"The Future of AI ~ in harmony with humanity ~ "

by Dr. Hiroshi YAMAKAWA at Bulgarian Academy of Sciences on February 27th from 11:00-12:30

While traditional Artificial Intelligence (AI) is designed for the realization of adults' intelligence represented in words, "deep learning", developed recently, has succeeded in the realization of infants' intelligence that cannot be verbalized. Indeed this development has enabled us to process real-world information and brought about advancements in the practical use of AI technologies. Consequently, AI has started penetrating widely into our daily lives, thus bringing us various kinds of conveniences. Naturally, this leads to the revitalization of related industries. This cycle is now well established and it would be rather impossible to stop its development hereafter.

The development of AI could have the greatest impact on human society ever since the Industrial Revolution. While it will surely enrich our lives, it could also have negative repercussions on our society. For example, the US and China are currently taking the lead in the global AI development competition and the trend is likely to continue. Namely due to this trend of global completion, concern is growing about a possible uneven distribution of the tremendous wealth which AI is expected to produce.

At the same time, after 2030, the world would be more likely to witness the birth of Artificial General Intelligence (AGI), which is capable of performing various tasks by the integrated systems much like human beings. There are already dozens of organizations worldwide engaged in building and testing AGI, and there are indications of a stable increase of activities in this field. Our Non-Profit Organization WBAI in Japan https://wba-initiative.org/en/ is one of them. Our approach is based on the architecture of the entire brain of human beings and we are targeting to complete the development of human-like AGI by 2030.

Then what would happen upon the successful development of an advanced AGI? It would be quite possible, for instance, that AGI's self-improvement process itself may bring about the rise of its intellectual capability on its own (intelligence explosion), or that AGI could set new goals for its development alone.

In any case, the impact of AI/AGI on our society would be far greater than you could imagine. In order to ensure that we, as human beings, can take control over such a highly advanced intelligence and get prepared to live together with it, it would be of crucial importance for all the stakeholders, including developers of AI themselves, to be united in the name of human society and to combine from a very early stage all the efforts towards a common goal in a cooperative manner.

You would ask then: "What is this - a common goal?" I believe that our primary mission could be consolidated into one – building a sustainable ecosystem where AI exists in harmony with humanity. As stated in the Sustainable Development Goals (SDGs), in this ecosystem, the common goal among all the AI communities should be focused on creating a world where no one is left behind, as well as on contributing to the resolution of the contemporary and future conflicts in our human society.