

## Laudatio of the Meckatzer-Prize for Klaus Mainzer

If you are interested in artificial intelligence and dig just a little deeper, you can't get past the name KLAUS MAINZER. If you have studied the subject more closely, you know him - but what should you know about him if, contrary to expectations, you have never heard of him? And why is he the prize-winner of the 3rd Philosophy Festival in the Allgäu Alps?

Professor Mainzer is one of the great philosophers Germany currently has. Beyond artificial intelligence, his main areas of expertise are complex systems, philosophy of science, foundations of mathematics, history of science and philosophy of nature. Among other things, he is currently President of the European Academy of Sciences, Emeritus of Excellence at the Technical University of Munich and Senior Professor at the Carl Friedrich von Weizsäcker Centre at the Eberhard Karls University of Tübingen.

This impressive career originated in 1947 in Opladen, where Klaus Mainzer was born. He remained true to North Rhine-Westphalia during his studies, studying mathematics, physics and philosophy in Münster. His doctorate and habilitation followed there - both on fundamental questions of mathematics and physics. A Heisenberg scholarship in 1980 already gave a glimpse of what was to come. From 1981 to 1988, Klaus Mainzer was Professor of Foundations and History of the Exact Sciences at the University of Konstanz, where he also served as Prorector. Afterwards, he was Professor of Philosophy and Philosophy of Science at the University of Augsburg for almost 20 years, until 2007: there he was, among other things - not insignificant for our topic of artificial intelligence - the founding director of the 'Institute for Interdisciplinary Computer Science'. In 2008, he finally moved to the Technical University of Munich, where he was not only Professor of Philosophy and Philosophy of Science, but also, for example, Director of the Carl von Linde Academy and Founding Director of the 'Munich Center for Technology in Society'. A list of his countless memberships in renowned scientific societies, his worldwide lecturing activities and the projects he has carried out would go beyond the scope of this brief introduction.

There is a reason for such a career: Professor Mainzer shows an impressive breadth in his philosophical work, which was once a matter of course for philosophers, but is rarely found today due to the complexity of the world. A few examples: Klaus Mainzer has worked and continues to work on the challenges of quantum physics as well as on the possibility of mathematical knowledge, he has written books on symmetries in nature as well as on time, and he has investigated across disciplines how new things arise in the world and what information actually is. Two major questions run like a thread through Mainzer's work. First: What can be calculated - both theoretically and practically? Secondly, how do we as humanity deal with these possibilities?

The treatment of these problems also runs through the area to which Professor Mainzer has devoted himself in a very special way and which has determined the content of our philosophy festival - artificial intelligence. Klaus Mainzer is one of the lighthouses in the philosophical debate on AI. His research activities in this field are documented by nearly a dozen books published on the subject of artificial intelligence, more than 20 articles on the subject and an almost uncountable number of international lectures and seminars. In his research on the topic of artificial intelligence, Professor Mainzer, as an outstanding AI expert, once again succeeds in doing something that is very rarely found, but which is urgently needed. On the one hand - sometimes unusual for philosophers, but not surprising in view of his interdisciplinary training - he does important work on the logical-mathematical foundations of AI and thus deals with the technical side of AI; on the other hand, at the same time, he always takes into account the social consequences and emphasises the need for a responsible approach to AI, so that ultimately human freedom is not restricted but expanded.

If one were to draw on the history of philosophy, one could say of Klaus Mainzer - especially with regard to his research on artificial intelligence - that he combines the insight of GOTTFRIED WILHELM LEIBNIZ that the entire universe is interconnected in some way and can be grasped in important respects with the help of logic, with the reverence of IMMANUEL KANT for the power of pure thought and the realisation that reason is the central guideline by which we should orient our lives.

However, his selection as the winner of this year's Meckatzer Philosophy Award is not only due to his special professional expertise with regard to artificial intelligence, but also to his understanding as a philosopher lived out in practice. The 'Philosophy in the Allgäu Alps' association wants to use the festival to bring philosophy to the general public - and this has also been a matter close to Klaus Mainzer's heart for decades. A large number of lectures and books by Professor Mainzer specially designed for this purpose are just one example of how he pursues this aim. His participation as a speaker at our last festival in 2019 also illustrates this attitude. In all these undertakings, despite all his successes, he shows an admirable openness to people and a modesty that is unparalleled. This enables him to build bridges between the often abstract and intellectually demanding world of academic philosophy on the one hand, and lay people searching for answers on the other.

And last but not least, it is an enormous capacity for enthusiasm that distinguishes Klaus Mainzer. Whether it is a matter of inspiring seasoned experts to further research, of motivating students in teaching for the subject of philosophy, or of generating incisive "aha"-experiences upon first contact with philosophy - Professor Mainzer has the gift of providing fundamental orientation in a world that is often difficult to survey. We will now get a glimpse of this ability to win people over to a topic and pick them up where they are in the keynote lecture. It is entitled: "Quo vadis AI? A Plea for Sustainable and Responsible Artificial Intelligence".

Dr. Thomas Heichele (on behalf of the Prize committee)