

KNOWLEDGE-BASED SYSTEMS AND INFORMATION SCIENCE

Personality perceived (knowledge engineering)

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The Indian librarian, Ranganathan, anticipated the present day interest in knowledge engineering by his consuming analysis of the nature of order. In library classification, order translates into the placement of general before special, a heuristic procedure which nevertheless was rationalized by Ranganathan (pace Kaiser) as a progression of increasing "concreteness". In that concepts are within the mind they are perceived, and not of the real world. For this reason "order" as it is discussed and understood in the context of thermodynamics is best kept at arms-length, being the order of material things, and not order as an abstract entity. For the purposes of calibrating his progression of concreteness, Ranganathan postulated five categories as being fundamentals for knowledge: Personality, Matter, Energy, Space and Time (PMEST). Specified in this fashion they are in truth a manifestation of decreasing concreteness, used for the citation of "facets" seen in the Colon Classification. Thus citation order reverses schematic order. The Personality category has never been satisfactorily resolved; but with five categories only specified for the entire spectrum of knowledge, it can be accepted that these five constitute a mutually exclusive array which must dominate all the processes of perception. TSEM are easily identifiable as perception of natural phenomena, leaving the residue P as equating with human creative activity and social organization. The human universe emerges only by virtue of perception, and in postulating this schema, Ranganathan implies that P is contingent upon order itself. Having perceived order, then order itself becomes the root of the cognitive process. In exhausting the schema then, Personality becomes order perceived and deployed. A test of the validity of the postulation can be attempted by confirming the status of these five concepts as irreducibles. A reducible concept can be rendered as both a definiens, its formative manifestation, and its subsequent expression as a definiendum. The definiens can best be visualized as a string, the definiendum being the "packed-down" term in which the concept finds its -- personality. By regression definiendums, then, are projections of definiens which themselves spring from existing definiendums, a process which continues until further reduction becomes impossible. To test Ranganathan's postulation we can look for further possible reduction within any of the five categories postulated; alternatively if other irreducibles can be found then the schema must needs be enlarged to include them. It is thought that the simple test of time suffices to show the efficacy of Ranganathan's postulation. It has survived half a century, without change, the supreme heuristic statement of cognition. The resolution of Personality as perceived order clears the way for the harnessing of order for noetic ends in the development of a true artificial -- thinking -- intelligence, as similarly the forces of the physical world are manipulated for palpable advantage.