

Teilhard and Prigogine

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I. Introduction

Ilya Prigogine (1918-) is a physical chemist and philosopher who shares his time with the University of Brussels and the University of Texas at Austin. His research in thermodynamics is seen as providing new theoretical reasons why the universe may seem to run down and yet tend to a greater complexity and organization. Dr. Prigogine was awarded the Nobel Prize in Chemistry in 1977 for this work. Since then he has pursued its implications in a number of popular journals and a book *Order Out of Chaos*.

The scope and significance of Ilya Prigogine's discoveries, ranging from physical processes to social and cosmic systems, compares well with the evolutionary vision of Teilhard. Several works on Teilhard refer to Prigogine (*Teilhard, Taoism, and Western Thought*, p. 12), and he was invited to speak at the Teilhard Centennial Symposium at Georgetown University in May 1981. As one of the organizers of that Symposium there was time for a chemist like me with a long-time interest in Teilhard to meet with and correspond with Dr. Prigogine and assess the extent of the similarities in thought of these two scientists and philosophers. A later dinner meeting with Dr. Prigogine stimulated an ongoing chemical research program in my own laboratory.

My purpose here will be to explore and explain the basic aspects of Ilya Prigogine's thought in such a way as to facilitate its comparison with Teilhard's vision. This may best be done in the main by a journey through its technical content. In this first section we will introduce some points of contact between the two thinkers. Part II discusses in some detail Prigogine's theoretical contributions — The Rediscovery of Time, Physical and Chemical Phenomena, Bifurcation Theory, and Energy and Entropy. In the concluding section we return to further consider and summarize the convergence of their worldviews.

One similarity which could be due to their common background is the effort to relate findings in their respective scientific disciplines to an integral humanistic view. Both authors were knowledgeable about their respective religious traditions and about classical literature. In the Preface to his book *From Being To Becoming* Prigogine notes "a reader must be familiar with the basic tools of theoretical physics and chemistry," and then goes on to say "It is probably not an exaggeration to say that Western civilization is time centered. Is this perhaps related to a basic characteristic of the point of view taken in both the Old and the New Testaments?" (BB XVII) Both developed an early interest in history and philosophy. Prigogine's mother recalls that he could read piano scores before he could read words and his repertoire as