Information, Knowledge, and Life: How are they Related?

Lecture in Homage to Michael Conrad

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Abstract: In his presentation at the FIS 1996 conference, in Vienna, Michael Conrad attempted a characterization of the proper relationships between the vertical structure of adaptability and the social management of information systems. As he argued in his written contribution to the Proceedings (Conrad, 1999: "Organisms, Machines, and Societies"), the information sciences cannot be expected to provide simple, fast answers to such interrelationship questions but to highlight the types of investigative approaches that will be necessary.

In this spirit, the reflections that follow will review some of Michael's basic ideas on adaptability while introducing a few nuances, undoubtedly inspired by recent discussions in the FIS list and hopefully conducing to new insights on the proper relationship between information and knowledge –on how both concepts have to be situated within a biological framework as constituting the very center of the "adaptive" structures of life. Somehow, this discussion transcends the disciplinary boundaries of natural science and achieves significance in socioeconomic fields too (Marijuán, 1998).

Three conceptual tracks may contribute to such general understanding of adaptability as will be briefly explored during this lecture: 1) The asymmetry between the ascending and descending information flows in the vertical structure of adaptability (in essence, the difference between analysis and synthesis, between closed and open systems). 2) The need to explain the operational "closure" in the adaptational processes of living beings by articulating a view "from within" (internalism vs. externalism). 3) The distinction, within the whole vertical hierarchy of adaptability, of some neatly informational, or better, "cognizing" entities propelling the further evolution of natural and artificial modalities of adaptability –"core cells" (Baluska et al., 2004), "cognits" (Fuster, 2003), "enterprises" (Brown & Duguid, 1999)– each one being characterized by specific modalities of knowledge accumulation and information accounting processes.

Coherently putting together the many strands of thought converging in these issues is far beyond the capabilities of any single author. The hope is that FIS and other thought-collectives may get motivated to promote further advancements in these "investigative approaches" so elegantly pioneered, and so richly developed in formal aspects, by Michael Conrad.

Bibliographical References

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