THE LABORATORY_CITY:
SUSTAINABLE RECYCLE
AND KEY ENABLING
TECHNOLOGIES

EDITED BY
CONSUENO NAVA
For the younger generations of South

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Photos by:  
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WORDS
AUGMENTED CITY
IS WHERE
THE IDEAS HAVE SEX:
URBANISM AS CONNECTION

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The city has been the best place to live because allowing a community life that build fruitful relationships, generate fertile synapses, producing new economies and accelerating innovation. In his history of innovation, Steven Johnson draws on seven centuries of scientific and technological progress to show what sorts of environments nurture creativity.

He finds that great creative environments are like coral reefs, teeming of diverse colonies of creators who interact with and influence one another, because in nature cooperation is just as important as competition. That is the secret of the coral reef model: everything is recycled in a limited space on a matrix of raw material (the calcium carbonate built up by the coral). It’s the ultimate example of “bootstrapping”: a self-sustaining process able to proceed without external input.

So, we are conscious that the key to both natural, social and technological evolution is bricolage: recycling spare parts, taking an object from one context and placing it in another. And the most creative environments are those that create a platform for innovation, allowing the greatest number of spare part add-ons, resources to recycle, raw material to remake.
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So, we are conscious that the key to both natural, social and technological evolution is bricolage: recycling spare parts, taking an object from one con-text and placing it in another. And the most creative environments are those that create a platform for innovation, allowing the greatest number of spare part add-ons, resources to recycle, raw material to remake.
The city is the best place where several innovation could find necessary tangible/intangible re-sources, as long as it able to recover his propensity for creativity and collective intelligence.

Cities as powerful creative habitats “are platforms to open do-ors to the adjacent possible” (Johnson, 2010) and each new urban innovation opening up new ideas to explore.

What is it that leads to innovation nature, technology or cities?

In my opinion and in my experience as urbanist it’s the sharing of ideas and building upon them. Matt Ridley describes it as “ideas having sex”, arguing that socio-econo-mic growth comes from the collision of information and new ideas, shared openly.

“The secret of the modern world is its gigantic interconnectedness. Ideas are having sex with other ideas from all over the planet with ever-increasing promiscuity. The telephone had sex with the computer and spawned the Internet” (Ridley, 2010).

So, if innovation is a fertile connection of elements, and urbanism needs to be an effective connection enabler, then I want introduce the concept of **Augmented City as the best place where ideas have sex**: it has to be planned and created to facilitate the fertile collision of ideas and people, of identity and innovation.

The Augmented City is a post-technological smart city, it’s a human smart city. An Augmented City is a connecting device for the sustai-nable city and it can be considered a vibrant organism which connects pla-ces and services, data and information, local and global economic resources, social sensors and actuators, in a permanent human and urban metabolism.

Cities were born and have resisted all alternative proposals – and the storms of post-urban – becoming the prevalent form of human settle-ment due to their ability to continually create a platform for innovation, allowing the greatest number of spare part, offering recyclable materials with which to build new relationships, or semi-finished places on which to
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The Augmented City is a post-technological smart city, it’s a human smart city. An Augmented City is a connecting device for the sustainable city and it can be considered a vibrant organism which connects places and services, data and information, local and global economic resources, social sensors and actuators, in a permanent human and urban metabolism.

Cities were born and have resisted all alternative proposals – and the storms of post-urban – becoming the prevalent form of human settlement due to their ability to continually create a platform for innovation, allowing the greatest number of spare part, offering recyclable materials with which to build new relationships, or semi-finished places on which to complete the process of metamorphosis (Carta, 2014).

To improve the effects of the connecting urbanism, I have set up ten keywords able to reset the urbanism and spatial planning for reimagining the Augmented City – in spatial, social and economic sense – in face of the 21st century challenges (Carta, 2016).

First an augmented city is Sentient because it needs new values, skills and tools for renewing a knowledge-based and solving-oriented urbanism in a well-timed collaborative scenario.

And it’s thus also based on Crowdsourcing, because needs for a civic-tech-urban structural alliance in the Sharing Society we live, able to generate new opensource space: meeting places and housing, social infrastructure and places of co-work and then triggers a renewed community covenant that reacts-vates the constituent factors of urban life (Ratti, 2015).

An augmented city is Intelligent – more than smart – because it can generate an enabling ecosystem based on the hardware of better urban spaces, on the software of the active citizenship, but overall on an urban operative system for an advanced city planning and design.

The fourth keyword is Productive because next cities need to frame the powerful makers movement within a new the creative/productive urban ecosystem for improving the manufacturing renaissance in the cities based on the new artisan economy (Anderson, 2012), for reconstituting an essential economic base of the city, after years of euphoria for city as services.

But the city will also be more and more Creative through the integrated use of culture, communication and cooperation (3C of the creative city) as resources for an active city can generate a new form and a different growth based on identity, on the quality and reputation (Carta, 2007).

An augmented city is Recycling-based and asks for a paradigm shift for metamorphosis cities that not only reduce, re-use, re-cycle their tangible and intangible resources, but design a new circular metabolism, by including the planned recycling between the components of the project.
Thus it is **Resilient**, that means accepting the task for adaptive, circular and self-sufficient cities for winning the climate change challenge, producing and distributing effectively the “resilience dividend” (Rodin, 2014): an instrument of urban ecological equalization in the economy of the transition to decarbonised development.

The eight keyword is **Fluidity** because asks to rethink porosity and fluidity as projective paradigms for urban regeneration projects that derive by water their charge of identity, producing new spatial configurations from renewing interface port-city not as place-threshold but as a producer of powerful urban identity (Carta, Ronsivalle, eds. 2016).

In the metropolitan scenario, the **Reticularity** defines the process from a traditional ecosystem and gravitational model to a new and more effective me-tropolitan super-organism and archipelagos.

Last but not least, an Augmented City is **Strategic**, regarding the need of a multi-domain approach and a time-oriented action, less consumer and more producer, able to activate several cycle to reactivate districts, cities and lands.

A new strategic approach, less financial and more cooperative, more metabo-lic and less occasional, asks for a new protocol for urban regeneration, which I called Cityforming© Protocol (Carta, Lino, eds., 2015), based on a system of incremental colonizing tactics, open source consolidations and development projects, preferring an approach by strategic masterprogram rather than a rational-comprehensive masterplan.

These ten keywords will define a rich cloud of meanings, tools and good prac-tices useful to recognize and define the existence of the arising urban para-digm shift: the Augmented City, that improves its material and immaterial resources, that strengthens its collaborative spaces linking them with the net worked community.

A city that senses and acts by its wide and deep networks of human sensors and civic actuators, of technologic devices and smart citi-zens, of politic leadership and technical skills.
An Augmented City must be a disruptive/reconstructive innovation in city planning, a visionary/pragmatic paradigm of urban regeneration and an open/circular approach in everyday life.

References