Niterói, Maio 2018
Modelar a Metrôpole PDUI- Cámara Metropolitana/ Estado do Rio de Janeiro.

DESAFÍOS
PARA UMA AGENDA METROPOLITANA

Willy Müller, Consultor Internacional-Coordenador Geral PDUI

DESAFÍOS

PARA UMA AGENDA METROPOLITANA

X NEW URBAN PARADIGMS

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PROGRAMMED COLLAPSE

Urban obsolescence in the age of megacities

PARADIGM_1
Urban obsolescence: how to design the urban collapse of XXI century cities?

CLIMATE CHANGE INFRASTRUCTURES

Logistic services for extreme escenarios

PARADIGM_2
Urban infrastructures are becoming obsolete every time faster and faster. How should we incorporate the collapse as part of our design strategy?

HYPERCONNECTED CITIZEN

Expanded public space for experience societies

PARADIGM_3
The hyper-connected citizen is the new inhabitant of XXI century cities. How to design public space according to its new attributes?

PRODUCTIVE CITIES

Networked fabrication for circular economies

PARADIGM_4
How cities can become nodes of production of food, energy, knowledge and goods?

CITY METABOLISM

Operative natures for urban environments

PARADIGM_5
In the XXI century we are moving from a contemplative nature to a performative nature. How to introduce this paradigm shift in our urban design strategies?

SLOW CITIES & HYPER-REGIONS

New social deal for a habits revolution

PARADIGM_6
Hyper-regions and slow cities are an urban reality in the XXI century: how can urban design articulate its opposite scales, sizes and speeds in one single metropolis?

WORLD OF CITIES

Mayor's challenges for global governances

PARADIGM_7
If the XIX cent was based on Empires, and the XX cent was grounded on States, is the XXI century going to be the century of cities?

REAL TIME DATA

Dynamic data for innovative environments

PARADIGM_8
We are moving from accumulating ratios of data to replace real time data. How urban design should face this change of paradigm?

MULTIDIMENSIONAL PLAN

Hyper-specific simulations for urban participation

PARADIGM_9
From representation to simulation: how to interact with the urban systems of the XXI century?

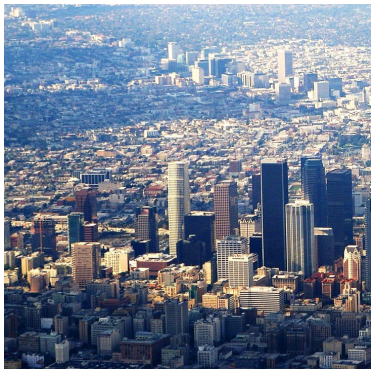
DISTRIBUTED SELFMANAGEMENT

Empowering citizenship through Big Brother technologies

PARADIGM_10
From the Bentham panoptic to the digital panoptic: how go beyond Big Brother control in XXI century cities?

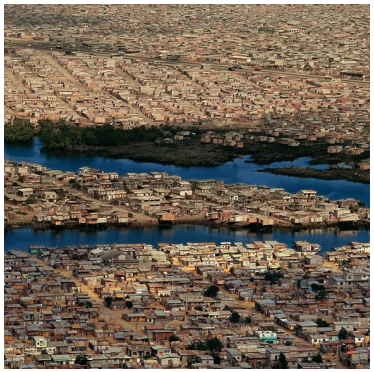
#1 PROGRAMMED COLLAPSE

Urban Obsolescence in the age of megacities



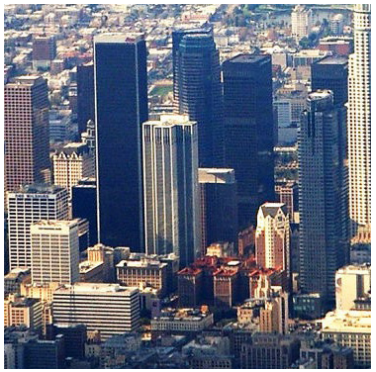
1.1
Urban obsolescence: how to design the urban collapse of XXI century cities?

1.2
Climate change is not any more a distopia but a present fact. How to deal with this reality from urban design?



1.3
Pininfarina separated the car in three parts: the bodywork, the engine and the chassis. Could urban design approach the city in a similar way?

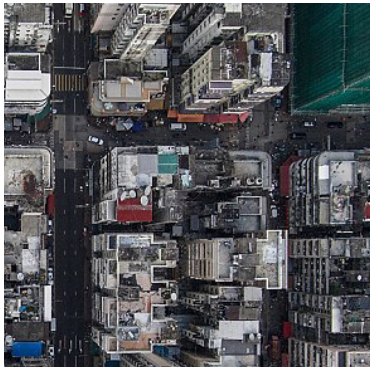
1.4
How to move the notion of programmed obsolescence to the field of urban design in order to deal with city's collapses?



1.5
The traffic light, an invention of the XIX century. Will hyperconnected mobility force us to radically reformulate its presence?

1.6
Urban programmed collapse: how to incorporate dysfunctional urban anomalies in the design strategies of the XXI century cities?

1.7
The urban collapse of the XXI century is closer to an habit than to an exception: how to incorporate it in our urban design agenda?



1.8
Urban resilience as a conservative strategy: how to fully assume the collapse for a radical change of paradigms in our cities?

1.9
Barcelona roman wall lasted 1000 years. Today, mobility infrastructures are obsolete almost from their creation. How to convert its collapse in a design strategy?

1.0
Cities have never been growing as they are doing in the XXI century. Are we prepared to assume its collapse as part of our urban design protocols?

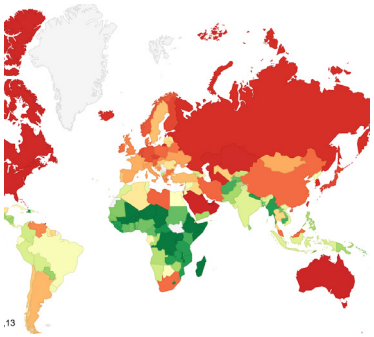
EXIT

롯데아트
LOTTE OUTLETS

#2 CLIMATE CHANGE INFRASTRUCTURES

Logistic Services for Extreme Scenarios

2.1
Climate change is not any more a distopia but a present fact. How to deal with this reality from urban design?



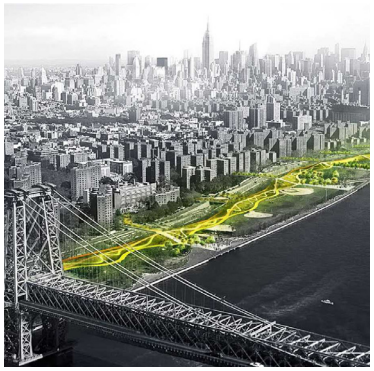
2.2
Cities occupy only 1% of the surface of the Earth, but they consume almost 80% of its resources. How to revert that from the field of urban design?

2.3
Since industrial revolution we are massively producing greenhouse gases. Is enough with applying a strategy based in resilience or do we really need a paradigm shift?

2.4
In 2050 we will have 70% population living in cities. How to design these huge metropolis assuming the climate change as a fact and not as a mere possibility?

2.5
Cities are highly vulnerable to climate change because of the “hot island” effect. How to fully assume it for a radical change of paradigm?

2.6
Climate change is already a reality. Which new types of infrastructures does it require?



2.7
Climate collapse episodes are nowadays closer to an habit than to an exception: how to incorporate it in our urban design agenda?

2.8
Mitigating the climate change is not the only priority of urban design. It is crucial to built the required infrastructures to deal with its immediate consequences.

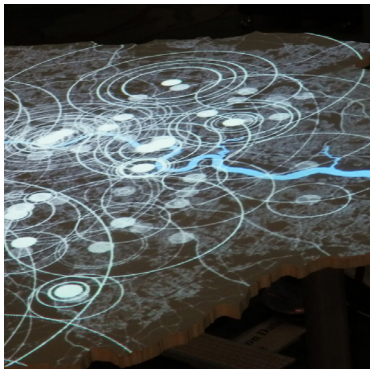
2.9
By the end of XXI it is expected a sea level rise of around 0.8m. Urban design will need to change its paradigms in order to deal with around 200 million people in risk.

2.0
Climate change is a reality. How to design urban buffers of protection that are not mere walls but activators of urban life?

#3 HYPER-CONNECTED CITIZEN

Expanded public space for experience societies

3.1
Social networks are replacing public space as scenarios of expression. Should urban design approach the public space under a complete new paradigm?



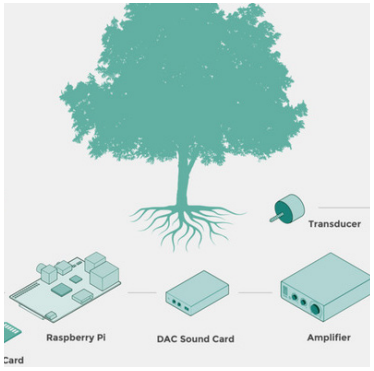
3.2
The informational age has transformed most of our disciplines. How to unfold urban design strategies which incorporate real time data as a key parameter?

3.3
The hyper-connected citizen is the new inhabitant of XXI century cities. Can we still design urban phenomena according to the citizen of the XX century?

3.4
The hyper-connected citizen has a constant, fluid, global, personalised, instantaneous and geolocalised connection with the rest of the citizenship.

3.5
New urban technologies are not just dealing with data, but also with experiences. How to design urban public spaces acording to this new technological reality?

3.6
How is the new intersubjective scheme of the hyper-connected citizen? How to design urban public space according to it?



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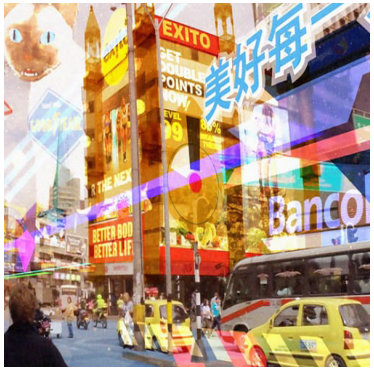
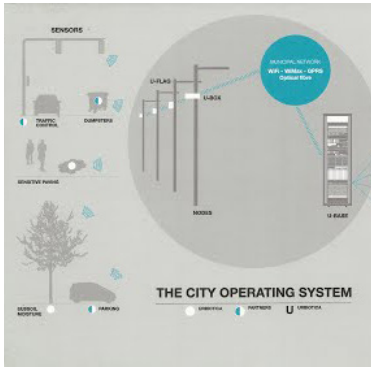
Expansive technologies allow us to deal with reality in a complete new manner. How should we design public space according to this new technological paradigm?



3.8
Augmented reality is becoming a social habit which opens up a complete new world of possibilities. How can public space take advantage of them?

3.9
How to design public space in a era in which internet is the main space of interchange and interaction?



3.0
What can public space offer to a hyper-connected citizen that can relate the whole world without going to the street?

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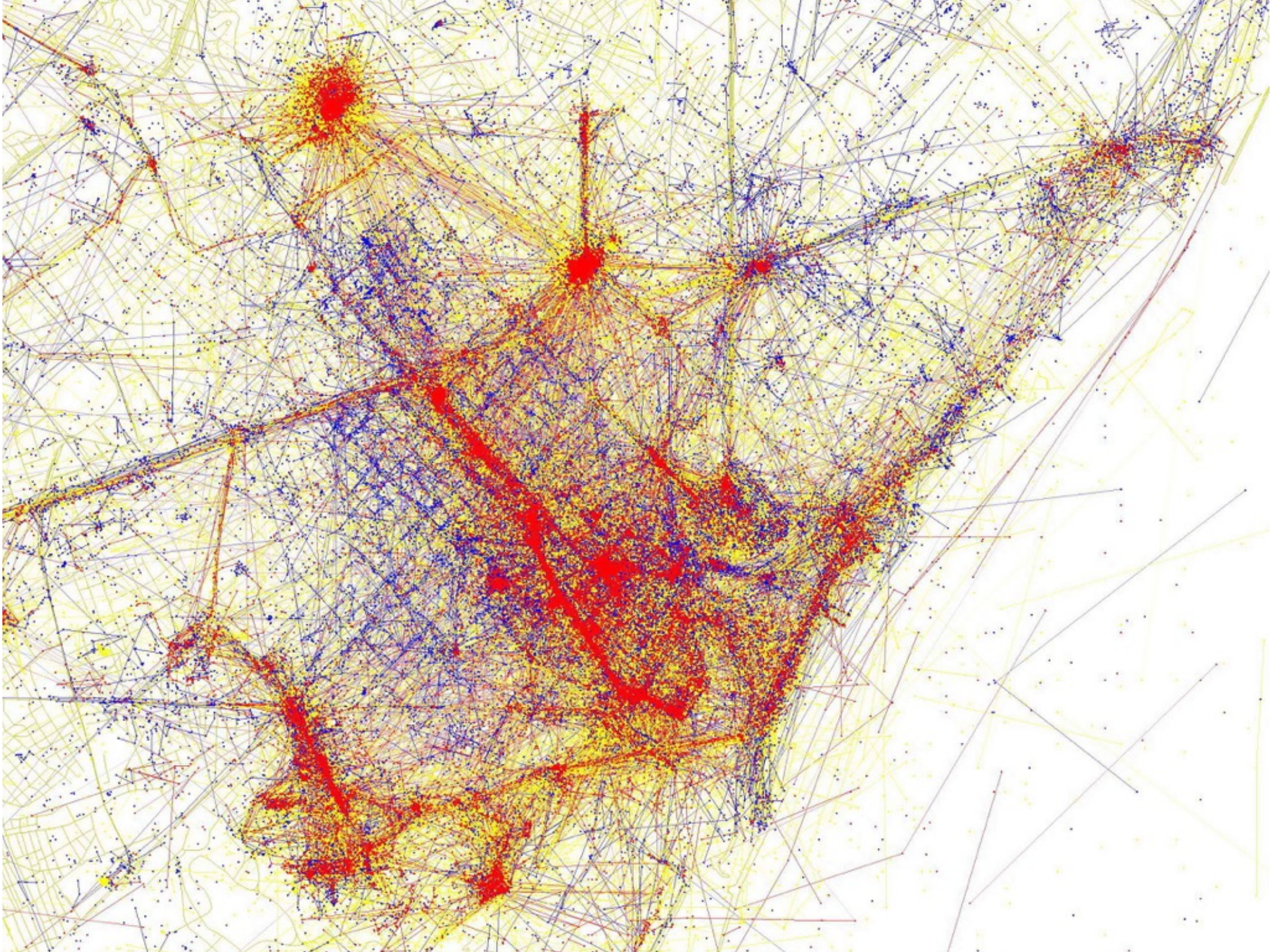

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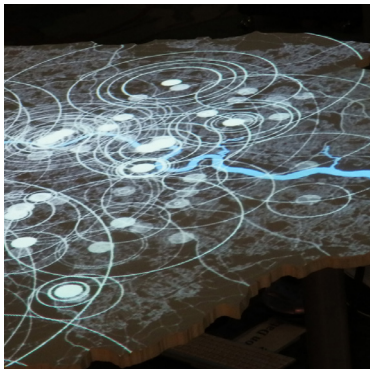

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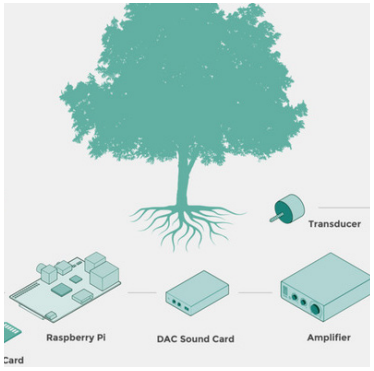

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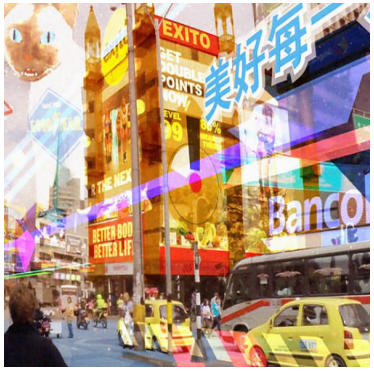

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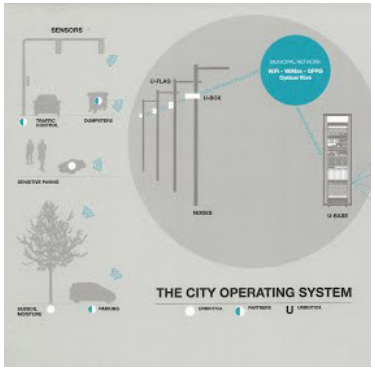

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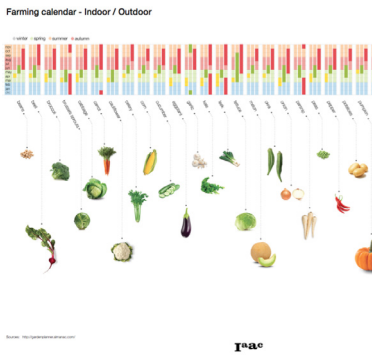
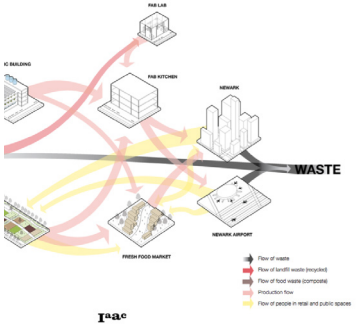
#4 PRODUCTIVE CITIES

Network fabrication for circular economies

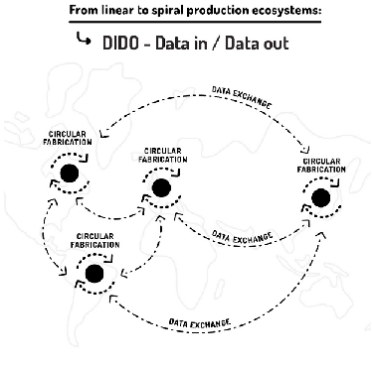
4.1
How cities can become nodes of production of food, energy, knowledge and goods?



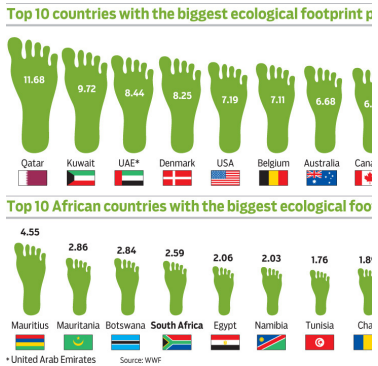
4.2
The third industrial revolution is a reality. How should we design cities according to this new paradigm of production?



4.3
We are moving from Product In – Trash Out to Data In – Data Out. Which is the impact that this new urban paradigm of production will have on our cities?



4.4
Industrial production completely transformed our cities. How networked production can impact in our urban design strategies?



4.5
In which sense the socio-technological processes of the XXI century can affect the urban re-industrialisation processes?

4.6
The notion of productive networks is transforming our understanding of industrial cities. How to design urban phenomena under this new paradigm?

4.7
We are moving from the notion of mass production to the notion of mass collaboration. How to convert theses XXI century processes in urban phenomena?

4.8
Resilient strategies cannot face the radicality of a paradigm shift in our production systems. How to approach this transformation from the urban design?

4.9
Urban design: How to reprogram urban infrastructures of the XX century with productive logics of the XXI century?

4.0
How to convert networked production in an urban, social, inclusive, open and collaborative process?

#6 SLOW CITIES & HYPER-REGIONS

A new social deal for habits revolution

6.1
Hyper-regions and slow cities: how can urban design articulate its opposite scales, sizes and speeds in one single metropolis?

6.2
Can we achieve hyper-region infrastructures through slow city devices? Can we go walking or cycling to the airport?

6.3
How to empower slow cities in order to convert them in cultural, economical and productive centers without loosing the benefits of its scale, size and speed?

6.4
Many slow cities into one hyper region.

6.5
How to synchronise the slow city notion of proximity with the hyper-region notion of inter-connectivity?

6.6
How can we participate from hyper-region virtues through protocols based on the main ideas of slow cities?

6.7
How should we rethink hyper-region equipments under the light of slow cities? How to re-understand the airport as an equipment?

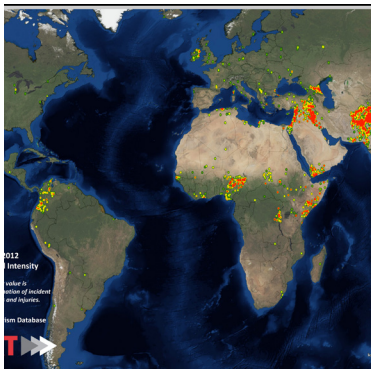
6.8
How to go beyond resilience and understand the articulation of hyper-regions and slow cities as a complete new paradigm?

6.9
Urban design: How to facilitate the co-existance of different speeds, sizes, times and scales that occur in the XXI century cities?

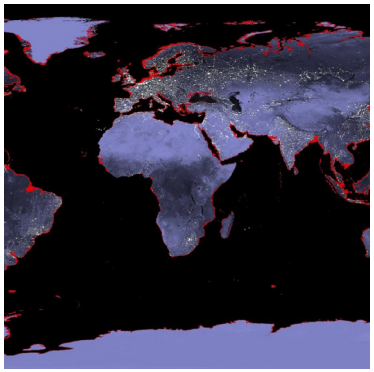
6.0
Cities are increasing its size to a regional scale. How can urban design introduce slow city behaviours in those megalopolis without loosing its virtues?

#7 WORLD OF CITIES

Mayor's challenges for global governances



7.1
If the XIX cent was based on Empires, and the XX cent was grounded on States, the XXI century is being the century of cities.



7.2
Cities are the main global nodes of economical and social forces. How can they replace the State as the main geopolitical actor?

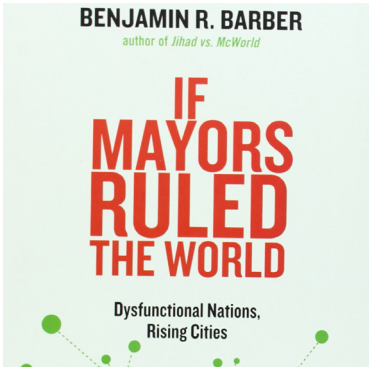
7.3
Cities are more efficient than states and closer to its inhabitants.

7.4
How to reapropiate the concept of the ancient greek polis in order to face the imbricate geopolitical challenges of our era?

7.5
How to convert cities in the mail geopolitical actors of the XXI century?

7.6
Which is the best governance scale for the XXI century? From empires and states to cities.

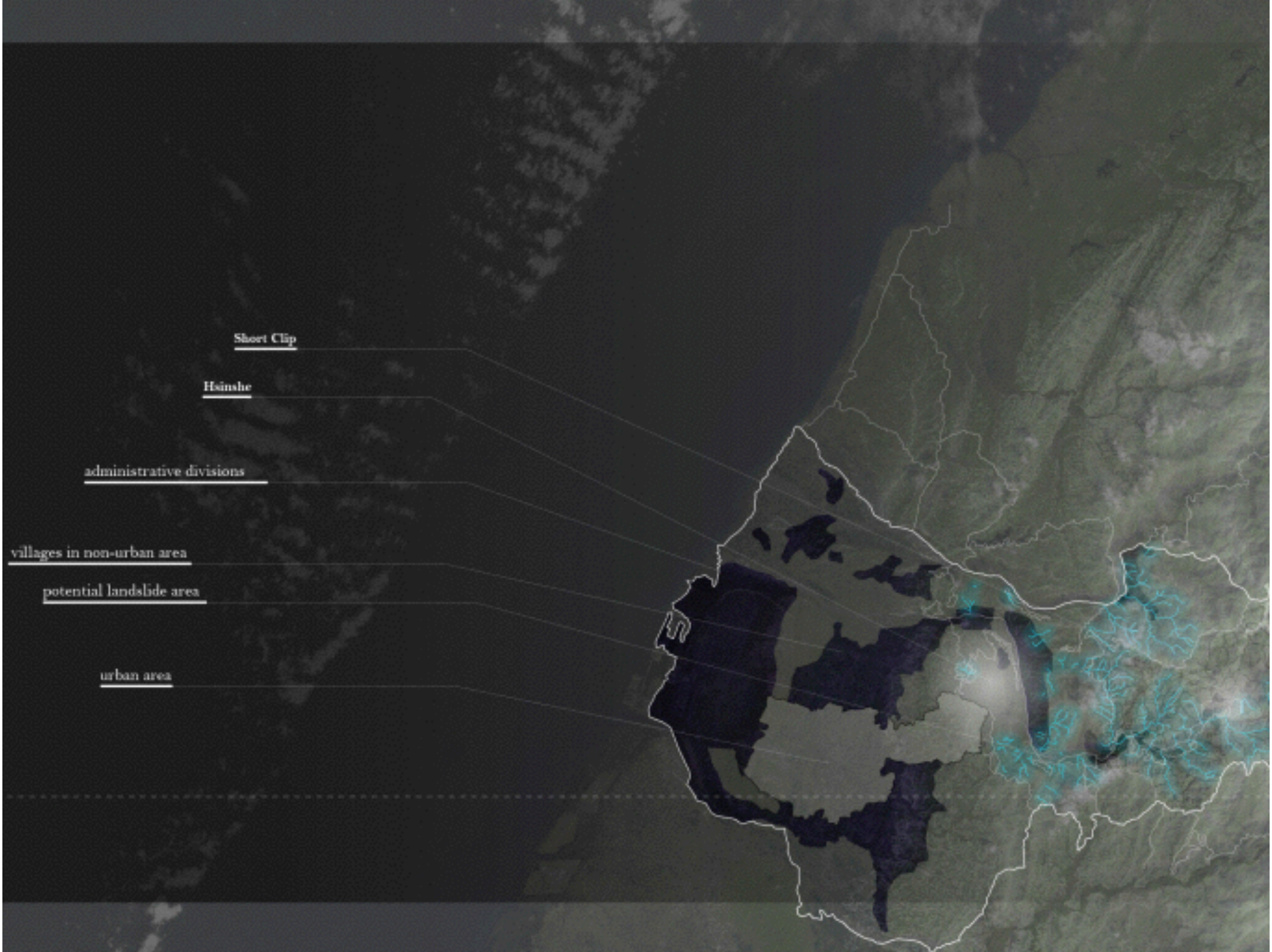
7.7
Beyond the intelligence that is being offered to cities by the stablisment, the question is: Which kind of intelligence to cities really need?



7.8
A parlament of mayors or how to change the action-scale of our political agents. From states to cities.

7.9
Networked cities: how to internationally coordinate urban policies in order to collaboratively respond to global challenges?

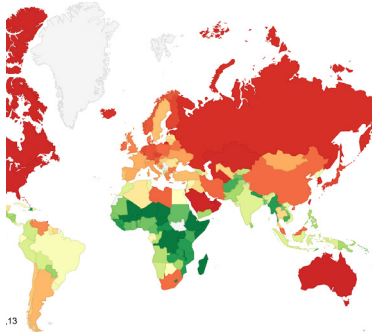
7.0
Challenges are not anymore framed in local territories, but involve the whole globe. How to respond them from the cities of the XXI century?


Short Clip
Hsinshe
administrative divisions
villages in non-urban area
potential landslide area
urban area

#8 REAL TIME DATA

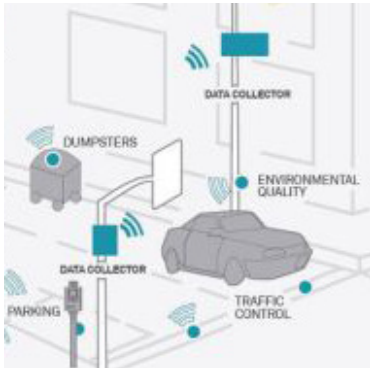
Dynamic data for innovative environments

8.1
We are moving from accumulating ratios of data to replace real time data. How urban design should face this change of paradigm?

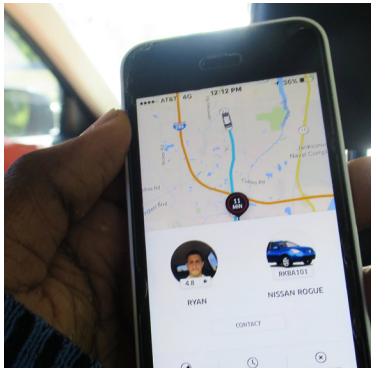


8.2
Can real time data get rid of the traffic light?

8.3
How should we face in the XXI century the design of a street without traffic lights?

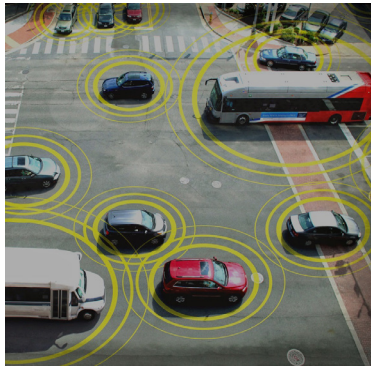


8.4
How to design a street from which we receive information through little amounts of binary data every three seconds?

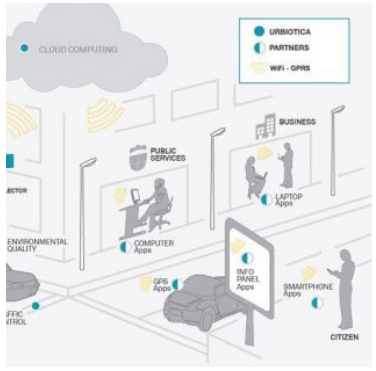


8.5
How to design cities through flows of data and not only through physical interventions?

8.6
Real time data permits the emancipation of the generic and its replacement by the hyper-specific. How urban design can operate under this new paradigm?



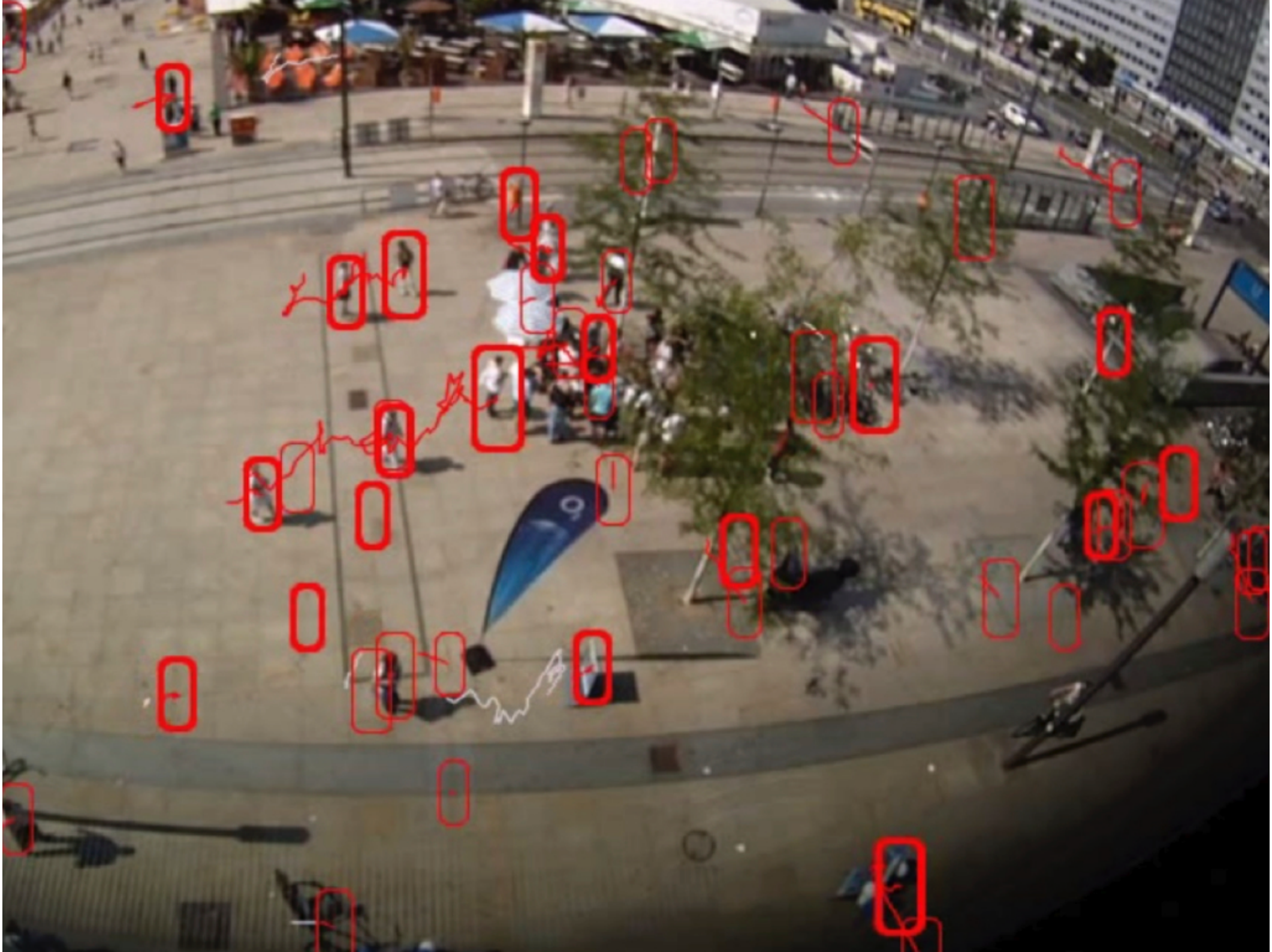
8.7
How to design the cities of the XXI century through hyper-specific circumstances and not anymore through generic protocols?

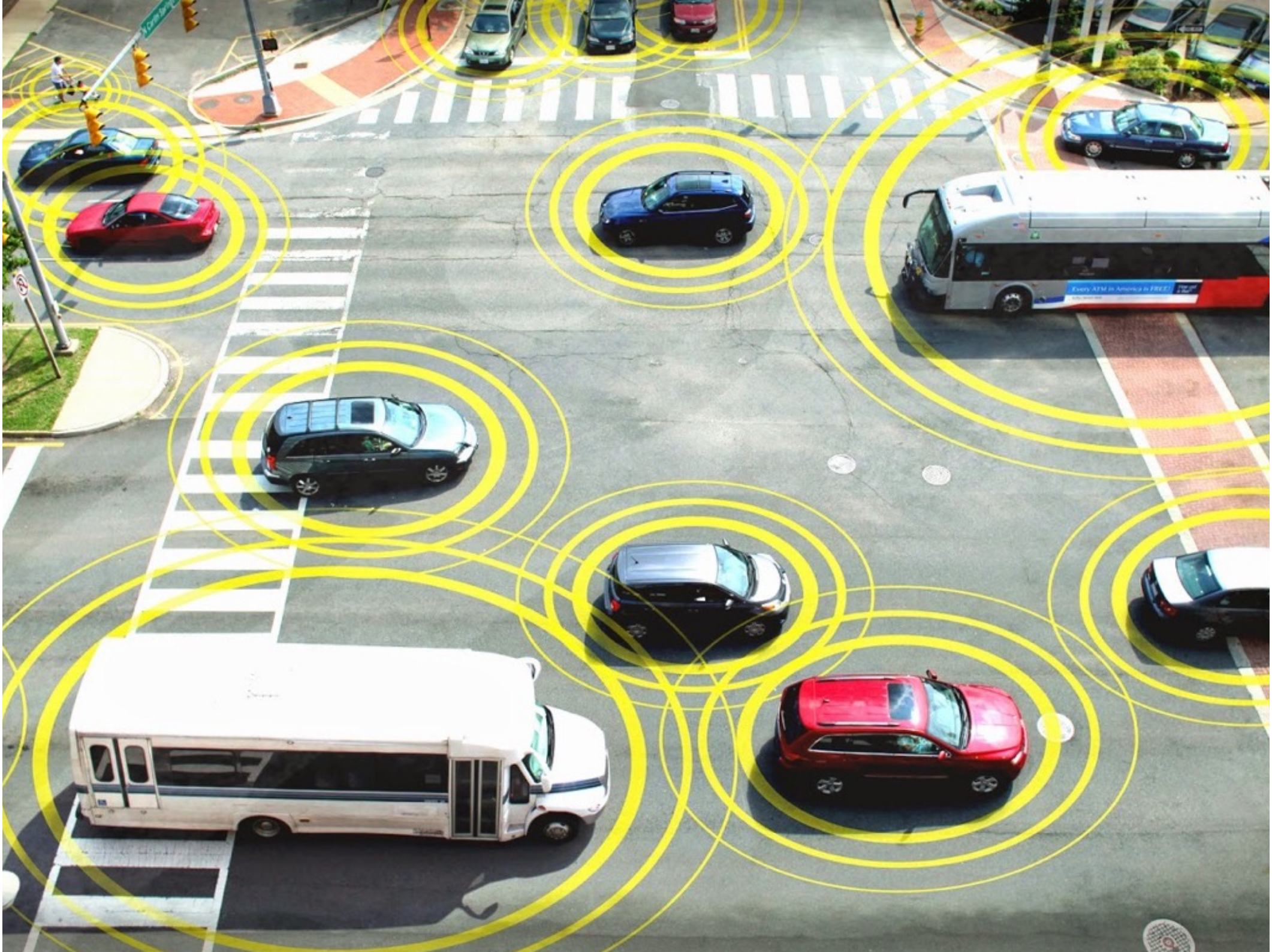


8.8
How to move from urbanism to urbiotica? How to apply real time strategies in urban design?

8.9
Amazon centers are already managed with driveless sensorized movement. How urban design can implement it in the XXI century cities?

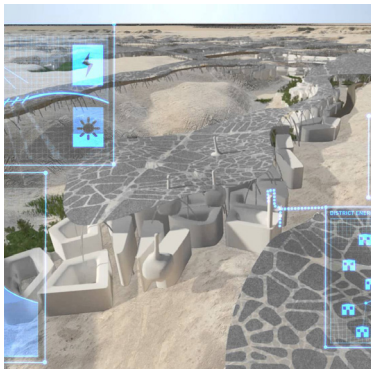
8.0
From an discrete acumulative model of knowledge to a continous updated data process: how to apply this paradigm shift to urban design?





#9 MULTIDIMENSIONAL PLAN

Hyper-specific simulations for urban participation



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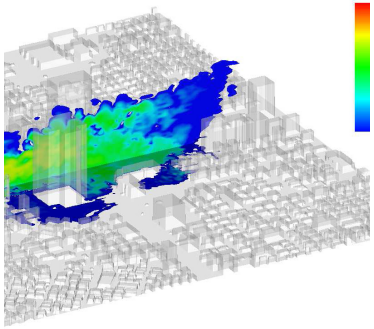
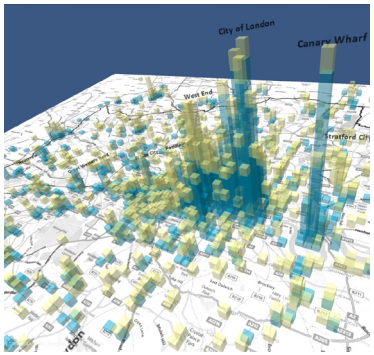
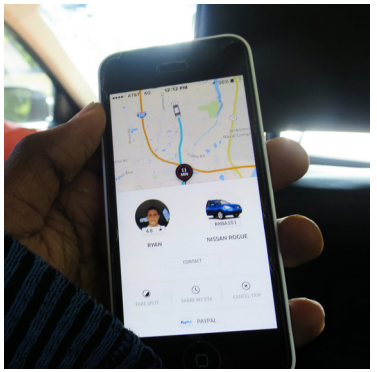
From representation to simulation: how to interact with the urban systems of the XXI century?



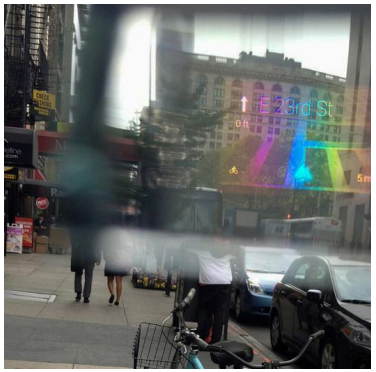
9.2
Time is a crucial parameter to manage XXI century cities, and the multidimensional plan the new representational paradigm to approach them.



9.3
Today, representing the city means, above all, simulating its urban flows: the multidimensional plan.

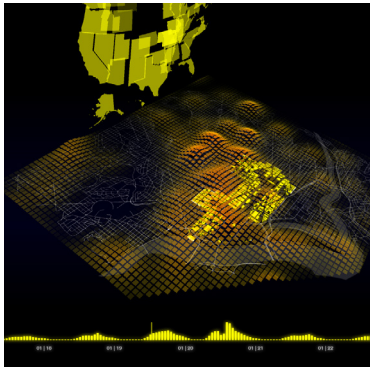


9.4
From designing urban objects to programming urban flows: The multidimensional plan.



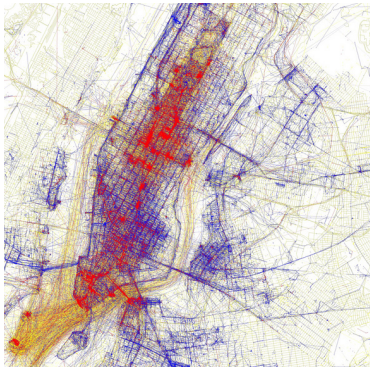
9.5
How to represent cities in the age of experience?

9.6
XXI century urban design operates through the analysis, manipulation and design of fluctuant realities: from representation to simulation.

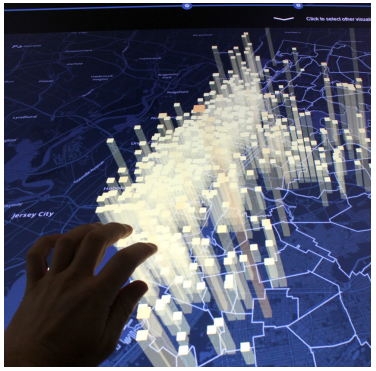


9.7
To represent the city today means, overall, to simulate its hiperespecific, ephemeral, variable, instant and interactive condition.

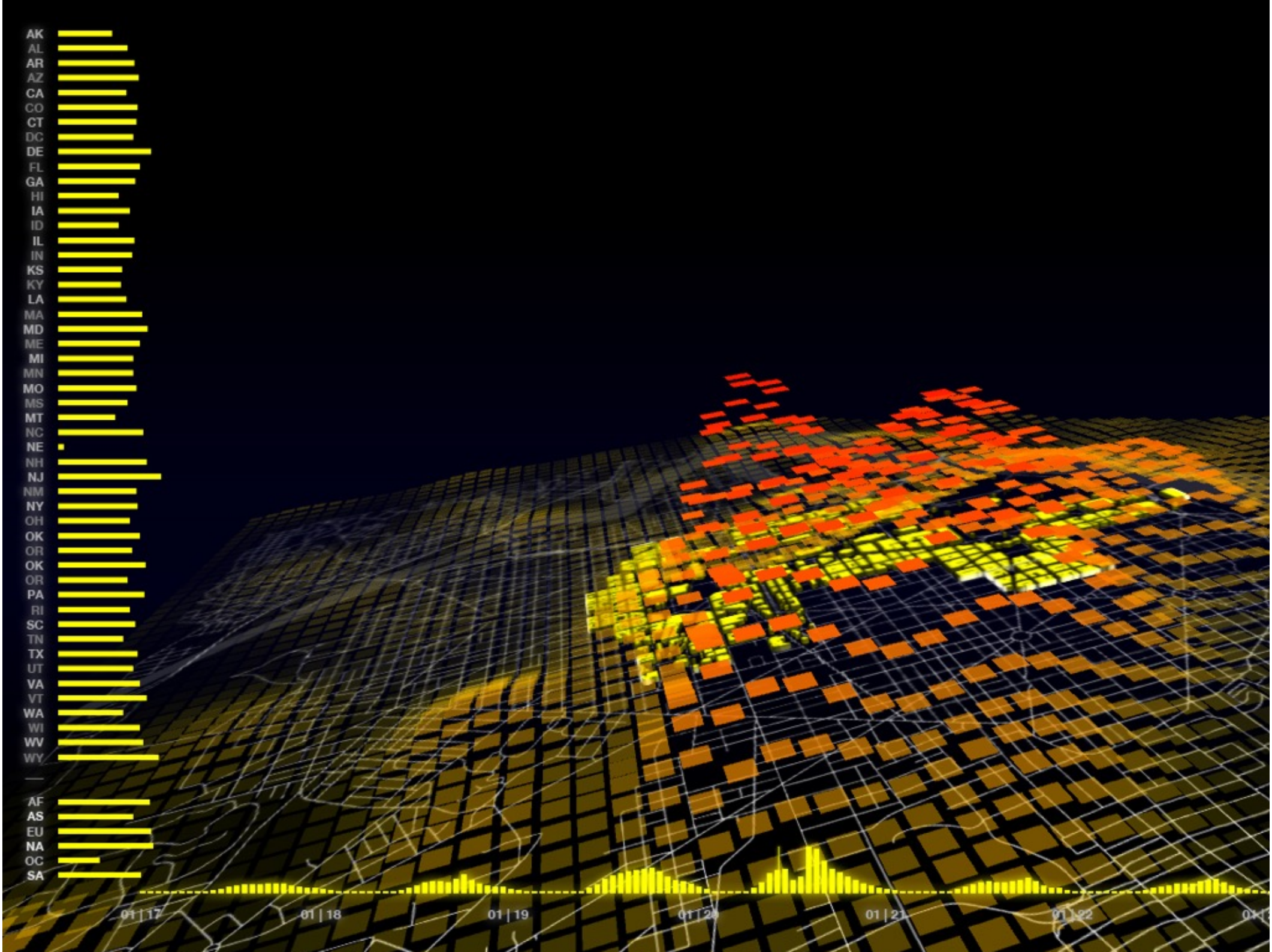
9.8
The interactiveness of the XXI century cities requires new dynamic documents: from the map to the app.



9.9
Borders among representation and simulation are every time more diffused in the field of urban design: the multidimensional plan.



9.0
XXI century cities are not anymore represented through notational systems, but through immersive experiences: From representation to simulation.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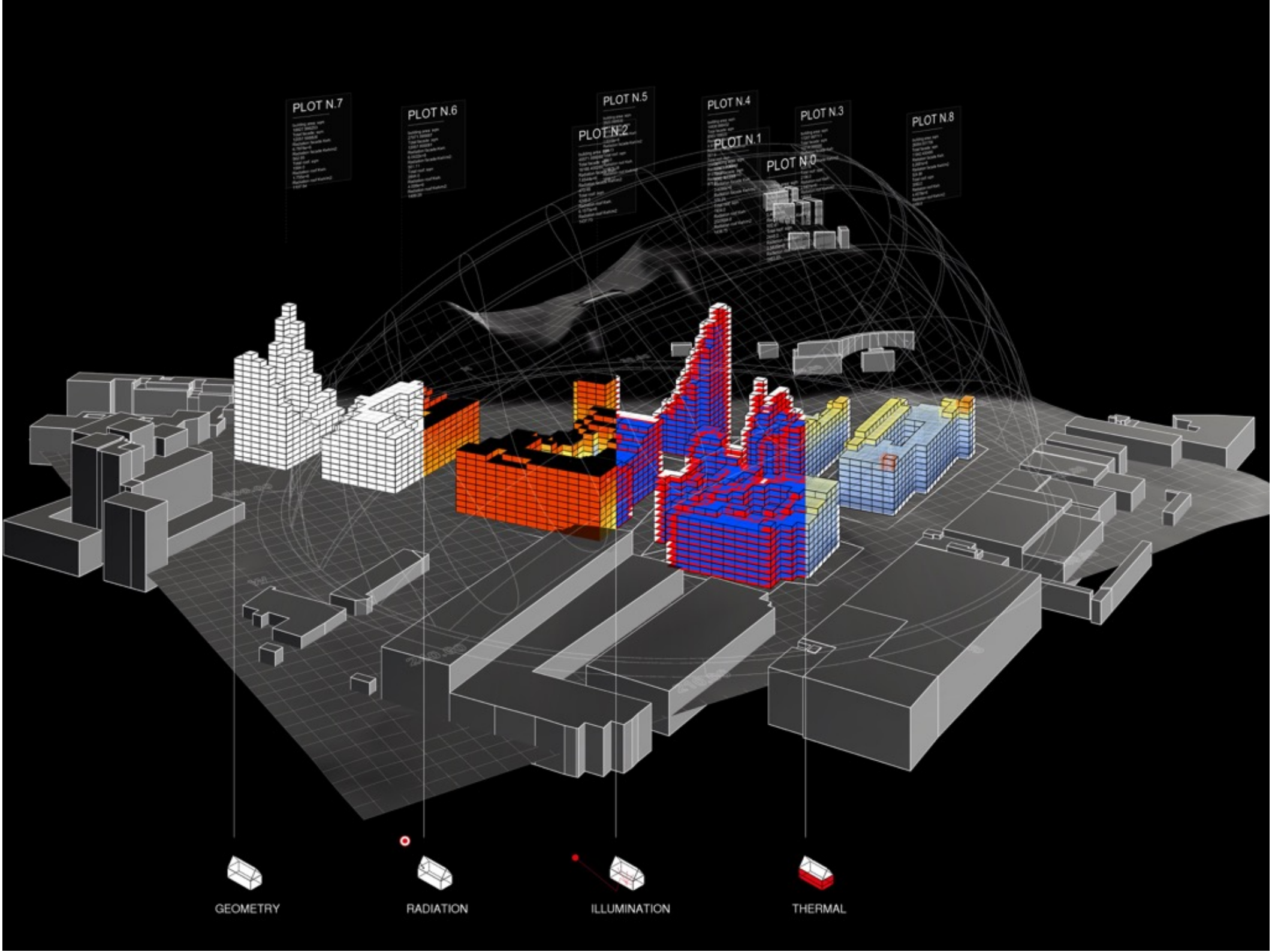
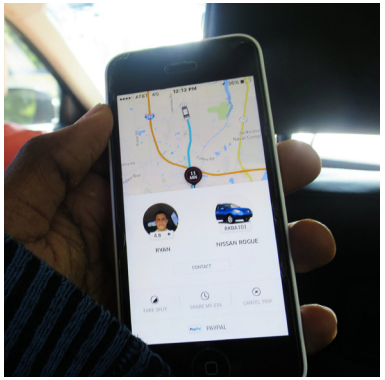
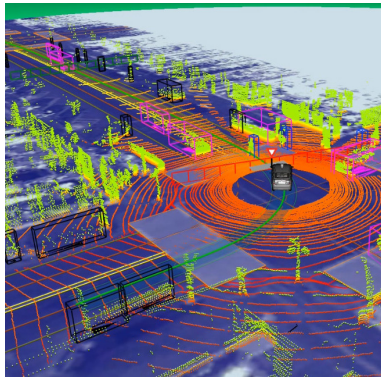

PLOT N.7
PLOT N.6
PLOT N.5
PLOT N.2
PLOT N.4
PLOT N.1
PLOT N.3
PLOT N.0
PLOT N.8
GEOMETRY
RADIATION
ILLUMINATION
THERMAL

#10 DISTRIBUTED SELF-MANAGEMENT

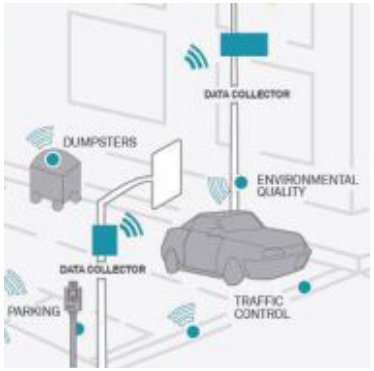
Empowering citizenship through Big Brother technologies



10.1
Is it possible to empower citizenship through the same technologies that are being used to convert cities in Big Brother environments?

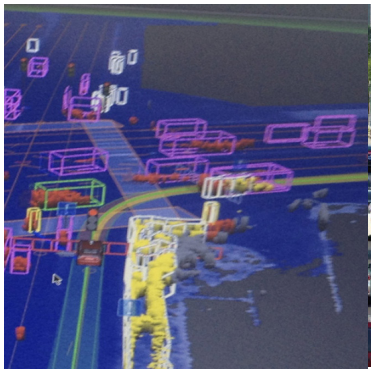


10.2
From the Bentham panoptic to the digital panoptic: how go beyond Big Brother control in XXI century cities?



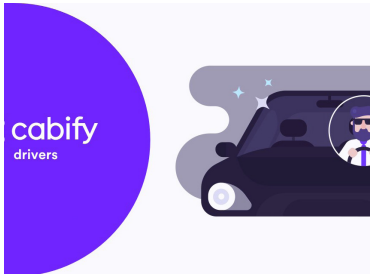
10.3
Informational technologies are being used for controlling citizens and for empowering them. How to find the right balance in XXI century cities?

10.4
Cities are becoming piloted from control rooms. How to apply these processes without oppressing the citizenship?

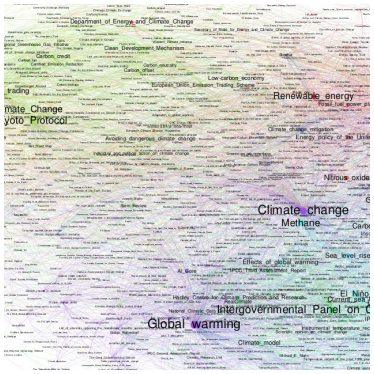


10.5
How to empower citizenship using real time data technologies?

10.6
Can advanced cities rethink democracy?



10.7
How to manage cities through dynamic and hiper-specific protocols?



10.8
Which is the right degree of control that XXI centuries cities should apply on their citizenhip through real time data technologies?

10.9
How can real time data technologies empower citizenship through participatory processes?

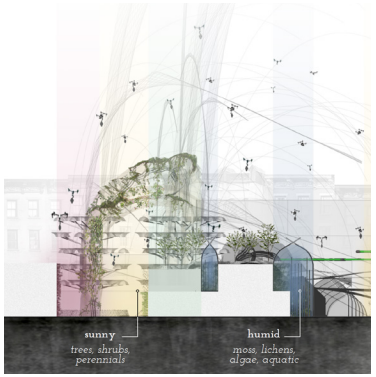
10.0
What is the role of urban design in the XXI century in relation to the empowerment of citizenship?

LA CRISIS
ES EL
CAPITALISMO

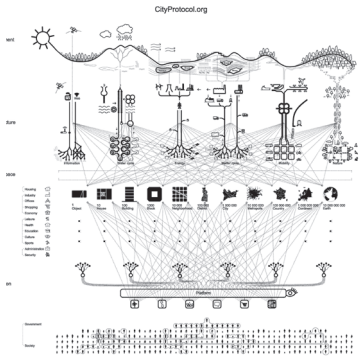
Planos
Programas
Projetos
Pilotos

#5 CITY METABOLISM

Operative natures for urban environments

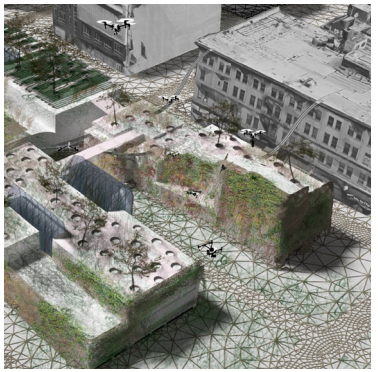


5.1
How to incorporate green space in congested cities as Hong Kong?



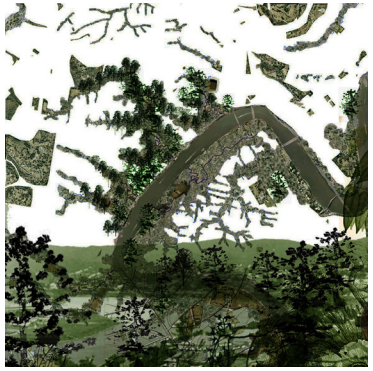
5.2
In the XXI century we are moving from a contemplative nature to a performative nature. How to introduce this paradigm shift in our urban design strategies?

5.3
Today we are able to deeply manipulate natural processes and produce artificial greeneries. How could we introduce it in the congested cities of the XXI century?



5.4
Can we design cities as metabolic systems?

5.5
Infrastructures, public space, information, citizenship conform a complex urban metabolism, whose design requires new radical strategies of renaturalisation.

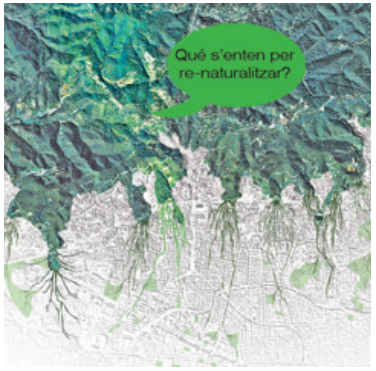


5.6
Urban nature cannot be reduced nowadays to mere a contemplative resource. How to design performative urban natures for our XXI century cities?

5.7
Green space has been read since industrial revolution as a healthy harmonious space. How to accelerate it through urban design?

5.8
Urban natures need to operatively engrane with city flows as temperature, pollution, water, humidity in order to keep their relevance in XXI century cities.

5.9
How to design in the XXI century operative natures that can contribute to the welfare of our contemporaneous cities?



5.0
How to move in urban design from green ecology based on nature to expanded ecologies that include as well socio-technological agents?

DESAFÍOS

PARA UMA AGENDA METROPOLITANA