The Miser Project use of "model" is reserved for a mathematical-logic situation around **6. Manifestation and Tacit Awareness** interpretations of theories, perhaps a third flavor of modeling (or theory-building) with respect to the marvelous utility of computers as instruments of human purpose and experience. * Mind-map notes and comments by William L. Anderson, https://orcid.org/0000-0003-3200-7947, 2019, CC0 5. Choreography of Computation 1. Recap: Computation-Model Stage-Setting† † I need definitions (examples?) for: 1. effective-computability[1] 2. operational computational process 3. computational representation 4. mathematically-demonstrated correspondence 5. model of computation 4+. Concerning Representational Equivalence Miser Project: Interpretation, Representation, **Computation, and Manifestation* Dennis E. Hamilton** (Posted on 2019-02-11-14:24) 2. Structure, Interpretation, Representation, Computation, and Manifestation

1. M. Davis, Computability and Unsolvability, Dover Publications, NY,

NY, 1982, ISBN 0-486-61471-9, pp. xv-xviii.

References:

4. Interpretation: Variations on a Theme

3. Review: More About Structure

Some informal notions are adapted and restricted in the context of the Miser Project to assist in capturing the

essence of computation and its practical application.

Introduction: Miser Project conception starts from reasoning with and in certain mathematical structures. That foundation is used with mathematical thinking in establishing a **model of computation** and subsequent **reasoning about programs** and **their dependable employment for practical purposes**.

A.With regard to computational interpretation, effective-computability is taken as a condition on deductions that are available given a particular mathematical representation of a function or predicate.

B. The transition from an effectively-computable representation in any structure(?) to an operational computational process of any kind is suggested, not demonstrated.

C. It is posited that the interpretation-in-<ob> approach is sufficient for computational representation of the same effectively-computable mathematical functions as any other recognized model of computation. Demonstration of such universality (i.e., Church-Turing computability) and common limitations of that universality is **one Miser Project objective:** making this aspect of theoretical computing accessible in practical, demonstrable, and understandable terms for computing practitioners and other interested parties.

Structure: mathematical characterization of theoretical entities, in terms of domains, primitive notions, and applied logical theories.

Interpretation:

- mathematical: arrangement by which one mathematical structure is modeled in another using a mathematically-demonstrated correspondence(?)
- *linguistic*: interpretation of a text in a (standard) semantic domain
- empirical: achievement of engineered mechanized operations confirmed to satisfy a model of computation
- social / scientific: identifying objects in physical/social reality as evocative of theoretical entities, and sometimes *vice* versa

Representation:

- mathematical: formulation of mathematical functions in a given structure's theory language
- conceptual
- reflective

Computation:

- conceptual: an orchestrated performance of representations of a specified function relationship, such as y=f(x).
- informal: the result of a computation, e.g., "the square root of x"

Manifestation:

- general
- operational
- interactive
- tacit