Towards resilient urban ecosystems

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Background:
With currently more than 50% of the world’s population living in cities, nearly 80% of humankind is expected to be urban in the next 50 years. Climate change, oil depletion, food & water crisis combined with a metro-world are more than challenges for sustainable development. Results of the Millennium assessment, warnings from the scientific community and events as the Katrina amongst others have raised awareness on the issue of urban resilience. Cities like London have already their resilience plan, mainly focused in dealing with emergencies. But has anybody actually measured the resilience of our cities? What is being done in this field? Why is resilience thinking important? Can it, and how, provide the opportunity for rethinking urban environments?

Results: New communities, originally marginal, are creating emerging forms of social urbanism based on resilience thinking, such as the Transition towns movement and DRIFT (Dutch Research Institute For Transitions). Academic and scientific entities such as the Stockholm Resilience Centre or the Resilience alliance are working on implementing resilience as a potential framework to make possible sustainable development. New forms of visualization and social networks empowered via internet are enhancing resilience through real-time, multilateral analysis of the urban environment. The understanding of cities as social ecosystems is deepening even from official institutions that want citizens to actively participate in urban planning decisions. Cities act with their growing, state-independent networks, while there’s an extraordinary amount of organizations that combine social justice and environmental awareness in their credo and create their own communities. All evolve in nested networks, impacting politics and urbanism. But when it comes to urban planning, the methodology is antique. Proposals are either revivals or imaginative cities that need billions in financing and extraordinary power and political decisions. In addition to thinking how to create new cities, we should look as well at cities growing fast, especially informal cities, the slums housing millions of people around the world; and analyze their resilience.

Conclusions: Resilience thinking offers an opportunity in a world where global threats are taken more seriously. Beyond the field of traditional sustainability applied to construction, resilience thinking is necessary to make our living environment potentially human, considering that we have today the tools to gather massive, real-time amounts of data from our environment. Existing resilience should be brought to light as objective data making possible faster, organic decision-making when it comes to urban planning.