General System Theory (glossary)

general system theory

> *General system theory (GST), attempts to formulate principles relevant to all open systems. GST is based on the idea that correspondence relationships (homologies) exist between systems from different disciplines. Thus, knowledge about one system should allow us to reason about other systems.* (von Bertalanffy 1968)

Sources

von Bertalanffy, L. 1968. *General system theory: Foundations, development, applications.* Revised ed. New York, NY: Braziller.

Discussion

Ludwig von Bertalanffy developed a research approach based on open system theory (Bertalanffy 1950). He was one of a number of natural scientists who realized that the reductionist, closed system, approach could not be used to explain the behavior of an organism in its environment.

GST also implies a scientific approach, with identify laws and generalized theory to unify all science. Bertalanffy was cofounder, along with Kenneth Boulding (economist), Ralph Gerard (physiologist) and Anatol Raporport (mathematician), of the Society for General Systems Research in 1957. This group is considered by many to be the founders of System Age Thinking (Flood 1999).

Work Cited

Bertalanffy, L. von. 1950. "The Theory of Open Systems

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SEBoK v. 2.10, released 06 May 2024