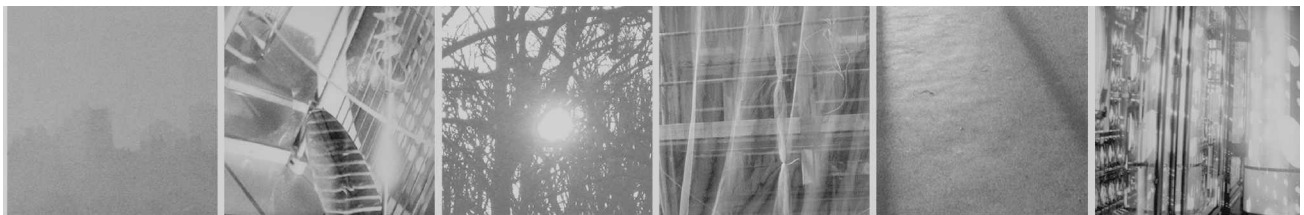


# LIGHT OF TOMORROW

INTERNATIONAL  
VELUX AWARD 2006  
FOR STUDENTS OF ARCHITECTURE

## IMAGINARY LANDSCAPES





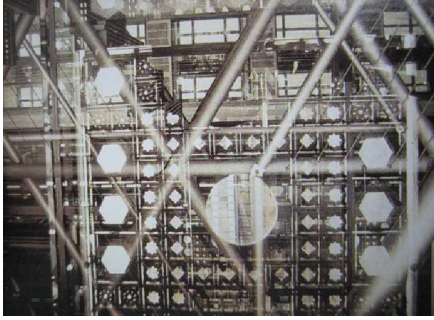
Industrial landscape - interpretative collage

Ignasi de Sola Morales defines the empty, abandoned spaces at the peripheries of our cities as '*terrains vagues*' - landscapes that are "*indeterminate, imprecise, blurred, and uncertain*"<sup>1</sup>. The same French term 'vague', meaning wave, also implies the sensation of "*movement, fluctuation, instability*". These undefined spaces can carry both a negative and a positive connotation in our collective subconscious. The absence of use and activity of these post industrial landscapes, the state of deterioration and abandonment, sets them apart from the order, growth and vitality of the rest of the city. At the same time, these spaces offer the opportunity to experience the city in a different way. This openness within the city creates space for *imaginary landscapes* to emerge, allowing our gaze to blur the line between perception and reality. The 'vacant' lands become a territory for transformation, no longer ignored or abandoned but yet uncertain and transient.

Daylight is one of the essential factors that take part in this process of metamorphosis. Either by reducing a landscape to a silhouette or by decomposing and filtering matter, daylight has the ability to transform a space, creating temporary, ephemeral landscapes. The approach to permeating the

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<sup>1</sup> Sola-Morales, Ignasi de « Terrain Vague » essay in « Anyplace », Cambridge, MA : The MIT Press, 1995



Institut du Monde Arabe, Jean Nouvel - screen detail

'uncertain', 'abandoned' territories described as 'terrains vagues' is by creating a *topography of light* that responds to and transforms the existing surroundings in an impermanent fashion; playing on transparencies and shadows, capturing the fluidity and rhythm of daylight, reflecting and diffusing it. The transformation takes place both physically but also on a perceptual level in the eye and mind of the viewer. In a sense this intervention is a way of trying to contain the undefined landscapes between two flows – the visual flow, the flow of perception, and the light flow – that is the medium of transformation.

The area of research and exploration for this competition extends from looking at *daylight* as a dematerializing factor in architecture, at ways of filtering, decomposing, permeating the surface, in projects such as the *Institute of the Arab World* in Paris by Jean Nouvel; to exploring the potential for *daylight* as a medium of intervention at the urban level, as a way of addressing special conditions such as urban voids or abandoned industrial sites. In this context of incorporating *daylight* in the larger system of urban infrastructure, arises the idea of generating '*lightscares*' or '*topographies of light*'. The surface plane becomes the new territory for exploration both at the ecological, technological and urban level. The *Soil* and *Haystack Veil* projects by Philip Beesley serve as precedents for creating lattice structures and prototypes for assemblies of artificial landscapes, while the Reiser + Umemoto entry for the *IFCCA Competition for Manhattan* addresses a similar intent to manipulate the surface plane as a way of infiltrating the urban fabric in a dynamic fashion.



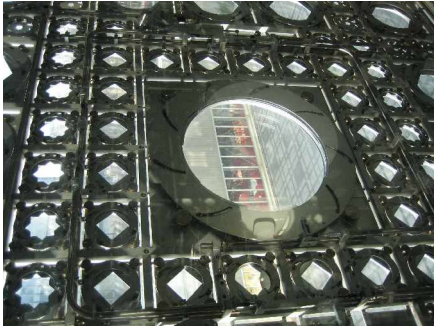
Institut du Monde Arabe, Jean Nouvel - staircase detail

#### DEMATERIALIZATION OF MATTER THROUGH LIGHT

*Institute of the Arab World*  
Paris, France, 1987 – Jean Nouvel

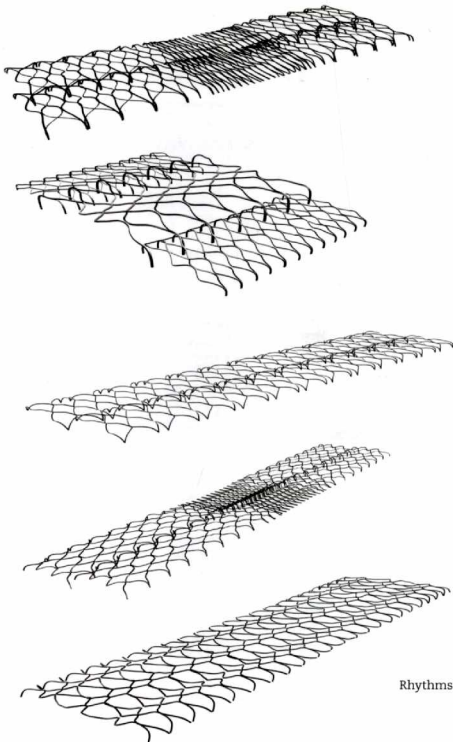
*“At the Institute of the Arab World, the volumes are in a certain way dissolved by light, the walls functioning essentially as filters or mirrors. In the future, light will constitute the true raw material for architecture. Not a light that underlines the forms, but a more complex light that diffracts, reflects, fragments, and recomposes, a light that creates, draws, metamorphoses the space... a light that plays on contrasts, engraves, generates an architecture where the substance becomes more subtle, more spiritual and almost devoid of mass.”<sup>2</sup>*

<sup>2</sup> Goulet, Patrice. « Institut du Monde Arabe – livret IMA architecture ». Paris : IRO – La Rochelle, 2001  
*Translated from French*



Institut du Monde Arabe, Jean Nouvel - screen detail

The idea of considering light as a primary material for architecture is very compelling. Although light has always played an important role in architecture as a sculptural, radiant force, with the IMA (*Institut du Monde Arabe*) project, light dematerializes spaces, permeates and transforms architecture, and makes it invisible. This signals a shift from an architecture of permanence to an ephemeral, momentary architectural experience. The skin of the building, especially on the south façade, answers the most practical question of finding a way of adjusting the transparency of the surface according to various degrees of solar intensity. The solution is both technologically sophisticated and imbued with symbolism. The diaphragm of the photographic camera becomes the primary element that inspires the development of the screen. The geometric symmetry and repetition of these primary elements is reminiscent of the Arabic moucharabiehs – the intricately carved wood screens that offer both privacy and sun protection. The openings are initially designed to be controlled by a sophisticated computerized program that analyzes the luminosity of the sky. At the IMA, *"architecture [is seen] not as a play of volumes but as an adjustment of transparencies."* (Jean Nouvel)



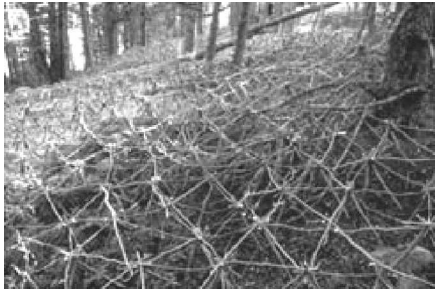
#### TOPOGRAPHIES – FIELD CONDITIONS

The idea of creating light topographies can be closely related with emerging theories in urbanism that examine the urban landscape as a *"matrix of connective tissue that organizes not only objects and spaces but also the dynamic processes and events that move through them."*<sup>3</sup> As networks of infrastructure, web like sprawl and voids become the dominant presences within our expanding metropolitan culture, an increasing concern with looking at *"forces instead of forms, at the rhizomatic instead of the figurative"*<sup>4</sup> becomes apparent. In his book *"Points + Lines"*, Stan Allen explores the notion of fields - *"more than a formal configuration, the field condition implies an architecture that*

<sup>3</sup> Corner, James. *"Recovering Landscape. Essays n Contemporary Landscape Architecture"*. New York, NY: Princeton Architectural Press., 1999

<sup>4</sup> Ibid.

*admits change, accident and improvisation... an architecture that leaves space for the uncertainty of the real.*"<sup>5</sup> Approaching the voids within the city with an ecological awareness and sensibility opens the path for exploration of sophisticated systems that bridge the urban scale with that of molecular and biological structures.



Haystack Veil –Deer Isle Maine. Philip Beesley

### *Haystack Veil*

*Deer Isle, Maine, 1997* - Philip Beesley

Philip Beesley's *Haystack Veil* is a project that follows the primal topography of the earth, creating an interwoven system that forms a piece of 'textile architecture' that 'dresses the ground'. It is a landscape of "cut saplings, thirty thousand twigs cut and bundled into a knit veil floating over a moss and lichen covered cliff alongside the Atlantic Ocean."<sup>6</sup> The tri-axial lattice structure relies on a connective bracing system that firmly stabilizes it and allows it to become like a second skin for the ground. This installation covers a site of a quarter acre in size, on the glacier-formed shore cliffs in Deer Isle, Maine.



Soil – Halifax. Philip Beesley

### *Soil*

*Mary E. Black Gallery, Halifax, 2000* - Philip Beesley

The *Soil* project takes a similar approach to exploring methods of generating a lightweight *geotextile* structure composed of modular elements. It is "formed using shaped copper-coated wire with crimped joints and polyethylene slip-connectors. The individual wire forms carry clamping and injection instruments including hollow needles fitted with latex bladders."

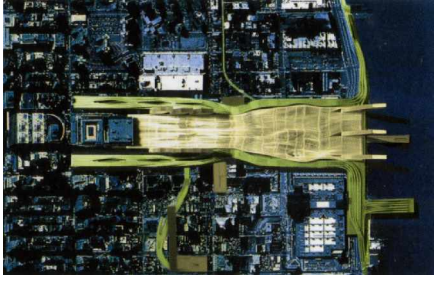
Both the *Soil* and *Haystack Veil* projects exemplify a symbiotic relationship between the *organic* and the *high tech*, resulting in structures that are both fragile and resilient, that allow for delicate growth to take place, in spite of their synthetic aesthetic and artificial constitution.

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<sup>5</sup> Allen, Stan. « Points + Lines – diagrams and projects for the city ». New York : Princeton Architectural Press, 1999.

<sup>6</sup> Beesley, Philip. "Haystack Veil"- <http://www.philipbeesleyarchitect.com/>





IFCCA West Side – Manhattan. RUR – aerial view

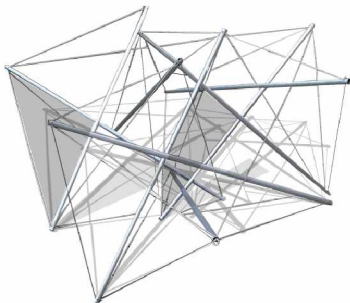


IFCCA West Side – Manhattan. RUR – interior view

## West Side Convergence – IFCCA Competition for Manhattan NEW YORK, U.S.A., 1999 - Reiser+ Umemoto (RUR)

The RUR scheme for the IFCCA Competition in Manhattan, explores the idea of interconnectivity between the material, information and infrastructure flows within the urban context. The scheme is an attempt to “weave the strata of the city together<sup>7</sup>” by creating a dynamic field that infiltrates the urban fabric. The design intention is “to make realms which are already present on the site in some form, accessible and continuous, for example by incorporating green spaces, automobile infrastructure, different scales of structural hierarchy and pedestrian flow.”<sup>8</sup> The scheme acknowledges existing conditions that allow for unpredictable outcomes to emerge. The project does not focus on creating an innovative structural design but rather uses the language of spaceframe and glass to offer spatial integrity and openness.

### LIGHT FIELDS



tensegrity structure - light lattice detail

The *topography of light* can take the physical form of a lattice, a light tensile structure that is laid out on the ground. The major components of the lattice are reflective rods arranged in a random pattern and translucent material that acts, along with the tensile cables, as a connective tissue and screen. The lattice is a three dimensional tensegrity structure, where isolated components in compression are inside a net of continuous tension, in a way that the compressed members (rods) do not touch each other. The textile properties of the connective tissue can change in varying degrees of colour and texture,

<sup>7</sup> Duisburg, Christopher, Drexler, Hans. “Landscape Urbanism: A Manual for the Machinic Landscape.” London: Architectural Association Print Studio 2003

<sup>8</sup> Ibid.

opacity and transparency, filtering both light and views and engaging in a dialogue with its surroundings. It is a membrane that captures the light flow, and only become visually present when in interaction with light. Their reflective surfaces radiate both heat and light. Light becomes woven into the structure and becomes one of the primary materials.

The 'random' nature of the lattice gives it flexibility in shape and dimension. It can either occupy a vacant land, activating it and transforming it into a 'light field', or it can infiltrate an existing site, weaving between existing objects and structures. Daylight is in constant transformation, and the lattice acts as a recording device of its diurnal and annual changes and fluctuations.



reflections of the light lattice upon industrial objects

## CLOSING REMARKS

Although the initial interest for the competition started out with a desire to explore daylight from a phenomenological point of view - as a factor that alters people's perception of reality, that is in a constant state of transformation, that gives an awareness of diurnal and seasonal cycles – choosing to explore this phenomena in a distinct urban context, generated a particular direction of interest towards artificial systems and ephemeral methods of intervention at the urban scale. Daylight becomes a way of reconnecting the earthly realm of the ground, soil, landscape, with a celestial realm, of the atmosphere, sun and sky.

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Philip Beesley. "Haystack Veil" - <http://www.philipbeesleyarchitect.com/>

Reiser + Umemoto <http://www.reiser-umemoto.com>

The Daylight Site by Velux - <http://www.thedaylightsite.com/>