12-19-2019

Book Review of "AI Superpowers: China, Silicon Valley, and the New World Order" by Kai-Fu Lee

Alina Shymanska
Seoul National University

Follow this and additional works at: https://trace.tennessee.edu/ijns

Recommended Citation
Available at: https://trace.tennessee.edu/ijns/vol5/iss1/7

This Book Review is brought to you for free and open access by Trace: Tennessee Research and Creative Exchange. It has been accepted for inclusion in International Journal of Nuclear Security by an authorized editor of Trace: Tennessee Research and Creative Exchange. For more information, please contact trace@utk.edu.
Book Review

AI Superpowers: China, Silicon Valley, and the New World Order

Kai-Fu Lee

Houghton Mifflin Harcourt, New York, NY; 2018, 272 Pages

Reviewed by Alina Shymanka
Ph.D. Student, Department of Political Science and International Relations, Seoul National University

Abstract

Dr. Kai-Fu Lee’s book, AI Superpowers: China, Silicon Valley, and the New World Order, can be characterized as a glimpse of how humankind could coexist with artificial intelligence, that would render many people unemployed. The book also hints at the AI power game between the United States and China. The author claims China will be the victor due to a deeper understanding of how to implement AI technologies, as opposed to simply developing them.

"I believe that the skillful application of AI will be China's greatest opportunity to catch-up - and probably surpass - the United States. But more importantly, this shift will create an opportunity for all people to discover what it is that makes us human."

Dr. Kai-Fu Lee

Do we live in the age of great discoveries or the age of implementation? According to Dr. Lee, the founder and president of Sinovation Ventures Artificial Intelligence Institute, the opportunities of AI such as driving a car, diagnosing diseases, and the ability to do spoken translation between different languages, "do not signify rapid progress toward 'general AI' any other similar breakthrough on a level of deep learning." Rather these constitute an implementation, just like applying electricity to lightning, the dwelling, and powering the industry.

In his book, Dr. Lee, assumes that we live in the age of implementation, as "implementation is what makes academic advances meaningful and what will truly end up changing the fabric of our daily lives". And while experiencing this age, we are given an opportunity to watch the United States and China compete for global dominance in the field of AI. Through this competition, we can see the massive team of renowned professionals from the U.S., who did the well-tailored groundbreaking discoveries in the field of AI, standing in the right ring corner versus their Chinese counterparts that are "the computer science Ph.D.’s who aren't in line for a Nobel, but could easily transition into being the Chief Technology Officer of an AI startup." From this, we may conclude that the development of AI may not be a mere
technological evolution, but a game changer for the future world order and a reason for the great power competition.

Dr. Lee’s main focus is the future of AI and the way it will frame people's lives, which constitutes a major sphere of interest for the experts in science and technology policy. This book is also an important piece for those working in the closely-knit fields of political science and international relations. This book review attempts to shed light on the core interest in the political science area—that of the power struggle between China and the United States for the best technology. Unlike other books that discuss AI, _Super Powers: China, Silicon Valley and the New World Order_ does not focus on the "Thucydides trap", which is the possibility of war between a rising power and an established one, this book instead tells us a story of the fair competition for knowledge in the era when material power retreats to non-material opportunities and software is no less important than hardware.

The book demonstrates to us this global power game from the point of view of the recent developments that happened in the Chinese prototype of Silicon Valley—the Zhongguancun (中关村). With particular attention to the Chinese business and cultural environment that helped these companies transform from mere "copycats" to implementers, who can now bravely compete with their American counterparts in the technological coliseum, Dr. Lee also tells us about the peculiarities of Chinese society being introduced to the post-modern technical advances, for instance, the Chinese rapid shift from offline to online payments, skipping credit cards all together. According to the author, the lack of knowledge of such peculiarities and lack of flexibility towards accommodation to Chinese realities became the major reason why American software and AI companies regularly failed at pitching their business models in China, appearing inferior to local counterparts.

In the two last parts of his book, Dr. Lee gives us some advice regarding the future of human coexistence with AI and the way in which artificial intelligence is going to change people's way of life. It is important to note that the author is not talking about the changes of the paradigms of warfare to a more asymmetric one, but rather gives his attention to the more down-to-earth aspects of human lives—jobs. At the very beginning of his book he mentions that while watching the Go match between the AlphaGo and the professional Go player Ke Jie (柯洁), Dr. Lee did not feel worried about the upcoming killer-robots' era, but rather was frightened by "the real demons that could be conjured up by mass unemployment and the resulting social turmoil."

This book is a meaningful opportunity for anyone interested in AI technologies and provides a look behind the curtain. At the same time, the author claims that he is not an oracle and may not answer many questions regarding the way AI may change history. Therefore, humankind questioning AI may seem as naive as kindergarteners questioning deep learning.