

**REUSABILITY IN KNOWLEDGE AND PEDAGOGICAL OBJECTS:
DIGITAL RESOURCE REUSABILITY (AS OBJECTS) ONLY OCCURS WHEN
LIBRARIES ARE NEAR-ISOMORPHIC TO THE STRUCTURES THAT PERTAIN:
FROM MATH TO BOOKKEEPING; FROM RIGID ORGANIZATIONS TO
UNBOUNDED, FLUID SOCIAL ORGANIZATIONS AND SOCIETIES**

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There is a false notion that the world is complex. Rather, the world, with appropriate definitions at appropriate levels of granularity, is a lot simpler than believed. One shorthand of granularity is the popular DIKW (data, information, knowledge, wisdom) division, however, even that shortcut is misleading because it implies a static universe of these entities, as if the distinctions between data and information, for example, always pertains in all situations and environments. Rather, within a dynamic universe of knowledge, a wit of knowledge pertaining to one situation, might not even be information or data, but simply noise to a system at hand.

To counter the notion of an ever more complex world it is important to look from both the perspective of those perceivers of complexity and the perspective of significant knowledge, say as *knowledge objects*, which can simply and effectively capture model-related processes in, say, a single-sentenced *operational definition* as advanced by Cowan, Churchman, Ackoff and myself. From the perceiver side it is necessary to ignore *apparent variety* – *variety* that will shroud a situation from its underlying brevity and clarity. As the aim of many designers and systems analysts is to *provide requisite variety* in response to forceful and conducive variety pertaining to a situation, only through an approach of *knowledge conciseness* or *knowledge consilience* can we attain guidance (a.k.a *cybernetic regulators*) of fluid social situations (and out of this focus have also defined *behavioral science* resulting from these *near-isomorphic* forms).

Further, as a generous benefit of investing in both *content knowledge objects* and *pedagogical knowledge objects*, via the *netting* of these Net-based objects, often as *true 'learning objects,'* with well-defined properties and methods, we will attain the oft-missed goal of *object reusability* as well as the formation of a World Brain (Wells, 1938) which will serve to enable the human mind to learn, an investment in *human capital* (Becker, 1964), a continuous process of adding to the netting, often appearing as welfare-increasing technological innovations, and a civilizing force in man's "race between education and catastrophe (Wells, 1919)."

Through citing example models and example knowledge objects, the listener is encouraged to consider the veracity and importance of making this *Kuhnian paradigmatic shift* (1962) before society loses all hope of re-establishing a vision of the *Enlightenment*.