Interview with Christian Huebner, Konrad Adenauer Foundation

The Merits & Demerits of AI, & Preparing the Way for Its Social Implementation Worldwide

By *Japan SPOTLIGHT*

Artificial Intelligence (AI) is a fundamental technology in the 21st century which will transform the whole world, but there are still many things unknown about its merits and demerits. We will need to deepen our understanding of new technology through dialogue among the different nations. A distinguished German AI expert, Christian Huebner from the Konrad-Adenauer Foundation, a well-known German think tank, offers his views in the following interview.

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AI for Human Civilization

Christian Huebner

JEF: My first question is how do you understand the emergence of AI for human civilization – as an opportunity, a challenge, or both?

Huebner: It should be seen from a dual perspective – as both an opportunity and a challenge. I'd like it to be seen as an opportunity rather than a problematic challenge, because its presence is undeniable and it's here to stay. This fundamental technology serves as a common platform or backbone that significantly influences new technological developments in various sectors, including business, industry, science, research, the military and numerous other aspects of our lives. So, it's vital that we position ourselves to harness all these benefits.

Different Approach Among Nations

JEF: Some people are saying that the European Union is taking a rather strict policy approach toward AI, while the United States is taking a different policy option, maybe to encourage innovation, and Japan is in between. What do you think of this description?

Huebner: The EU has decided to establish its own AI Act, rooted in European values, which I would characterize as a balanced approach. This decision is intrinsically linked to the fundamental question of striking a balance between leveraging opportunities and mitigating risks. One potential critique of the European AI Act is that it might

limit certain opportunities or potentially stifle a degree of future innovation. On the other side, the European AI Act aims to safeguard human rights. The advent of AI innovation and development implies that it impacts our daily lives, particularly in terms of potential misuse of our personal data.

For instance, it could influence elections through the use of deepfakes, among other risks that the European AI Act seeks to mitigate. It remains to be seen whether it will effectively achieve this goal. In comparison to the US approach, the differences might not be as stark as commonly perceived. The US government tends to place more responsibility on the business sector, while in the EU the government is striving to establish a general framework. Of course, there are other approaches as well. For instance, China's approach is distinctively government-centric and highly regulated. One concern with the European AI Act is that while we currently have a European approach, it does not guarantee uniform implementation across all European countries. It would be beneficial to ensure consistent implementation to truly realize the scale effects of this AI Act.

JEF: One set of concerns is ethical questions. Could you explain your thinking regarding those questions, and how do you think they are to be addressed?

Huebner: The importance of these ethical questions cannot be overstated. As a society, we've seen many of these ethical dilemmas surface in the EU during the development of the AI Act, and they have already been addressed. These include making deepfakes transparent – an essential issue concerning elections, determining

which data can be used for AI foundational models, deciding where and to what extent AI should be allowed to make autonomous decisions without human oversight, and contemplating the use of AI in the military sector. The use of AI tools could significantly increase opportunities and power in terms of cyberattacks, raising a host of fundamental ethical questions. Striking a good balance is crucial here. The European AI Act, which strongly emphasizes these ethical issues, is a commendable start. However, when it comes to implementation, we must ensure a balanced approach that leaves ample room for innovation.

JEF: You mentioned the singularity aspect of this technology and whether machines will dominate human beings or not, and that would be a question for the future perhaps. But at this moment, maybe we should be more focused on the practical aspects of this technology. Listening to your remarks, human rights issues seem to be very important. Besides privacy issues, what kind of human rights issues could arise from the use of AI?

Huebner: Indeed, the use of AI can raise several human rights issues beyond privacy. Here are a few key ones. AI systems can unintentionally perpetuate and amplify societal biases that are present in their training data. This can lead to unfair outcomes in critical areas like hiring, lending, and law enforcement. Or the case of content recommendation algorithms, which are able to influence the information people see online. This can potentially limit access to diverse viewpoints and affect individuals' right to receive and impart information. AI systems used in determining social benefits can lead to unjust outcomes. It's important to note that these issues can be mitigated through careful design, testing, and regulation of AI systems. This can help ensure that AI is used in a way that respects, protects, and fulfills human rights.

JEF: Making global rules for AI may make it much easier for us to take advantage of the positive aspects of AI. The OECD has been working on this. What do you think of the OECD approach?

Huebner: I believe it's a constructive approach to begin by establishing global standards, starting with a clear definition of AI, and then addressing questions about its appropriate and

inappropriate uses. This approach seems logical to me. The importance of these multilateral strategies cannot be overstated. However, when it comes to the effectiveness of these global regulations, I harbor some concerns about their actual impact on national-level changes. This is evident in the European AI Act, where certain exemptions can be observed, particularly in relation to national security. The recent exponential advancements in AI are set to accelerate even further with the advent of quantum computing technology, which promises to expedite development, enhance effectiveness, and enable the processing of larger volumes of data in a significantly shorter time compared to our current computing capabilities. Therefore, I believe it's crucial that we engage in these global exchanges of processes.

JEF: OECD practices do not include an enforcement aspect. Do you think we will need enforcement in AI rules at a global level in the future?

Huebner: Determining this isn't straightforward. I suspect that the ability to enforce corresponding institutions at the global level would have little effect at the national level. The impact on national sovereignty always comes into play. I believe establishing common global standards would be beneficial, providing a shared foundation for different nations.

JEF: The United Nations doesn't seem to be working well today, unfortunately, in the middle of the war in Ukraine, so it might be a wrong approach to expect a lot from UN actions, but what do you think about UN law in this area?

Huebner: They indeed play a pivotal, fundamental, and significant role. It's a platform where global-level discussions occur, the ultimate forum where representatives from all countries convene to address challenging questions. These include issues such as the singularity, determining the sectors where AI should be allowed to make decisions, and deciding the extent of AI's presence in the labor market. I believe it's a crucial discussion forum, and these exchanges foster the development of values-based standards that could guide national governments on a global scale. However, I remain skeptical about finding substantial common ground at this global level, given the diverse views on the extent of AI's integration into society.

G7 Process on AI Important

JEF: Yes, the question of the impact on national security or national sovereignty will be very complicated. The next G7 meeting in Italy this year might achieve some outcome in this area as well. What do you think about this?

Huebner: The G7 process, I believe, holds significant importance. The central idea behind the G7 Hiroshima AI Process is to establish a shared understanding of the values underpinning AI development. This leads us to the issue of systemic risk. With the contrasting approaches of China and the West, it's crucial for global powers to unite and cultivate a common, values-based concept of AI. This reflects a cultural divergence in the utilization of AI. Within the G7, there is a shared understanding of democratic values, which provides a common foundation for the application of AI. Despite the variations among the G7 countries regarding the degree of freedom granted to the business sector for AI use or development, there's a shared democratic basis, which I believe is extremely important. Therefore, the G7 process is vital.

I hope this process yields more outcomes, as well as insights into the latest AI developments, which are currently progressing at an unprecedented pace. It's nearly impossible for politicians and lawmakers to keep up with the rapid evolution of AI. This was evident with the European AI Act. Upon its completion, generative AI emerged, prompting a return to square one to establish new rules for generative AI. Predicting where AI will stand a year from now is a daunting task, given the swift pace of development. The challenge lies in establishing rules for a yet-to-exist reality, which is inherently difficult and seemingly contradictory to fostering an environment conducive to innovation.

JEF: Taking the very rapid progress of AI technology into consideration in formulating guidelines, should there be a channel between the engineers and guideline creators?

Huebner: That is definitely an aspect that is extremely important. These industry leaders, the leading developers from research, from industry, have to be on board to share some idea of where they think things are going, and you can develop some guidelines and standards based on that.

Demerits of AI

JEF: I have a question for later related to that point, but before that a couple of questions related to the negative aspects of AI. First of all, AI may take human jobs and unemployment might increase.

Huebner: In my view, there's no doubt that AI is already impacting jobs. It's transforming traditional roles, particularly those involving automated processes. I believe we all need to educate ourselves on how to utilize AI and enhance our own abilities to use it. AI technology and tools are readily available, and while they require continuous adaptation and development, they present significant opportunities. Jobs are evolving, as they always have. With the widespread use of AI technologies like ChatGPT, Bing, and others, we're presented with even more opportunities. We must recognize the potential of AI because it's an integral part of our reality. We're poised to use it, adapt to it, and extract the best from it. For instance, in Germany, we face a significant issue due to the lack of skilled labor in the public sector or other sectors. AI could relieve the burden on skilled labor, which in turn could be used for other tasks. A key challenge is to provide AI education for each age.

JEF: What about the possibility of a new digital divide being created by AI that could lead to income inequality, for example, between the people taking advantage of ChatGPT or generative AI and the people who cannot use them very easily?

Huebner: I think we need a few more years to observe how various industries have incorporated AI into their operations to see whether a digital divide with impacts to the society and the labor market can be observed. I suspect the changes won't be radical; rather, we'll see a developing new normal. Currently, there's a lot of discussion about singularity and other extreme AI issues, but eventually, we'll reach a state of normalcy where using AI is commonplace. I view AI as an extremely beneficial tool for society, which is why I'm not overly worried about its impact on the labor market. Indeed, we need to make sure everybody has access to AI education. It becomes a crucial competence. But there is no need for everybody to become an AI or machine learning specialist. And the interaction with AI, for instance through prompting, makes its access very easy. It is also interesting to see the first impacts of generative AI on the labor

market. I'm in touch with software developers who initially expressed fear, stating that "generative AI can now perform my job." However, they've ultimately found themselves more productive. They still require coding skills and knowledge, but they're now able to work at a much faster pace. They're leveraging the power of ChatGPT and other generative AI programs to enhance their efficiency.

AI Impact upon Global Environment

JEF: Another question that may need to be resolved over the longer run is the impact on the global environment. I would hope AI could be much better at resolving global environmental issues than human beings.

Huebner: There are many amazing developments in this field. For instance, climate scientists are already leveraging AI in their climate modeling. This might enhance their ability to predict extreme events, providing political decision-makers and disaster prevention teams with more time and flexibility to adapt and prepare. AI does have significant impact on the reduction of carbon emissions, through its ability to increase the efficiency of energy use in many areas like the mobility sector or the construction and management of buildings. In the realm of renewable energy, AI presents numerous opportunities, particularly in trading, demand forecasting, and weather prediction, which are crucial for wind and solar power that rely on weather conditions. Consequently, we can expect more accurate forecasts in the future. In terms of environmental protection, AI can be utilized in biodiversity conservation and enables us to monitor our planet more effectively. This is a critical prerequisite for implementing political measures for environmental protection.

Role of Think Tanks in Global Consensus on AI Development

JEF: You've said that AI issues must be addressed with an interdisciplinary approach involving communication between engineers, lawyers, economists and others. It also involves a lot of socioeconomic questions like the unemployment issue, social security, social safety, and national security. So that needs a wide range of experts involved in this discussion. How can we achieve such an interdisciplinary approach, and do you consider think tanks to be good venues for this? Do you think, for example, that the G7 or G20 processes should be supported by think tanks?

Huebner: Scientific advising holds paramount importance in the realm of AI. While it's already underway in forums like the G7 and G20, there's room for enhancement and increased expert participation. Based on my experience, establishing close personal connections with decision-makers is crucial. This is a sentiment echoed by my encounters in Germany and Europe. Engaging in dialogue with lawmakers is key – they have a vested interest in AI and are keen to understand its potential, its applications, and areas for improvement. Perhaps we need to delve deeper into the role of think tanks and the dissemination of AI knowledge to decision-makers. It's essential to explore new communication formats while maintaining the necessity of traditional paperwork. Having standard analytics documented is important, but the crux lies in effectively conveying this knowledge to decision-makers. Think tanks play a pivotal role here, bridging the gap between academic science and a format that decision-makers can comprehend and utilize in their decision-making process. Ultimately, I always advocate for direct, detailed discussions with decision-makers – I believe that's the most effective approach.

JEF: That means that think tank experts should be working on improving their communication technologies?

Huebner: Yes, that's how I see it. I think that think tanks have a big role in AI by doing this translation from scientific AI to the public and to politics.

JEF: Thank you very much for your time. J S