

Total Systems:  
Theory, Elements, and Language

## The Interconnected Universe

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This short paper was written as a forward to Ervin Laszlo's *The Interconnected Universe*, published in 1995 in Singapore and Riveredge NJ, by World Scientific. It is reprinted here with slight revisions.

Now, at the end of the twentieth century, it appears that at its beginning something happened which may have a profound influence far into the future. Without losing touch with observation under carefully registered conditions, the level of abstract thought in natural science theorizing increased immensely. The steps of deductions increased proportionally. The fundamental theoretical postulates of the new physical theories tend to contain concepts more and more abstruse, and seemingly of an arbitrary character. What for most people must appear as an increase of unfounded speculation and more invention than discovery is, in reality, the consequence of a liberating synthesis of thought and imagination.

The wave-like development has impinged upon philosophy in unpredictable ways. The creative work of Ervin Laszlo is a brilliant testimony of how conceptual imagination—deductively related to careful observation—can make us see a Cosmos, and our place within the Cosmos, in new ways of great inspirational value. Reality as conceived by Ervin Laszlo seems to have what I call 'gestalt character'—a predominance of internal rather than external relations.

It is a good thing that Ervin Laszlo uses frequently the term 'speculations' and does not pretend, for instance, that recent research *implies* any definite conception of consciousness. He differs from the more uncritical author Stanislaw Grof who says that modern consciousness research *reveals* "that our psyche has no real

boundaries.”<sup>1</sup> The book is admirably sober—no spiritual *Schwermerai* in the Kantian sense.

Laszlo rightly emphasizes the *simplicity* of the theories he explains so well. It is a simplicity that takes a lot of training to perceive. Beginners find the theories ‘complicated.’ But they have a remarkable simplicity in relation to their great power of explanation, the new, formidable range of phenomena covered by their conceptual framework.

Some philosophers, and I am one of them, intensely admire the creation of mathematical physics—the little we understand of quantum physics and Einstein’s space-time theory and its cosmological consequences. One of the things we wonder about is what would have happened if the famous physical constants, such as the Planck’s constants, somehow had been different, perhaps only a little bigger or smaller quantities. Physicists tend to answer that the evolution of the Cosmos would have been vastly different, mostly there would have been no cosmos created. What might explain the existence of these precious constants? Did they evolve out of something? But how? Ervin Laszlo attempts to answer, very, very tentatively, questions of this level of depth.

It does not seem possible that any kind of observation could be of any use—at least not today. Answers must be purely speculative, Laszlo admits. A lot of postulates seem to be required. Ultimate premises need to be tentatively adopted. They might explain otherwise unexplainable phenomena. But some simple reflections may help us start to formulate clearly the relevant questions.

“A universe of isolated components governed by pure chance could not give rise to the orders that now meet our eye,” says Laszlo in his preface. I would rather say that even if it were conceivable, the next moment might see the destruction of everything. If so, why bother?

Obviously we not only can bother, but we can also contemplate events interconnected systematically. Laszlo formulates in his own preface the question his book tries to answer: “How could the evolutionary trajectories of the many things we observe, or infer from observations—not only divert but also convert with each other, even when they are separated in space and time?”

A central part of Laszlo’s conceptual framework is in what he calls the QVI-hypothesis. It is a highly sophisticated theory rather than a hypothesis in the terminology I find most convenient. I cannot but hope that it is taken seriously by the few professionals who will be able to

judge its scientific merit. Potential readers of the book are advised to joyfully continue reading even if many sentences are incomprehensible to them. It is a pity that so many stop reading when most of a text is not understood. One can get a lot of aha-experience in spite of this. Some parts of the conceptual framework are: “the Dirac sea of quantum vacuum,” “sequential emergence of diversified, yet ordered, systems,” “bias producing interconnections that subtly bias the evolutionary trajectories of the universe,” “the holographic field.” Extremely simplified, one might say that Laszlo envisions a world that is constantly created and where every event that happens locally, as for instance what happens in one’s consciousness, is connected with what happens everywhere else. There is no absolute determinism, but evolution has had a measure of bias in favour of certain trajectories, and directions, rather than others. Complete randomness is out of the question or, strictly speaking, incomprehensible. The time is ripe to work out exact theories of general evolution of the Cosmos, transcending the usual deep distinction between theories of physics and biology, and between the physical and the mental.

There are many of us who wish to see a mounting trend of speculation inspired by such courageous, but not pretentious efforts, such as those of Ervin Laszlo.

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<sup>1</sup> Ervin Laszlo. 1995. *The Interconnected Universe*. Singapore and Riveredge, NJ: World Scientific. See especially pp. 5–28.