Preface to the English Edition

For centuries the dialogue, and often the heated debate, between science and religion was dominated by the question of whether and how God might be experienced through the scientific study of nature. A recent example is our recognition of the amazing fine-tuning of the physical parameters of the universe, without which cosmic evolution could not have taken place. Some prominent authors insist that finetuning requires a "fine-tuner" (Alister McGrath, Rodney D. Holder) or an "intelligent designer" (Michael J. Behe), thus claiming scientific evidence for the existence of God. Professing atheists such as Richard Dawkins or Victor J. Stenger vigorously disagree, pointing out correctly that there may well be still unknown natural explanations of the fine-tuning. These atheists have reinstated what David Hume and Immanuel Kant already realized in the 18th century: that God cannot be evidenced by scientific methods.

On the European continent the dispute between science and religion was interrupted in the middle of the twentieth century by Karl Barth, the most influential Protestant theologian at that time. He claimed that science is irrelevant for theology and must be radically separated from theology. Barth's critics regretted that he established a barrier between the two fields that seemed to forbid any dialogue.

As an active scientist, I assume that science and religion start from different perceptions: quantitative observations and measurements on the one side, religious and existential experiences on the other. I do take seriously these religious experiences, intuitions, and visions, always aware that they are not measurable and contain a subjective element. Based on different perceptions, the methods and languages of the two also differ completely from each other. Experiments and mathematical modeling are indispensable for science; metaphoric language is necessary to express the essence of religion. Disregarding these fundamental differences has resulted in unfortunate misunderstandings.

However, I disagree strongly with Barth that dialogue between the two is futile. In a worldview shaped by science, theology is becoming incomprehensible to more and more people. The perceptions from which science and religion originate must remain distinct, but should be brought into a common view and relation. They are the results of different perspectives on one reality, which at a deep, unfathomable level constitute, I believe, a unity.

In this book I explain that cosmic fine-tuning and other coincidences are no proof of God. But they are astounding, and remain unexplained. Amazement is an appropriate emotional reaction to reality. It implies that the objective world is not to be taken for granted and may well not have formed at all. Thus the cosmos is experienced as an extraordinary fluke, something quite gratuitous. In such an "aha moment" one realizes that the universe as well as elemental realities such as my life, our environment, and Earth itself are all undeserved gifts. However, creation is constantly taking place amid the contraries of degeneracy and death, as is palpable for instance in the course of biological evolution. We are reminded that both science and religion must face up to the sober facts of destruction and decay. Thus we need to understand why the Biblical authors conclude that Creation is basically "very good" (Gen. 1,31). Despite life-experience that must have been at least as negative as ours, they sensed a reality that is essentially benevolent and understood the universe to be a gift (Gen. 2,7-9). They interpreted and believed it to be a divine Creation, hence meaningful and worthy of trust. Science can strengthen such faith but cannot create it.

Based on the testimony of scientists who happen to be persons of faith, some modern apologetical treatises claim blithely and abstractly that science and religion are reconcilable. This is a common view among theists, but too often it is nothing more than a postulate. Does it hold true in reality? To answer this question one must comprehend more fully the intention and scope of modern science as well as its limits. One must also reflect with more than usual care on what religion is – and is not – in connection with the faith-science dialogue. This book not only claims that science and religion are reconcilable, but aims to show explicitly *how* they are compatible.