2003)

Monologue

Although the building is metaphorically sustaining the idea of flight, the physical structure is also supporting the concept of the uplift through the application of large spans in the building. The TWA Terminal is a twilight between formal architecture expressing the act of flying, perceived as an act of freedom, and the philosophy of flying and virtually invading the sky.

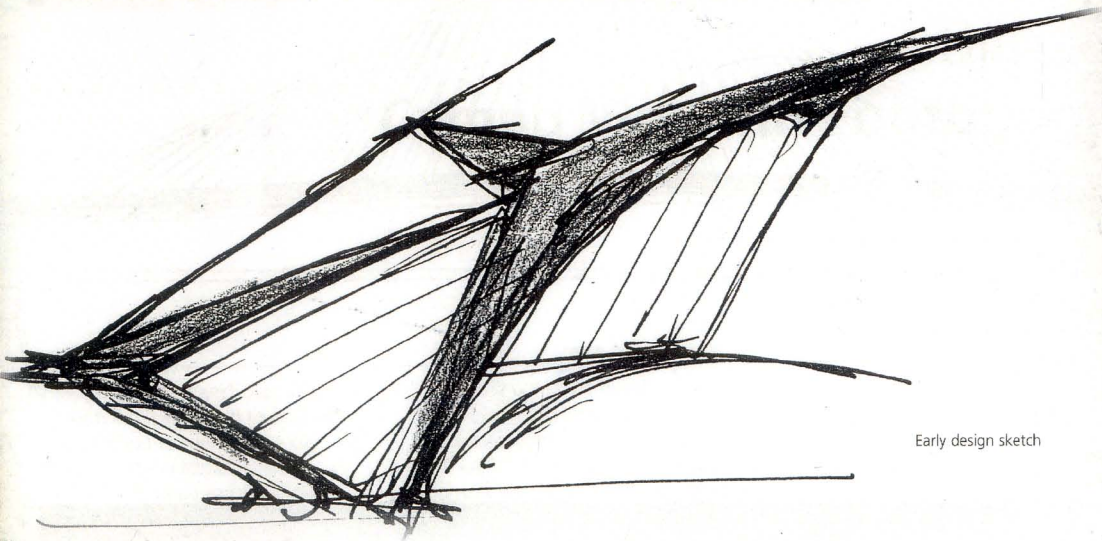


http://en.wikipedia.org/wiki/Leonardo_da_Vinci

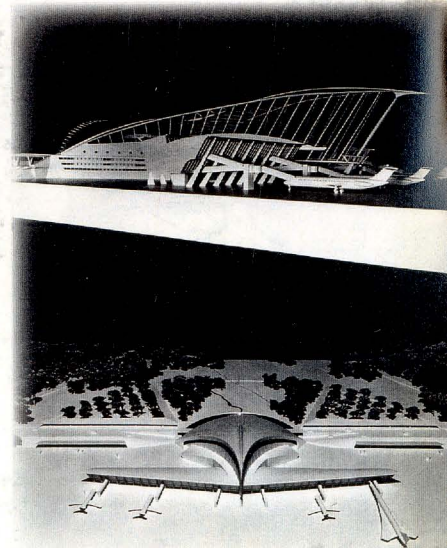
In Motion

Leonardo da Vinci: The first intense period of research on flying machines began in the early 1490s, it incorporated the study of mechanics and the anatomy of the human body. The result of his investigations was Leonardo's flying machines. Even though they were based on sound aerodynamic principles; the combined weight of the machine and its pilot was simply far too heavy to be lifted by human muscle power. Later and after very akin observation and study of the anatomical and aerodynamic details of birds in flight, Leonardo concluded that even though human beings would not be able to fly by flapping mechanical wings, 'soaring flight' or gliding might be possible since it requires much less force.

(http://en.wikipedia.org/wiki/Leonardo_da_Vinci)



Early design sketch



Sharp, Dennis. (1996) Architecture Monographs No 46: Santiago Calatrava. London: Academy Editions.

Hanging In Between

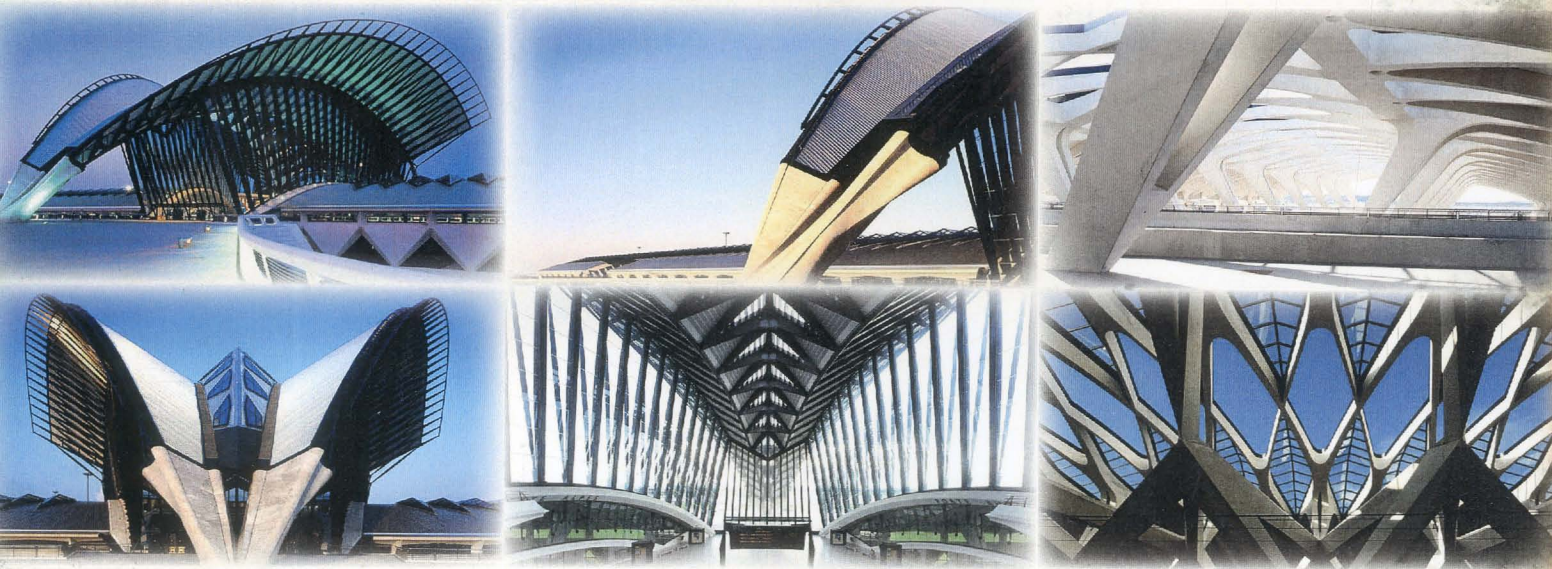
Santiago Calatrava

His architecture is expressed by the overall form; the architecture of movement. Calatrava has been interested in the Kantian Theory whereby beauty is often based on bodily metaphors, animal skeletons and human gestures to add scale, shape and dynamism to the designs. His works rely on flexibility and movability of forms and how structures might express a dynamic, active condition: foldable roofs to respond to changes in temperature and climatic conditions (bio-climatic), playful significance of a thick, hollow wall acting as a thermal barrier, light and shadow give a static interpretation of movement...

“The art of architecture is the creation of harmony in tension: the tension of a structure in relation to its setting; the tension between form and construction.” Santiago Calatrava (Sharp, 1996)

Project: The New Airport for Bilbao-Sondica in Spain, 1990

Calatrava's design is a conceived metaphor for the dynamics of flight. The architect uses a bird-like image with open wings to express its function as an air terminal. (Sharp, 1996)



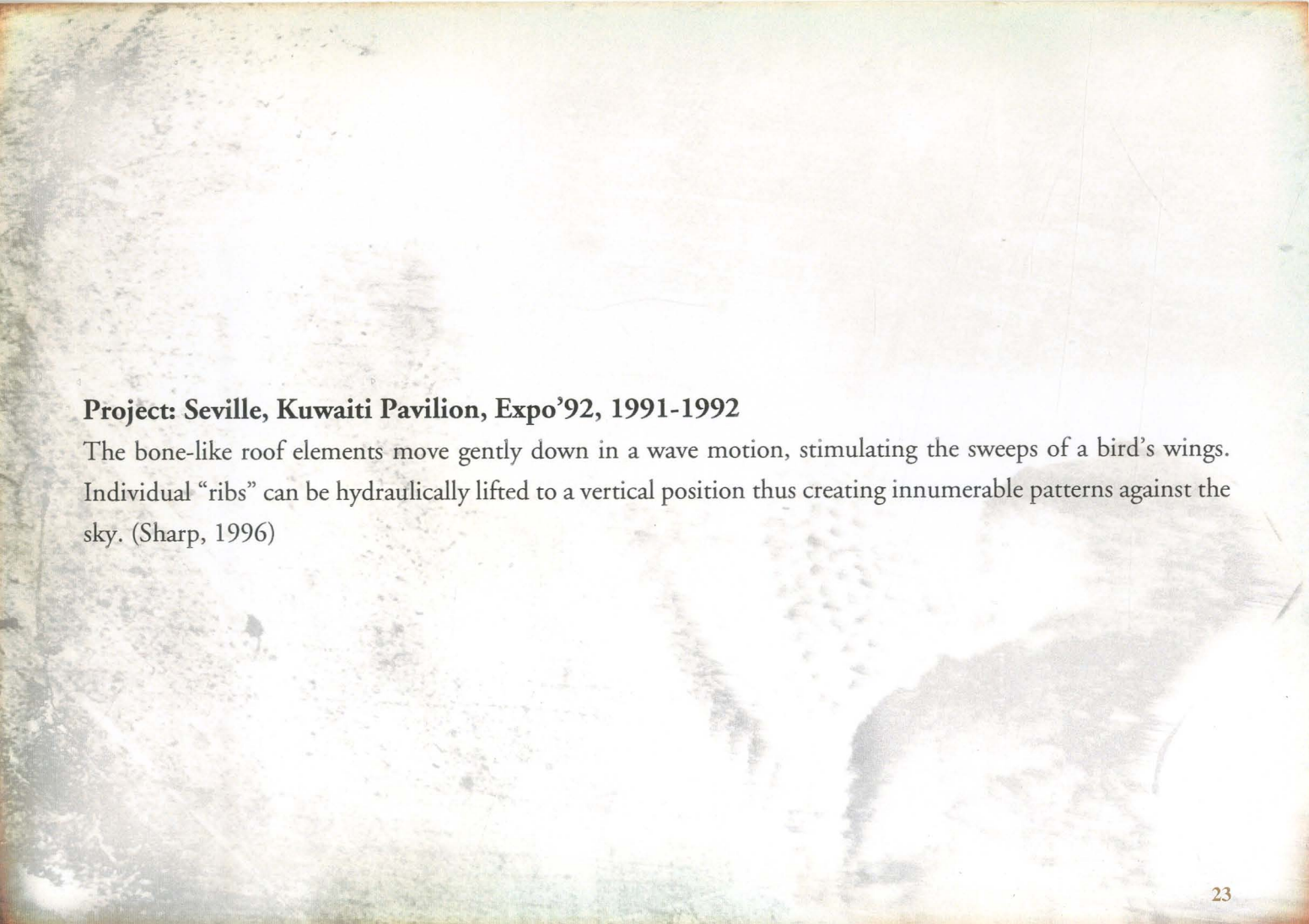
Sharp, Dennis. (1996) Architecture Monographs No 46: Santiago Calatrava. London: Academy Editions.

Project: Lyon Airport Railway Station, 1989-1994

Birds in Flight; it is a literal implementation of the wings concept in its mechanical aspect as well as in its function of transporting a body of objects from one space to another. The roof of the actual station hall is wide, with its two parts resembling the wings of a bird in flight or landing. Such a form serves the main function of the structure; to signal the arrival and passages of the trains. (Sharp, 1996)

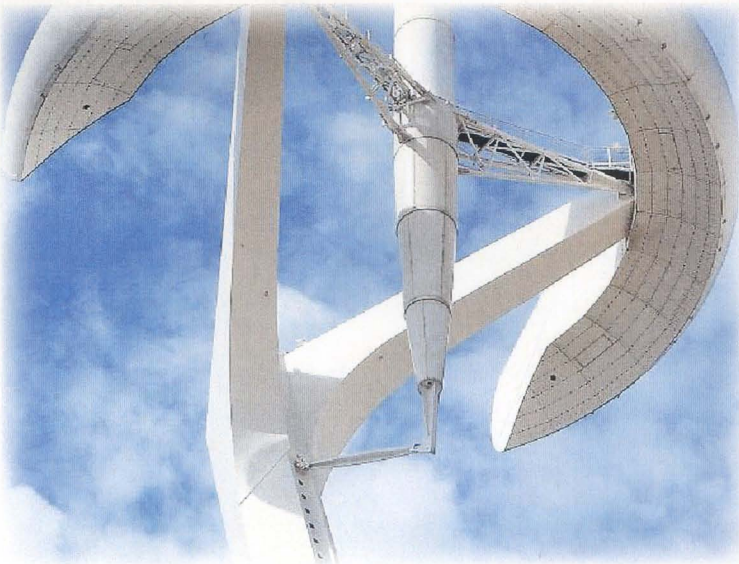
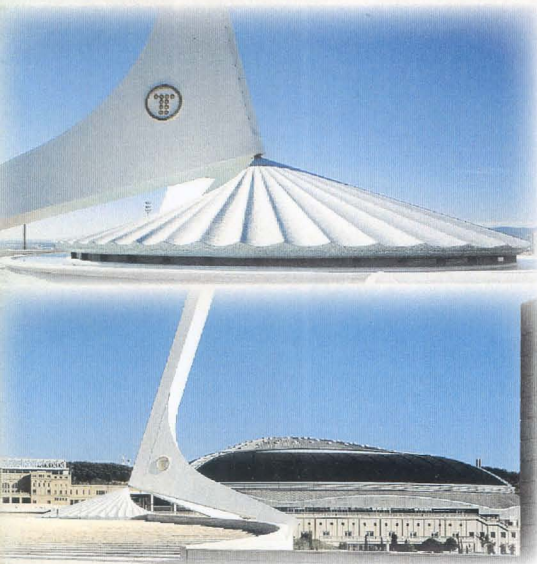


Sharp, Dennis. (1996) Architecture Monographs No 46: Santiago Calatrava. London: Academy Editions.



Project: Seville, Kuwaiti Pavilion, Expo'92, 1991-1992

The bone-like roof elements move gently down in a wave motion, stimulating the sweeps of a bird's wings. Individual "ribs" can be hydraulically lifted to a vertical position thus creating innumerable patterns against the sky. (Sharp, 1996)



Sharp, Dennis. (1996) Architecture Monographs No 46: Santiago Calatrava. London: Academy Editions.

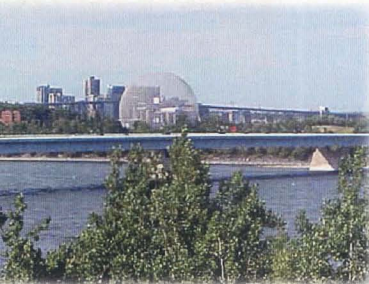
Project: Montjuic Communication Tower, Barcelona, Spain 1989-1992

Recognized as a landmark and a touristic destination, the structure was designed originally to be seen from all over Barcelona to symbolize the power of the Olympic Games coming to Catalonia in 1992. The 136 m (446 ft) tower is located in the Olympic park, and based on Calatrava's sketch of a kneeling figure making an offering, the structure represents an athlete holding the Olympic Flame. The Challenge in this structure was to visually create a 136m tower held at only one point. It's weight seems to absent itself in order to found just the right equilibrium for the structure to stabilize. (Sharp, 1996)

Monologue

I can clearly see the metaphorical effects impacting the architecture, but it is certainly strengthened by the structural elements complementing such a powerful effect.

Much later after Leonardo da Vinci who tried to fulfill the dream through merging the human factor and the birds' anatomy, Calatrava found a different language, a mediator. His work is an interplay of architecture and engineering. Light, space, material, form and structure are apparently expressed through the bird's metaphor in all its moments; while flying, flapping his wings or even landing. Calatrava enabled his human being to experience flight through the structure in motion. His architecture evolves through the structure; it is not in itself structure. Therefore, although metaphorically and formalistically attempting to fly through the apparent lack of equilibrium, Calatrava perpetuated this state of equilibrium. The morphology of his architectural language creates dynamic spaces through the assembly of individual static elements implying movement; the structures were still attached to the ground, but in motion.



Margolius, Ivan. (2002) Architects + Engineers = Structures. London: John Wiley & Sons Ltd.

Kinetic Structures

Buckminster Fuller, Tensegrity

Buckminster Fuller designed large numbers of geodesic and tensegrity domes and structures. The structure is efficient structurally and flexible to transform in different shapes and is able to span over 3 kilometers in diameter. The United States Pavilion at Expo'67 in Montreal was 76 m high, using 90mm diameter steel tubes to form a 3 dimensional frame of hexagonal and pentagonal components rising from 1 m thick base gradually thinning to the top. (Margolius, 2002)

Monologue

I am going to trust my intuition to achieve the exceptional; stripping down to the minimum, using the least amount of material to perform the act of flying.

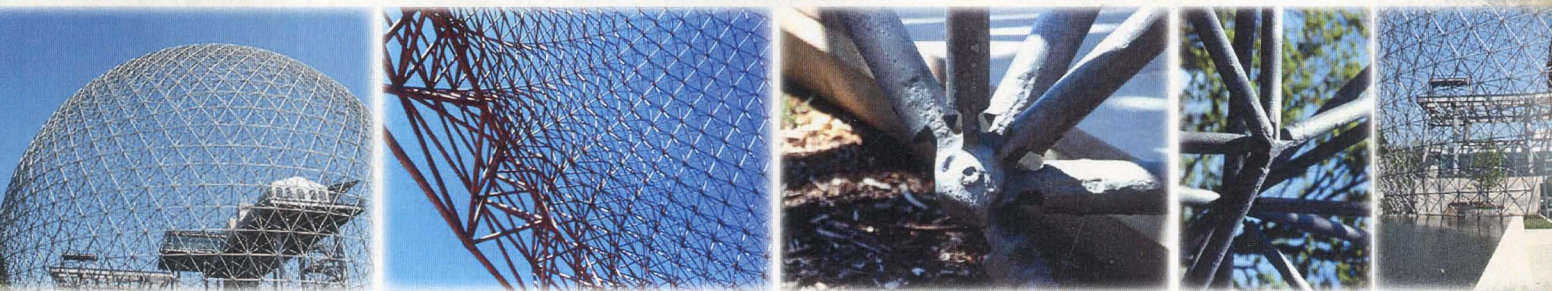
Bill Addis argues that "Structure is all about doing more with less, using less material to support a given load or enclose a given volume, or making a stiffer or stronger object without using more material.

(Margolius, 2002)"

London 1994, p.9

Meaning that I should take all the unnecessary weight out of the building to make it as light as possible. And what if the building itself is all about the structure that is light, and flying. Complying to mathematical laws of substitution, the building itself will be thus, flying.

Buckminster Fuller posed such a question: 'do you know how much your building weighs?' in order to raise the



Margolius, Ivan. (2002) Architects + Engineers = Structures. London: John Wiley & Sons Ltd.

awareness about the importance to consider lightness in building construction. Lightness was the main driver of his designs where, Buckminster Fuller introduced Geodesic and Tensegrity Domes between 1948 and 1983.

...he used short lengths of rigid aircraft duralumin tubing connected with cables. When tensioned the dome assumed its form and the legend was born; tensegrity.

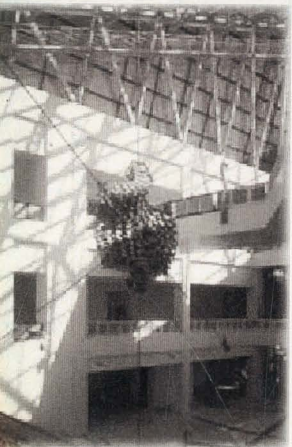
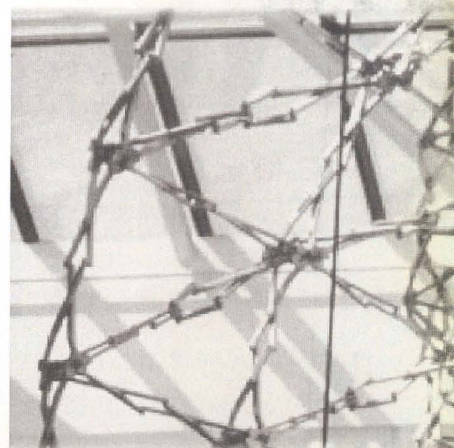
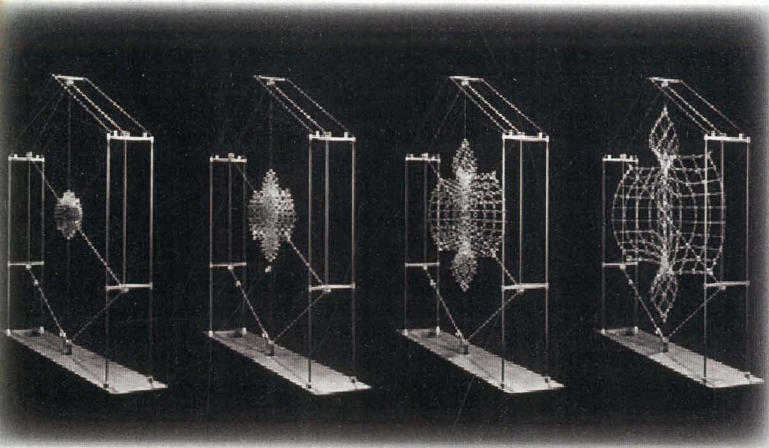
“There are many ways of rendering geodesic structures, but all represent closed systems in which compression is comprehensively encompassed by tension”, both forces are energetically juxtaposed. “In principle, this emulates the structuring of the universe”, implying that Tension is comprehensive and the universe is tensional integrity.

Molecules are structured geodesically. (Margolius, 2002)

The counteracting forces equilibrate throughout the structure and stabilize it, in contrast with normal building structures that derive their stability from continuous compression due to the force of gravity.

Gravity was never surmounted, camouflaged but never overstepped.

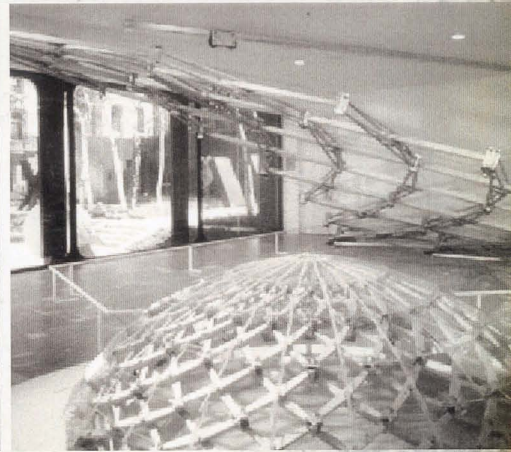
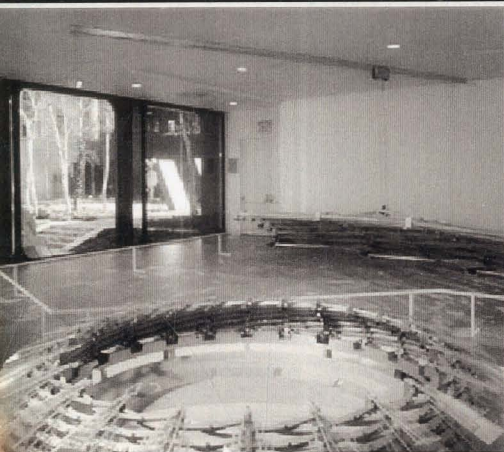
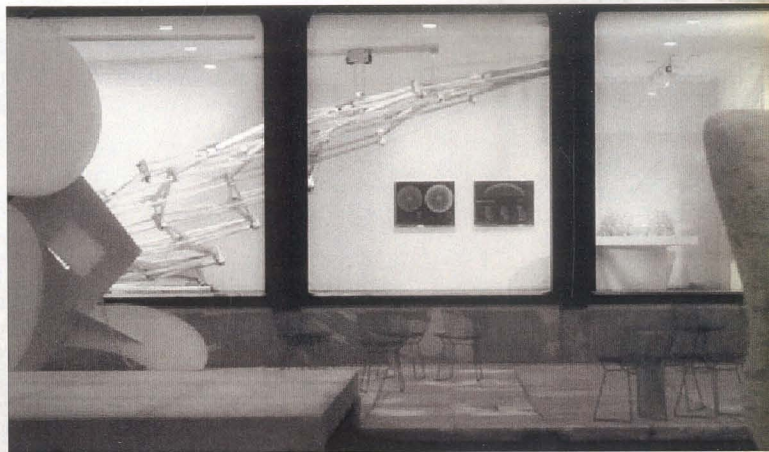
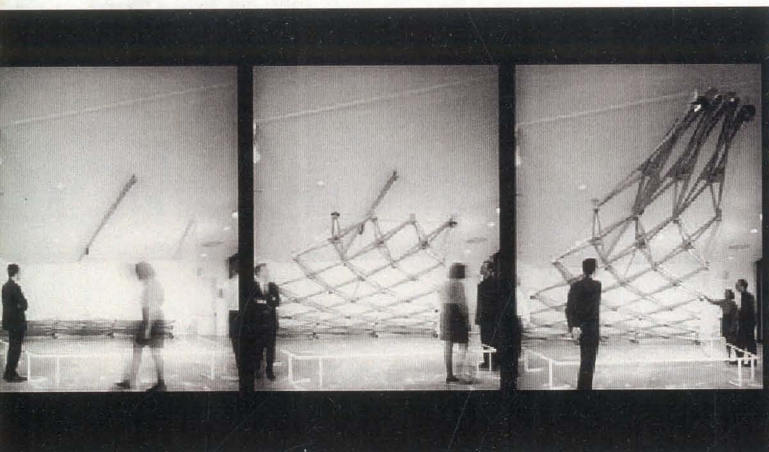
Knowing that flying is unachievable by human kind, we repressed such a reality in our denial lobes buried inside our mind and tried through centuries and centuries to compensate such a deficiency. Nevertheless, the impossible could undergo some mutations and metamorphoses into dream. Claiming that flight is a dream is a much less harsher reality.



Chuck Hoberman

Project: Expanding Hypar, California Science Center, Los Angeles, California, USA, 1998

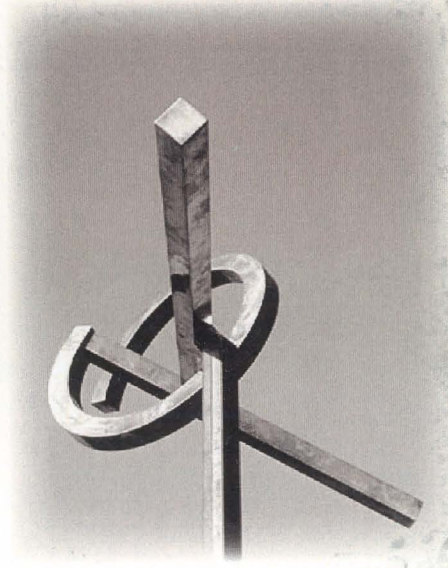
A permanent exhibit that opened with the California Science Center in 1998, the Expanding Hypar forms an undulating plane that bisects the museum's wedge-shaped atrium. It changes with the viewer's perspective—resembling from different angles, a star, a saddle, or a bow. Regardless of the form, the profile expands and contracts continuously while maintaining its overall shape. (<http://www.hoberman.com/portfolio/>)



Project: Iris Dome at The Moma, Museum of Modern Art, New York, USA, 1994

This retractable roof opens and closes like the iris of an eye, transforming the space inside between indoors and outdoors. The Dome has rigid covering panels attached to its structure; they glide smoothly over one another to form a continuous skin covering the dome when fully extended over large spans.

(<http://www.hoberman.com/portfolio/>)



www.laudenslagersculpture.com/

Jeffery Laudenslager Sculptures

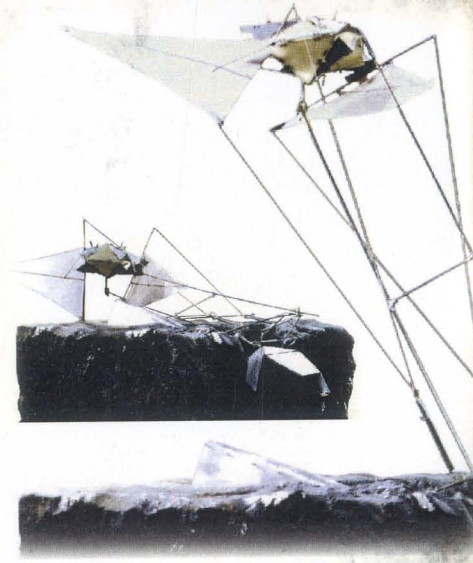
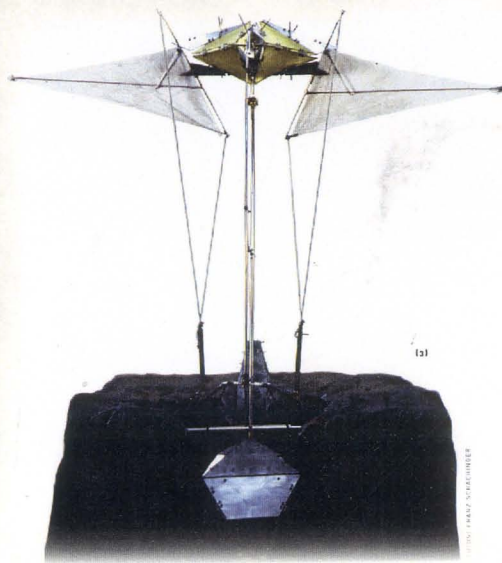
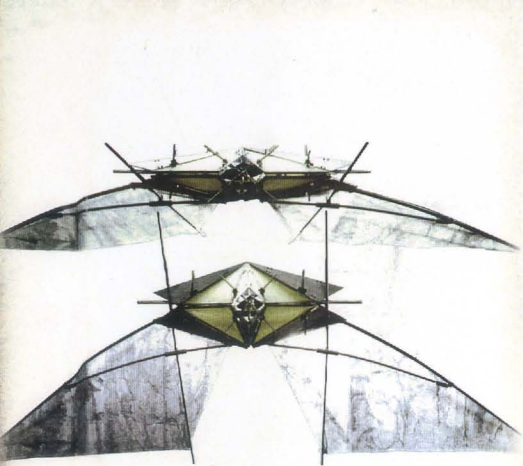
Projects: UKOYL_E EDITION 1, Running Man, Bird of Paradise, Trance America (knot in Time)

(www.laudenslagersculpture.com/)

Monologue

The sculptures are all organized around the concept of gradual articulations. It resembles bodily articulations where each member's activity requires the stimulation of another adjacent member. Its anatomies are fragmented into parts to form the whole of the aluminum light sculpture.

The interesting part is that the flying elements are totally stable although floating in the air and susceptible to motion by air current each based on the lightness of its weight. They are just held at one another by one rotating hinge, but still in total balance.



Najjar & Najjar. (2001) Kinematic Space. Berlin: Kristin Feireiss, Hans-Jürgen Commerell.

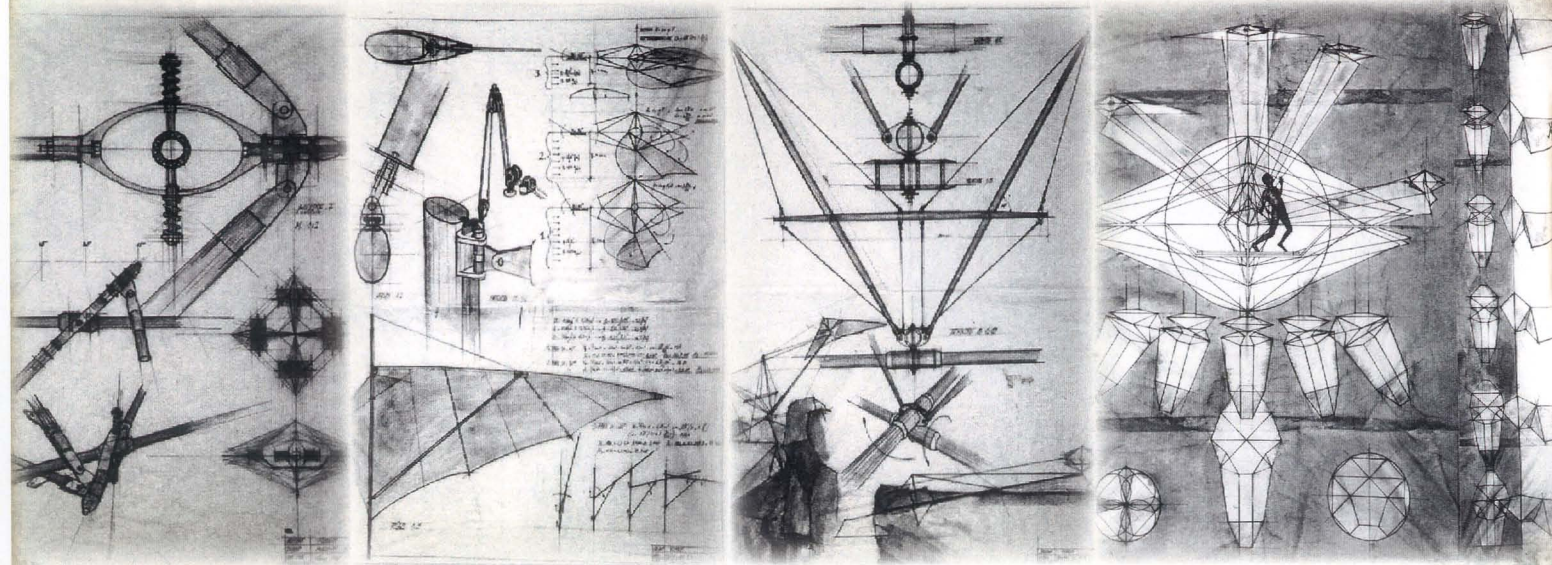
Take-Off Position

The Structure

Project: The Flarke

“The ‘Flarken’ is a manifestation of the human endeavor to rise up in the sky and climb deep into the ground, to seek exposure and protection. It is a hybrid of a tree house and a cave dwelling in constant interaction of movement, which manifests the existence forms of human life.”(Najjar & Najjar, 2001).

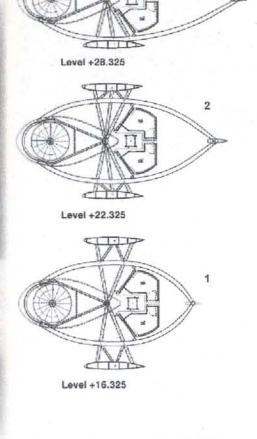
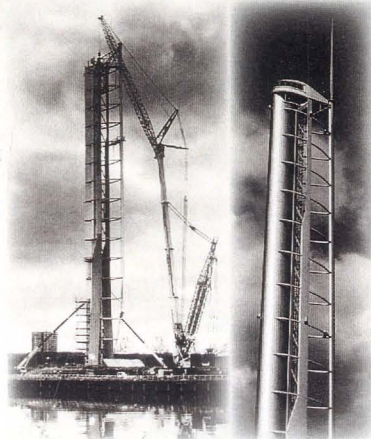
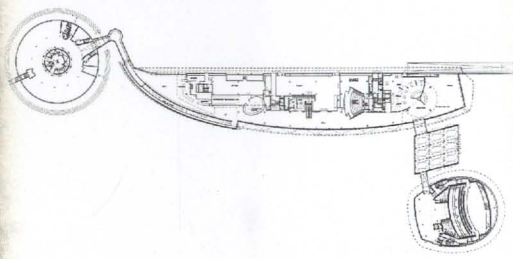
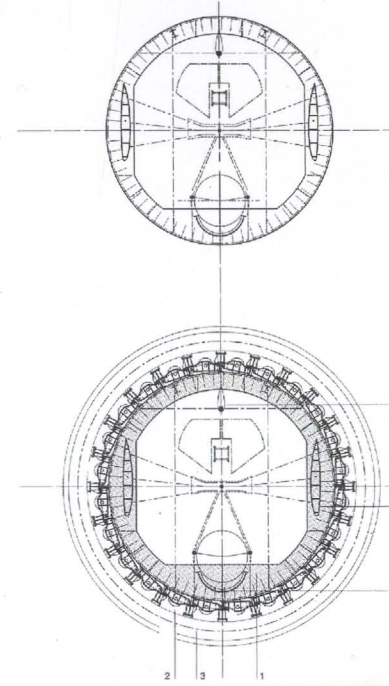
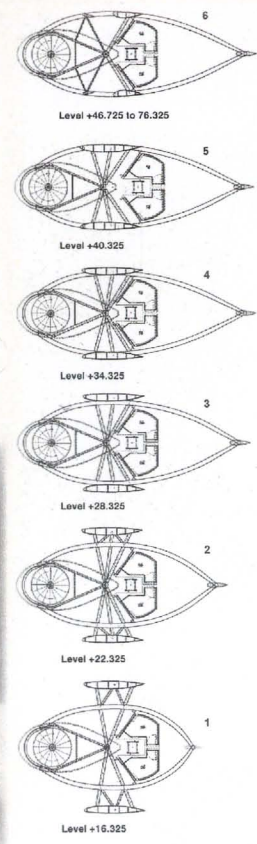
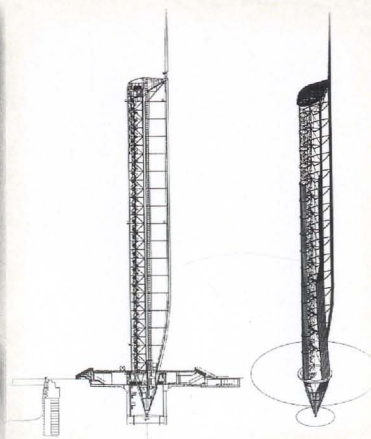
The Flarke is a capsule installed on a cliff. By unfolding its wings in the wind the Flarke is lifted up in the sky. Simultaneously a cave house withdraws into the rock. The house’s varying geometrical configuration and movement is ensued by the different inclinations of the wings’ flying device is driven by the wind’s directions and positions. (www.najjar-najjar.com)



Najjar & Najjar. (2001) Kinematic Space. Berlin: Kristin Feireiss, Hans-Jürgen Commerell.

Monologue

What strikes me the most in the Flarke, is its ability to be in motion through simple and naturally generated action of the wind. The latter is a constant motor of the installation making it in action position all the time. Not only the wind, but also the human factor partakes a role for the person within the house is able to change the structure and its location by a shift of the balance. And who doesn't support the idea of being in control of such a flying structure? However, control can be reached from a different aspect, not necessarily through the control of the structure, but through the mastering of our emotions and sensations while being in a breath taking structures.



Herzog & de Meuron. (2003) Steel and Beyond: New Strategies for Metals in Architecture. Switzerland: Birkh user – Publishers for Architecture.

Richard Horden

Project: Millennium Tower, Glasgow, Scotland, 1993

The form and function of the 140m high tower articulating Glasgow city's past and future technological capabilities expresses the desire to live and design in harmony with the natural forces of wind and gravity. Its lighter construction is emphasized in its base through a turning mechanism based on a spherical bearing. It allows the tower to shift with the wind, thus reducing wind load on the structure. All systems incorporated within the design empower the statement and function made by this tower such as its seemingly flying ribs and its lifts descending slowly by their own weight without power, as well as the employed materials offering open-air views of the surrounding. (LeCuyer, 2003)

Monologue

Richard Horden attempted to fly his rotating tower while still being in coherence with the controlling natural (weather) conditions. He was not trying to escape them smartly; in fact, he submitted to its forces and cooperated with the residing natural circumstances through lighter materials and technological mechanisms.



www.hcla.co.uk

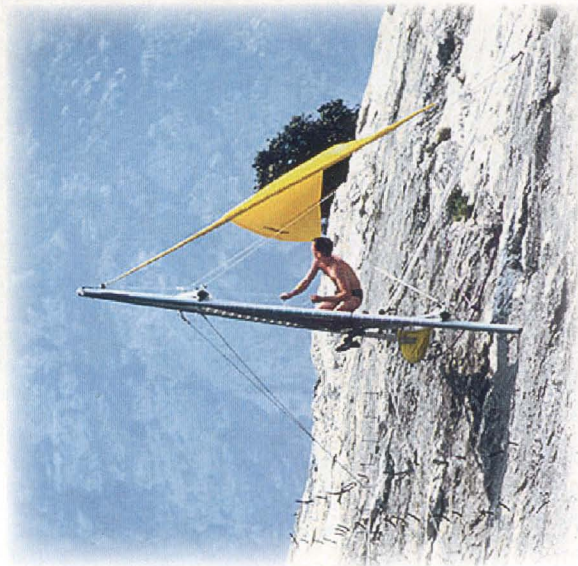
Project: SkiHaus, Switzerland, 1991

The SkiHaus was conceived while skiing late and high in the Alps. It serves as a mobile alpine hut; a hard tent. The lightweight, all-aluminum structure weighs 315 kg and is designed to be lifted into position by helicopter. It is well-insulated using lightweight aviation materials and has a self-sufficient energy system powered by solar and wind generators. Besides its rescue and safety functions, the SkiHaus is an architectural vehicle with which to explore the third dimension and the wide clear spaces on top of the mountains. (www.hcla.co.uk)

Monologue

Evening sun, a beautiful, clear, starlit night, twinkling lights of the village in the valley, a reluctance to return: Would it be possible to stay here in the beautiful, cold silence?

A question paused by many people while faced with such an atmospheric paysage. To be alone, surrounded by the silence of darkness, to feel the moment and breathe the fresh aroma rising from beneath the green shaded mountains; to feel the minute sprinkles of water against you face, to feel the nature, and to retract silently from the loud arrogant urbanity is a dream come true, it is flying...



www.hcla.co.uk

Project: Cliffhanger, Lake Garda, Italy, 1997

by Alexander Felix, Christopher von der Howen

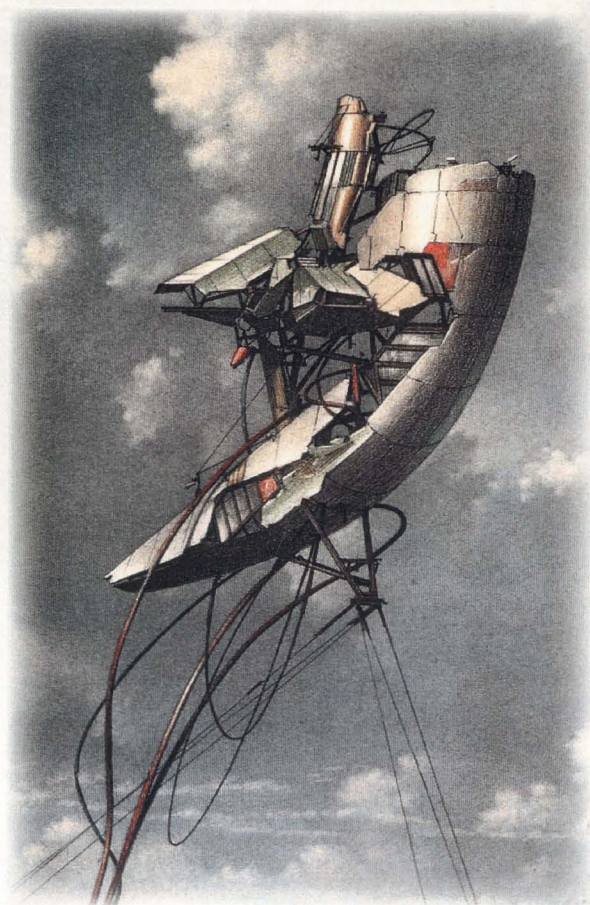
Cliffhanger was designed as a platform for surfers, yachts' people and climbers. Suspended only a few meters above the water, it is conceived as a place for resting and sunbathing, and as an observation point for regattas. It has a lightweight form of construction without any great technical elaboration. Two tubular members, pre-assembled on the ground and then fixed to the rock face by a climber, are connected at one end to form a v-shape and are braced by two members that have the cross-section of a yacht mast. The structure is stayed by dyneema cables fixed to two pitons in the rock face.

A glass-fibre-reinforced synthetic mesh stretched between the tubes provides a deck for sitting and reclining.

(www.hcla.co.uk)

Monologue

The extreme location on a sheer rock wall as well as difficult conditions of transport and assembly necessitated a minimal use of materials, which reminds me of achieving more with less. It is an extreme installation in an extreme setting; a cliff. Although uncanny, it is unique and distinguished through both lightness in structure and significance for it discerns its main function of floating, sailing and balance simultaneously. I intend to found my own project in a similar extreme location; an edge.



Pause

While still researching, I paused once while reading an article written by Lebbeus Woods, and I dared to address him through a question that is 'secretly and directly' related to my topic and project. View that he is, after all, Lebbeus Woods and I am still on my way to becoming an architect, I did not expect much really. So giving myself a username, I called myself 'student'. Here is my following question.



student 12.24.09 / 11am

I really like the whole concept of fluidity, air, water, and I cannot but think of it in the context of flight. Similarly, if we want to acknowledge it in the architectural realms, we might think of it as a flying structure on the verge of collapsing, not stable, denying the everlasting gravity effect and the bitter reality of it being destroyed by the Newtonian facts. However, I pause and ask myself whether such a vision can actually echo the human desire of flying; this is what will happen if one tries to jump off a cliff...But after all, this is what will elevate us to whole new level of perception. It is this feeling of letting go that produces such a Rush. Then my question to you would be, how could we, as architects, tie all of these bits and pieces to produce flying/dangerous architecture?

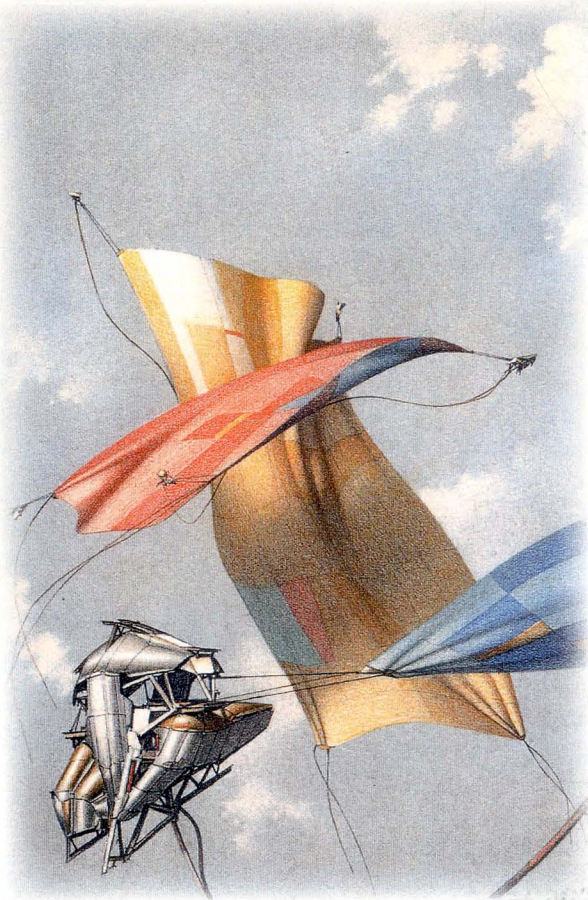
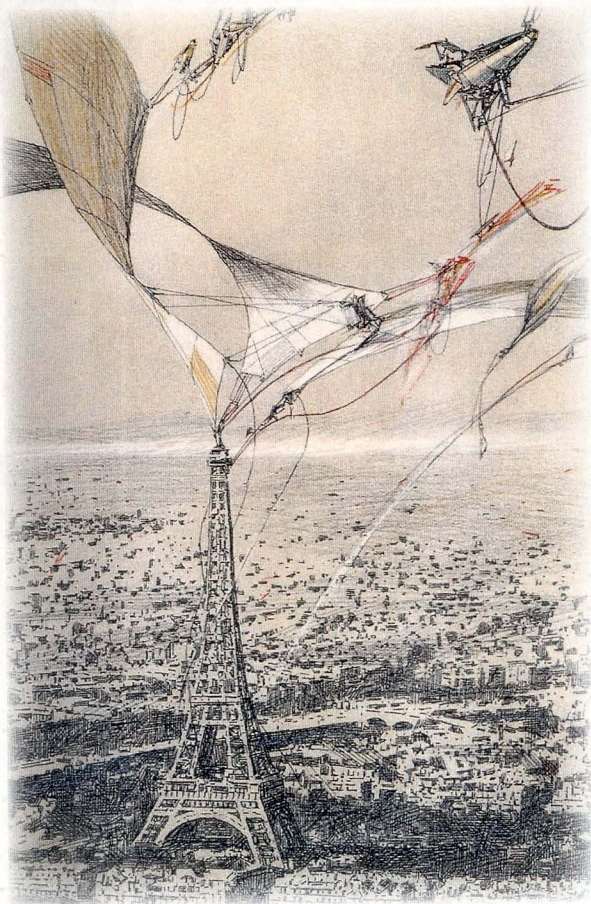
[Reply](#)



1. lebbeuswoods12.24.09 / 3pm

student: One answer to your question is the 'aero-living labs' of the Aerial Paris project, shown in this post.


[Reply](#)



<http://lebbeuswoods.wordpress.com/2009/06/28/fluid-space/>

Aero-living Labs: A community of heavier-than-air, experimentally inhabited structures in the air over Paris. The moving structures drag immense sheets of light-weight material through the earth's magnetosphere, generating static electricity in sufficient quantities to levitate them silently, much like a mag-lev train, but freely in the open sky.

After I got speechless for quite a moment, I checked the 'aero-living labs' of the Aerial Paris project. However, Lebbeus Wood's reply did not satisfy my hidden intentions, for such a project is just an artistic fantasy and a human dream so I replied back to him with another position however, still without an answer from Lebbeus Woods.

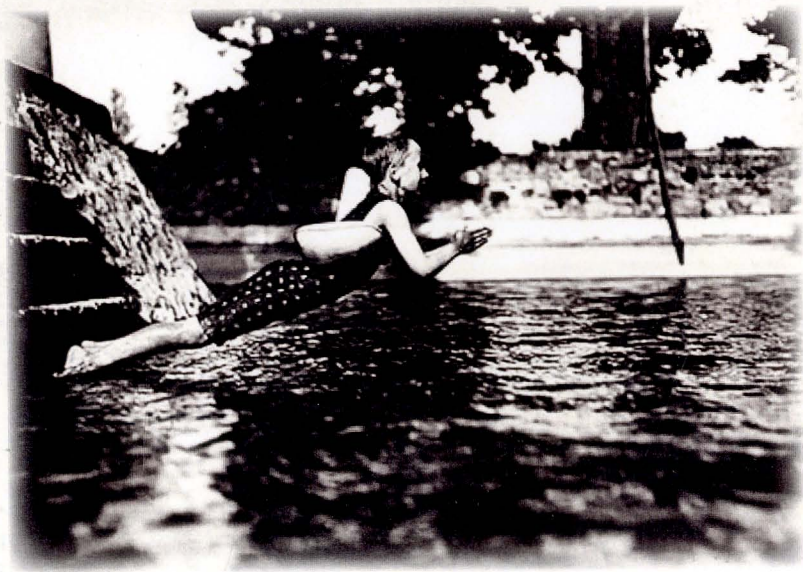
2.  student 1.12.10 / 11am

What if the 'aero-living labs' are not the 'futuristic' flying machines floating in space over Paris City, then what would they be? How could they exist in the fluid space? But then the most principle question would be, should flying architecture be always a machine in motion or can it be perceived as static architecture in space that is still be acting dynamically to weather conditions, perhaps wind or other factors?

<http://lebbeuswoods.wordpress.com/2009/06/28/fluid-space/>

Monologue

There is no right and wrong in architecture; there is logic, creativity and intuition. Flying architecture should not always be perceived as a machine. However static it may be, it will naturally interact with the surrounding environmental/contextual conditions.

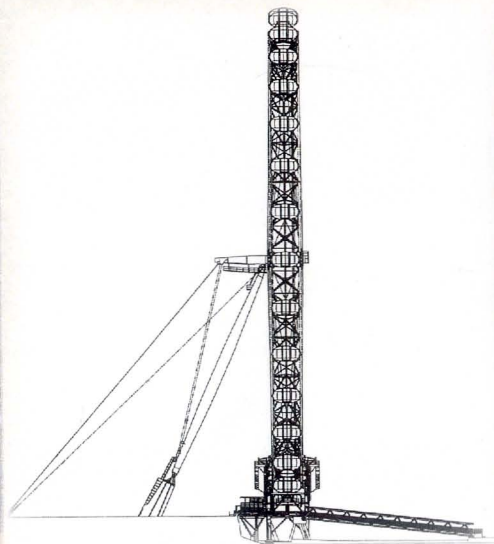
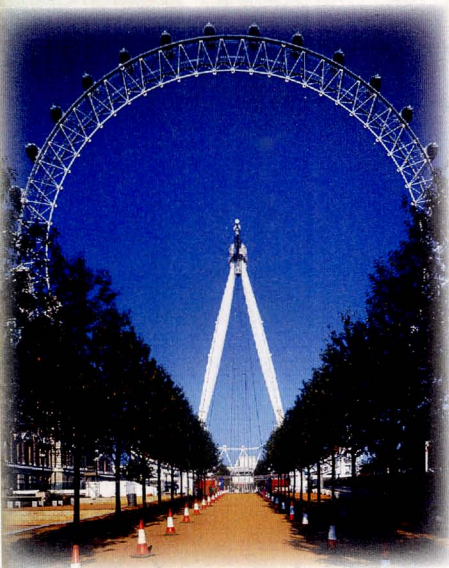


Synthetical Monologue

I can clearly see the metaphorical and emotional effects impacting my architecture, but it is certainly strengthened by the physical/structural frames holding the parts together, to create the whole of the system.

How to achieve more with less in architecture?

In architecture, such an issue could actually be interpreted differently, but in flying architecture, I think that the most logical answer would be perhaps light and lightweight. It is the optimization of visual and technical lightness, the minimization of the use of materials and the ability to make the structure touch- or untouch- the earth lightly and unnoticeably.



LeCuyer, Annette. (2003) *Steel and Beyond: New Strategies for Metals in Architecture*.
Switzerland: Birkh user – Publishers for Architecture.

Lightness as a Medium

Space, materials in space, the intermingling of space and object are all related topics when considering flying and architecture. Space disguises itself and its nature by its transparency. It is, strangely, this very transparency that makes space opaque to our awareness.

I want to employ skinny lines blending in space. In fact, emptying out the volume reduces the visual mass so that more of the space around the structure gets implicated in what the structure finally is. The space shares in creating, or manifesting, the function of the structure itself. This emptying-out of the mass makes it possible to imbue space without occupying space.



Vision

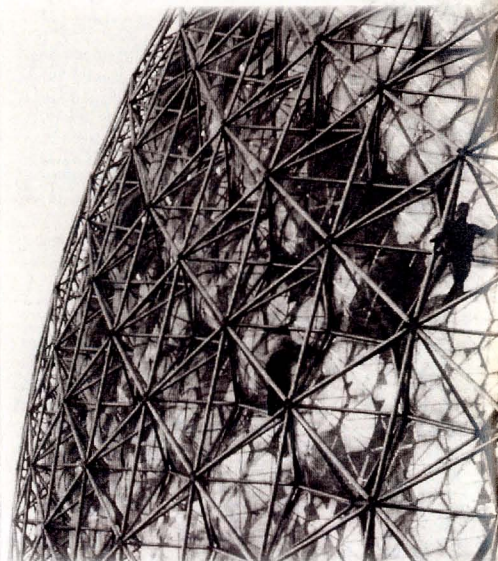
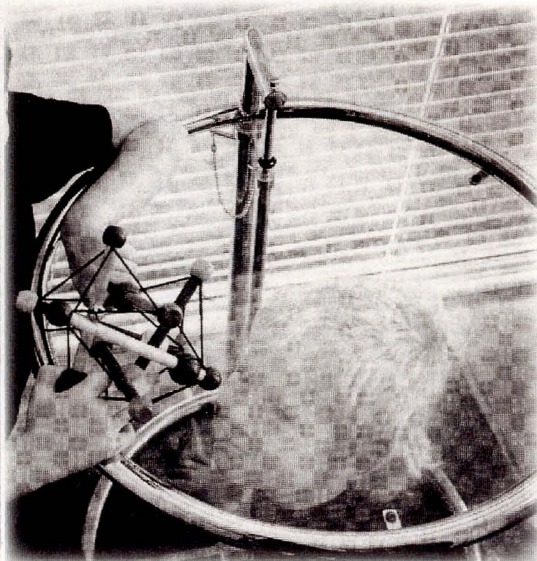
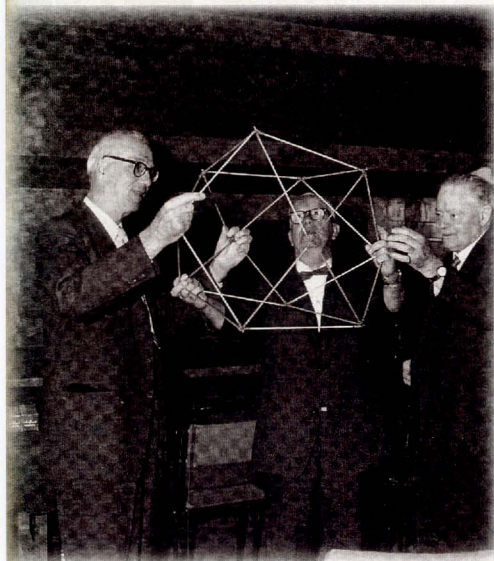
Cables, pulleys, glass, steel, carbon fibers, trusses are all architectural elements and materials emphasizing the lightness of such a flying structures and elements such as the 'elevators', or perhaps moving cells, on the exterior of the structure, allowing eventually the access of the flying ribs; or the flying inner spaces/slabs.

Picture London Eye, 2000 designed by Marks Barfield Architects celebrating the new millennium; the wheel is visually light and unbelievably slender in every detail. Suspended over the River Thames, it seems to challenge the laws of gravity.

Rims, hubs, cables, spindles, trusses, cantilever, steel castings, flanges, rings, stainless steel roller bearings, A-frames of tubular rolled steel, bundles, aerodynamically shaped capsules, glazed cladding...

Despite the heavy loads and forces applied, all of the above are architectural components that were studied to determine the 'lightest' most delicate visual balance of the final structure. (LeCuyer, 2003)

Imagine that structure held at one point, at a cliff edge, while the wind swings the Eye delicately in space...



Margolius, Ivan. (2002) Architects + Engineers = Structures. London: John Wiley & Sons Ltd.

{between brackets}

Tension

{The introduction of steel into the construction realms in the late 19th century, as well as Buckminster Fuller's Tensegrity Theory brought tension into consideration.

“We have in the universe a tendency to expand and to contract and in this expanding and contracting the expansion which we call radiation brings about pressure, compression, and the gravity copes with the other tendency and pulls the things together. Gravity is tension, radiation is compression, and all buildings, structures, all interaction, every realization physically is in play with that push and pull.”

Buckminster Fuller (Margolius, 2002)

The progress of evolving new materials brought higher values of tension capability and introduced new structure and architecture using materials such high carbon steel, chrome nickel steel, and more recently carbon fibers which weight $\frac{1}{4}$ of the weight of steel and achieve 48 times the strength for the same amount and weight of steel.

In fact, much more can be accomplished with lighter material which arises new possibilities to design and create new structural systems working with gravity and alternating between tension and compression.

The new materials and techniques brought a new era in the construction of buildings and a realization of the dreams and ambitions of defying gravity.} (Margolius, 2002)



The Sears Tower's Ledge, Chicago, at the 103rd floor

Monologue

To create a structure or a building that is physically light requires a lightness that will affect its form and that will 'compatibilize' it with the environment, setting and urban realms that will embrace such a light structure. All of these elements should combine to generate a flying architecture, one which does not weight heavily on the existing society and environment. It is an architecture that will inspire the users to let go through its spaces and nature; it will enable them to dream and to touch the sky with a lightness of spirit.

Losing control while being in my structure can be one aspect; in fact, thinking about the possibility of human flight in a flying structure is losing control, but also the mastering of our emotions and sensations while being in a breath taking structure and surrounding is a must that is earned. It would have to be a challenge to stand such emotions of rush.



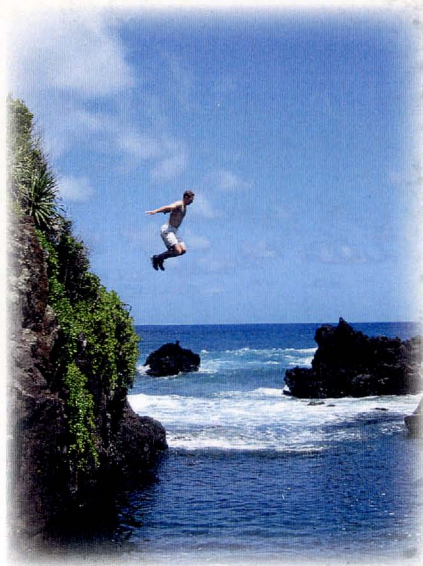
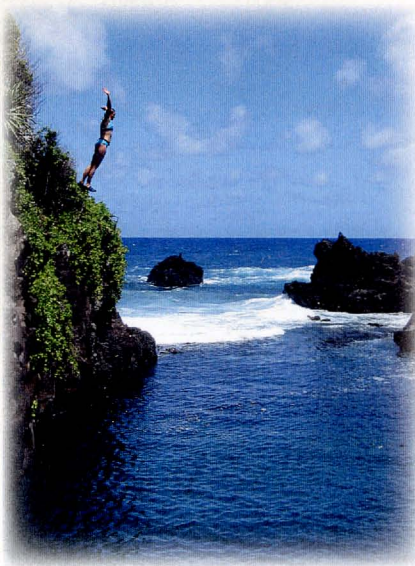
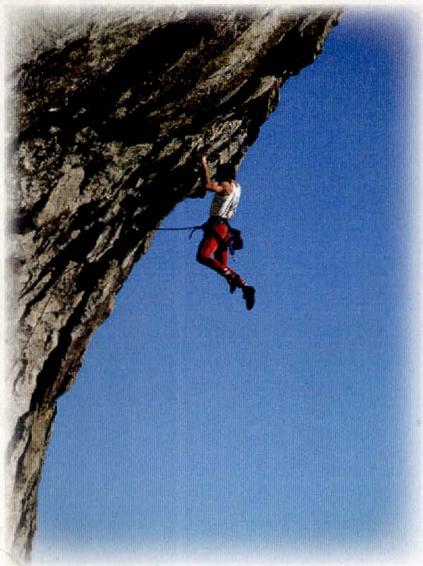
The Rush

To define the rush, a person should certainly have to experience it and still he/she would never be able to define such a sensation.

Biologically, the rush is reached when adrenaline or epinephrine is released. The body responds by quickening the breathing and heartbeat and raising blood pressure. Glucose from the liver and fatty acids are released to provide you with quick energy. One of the quickest ways to get an adrenaline rush is by doing an activity like cliff jumping or going on a roller coaster, these activities aren't usually dangerous, but they may seem dangerous. So they will cause your heartbeat to raise and release adrenaline.

(http://www.chow.com/about_5035148_meaning-adrenaline-rush.html)

Independently of the situation, if one is scared, the body will go into a survival mode and the adrenaline level will rise for it will start to shed into your veins and reach up your mind.



Monologue: The Rush in Flying Architecture

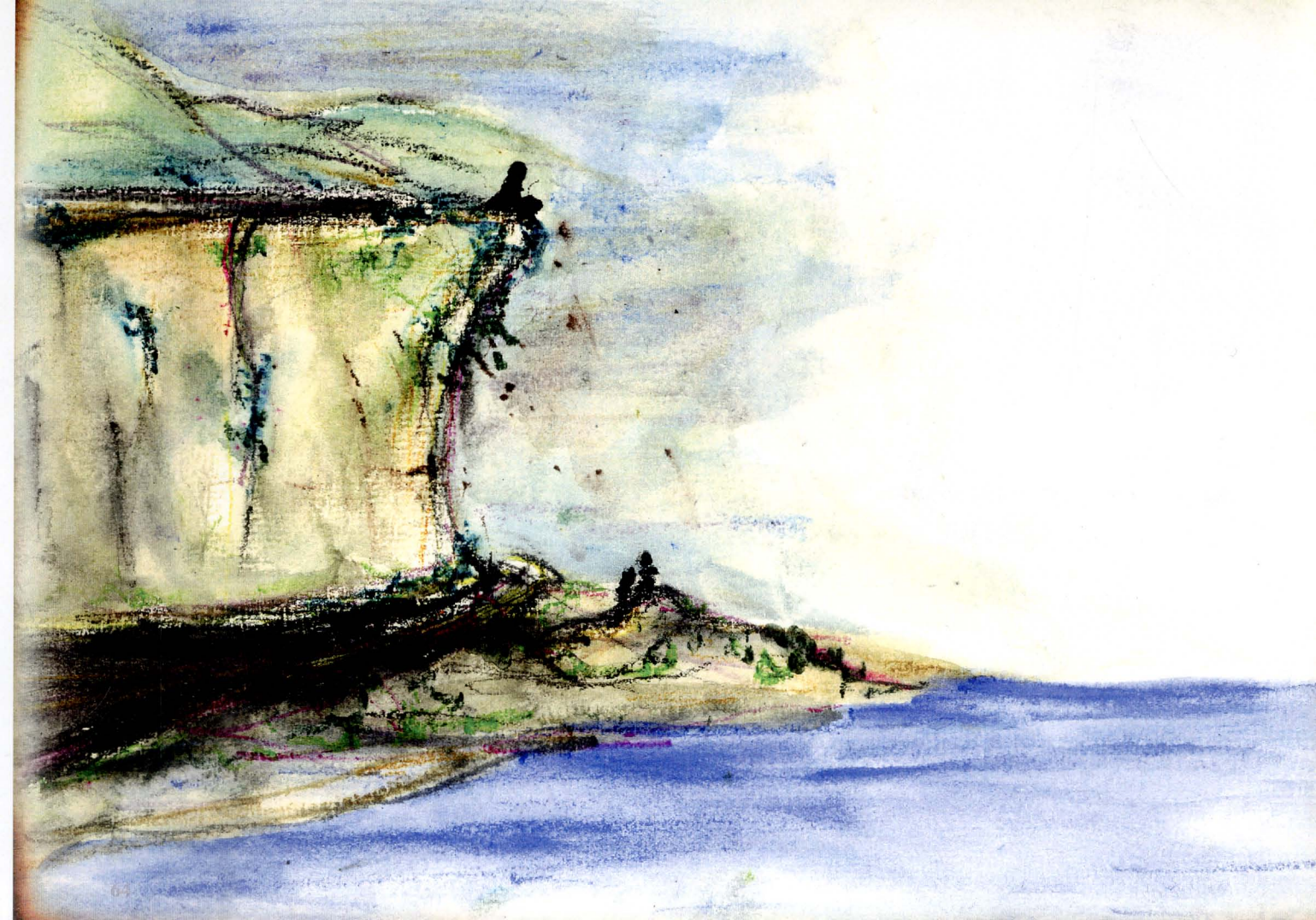
How the rush manifests its existence through flying architecture?

Architecture is not generally a medium to produce rush- it can induce many feelings and provoke a communication and interaction between the user and the space- but in my case, I want it to be so, for I am considering flying through architecture that will produce the rush.

The rush is a human feeling, so it is directly correlated to the presence of the human factor within the structure. Thus, I am implying and defining one major aspect of the relationship that would have to occur between the flying structure and-by substitution- the flying being within it.

It might seem light architecture influenced by pure and transparent lines, but the mere fact that it is flying would have to generate the feeling of insecurity and danger. My flying architecture will naturally engage danger, not necessarily from within the space, but in its composition and relation to the edge I am intervening on it, its position and treatment of materials, its perception from faraway or at proximity, the perception of space and the void around it, the sky, the ground, gravity...

As conflicting and confusing sensations that it might bring, the setting is an extreme edge, a cliff that will always involve risk taking, however, it is a serene space, where one could clear up his mind and feel the pleasure of being in such a risk while embodied by the structure. The structure and I will be one. I will have to trust the structure in the face of the wind.

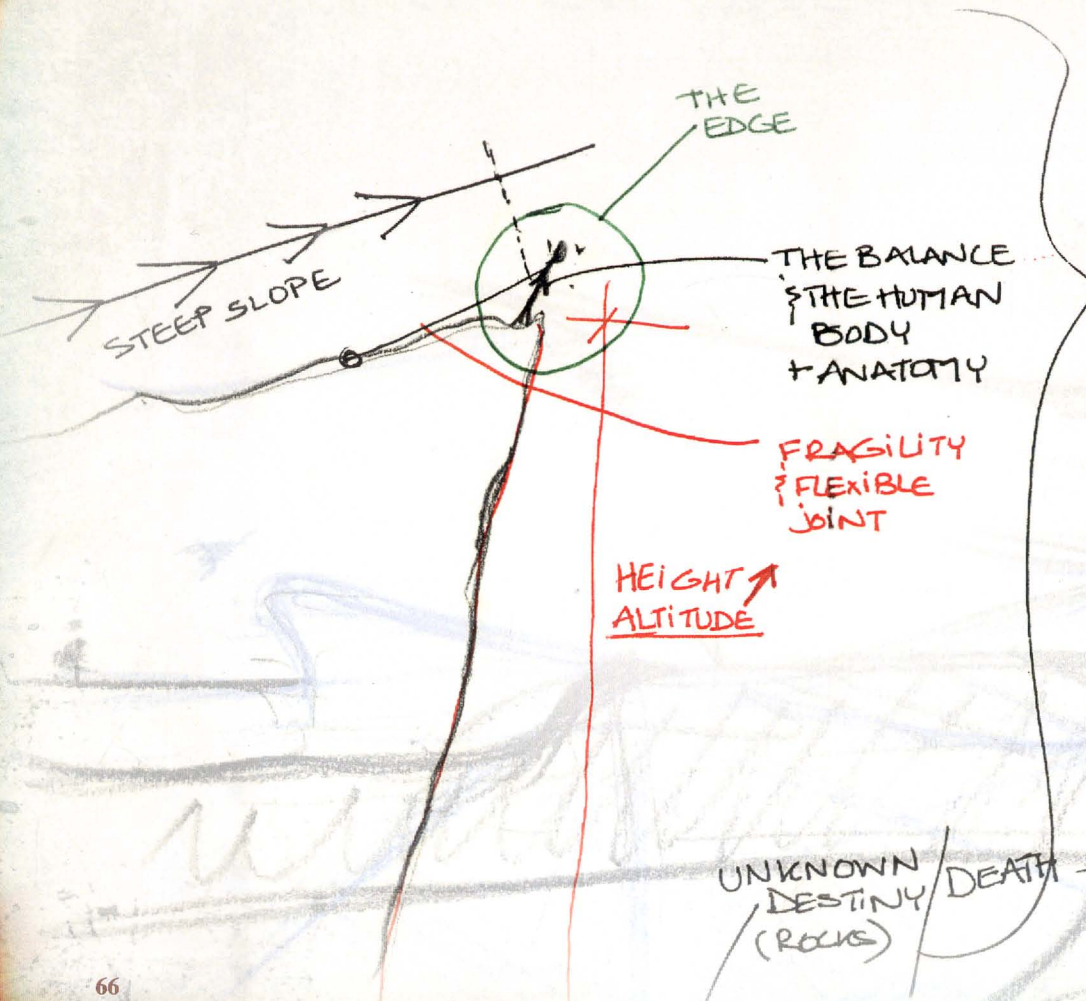


The Cliff

The structure I will design and explore the phenomena of change in material and spatial terms. It works within a strong site in order to expose the sites' latent dynamism and the forces hidden within it leading to inevitable boost of the flying effect.

The aim is not to disturb the site's stability for the edge is a non-stable point where one would feel on that he/she is on the verge of collapsing...or of flying, in this case. The aim is to provide strategies for the users and the structure's adaptations whenever the structure attempts to take-off or even to move, view the site's geographical and climatic conditions controlled by the wind effect. Even more, both the structures and its inhabitations will celebrate the energies driving it, as the essence of existence.

In the course of my site's investigations, I had in mind a vision that helped somehow to decide about the site- or more correctly, the cliff- I will intervene on it.



STEEP SLOPE

THE EDGE

THE BALANCE
OF THE HUMAN
BODY
+ ANATOMY

FRAGILITY
+ FLEXIBLE
JOINT

HEIGHT ↑
ALTITUDE

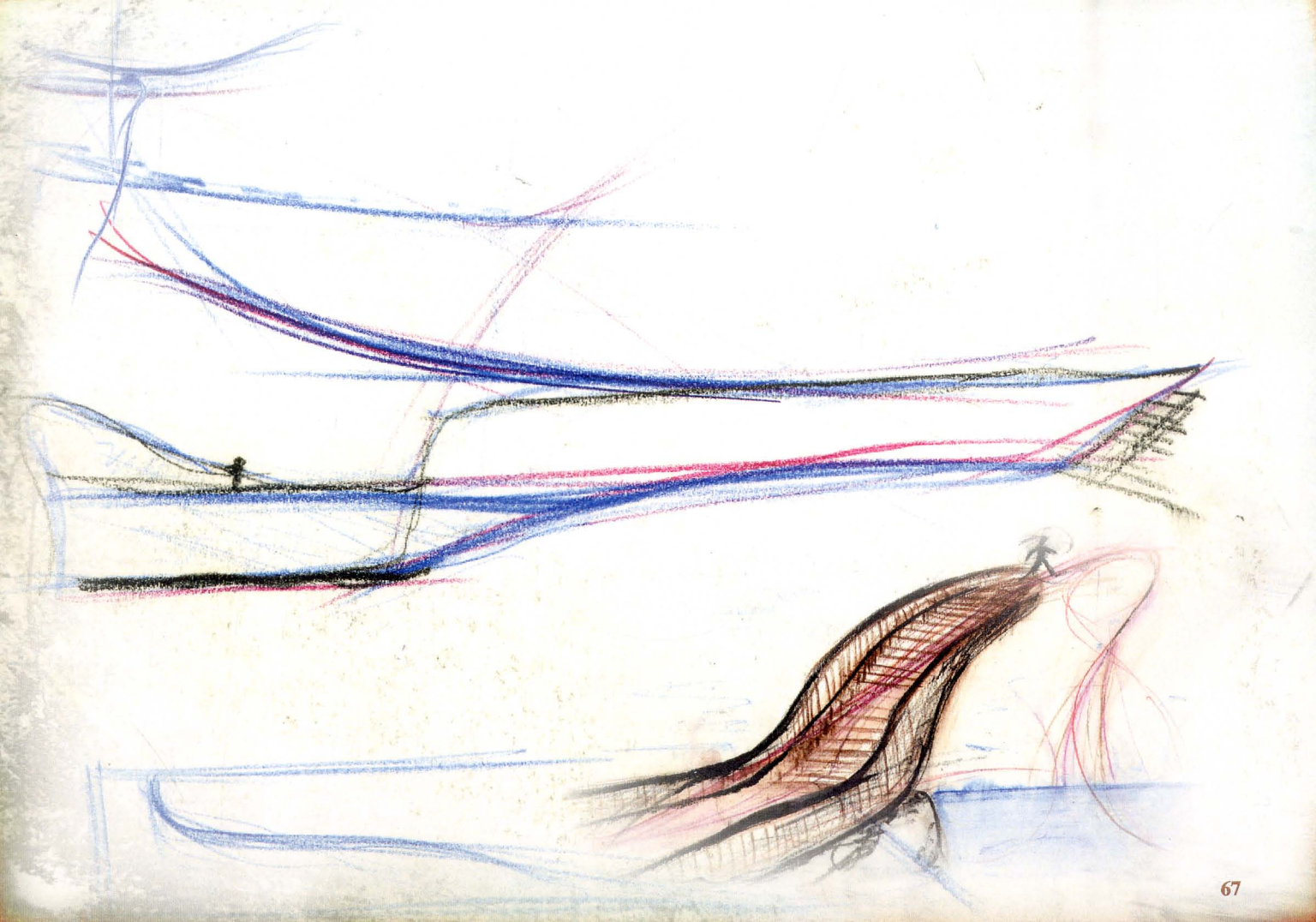
UNKNOWN
DESTINY /
(ROCKS)

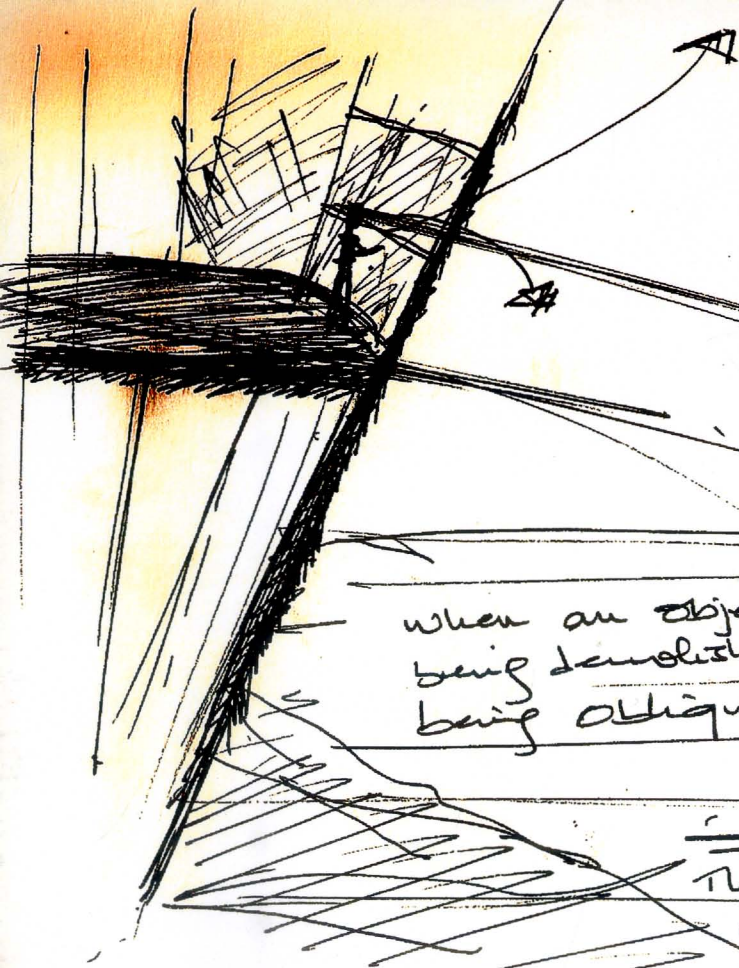
DANGEROUS
SETTING/SITUATION

FLYING
SENSATION

HANGING OFF
FROM THE CLIFF

→ ULTIMATUM





The slope
feeling unstable

aiming to look up but not
being able to for afraid to
fall off

The site line is not
horizontal due to the
sloped structure

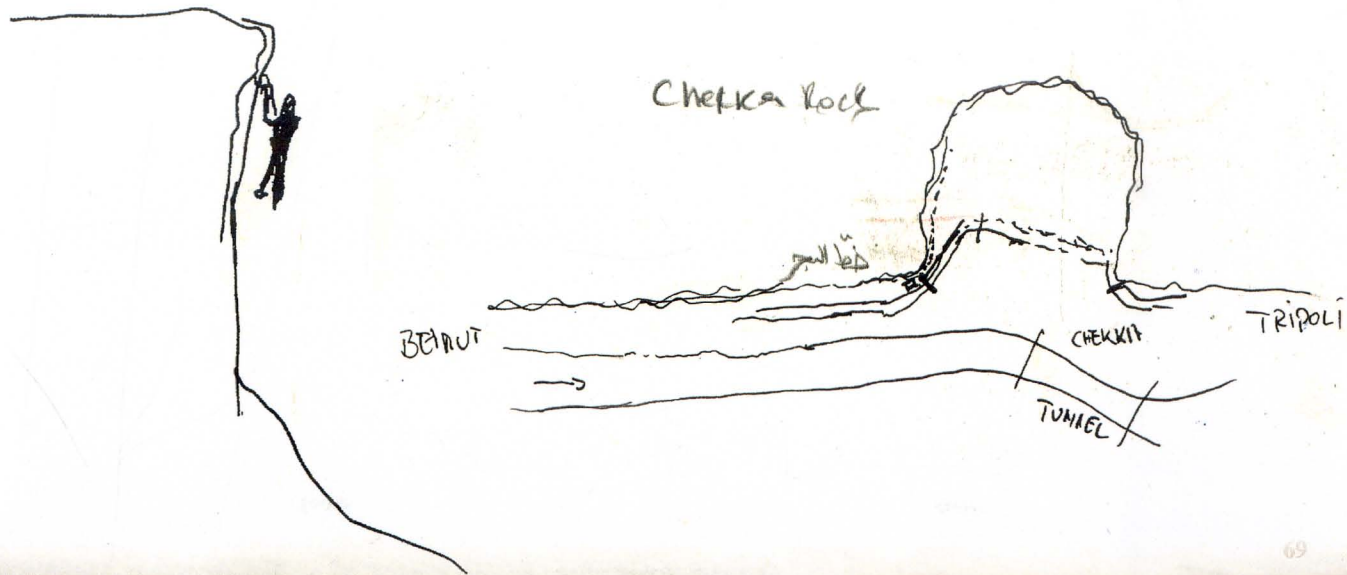
when an object is falling, or a ~~edge~~ is
being demolished or shaken, it goes on
being oblique

The difference is that, the structure
is not grounded to earth.

To be thrown in space is one thing & to throw oneself willingly is another.

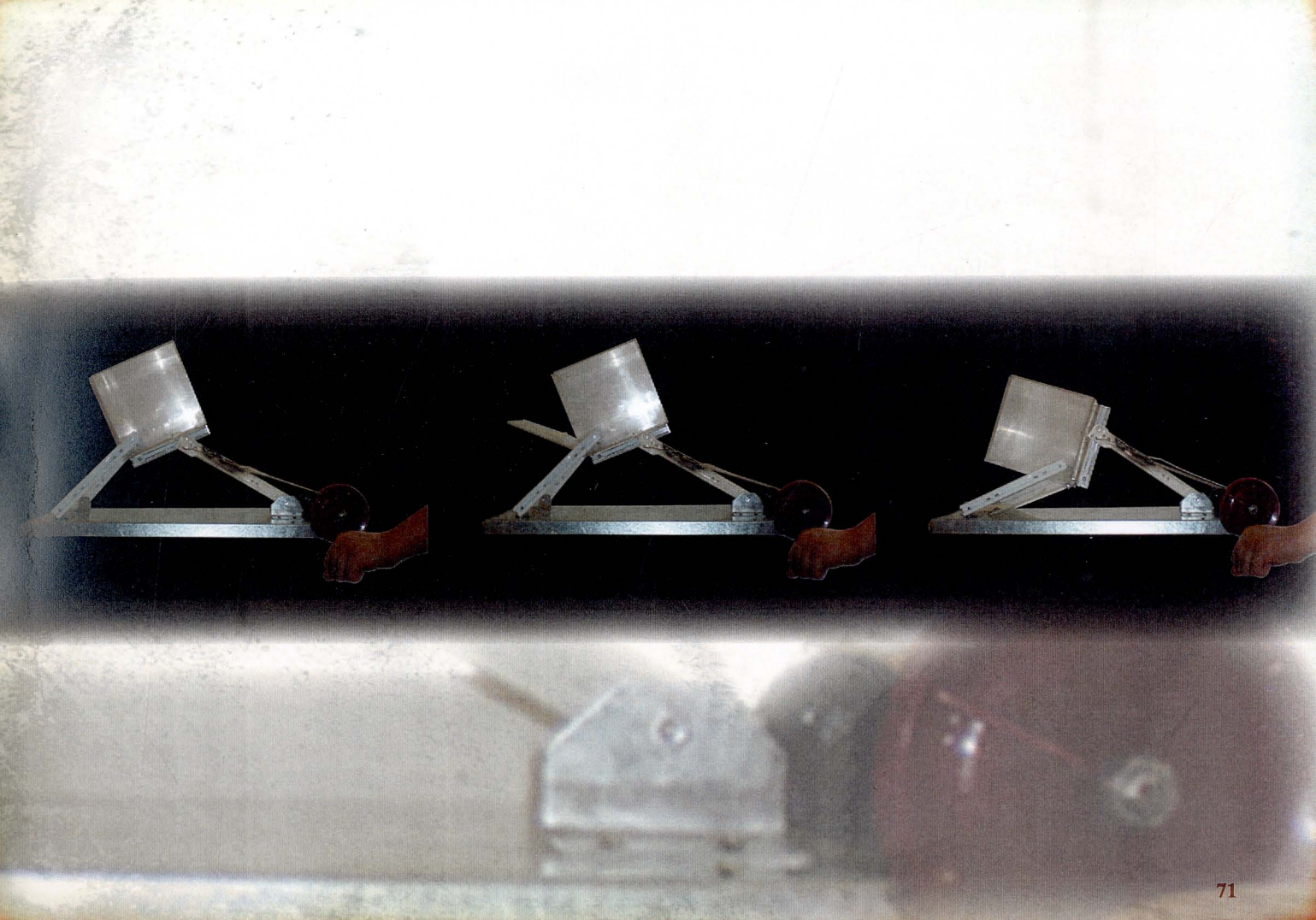
Here the structure is thrown in space, like bungee jumping while taking all safety measures.

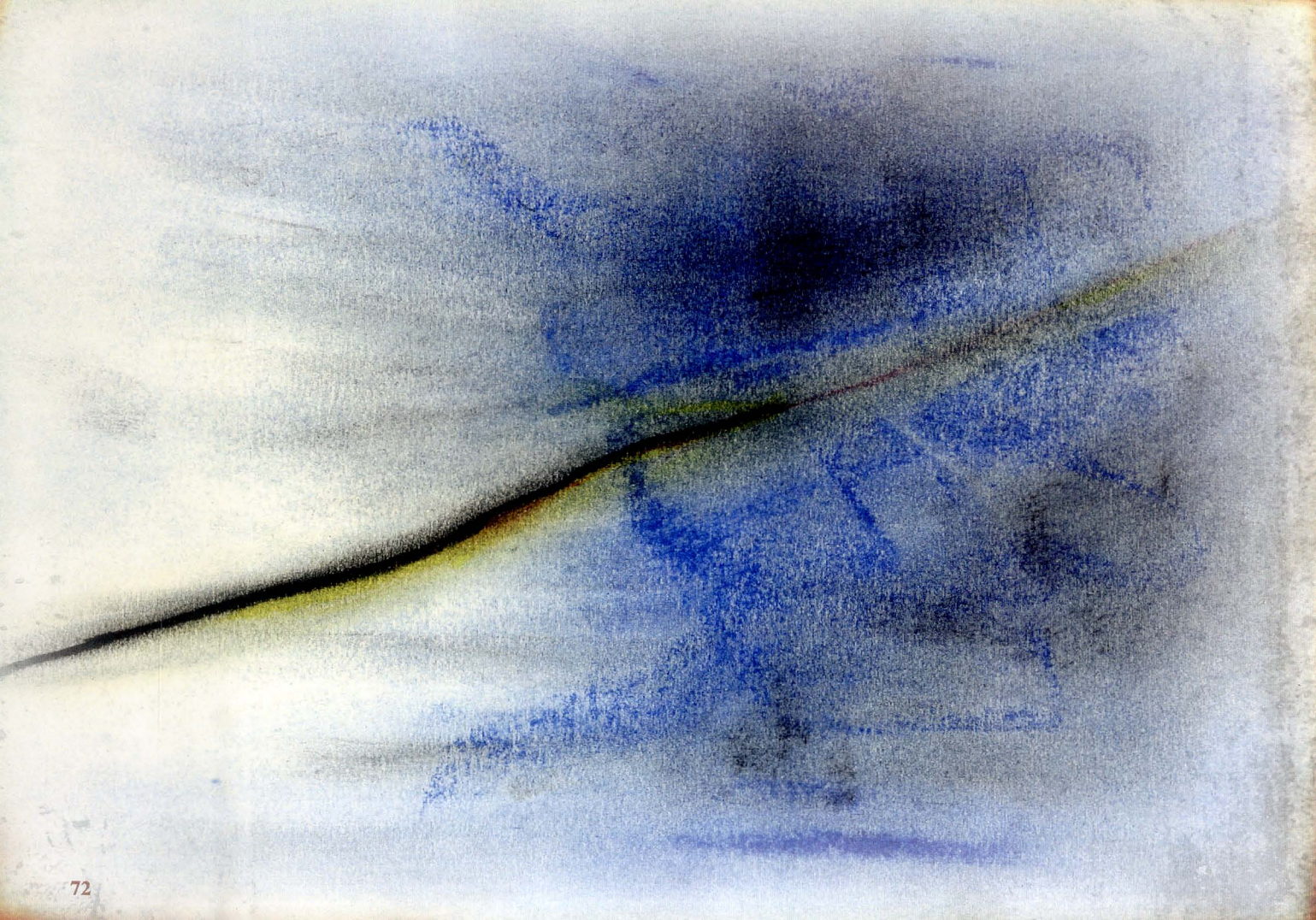
It is a risk for the rope might be cut off, but it is worth trying in a lifetime for those who love adventure. Add to that mountain climbing.



Attempt 1







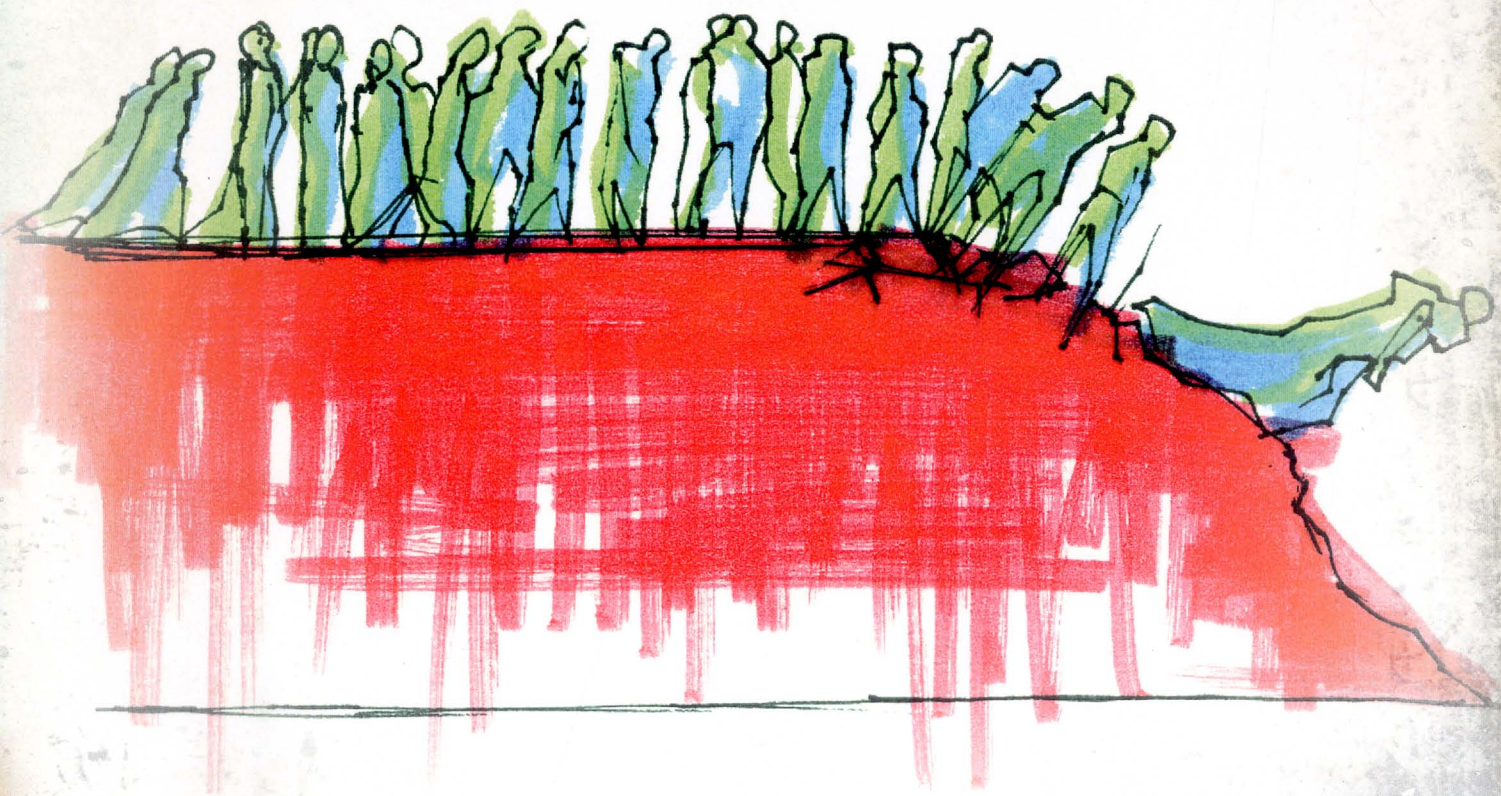
I or...

I believe that by telling the story of one man through history, I will be able to tell the story of humanity, but I will not do that. I want to talk about one kind of a man, one kind of individual who is going to inhabit my structure... I will tell the story of a nature lover, a desert dweller, a mountain hiker, an extremist and a moderate at the same time. This individual chose seclusion but is never alone; in fact he even has an audience in rather a theatrical setting where he chose to be, be it a cave, a forest or even a more contemporary urban habitat, a hut or even a monastery. The person I am addressing resembles, in many ways, The Hermit.

The flying structure that will be hanged in nothingness is the new home of the eremitic who is defined as “a person who lives to some greater or lesser degree in seclusion from society”. (<http://en.wikipedia.org/wiki/Hermit>)

A hermit is universally known in all religions as a person faithful to religious convictions and seeking seclusion from society in order to bring about a change of heart. So seclusion in other words is not necessarily a delusional escape of society, on the contrary, it is a blessing in the case of the Hermit allowing him to be found in a conducive environment for striving after a particular spiritual purpose that forms part of our common human vocation.

The purpose of such a description is not to research the religious view of the life lead by a hermit, but rather the philosophy of such life. Some choose to live in an urban setting, that is a life surrounded by exhilarating events, where loads of people are encroached and conquer a bulky proportion of their fantasized life. I am talking about the extreme other, who chose isolation over society. The Hermit is one of many other persons, be it religious or even secular. The term hermit is used loosely for anyone living a solitary lifestyle, including the misanthrope. The person, I am considering, withdraws and departs from urbanity as a mean of rejuvenation and refreshment.



Monologue or...Others

What we differ in is our ability to behold ourselves and control it to perceive life as a better place to be. We are not really alone, Reality cares about us, but in order to communicate with it, we need to be in such places of silence. Silence charges us with fullness and satisfaction. When we feel the other extreme we sense blood rushing up through our veins and our heart releasing its breaks to pump blood at full acceleration.

What is this feeling all about? It resembles the feeling I have when I praise the deity in my prayers and meditations, in my proximity to the divine.

The divine is not necessarily God; it is the Thing that enriches our being and reassures us, perhaps nature. Meditation is one thing where you can feel close to the self, to the pure soul- I feel my breath, I hear it, I feel the air nurturing my lungs, and I feel my blood rushing up to reach my head- only by sitting in the cave or in the nature, or down a valley, in the cottage, at the sea shore or even at a mountain cliff...

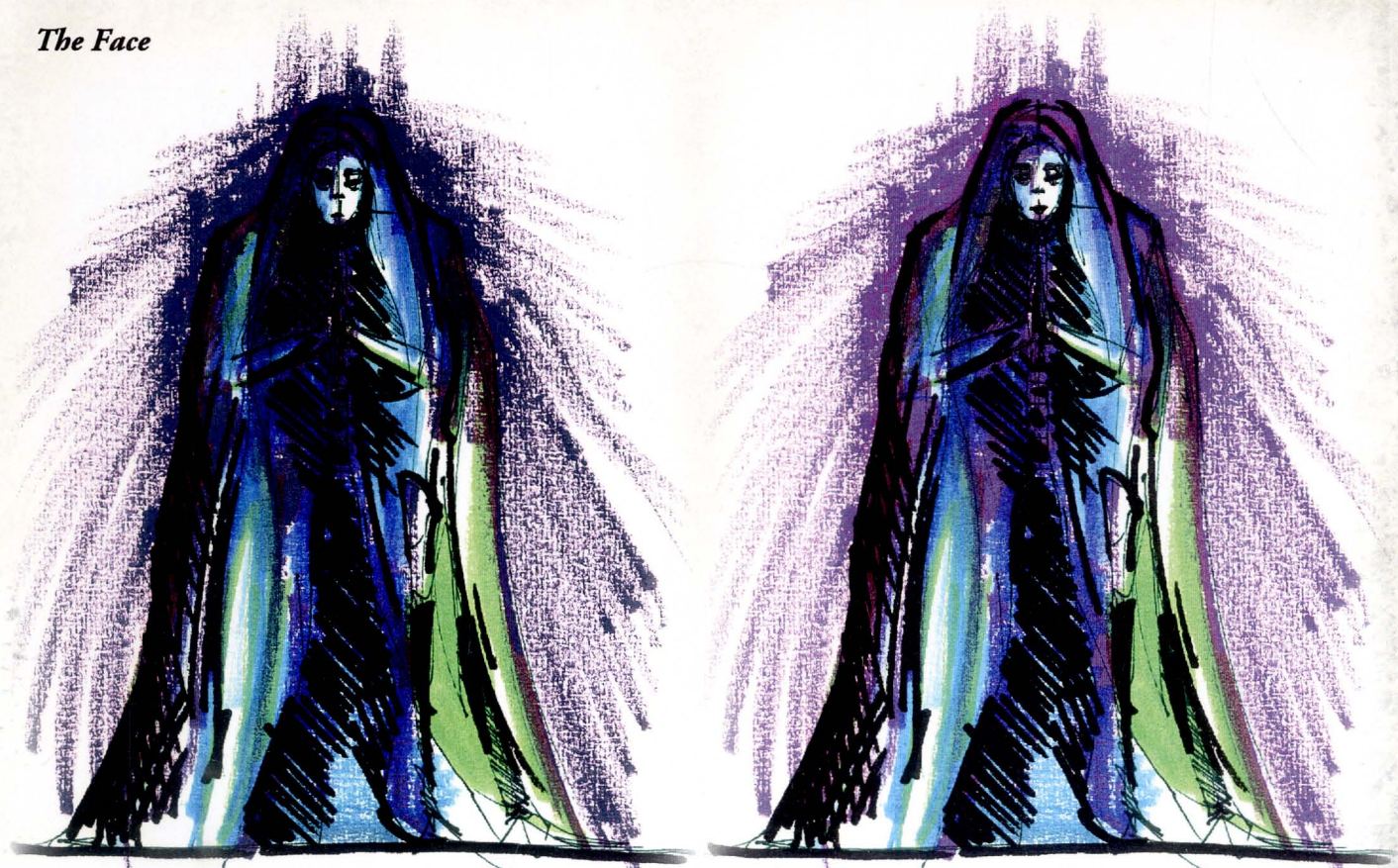
Such settings are a source of inspiration to my creativity, my poems and literature, to my works of art to my soul and the spirits around me.

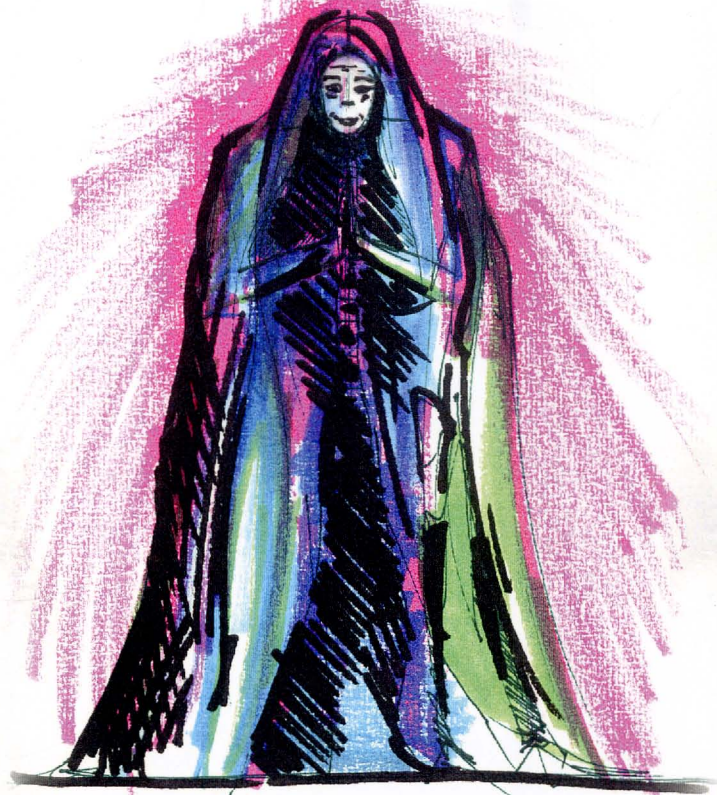
Religiously, the solitary life of the hermit is a form of simplicity, where he renounces worldly material concerns and pleasures in order to approach the deity he worships or revere. He seeks solitude for meditation, contemplation, and prayer without the distractions of ephemeral societal complications and codes.

This is why I like to view my life as such of a hermit's life, based on intuition, hope for the best and appreciation of my free soul that awaits to fly.

As silent and elevated from the mundane as I might seem, there is a reason why people call me the wise person;

The Face





... wants ... to be alone

isolated from city
the verge
in extreme



audience
to

work/bu

... somebody so their

A single person - Appare

all the story of one man - the stories of

... wants

least new sources of

like/like

I renounce pleasures but not all the pleasures. I feel the pleasure when I talk to the Real, when I contemplate the natural wonders, when I meditate on the edge of a cliff; I feel every member of my body beating powerfully when I look down from that edge while trying my best to root my feet in solid rocks.

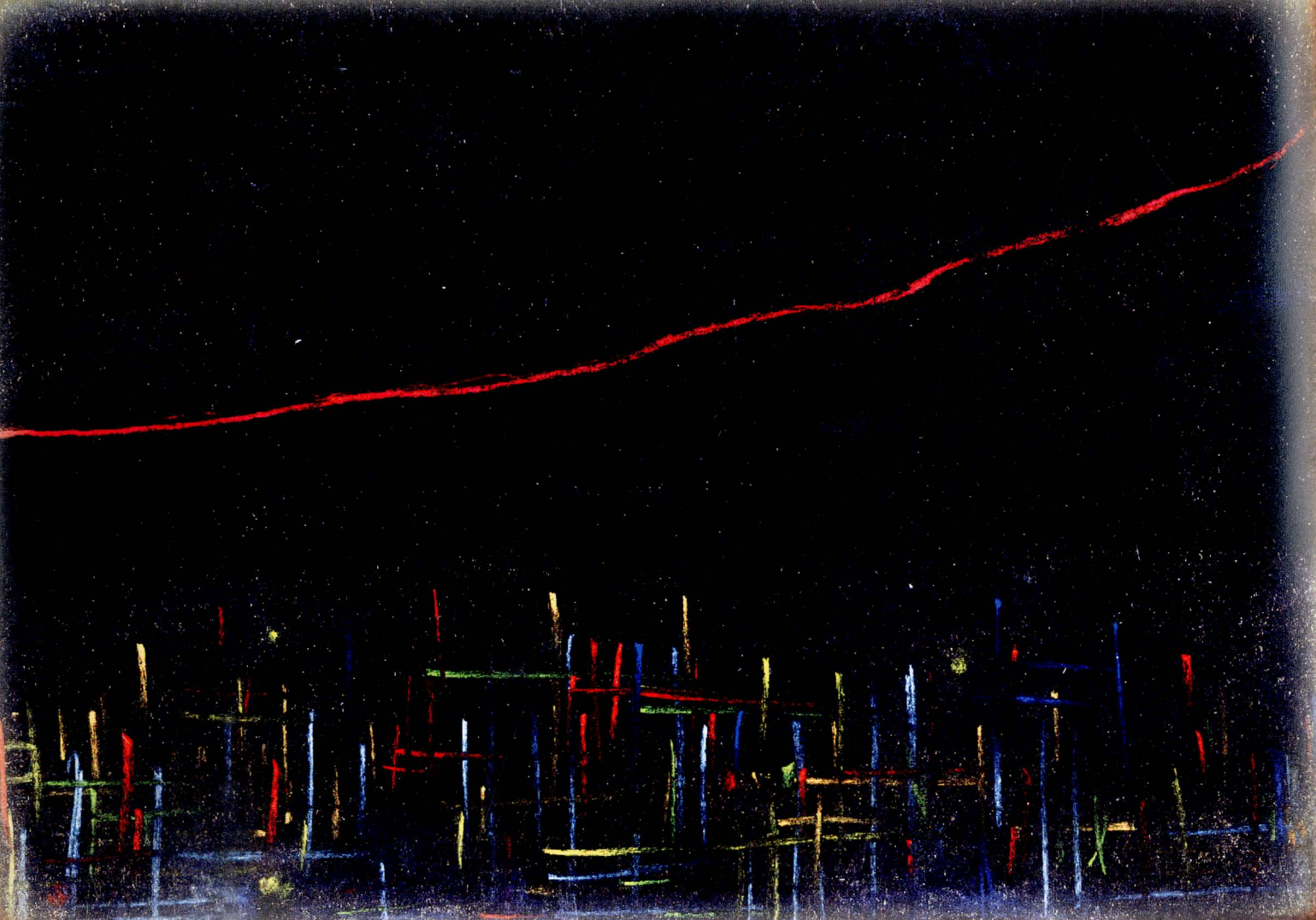
I am on the verge of collapsing... NO

On the verge of flying high into the pure sky,

The air bounces my hair on my cheeks and my feet quit the ground and approach the edge,

So seductive to forget the mortal effect of gravity and jump into the sky,

Nature will receive me and embrace me.



The Site

Chekka Rock...

Country: Lebanon

Governorate: North governorate

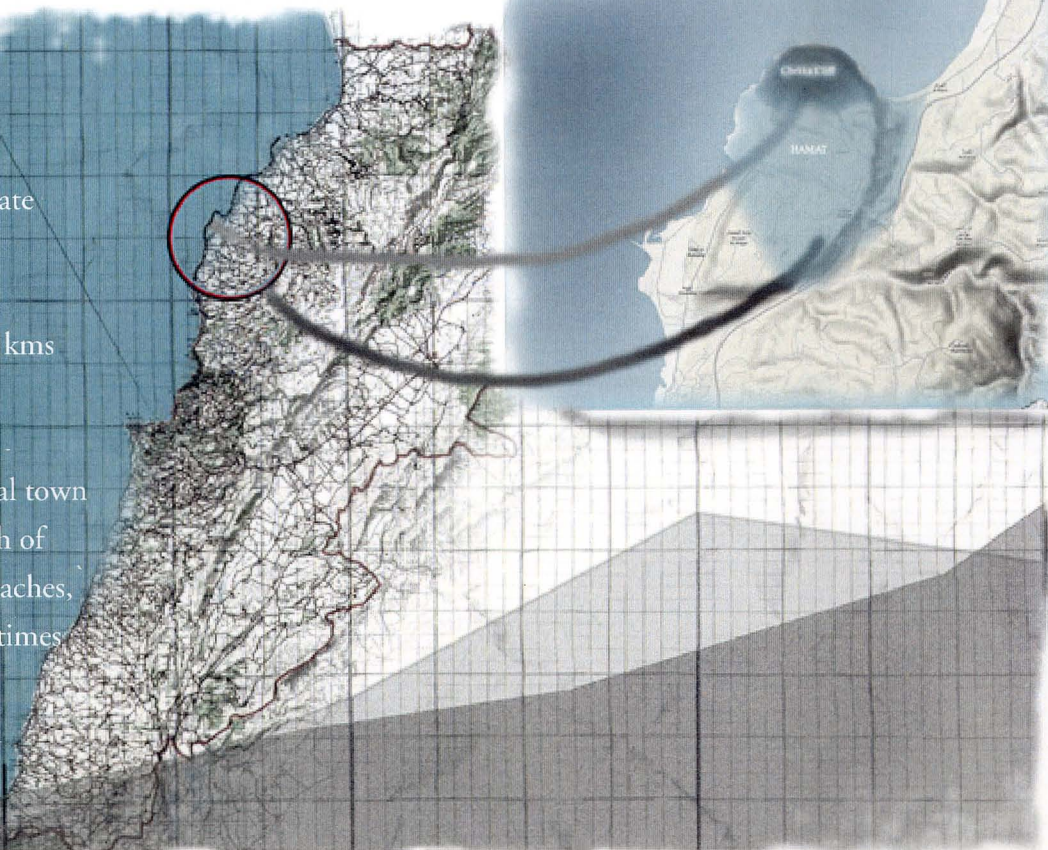
District: Batroun

Altitude: 200m

Distance from Beirut city: 86 kms

Nature: Coastal Rock

Chekka is an industrial, coastal town in Lebanon. It is located north of Râs ach-Chaq'a' and Herri beaches, or Theoprosopon of classical times and south of the ancient Phoenician port of Enfeh and the city of Tripoli.





An Overview

The high land in Chekka, known as Chekka Al-Atika, was resettled around 300 years ago and the fertile valley of Chekka was cultivated in the intention of making Chekka a Maronite stronghold on the Lebanese coast. Many families moved from Mount Lebanon to Chekka at that time to flee persecution.

Today, Chekka has a Christian majority and a Sunni Muslim minority. It has many Maronite Christian, Greek Catholic and Greek Orthodox churches. (<http://en.wikipedia.org/wiki/Chekka>)



DEIR EL-NOURIYEH
1923

Population

Statistics show that there are about 16,000 people currently residing in Chekka for work purposes but most of them vote in other towns and villages like Tanourin and places near Zgharta and Bcharre.

(<http://en.wikipedia.org/wiki/Chekka>)

Hermits, priests and other religious figures, live nearby Chekka rock in three different monasteries. While following the natural topography of the rock; 'Deir Sayidat el Nourieh' stands out primarily, on the main level, in our way towards the edge, towards the cliff. A deviating narrow pedestrian street leads us to stairs; around 300 stairs to reach another adjacent monastery 'Deir Mar Michael' that is on the lower division of the rock, hindered by the natural, small-scale 'forest', where the hermits' cells directly oversee the blue sea around the rock. Once you're up again on the main level, the upper road leads you to the cliff, where 'Deir Mar Sema'an' appears.







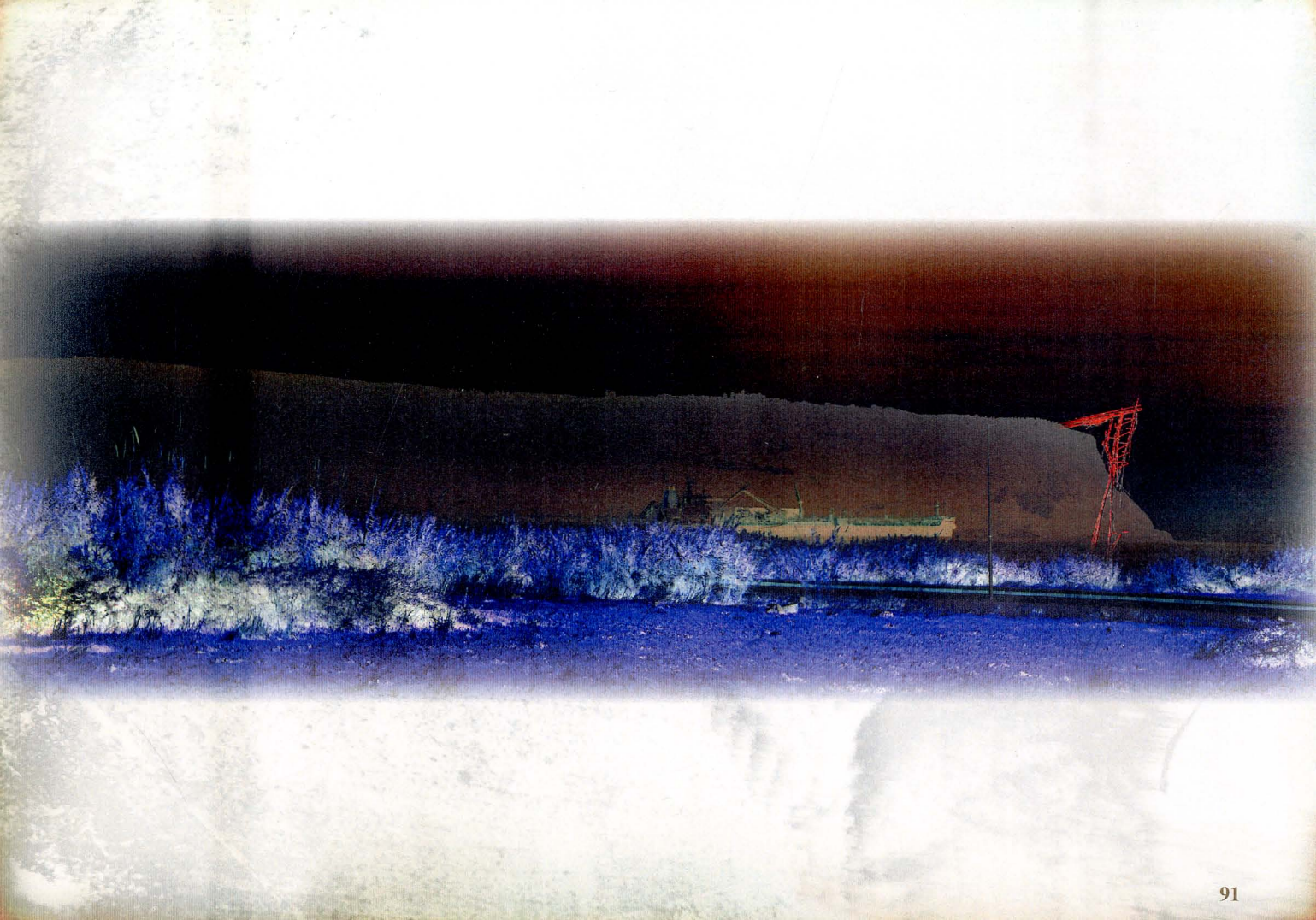
The Landscape

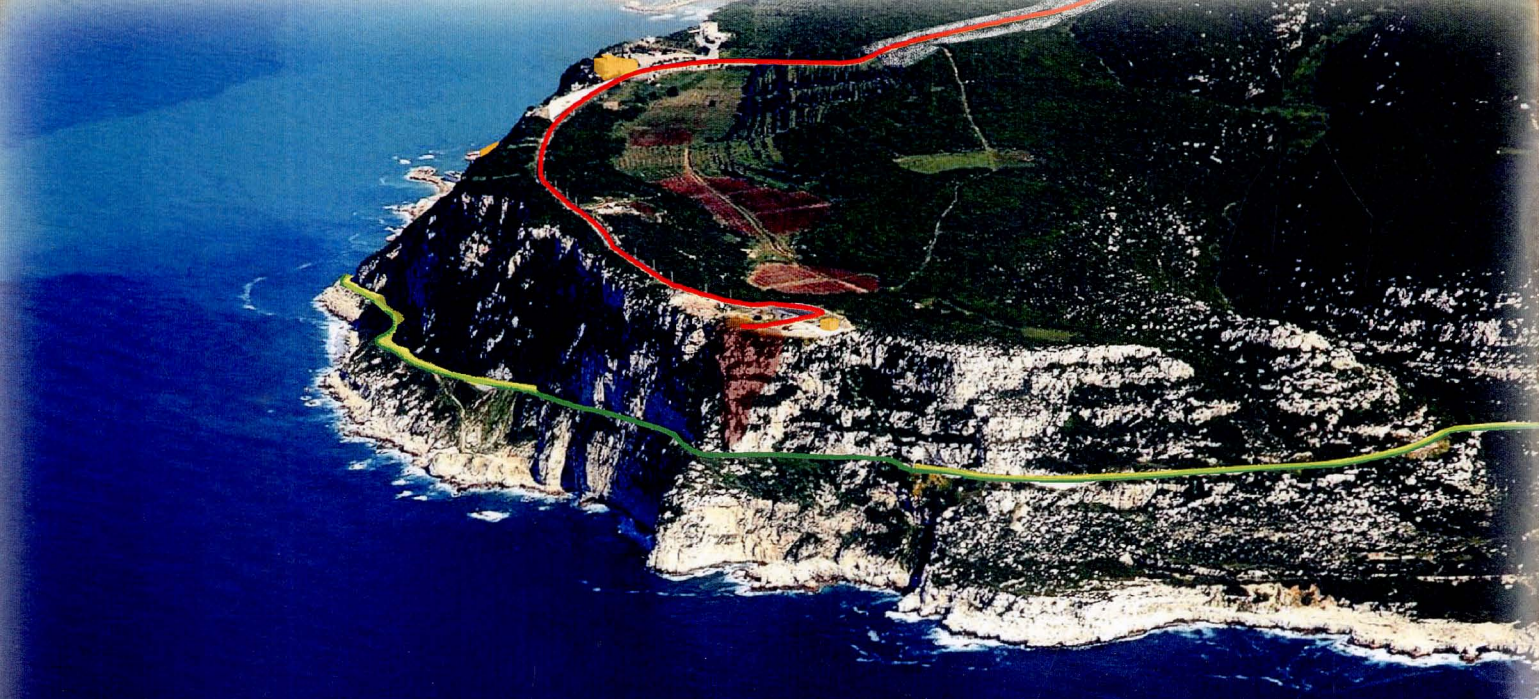
According to Mr. Matar Karam, the head of Hamat Municipality, Chekka is one of the few left green regions in Lebanon. The area authentic for it is a coastal mountain which distinguishes its weather and atmosphere around the year. What marks Chekka is also its vernacular networks that respond to the natural landscape.



Attempt 2







Monasteries (Deirs)



Local Network



Ottoman Network (1943-1944)



English Network (1890-1900)



The Cliff (Site)



Dense area

The Networks

In fact, there are three main networks around and within the Rock. Mr. Matar Karam explains that the oldest one was executed by the English, around 1890-1900. The network includes a tunnel that cuts naturally through the rock. Along it and parallel to it, another path was implemented by the Turks- the Ottoman- around 1943-1944. This path comprises two small and narrow tunnels within the volume of the rock.

And finally, the third main network is the highway coming from Tripoli towards Beirut; it was implemented in 1976.

However, there is only one local network that leads as well to the dead end of the rock; the cliff. It is the one passing along 'Deir Sayidat el Nourieh'.

A Natural Obstacle

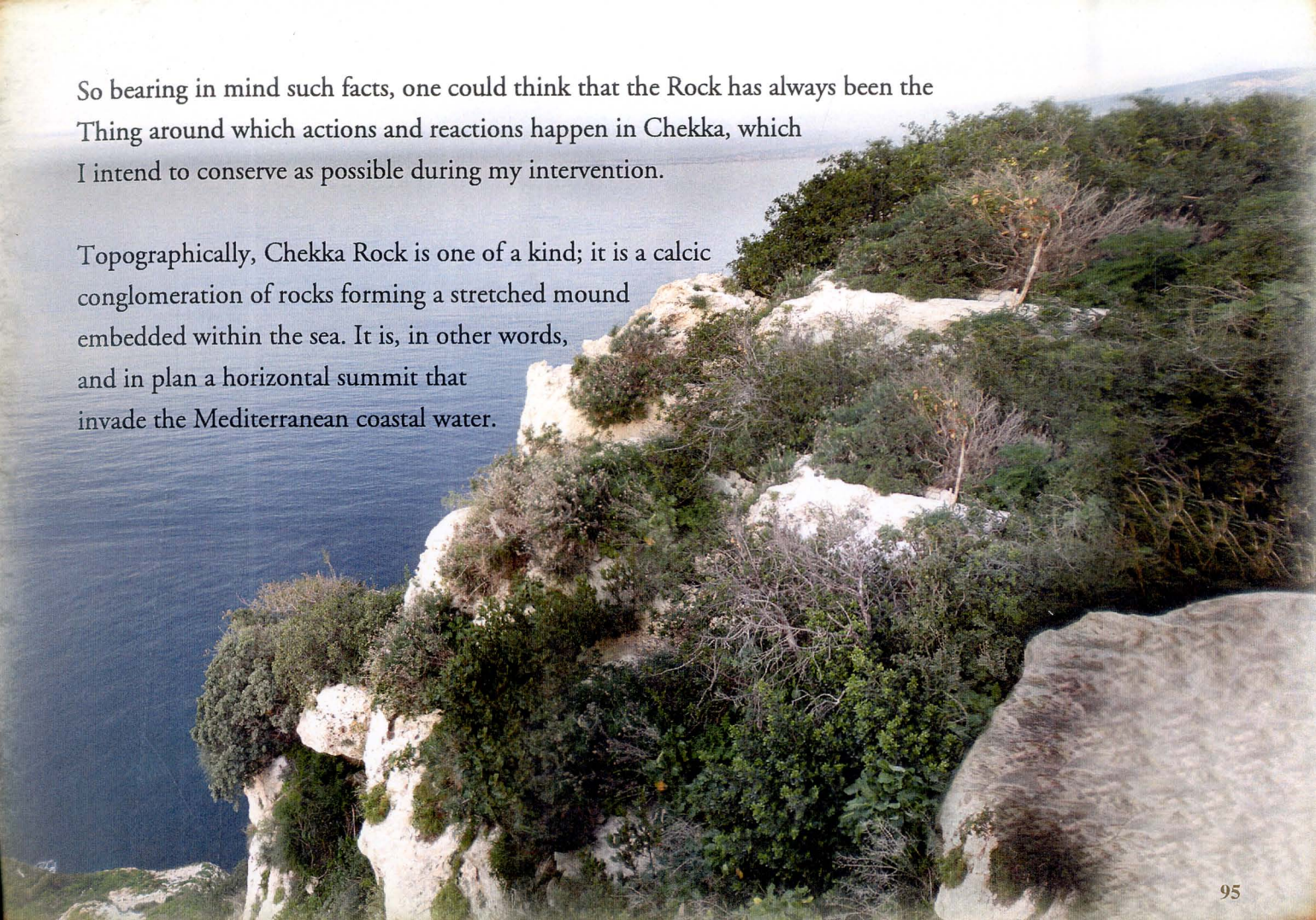
According to Hamat Municipality, the rock was historically the only natural obstacle for the people and the goods to commute from North to South. Moreover, considered as the highest point in the area, the rock houses the main telecommunication towers which connect virtually Tripoli and Beirut.

Despite, such a reality concerning the infrastructure, the rock is known for its silent and anonymous inhabitants, the hermits. It has been and still embeds within it the dark cells of the hermits embracing serenity and holiness.



So bearing in mind such facts, one could think that the Rock has always been the Thing around which actions and reactions happen in Chekka, which I intend to conserve as possible during my intervention.

Topographically, Chekka Rock is one of a kind; it is a calcic conglomeration of rocks forming a stretched mound embedded within the sea. It is, in other words, and in plan a horizontal summit that invade the Mediterranean coastal water.





Monologue

Reaching the Rock is a process by itself. When you first hear about it, you imagine it as an agglomeration of calcareous rocks that is located at a proximity to the sea. Once I reached Chekka, I did not perceive its location directly, but I was drawn by one coastal rock that has an unobstructed view over the Mediterranean Sea. I knew later that this is actually the rock I am visiting. It was such a relief.

Getting there is a choice by itself to be made by visitors. We can either reach it following the old track and thus, passing by the 'cave-tunnel' that belongs genuinely to the rock- as if it constituted its corroded part- and heading up towards the cliff; or to proceed through the common upper road where one could witness an unforgettable natural paysage; as a passerby, you'll be able to walk adjacently to the green summits of the mountains and along the sun setting behind the trees, since Chekka is an agricultural city.

The upper road consists of one main continuous network that passes by 'Sayidat el Nourieh' church down towards 'Deir Mar Sema'an', the monastery. Surprisingly, although I was heading towards the summit of Chekka, the topography was descending to flatten up once I reached the 'Deir'.

On my way, the narrow street network was flanked on both its margins by green empty spaces where many families temporarily adapted it to have a pick-nick or a promenade.

Once I reached the cliff, the view was indescribable.

As one advances into the deep-cut rock of Chekka, one is surrounded by mountains towering over the gorge, as if attempting to touch the sky visible overhead, while the cliff is plunging deeply into the blue imprints of the



sea. If one looks down into the depths of the cliff, one is overwhelmed by a sense of power, and one wants to seize some twisted tree-trunk so as not to go falling into the vast space between the coastal rocks; this is what happened to 'myself' while attempting to take pictures of the site, unlike other visitors who tried to stay as safe as possible. However, the risk that I took was worth it for my theory about the rush in the flying structure, its positioning on the cliff, the environmental atmosphere as a whole, proved my theoretical approach right.





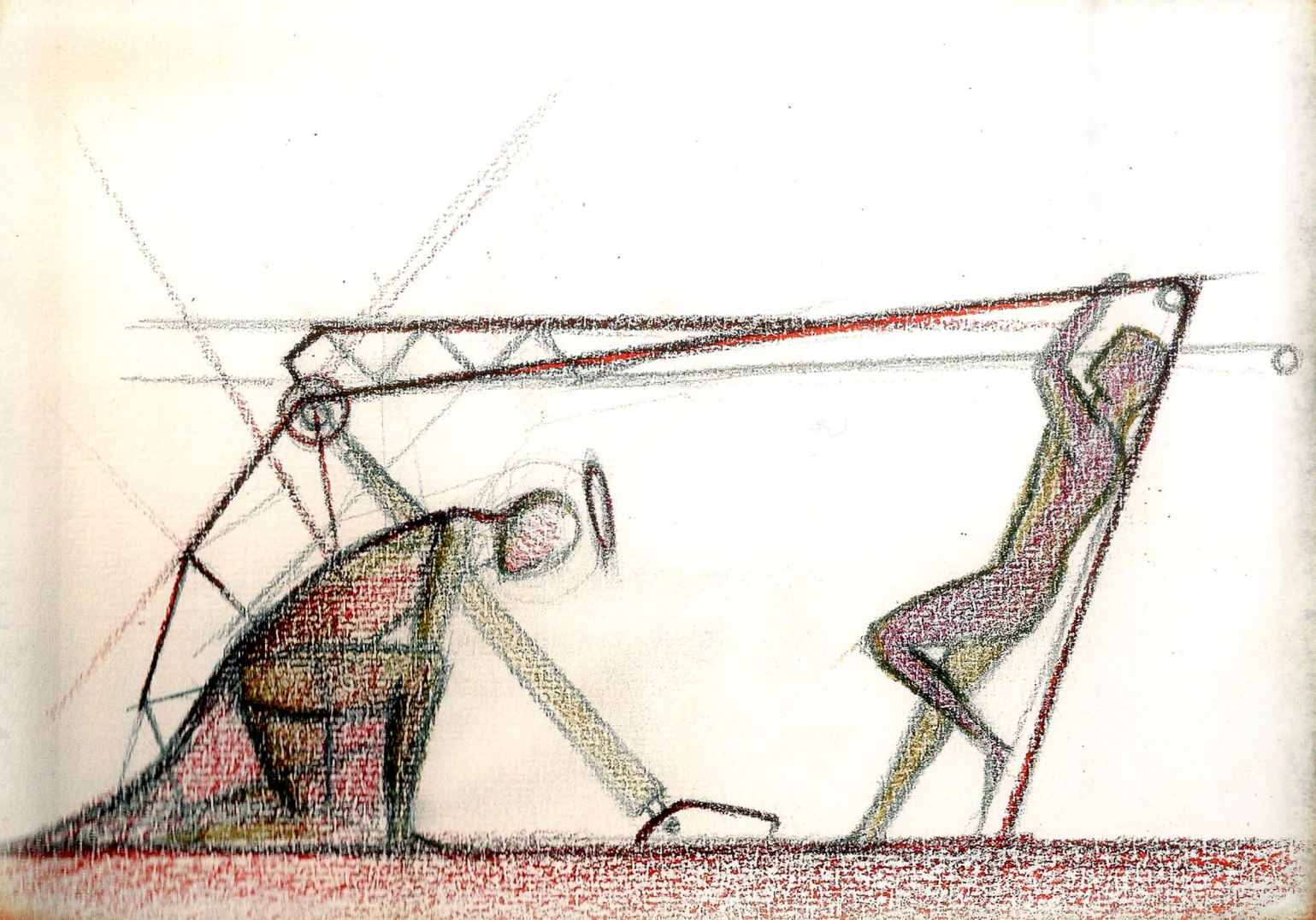
Saints Valleys as Inspiration

The site is a source of revelation and inspiration to action that is worth calling 'Holy'. Bearing in mind its history, the site, its location and paysage is inspiring which reminds me of the Saints' Valleys in Mounts Lebanon; the Holy Valleys such as in Bsharri district; Bsharri, Dimane, Tourza, Monastery of Qannoubine; and in Zgharta district Kadisha Valley, Ehden, Kfarsghab, Monastery of Qozhaya...

Not only known as the Saints' Valleys but also the Poets' Valley's such as in Bsharri, the hometown of Kahlil Gibran.

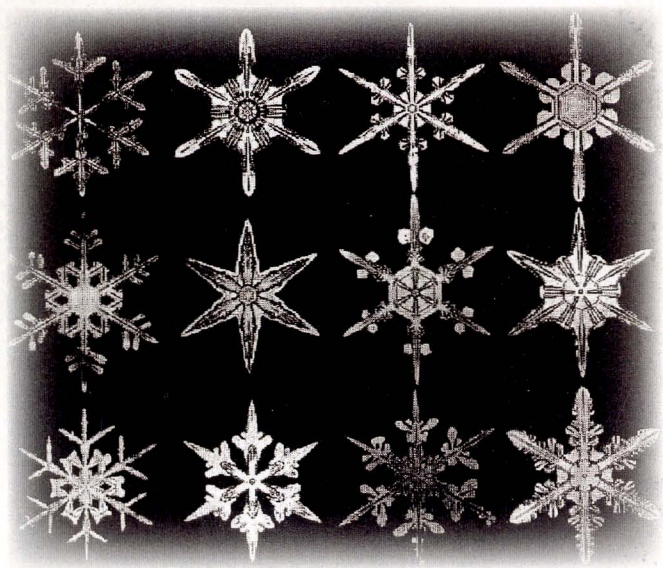
He was the 'avant-garde' modern hermit of his era. He was the hermit, the writer, the poet, the painter and the sculptor. These facts are the basic traditions of our Lebanese 'multi-religious' rich culture. Khalil Gibran is one of many philosophers, authors and creators of his era; Ameen Rihani, Elia Abu Madi and Mikhail Naimy who was a close friend to Khalil Gibran and distinguished master of Arabic literature, whose descendants Gibran declared to be his own children, and whose nephew, Samir, is a godson of Gibran's.

(http://en.wikipedia.org/wiki/Khalil_Gibran)



Such facts lead me to ask; who are the hermits of today?

Sites such as Chekka Rock could be the habitat of a new generation of Hermits; **another kind of Hermits, not necessarily religious, but of the common people seeking detachment and serenity.** [Bold] My site, very similar to the mentioned Holy sites, can house my flying architecture that could re-interpret the Hermit's life and re-define it in correspondence to the function of my structure and to its program. It can become a new source of inspiration that could re-generate today's Hermits.



Just like the Cocoon...

Nature as Inspiration

After my trip to Chekka cliff, nature became undoubtedly part of my inspiration.

Structure must follow, satisfy and respect the laws of nature. Any further development in the new engineering of buildings is governed by these laws. There is an inherent simplicity in nature that has been a main resource for me to look at and be inspired and translated into structural. Since structure is all about doing more with less, nature points the way by its rules of minimum component types, which have the ability to be combined into a vast diversity of structural forms.

Take for example a snow flake; it has a constant symmetrical hexagonal form, enabling an unlimited range of diversity of patterns which are never repeated. Every snow flake is unique and, at the same time, has a high degree of differentiation within its own pattern. The snow flake is a result of a least-energy interaction of its minimum inventory with the environmental conditions of temperature, humidity, wind velocity and atmospheric pressure.



<http://www.flickr.com/search/?q=Butterfly+cocoon>

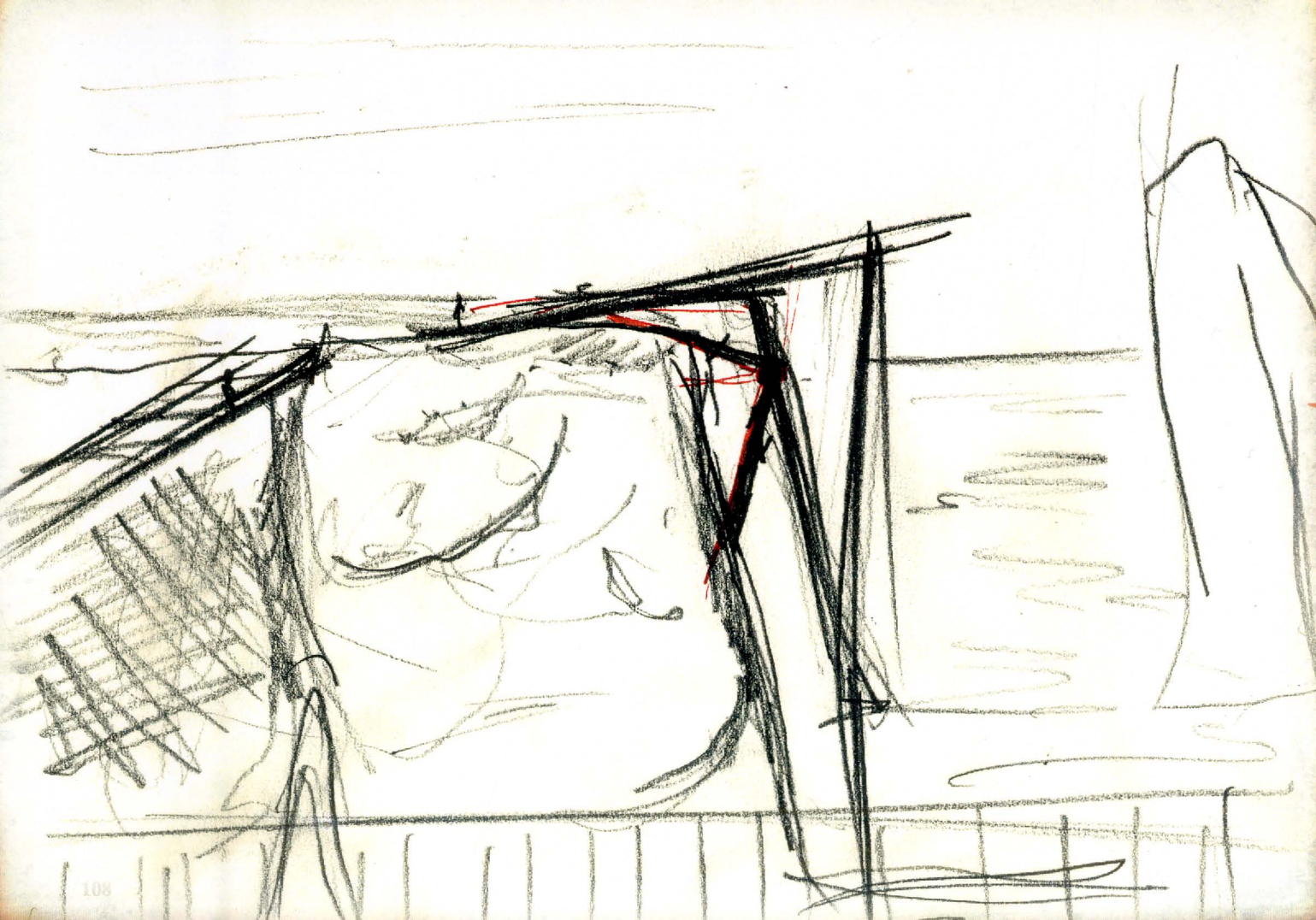
Architect Karel Honzik observed that “Living and dead matter seems to follow a single impulse, displacing and reorganizing itself, or growing, with the object of attaining equilibrium, under the direct influence of internal and external forces. Nature seeks that ideal state of equilibrium.” And architect Marcel Breuer stated that “One of the fundamental instincts of the human race is to defeat gravity, to construct without gravity”.

(Margolius, 2002)

Monologue

If I am to translate these words into my own thoughts I would say that nature creates forms of structures according to the requirements of minimum energy. In recent years man has been trying to reach beyond his natural, earth-bound environment, moving into space governed by different laws not abiding to the gravity laws we are used to. The structure I will design reminds of the butterfly cocoon. It is an added component to the existent natural components such as the foliage or the branch of a tree, but somehow it perfectly blends with the environment.

I am stepping outside nature but in cooperation with it, constructing a complementary world with it, one of my own and others' imagination and dream through a structure hung on the edge of a cliff and on the verge of flying or...



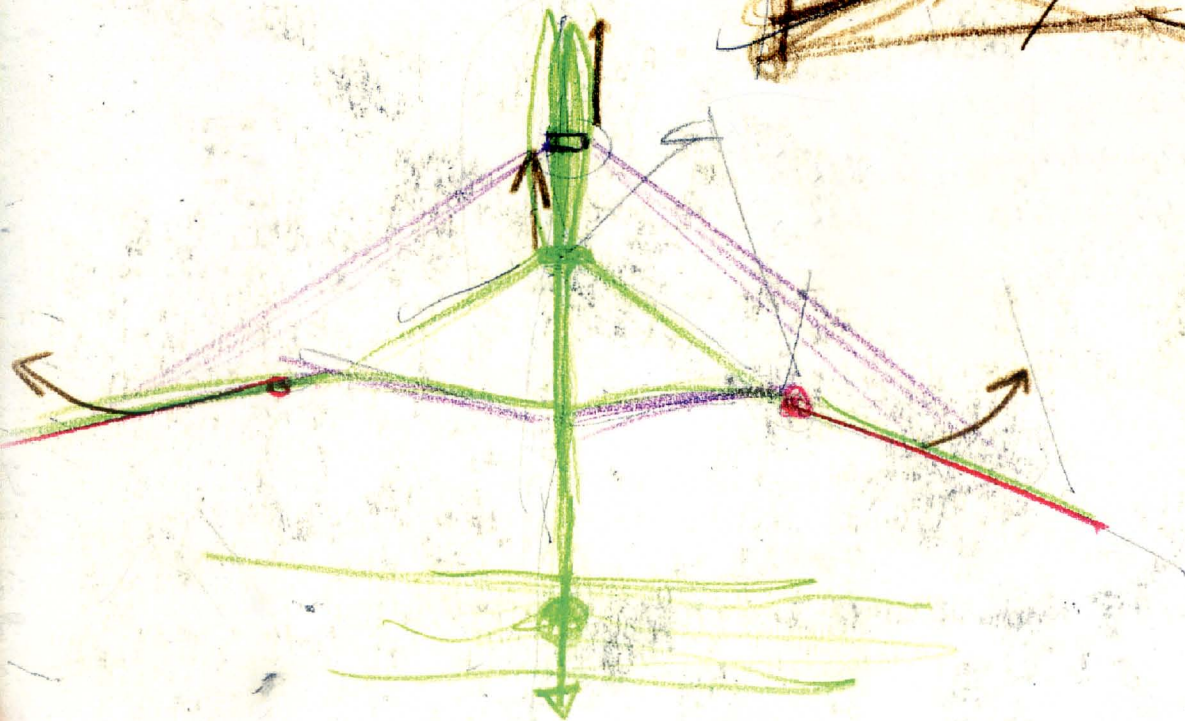
Me...Flying

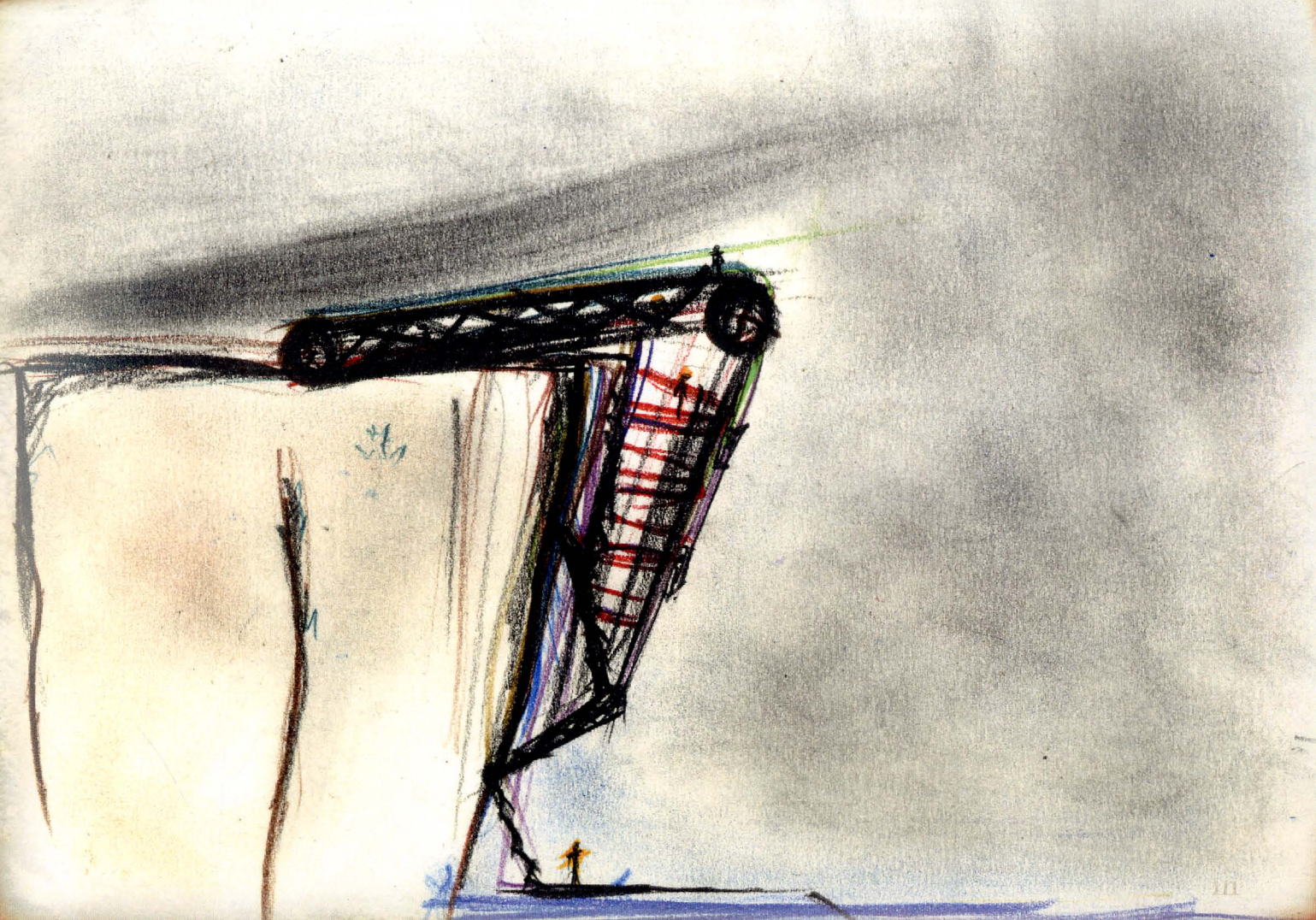
I am clearly captivated by the structural impacts on architecture, especially that I am exploring flying through architecture; however, I am not seeking to flying through the structural elements. I want the structure itself to fly, only then such a sensational rush of flying will reach our soul and mind.

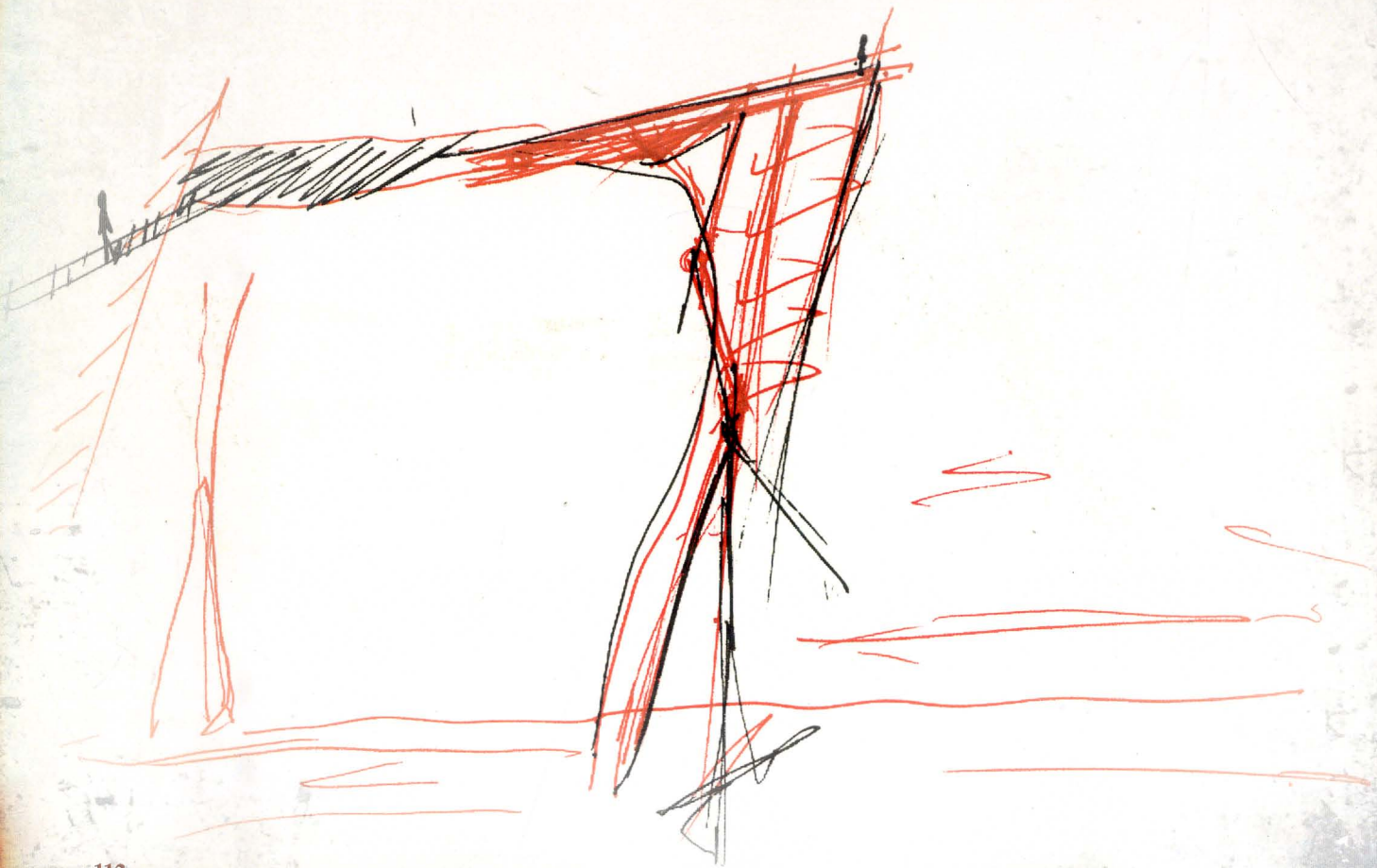
I want to create a space encompassed within a larger natural cosmic space. Nature will be part of my project expressed through the lightness of structure in terms of its materials, treatment and structure.

I want a certain motion in my structure that is provoked naturally- a natural reaction to the environmental, weather, wind condition, that in not mechanized. The only moving components would be the transportation services; in other terms, the elevators. The latter have a vertical connotation, implementing an ascending or descending motion depending on the destination of the user. It tackles the vertical spatial void.

211

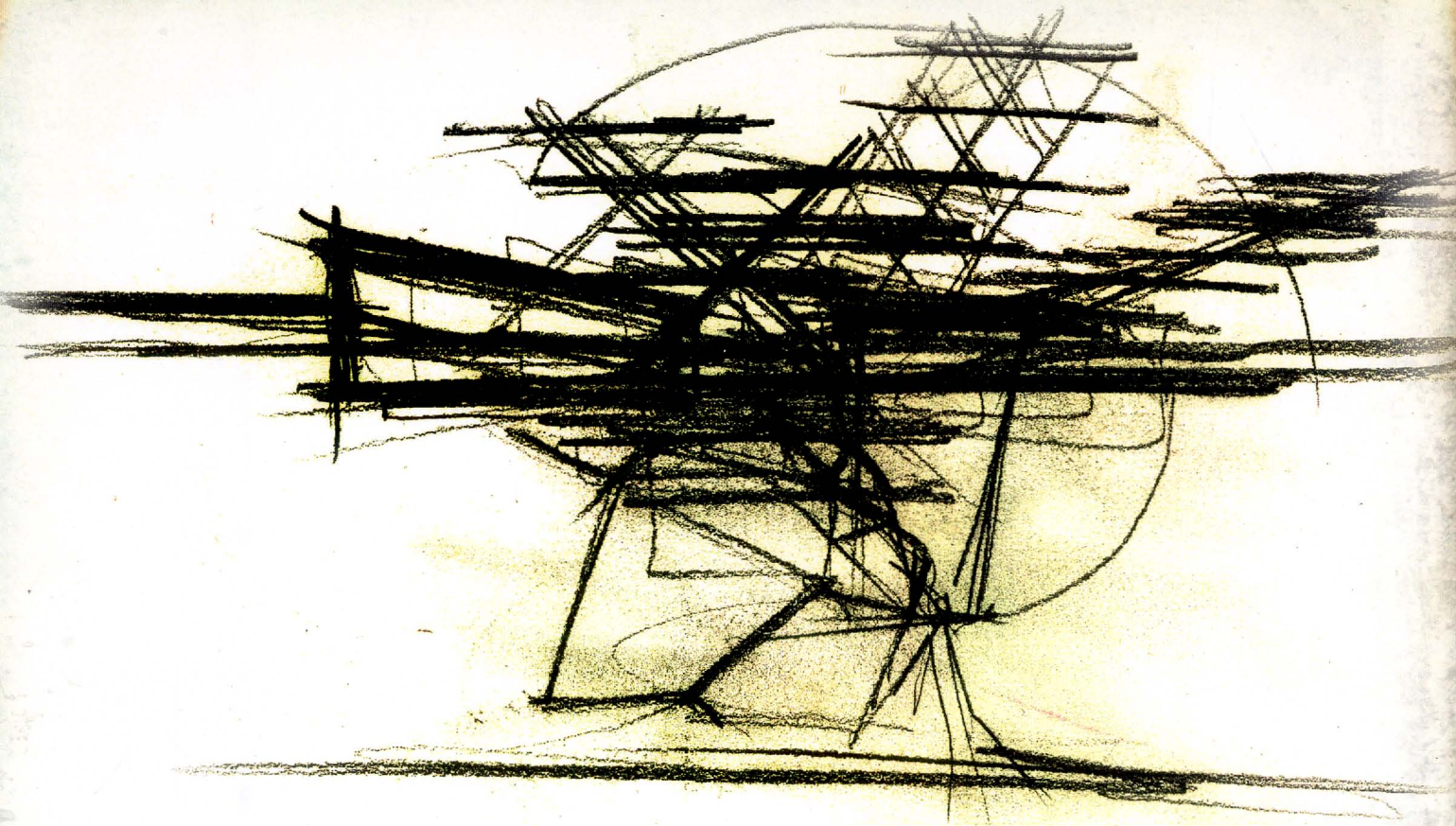


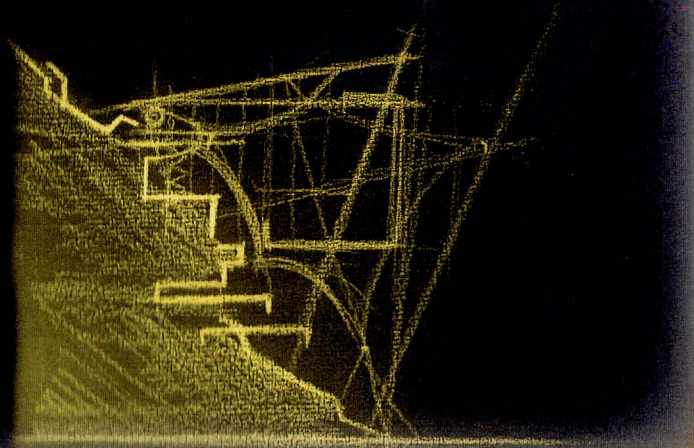
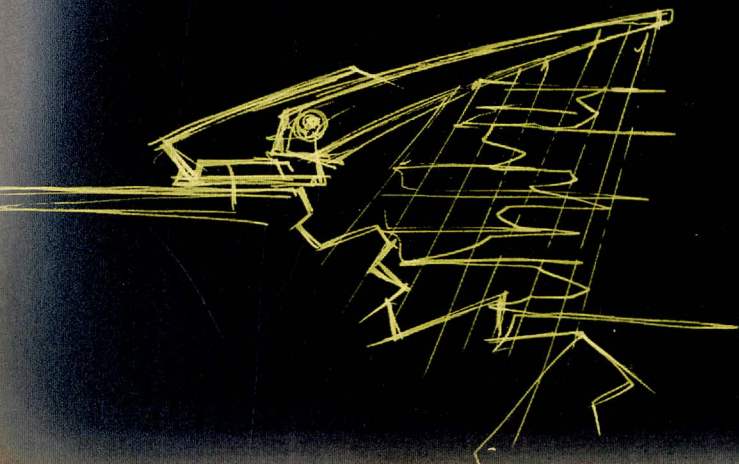
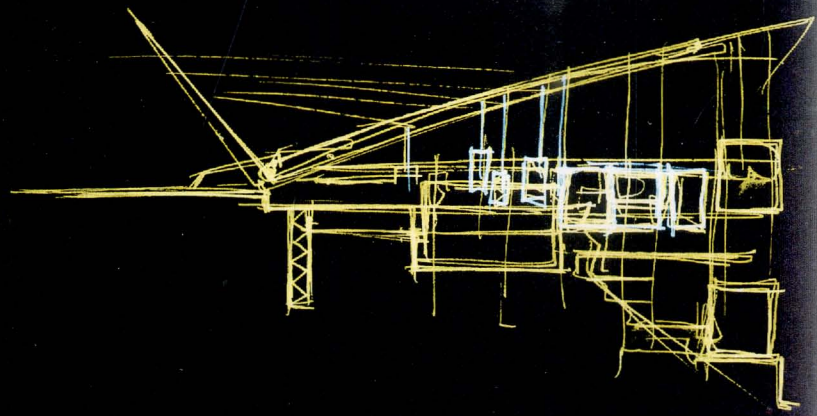
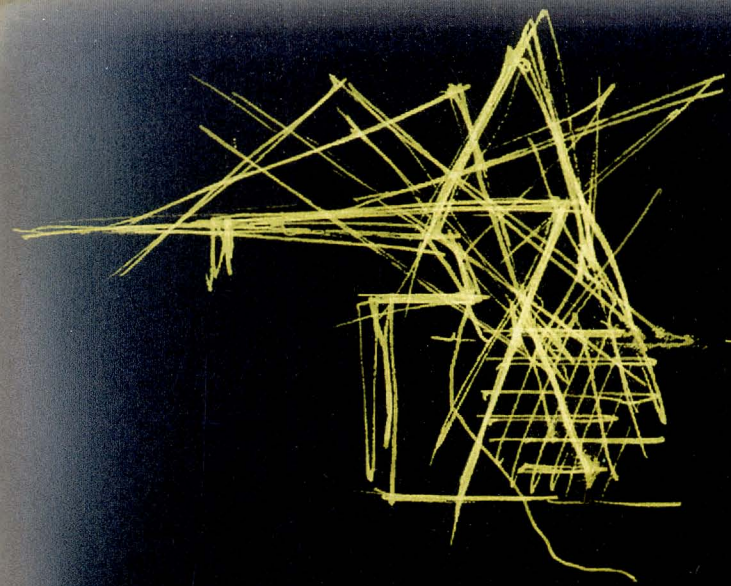




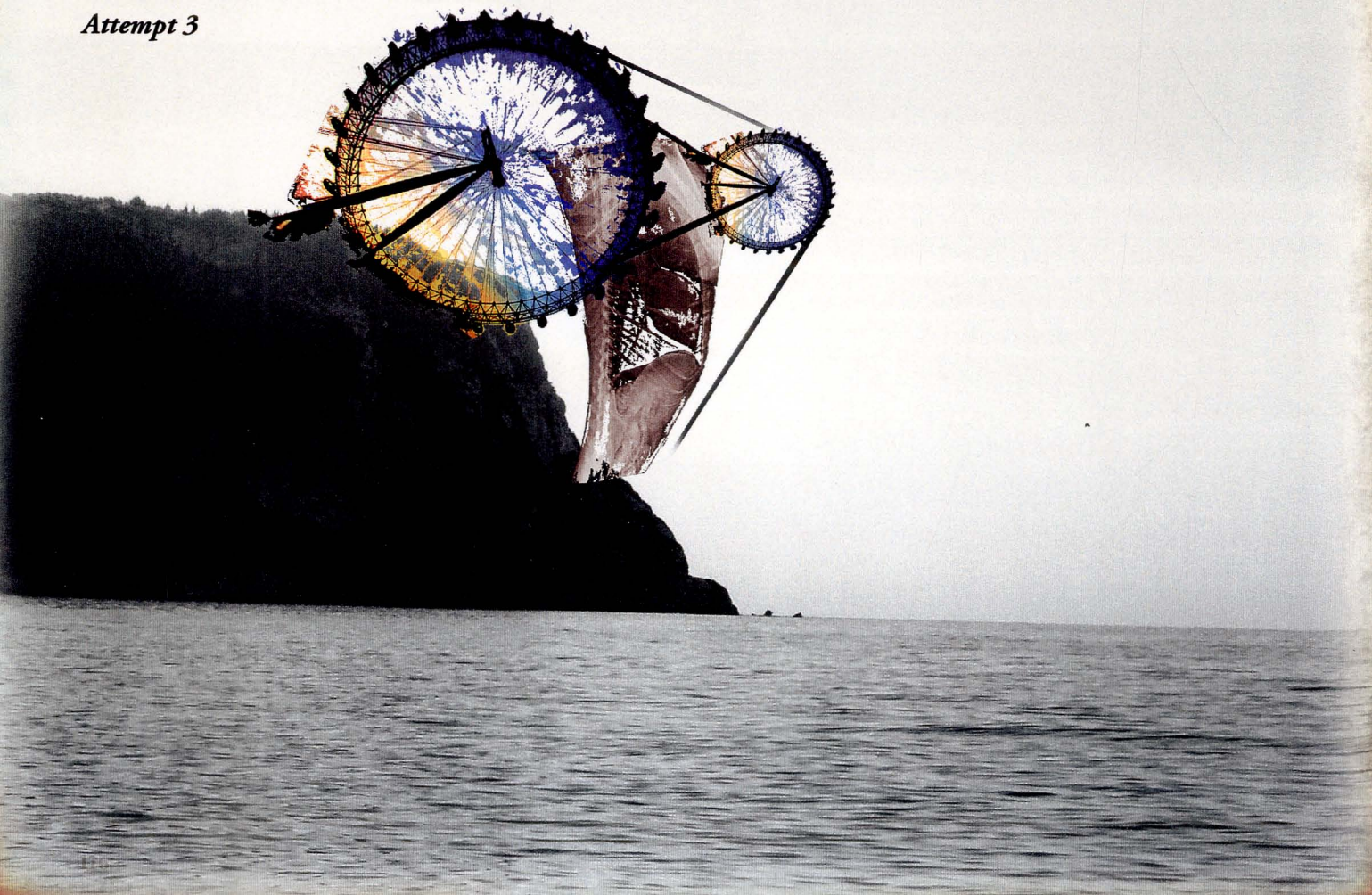
A hand-drawn sketch of a mechanical linkage system. The drawing is on aged, textured paper. It features several interconnected bars and joints. A central vertical bar is connected to a horizontal bar at the top. To the right, another horizontal bar is connected to the central one via a pivot. Below these, there are several other bars and joints, some of which are drawn in red ink. A large black arrow points upwards from the center of the mechanism. The word 'FIX' is written in red ink near the top left joint. The number '10' is written in red ink in the lower center. The title 'In the Process of Flying Attempts' is printed in black serif font in the center of the page.

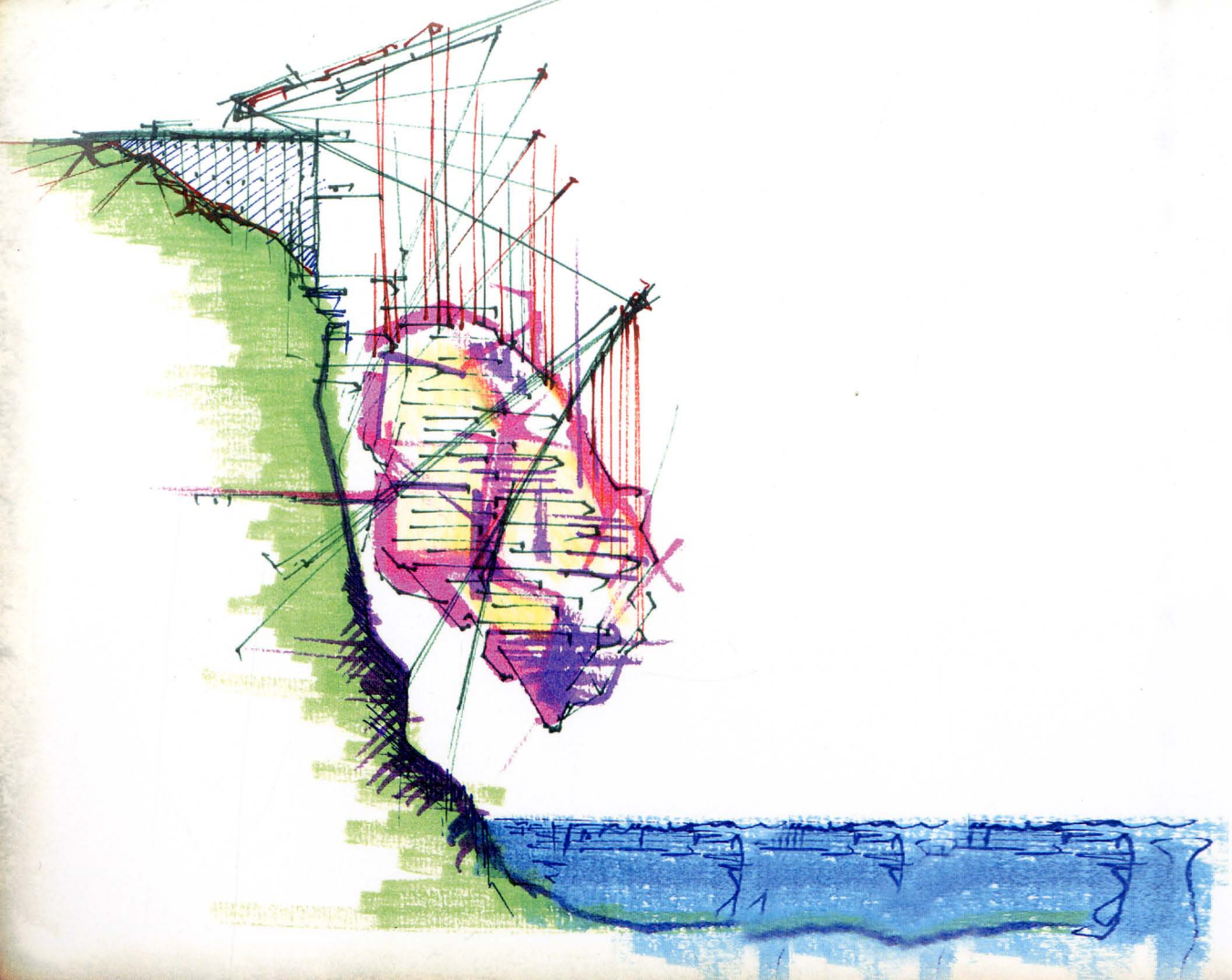
**In the Process of Flying
Attempts**

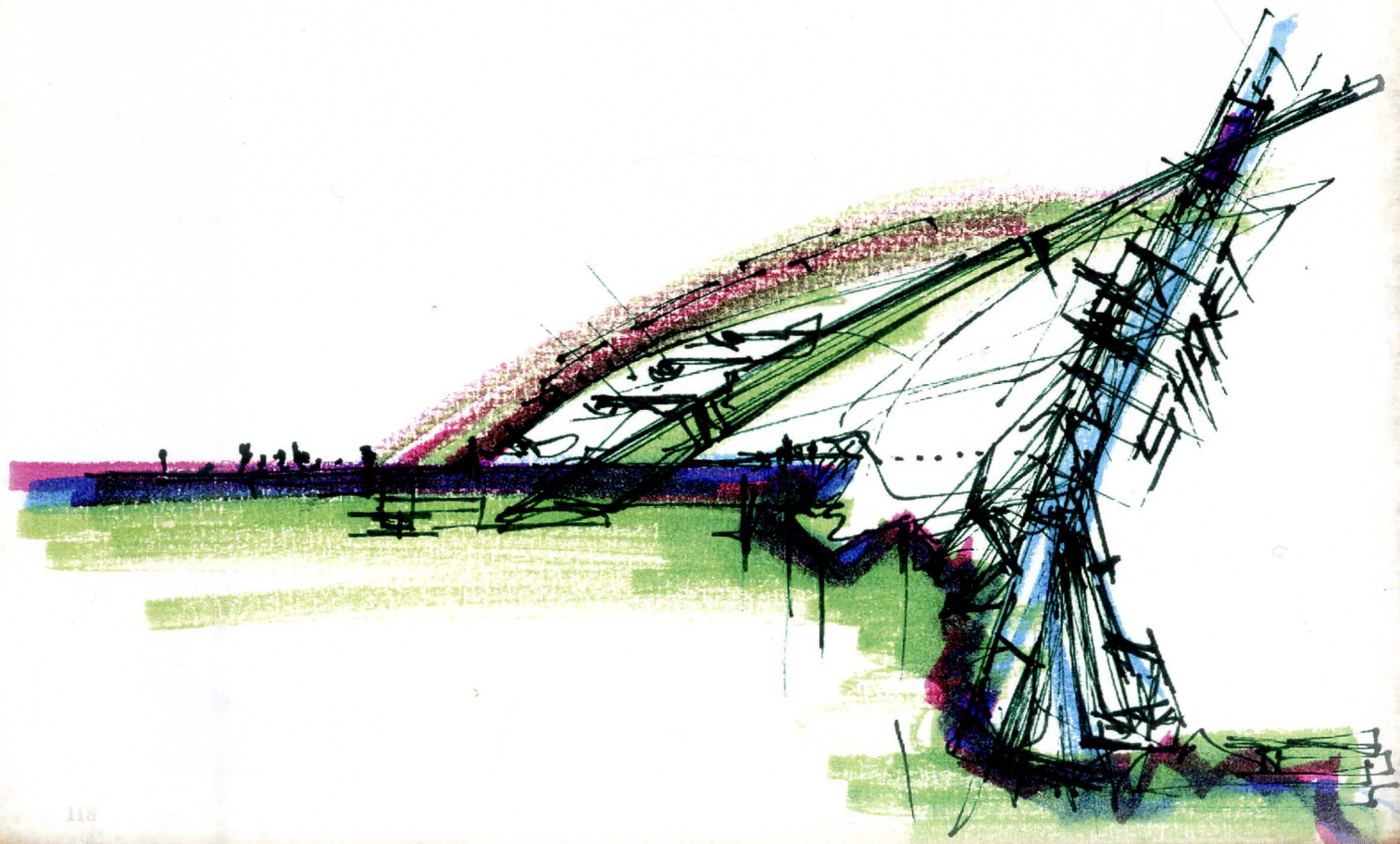


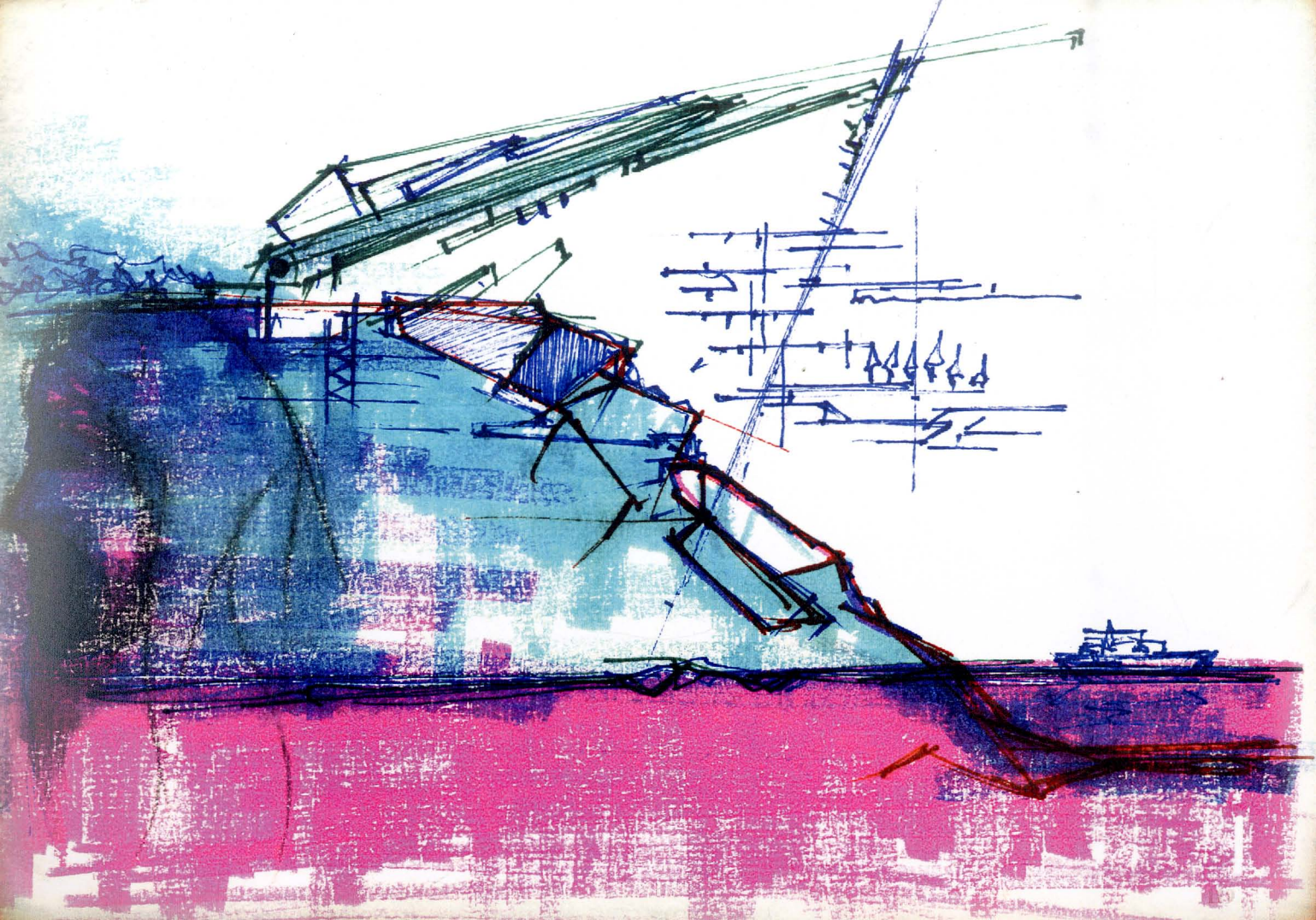


Attempt 3

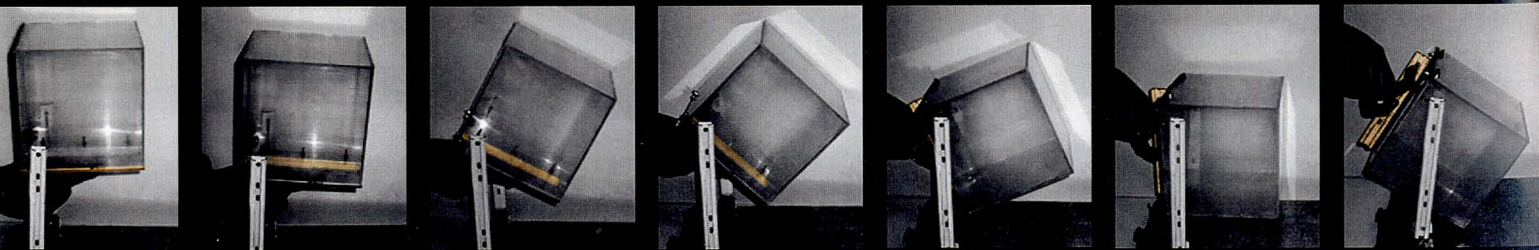


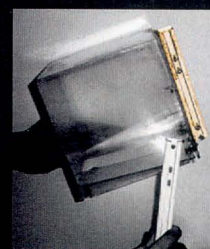
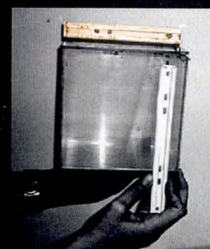
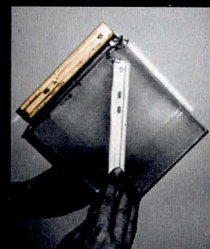




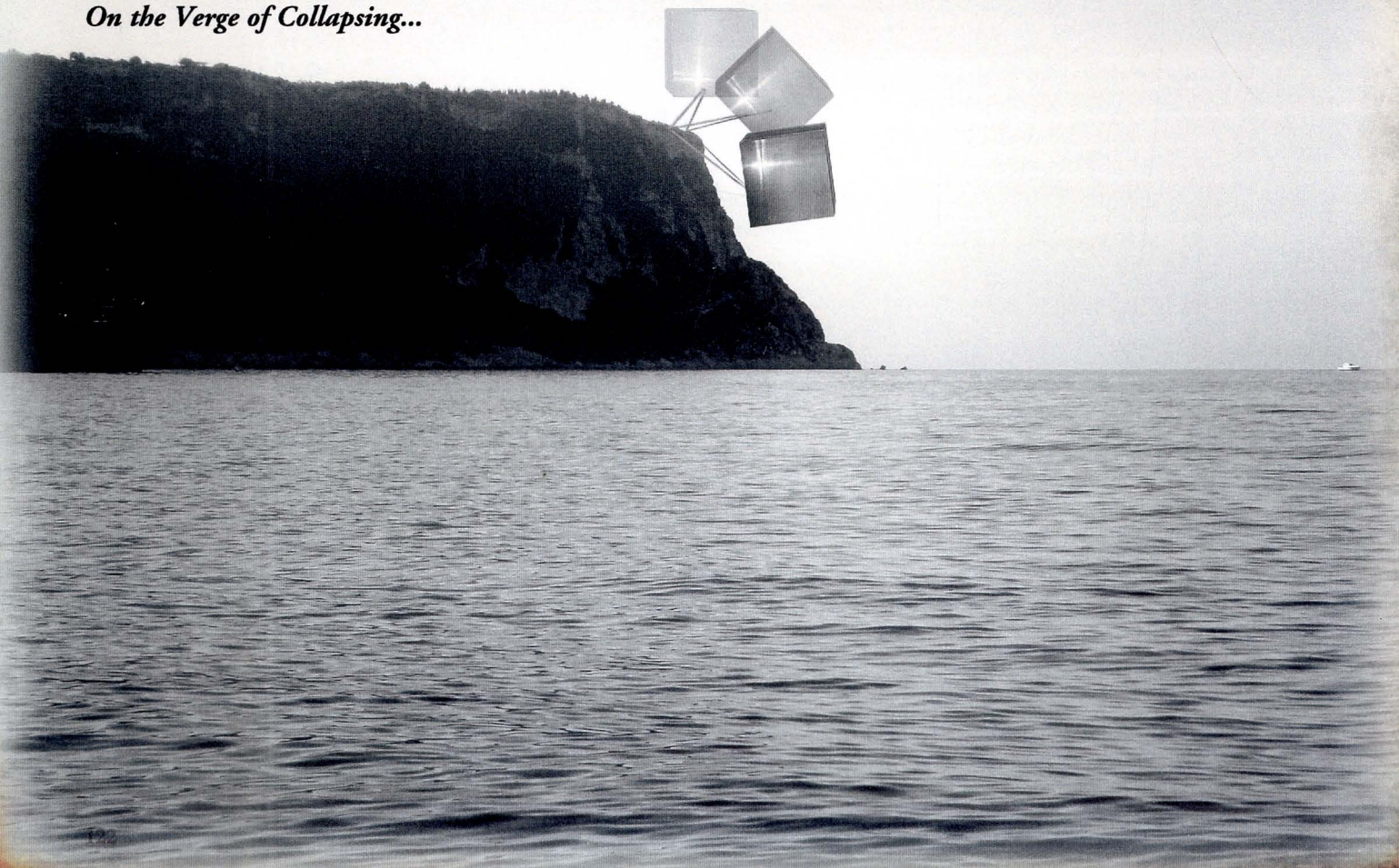


Attempt 4





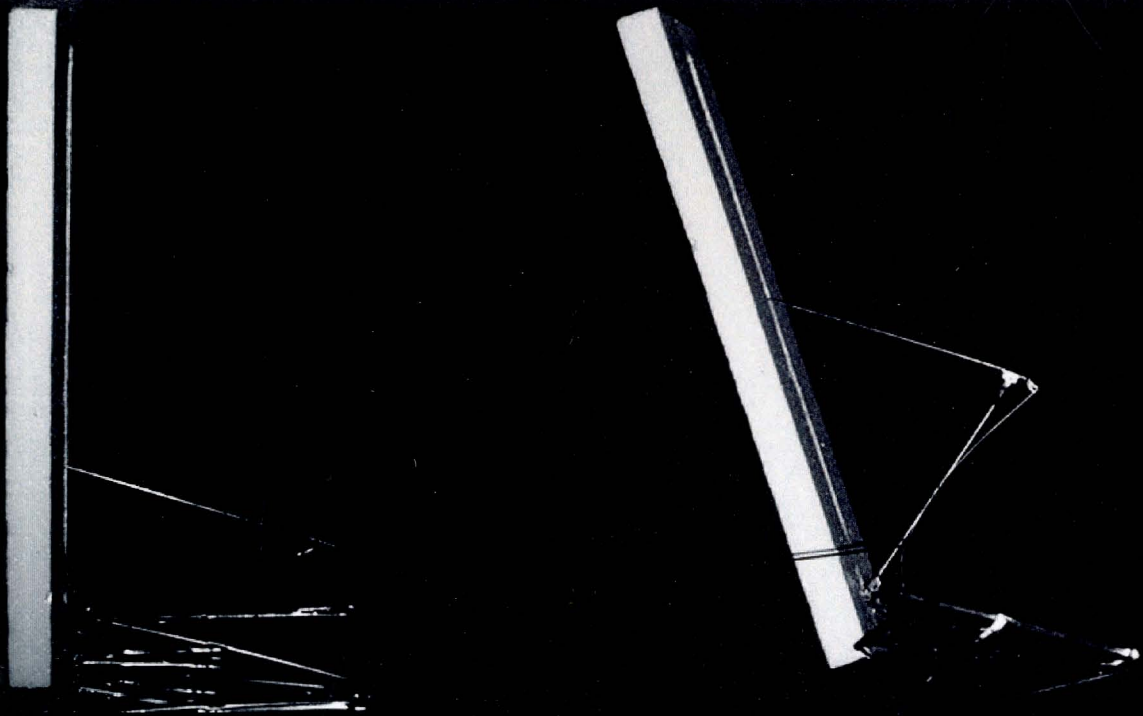
Attempt 5
On the Verge of Collapsing...



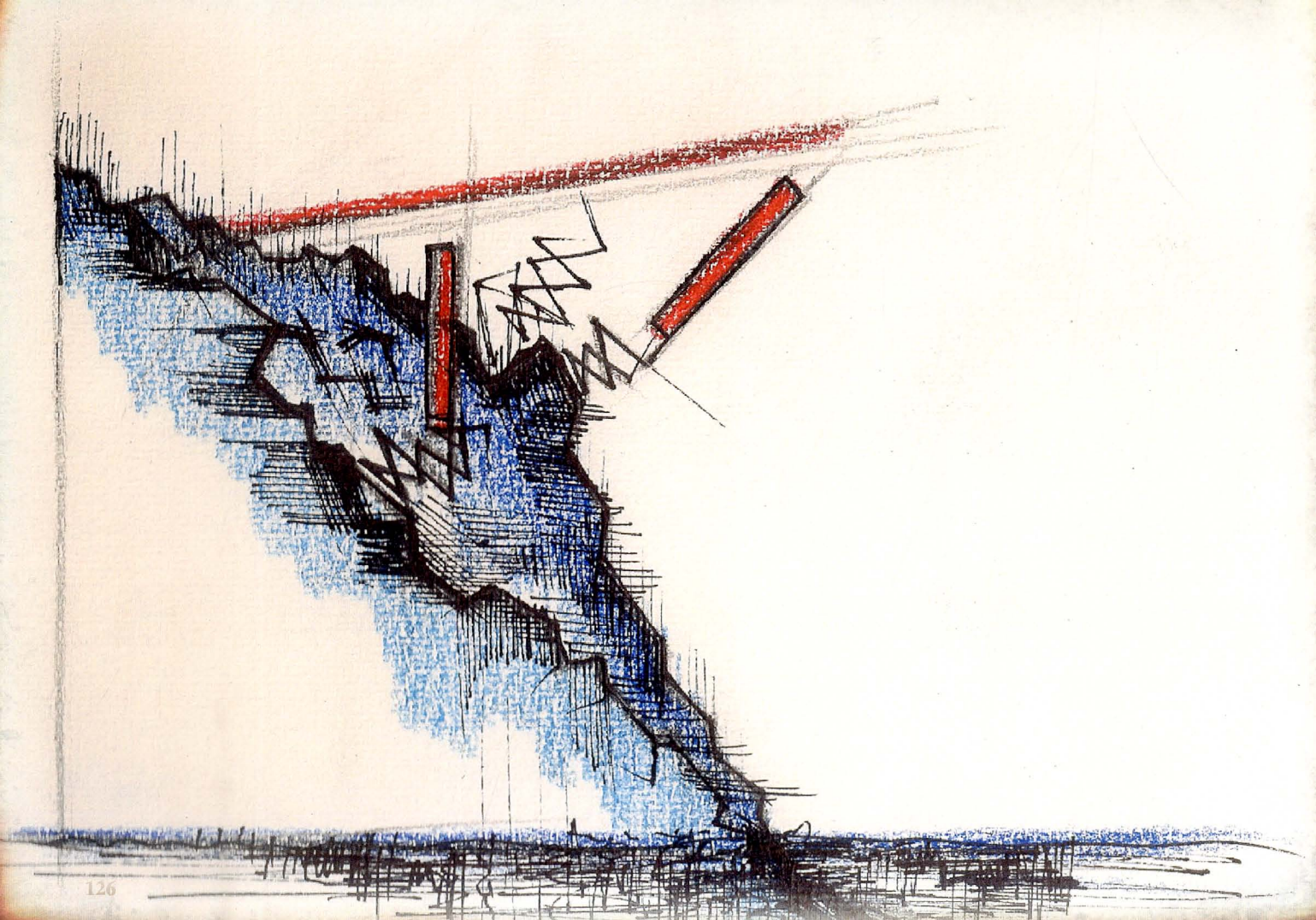
*Attempt 6
Or on the Verge of Flying...*

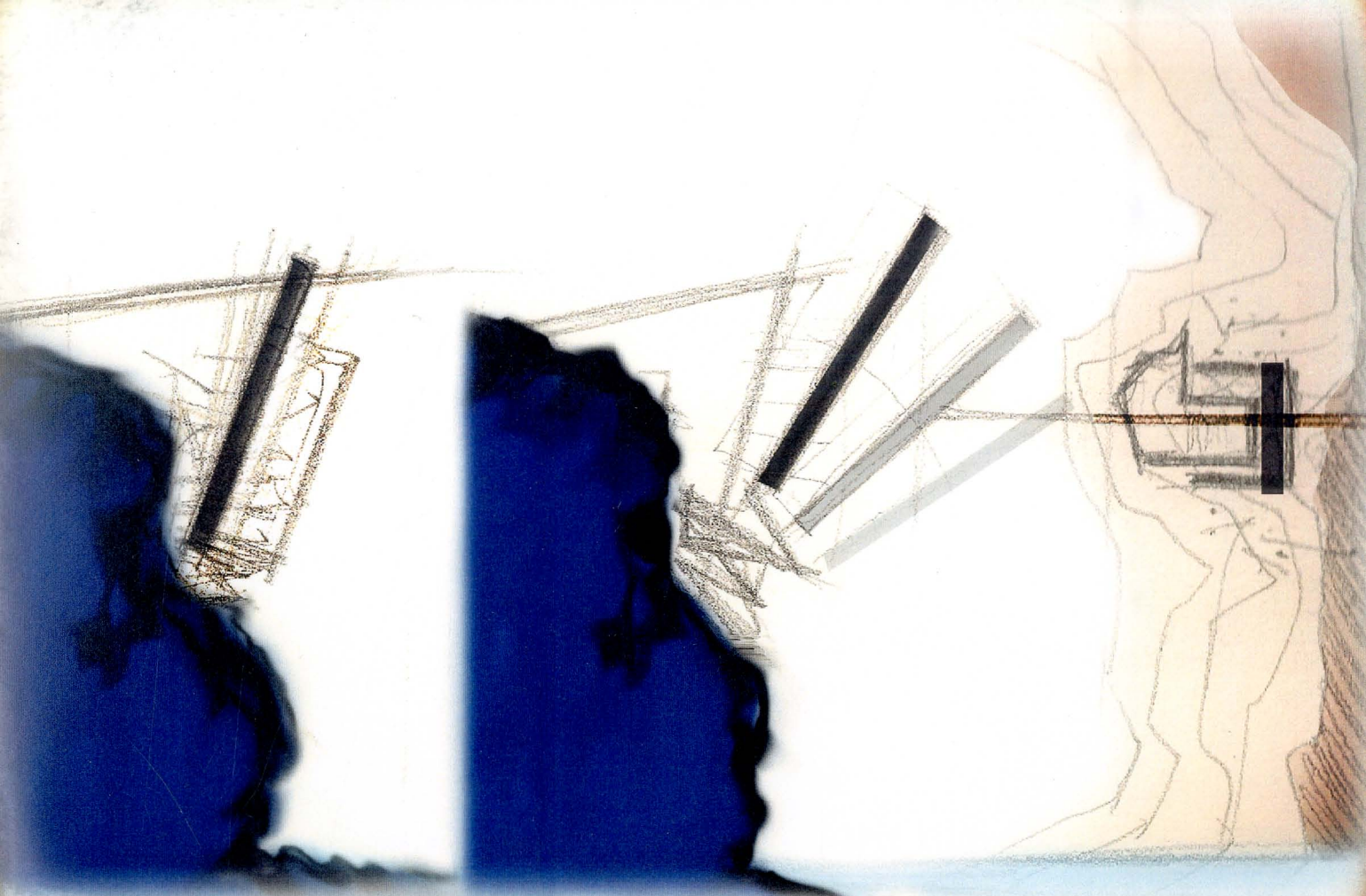


Attempt 7











Ice Hotel

Ice Hotel is inspired by the river Torne that flows in Jukkasjärvi, the cold arctic climate, the Northern Lights and the midnight sun. It is a hotel that is built each winter; it is an ephemeral art project held in Swedish Lapland, 200 km north of the Arctic Circle. The hotel's chain expands all over the world and in cities such as London, Tokyo, Chicago and Barcelona.

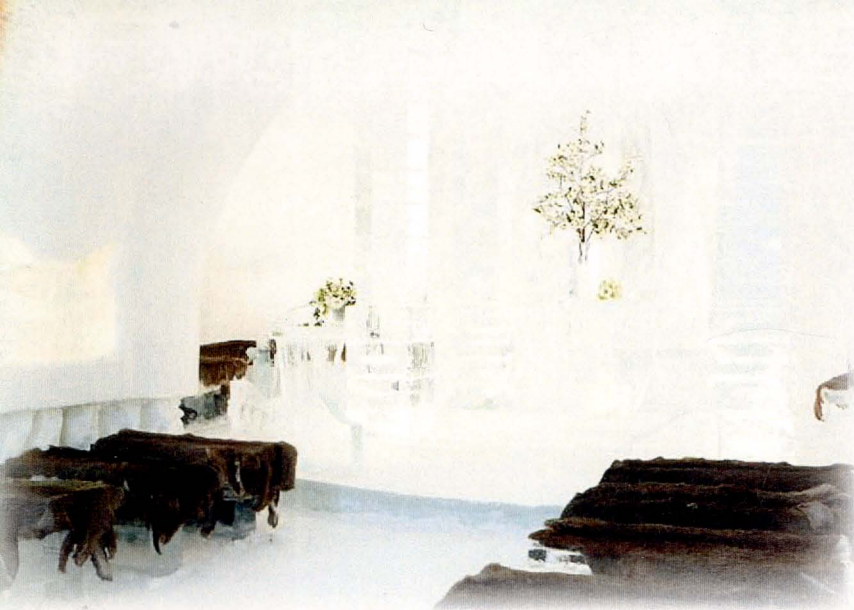
The hotel is considered one of the extreme places where one chooses to go and spend the night over. He/she is taking a risk of falling asleep while surrounded by ice; is risking to freeze while sleeping. However, it is a choice and a lifetime experience, in an unusual extreme and exposed setting that will never be forgotten.

... we had the entire Torne River full of ice, but not using it.”

... The first guests stayed overnight in 1992 and the story goes: One of my clients wanted to visit us with his company. But our lodging had run out of availability that particular week. I solved the problem by suggesting that they would overnight in the snow house. We arranged sleeping bags and held survival training with detailed instructions before the guests headed for their lodging. Some staff members worried about how the guests would handle toilet visits and feel about the comfort of the room – everyone was in the same room.

The following morning we anxiously awaited the guests' reactions. After a morning sauna and breakfast we handed out diplomas as proof of that the guests had survived a night in -5 C. They were fascinated by the experience and their faces lit up with joy.”

Yngve Bergqvist, the founder of ICEHOTEL

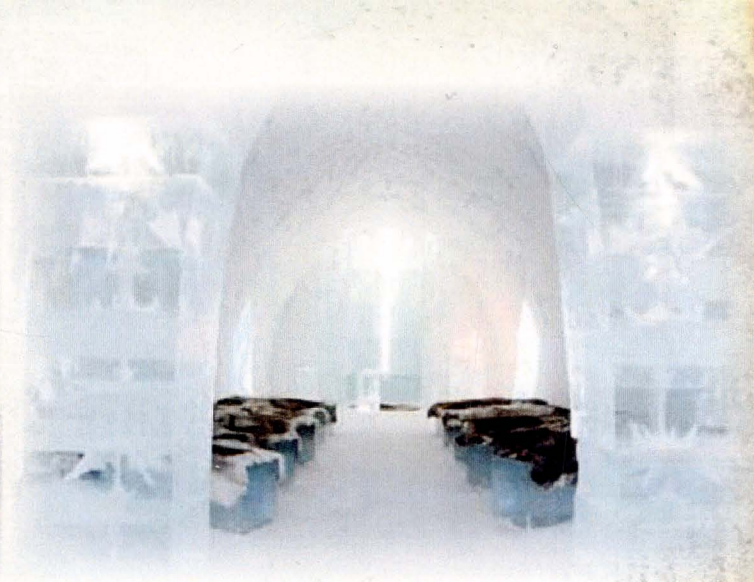


Building the ICEHOTEL

As soon as winter begins, in mid-November, a team of snow builders, architects, designers and artists from all over the world gather in the little town of Jukkasjärvi far north of the Arctic Circle. They create each year's version of ICEHOTEL. The snow is sprayed on huge steel forms and allowed to freeze. Later, the forms are removed, leaving a network of free-standing corridors of snow. In the corridors, partition walls are built in order to create rooms and suites. Ice blocks, harvested at springtime from Torne River, are now being transported into the hotel where selected artists start creating the designs of the fragile material.

The construction of ICEHOTEL under the open sky using the natural materials of the winter season is fulfilled in several phases. First the main hall and few snow rooms open up, followed by the completion of the ABSOLUT ICEBAR, and finally all sections of Ice Hotel are finalized with the completion of the ICE CHURCH. More suites and rooms will be available eventually each week until December 30th when the construction of ICEHOTEL is completed.

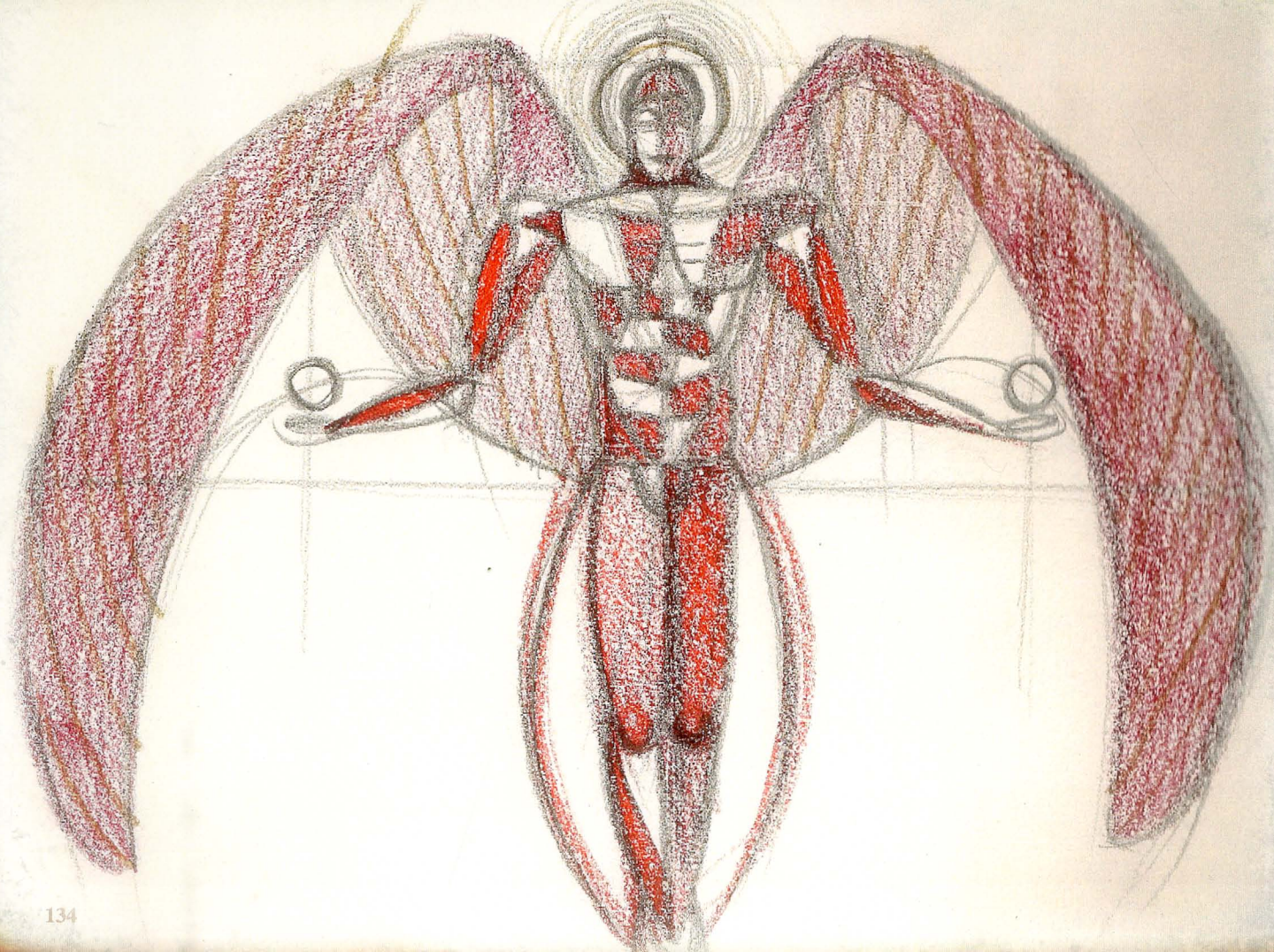
Until spring arrives and the sun starts to unthaw the walls of snow, the hotel is finally closed to return slowly return to its original setting, the Torne River.



The Program

The Ice Hotel boasts around 50 rooms per year, with 5,000 square metres built of 30,000 tons of snow and 4,000 tons of ice. Once inside the ice hotel through reindeer-skin covered doors, regardless of the rooms, there is a reception area, hall of pillars, Ice art exhibition, Absolut Icebar, Icehotel cinema and an Ice church. To end their day with a romantic gathering, in the evening guests gather in the Ice bar for a drink 'in the rocks' - ice glasses taken straight from the ice of the River Torne. www.icehotel.com

(<http://www.icehotel.com>)



Solitude in Public

The hermits are famous people, living in the mountains carving out their caves and adhering to the idea of solitude. The cliff I am intervening on it is a public magnet known for its natural and picturesque scenery, although it is a solitary setting for a private religious practice. This contradictory fact has unintentionally specified the kind of public practice in the realm of the area. It has limited the number of persons visiting the site and stratified them into two types of visitors; those of whom are just looking for a mere romantic view, and those who are seeking a detachment and a moment of clarity faraway from any materialistic belongings.

I will consider the case of those users aiming to fly away from the worldly matters and to plunge in a deep silence. Just like the hermits. I am one of them, a contemporary Hermit. My story can be the story of others...

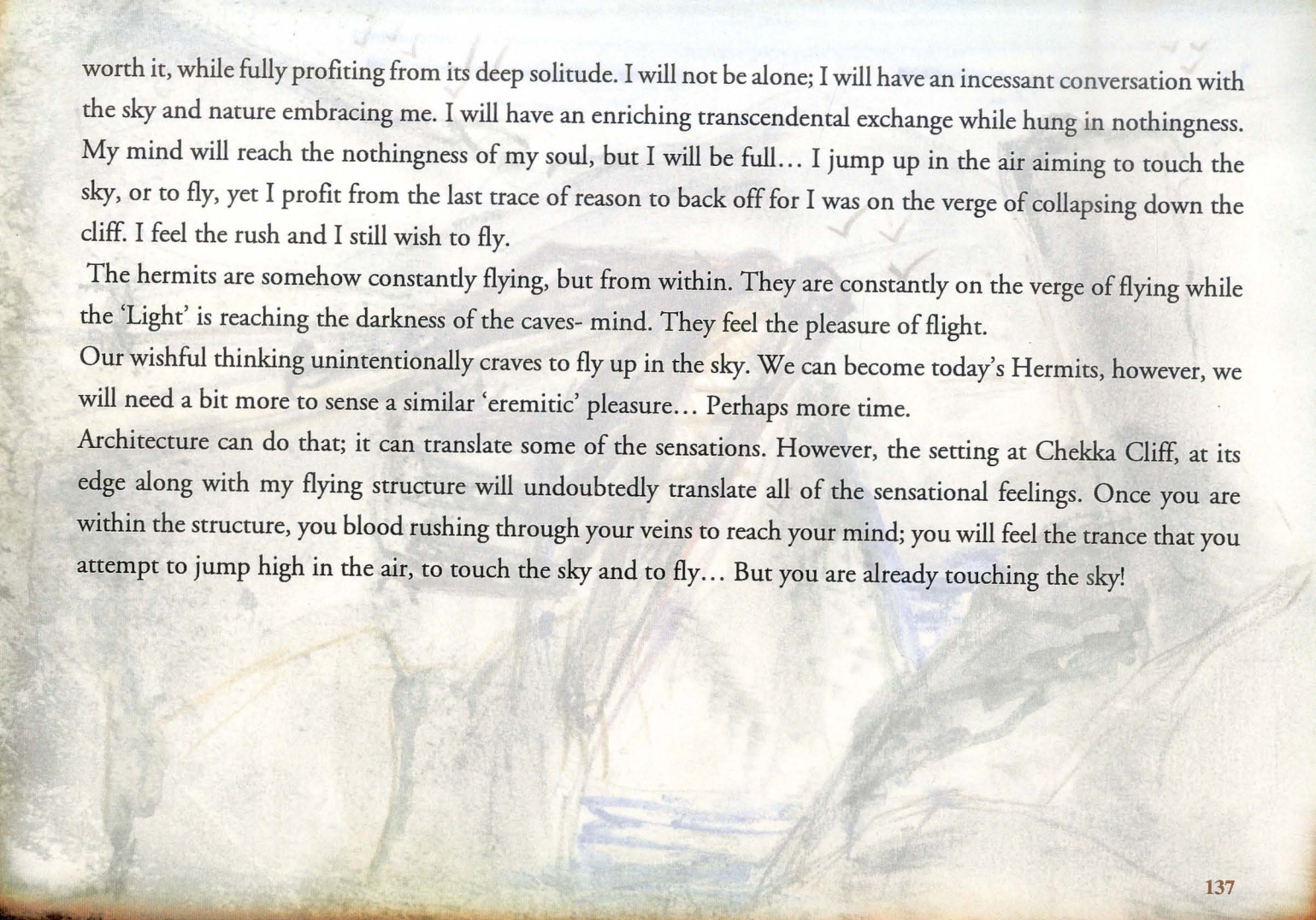
Closing Monologue

As any human being, my life can be very overwhelming... I seek detachment and silence in my life; Chekka is one place to flee everyday's pressure, so I reach the rock, and I stand on the cliff, but only for few minutes. Then it is over. My trip always ends with disappointment for it never lasts longer. I need to leave before sunset, while daylight can still lead my way back.

But what about the night; what happens then, at the cliff? And the next day, at dawn would the view be ever more beautiful?

The space is continuously progressing through time. Witnessing the space's instantaneous transformation is





worth it, while fully profiting from its deep solitude. I will not be alone; I will have an incessant conversation with the sky and nature embracing me. I will have an enriching transcendental exchange while hung in nothingness. My mind will reach the nothingness of my soul, but I will be full... I jump up in the air aiming to touch the sky, or to fly, yet I profit from the last trace of reason to back off for I was on the verge of collapsing down the cliff. I feel the rush and I still wish to fly.

The hermits are somehow constantly flying, but from within. They are constantly on the verge of flying while the 'Light' is reaching the darkness of the caves- mind. They feel the pleasure of flight.

Our wishful thinking unintentionally craves to fly up in the sky. We can become today's Hermits, however, we will need a bit more to sense a similar 'eremitic' pleasure... Perhaps more time.

Architecture can do that; it can translate some of the sensations. However, the setting at Chekka Cliff, at its edge along with my flying structure will undoubtedly translate all of the sensational feelings. Once you are within the structure, you blood rushing through your veins to reach your mind; you will feel the trance that you attempt to jump high in the air, to touch the sky and to fly... But you are already touching the sky!

Area of Lot 1542 = 50.8sqm



My Program

The Habitat

I intend to create a habitat for the new generation contemporary hermits; for the creator, the poet, the sculptor, for the runaway of the daily overwhelming urban life, for the adventurer, for the nature lover, for the pious, for the secular... The Habitat...

This is what the program offers, more time. More time to feel alone, more time to feel detached, more time to feel the trance, more time to feel the rush, more time to fly up in space. A habitat is the program; a space where one can feel the 'space' rather than adapt it to he/she feels. A space to be alone, to dream...

And to let go...

Areas Estimation {The areas are not final, for many changes can occur during the actual design.}

Reception + Offices = 1000sqm

Lecture/Meeting Space = 500sqm

Restaurant + Bar + Kitchen = 800sqm

-50 Sleeping Space/Cells = 4000sqm

Technical Areas + Storage Spaces + Services = 700sqm

Parking = 500sqm

Total Areas = 7500sqm

Bearing in mind that my flying structure expands vertically on Chekka Cliff; in plan, I will intervene on Lot # 1542. Its area is 50.8sqm.

References

Books

- Krause, Joachim and Lichtenstein, Claude. (2001) *Your Private Sky*, R. Buckminster Fuller. Switzerland: Lars Müller Publishers.
- LeCuyer, Annette. (2003) *Steel and Beyond: New Strategies for Metals in Architecture*. Switzerland: Birkh user – Publishers for Architecture.
- Margolius, Ivan. (2002) *Architects + Engineers = Structures*. London: John Wiley & Sons Ltd.
- Najjar & Najjar. (2001) *Kinematic Space*. Berlin: Kristin Feireiss, Hans-Jürgen Commerell.
- Najjar, Karim and Aramouny, Carla. (2009) *Coastal Thresholds: Structures between the Dynamic and the Static*. Lebanon: Anis Commercial Printing Press.
- Pelkonen, Eeva-Liisa and Albrecht, Donald. (2006) *Eero Saarinen: Shaping the Future*. New Haven and London: Yale University Press.
- Román, Antonio. (2003) *Eero Saarinen: An Architecture of Multiplicity*. New York: Princeton Architectural Press.
- Sharp, Dennis. (1996) *Architecture Monographs No 46: Santiago Calatrava*. London: Academy Editions.
- Tzoni, Alexander. (1999) *Santiago Calatrava: The Poetics of Movement*. New York: Universe Publishing.

Internet

<http://www.angelfire.com/electronic/awakening101/leonardo.html>

http://www.ehow.com/about_5035148_meaning-adrenaline-rush.html

<http://www.icehotel.com>

<http://lebbeuswoods.net/>

<http://lebbeuswoods.wordpress.com/2009/06/28/fluid-space/>

<http://www.mafox.net/gallery/gallery.htm>

<http://www.wikipidia.com>

Films

Wings of Desire, a film by Wim Wenders

Avatar

Thank You Note

I would like to thank my advisor, Karim Najjar, for having faith in me.

Thank you for challenging me, for inciting my creativity and inspiring me...

I would also like to thank all the advisors and instructors who accompanied me throughout my experience.

Thank you for your advice, time input and devotion.

Special thank to Dr. George Arbid...

- I would like to thank my parents for supporting me all through my 'architectural journey'.

Thank you for sustaining and encouraging me during my dark moments; you helped me see the light again...

For Mom, thank you for your love and sacrifices...

For Dad, thank you for being my daddy, you taught me how to dream and, most importantly, you taught me how to FLY...

My project is an honest dedication to all the dreamers, who wish to touch the sky...

Position for Take-Off

