

## Chapter 4

# Cities, Knowledge Flows and the New Commons: A Knowledge System for Monterrey, Mexico

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### ABSTRACT

*This chapter aims to outline the central notions of the Knowledge-City paradigm in which a recent innovation commons development provides a complex perspective of the interdependencies between the many and diverse dimensions of urban value categories that co-exist in the northern city of Monterrey, Mexico, within the Mexico-Texas Borderland. It will focus on an integrated perspective of knowledge (intangible) capitals that are leveraged for city value-generating processes. Such focus will serve as the basis for theorizing on transformations of socially networked environments - e.g., knowledge networks, hubs and clusters, networked cities, and similar concepts that could eventually become knowledge commons under certain conditions. Monterrey's recent developments under the flag of Knowledge City models could shed some light in the way clustering processes are perceived, resulting in a thorough, honest and integrative case of where the city stands in its own terms comparable to other city-regions with knowledge-based aspirations.*

### INTRODUCTION

According to some observers (Pór, 2017), we are in a year of renewal, in a period of collective self-reflection practices at increasing scale, from communities to organizations, to societies and global systems. Most importantly, we are on time for a new Social Contract (Burrow, 2018). This might be a direct consequence of 2017 being a year when “indications of uncertainty, instability and fragility proliferated” (Burrow, 2018). By confronting such reality, one could ask how people across different social and economic groups are currently coping with life-transformative events at a global scale.

DOI: 10.4018/978-1-5225-5448-6.ch004

From the Knowledge-based Development (KBD) fieldwork, an unyielding promise to preserve and improve the wellbeing of society might arise as an answer to this and other poignant questions. KBD seemingly enables citizens to leveraging knowledge to create value as their backbone to influence and improve key factors like mobility & immigration, environment, human rights, quality of life and governance. However, in the context of the Knowledge Economy, it has been argued that for a city-region to experience sustained development, it has to link research and manufacturing activities — namely, innovation and production — in the same place. This unassuming proposal can be an unwelcomed challenge for many regional economies, as some studies show (Inman, 2018). It can therefore be argued that a new approach to city-region planning and development is needed: one that include fostering innovation and manufacturing through small firms and civil society organizations (CSOs) (Clark, 2013). In these emerging models, learning and knowledge-generating activities are turning into a life-long process for knowledge, skill, and expertise acquisition and, additionally, for strengthening people's meta-cognition abilities within the now called knowledge-generating spaces, knowledge *milieux*, techno-ecosystems or Knowledge Innovation Spaces (KISs).

In such context, the first part of this chapter attempts a literature review and reflexion on how knowledge agents and actors engage in learning interactions in contexts that can eventually become knowledge-generating spaces. Under this scope, knowledge systems are seen as a prerequisite for Knowledge Innovation Spaces (KISs) to emerge. Such scope will serve as the basis for theorizing on transformations of socially networked environments – e.g., knowledge networks, hubs and clusters, Living Labs, virtual communities etc. And how knowledge networks, under certain conditions, have evolved to become the *New Commons* (Kilpi, 2015). The chapter will then advance that emerging economic systems, such as the Commons Economy (CE) are developing social structures that have the capacity to allocate resources that do not involve any specific reciprocity between individuals, but only between the individuals and the collective resource (Hess & Ostrom, 2007).

The key to advance knowledge-based urban development (KBUD) practices, is to foster learning interactions, particularly social learning facilitation in informal and formal networks. They could become spaces for conversations where knowledge is transformed into value within an ecosystem that eventually would benefit the city and its citizens (Carrillo, 2004). This review will be followed by a deeper inquiry on the role of knowledge networks, on how they add value to innovation processes through access negotiation, autonomy and participation, and how they actually create innovation infrastructure. The fourth part of the paper will introduce and discuss a regional case of knowledge network building process, in which KISs could become the kind of networked knowledge that builds a case for sustainable development. Some explorations are already in place through models such as the Transformative Communities of Practice or TCoPs (Pór, 2018), and through composed discussions on issues of the Anthropocene (Carrillo, 2015).

## **KNOWLEDGE, NEW COMMONS AND NEW TERRITORIES**

In knowledge-intensive settings, social forms, spaces and shapes have emerged in which knowledge seems to flow through its social scaffoldings. Notions like Living Laboratories (Living Labs), incubators or social art spaces have been identified (Wenger, White & Smith, 2009). However, for the purposes of this chapter, a focus has been placed on knowledge networks (as knowledge commons) and clusters, as they closely relate to the networks describe in previous paragraphs.

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