Preface

CONTEXT

This book and its twin volume, *Knowledge for the Anthropocene*, are part of our current work at the World Capital Institute (WCI) to evolve the fields of Knowledge-Based Development and Knowledge Cities into those of Knowledge for the Anthropocene and City Preparedness for the Climate Crisis. The choice faced by the WCI mirrors that faced by individuals and organizations in their daily experience in coming to terms with Anthropocene realities as the single most pressing issue of our age and the need to re-invent our lives accordingly.

Both volumes work as mutual companions and together add to a conceptual and practical approach towards living in the Anthropocene. These two volumes carry a formal symmetry, while the contents are quite specific to each. The original selection of topics for both volumes was based on prior work that led to the ongoing transformation of WCI work.

The World Capital Institute is an independent international think- and do-tank “whose purpose is to further the understanding and application of knowledge as the most powerful force for positive development” (WCI webpage at www.worldcapitalinstitute.org). For that purpose, it has created and internationally promoted the discipline of Knowledge-Based Development (KBD) and its application to urban development under the better-known category of Knowledge Cities. KBD and Knowledge Cities aim at a balance of all collective capital forms (both tangible and intangible) in the evolution of human activity for now and the future. Under this perspective, the main societal performance benchmark is not monetary mass increase (GDP) but the improvement in the social and economic wellbeing of citizens and respect for our planetary ecosystems. The bulk of the literature on Knowledge Cities has been led by WCI associates and the leading journal in the field, the *International Journal of Knowledge Based Development* (IJKBD), an offspring of WCI, was created and continues to be edited by prominent WCI members. Additionally, the WCI has convened for over a decade, the main annual conference on KBD and K-Cities: The Knowledge Cities World Summit (KCWS) as well as hosting the annual Most Admired Knowledge City Awards (MAKCi).

Knowledge-based Development (KBD) evolved from the fields of Knowledge and Intellectual Capital Management at the organizational level to the wider realm of societal value and knowledge base. KBD focuses on the intangible (or ‘knowledge-based’) collective value, that is, all those forms of capital beyond the traditional financial and physical assets that can leverage social development (Metaxiotis et al., 2010). Hence, KBD has been defined as “the collective identification and enhancement of the value set whose dynamic balance furthers the viability and transcendence of a given community” (Carrillo 2014: 416).

The promise of KBD has been to contribute to the understanding and design of human coexistence in knowledge-intensive societies. Such understanding involved a major challenge for it implied coming to terms with knowledge as a natural and behavioural phenomenon as well as with its economic implications. Advancing on this endeavour helped to set up an agenda for knowledge societies beyond economic productivity, aiming at a qualitative evolution in the human condition.

But if KBD is about net future social value and related human preferences, then the realities of the Anthropocene, as Naomi Klein would have it, put our whole value systems in perspective (Klein 2015). Therefore, the WCI has increasingly shifted its focus over the last years to the knowledge implications of the Anthropocene. In particular, it has paid attention to two key concerns that provide continuity to its developmental and urban traditions: (a) what is the social role of knowledge and what new shape might it take as the realities of the Anthropocene unfold? And (b) how can cities be best prepared to deal with the upcoming challenges of the climate crisis?

This move is highlighted by the recent ‘Anthropocene Turn’ as described by an editorial of the *International Journal of Knowledge-Based Development* (Carrillo 2019).

With the ever increasing urgency to address the climate crisis, this book on City Preparedness is not only a timely contribution to knowledge but shines a light on the role that cities can and must play for the benefit of their citizens and the planet. The chapters include aspects of adaptation and mitigation, as well as examples of radical transformation and intra/inter-urban agency. While a diversity of approaches and perspectives has been welcomed and actively encouraged, the concept of values-based progress as an integrative framework resonates through several chapters and builds strongly from the concept of Knowledge Cities as developed at the World Capital Institute since the year 2000. A Knowledge City can be defined as “A permanent settlement of relatively higher rank in which the citizenship undertakes a deliberate, systematic attempt to identify and develop its capital system in a balanced, sustainable manner” (see, e.g., Carrillo 2004, 2006). The concept of knowledge cities has been researched, developed, and launched into practical application

across the world, helping cities not only to adapt to their emergence from post-industrial economies, but providing a valuable framework and platform from which to manage rapid change (Carrillo et al., 2014; Yigitcanlar et al., 2012; Yigitcanlar, 2014; Edvardsson et al., 2016). The growing international community of interest and practice has met annually at the Knowledge Cities World Summit (KCWS), for more than a decade in cities across the globe from Latin America to Europe and from Australia to Asia. Annually also, the Most Admired Knowledge City Awards (MAKCi) have been carried out through a Delphi Consultation, with a set of international experts (Carrillo 2007; Garcia 2008, 2010, 2012), that in turn provided data for quantitative analyses and model testing (Garcia & Leal-Garza 2010; Garcia-Meza & Leal-Garza 2012; Leal-Garza & Garcia 2012). In terms of the formal elements that constitute a scientific discipline (Ben-David 1971), Knowledge-based Urban Development and its framework of the Knowledge City became a field on its own. The conferences and awards have brought together academic researchers, practitioners, city leaders and policy makers to share knowledge, learn from each other's experiences and drive innovation. This reflects the very paradigm needed if we are to prepare cities to meet the demands of the climate emergency.

BOOK PLAN

This book likewise brings together a wide spectrum of scientists, philosophers, activists, decision-makers, and humanists to tackle important and difficult questions from a transdisciplinary perspective. The content structure is aimed at a general academic audience, rather than the specialists of each particular field. Even for specialists, the interest and value of this work lies in the interconnections that are made possible by the mosaic of data, theories, cases, models, methods and experiences collected in this book. Those interconnections will be underscored by a general conclusion, emphasizing some of the links as they emerge from the joint reading of all chapters. Individually, each chapter serves as reference to a specific topic.

With a wide audience in mind, an emphasis has been given to readability and clarity. Each brief chapter is intended to contribute a contemporary perspective on a selected topic. The philosophical and political perspectives, theoretical and methodological approaches – although generally convergent – allow for a broad range of points of view. Writing styles also vary from the essay to the empirical analysis, from the journalistic to the strictly academic, from the monograph to the artistic rendering. The underlying belief is that the reader will benefit from an adequate set of realizations and analyses integrated under the common challenges of City Preparedness for the Climate Crisis.

The book is organized in seven parts, going from the more general aspects of urban vulnerability to the more specific issues and cases illustrating alternative adaptation pathways. Part I introduces the topic of city preparedness for the climate emergency and the challenges facing urban settlements. When a city – and humanity at large – face existential risks, their whole set of priorities shift drastically. Given the scale of existential threats and the fact that some planetary boundaries have already been exceeded, the urgency to reinvent the city becomes prominent.

Part II provides a current account of existing approaches, movements and networks, including a directory of urban preparedness for reference. The bulk of chapters deal with elements of analysis, design, measurement and future visualization of cities. Part III provides a critical account of city preparedness indicators and benchmarking, including lessons from closely related knowledge city metrics experiences. Part IV looks at some economic aspects of urban life, from a broader perspective of value systems. Part V digs into social and political aspects determining the space of possibilities for the urban Anthropocene.

The two final parts look at elements for conceiving alternative futures (Part VI) or reinventing the city (Part VII). The book closes with a conclusion which seeks to draw out emerging themes, including the main barriers, and limiting factors for progress together with calls for urgent action.

A growing number of climate scientists, philosophers, environmental activists, decision-makers, politicians, social scientists and public at large are beginning to realize the inadequacy of the current urban paradigm to be fit to meet the likely scenarios of the climate emergency. In the following lines, some prominent works that preceded this book are reported. Far from a thorough literature review, this is merely an acknowledgement of several key publications that have had an influence on this project. Some of their authors further their views in their contributions to this book.

We now turn to the research community in the hope that this collective work opens up much needed collaboration across disciplines to consolidate the emerging field of City Preparedness for the Climate Crisis. If it contributes to raising new relevant and productive questions and suggests effective ways to tackle them, its purpose will have been accomplished.

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