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**Transition Towns as new frontier for urban sustainability.
Challenges and opportunities for resilient communities**

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This research paper suggests a different disciplinary approach to the theme of urban sustainability, in light of its various environmental, social, economic, spatial, cultural and ecological connotations.

An innovative and possible frontier it's represented by the Transition Town Movement (better known as *Transition Towns*¹) that, for some years now, it's spreading like wildfire around the globe.

The challenges posed by the movement, bring new hope and real answers, from a local dimension to many global problems like peak oil and climate change.

This analysis, attempts to highlight the potential of this unique approach to social, economic, environmental and space dynamics, which, by implementing a method with a strong holistic and systemic character, seeks to promote innovation and a deep change of today's identity society, as well as radically change the paradigms of contemporary *modus vivendi*.

The paper proposes a reading of the phenomenon, according to a scheme that is articulated substantially into two parts: *the first part*, consisting of the first three chapters which give rise to the concepts and content underlying the Transition Movement, the motivations that led to its creation and spread, the challenges posed by the movement and some of its theoretical foundations. *The second part* includes four chapters, the focus of this paper and describe innovative aspects that make the *modus operandi* of Transition Movement. Are analyzed two key themes that form the cornerstones of theoretical and practical transition thought: the concept of "resilience"² and "permaculture"³.

These themes are followed by the analysis of tools and techniques used by the Movement for ferrying operatively contemporary cities towards a gradual process of local self-sufficiency and local energy descent.

¹ **Transition Towns** aim to create self-sustaining communities, highly resilient, through energy rescheduling and relocation of the community's basic resources (food production, goods and basic services). This is due to practical proposals and projects which are based on common sense, involving bottom up processes and building a strong and supportive social network among the communities inhabitants.

² The scientist and ecologist Brian Walker defined **Resilience** as "the capacity of a system to absorb disturbance and reorganize while undergoing change so as to still retain essentially the same function, structure, identity, and feedbacks"

³ The term **Permaculture** derives from the contraction of the words "permanent" and "agriculture" and is a theory of ecological design which seeks to develop sustainable human settlements and agricultural systems, by attempting to model them on natural ecosystems. The basic assumption of this philosophy is that, it can not be evaluated food sustainability, isolating it from the context of other distinctive features of society such as economics, construction and energy.

Are also described the different types of Transition Initiatives, from local to regional and district initiatives, criteria and universally valid strategies that each community can use to address the route towards transition and resilience. Finally, are described some of the most interesting case studies.

Based on observations conducted by Transition Movement, this paper wants to strongly emphasize that, even if it is a phenomenon widely debated at an international level, the use of fossil fuels (in conjunction with the human induced climate change), has largely diminished the resilience of the planet.

Even if exist reliable statistics, what is important is that in a very small amount of time, these fossil fuels, especially oil and natural gas will be exhausted; and if humanity is not prepared for this big change, will face a cultural and economic contraction at a scale never seen before. Without fossil fuels, Earth would never have supported the growth of human population; the modern industrial agriculture, the production of goods and their distribution could never exist.

According to a theory now widespread throughout the world, *sustainability is best created by people who live into their territories and determine the way in which local resources are used*. A collective learning process, in which what is learned becomes an important heritage lies within the community.

Therefore, the subjects of "human" dimension of the settlements, environmental sustainability, the proper use of natural and unnatural resources, has generated a profound reflection both in the scientific field and in the community by promoting the spread of new science and new theories about how to shape in the most effective and efficient way the relationship between humans and between humans and nature, giving new meanings to the terms of environment, territory, city, production, resources, etc..

All these instances converge in the theoretical and practical experience of the English naturalist, Rob Hopkins, who started in 2005 the Transition Movement, which have now several communities around the world⁴: these communities are encouraged to search methods for reducing energy use and increase their resilience at all levels (food, economic, energy, etc.). From the emerging results, these Initiatives are currently the most promising way to involve urban centers (also huge once) and encouraging them to take all those required far-sighted actions, to create resilient and self-sufficient communities from oil-dependence and also capable of tackling climate change.

⁴ Updated data to September 2011, show that within the Transition Network Initiative 840 are distributed in about 34 countries, of which 382 are "officially recognized" by the network as a Transition Town, while 458 are defined as "Mullers" namely those cities which are in decision step and not yet ready to identify themselves as a Transition Initiatives.

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