

Fig. IA The Complexity Hierarchy; Problem of Alpha

#### PROBLEM OF ALPHA

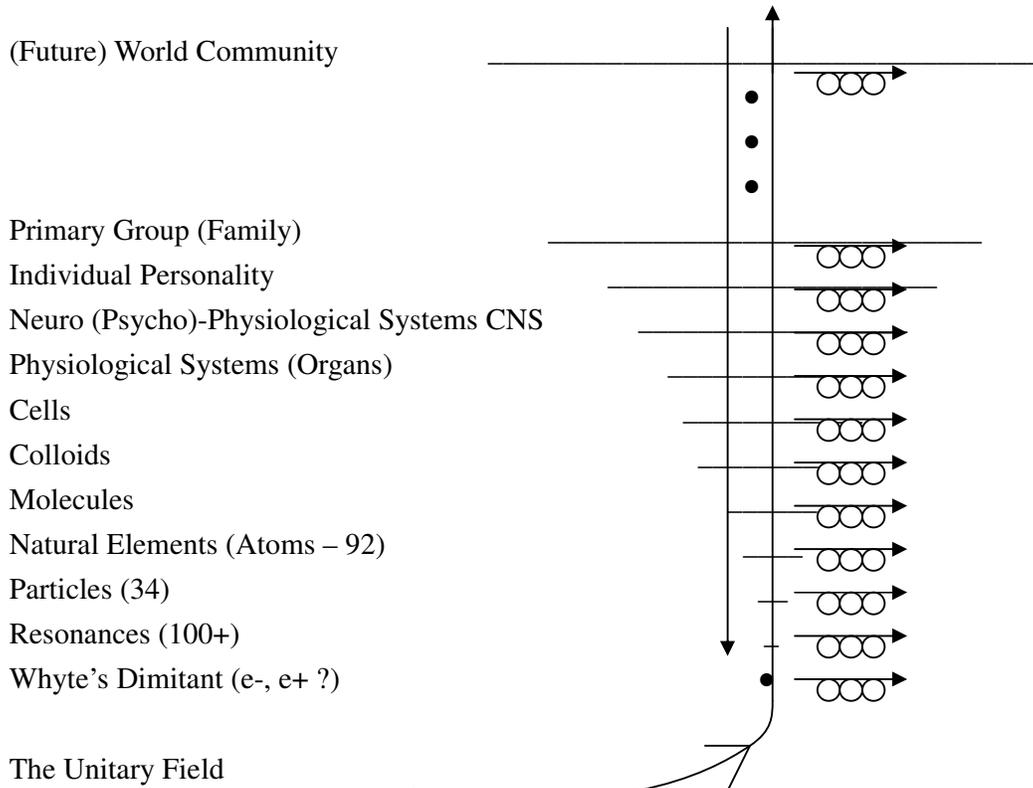
$$\alpha = 2\pi e^2 / hc$$

$$\alpha = \frac{2(3.14159)(4.80296 \times 10^{-10} \sqrt{\text{dyne cm}})^2}{(6.62554 \times 10^{-27} \text{ dyne cm sec})(2.997925 \times 10^{10} \text{ cm/sec})}$$

$$\alpha = 7.29719 \times 10^{-3} = 1 / 137.03913$$

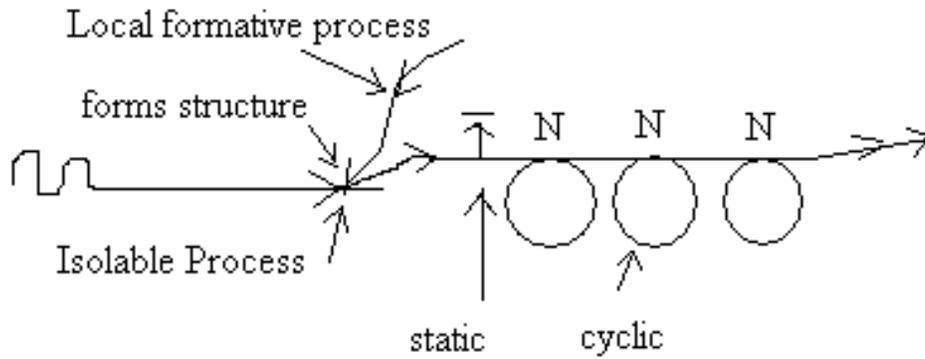
$\alpha^{-1} = 137.03913$  is a pure number that appears in all equations of high energy physics. Problem of alpha: What is its empirical meaning and referent?

**Fig. IB The Complexity Hierarchy**



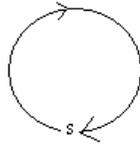
The unitary process appears as a formative ( $\downarrow$ )-organizing ( $\uparrow$ ) process on all levels of the Complexity Hierarchy; its normalizing-organizing process forms static and cyclic structures (utilizing the structures of the  $\downarrow$  formative process) in its intrinsic tendency toward restoring its norm.

(Note: Static and Cyclic Structures  $\rightarrow \text{○○○} \rightarrow$  may exist at each level of complexity.)



The Unitary Field as a whole operates as a normalizing organizing process by synthesizing static and cyclic structures that facilitate normalization (maintain the norm).

### Simplified Representation of the Unitary Process



Whyte's Unitary Field Theory: This universe is one (unitary) field and operates on one (unitary) principle which has two aspects. These two aspects appear as a creative formative-organizing process which manifests itself in all physical, biological, and sociological systems of the universe. The Unitary field is based upon one structure: the free energy field structure.

Whyte's Unitary Principle and Unitary Process: "Asymmetry tends to disappear (and symmetry is approached) and this tendency is realized in isolable processes." There are two aspects of this (intrinsic unitary field) tendency toward symmetry: a local formative symmetry tendency and a tendency of the field as a whole to bring each formed part into conformity with the asymmetry level of the field as a whole (uniformity of asymmetry). In isolable processes both field tendencies appear in the same structural organization; the local symmetry tendency appears as a formative process and the symmetry tendency of the field as a whole acting to restore its uniformity of asymmetry (asymmetry level) appears as an organizing process. In short, the unitary field and its intrinsic tendencies toward symmetry appears in isolable processes as a creative formative-organizing field process.

One way direction of development. The intrinsic tendency of the unitary field to re-establish continuously the level of uniformity (of asymmetry) in the field as a whole and in each of its parts is called the normalizing-organizing process and the level of uniformity (of asymmetry) established in the part is called the norm. In its intrinsic tendency toward restoring the high level of asymmetry in the field as a whole and in each of its parts, the normalizing process organizes the formed structures (parts) into large structural organizations in such a way that they facilitate normalization. . . the normalizing process, in continuously promoting its intrinsic tendency by synthesizing . . . . . is responsible for all one-way (evolutionary) . . . . .

(Note: This chart is handwritten. The last portion of my copy is damaged.)

Fig. IC

Psychological Process Hierarchy

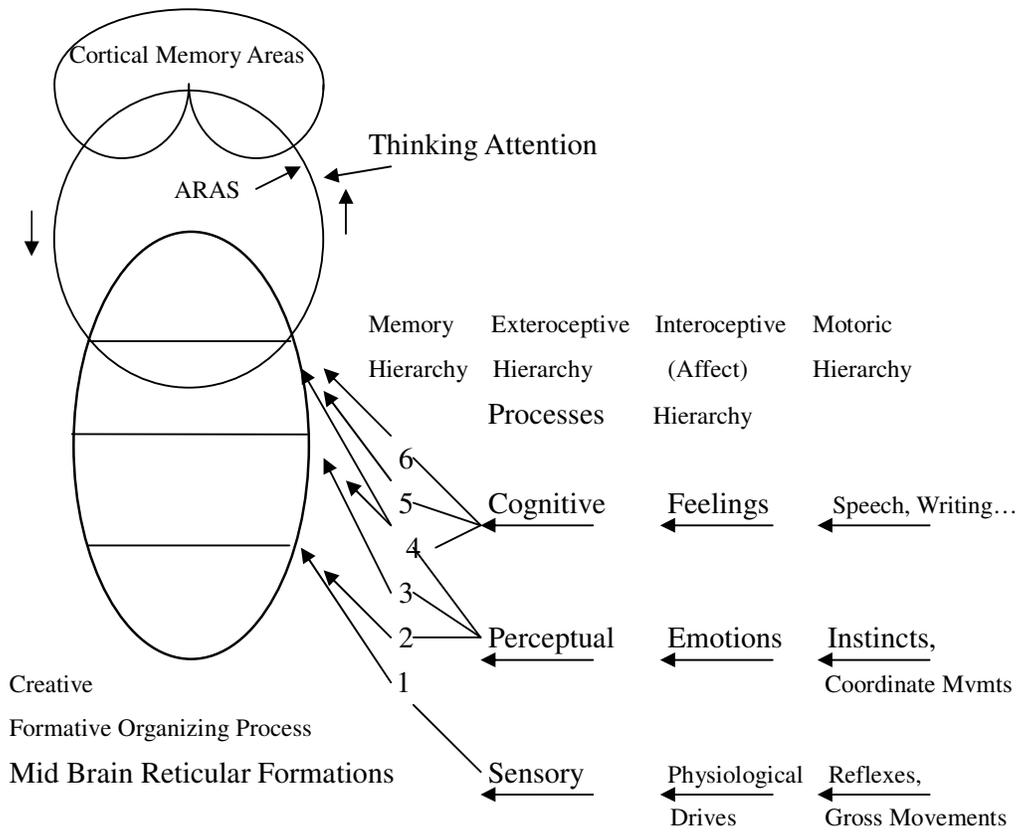


Fig. ID

Exteroceptive Memory Hierarchy

- 6 Personality Attributes; Symbolic Abstract Concepts
- 5 Concrete Concepts
- 4 Ungeneralized Past Experiences
- 3 Spatial and Figural Qualities: Depth, words, etc.
- 2 Qualities: Hue, Pitch, Etc.
- 1 Intensity: Loudness, Brightness, Etc.

Fig. II