

## Panel #3

Elodie Nourrigat  
Judith Sykes  
Fernando Porras Isla

International Forum

# MED.NET 3 RESILIGENCE

Intelligent Cities /  
Resilient Landscapes



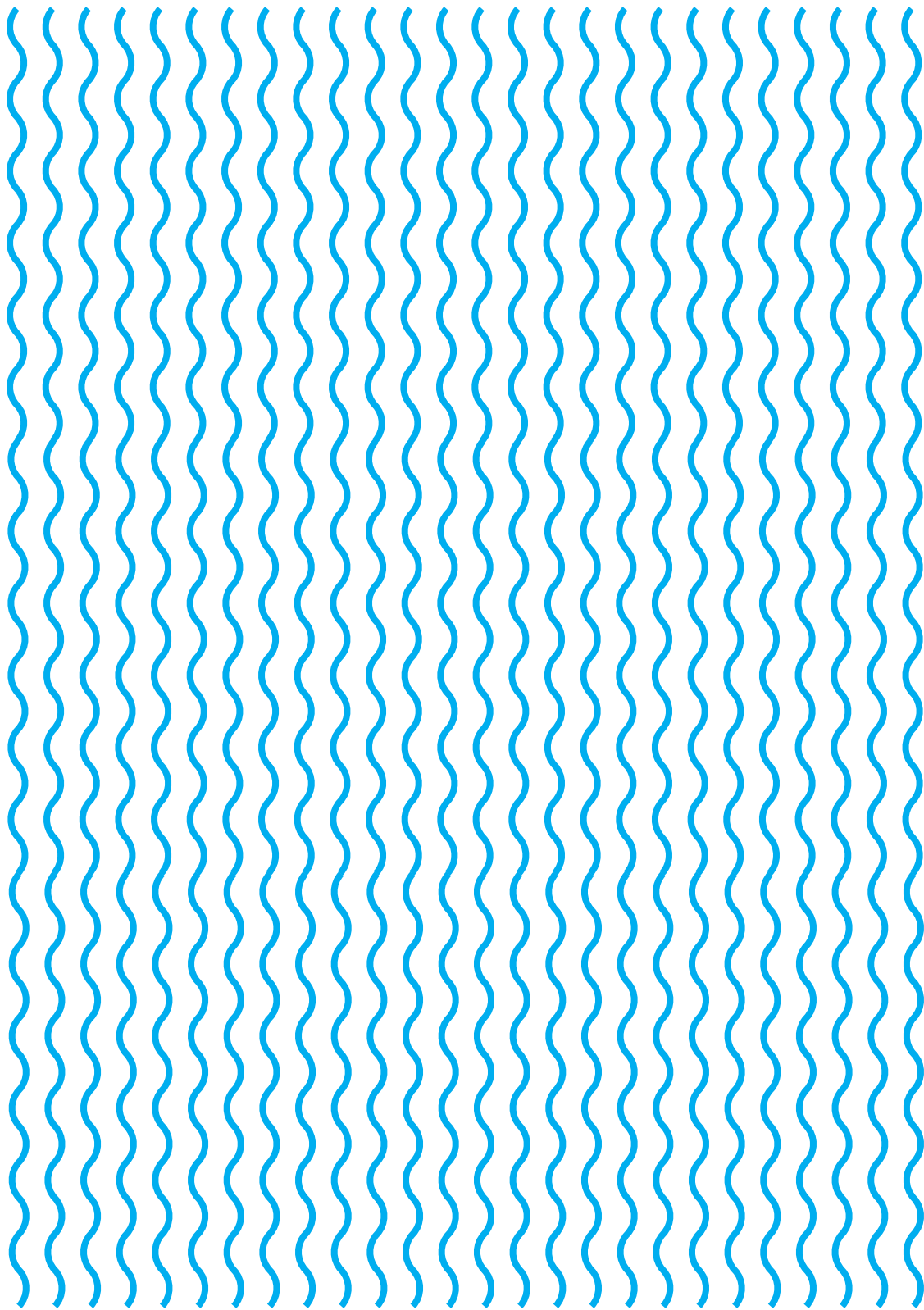
## MED.NET.3 Resili(g)ence INTERNATIONAL SYMPOSIUM

*The Student's Survey*

PANEL #3

October, 27<sup>th</sup> 2016

Elodie Nourrigat  
Judith Sykes  
Fernando Porras Isla



**STUDENTS:**

Giulia Allais

Sabrina Cavo

Marta Cudia

Iris Diaz

Alessandra Gargano

## Designing/Socializing

Elodie Nourrigat

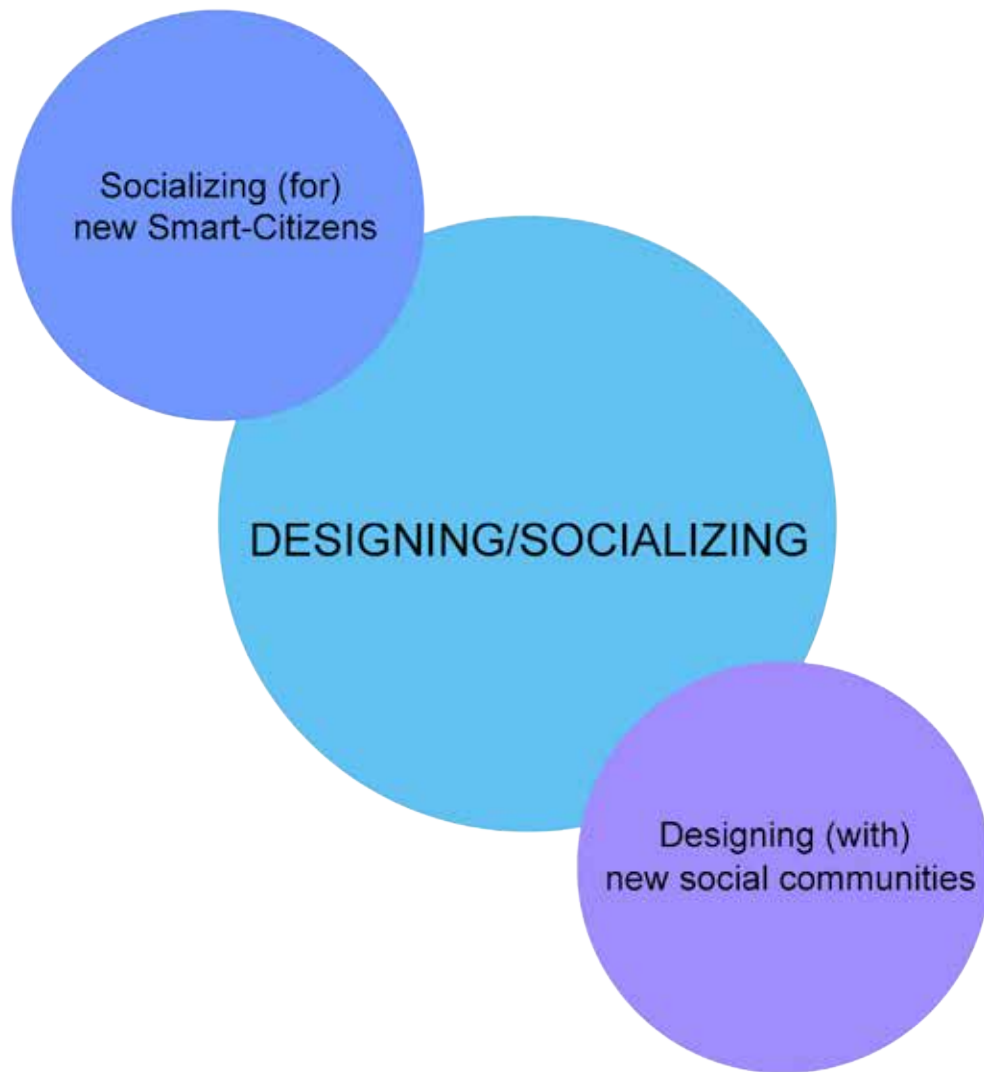
In the last years the biggest change is the influence of technology in our society. Also communication and community change. Now they don't need their own place, people could be connected remotely without a place of connection. We moved from an individual and physical community to a connected individual and virtual community.

What are the consequences for the city?

There are new ways to manage and understand the city. The city became "smart, intelligent, creative city", because it is able to offer more services. That change have a positive impact on the territory and the urban cities structure, in order to make a perfect harmony between the human and the city, in ecological and environmental way.

In Smart city society, communication and socialization are a necessity. The use of technologies in our contemporary era improves the community's interaction making events in private or public spaces (cultural, social, architectural, sporting, ect.). In that way use and design become very important in public spaces. Those public spaces must be re-appropriating so people can find their own useful space.





**The city is “smart” not because it is technological, but because it is able to offer more services better access to education, culture, health... thanks to technology.**

**Elodie Nourrigat**

# Design for Resilience

Judith Sykes

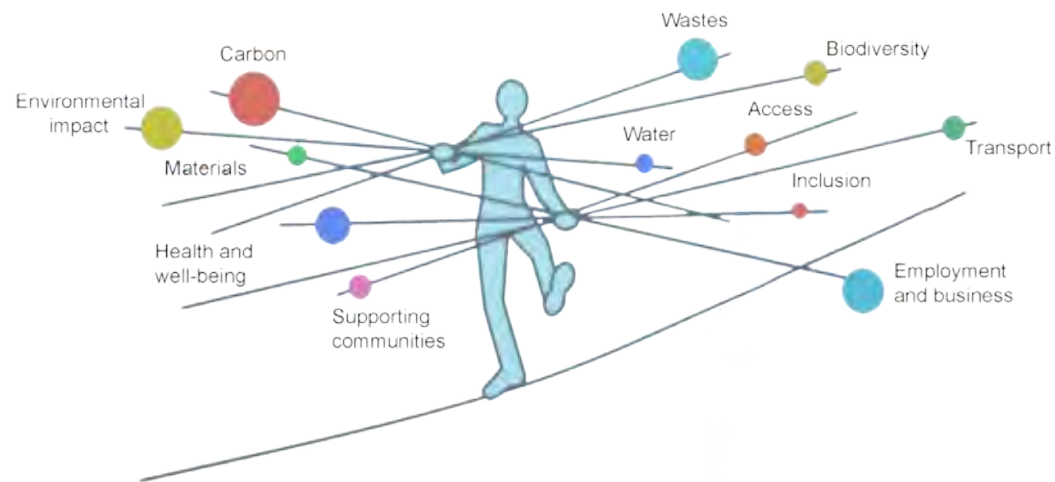
Resilience has the capacity to convert vulnerability into adaptive capacity to improve society. In this order, adaptive capacity minimizes vulnerability, for this reason we need to inform and analyze this capacity in the society. It's important understanding tools and ways for adaption. We must always know the consequences of acts because sometimes change and adaptation have too much impact in the society or in the environmental. Technology has a big role in the adaptive capacity. A good way to value is the multidisciplinary knowledge: architects, engineers, sociologist, chemical, geographer etc.

After threats, population is more vulnerable and with adapted capacity they could develop resilience.

Traditional design approach is a relation between cost and value. Sustainable design practice has many other factors that influenced this relation such as wastes, biodiversity, water, carbon, environmental impact, materials, health and well-being, supporting communities, inclusion, access, transport, employment and business.



## Sustainable design practice



**Technology has a big role in the **adaptive capacity**.**  
**A good way to value is the multidisciplinary knowledge.**

**Judith Sykes**

# Intelligent Cities/Resilient Landscapes

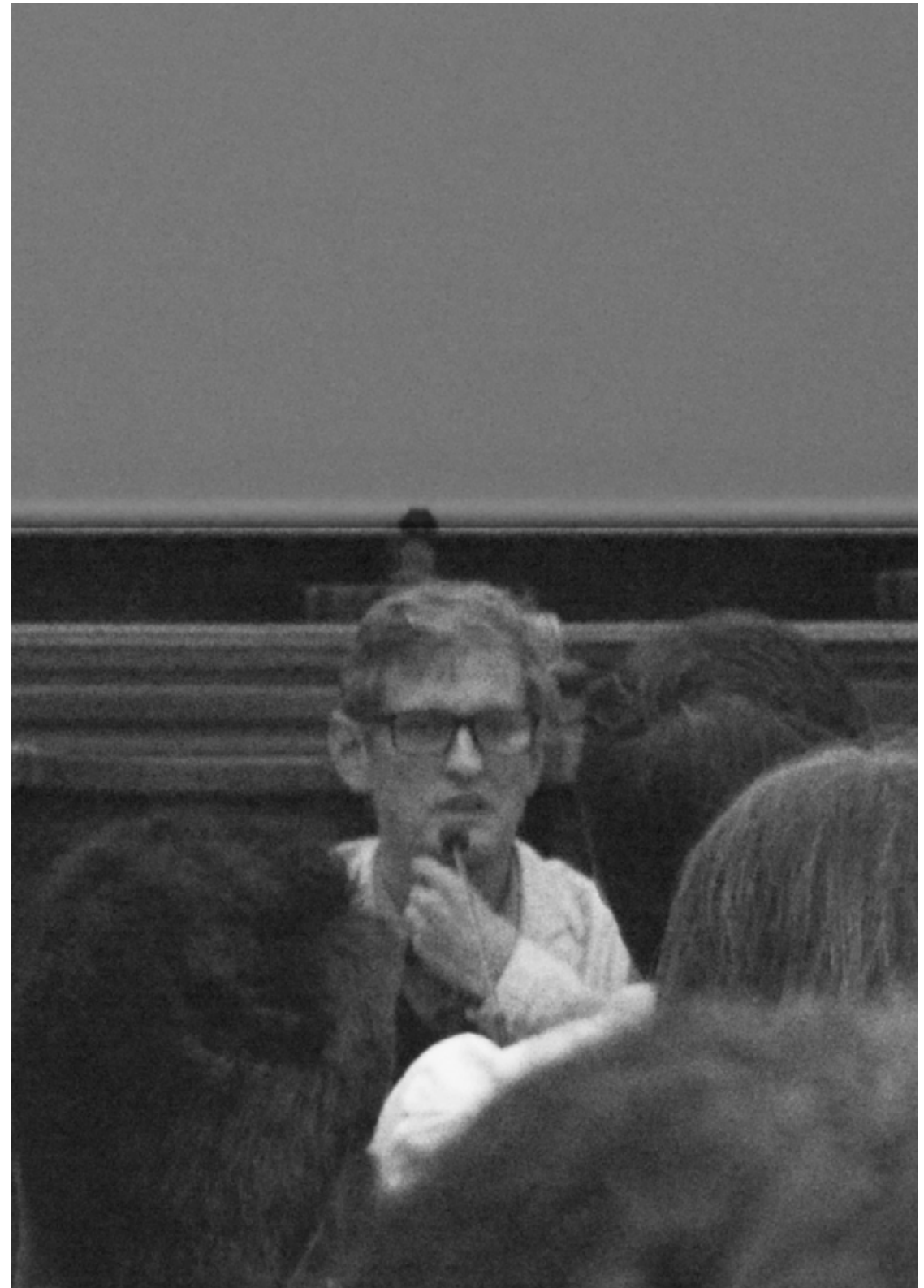
Fernando Porras Isla

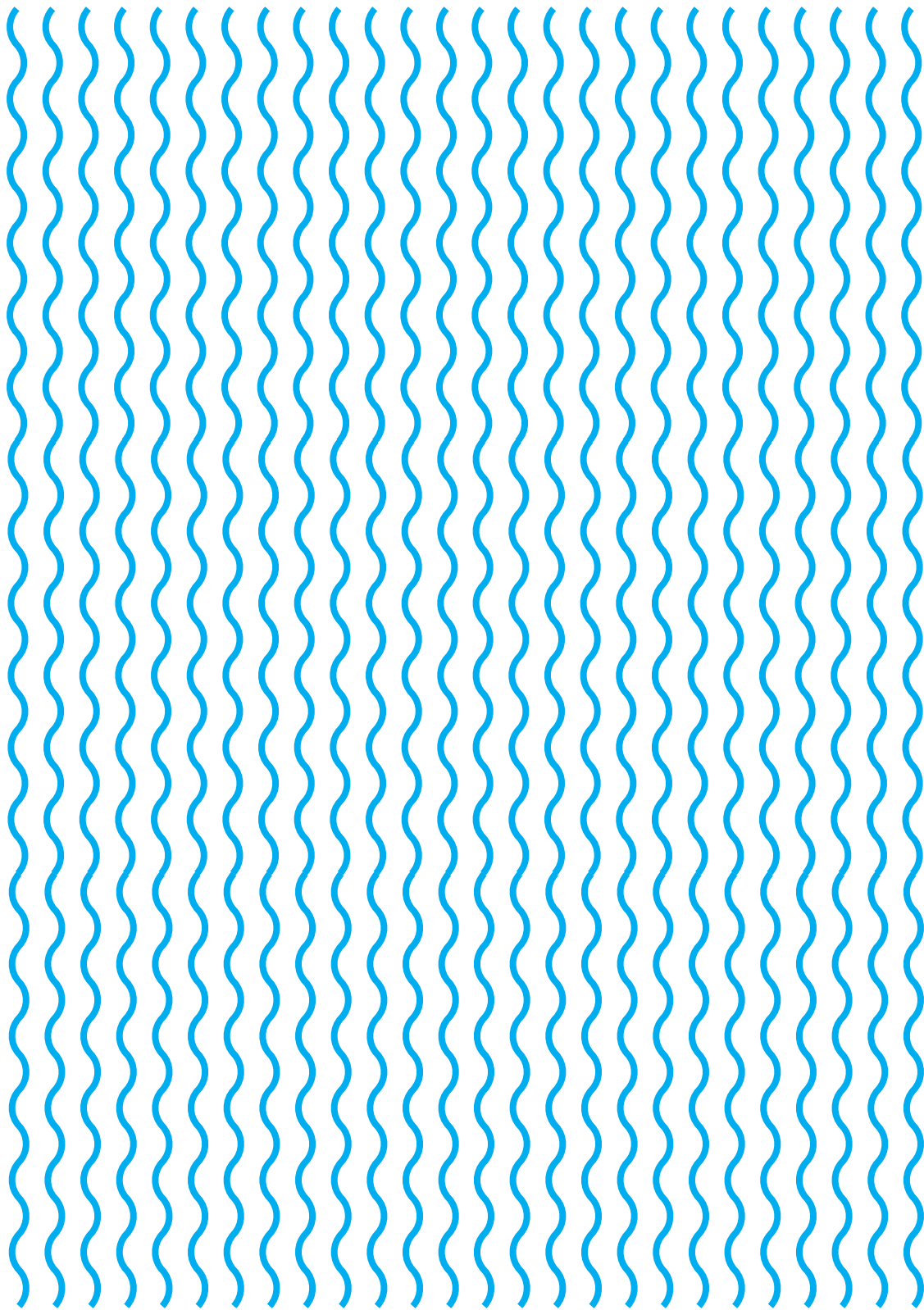
In 2003 Madrid city council decided to modernize the highway by burying the southern part under the river, this project is called "Madrid Calle 30". In 2005 it set a competition of ideas for the reuse of the vacant surface. The project consists in a linear park, a green corridor which stretches from El Pardo to Getafe, combining woods, parks, historic gardens and urban parks that in the past were missing and there wasn't connections between them, freeing from traffic, air pollution and noise. The fundamental principle of this project is to connect Madrid with the valuable foreign territories that surround it. The infrastructure system and rings that enclosed the city made continuous connection between the urban landscape and the natural environment. With the proposal's development, the Manzanares River becomes the connection point between the two environments, by building a tree-lined corridor on its banks and by the implementation of various bridges and footbridges that cross-linking citizens and overcome major infrastructure traffic.

The project is characterized by six different landscapes:

1. Salón de Pinos
2. Trip to Lisbon
3. Line in the history
4. Finding Ribera
5. River remains
6. Water and Blood

This very resilient project adapts people needs and territory's geography, and it tries to respect the environment creating a green belt in the city.





**STUDENTS:**

Elisa Cantone

Elisa Orengo

Beatrice Pastorino

Giorgia Vecchi



## ELODIE NOURRIGAT



Elodie Nourrigat and Jacques Brion architects had created in 2000 in Montpellier, the agency N+B architects. She graduates at the School of Architecture of Montpellier and obtained in 2002 a Master's degree in Philosophy of the University of Lyon III. Elodie Nourrigat is a Doctor in Architecture from School of Architecture of LA Villette Paris, University Paris 8 and she is also professor of architecture at the ENSAM.

Elodie Nourrigat has received in June, 2008 in London the prize "Atkins Inspire Awards" in the category International.

As architect too, she is investing in the communication of the architectural culture. For that, in 2006, she created and since organizes each year in June, the "Festival of the Lively Architectures" in Montpellier which invites young architects to construct a project in the courtyards of mansions of the city of Montpellier.

### Partecipation at MED.NET3 Resili(g)ence in Genoa

Elodie Nourrigat talked about the new organization of the city on the model of a new shape suggested by Jean Luc Nancy in *La Communauté désœuvrée* in which he deals with the theme of the community of the One.

Nancy traces the influence of the notion of community to concepts of experience, discourse, and the individual, and argues that it has dominated modern thought. Discarding popular notions, Nancy redefines community, asking what can it be if it is reduced neither to a collection of separate individuals, nor to a hypostasized communal substance, e.g., fascism. He writes that our attempt to design society according to pre-planned definitions

frequently leads to social violence and political terror, posing the social and political question of how to proceed with the development of society with this knowledge in mind. *La Communauté désœuvrée* means that community is not the result of a production, be it social, economic or even political (nationalist) production; it is not a "work of art" ("œuvre d'art") but "art" is here understood in the sense of "artifice".

*"The community that becomes a  
single thing (body, mind, fatherland,  
Leader...) ...necessarily loses the in of  
being-in-common.  
Or, it loses the with or the together that  
defines it.  
It yields its being-together to a being of  
togetherness.  
The truth of community, on the  
contrary, resides in the retreat of such a  
being."  
(Preface, xxxix)*

Elodie Nourrigat's intervention was divided into three main topics:

- Community & locality
- Efficiency & sharing
- Place of event in the city



### COMMUNITY & LOCALITY

In the first intervention she defined the link between community and locality as the relationship between a human being society and the place where it belongs.

In modern times, with the advent of new ways of communication a new form of sociality has come: individuals members of a community are remotely connected through mobiles and they don't necessarily need or belong to a physical or defined locality.

Technology is the node, not the finality: everybody is a dot in society and globality.

### EFFICIENCY & SHARING

She pointed out the necessity of maintaining the archetype of public spaces as/with objects connected in the city: the idea is to reappropriate of our public and social spaces. For this purpose she focuses on the importance of developing better ways or methods of understanding the city dynamics.

In her vision each individual can create his own private space in the contest of a public environment, however the importance of a public space is a common project: the role of the architect is to read this dynamic and try to project a space in order to use it for different purposes all at once. About this is important to understand that a public space doesn't have to necessarily be a defined shape: everything could be anything if you want.

### PLACE OF EVENT IN THE CITY

If you have a bit of imagination, every place could be used for every purpose, even for temporary cultural events: you can use your environment or the shape of the public space as an important part of the exhibition itself. Some examples could be "chairs out of stairs" or "squares like antlers", or even find a way to create your own use of that space with the aid of different tools (Nike Laser Soccer Field). We can consider the example of Piazza del Campo in Siena: just with the use of a great amount of sand the entire shape of the square changes and it can be used for the Palio.



With a background in civil engineering consultancy and a Master's Degree in Sustainable Development from Cambridge University, Judith Sykes has 15 years experience developing and delivering sustainable projects around the world.

Recognised for her insightful and collaborative approach to urban development, Judith is regularly invited to speak on the complexities of sustainable design in the delivery of an integrated built environment.

She has worked with government organisations, major developer clients and asset owners, and has particular expertise in city and urban resilience, sustainable infrastructure design, asset management and closed loop engineering.

Useful Projects is a sustainability consultancy for the built environment.

They work on major urban development projects, and with organisations, to develop sustainability strategies and to identify opportunities for innovation.

They provide a range of strategic and technical consultancy services and take pride in their ability to provide practical advice which is tailored to client needs.

Their approach is holistic across a set of environmental, social and economic themes.

### Partecipation at MED.NET3 Resili(g)ence in Genoa

Judith Sykes' intervention started with a definition of the word "resilience": a capacity of bouncing back after a tragedy. She wondered how to calculate the resilience and she solved this challenge with a formula:

THREATS -> VULNERABILITY + ADAPTIVE CAPACITY -> RESILIENCE

For designing and planning you have to minimize vulnerability and, at the same time, to increase adaptive capacity.

For explaining this mental process she made three examples of project approach:

- Queen Elizabeth Olympic Park (London)
- Old Oak Common
- Terminal 5, Heathrow

## QUEEN ELIZABETH OLYMPIC PARK, London

The main theme of her intervention was about sustainability and the new approach to the landproject and to designing spaces.

The traditional design approach is outdated because was more a relationship between price and project but nowadays we have to consider a lot more factors: environment, interconnections, purposes etc.

Today we have to create something which has the ability of bringing innovation with a reasonable price.



## OLD OAK COMMON

To make an intervention in such a large public area is important to consider, through a new light, the specific features of that environment and to pay attention to how our projects can change those specific features.

Among the things to consider there are: climate change, urban heat effect, level of area contamination, hours of sunlight etc.

The core of her reasoning was: "We are the ones who make changes and so we have to be the ones who can control those changes".

## TERMINAL 5, Heathrow

We have to take advantage of all the reserves that our environment needs and has: in this project they used this principle for the usage of potable water.

With a similitude she explained the meaning of the term "adaptive structure": structures that are more like a human being. About this she differences a passive structure from an active structure, the latter being the result of the use of available materials with the minimum waste.

In the end the whole speculation focuses on the idea of using at best materials, spaces and resources in general in order to projecting intelligent cities and resilient landscapes.



## Porrás La Casta Arquitectos **3**

# FERNANDO PORRAS ISLA

Fernando Porrás Isla is the coauthor of the project MadridRio and the delegate of the architectural firm Porrás La Casta Arquitectos. In his speech he presented their main project: Madrid Rio.

The focus of his intervention was about the theme of resilience in connection with a great urbanistic project that completely changed the shape of the city. The project was in collaboration with West8, Burgos & Garrido and Rubio & Álvarez-Sala.

He has been the director of the magazine *Arquitectura* (COAM), the director of the magazine *BAU* and actually he directs the "Master en Gestión inteligente de la Ciudad" of the Universidad Europea de Madrid.

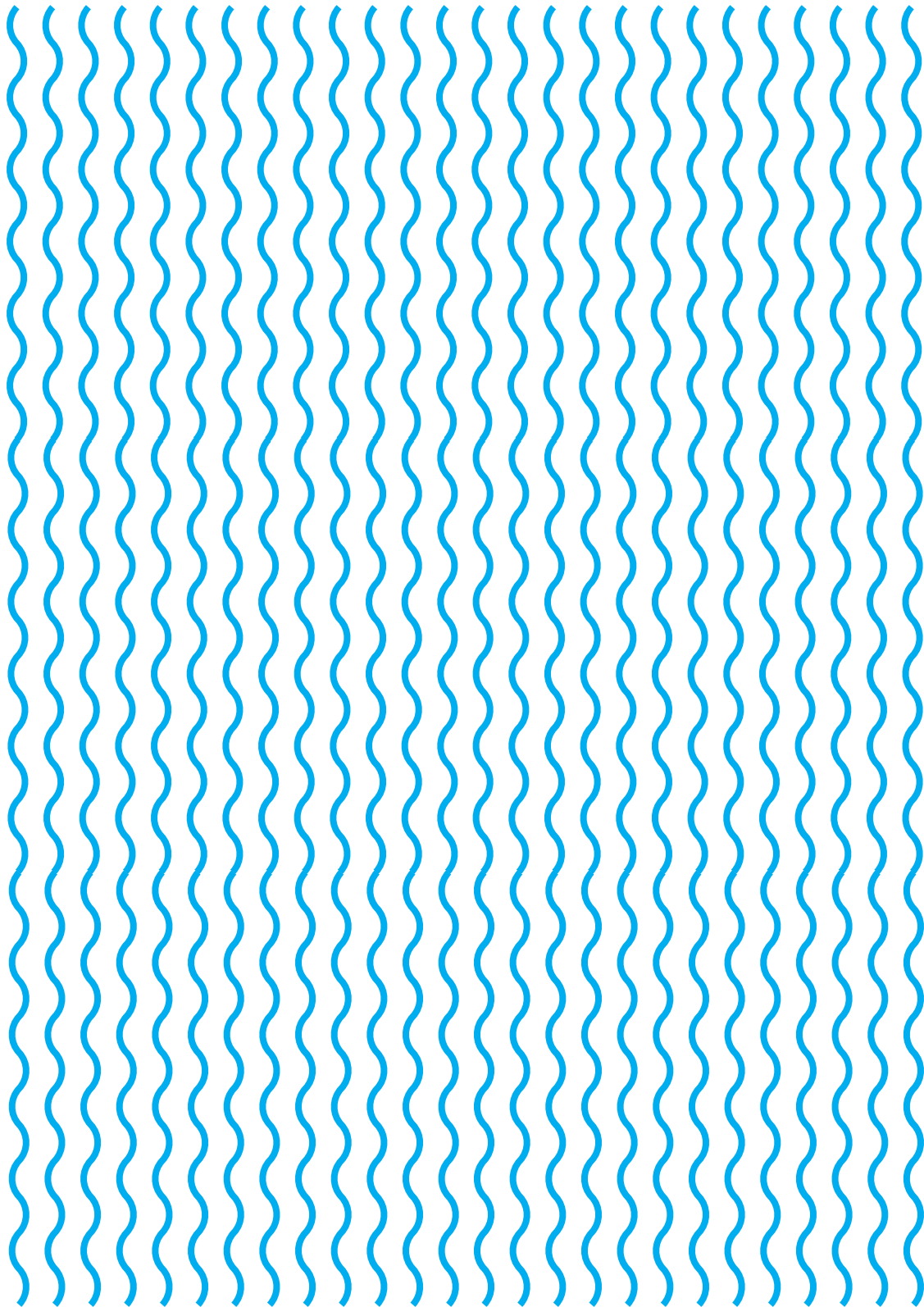
### Partecipation at MED.NET3 Resili(g)ence in Genoa

The city of Madrid dug 43 kilometres of tunnels into which the exit routes and motorways of the six-kilometre section along the River Manzanares disappeared. West 8, working together with MRIO arquitectos, a joint venture of three Madrid based firms managed by Ginés Garrido Colomero, designed the master plan for the reclaimed riverbanks and the new urban area.

Development plans were then prepared for the individual components: Salón de Pinos, Avenida de Portugal, Huerta de la Partida, Jardines del Puente de Segovia, Jardines del Puente de Toledo, Jardines de la Virgen del Puerto and Arganzuela Park.

The most important of which include: the Salón de Pinos, designed as a linear green space, which links the existing and newly designed urban spaces with each other along the Manzanares River. Salón de Pinos is located almost entirely on top of the motorway tunnel and features a "choreography" of 8.000-fold pine trees and a repertoire of cuts.

Avenida de Portugal, by relocating one of the most important roads into the centre of Madrid underground and providing underground parking for 1,000 vehicles, it was possible to convert the space into a garden to benefit local residents. Embellished with Cherry trees and cherry motif, the result is the creation of an extremely popular public space.



**STUDENTS:**  
Martina Bellone  
Luca Bonfantini  
Caterina Ippolito  
Matteo Meneghel

# ELODIE NOURRIGAT



*Elodie Nourrigat is an architect , graduate at the Ecole Nationale Supérieure d'Architecture de Montpellier (ENSAM). In 2002, she was awarded a Master's degree in Philosophy from Université de Lyon III, followed by a PhD in Architecture in 2011, under the supervision of Chris Younès at the Paris la Villette ENSA, part of Université Paris 8. She has worked as a professor at ENSAM since 2004.*

*In 2000, she co-founded N+B Architectes with Jacques Brion in Montpellier. Both partners split their time between working for the firm, teaching, and carrying out research. They renamed their firm NBJ Architectes after taking on a new partner in 2013.*

## THE BASE OF RESILI(G)ENCE IS THE NEW SOCIAL DESIGNING.

During the symposium, Elodie quotes 'La communauté affrontée' of Jean-Luc Nancy. It's not just about "geopolitics" or "economy", and it's not just about "religion" or "culture": the event engages all the forms of life and thought that is "globalized."

So this is an invite for us to open our eyes: the community must have a common project and people wants to create:

- the community around project;
- the community speak about family like instead of sharing;
- the community of 'with' it in fact is with social media: we're in the center and the community is around us;
- community and locality: the community in a specific space. The first thing of technology is phone: individual com-

munity connected remotely with a place of connection but people not connect with place are more individual. The passage of individual community to the connected individual making his own community.

- the time: time goes fast and the sensation change faster but the only difference with connection is

the consequence for the city. The city is **smart** not because it's technological but because it's **able to offer more services**: we have to effect efficiency and sharing is the new way to create energy communication and data is new to share experience in the city, to play game like Pokemon Go. There is important on the public space:

## WE COULD REAPPROPRIATE THE PUBLIC SPACE CREATING NEW TYPE OF DIVISION OF THE CITY.

At the end of symposium, Eloise exposed us some projects:

- The common project important for every body: the **'high line' in New York**.
- The place of cultural event in the city: **Chart Art Fair in Copenhagen**, the galleries'artwork and presenting everything in unison as an exhibition
- The **FAV**, le Festival des Architectures Vives, in **Montpellier**

- The PARK(ing) Day**, an annual worldwide event where artists, designers and citizens transform metered parking spots into temporary public parks because sport is the good way to socialize;
- Superblocks in Barcelona**: a plan to give streets back to residents. The Catalan capital's radical new strategy will restrict traffic to a number of big roads, drastically reducing pollution and turning secondary streets into 'citizen spaces' for culture,





# JUDITH SYKES



*Judith Sykes is a civil engineer with 15 years of experience in infrastructure both in the UK and overseas. Recognised for her insightful and collaborative approach to urban development, she has worked with government organisations, major developer clients and asset owners and she has particular expertise in city and urban resilience, sustainable infrastructure design and asset management.*

## THE KEY POINTS OF THE SYMPOSIUM ARE:

- **ROBUSTNESS**
- **ADAPTATION**
- **SUSTAINABILITY**

We can measure the resilience and the resili(g)ence model: **vulnerability + adaptive capacity with informations**. It's making sense of resilience of an ability to bounce back in design process.

The traditional design approach is quite silent so we have to practice **sustainable design**. The best solution is multiple objectives and multiple modelling.

She exposed some projects to explain it better:

- **Old Oak Common** : is an area of London between Harlesden and East Acton known for its railway. There will be the next new project in this area.

- **Norwich** : is a city on the River Wensum in East Anglia and 160 km north east away from London.

There are constructions built next to the river: it was used a parametric model to develop the site layout.

They have to balance cut and fill , minimise the storage and test the climate change avoid construction in the contaminated land.

The end point of discussion was the discordance between **ROBUSTNESS vs EFFICIENCY** at the new project inaugurated in 2008 of the Terminal 5 in Heathrow Airport of London.

They have created a structure from passive to adaptive.



# FERNANDO DE PORRAS



# ISLA FERNÁNDEZ

*Fernando de Porras-Isla-Fernández is graduated from the Escuela Técnica Superior de Arquitectura of Madrid. He is an architect and works in his own office since 1984 , he is partner co-fondator of Porras La Casta Arquitectos . For more than 25 years has been dedicated to both the professional work within the classical discipline as research and teaching.He directed the magazine “Architecture” of the College of Architects of Madrid and other famous magazines.*

He is coauthor of the recovery project of the river **Manzanares in Madrid**, where they urbanized over 120 hectares in the center of the city.

This project has already received numerous awards including the **International Prize urban design of the International Committee of Architectural Critics, Best Green design Award Chicago Ate-neum or the Prize for Best Public Work of the College of Civil Engineers of Spain or the Special Prize College of Architects of Madrid.**

Also for his work: Rehabilitation of the historic center of Isla completed in 2012, he received the Hspania Nostra First Prize in Landscape Intervention.

In 2005 the **City Council convened an International Ideas Competition** with the aim of obtaining proposals for the management and development of this great void.

They decided to project a large urban park of 6 km long and 1,500,000 m<sup>2</sup> surface on both sides of the river.

The fundamental principle of the project is to **connect** Madrid with the valuable foreign territories that surround it (among which the mountain of Pardo north and cultivated the fertile valleys south). The system infrastructure and rings that enclosed the city made continuous connection between the urban landscape and the natural environment impossible.

With the development of the proposal, the Rio Manzanares becomes the connection point between the two environments, by building a tree-lined corridor on its banks and the implementation of various bridges and footbridges that cross-linking neighborhoods and overcome major infrastructure traffic that prevented contact.

One should not forget that acts mainly on underground infrastructure; 40% below ground level consists of slabs covers the tunnels and the technical rooms associated with them.

The tunnel is more than six kilometers long.

On this underground building the solution adopted is based on the use of vegetation as the main construction material.

The concrete proposal in landscape units or green areas.

- **The corridor** that runs along the right bank of the river, it is the structure of fundamental continuity that runs through the entire park lengthwise and called Pine Park.

It is built on the tunnels almost entirely and has an average width of 30 meters and 6 km length.

- **The new monumental stage** to definitively link the historic center with the largest park in Madrid.

- They have proposed different solutions to face with extreme care the context in which they are located: the **garden of the game**, which is a closed enclosure where they have planted different trees.

- He designed the entire new **Parque Arganzuela** including contemporary art center Matedero. The park represents the largest area of intensive landscaping of the left bank of the river. The park has been conceived as a great space in which the river has retreated leaving their ancestral footprint.

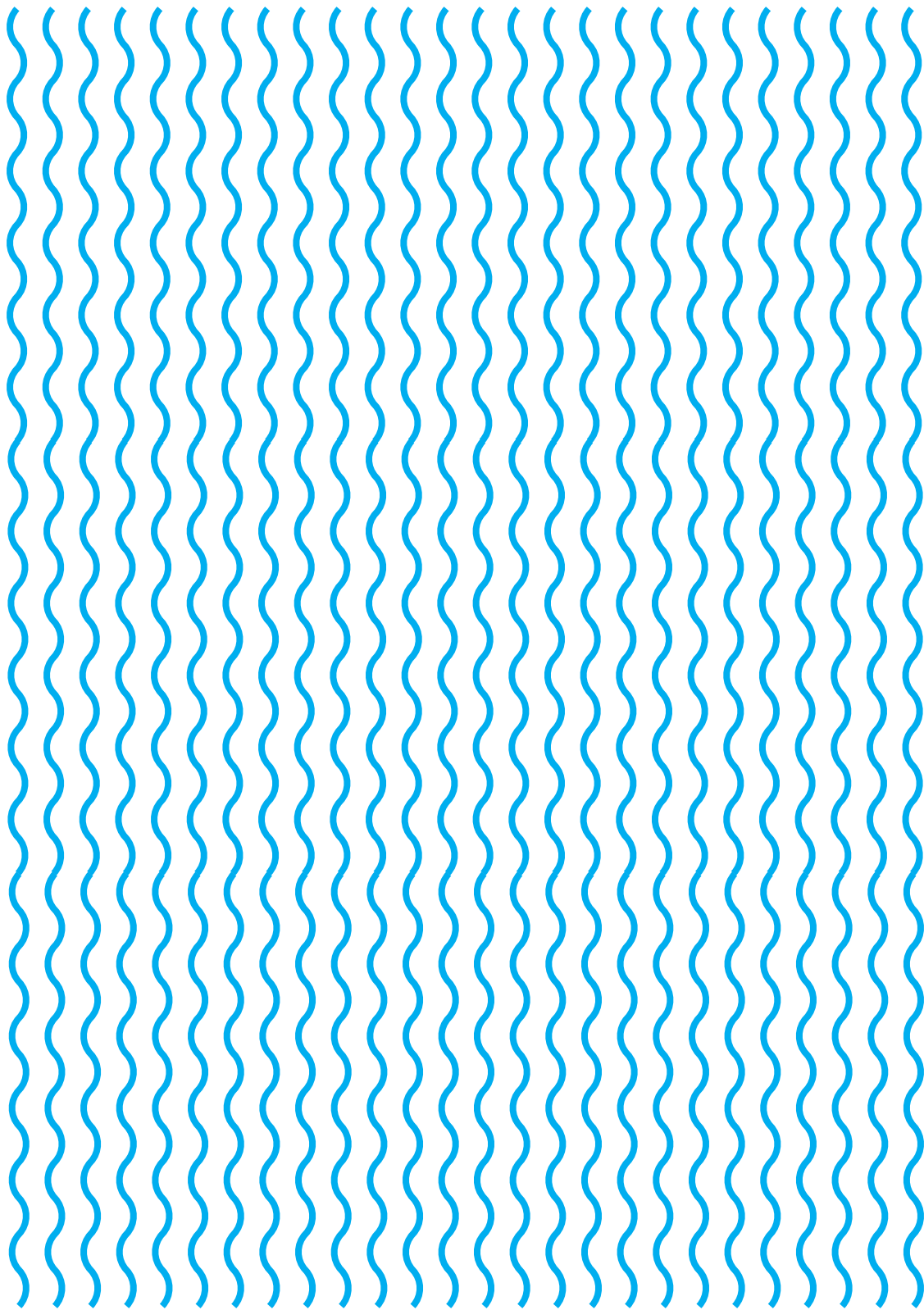
- **The project Madrid Río** has more than 1200000m<sup>2</sup> of green areas.

The project establishes as a general strategy the idea of intro-

ducing a dense topography, almost forest character, whenever possible, by making a landscape with living matter, on an inert substrate underground. His project has already received numerous awards including the International Prize

urban design of the International Committee of Architectural Critics, Best Green design Award Chicago Ateneum or the Prize for Best Public Work of the College of Civil Engineers of Spain or the special Prize College of Architects of Madrid.





**STUDENTS:**

Anna Maxia

Monica Muschietti

Martina Ottazzi



# ELODIE NOURRIGAT

ELODIE NOURRIGAT, architect and professor at l'école nationale supérieure d'architecture Montpellier, intervenes at 4.15 p.m.

How can we design the city of the future? We went FROM "the community of the one with a common project", a private, familiar and confidential community TO "the community of the with", a global community, where everyone have a connection with other people, other places, other cultures.

Collective actions exist for a long time.. What's new today? We can do this in real time, and in every places. This involves big economical, politic and social consequences. In this "fast"-world, without free time, we can, however, know every notice, from every part of our planet, in a very little time. The city is not smart because it's technological; what really matters is the use we make of technology. City is smart because, thanks to technology, it's able to offers more services, education, culture and health.

## RIAPPROPRIATION OF THE PUBLIC SPACES.



Extimity Technilum – Create hit own private space.



Hight line, New York.  
At the beginning used for the transit of the trains.  
Now the High Line is a park.



Thailland football field.  
World's first non-rectangular football field.  
in Bangkok there are numerous asymmetrical spaces  
which were mostly covered in trash. They decided to  
design a field for playing football.

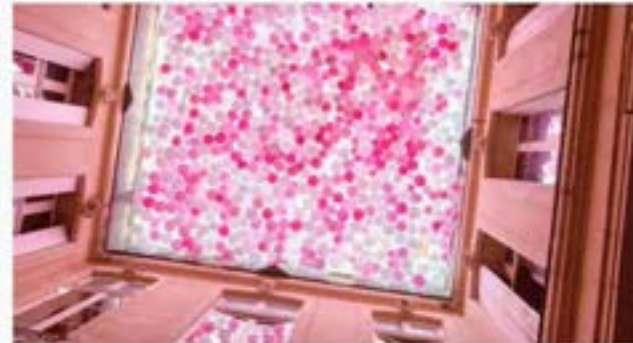
## CREATION OF PUBLIC EVENTS IN PUBLIC SPACES.



Chart art fair, Copenhagen.



Laser field, Nike.



Fav, Montpellier.

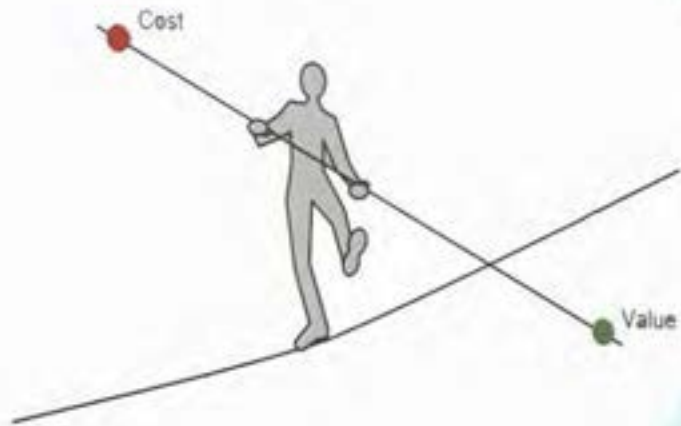




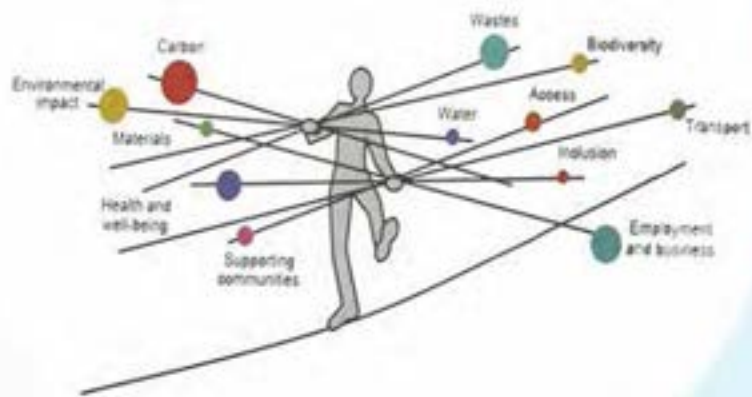
**JUDIT  
SYKES**



## TRADITIONAL DESIGN APPROACH.

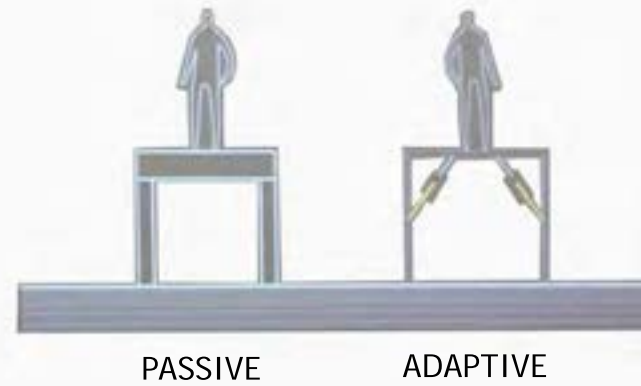


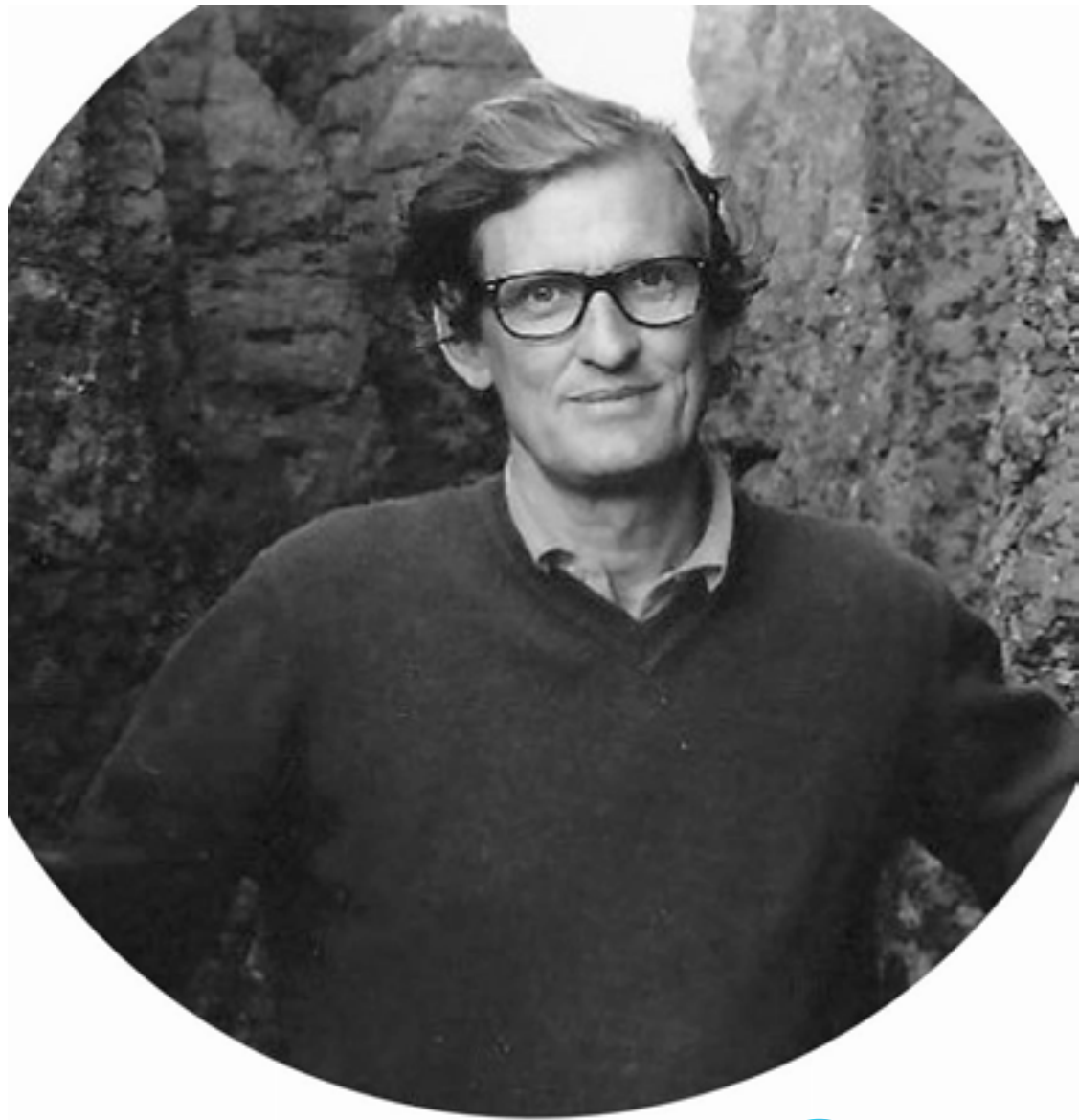
## SUSTAINABLE DESIGN PRACTICE.



## ROBUSTNESS VS EFFICIENCY.

### ADAPTIVE STRUCTURES.





# FERNANDO PORRAS ISLA



SALON DE PINOS.



AVDA. DE PORTUGAL.



PUENTE DE TOLEDO.



PARQUE DE ARGANZUELA.



MATADERO DI MADRID. (ex madhouse)

URBAN  
DESIGN  
AND  
LANDSCAPES.

