

# BDC

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**Towards  
a Circular  
Regenerative  
Urban Model**



# **BDC**

**Università degli Studi di Napoli Federico II**

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## **HOW CAN URBANIZATION BE SUSTAINABLE? A REFLECTION ON THE ROLE OF CITY RESOURCES IN GLOBAL SUSTAINABLE DEVELOPMENT**

*Ana Pereira Roders*

### **Abstract**

This article is a contribution to the debate on the role of city resources in global sustainable development. It discusses the evolution of models in which urbanization is defined to be sustainable, as well as, their relation to the conservation of city resources. Further, it provides an in-depth reflection on the UNESCO Recommendation on the Historic Urban Landscape, reviewing its elaboration and implementation, both in practice and research. The results are expected to help government officials, academics, activists, or interested citizens identify and address the sustainability of urbanization, as well as, discuss the role of conservation of city resources in global sustainable development.

Keywords: historic urban landscape, city resources, sustainable urbanization

## **COME PUÒ ESSERE SOSTENIBILE L'URBANIZZAZIONE? UNA RIFLESSIONE SUL RUOLO DELLE RISORSE URBANE NELLO SVILUPPO SOSTENIBILE GLOBALE**

### **Sommario**

Questo articolo è un contributo al dibattito sul ruolo delle risorse urbane nello sviluppo sostenibile globale. Viene discussa l'evoluzione dei modelli nei quali l'urbanizzazione è considerata sostenibile, così come la loro relazione con la conservazione delle risorse urbane. Inoltre, fornisce una riflessione approfondita sulla Raccomandazione dell'UNESCO sul Paesaggio Storico Urbano, passando in rassegna la sua elaborazione e la sua attuazione, nella prassi e nella ricerca. I risultati potranno essere utili ai funzionari governativi, agli accademici, agli attivisti o ai cittadini interessati per definire ed orientare la sostenibilità dell'urbanizzazione, nonché la discussione sul ruolo della conservazione delle risorse urbane nello sviluppo sostenibile globale.

Parole chiave: paesaggio storico urbano, risorse urbane, urbanizzazione sostenibile

## 1. Introduction

The XXI century brought great challenges to contemporary urban planning. Urban population growth is unprecedentedly high, by nearly 60 million every year (WHO, 2014). Numbers are even expected to double by 2050, and triple by 2100 (Angel, 2012). Over the next 30 years, most urban population growth is expected in cities of developing countries. Without immigration (legal and illegal), the population of cities in developed countries is expected to remain largely unchanged or even decline (WHO, 2014).

The impacts of these shifts in population on cities can vary worldwide, each city carving its own model of urbanization. Many cities are expanding, others are shrinking, changing and vacating. The pace of urban population growth is speeding urban developing and that is changing our cities and their quality of life. The informal sector seems to be taking the lead, contributing to an escalation of urban sprawl and unplanned periurban development (UN, 2009). Hundreds of millions of citizens in urban areas are experiencing an increasing vulnerability towards rising sea levels, coastal flooding and other climate-related hazards (IPCC, 2007). These are few of the main challenges, contemporary urban planning is considered to have failed addressing (UN, 2009).

Compact cities have been confirmed as more sustainable than suburban sprawl or countryside settlements. They provide greater offer to society, have smaller carbon footprints and nurse more innovation (Glaeser, 2011). They also encourage more walking and cycling (Angel, 2012). Though, compact cities are also being accounted for higher levels of air pollution and heat island effects on urban population (Angel, 2012). Compact cities can be designed from scratch as the Masdar city, in Abu Dhabi, United Arab Emirates. Though often, to become compact, cities entail a process of urbanization targeting densification, where city resources get transformed and the urban dynamics intensified, reactive to the societal needs and economic strategies (Bandarin and van Oers, 2012).

Though, not all compact cities seem to be endorsing such sustainable development. There is a global concern on rapid and uncontrolled urbanization models, which are causing deep impacts on community values and city resources. These models seem to impose excessive building densities to their cities, including standardized buildings alienated from their setting and cultural diversity. They contribute to the loss of public space and amenities, inadequate infrastructure, debilitating poverty, social isolation and increasing risk of climate-related disasters. They also create social and spatial fragmentation, and cause a drastic deterioration of the quality of the urban environment and surrounding rural areas (UNESCO, 2011a).

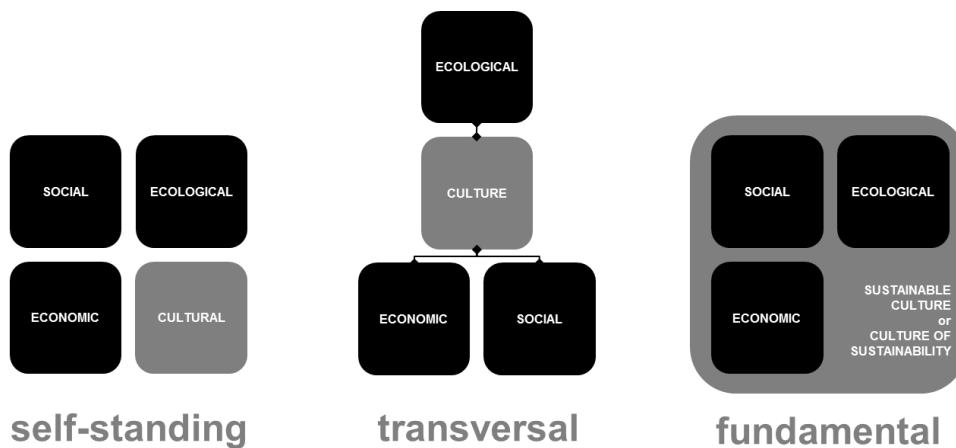
Such patterns question the validity in globally defining sustainable development as the «development that meets the needs of the present without compromising the ability of future generations to meet their own needs» (WCED, 1987), with three fundamental pillars: social, ecological, and economic. Besides remaining open for subjectivity and misinterpretation (Holden, 2006; Tanguay *et al.*, 2010), the balance between the three pillars seems to remain theoretical. Ecological and economic sustainability are considered largely prioritized over social sustainability in the sustainable development agendas and action plans, both focusing on the ecological footprint and energy consumption (Tweed and Sutherland, 2007; Shmelev and Shmeleva, 2009; Colantonio, 2009).

The role of culture in sustainable development has also been gaining attention among scholars worldwide (Hawkes, 2001; Evans, 2005; Folke, 2006; Nurse, 2007; Bandarin *et*

*al.*, 2011). O'Connor (2013) argues the need to consider culture as an aspect of sustainable development. Accordingly, «there is no context, content or process without culture». The disciplinary and cultural differences in the use of concepts – culture, sustainable and development – are considered to hamper the rise of a multi-, trans- and inter-disciplinary approach and subsequent co-creation of cross-sectorial policies.

As a result, the focus on a sustainable development, which acknowledges the role of culture, in relation to the three pillars of sustainability seems more the exception, than the rule. Soini and Birkeland (2014) report three main approaches on how culture can be integrated in global sustainable development: culture as self-standing, a fourth pillar of sustainability; culture as transversal, a driver of sustainable development; and culture as fundamental, as the culture of sustainability (Fig. 1). The strengths and weaknesses, opportunities and threats of such approaches are still much underexplored, together with the lack of a global understanding on how governments and other key stakeholders approach it in practice. Further research is much needed in these domains, but entails the close cooperation between scholars from different disciplines and governments.

**Fig. 1 – The three main approaches on the role of culture in global sustainable development**

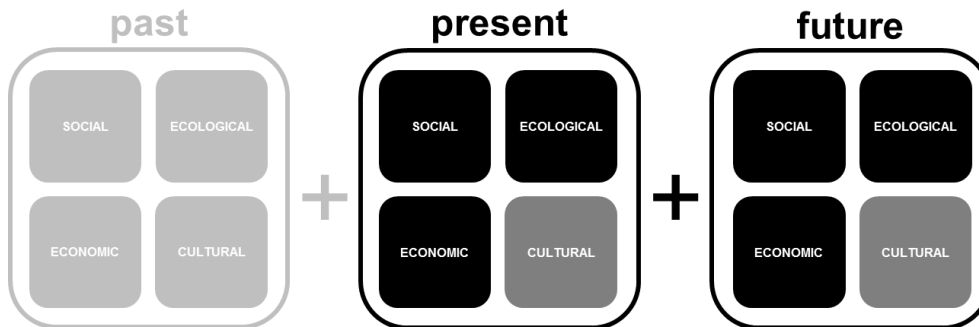


Sources: adapted from Soini and Birkeland (2014)

Apart from the disciplinary discussion on the nature of the three pillars of sustainable development, the exclusive focus on present and future needs of sustainable development also raised questions among scholars, regarding the role of the past needs and developments (Matero, 2000; Pereira Roders, 2007). Conservation, like history, is respectively seen to enroll the conscious commitment to ensure cultural continuity even where living cultural memory ends (Matero, 2000). Therefore, the level of integration conservation achieves in global sustainable development can act as an indicator on how the past and its pillars of sustainability are being acknowledged and even advanced by urbanization (Fig. 2). The models of urbanization and the level of conservation of the urban resources, seem therefore

determinant to urban development of compact cities as being sustainable, balancing past, present and future.

**Fig. 2 – The evolution on the definition of sustainable development**



This article discusses a model of urbanization that has long been fletched by academics worldwide (Evans, 2005; Palmer, 2009; Gucic, 2009; Pereira Roders and van Oers, 2011). A model of urbanization that acknowledges the three temporal dimensions of sustainable development – past, present and future – by integrating the conservation of city resources – natural, cultural, and human – into the wider goals of urban development. This model has proven to stimulate several local governments to develop culture-led urban strategies (Evans, 2005; Nijkamp and Riganti, 2008), but also, to contribute to the development of local communities and to the satisfaction of human needs (Tweed and Southerland, 2007). A model where culture is acknowledged as a driver for sustainable development, providing cities with a unique identity, in their competition for global markets (Scheffler *et al.*, 2009). Still, the model has primarily been tested in pilot projects, requiring further theorization and a broader validation before its contribution to global sustainable development can be scientifically confirmed. This is the same model, the *Recommendation on the Historic Urban Landscape* has chosen to endorse, further analyzed and discussed in this article.

## 2. The Recommendation on the Historic Urban Landscape

UNESCO (United Nations Educational, Scientific and Cultural Organization) is sensitive to the urban challenges of the XXI century and recently contributed to the elaboration of international guidelines with a non-binding “soft-law”, the *Recommendation on the Historic Urban Landscape* (hereinafter “HUL approach”), adopted in November 2011, by UNESCO’s Member States (currently 195 countries).

The HUL approach echoes an evolution in UNESCO’s approach, over the last 40 years, concerning the global conservation of resources, as well as, the shared responsibility in conserving parts of heritage considered of outstanding universal value, through the popular World Heritage list.

This evolution is felt through the UNESCO conventions and recommendations (UNESCO, 1962; 1968; 1972a; 1972b; 1976; 2005; 2011a), as well as, the ICOMOS charters

(ICOMOS, 1964; 1982; 1987; 2005a; 2005b).

Earlier approaches acknowledged urban development as one of the many dangers that can threaten the resources and to which conservation is to be reactive. Instead, the HUL approach endorses the model of urbanization that integrates the conservation of city resources into the wider goals of urban development – past, present and future.

The HUL approach was tailored for urban areas resultant from a «historic layering of cultural and natural values and attributes», including «the broader urban context and its geographical setting». Therefore, also including the site's «topography, geomorphology, hydrology and natural features, its built environment, both historic and contemporary, its infrastructures above and below ground, its open spaces and gardens, its land use patterns and spatial organization, perceptions and visual relationships, as well as all other elements of the urban structure», as well as, «social and cultural practices and values, economic processes and the intangible dimensions of heritage as related to diversity and identity» (UNESCO, 2011a). Thus, every city is a candidate to explore the potentials of the HUL approach in guiding its sustainable urbanization and it is up to the stakeholders to distinguish the city resources according to their tolerance for change, ranging from those worthwhile of conservation to those available for transformation. Tangible and intangible, movable and immovable, natural and cultural, it is up to the stakeholders to determine what to value and why, without ethical prejudices.

The HUL approach is much focused on “what is to be managed and why”, as often doctrinal documents are. Though, the six step approach (UNESCO, 2011b) even if not adopted along with the official text, does hint on a roadmap on how the HUL approach could be implemented in cities, within their specific contexts. In brief, the city's resources are mapped, distinguished according to the values they convey and vulnerability to change agents e.g. climate change and urbanization. That allows for their inclusion in the city development strategies and action plans, while establishing partnerships and local management frameworks, variable per project, depending on the involved actors and aims.

The six steps of the HUL approach (UNESCO, 2011b) are the following:

- to undertake comprehensive surveys and mapping of the city's natural, cultural and human resources;
- to reach consensus using participatory planning and stakeholder consultations on what values to protect for transmission to future generations and to determine the attributes that carry these values;
- to assess vulnerability of these attributes to socio-economic stresses and impacts of climate change;
- to integrate urban heritage values and their vulnerability status into a wider framework of city development, which shall provide indications of areas of heritage sensitivity that require careful attention to planning, design and implementation of development projects;
- to prioritize actions for conservation and development;
- to establish the appropriate partnerships and local management frameworks for each of the identified projects for conservation and development, as well as to develop mechanisms for the coordination of the various activities between different actors, both public and private.

**Tab. 1 – Aims and objectives of the four main groups of tools proposed in the HUL approach**

	<b>Civic engagement tools</b>	<b>Knowledge and planning tools</b>	<b>Regulatory systems</b>	<b>Financial tools</b>
<b>Aims</b>	<ul style="list-style-type: none"> <li>• facilitate intercultural dialogue;</li> <li>• learning from communities about their histories, traditions, values, needs and aspirations;</li> <li>• facilitate mediation and negotiation between groups with conflicting interests;</li> <li>• constitute an integral part of urban governance dynamics</li> </ul>	<ul style="list-style-type: none"> <li>• help protect the integrity and authenticity of the attributes of urban heritage;</li> <li>• allow for the recognition of cultural significance and diversity;</li> <li>• provide for the monitoring and management of change;</li> <li>• improve the quality of life and of urban space</li> </ul>	<ul style="list-style-type: none"> <li>• recognize and reinforce as necessary traditional and customary systems</li> </ul>	<ul style="list-style-type: none"> <li>• building capacities and supporting innovative income-generating development, rooted in tradition;</li> <li>• complement government and global funds from international agencies</li> </ul>
<b>Objectives</b>	<ul style="list-style-type: none"> <li>• identify key values in their urban areas;</li> <li>• develop visions that reflect their diversity;</li> <li>• set goals, and agree on actions to safeguard their heritage;</li> <li>• promote sustainable development</li> </ul>	<ul style="list-style-type: none"> <li>• document and map cultural and natural characteristics;</li> <li>• use heritage, social and environmental impact assessments to support and facilitate decision-making within the framework of sustainable development</li> </ul>	<ul style="list-style-type: none"> <li>• reflect local conditions;</li> <li>• include legislative and regulatory measures aimed at the conservation and management of the tangible and intangible attributes of the urban heritage;</li> <li>• include their social, environmental and cultural values</li> </ul>	<ul style="list-style-type: none"> <li>• foster private investment at the local level;</li> <li>• support local enterprise with micro-credit and other flexible financing a variety of models of partnerships, are also central to making the historic urban landscape financially sustainable</li> </ul>

The HUL approach refers to varied stakeholder groups involved in the urbanization of cities. All levels of government – local, regional, national – can contribute to the definition, elaboration, implementation and assessment of the HUL approach. Policy planning and practices can be developed in line with the governmental strategies and agendas, following a participatory process where all interested stakeholders, institutional and sectorial, can share their viewpoints. Those include public and private stakeholders, but also International

organizations, as well as, National and international non-governmental organizations. Four main groups of tools are proposed to assist the implementation of the HUL approach: civic engagement tools; knowledge and planning tools; regulatory systems; and financial tools (Tab. 1). Their aims and objectives seem distinctive. Yet, their integration is crucial for the success of this landscape approach. After all, communities can indeed have an active role in the sustainable development of their cities, though, they also need to be supported by efficient planning and policies, as well as, provided with the opportunities to generate the financial means to materialize their ambitions and contribute to quality of life and of urban space.

Given the HUL approach is a non-binding “soft-law”, the implementation to their national contexts each UNESCO Member State has agreed to adapt, disseminate, facilitate and monitor (UNESCO, 2011a; Veldpaus *et al.*, 2013a), seemed worthwhile to provide an overview already two years after its official adoption, to trace early adopters and their challenges and preliminary findings.

### **3. A tool for sustainable urbanization**

Even though the adoption of the HUL approach by UNESCO Members States is less than three years ago, the academic and practical exploration on its potentials as a tool for sustainable urbanization worldwide, started already while the HUL approach was being drafted (van Oers, 2010).

As part of an official program, UNESCO undertook several field activities prior to 2011. The first workshop took place in Baku, Azerbaijan, in 2010, at the request of, and financially supported by, the Administration of Icheri Sheher, the local authority responsible for the management of Baku’s World Heritage. Azerbaijan has become one of the world’s fastest-growing economies due to its oil wealth and is aspiring to become a prominent capital of Europe and Central Asia. Such ambitions imply major planning and design schemes, as the promenade along the Caspian Sea, the modernization of electrical grids and transportation (van Oers and Pereira Roders, 2012). Kingsbury (2010) raised concerns on the development driven by entrepreneurial spirit and market thinking, with models of urbanization with great impact, direct and indirect, on the city’s resources, including its urban heritage.

Furthermore, three training workshops were organized, with financial support of the Flemish Government, on the concept and application of the HUL approach for local authorities in three cities on the Swahili Coast in East Africa, being the Island of Mozambique, Lamu in Kenya, and Stone Town, Zanzibar, in Tanzania. These cities are also exposed to ambitious development plans for the East African Community, which has become among the most vibrant economic regions in the world.

With capacity building and research as leading components of this initiative to explore the potentials of the HUL approach in steering sustainable urbanization, UNESCO established cooperation with international and local universities and educational institutes on the Swahili Coast, during the workshop and implementation of identified follow-up activities. The results were shared with an international public, through an abridged report (UNESCO, 2013); but also, during a two-day international colloquium on *World Heritage Cities in the 21st Century*, organized by the City of Bruges and the Flanders Heritage Agency in 2012. Since 2011, international expert meetings and training programs have periodically been organized by the World Heritage Institute of Training and Research for Asia and the Pacific

(WHITRAP) in Shanghai, China. The HUL approach was already discussed in the context of all UNESCO regions (WHITRAP, 2013), involving UNESCO Members States as Brazil, China, Australia, United Kingdom and Dubai. A hand full of pioneer cities as Zanzibar, in Tanzania; Ballarat, in Australia; Rio de Janeiro, in Brazil, Naples, in Italy; and Beirut, Lebanon; seem to be taking the lead in exploring and enriching the HUL approach.

The URBACT, an European exchange and learning programme promoting sustainable urban development has recently financed two projects talking the implementation of the HUL approach. Heritage as Opportunity (HerO), led by Regensburg, Germany, developed a new management approach designed to enable cultural heritage to act as a catalyst for sustainable development through the preparation of Integrated Cultural Heritage Management Plans, tested through 19 pilot projects in 9 cities.

Management of Cultural Heritage in the Central Europe Area (Herman). Led by Eger, Hungary, joined 9 cities, to “moving from conservation to management” and promote improved and sustainable management strategies for cultural heritage. Though, many more cities are expected to follow considering the growing number of cities taken as case study by scholars, teaming up with governments worldwide.

The HUL approach has already been analyzed at varied levels; locally, in cities as Liverpool (Rodwell, 2008), Amsterdam (Bruin *et al.*, 2013), Edinburgh (Bennink *et al.*, 2014) and Naples (De Rosa and Di Palma, 2013); nationally, in Chinese cultural, political and social contexts (Xu, 2014); regionally, in Asia (Chandler and Rellensmann, 2011) and East African contexts (UNESCO, 2013); and even, cross regionally, in Port cities/areas (Fusco Girard, 2013). Particularly, the HUL approach has been contextualized to the evolution of cultural landscape theories and World Heritage cultural landscapes (Xu, 2014), as well as, to the evolution of heritage and urban planning theories (Jokilehto, 2010; Sonkoly, 2011; Veldpaus *et al.*, 2013a; Martini, 2013). The HUL approach was considered to enable the integration of conservation and planning (Fusco Girard, 2013; Xu, 2014), throughout the strategic, planning, design and management levels.

#### **4. Discussion and conclusions**

The HUL approach is confirmed to stimulate a cultural-led planning approach to local development, creative and resilient solutions. It promotes a trans-disciplinary perspective, attentive to both the part and the whole, to specific interests and to common goods (Fusco Girard, 2013). An urbanization model based on specific cultural resources, and not only on technological innovations. From a circular perspective, the HUL approach puts all aspects in a holistic/systemic view, by linking the old with the new, past and present, present and future, intrinsic values and instrumental values, private spaces and public spaces (Fusco Girard, 2013).

Direct parallels are made between the HUL approach and the Council of Europe Faro Convention (CoE, 2005), for their potentials as prototypes to enable the development of legal models fostering the cohesion of human rights to the city, rights to cultural heritage, and conservation of city resources inherent to historic urban landscapes (Markevičienė, 2011).

The need for new evaluation tools and a widespread “evaluation culture” to enable the implementation of the HUL approach (Fusco Girard, 2013), is being endorsed by scholars as Xu (2014) and Veldpaus *et al.* (2013b) who developed theoretical frameworks, to explore the application of the HUL approach. Xu (2014) tested the framework in cities in



China. The framework has three main themes and several sub-themes embracing dimensions such as perception of landscape, land-use, ways of life, spiritual or social-economic associations with landscape, and tools which can be used for identification of values. Veldpaus *et al.* (2013b) tested the framework in two European case studies, Amsterdam and Edinburgh. The framework has four main themes: object, values, actors and tools.

A more global assessment on the application of the HUL approach is still to be developed. This could surely benefit from the in-depth scrutiny from the case studies so far explored. Though, they are still too limited and alienated to allow global conclusions. Platforms as UN-Habitat and UNESCO, together with leading universities in developing global monitoring systems focused on city resources, have a role to play over the next decade in revealing and discussing the sustainability of urbanization models cities will be endorsing to pursue their visions on sustainable development. A global observatory on historic urban landscapes is needed, to allow a scientific debate fed by facts, concerning the sustainability of urbanization models, but also the role of culture in global sustainable development.

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