

The Stuff We Are Made From

Rethinking Nature and Society

by Fabian Scheidler

Summary

Industrial civilization has plunged the Earth's life-sustaining systems into the greatest crisis in 66 million years: climate chaos, species extinction and the closely related spread of pandemics threaten the future of humanity. After Scheidler's book *The End of the Megamachine* exposed the economic and political roots of this crisis, *The Stuff We Are Made From* is devoted to the role of the technocratic worldview, which reduces nature to an exploitable and controllable resource in the hands of man. In six chapters, the book traces the rise and fall of this worldview. The first three chapters deal with the development of physics and biology from their beginnings to the present; Chapters 4 to 6 are devoted to the social consequences of the profound ideological upheavals that characterize both the beginning of modernity and our present day.

The idea of a thoroughly calculable, machine-like universe marked the beginning of the scientific revolution 400 years ago – at exactly the time when the capitalist world-system was being formed. With the advancement of technology and the military-economic expansion, man seemed to acquire an almost divine power over creation.

However, the deeper science penetrated nature in the following centuries, the more the idea of a mechanical world began to falter – a process that began with Newton's theory of gravity and culminated in the 20th century with the revolutions of Einstein and quantum physics. In biology, the idea of genetic determinism has increasingly given way to the insight that life is a self-organized, cooperative and creative process – a process that also gives rise to the enigmatic phenomenon of consciousness, which remains incomprehensible in a mechanistic worldview.

But despite these insights, the technocratic ideology is still powerful, whether in the futuristic fantasies of Silicon Valley – from "uploading" the human mind to the colonization of Mars – or in the idea that the climate crisis can be solved by large-scale "geoengineering" .

Overcoming our current destructive economic system, which is driving the planet to the brink of collapse, requires a new way of looking at nature and thus also at ourselves. In this transformation, it is key to overcome the "ideology of separation", which holds that we are isolated utility maximizers in a world of dead things. Natural sciences, on the contrary, show that we are inextricably linked with our environment, embedded in the cosmic, biospheric and social metabolism. Humankind only has a future if it reorganizes its economic and political structures in such a way that it takes account of these interdependencies.

Fabian Scheidler's book advocates a new understanding of nature and society in a crisis-ridden time. It shows that serious research – in contrast to technocratic myths – by no means has to lead to a "disenchantment of the world", but can decisively deepen and expand our understanding of reality.