

# SYLVA

A feature 3D documentary film project  
Research report and synopsis  
Philippe Baylaucq — February 2013



# SYLVA

A feature 3D documentary film project  
Research report and synopsis  
Philippe Baylaucq — February 2013



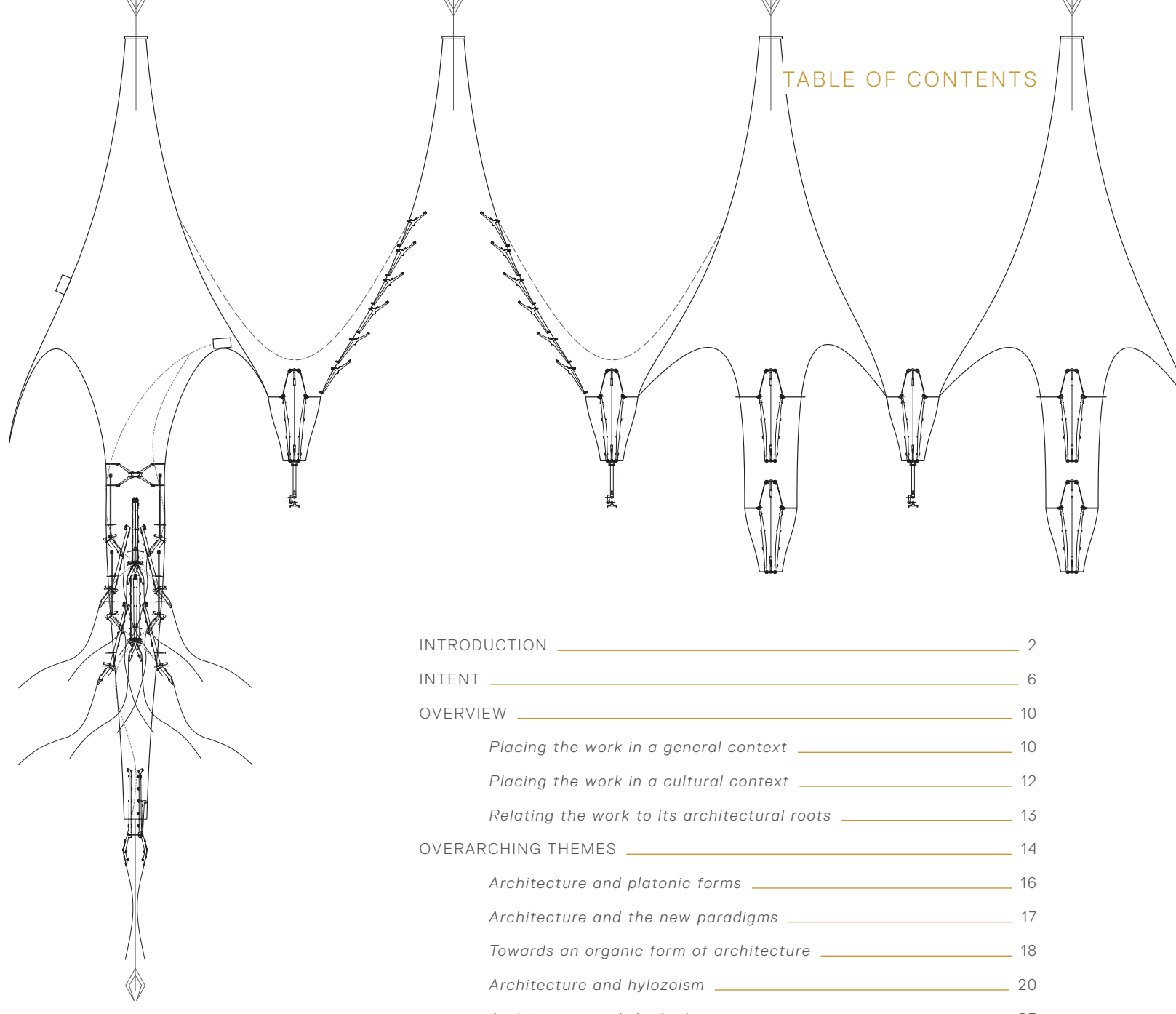
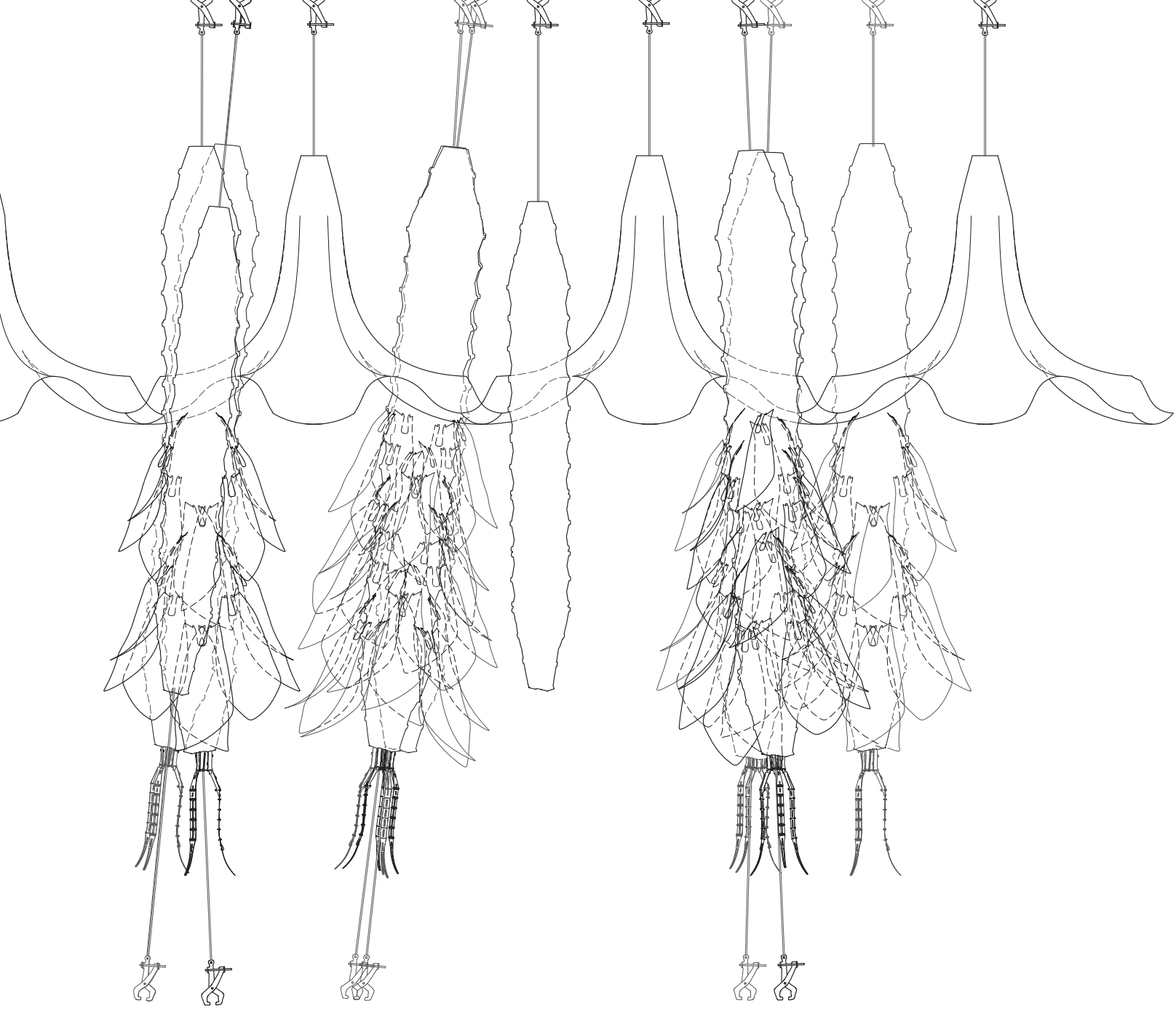
A SMALL GROUP OF REMARKABLE PEOPLE ARE EXPLORING NEW SPATIAL REALITIES AT THE INTERSECTION OF ARCHITECTURE AND ARTIFICIAL INTELLIGENCE.

The striking sculptural forms they create hover between art and scientific enquiry with a 'near-living' architecture that reaches out and touches the soul. It speaks to our bodies, teases the senses and points to the future forms of our built environment.

**Why has this extraordinary work been developed ?**

**How is it made and who is behind it ?**

*Sylva* is a 3D documentary film that takes us inside the mind and creative process of an inspired artist as he leads a group of talented collaborators into a fascinating adventure in innovation.



INTRODUCTION \_\_\_\_\_ 2

INTENT \_\_\_\_\_ 6

OVERVIEW \_\_\_\_\_ 10

*Placing the work in a general context* \_\_\_\_\_ 10

*Placing the work in a cultural context* \_\_\_\_\_ 12

*Relating the work to its architectural roots* \_\_\_\_\_ 13

OVERARCHING THEMES \_\_\_\_\_ 14

*Architecture and platonic forms* \_\_\_\_\_ 16

*Architecture and the new paradigms* \_\_\_\_\_ 17

*Towards an organic form of architecture* \_\_\_\_\_ 18

*Architecture and hylozoism* \_\_\_\_\_ 20

*Architecture and the body* \_\_\_\_\_ 23

*Architecture without boundaries* \_\_\_\_\_ 24

INSPIRATION \_\_\_\_\_ 27

*Back story* \_\_\_\_\_ 27

PROPOSITION \_\_\_\_\_ 38

*The artist's response* \_\_\_\_\_ 38

SYNOPSIS \_\_\_\_\_ 49

*Featuring the human element* \_\_\_\_\_ 49

*Featuring the work* \_\_\_\_\_ 52

*Encountering the finished work* \_\_\_\_\_ 56

CONCLUSION \_\_\_\_\_ 64

## 2 INTRODUCTION

*What do we see ?*

THE CREATION OF  
AN INTERACTIVE PIECE OF SCULPTURE.

*Who do we follow ?*

ITS MAIN CREATOR  
AND HIS COLLABORATORS AT WORK.

*Where does this take place ?*

WITHIN THE WORK ITSELF,  
IN THE STUDIO-WORKSHOP, AND BEYOND,  
NATIONALLY AND INTERNATIONALLY.

*What are we looking at ?*

A TRULY INNOVATIVE WORK OF ART.

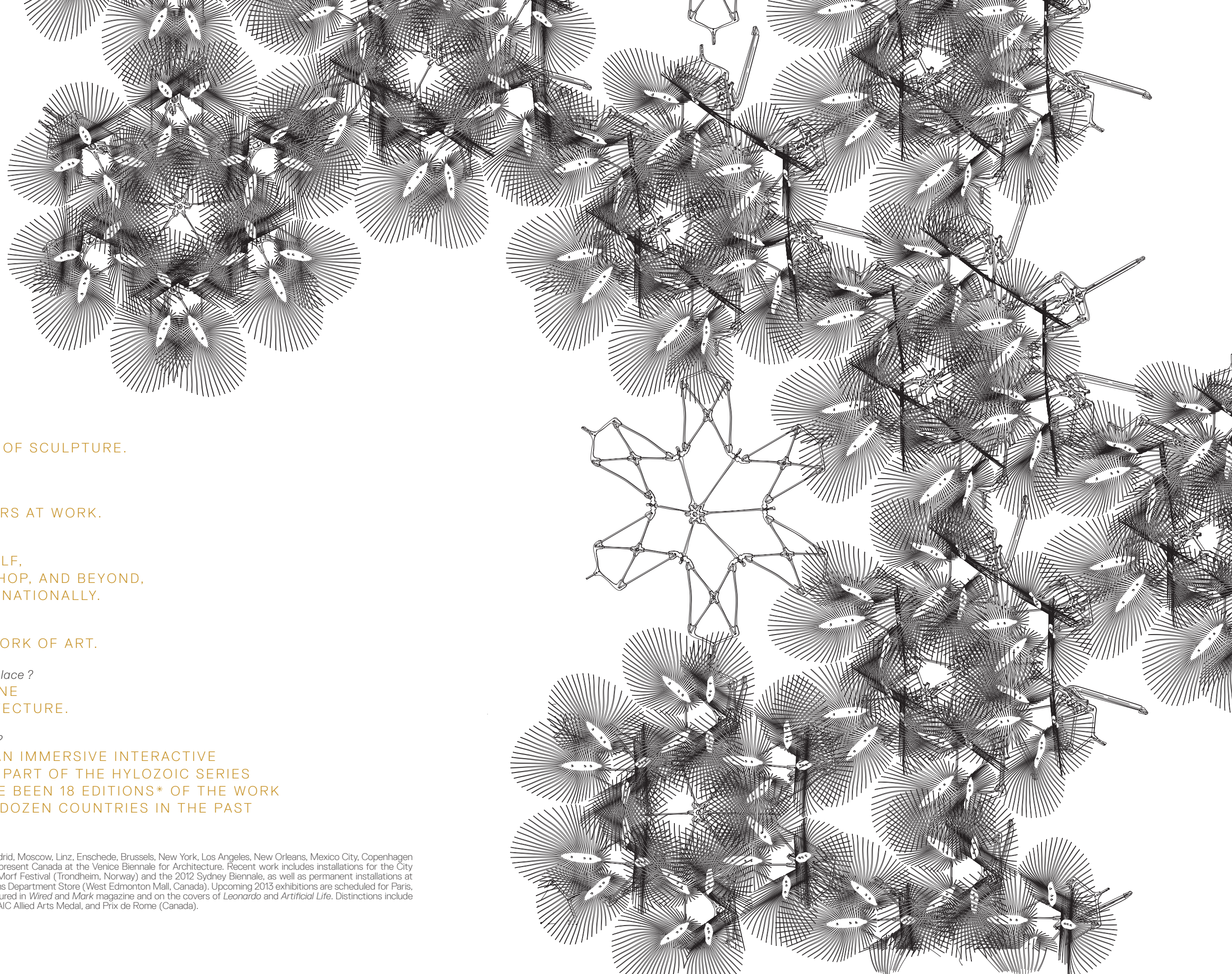
*Why was this made in the first place ?*

TO INVITE US TO IMAGINE  
NEW FORMS OF ARCHITECTURE.

*What is the nature of this work ?*

HYLOZOIC GROUND IS AN IMMERSIVE INTERACTIVE  
ENVIRONMENT THAT IS PART OF THE HYLOZOIC SERIES  
OF WORKS. THERE HAVE BEEN 18 EDITIONS\* OF THE WORK  
PRESENTED IN OVER A DOZEN COUNTRIES IN THE PAST  
SIX YEARS.

\* Projects since 2007 include installations in Madrid, Moscow, Linz, Enschede, Brussels, New York, Los Angeles, New Orleans, Mexico City, Copenhagen and in 2010, Philip Beesley was selected to represent Canada at the Venice Biennale for Architecture. Recent work includes installations for the City Gallery (Wellington, New Zealand), the Meta.Morf Festival (Trondheim, Norway) and the 2012 Sydney Biennale, as well as permanent installations at The Leonardo (Salt Lake City, Utah) and Simons Department Store (West Edmonton Mall, Canada). Upcoming 2013 exhibitions are scheduled for Paris, Seoul and Hangzhou. The work has been featured in *Wired* and *Mark* magazine and on the covers of *Leonardo* and *Artificial Life*. Distinctions include FEIDAD, VIDA 11.0, ACADIA Digital Practice, RAIC Allied Arts Medal, and Prix de Rome (Canada).





*Hylozoic Soil*, Madrid, Spain, 2009 >

## THE PROJECT'S TITLE REFERS TO 'HYLOZOISM', THE ANCIENT BELIEF THAT ALL MATTER HAS LIFE.

For the 12<sup>th</sup> Biennale of Architecture in Venice in 2010, *Hylozoic Ground* transformed the Canada Pavilion with an immersive, interactive environment made from tens of thousands of lightweight digitally-fabricated components fitted with enmeshed microprocessors and sensors. The glass-like fragility of this artificial forest was built of an intricate lattice of small transparent acrylic meshwork links, covered with a network of interactive mechanical fronds, filters and whiskers. These environments are similar to a coral reef, following cycles of opening, clamping, filtering and digesting. Arrays of touch sensors create waves of diffuse breathing motion, luring visitors into the shimmering depths of a forest of light.

*Hylozoic Ground* offers a vision for a new generation of responsive architecture. The *Hylozoic Ground* environment can be described as a suspended geotextile that gradually accumulates hybrid soil from ingredients drawn from its surroundings. Akin to the functions of a living system, embedded machine intelligence allows human interaction to trigger breathing, caressing, and swallowing motions, as well as hybrid metabolic exchanges. These empathic motions ripple out from hives of kinetic valves and pores in peristaltic waves, creating a diffuse pumping that pulls air, moisture and stray organic matter through the filtering Hylozoic membranes. 'Living' chemical exchanges are conceived as the first stages of self-renewing functions that might take root within this architecture.



ORA, dancers recorded in HD stereoscopic thermography ^

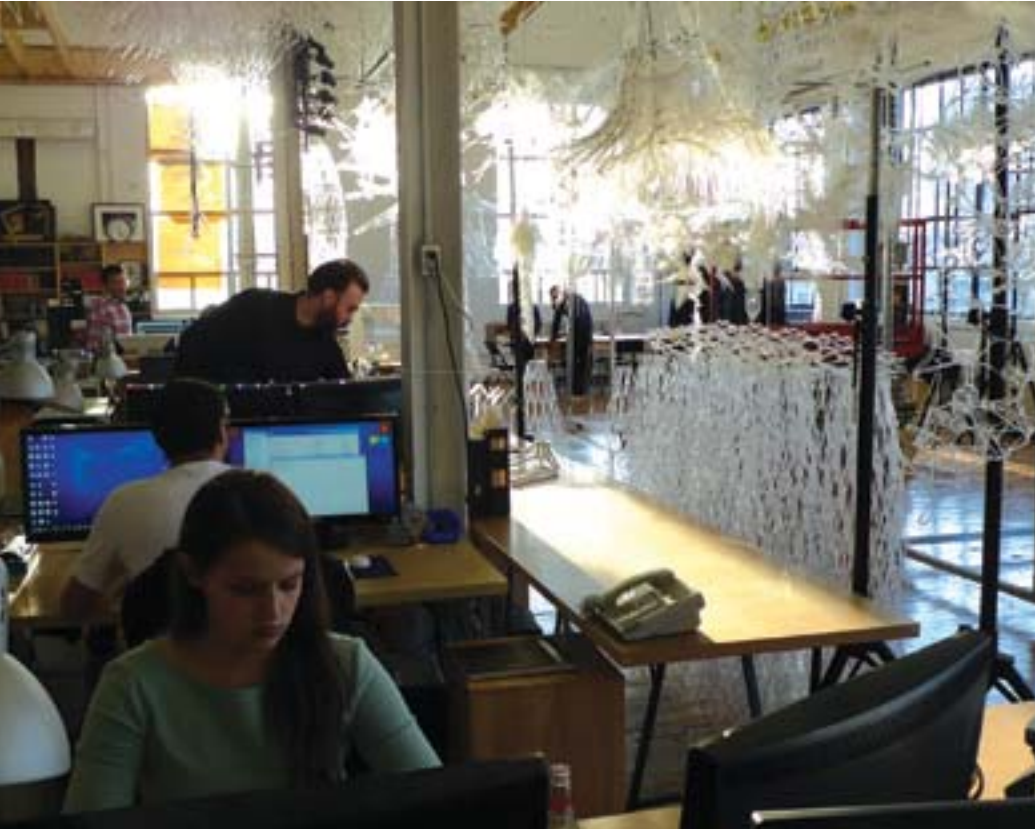
### WHY WOULD I WANT TO MAKE A FILM ON THIS SUBJECT ?

The experience of working on my previous film, *ORA*, produced and launched by the NFB in 2011 was a compelling and enticing one. Enticing because, in the relatively short time that we had to produce it, I was given a view of the remarkable and yet untapped possibilities of writing a story in virtual space. Since completing *ORA*, I have been searching for the appropriate story, knowing, all the while, that few subjects would be candidates for the exploratory approach I was envisioning.



^ Endothelium, Los Angeles, California, 2008

While in Toronto during my visit to launch *ORA* at TIFF, I re-connected with an old friend, the architect and artist Philip Beesley. It was a windfall moment. When I walked into his impressive studio space on Sterling Road in Toronto's West end, I had that eureka moment of having stumbled, almost effortlessly, onto the subject of my next (S3D) film.



Beesley work space, Toronto, Canada ^

## WHAT IS THIS STORY ABOUT ?

Beesley uses sculpture to explore and question the future of his field, that of architecture. Pushing the limits of his own investigations, his work has continued through to the past two decades.

His proposition is not utilitarian – it is artistic.

To a certain extent, this is architecture of **chance & unpredictability**. It is conceived and built according to plans, but these plans change organically. In much the same way that things evolve and come into being gradually, step by step, a work of art is created.

The film highlights this unique creative process. It is about a group of people whose hands and minds will create a world specifically for the S3D medium.

The story follows the main creator, Philip Beesley and a dynamic group of individual contributors at work on the many facets of the project. Their human presence stands out in the visually enticing worlds they bring to life.

The eyes of the two cameras will always be searching for ways to celebrate the fascinating subtexts, resonant with poetry and meaning.

From its ancient and mysterious beginnings in Rome to the cutting edge technology used in the Toronto studio and around the world, the *Hylozoic Ground* series, with its special film edition, *Sylva*, calls for an original cinematographic approach.

More than a documentary about the creative process, *Sylva* will be an innovative and challenging film object in its own right.



Setting up *ProtoCell Field*, Rotterdam, Netherlands, 2012 ^

*Why is this the right subject ?*

**BECAUSE THE SUBJECT IS ORIGINAL, AND VISUALLY AND THEMATICALLY RICH. IT IS ALSO HIGHLY CHALLENGING TECHNICALLY. FURTHERMORE, THE SUBJECT MATTER IS INTRIGUING. SOMETHING NEW AND SOMEWHAT MYSTERIOUS IS HAPPENING HERE. I WANT TO INVESTIGATE IT.**

*Sylva*, the film, will be **a bridge across the disciplines of science and art**: Highlighting the visual contrast between the complimentary scientific and artistic streams that inform Beesley's work, the film will celebrate the hybrid nature of the artist's aesthetic and formal approach.

*Sylva*, the film, will be **a bridge across different geographies**: The work stems from the contrasting features of disparate places, both natural and urban, each of which contributes a page to this story. Set on several continents, it tells an international story with international themes.

*Sylva*, the film, will be **an incursion into the future**. The work questions assumptions about the nature of the architectural spaces in which we live and work. For an architecture of the future through the technical innovation, experimentation and visionary concepts found in the work.





*Sibyl*, Sydney, Australia, 2012 ^

*Placing the work in a general context*

WHAT IS THE NATURE OF THIS WORK ?

IT IS HYBRID  
IN NATURE

**How does one understand and classify such an object ?**

As an object, the work is part of a larger animal sensorium where :

- > Humanity is never divorced from nature.
- > Nature is seen to include the mechanical.
- > The forms and structures of the mechanical, electronic components often refer to the organic.
- > The work challenges categorization because it is hybrid by nature and constantly evolving.

Placing the work  
in acultural context

WHERE IS IT  
COMING FROM ?

THE CROSSROADS  
OF SCIENCE  
AND ART

**As a form of architecture, as a post-humanistic work of art:**

- > The work pushes the boundaries of its field.
- > It expresses the vertigo of emergent technologies in a post humanistic era.
- > It stems from two fields of engagement and impact: Nature & Science, on the one hand, and Art & Culture on the other.

In the creative processes of conceiving, making and presenting the work, these are not taken as opposites but rather as merging frames of reference and complimentary fields of action

Thus, the work at hand can be seen through several prisms. A film on Beesley's work will be as much a film about science as one about art and architecture. It will equally address philosophical and ethical questions that stem from the relationship between life and technology, humans and machines, the body and synthetic matter.

Detail from the Issenheim alter piece >  
by Grünewald late 15<sup>th</sup> century



Relating the work  
to its architectural roots

WHAT IS THIS  
ABOUT ?

IT'S INSPIRED BY  
THE PAST, BUT IT'S  
ABOUT THE FUTURE

As a set of phenomenological and aesthetic enquiries, the *Hylozoic Ground* series is concerned primarily with issues relating to architecture.

**From the onset, it poses the following questions:**

- > What is the architecture of the future?
- > In what type of spaces might we one day be living?

As an answer to these questions, the work is both an artistic and intellectual enquiry that imagines forms of living technologies. It suggests examples of responsive living spaces, and provides an absolutely unique user experience.

As a form of prototype for the architecture of the future, the work is sculptural and environmental. It is scaled to a given space and solicits the attention

of individual visitors in small groups. The work engages the viewer (body and mind) in an emotional, aesthetic, spatial and kinetic relationship. On site, this is experienced by the visitor as a sensual exchange with the work, which in turn, initiates an understanding of the possibilities of sentient, interactive forms of architecture.

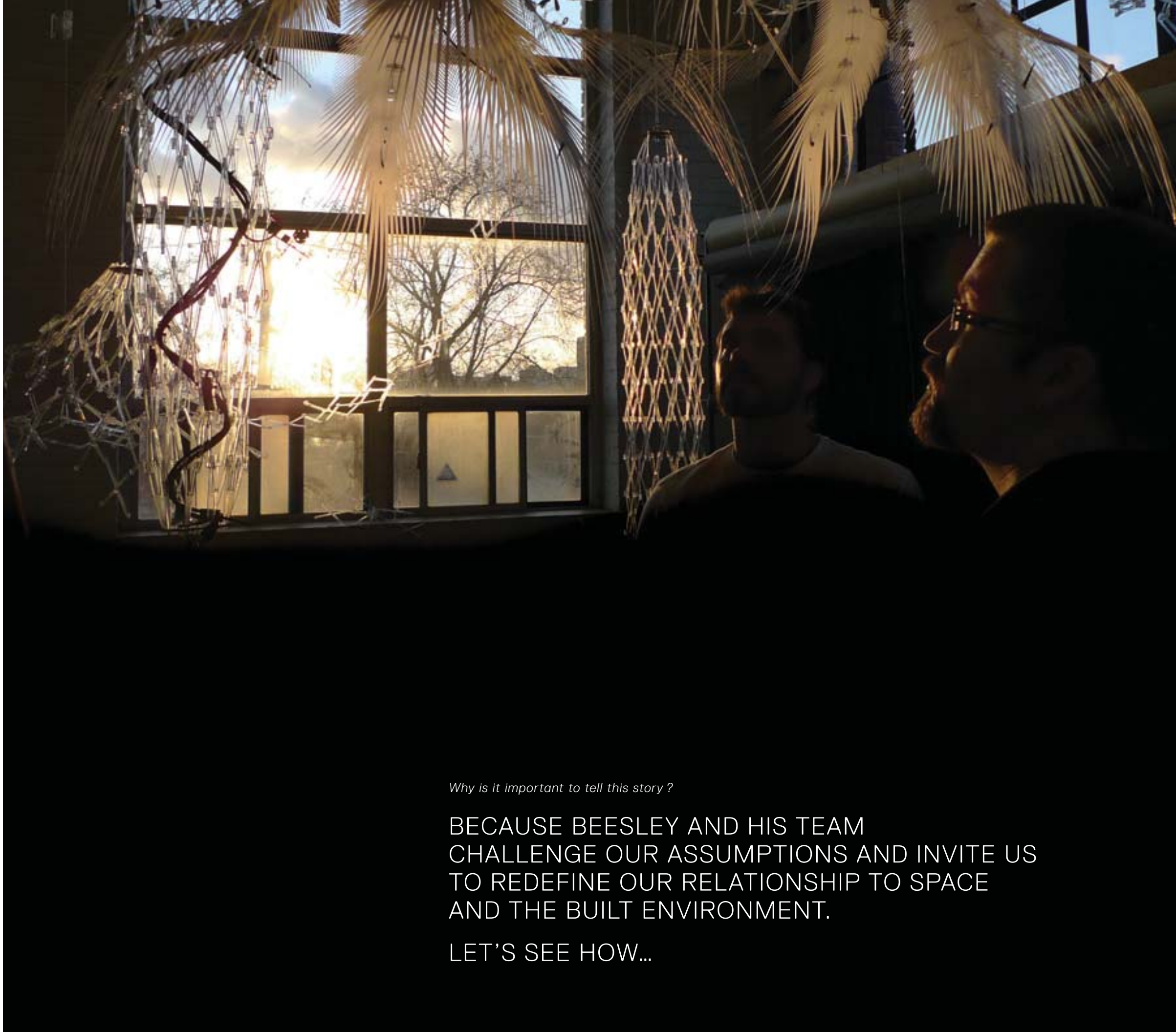
*Sibyl*, Sydney, Australia, 2012 ▾



Beesley work space, Toronto, Canada >

The following section is an overview of the main themes behind the work and the film:

- > The idea that in a brimming digital world, what once defined architectural norms is being put to the test. As old paradigms fall, new ones are emerging.
- > The idea that inert matter might actually be graced with a sense of life. That forms of 'living' architecture might one day come to be.
- > The idea that this architecture could be in direct and active contact with the bodies of its occupants.
- > The idea that this architecture might exist without rectilinear boundaries. The space that it defines around its occupants might well become a space of real physiological exchange.



*Why is it important to tell this story?*

BECAUSE BEESLEY AND HIS TEAM  
CHALLENGE OUR ASSUMPTIONS AND INVITE US  
TO REDEFINE OUR RELATIONSHIP TO SPACE  
AND THE BUILT ENVIRONMENT.

LET'S SEE HOW...

*Architecture and platonic forms*

**PREMISE : DO DOMINANT ARCHITECTURAL FORMS SERVE US AS WELL AS WE MIGHT EXPECT ?**

In the world and culture that we are brought up in, there is a sort of pride at the stripping away of the earth, a clearing out of a space to build on, starting from scratch, presumptuously and authoritatively. In creating the space called home – a male fundament often synonymous with solidity – we lay down the foundations of this emplacement.

In a large number of cultures and nations, one measures a collective pride in achieving a modern, civic, secular society, an existential world that is, for the most part it seems, independent from nature.

But nothing ever is... not completely.

It is one thing to minimize the footprint, its quite another to cut oneself off from nature all together as a result of prophylactic building design processes. Over time, this has led to forms of architecture that isolate humans from buildings and from each other.

This pride in the built environment and characteristic rigidity celebrate human presence, hubris and dominance. In this

polarized context, humanity is on top in a world modelled on ideal Platonic geometric forms and volumes such as cubes, pyramids, and spheres.

As an example, the latter, the sphere is a reductive, transcendental, pure kind of statement. An ideal crystalline shape, the sphere has a luminous clarity and simplicity in its boundary. It offers maximum enclosed territory with minimum enclosing surface.

The sphere, however, is also a machine that resists exchange...

You cannot have less interaction with the surrounding world than from within the form of a sphere. It suggests an agenda of sheltered defence and territorial assertion. It occupies a given space and resists entry.

With the sphere as a case in point, a despairing insecurity settles in because, inevitably, something gets lost along the way.



*Architecture and the new paradigms*

**PROPOSITION**

Imagine a different agenda, one of interaction and involvement, exchange and oscillation. Picture an agenda that proposes examples of open matrices, seeking the maximum, most radical, involvement with the world. A proposition not about creating clarity at all costs, or a proud figure, but rather about being surprised and touched in a myriad of small ways, through entanglement in complex, fertile spaces. This is architecture that is not about expansion but rather, about exchange.

Philip Beesley and his team are imagining these alternative forms of architecture.

Probing options that are at the cutting edge, his work is an attempt to discover new ways of relating to the world. He is demonstrating how buildings in the future might move, and even feel and think. He paints a picture of vibrant possibilities and exciting new relationships between humans and their living spaces.

Built up from inert materials, his creations explore the possibility of things coming alive, of materials that know and respond, of an environment that cares, of spaces that connect with us. A form of architecture that is less our servant as it is something that we might even enter into conversation with.

**THIS IS ARCHITECTURE THAT IS NOT ABOUT EXPANSION BUT RATHER, ABOUT EXCHANGE**



*Towards an organic form of architecture*

A space that is an assembly of smaller contingent spaces, each a pocket for exchange. A gathering of village-like forms into clustered aggregates of multiple identities and interlacing worlds invite us to travel...

In the work, architecture is celebrated as an extension of nature. The inert component materials appear to come

to life through the play of light, shadow, movement and depth. These distributed metabolisms, intermediary spaces and meshed volumes, infer empathy. By sending out ripples, they appear to communicate.

These groupings of diffuse forms offer maximum reticulation, involvement and bridging with the environment.

In fact, they are the environment.

But, of note... diffuse forms are by nature grotesque, often baroque, excessive and unresolved, potent, and, above all, brimming with stories and open possibilities...

*Hylozoic Soil: Alameda Field* ✓  
Mexico City, Mexico, 2010



A PLATONIC IDEAL ORDER AND MANICHEAN POLARITIES GIVE WAY TO A CYCLICAL, DYNAMIC RAPPORT THAT SWINGS BETWEEN GROWTH AND DECAY, EFFLORESCENCE AND PUTRIDITY, PRECISION AND OVERFLOW, ECONOMY AND EXCESS, ZEN AND THE BAROQUE.

< Detail from the Isenheim altar piece by Grünewald late 15<sup>th</sup> century



Volcanic basin, Rotorua, New Zealand ^

### Architecture and hylozoism

#### PREMISE : WHAT IS ALIVE AND WHAT IS NOT ?

Hylozoism reframes the question of what life is:

- > Life arises out of matter
- > Life is inseparable from matter

In the beginning of life on this planet, how did inert matter first become alive ?

How did life arise from terrestrial chemistry ?

What are the origins of life in the primordial soup ?

In the future, how might inert matter become alive ?

Can synthetic life arise from specialized forms of technology ?

Is this possible, and if so, how ?

#### WHAT DOES THIS MEAN FOR THE ARCHITECTURE OF THE FUTURE ?

In what ways is the work inspired by these enquiries ? The materials, are sourced from various technological applications. They refer, at times, to bio-medical tools and procedures. These materials are light emitting and light capturing. All the components are synthetic, metallic or liquid. For the most part they are inert. Yet, combined as they are in the piece, one has the distinct sense that the whole is 'alive'.

A form of Hylozoism is therefore already at work here, albeit indirectly, by suggestion, by illusion, by metaphor. It is present in energy and computer driven technologies organised in organic forms of display, this artificial universe would have us believe that it is truly responding, that it is almost alive.



Organic formation in the sewers of Tokyo, by Naoya Hakateyama, 2000 ^

THIS IS ALIVE!...  
BUT IS THIS A LIFE-FORM ?

## THIS IS RELATING TO ME AND TO MY BODY

### *Architecture and the body*

#### PREMISE : WHEN BODY AND SPACE BECOME ONE

- > It is an **architecture of sensibility**: the work explores the rapport between humans and their built environment, their living quarters. It questions what happens when we enter an architectural space. In what way might the components of that space somehow respond to our presence?
- > It is an **architecture of personalization**: the work is not so much about structural form as it is about sensuality. As a space, it is in no way static, neutral or empty or waiting to be filled. It envelops physically and metaphorically. It engages the body and mind in a process of exploration.
- > It is an **architecture of proximity**: manifest not in formal rectilinear space and geometry, but rather in light and heat, the work reaches out and solicits a reaching towards. It goes beyond what the eye can see, it operates in the realm of what the body as a whole can sense. It is an architecture of physiology.
- > Not only does this **quasi biological architecture** seem to merge with the body, it also appears to suggest, metaphorically, the body's internal workings. It proposes an environment where human physiology is mirrored in the components of the ambient space.
- > It is an **architecture of ambivalent scale**: at first, the work seems monumental, it envelops us and seems so much larger than ourselves. Paradoxically, it also feels very intimate. Each node and cluster within the general canvas works on the personal scale of our own body's presence.
- > It is an **architecture of interactivity**: the proposition is not so much about materials, as it is about tactility, about touching those materials and provoking a response from them. The work is designed to enhance exchange through two-way physical interchange. You move, it moves. It moves... you are moved.

WHAT IS  
THIS SPACE AND  
WHERE AM I EXACTLY ?

WHERE DOES  
ARCHITECTURE START  
AND WHERE  
DOES IT END ?

*Architecture without boundaries*

**PREMISE : REDEFINING THE NOTIONS  
OF BUILT SPACE AND FORM.**

In Beesley's work, the boundaries of architecture are made to fall, literally and metaphorically. Describing this architectural space in terms of what generally defines architecture, there appears to be a blurring of borders.

- > To start with, this is a fuzzy object, no cut and dry limits and rectilinear defining perimeters here...
- > Unlike most buildings and spaces, there are no longer any walls, doors or ceilings, no foundations either – the structure is suspended.
- > Edges are vague. The objects and spaces therein appear to be open ended.
- > The object is not perceived through its material solid surfaces per se, but rather, it is grasped by way of its transparency which offers open perspectives through the space that it occupies.
- > We see all component structures. We are given access to all its internal workings.
- > The light appears to come from within the piece, as if it were from the core of a living, breathing organism.
- > Its limits, many complex edges, define a profile that is organic and asymmetrical.
- > Its jagged body seems whole. Its border is both a barrier and a way in. Its 'skin' is permeable.

Arguably, the integrity of a given sealed body leads ultimately to its isolation.

The dis-integrity of this body, its porousness, makes it open to entry, to forms of networking.

In the *Hylozoic Ground* experience, there is networking with our imaginations, with our body heat and movement, and our individual touch and presence...

**All these forms of exchange suggest new sentient forms of architecture.**



△ *Hylozoic Soil: Alameda Field*  
Mexico City, Mexico, 2010





## WHAT ARE SOME OF THE QUESTIONS THAT HE ASKED HIMSELF ALONG THE WAY ?

### *Back story*

**The following section provides an overview of Beesley's artistic agenda.**

Launched during a memorable stay in Rome, almost two decades ago, his project has grown as he investigates sources in archaeology, art history, and design, as well as biology, physics and phenomenology. He has explored and cross-referenced these fields to imagine a form of architecture where empathy and exchange are at the heart of his artistic proposition.

How has all of this come to be, along side his work as an active university professor, his numerous architectural collaborations in Canada and abroad, his travels around the globe and, of course, his own intellectual, aesthetic and spiritual interests?



*Back story*

## STANDING ON THE GROUND

### **Beesley and the mantle.**

**The relationship to a space starts with defining ones stance within that given place.**

In cities, where most of us live, we stand on hollow floors or slabs of concrete or asphalt and are rarely in direct contact with the ground, per se.

Our original stance, however, the one that we experienced throughout our evolution as a species, was one with our feet directly on earth or on rock. This contact with solid ground provided quite a different sense of emplacement and rootedness.

When standing on the ground in a setting such as the wilderness of the Canadian Shield, one becomes aware of just how intense a presence the land radiates.

In the absence of any trace of human shaping of the land, we experience a connection to something that feels ancient. No human history here, only

the forms of geological time that span back hundreds of millions of years.

**In this setting, the land is one vast, timeless, often overwhelming presence.**

Historically, as an industrial, resource-exploiting society, we have treated the land as something to overpower, partly for our survival, but also because, unconsciously, we could feel threatened by its sheer natural force. We've needed to tame it.

Collectively, our well-being is apparently insured by economic activity concentrated in vast urban settings. Here, we have measured that our survival is concomitant with our ability to harvest and exploit the resources of our territory. And so we do, and have done, for centuries.

Paradoxically, as individual human beings, away from the theatres of this collective activity, we are still able to feel

a connection of a different order with land. We can experience a sense of being one with it and often need to seek this out. Why is this?

Beesley asks the following question: what does it mean to be connected in this way, to experience a sense of oneness with the immediate living environment? And furthermore, he suggests that if this type of connection occurs in Nature, as it apparently does, how can it inform the way spaces and buildings are conceived by architects? How might these future spaces also envelop their occupants and enter into forms of dialogue with them?

**Simply put: can something of the connection we are able to make with the wilderness be transposed into a rapport with new forms of sentient architecture?**

Back story

DRAWN INTO THE CAVE

Beesley and the cave.

Early humans were drawn to caves hundreds of thousands, if not millions, of years ago. Naturally, *Homo Sapiens*, our distant ancestors, were intimately connected to the wilderness, their environment. They were drawn to overhangs, cliff faces and caves of all sorts, as these provided crucial forms of shelter.

Entering the earth, beyond the caves mouth, to explore the unknown in darkened underground passages, by torch light, was an act of courage and intense curiosity.

One imagines that the combination of fear, darkness and the dancing forms brought about by firelight on rock faces and cave walls conjured up dream worlds and spawned the imaginary.

At the dawn of culture, these underground volumes acted as sanctuaries or sacred ceremonial spaces. These were likely the birthplaces of proto-art. Along with forests, the occupation of these natural cavities was probably *Homo Sapiens'* **first experience of immersive enveloping environments.**

The cave and Beesley's work have a number of things in common.

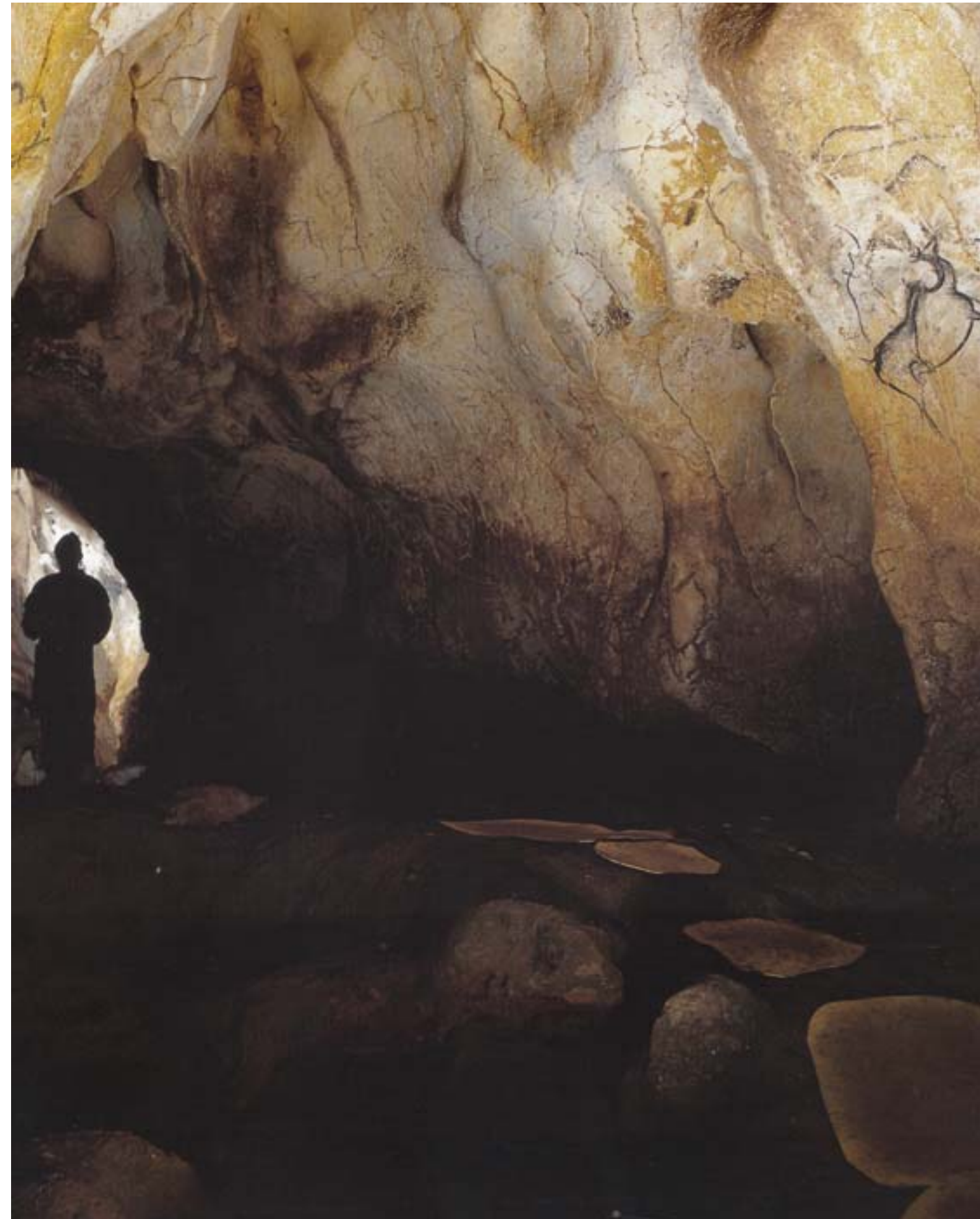
To start with, both are enveloping spaces, generally dark, with water present in some form or another. The more spectacular geological formations of stalactites and stalagmites of some grottos could also be considered as inspiration for some of the structural forms present in Beesley's installations.

Chauvet cave, Ardèche, France >

Above all else, it is surely the spatial factor, the relationship of the human body to ambient enveloping structures that constitute the strongest parallel between Nature's caves and Beesley's creations. If the cave is sculpted by water out of shear rock, Beesley's suspended structures are painstakingly assembled from thousands of minute component elements.

As fundamentally different as they are, paradoxically, both have in common a moulding of space that, as we enter it, acts on our psyche in similar ways.

**We are taken in, embraced, immersed, swallowed by a space that almost feels like another being...**





The Palatine mound, Rome, Italie ^

Porta Mugonia burial site &gt;

Back story

## STANDING ON HISTORY

### Beesley and the Palatine.

In 1995, Beesley was awarded the Prix de Rome for Architecture and spent a year and a half in the 'Eternal City'. During his stay, he was drawn to the archaeological work being conducted at the Palatine, the labyrinthine artificial mountain at the heart of ancient Rome. This site goes back to a time when humans, leaving behind a turbulent wilderness, were gradually taking up the stewardship of establishing the first cities in the region.

Studies of the local topography have revealed the original structure of the Palatine hill as gentle, rolling agricul-

tural terrain surrounded by marshland. Fortifications were gradually built at the foot of this hill to secure an inner herding area. Dense layers in the following millennia transformed the landscape into a synthetic precipice now towering above the Forum of present day Rome.

When Philip Beesley stood on the Palatine hill in 1995, he had the singular experience of feeling centuries of history beneath his feet, layers of cultural activity and violence speaking through the soles of his shoes. What exactly was he standing on?

The ground is porous here, sedimentary, layered and compressed. Things have long since decayed, traces of memory have turned to dust. This is an experience radically different from that of standing on the Canadian Shield, with one's feet solidly fixed on the granite mantle. Here, one is standing on human history.

This is the sterile dust of civilization...

**This, is hand-made soil.**

Back story

## BLOOD IN THE GROUND

### Beesley and the first-born son.

The archaeological activity that Beesley observed was centered on ritual deposits at the fortified boundary of the archaic city. The focus was a site identified as the Porta Mugonia, one of the three original gates of the city dating back to its founding in the eight century B.C.

In this place, Beesley witnessed the unearthing of the remains of a baby boy. The nature of the sacrifice here is the act of spreading blood to ensure the sanctity of a specific place under the gate of the city.

Here, in his own words, is an explanation of what he saw:

*Beneath the wall, at the edge of the city, a pit was dug into the volcanic mud-stone tufa, fitted to the clay dolium vessel enclosing the tiny body. Sift-*

*ed linings filled in the spaces closing the void between the vessel and the hole. Tiny fragments of the burial remained: a brooch; a tooth. Laid bare.*

*The traces of the buried children appears to confirm many fragments of foundation rituals described by many writers in which 'first fruit' of the first family of the city was sacrificed at the gate, protecting the boundary of the city. Making sacred.*

*A mundus, a little world offered instead of the world around.*

Here we are entering history, **breaking the surface** and **digging down** into the earth. We find that a child has been sacrificed, blood split, its infant body placed in a vessel and buried in the ground. What is the significance of these traces of ritual?

How can we interpret them? What is their meaning today? What are the elements at hand?

Etruscan substitution burial votive  
c. 5<sup>th</sup> century B.C. v





Canes licking the blood of sacrificed Taurus, wall painting c. 150 CE ▲  
Mithraic grotto below Palazzo Barberini

### Back story

## NOTHING IS LOST

### Beesley and the sacred cycle.

Furthermore, the experience underlines the link between fluids and fertility, how soil is capable of yielding riches because – and only because – it is combined with water.

In the case of the Palatine site, symbolically, the spilling of another liquid, blood, is a manifestation of engagement, a way of sanctifying the bond with the earth and the site upon which the city is founded.

This is a burial in the ground.

By definition, soil is life bearing: the locus of fertility and growth.

In life-forms, blood and other fluids flow at the heart of the biological organism, within it.

In ritual, this life-blood is spilt out onto the ground and they are combined.

In death, ground is life absorbing: the locus of burial and decomposition.

The body returns to the ground, replenishing part of the soil.

Thus, symbolically and organically, blood fertilizes the earth and vice versa.

The early roman ritual celebrates the blood to soil – soil to blood cycle.

**Influenced by this seminal encounter, Beesley has been investigating the cycle ever since.**

Human blood under the microscope >

### Back story

## REACHING OUT

### Beesley and re-burial.

Clearly, the experience at the Palatine Hill is seminal for Beesley. It brings the artist face to face with ritual sacrifice and the contradictions of taking life to ensure the collective wellbeing of the community – it highlights the paradox of causing death to ensure fertility and survival.

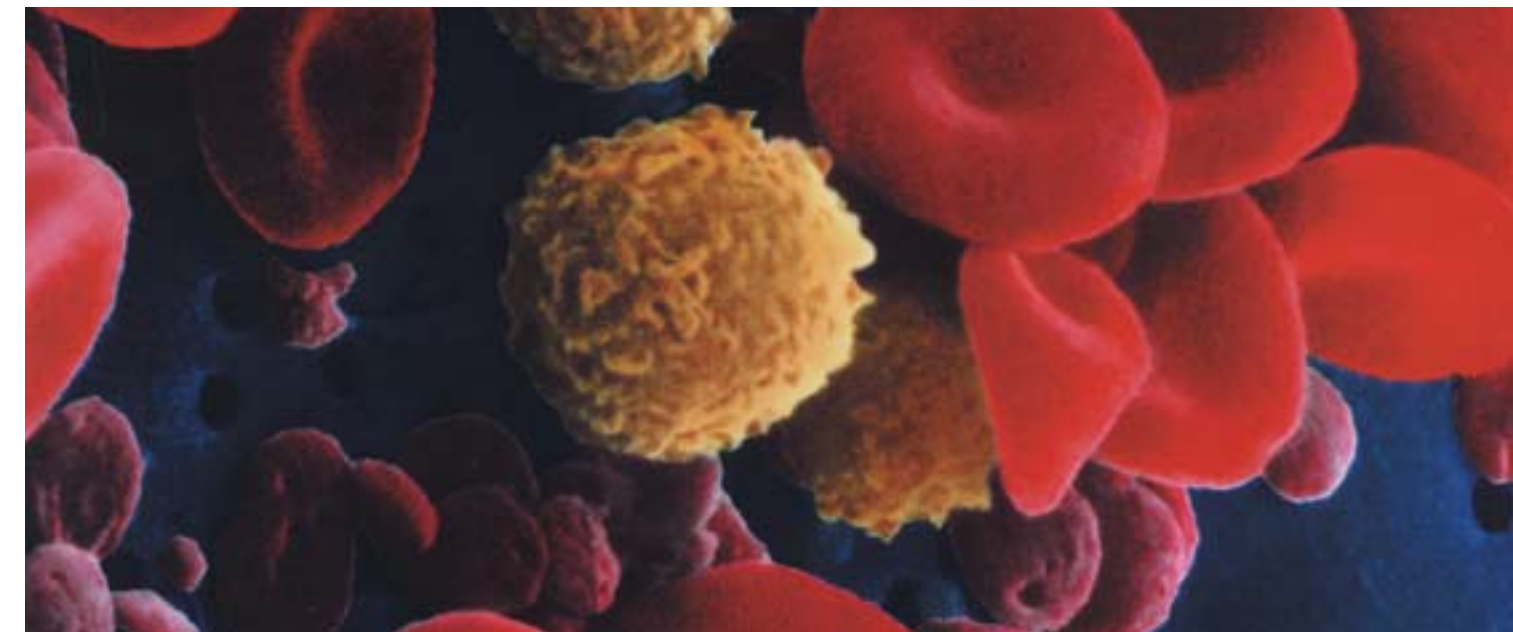
On a personal level, the encounter with the ritual remains of a baby boy inspires **empathy**, a reaching out to a young life sacrificed at the alter of the city, the alter of architecture, so to speak.

Announced from the very start in Rome as a form of testimony to this first born son, Beesley's work has evolved into an act of **reparation**, a form of artistic and architectural **re-burial**.

This has led the artist to question the paradoxical nature of this disturbed grave site. He asks himself the following question, one that will be fundamental to his artistic enquiry and his thinking about the future of architecture: **What material could be adequate for covering such a place?**

Initially his response was to imagine a way of 'building up soil', of ritually and metaphorically covering child and grave. In attempting to answer the question, in the hope of re-covering the site, Beesley launches into a long investigation into the nature of soil, and soil, as we will see, will inspire and inform his work for the following decade.

N.B: With the film, we will want to see inside soil. We will want to see inside blood and even inside the blood cell. The descriptive imagery of these microscopic spaces and structures (nano-architectures of sorts) are some of the visual and thematic references that inform Beesley's work thematically, structurally and aesthetically.





Forest floor, northern Thailand ^

Back story

Hylozoic Series: Vesica, Wellington, New Zealand, 2012 >

## OVER THE SURFACE, THINKING ABOUT SOIL

### Beesley and fertility, born from decay.

But before he could proceed, he had to investigate the nature of soil itself. What is this substance and where is it?

The soil is at the surface and the surface is the point of separation between the underground below and the habitable environment above. It is at the surface that materials deposit themselves, that sedimentation takes place, it is where the inert is eroded, dissolved and absorbed by living organisms and broken down into the components of new life.

At the surface is soil, the locus of this transformational activity, this recycling of stuff from inert to alive, mineral to organic. It's where fertility meets decay in a mid-state, in a place of transformation, of circulation and exchange.

In his travels, notably in northern Thailand, Beesley observed this intense organic activity in the teeming ecosystems of the tropical forest floor. Closer to home, in Northern Ontario, he was fascinated by the brimming activity of the swamplands that rest upon the impermeable Canadian Shield. Here

decay and rebirth are measured in the peaks and troughs of seasonal activity.

In both instances, he observed that soil is a fascinating fertile hybrid of death and life. Its structure is inspirational.

**It spawned the idea of creating a hybrid architectural soil.**



Madonna, school of Fra Angelico, c. 1450 >  
(left)

Hylozoic Soil: Alameda Field >  
Mexico City, Mexico, 2010  
(right)



*The artist's response*

## ABOVE GROUND & UP INTO THE AIR

### Beesley and hybrid soil.

In western culture the Apollonian model of emplacement has prevailed, but Beesley is weary of the complacency with which this dominant male paradigm is widely accepted as the way to build; deep foundations, a strong footprint, a proud statement.

He seeks a temporary reversal towards a Dionysian model of fertility, a paradigm where diffusion is the main characteristic, where the female associated aura could become the formal inspiration for the architecture of the future. Architecture that engenders, that nourish-

es, overflows and interacts. Ultimately, Beesley imagines an architectural practice that reconciles the Apollonian and Dionysian models, pulling together the two sensibilities into a new hybrid proposition.

Beesley speaks of 'earning' structure by building in a laminated fashion, by weaving and assembling in space. He imagines working upwards from the surface. The foundations of his construction are not plunged into the ground because there are no foundations as such. The structure rests on

the surface and emanates from it, echoing the ground by mimicking its structure. It creates an intermediate space that hovers.

He is creating a hybrid soil, building up a form of artificial ground, imagining structures that are both inert and living, porous and interconnected, where, in the end, male emplacement and female exchange are reconciled.





< *Hylozoic Soil*, Madrid, Spain, 2009

> *Haystack veil*, Dear Isle, Maine, U.S.A., 1997

*The artist's response*

### FROM THE GROUND UP AND DOWN AGAIN

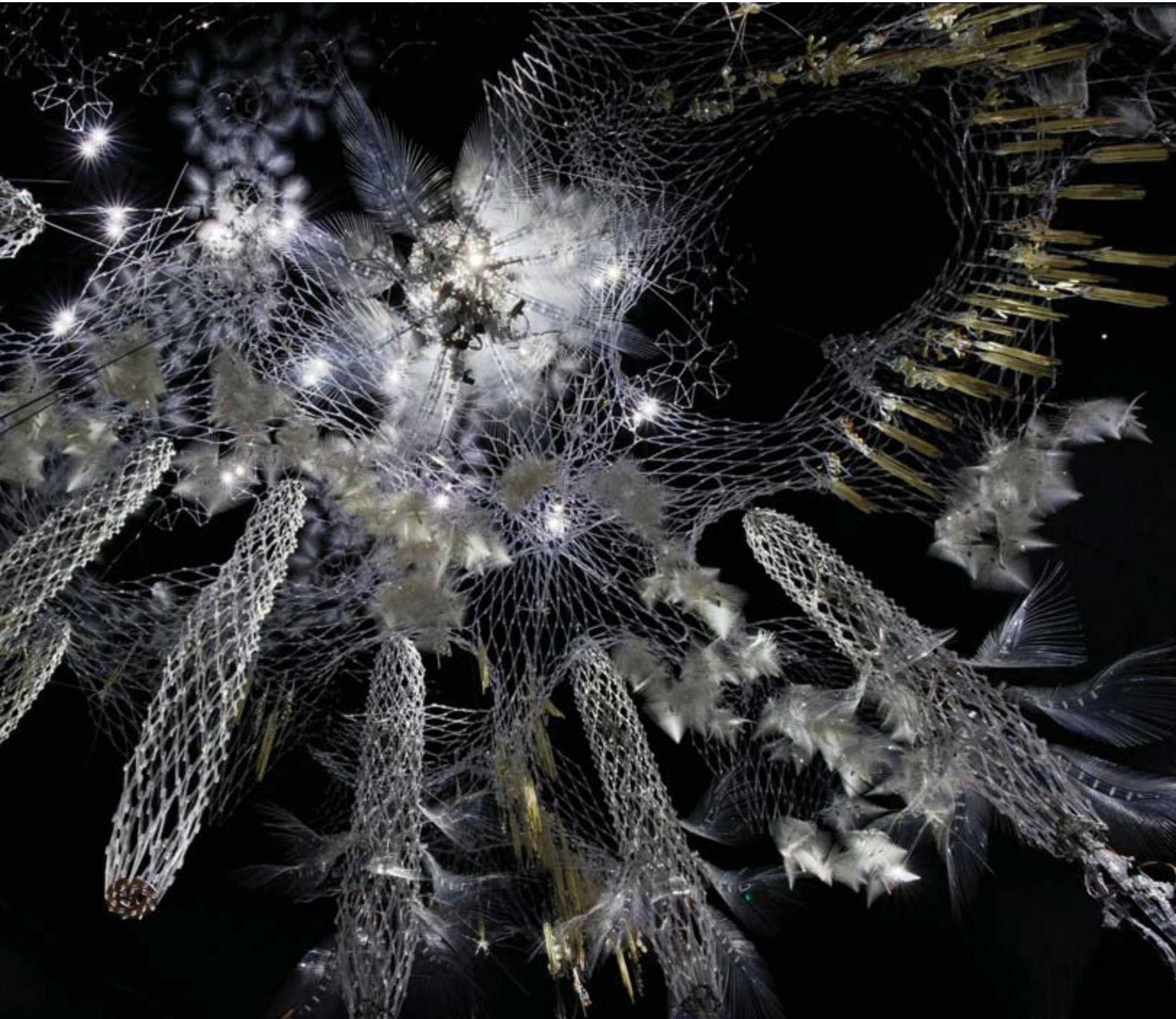
#### **Beesley's evolving vision**

Beesley's work has evolved along these lines for the past decade. The first structures were conceived as extensions of the ground and emanated from it. Gradually these assembled structures grew independent of landscape and specific locations.

They continued to evolve upwards and, in a bold move, were lifted into suspended positions above the head of the observer. The lessons of working from the soil were then transferred to new propositions that resemble synthetic forest canopies. As the body of the observer could now enter under and into new volumes and spaces, the notions of response and interactivity could now be developed more readily.







*The artist's response*

### THROUGH AND OUT- WARDS TO THE OTHER

#### **Beesley and the space in between.**

The architect creates a new meeting place. Here, figure and ground will eventually merge and become one. The observer is now able to enter the work and experience the sensation of being immersed in it, from above, around and below.

Beesley is interested in the space that exists between the human subject and the delimitations of the space that surrounds him/her. He asks the question about the nature of that space's edge and, in so doing, poses the question about the corollary, our own physical body boundaries.

**How can the space between the two be actively bridged?**

Inspired by the observation of single celled organisms such as amoebas, which move and exist through a chemical push and pull relationship with their immersive liquid environment, Beesley suggests that, as complex biological beings, we are no less porous. Consciously and unconsciously, we maintain a constant oscillating sensual rapport with the environment.

If each boundary is in a way permeable, how does this redefine the relationship of our human bodies to the architectural space?

**How can architecture frame and enhance this relationship?**

*The artist's response*

### MATTER THAT SPEAKS

#### Beesley and the role of empathy

Referring to the ancient Greek notion of hylozoism, the idea that all inanimate matter is alive in ways that we do not suspect, Beesley suggests that the distance between the occupant and the edges of the space is bridged by active empathy. He calls upon the empathy of humans towards things, imagines and designs things that appear to display empathy towards humans.

✓ *Sylva*, Sydney, Australia, 2012



*The artist's response*

Still image from the film *ORA* ^

### RADIANT AND EXPANDED PHYSIOLOGIES

#### Beesley and extended fields of energy: auras & halos

Thus, through empathy, the space in between is bridged.

Beesley develops this idea even further and expresses it visually by creating structures that occupy space in such a way that the onlooker is drawn in physically and perceptually. These are complex open structures that enable active forms of exchange.

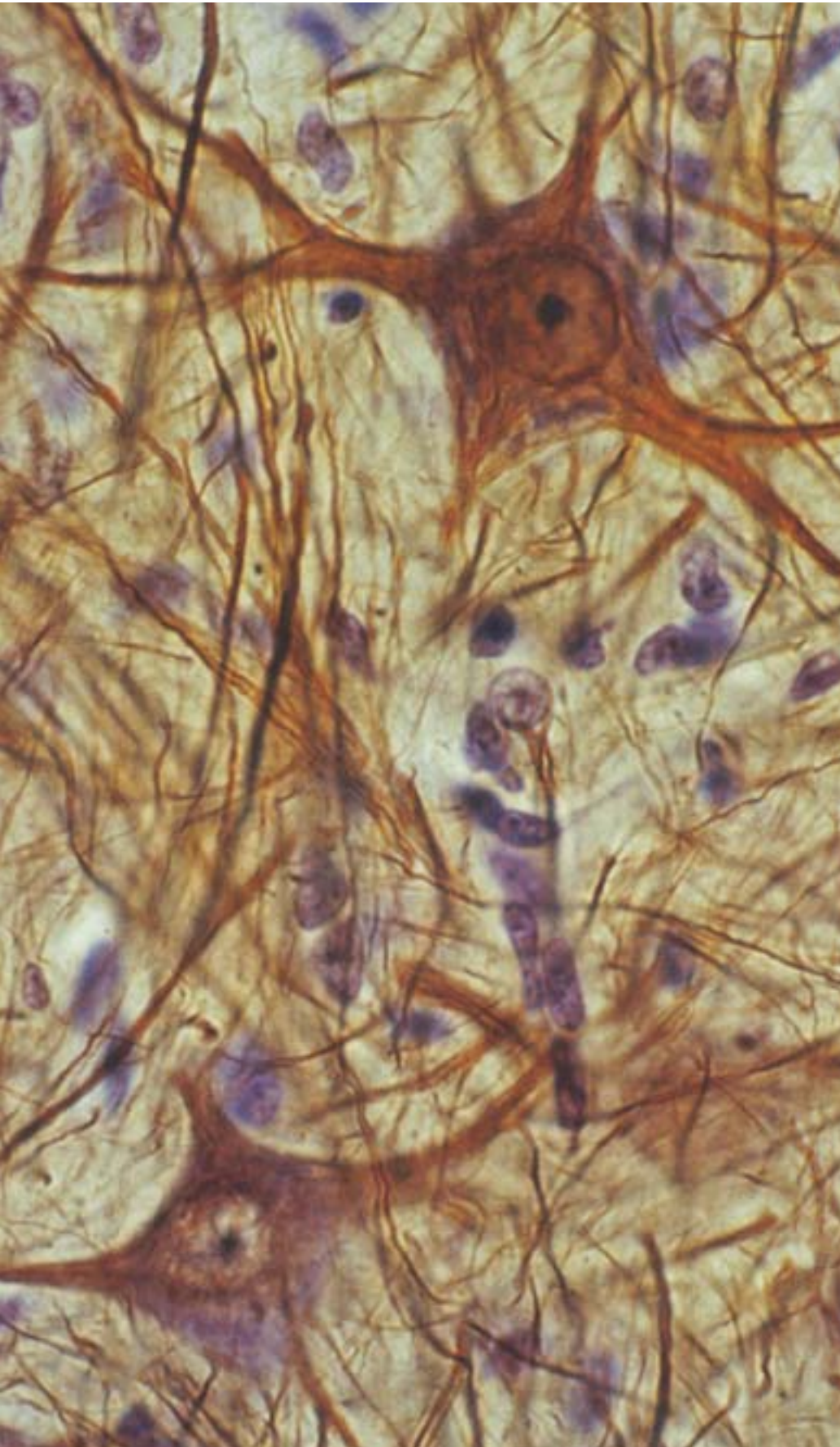
He submits the idea that each of us generates invisible fields around our bodies such as heat plumes, air displacement, pheromone release and magnetic activity.

Upcoming generations of his work will attempt to further articulate the intertwining of these phenomena in the fertile zone of interchange that exists in between the work (the space) and the human onlooker and occupant.

As was the case with use of infrared technology in my previous film *ORA*, my role as filmmaker and creative partner on *Sylva*, will be to explore how new imaging technologies might afford a glimpse of some of these hitherto unseen phenomena.



Schlieren thermal imaging ^



< Brain cells observed under a microscope

*The artist's response*

### THOUGHT AS LIGHT

#### **Beesley and the model of an idea.**

More often than not, the work is presented in darkness, partly to underplay the presence of the host space, but mainly to enhance the role played by light. In this immersive experience, light acts as a metaphor for life but also for energy and thought, an evocation of the brain?

The mind is imagined as a repository of an expansive field of experience. The mind generates its own feedback loop. It processes a world of experience, real and imagined, and, in turn, through the senses, is reconfigured by what it perceives.

What is the shape of a thought?

Do ideas have forms?

How are they lodged in the brain?

Can we imagine what the trace of a thought might look like within the cerebrum?

Beesley's work can be seen as a model of an idea, a representation of thought. It is a work that embodies concepts and gives them a form. It enables something paradoxical: trying to show the incomprehensible. Surely, as such, it raises a series of questions, but does it not also, in its own right, look like a question?

An embedded protocell flask >

*The artist's response*

### WITHIN THE WORK, SPACE AS METAPHOR

#### **Beesley and a polymorphous work.**

The work acts as a metaphor for a large array of phenomena that have inspired its creation along the way. There is a multilayered way of reading and understanding the nature of what we are looking at here.

This could be soil under a microscope, a sea of cells or even an evocation of the structure of blood. With its network of synthesized life forms suspended in localized chemical reactions, it suggests gaseous states, the heavens and even the virtual Noosphere.

It could also be a cloud or a forest of genes. It could be all of these, combined.

As in nature, the infinite whole is suggested in each finite part.

**The work is a constant reminder of this over-arching play of scales, nano-dimensional to planetary scale and beyond.**

Poetics give it further resonance beyond its obvious evocative strengths.

Totally new, but also reassuringly familiar, it is what it is. In all its beauty and strangeness, it is not quite a space, but more than an object. **It is both art and fundamental research.**





*Featuring the human element*

#### WHAT IS THE NATURE OF THIS ENTERPRISE ?

It is a formidable energy that pervades the space where, under Beesley's visionary leadership, a dozen collaborators assemble this **modern day Golem**.

What drives each one of these participants? Curiosity surely, but also the feeling of being involved in an enterprise that is unique and resonant with meaning. There is also the technological challenge, the aesthetic adventure, the poetic encounter and the illusion, dizzying as it is, of infusing life into matter. This is the high art of creating a being, an organism that absorbs and seems to channel, and display, all the energies that are deployed to create it.

But if the result does indeed seem to come to life, it is the effort leading up to its birth that we also wish to show, the human effervescence of ideas, problem solving and inspired creativity that moves this unusual story along.

*Featuring the human element*

### WHOSE STORY IS THIS ?

It is a story about people, about a team led by a visionary artist and inspiring group leader.

#### Creating the work – who we will see and meet ?

- > **Philip Beesley**, the artist and main creator, initiates new ideas and drives the team behind the advancement of the work. In a series of experimental installations that have attracted global attention, as architect, Beesley continues to lead a group of experts from science and art in creating a uniquely Canadian experimental architecture. As artist, he signs the work.
- > His **Collaborators** express ideas, conduct research, contribute elements that are part of the work's investigative scope.
- > His **Organizers** create plans and adapt the work to the specifications of its various exhibition settings.
- > A small army of **makers, programmers and helpers**, design, assemble, maintain.
- > Finally, through encounter and exchange, **spectators and participants** are seen as completing the work. It is, after all, designed with them in mind.

All are employed in the development and delivery of a full Hylozoic sculpture. Working together they solve problems as tensions often arise around creative and technical challenges, heightened, of course, by deadline pressures. At the initial stages of fabrication in studio and during installation on site, the process is an apprenticeship for young local volunteer architecture students who participate in the setting up of each presentation of the work, and this happens worldwide.

The creation of the piece is a highly collaborative process. Teamwork spans different abilities, techniques, expertise and sensibilities. The work emerges as a singular, but also collective vision. It is planned for, but also adapted to the space in which it will be lodged.



*Featuring the human element*

### WHAT WILL THEY BE DOING ?

The setting up of each edition of *Hylozoic Ground* is generally divided into three steps.

Initially, at home base in the Toronto studio, a number of tests and preassemblies of component parts are conducted well ahead of delivery to the exhibition site. The studio can be considered to act as a laboratory as it is, after all, the testing ground leading up to final, on site, construction. At a second stage, further preassembly of larger articulations along with visualization tests are organized in studio in order to compose the piece and develop aspects that will mark departures from previous editions. Relatively large elements can thus be assembled for verification and then taken apart again for shipping abroad.

Finally, on the presentation site itself, assembly begins and is generally conducted over several weeks. One witnesses the fastening of proper hanging fixtures in parallel to the unpacking of freight containers and all manner of general preparation.

One has the distinct impression of following an army of present day palaeontologists busy assembling the massive skeleton of a beast descended from the future. As it is composed of thousands of illuminated transparent pieces, it is a considerable task to hang all of these elements, ensure proper wiring, connecting, programming and fine tuning before the work is finally declared accessible to the public.

It's an absolutely fascinating process to watch. Mainly young people, ensconced in a forest of form, all concentrated on given tasks. This makes for striking images of dedicated collaborators suspended atop ladders amidst an electronic Sargasso sea that appears to have swallowed them up.





*Featuring the work*

#### HOW WILL WE SEE IT ?

In the film, the creation of the work becomes the visual focus and backdrop to the presentation of the ideas behind the work.

The story is centred on the creation of a piece **designed specifically for the film** and conceived to best engage with the stereoscopic cameras. A subject tailor-made for a new cinematographic language that uses depth to tell a story.



*Featuring the work*

△ Alain Baril conducting stereo 3D camera tests  
*Sibyl*, Sydney, Australia, 2012

#### WHY IS THIS A S3D STORY ?

Because it is about space and about the human body's relationship to space.

By virtually being there, in front of it, under it, a part of it, within it, one has a spatial experience.

This is a choice subject for a S3D film, a splendid opportunity to push S3D further. It is an invitation to write in space and to do so with meaning, to do so in such a way that depth, volume and space are as much a part of the subject matter as they are of the storytelling process. This goal is an ambitious one.

Presenting a subject in S3D requires more than just capturing its reality with depth as added value. It is about presenting the subject in a way that would otherwise be impossible through conventional means, in a way that only the S3D 'filming' process can make possible. The goal is to discover something new about the work through the specific process of S3D storytelling. To find a way to convey, to transpose in S3D, the magic of seeing the work for the first time, but also, to show something in the work that cannot otherwise be seen or experienced.

Beesley's work is a fantastic and singular example of **immersive** and **total** art, involving space, light, sound, depth, scale and emotion! It is an opportunity to create a film where form and content are seamlessly intertwined.



*Featuring the work*

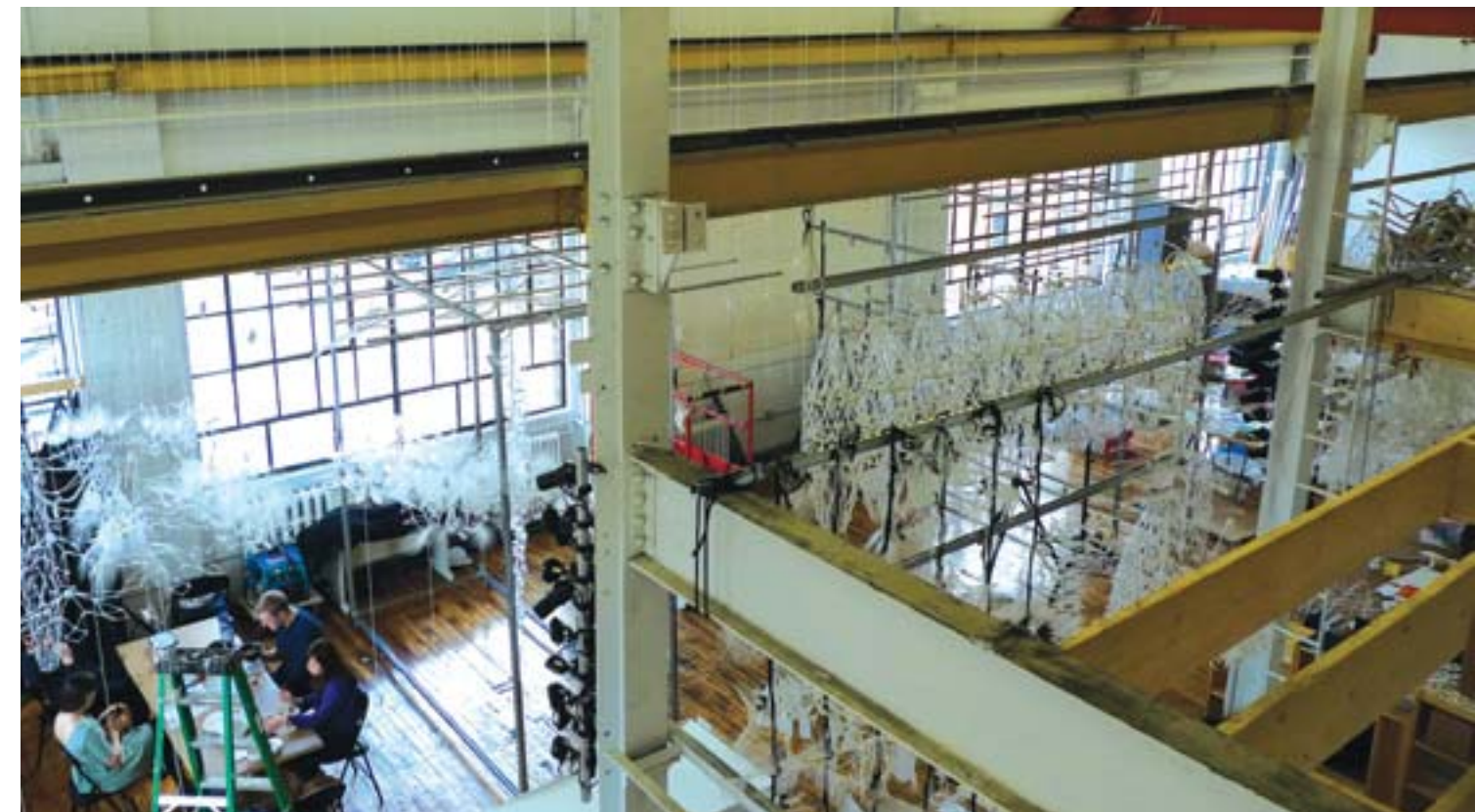
### WHERE DOES THIS STORY TAKE PLACE ?

In the greater setting, we understand that we are in an early 20<sup>th</sup> century industrial quarter of Toronto. In a vast building of workshop spaces, we are led to one, single, large-scale, dedicated studio space.

In this immediate setting there is a sealed peripheral studio room where the component parts are custom made with a precision laser cutter. There are various discussions and work zones within a central area where the piece is imagined, designed, prepared.

In the open work zone, we discover the 'sculpture-to-be' in minute component pieces that are being fashioned and gradually assembled: a vast variety of parts, created by different teams of participants, assembled by waves of deft hands.

We witness the fabrication of the various building blocks, and then follow the assembly of the component skeletal elements that make up the spine and the intricate detailing of the piece.



*Narrative of the encounter*

#### HOW IS THIS EXPERIENCED ?

##### **Seeing the piece from a distance.**

Where are we, what is this? What exactly are we looking at?

As we stand back and observe, at first we wonder what is the proper reading scale?

Is it a miniature model of something that is much much larger... or is it an enlargement of something that is perhaps microscopic?

First viewed from afar, we take in the patterns of the whole.

It looks and feels somewhat organic. It could be a fungus or a sponge, a medusa or a cloud. This body branches out like a snowflake or a sea urchin...

Either way, it appears to be an organism in its environment. By marked contrast, the conventional architectural space (gallery, museum, public spaces) that generally houses the piece highlights this organic aspect of the work.

As soon as a human being approaches it, a fixed relationship of scale is established.

This is a tree-like object, a type of suspended canopy, a forest like environment.

As we work out the relationship of the piece to its setting, we are presented with another riddle: **is it an object or is it a space?**

## ENTERING THE HOST SPACE





ON THE PERIPHERY,  
DECODING AND DECIPHERING

SPACE IS NOT MASTERED  
BY THE SIGHT ALONE

*Narrative of the encounter*

ENTERING A SUSPENDED GROVE

**As we the visitors approach the piece, there is a sense of entering a volume of sorts.**

Whereas the distinct figure and ground rapport is evident when we observe it from a distance, things become more complex and intriguing as we proceed into it. Gradually the notion of what is foreground and what is background is re-defined.

This is indeed a complex reading of figures that are riddled with ground, and the opposite, ground, studded with patterned figures.

The resulting experience is one of immersion, a bridging of the body with its surroundings, a phenomenon where we feel ourselves merging with the space, taken in by the arms of a sprawling object that surrounds us progressively as we move forward.

**And then it lights up and begins to move ...**

The experience is akin to walking through a fragile forest environment of luminescent forms. We enter a ghost-like grove, a meshwork of proximity sensors. These acknowledge our presence and react with small increments of response: waves, ripples and vibrations.

Each cluster is chained together with communication systems that convey information from part to part to part. They work together in composite to produce a turbulent chorus. Multitudes of mechanisms animated by weak electrical impulses generate ripples of action in peristaltic waves through hyperbolic canopies, groves of columns and suspended filters.

As one goes deeper, there is a sense of increasing saturation, of a soil like presence, with glands and traps that hold humidity and viscous materials.



< *Hylozoic Soil: Alameda Field*  
Mexico City, Mexico, 2010



## GETTING UP CLOSE, ARCHITECTURE AND THE EROTIC ENCOUNTER

*Narrative of the encounter*

### MAKING IT MOVE... IS IT ALIVE ?

As we proceed through the piece, our presence is detected, even before we actually brush or touch the sensitive barbs and leaf-life outgrowths.

A dialogue has been struck. This space, this living mass is moving. With pulsing light, with localized gestures, **it is responding to us.**

Why does it do that ? This is artificial movement, **artificial life that feels real.**

Apparently inert, we are reminded of earth, synthetic earth, of a hybrid turf... a fabric soil. We detect a human touch, not quite hand-made, but nonetheless made by humans.

This is a new growth geotextile that evokes a sort of hi-tech burial shroud. It feels like skin, living, responsive and porous... in chemical flux.

Discontinuities are resolved through the repetition of miniature parts. Singular elements turn into patterns of multiples, sweeping waves of geotextile mesh lick, breathe and swallow. And then there is fire, the miniature lightning of localised storms. Phosphorus flashes, swollen pulsating embers, a breathing heat.

Organized in individual clustering nodes, these actions create a path that surround and immerse the visitor.

In a decentralized structure, nodes of sentient electronics are revealed. These mini-centers of localized intelligence are the brains behind the apparent empathy that reaches out to our presence.



*Narrative of the encounter*

### A PARADOXICAL ENCOUNTER

All the senses are engaged. We step outside of ourselves, are invited to release, to extend self-consciousness outwards, to converse with a responsive place.

It seems to seek human presence as elemental food, engages a subtle, reflexive, natural interaction. In all its subtle complexity and resilient fragility, this aerial, fertile soil, this immersive meshwork of tessellations, is at once alien and yet strangely familiar... uncanny yet emphatically sentimental.

Children know what to do, how to act and move here, instinctively...

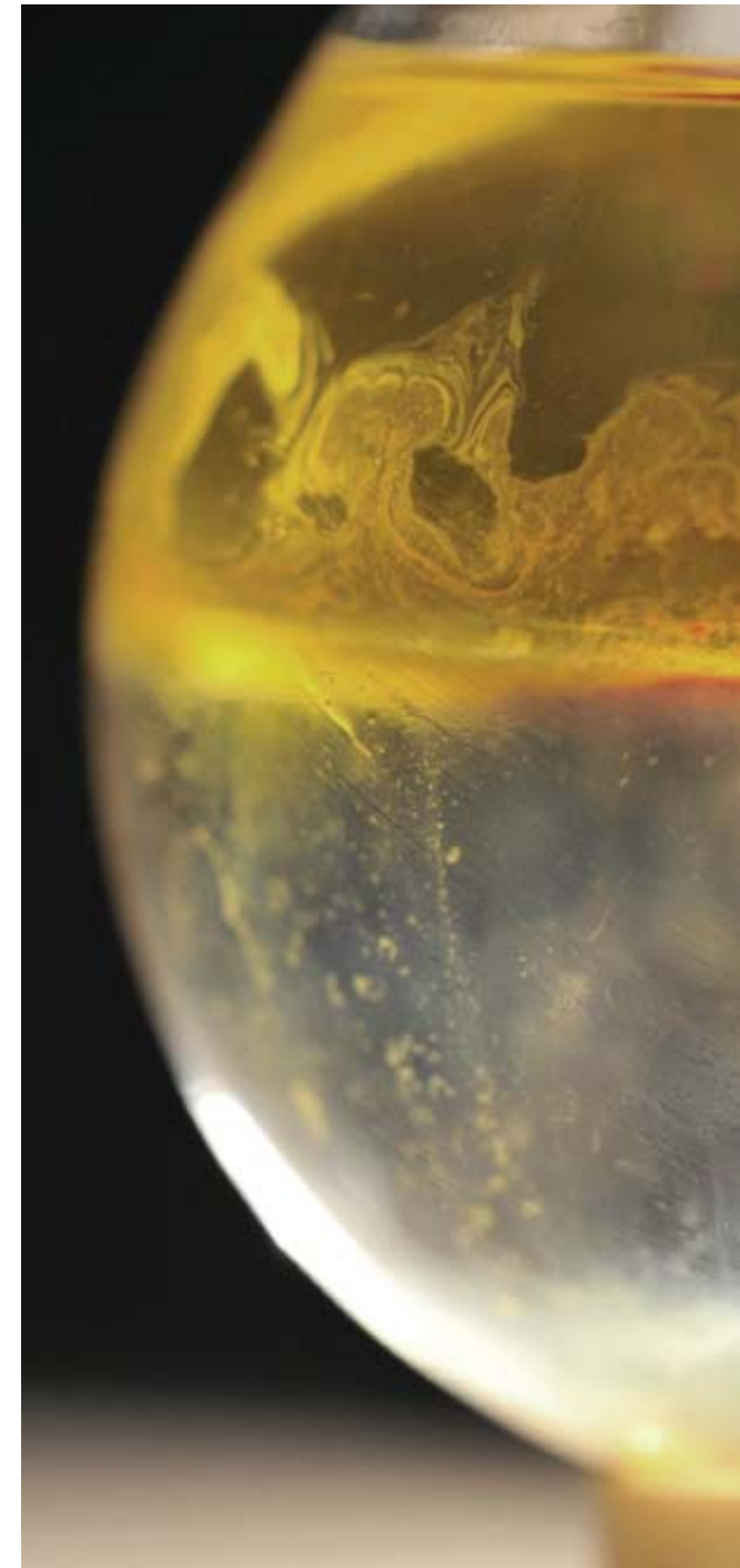
Paradoxically, the work commands a set of complex, apparently contradictory, reactions:

REVULSION < > ATTRACTION

QUEASINESS < > CONFORT

FEAR < > FASCINATION

MENACE < > EMPATHY



### THE REALM OF UNITS AND PARTS

*Narrative of the encounter*

### INVESTIGATING THE MICROSCOPIC, SEEING THE INVISIBLE

Within the component parts of the piece are a variety of individual spaces that only the camera and computer graphics can successfully explore. Inside the bladders and hydroscopic islands are the chemical reactions that spawn synthetic, proto-lifeforms. With the help of macro-stereoscopy and stereoscopic CGI, we will go beyond what can be seen with the naked eye.

*Hylozoic Soil* >  
Montreal, Canada, 2007

## CONCLUSION

*Sylva* the film, will draw parallels and connections between the subject of architecture and the many themes, perspectives and ideas that have informed Beesley's creative investigations over the years.

How can we show this in a film?

With a medium able to convey an immersive environment.

Furthermore, and most importantly, the role of the film is to convey the experience of encountering the work through the language of Stereoscopic 3D. We plan to use the medium of S3D to take the experience of *Hylozoic Ground* further, to a place that only the S3D film experience can take it.

In this way, the filmmaker becomes a collaborator in the continuing *Hylozoic Ground* investigative process, and, as such, the film becomes an artistic and experimental undertaking in its own right.







*For additional information about the film project, please contact*

**Philippe Baylaucq**

office 514 523 2902 | cell. 514 702 2902

p.baylaucq@videotron.ca

*For additional information about the work, visit*

**Philip Beesley**

philipbeesley.com