On Myself

I was formed above all by my parents and by the family of my mother. My maternal grandfather was a physicist with a doctorate, and during the war he worked in Travemünde on the Baltic Sea, developing acoustically guided torpedoes. My father served in the German navy, and in the years that followed he was trained by the Americans as a missile avionics engineer at White Sands, New Mexico.

In 1975 I had the chance, as a child, to spend a year with my parents in El Paso, Texas, while my father was stationed at White Sands. That year abroad left a deep mark: the foreign setting, the presence of advanced technology, and the sense that science and politics were inseparably linked in the lives of my family.

With my father and grandfather as role models, it seemed almost natural that I would study physics or pursue engineering. Yet in the middle years of high school I also found myself increasingly drawn to philosophy. Here the influence of my mother was decisive. She was a teacher of German, having studied Germanistics, History, Political Science, and English at Munich — the same university where my father had studied Information Technology. Through her, I came to appreciate the human sciences, literature, and the broader horizon of historical and political reflection.

At school my teachers even recommended that I take up Germanistics at university. It was never, therefore, a simple question of one path alone. From early on I stood at the crossing of two traditions: one scientific and technical, the other humanistic and reflective.

When the time came to choose my studies, I began near my parents' home in Constance. Soon, however, I felt the need for a more demanding intellectual climate and transferred to Freiburg, a university known for its theoretical orientation. There I lived with my aunt and uncle, both physicians, which added yet another dimension of scientific seriousness to my daily life.

After completing my studies successfully, I accepted an invitation to Paris to pursue work in astrophysics and spatial techniques. The move to France broadened my perspective still further:

it placed me in an international context and confronted me with new traditions of thought, at once rigorous and imaginative.

For my doctoral studies I accepted an invitation to Grenoble. There I found myself at the intersection of physics and numerical mathematics, a field that had fascinated me since my high-school days. Already then I had a strong sense that computers would shape the future of science and society, and in Grenoble I was able to pursue this intuition in a rigorous way.

After completing my doctorate and returning to Germany, I joined a university clinic in order to learn medical imaging techniques. This step was not a break but a deepening: a way of applying theoretical knowledge and numerical skills to questions that touch human life directly.

In the course of a collaboration between the hospital and the Max Planck Institute for Biological Cybernetics, I was asked whether I wished to pursue my career in fundamental research on brain imaging. That invitation proved decisive: it opened for me the path into neuroscience. What had begun with physics, carried through mathematics and computing, and applied in medical imaging, now found its culmination in the study of the brain itself — the organ of thought, perception, and consciousness.

Afterwards I worked for a time, successfully, at a university clinic in Belgium. When I eventually decided to leave that post, I chose to redirect my career toward neurophilosophy and neurolinguistics. This was not an abandonment of my earlier work but its natural continuation. Physics had taught me rigor, mathematics had given me structure, neuroscience had revealed the complexity of living systems. Philosophy, in the end, offered the space to reflect on what it all means, and language became the key by which human beings make sense of their world.

Thus, if I call myself both a physicist and a philosopher, it is because my path has required both: the precision of the one and the depth of the other. My family and my teachers gave me the beginnings; my own journey has confirmed that science and philosophy are not rivals but companions, each correcting and enriching the other.