

Fundamental vs. Applied Research – Interview with the Leibniz Association

The Leibniz Association was founded in 1995 after a fusion of institutions of the Western German association “Blaue Liste” and other research institutions of the former German Democratic Republic (GDR). It was named after the German polymath Gottfried Wilhelm Leibniz (1646 – 1716). The association is particularly known in the eastern parts of Germany, being the biggest research association there. Interestingly, the Leibniz Association even patronizes several museums and the most commonly known are the Senckenberg institution in Frankfurt a. M. and Deutsches Museum in Munich. We spoke with Christoph Herbolt-von Loeper¹ who is deputy press officer of the Leibniz Association.



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JUnQ: Could you briefly tell us about the tasks and vision of the Leibniz Association?

Leibniz: The Leibniz Association’s vision is to find answers to the big questions of our modern society. To put it in a nutshell, we conduct research that benefits mankind. This includes all kinds of disciplines, be it medical research, life sciences, engineering, environmental research or social trends.

JUnQ: Could you please tell us a bit about the historic background of the Leibniz Association?

Leibniz: Before the association was named after the German polymath Gottfried Wilhelm Leibniz in 1997, many of the institutes were included in the parent organization “Blaue Liste” (engl. blue list). This in turn was a fusion of former Eastern and Western German Institutes in 1992. However, some of our institutes were founded up to 300 years ago, such as the Leibniz Institute for Astrophysics Potsdam.

JUnQ: What is the organizational structure of the Leibniz Association?

Leibniz: Our institutes and museums are organized autonomously and are fostered by the Leibniz Association. The association itself is headed by a president and four vice presidents forming the management board. Furthermore, our institutes are organized into five different sections which have their own spokespersons. Together with the management board, they form the presidium.

JUnQ: How many different Leibniz institutes are there currently in Germany and what is their main emphasis respectively?

Leibniz: Currently, the Leibniz Association consists of 88 autonomous institutes and museums organized in the five sections Humanities and Educational Research; Economics, Social Sciences, Spatial Research; Life Sciences; Mathe-

tics, Natural Sciences, Engineering and Environmental Sciences. These sectional topics are a guide for the research conducted but there are no specific primary focuses to ensure that it covers the whole spectrum of the society’s needs.

JUnQ: What is your main way of funding?

Leibniz: On the basis of article 91b of the German Constitution, we are funded by the German Bund and Länder (federation and the federal states), which contribute 50% respectively. This forms about 70% of our funds. The remaining 30% are contributed by third-party funds coming from economy or foundations.

JUnQ: The Leibniz Association promotes a lot of applied research. What are the reasons for that? Is fundamental research a topic at all?

Leibniz: The research in our institutes is conducted focusing on a specific topic. Which type of research then is necessary, may it be basic or applied, depends on the questions that are investigated in the first place. There are a few institutes promoting primarily basic research but the aspects of application and social need are included as well.

JUnQ: In this context, do you think that a differentiation between fundamental and applied research makes sense or isn’t it rather becoming more and more difficult to clearly distinguish between the two?

Leibniz: We rather see it as a continuous process, applied research lives from the ideas of basic research and one cannot be clearly separated from the other anymore. The main focus is not the type of research but the questions we want to solve. One can rather term it application-oriented basic research which is oriented to our modern society’s needs without specific scientific boundaries.

JUnQ: Do you put special emphasis on technology transfer? How important are cooperations with industry (also with respect to funding)?

Leibniz: Transfer itself is an important aspect of the Leibniz Association. We make a lot of our new insight and databases available to open access since we perform research for the common good. This can also include technologies. In addition, we have cooperations with industry.

JUnQ: Do companies contact you as an external scientific consultant?

Leibniz: Yes, they do. However this is not our core activity. Whenever possible, we contribute to developing new technologies, especially in terms of innovation research and prospective technology. More commonly, we offer science-based policy advise.

JUnQ: Additionally, it appears as if a lot of your institutes are dedicated towards studying social trends. Is that avenue a fallout of an entrepreneurial mindset?

Leibniz: Some hot topics in modern society cannot be investigated exclusively by one scientific branch. For example, we have the research alliance “Science 2.0” dealing with knowledge in the digital age. We take up the devel-

opment of our society and investigate them scientifically. Other examples are nanosafety, globalization or educational research.

JUnQ: In your opinion, what sets the Leibniz Association apart from other scientific societies like Max Planck, Fraunhofer or Helmholtz?

Leibniz: In contrast to MPG and Fraunhofer, we are focussing on specific topics, whereas MPG is known to be basic research oriented and Fraunhofer applied research oriented, respectively. In a way, we are located in between, just like the Helmholtz Association. Our institutes are legally and scientifically autonomous and our main aim is to provide knowledge to the benefit of our modern society. Besides research, we promote science transfer and offer scientific services and infrastructure, such as provision of data, equipment, collections and archives.

JUnQ: Thank you very much for the interview!

—Theresa Lückner