

Book review: listening to the approaching wave

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Received: 14 September 2017 / Accepted: 17 October 2017 / Published online: 2 November 2017
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Abstract In his book, Markku Wilenius, Professor of Future Studies at the University of Turku, in Finland, applies the concept of the mega waves of change (of 40–60 years each), proposed by the Russian economist Nikolai Kondratiev. His central argument is that the world is presently experiencing a transition between an ending mega-wave (1970–2010), dominated by Information and Communication Technologies, and a starting one, following the deep financial crises of 2008–2009, and containing patterns discussed in the book. The list of patterns examined is impressive. It includes factors of several types shaping the future, such as major environmental problems; the need for a new economy; challenges for societies, e.g., by globalization and ageing; building participatory and trust-worthy political systems; and developing intelligent technological solutions, and creative educational institutions. Each pattern is thoroughly analysed, in a simple, easy-to-follow language, using examples, and supported by a rich literature. In the last chapter, the author offers a five-point action strategy as a navigation tool for crossing the new mega wave of change; his plan deserves to be discussed and followed by all key players and social actors.

Keywords Foresight · Kondratiev waves · Socio-Economic impact · Book review

In his poem “The Wise and the Future”, the great poet of the early twentieth century, *Constantine Cavafi*, stated that “*the future can be known only by the gods (...); of the future, the*

wise can perceive merely what is approaching (...); the secret buzz of approaching events is reaching them; and they listen with respect”. In his book,¹ Markku Wilenius, Professor of Future Studies at the University of Turku, in Finland, has used his professional wisdom – in the Cavafian sense - to listen to the secret buzz of the approaching future, and inform and warn us about it. Let us see how.

What makes this book distinct from other studies of future trends is, first, its putting together of a coherent central argument, which we will summarize in the following paragraphs; second, its methodological richness, resulting from a combination of various foresight methods and approaches, qualitative and quantitative, and operating at various levels of analysis (e.g., economic, social, cultural); third, its use of the proper language to reach a multitude of audiences, both expert and lay, without sacrificing wisdom or clarity of the content and form. These general remarks on the strength of the book will be illustrated by its critical reading, whereas, some weaker points will be presented at the end of this review.

As shown in the subtitle of the book, the whole approach follows the model of the long waves or Kondratieff (K) cycles of change (of 40–60 years each), as first proposed by the Russian economist Nikolai Kondratieff. In particular, the author builds his main arguments on the assumption that the world is presently at a crossroads, appropriately expressed by the transition between two long waves: an ending K-wave (the 5th, ca. 1970–2010), dominated by Information and Communication Technologies (ICT) and their effects on economy and society, and a starting one (the 6th), following the deep financial crises of 2008–2009, and containing elements to be further mapped and discussed in the book.

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¹ Markku Wilenius, *Patterns of the Future – Understanding the Next Wave of Global Change*, World Scientific Publishers, New Jersey, 2017 – Foreword by H.E. Tarja Halonen, former President of Finland.

The author's intentions are not simply academic, as the use of the term "understanding" in the book subtitle might indicate. As made very clear first in the foreword and then in the introduction, what motivates the book is that there is a lot at stake from the recognition of our present position, the dynamics of change already in action, the future developments that will follow, and our anticipation of - and reactions to - those. This justifies the scope of a forward-looking approach running throughout the 250-page book, with its 12 chapters focusing on the major "patterns of the future" promised by the book title. Let us see briefly, from our reading, how the 6th Kondratieff (6 K) wave can be described according to Wilenius, and what are the options of Planet Earth to survive and - if possible - benefit from its action.

The main challenge for the world during 6 K will take the form of a global and multiple **risk assessment and management** problem. And if we simply follow the definition of "risk", then we can list the factors that on the one hand affect the probability of events and on the other hand determine the impact of their actions. Strategies and policies for assessing and managing each type of risk will then have to be conceived and developed accordingly. Unfortunately for this approach, the lists contain several problems, actually, blocks of problems - and they are most BIG! It is, of course, beyond the scope of the book to understand their generation and growth patterns; some references to the decline of capitalism are offered in the book, but one is tempted to wonder about the possible effects from the end of another, much larger cycle, i.e., the one since the Industrial Revolution (1.0 in the jargon of the time).

The most critical block of problems (the "snake sack" of 6 K), strongly affecting the patterns of the future, is definitely that of the **environment**, including - according to the book - climate change, soil erosion and desertification, water quality and quantity, pollution and degradation of ecosystems, fossil fuel use, exhaustion of critical resources, food quality and safety, and much more. The destructive potential for our Planet of each of these "bombs" during 6 K makes their abatement a priority; but this is limited on the one hand by most of the other blocks of problems affecting the environment, and on the other hand by the development of technical and organizational solutions still lagging behind.

The block of problems and factors related to the **economy** affects most of what is happening (and not happening) today. The book mentions in particular the dominance of financial capital, which could be controlled by the appropriate regulations. Also, the need for a new economy, producing value for the society; following a new business model, including a new role for leadership and management, and promoting the support for the

development of the new Industry (4.0), and its shift from products to services. Investing in research and innovation should be an essential part of this new economy to be deployed during 6 K.

The next important block of problems and parameters leading to patterns is related to the **society** and the social, socio-cultural and societal aspects of human life and actions. The book is particularly rich in that dimension. Two major types of issues fall into the plate of society: globalization and demographics, both with significant effects on the other blocks of parameters. Of special value is - according to Wilenius - the required revolution in awareness by citizens - the "roar of the people"; from think collectively to think socially! - and the new work opportunities, radically changing the work vs. leisure social patterns.

Policy-making and politics make up the contents of the next block of forces in action during 6 K. The new democracy features required to guarantee the changes will include five characteristics: cooperation, openness, sharing, integrity, and interdependency. The governance systems necessary for guiding the new tasks will be participatory and interactive. The example of **Finland** is used in the book to describe the policy framework during the next wave. The analysis of additional national and regional cases could add more value to the findings of Wilenius.

Our critical reading of the book should not bypass two very important blocks of patterns, powered by **innovation** and **education**, respectively. In the case of the former, the emphasis will be on the development of intelligent solutions, based on a thorough understanding of the mechanisms in place and action, and deployed within appropriate innovation ecosystems. As for the latter, it could be structured around some key themes, i.e., information analysis, learning to learn, solution-centered orientation, creativity, and culture.

A **five - point action strategy** is proposed in the final chapter of the book for the survival, as well as sustainable and responsible development during 6 K; this includes the following: (1) energy matters, as a key to mitigate greenhouse gases and control climatic change; (2) circular economy, as a key to resource and waste management and ecosystem balance; (3) intelligent technological solutions in support of the new industrial revolution (4.0); (4) putting together the appropriate policy system to run and guide the whole strategy; and (5) re-focus of the corporate sector towards the new targets set in the strategy.

Some critical points as our closing remarks: First, as the book focuses on socio-economic and other "soft" factors, the role of technology as a disrupting force of change is considered in a "black box" style. Second, the emergence of bio economy as part of the global 6 K wave deserves more analysis, as it was done in the case

of Finland (see the book chapter on Finland, p. 180); the assumption that 7 K will be dominated by biology leaves open the vital question of the gradual emergence of bio based economy and society within 6 K. On the other hand, how possible is it that the above reviewed extremely rich list of challenges and opportunities offered to the reader could “exhaust” the actual materialisation potential for the 6 K wave? If so, then the action of some factors and the appearance of the respective patterns – other than the bio based ones - could be extended towards 7 K, as already stated by Wilenius for the patterns towards bio economy after 2050. Well, listening

carefully to the approaching buzz of future events (to cite Cavafi’s poem again) might provide some answers.

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