

The New Universal Axiomatic System

An Outline

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The Universal Axiomatic System combines the Postulates of the Reciprocal System (the Physical or Space-Time Realm) and the Postulates of the Metaphysical Realm (or Non-Space-Time Realm).

0. The Postulates / Axioms

A. Metaphysical Realm

FIRST METAPHYSICAL POSTULATE: There are existences in the metaphysical region of a more general and less restricted type than the units of motion that are the basic constituents of the physical universe.

SECOND METAPHYSICAL POSTULATE: The metaphysical existences are logical, orderly, and rational.

THIRD METAPHYSICAL POSTULATE: Metaphysical existence conforms to a specific set of laws and principles different in some respects from those of the physical universe.

FOURTH METAPHYSICAL POSTULATE: The metaphysical existences of which we have evidence are intelligent.

B. Physical Realm

FIRST FUNDAMENTAL POSTULATE: The physical universe is composed entirely of one component, *space-time* or *motion in the most general sense*, existing in three dimensions, in discrete units, and with two reciprocal aspects, space and time.

SECOND FUNDAMENTAL POSTULATE: The physical universe conforms to the relations of ordinary commutative mathematics, its magnitudes are absolute, and its geometry is Euclidean.

THIRD FUNDAMENTAL POSTULATE (IMPLIED): The physical universe is logical, orderly, and rational.

I. The Universal Axiomatic System: Outline

A. Axioms and Theorems of Form

1. Logic (deductive and inductive)
2. Mathematics
 - a. deterministic mathematics
 - 1) finite quantities: algebra
 - 2) infinitesimal quantities: calculus
 - b. stochastic mathematics
 - 1) probability
 - 2) statistics

B. Axioms and Theorems of Content

1. Non-space-time--metaphysical existents
2. Space-Time
 - a. individual units of space-time
 - b. collection of units of space-time—geometry
3. Physical Existents
 - a. individual physical existents and space-time
 - 1) material displacements
 - a) photons
 - b) subatoms
 - c) atoms
 - 2) cosmic displacements
 - a) photons
 - b) subatoms
 - c) atoms
 - b. interaction of physical existents
 - 1) material displacements
 - a) interaction of photons
 - b) interaction of photons and subatoms
 - c) interaction of photons and atoms
 - d) interaction of subatoms
 - e) interaction of subatoms and atoms
 - f) interaction of atoms
 - g) interaction of large collections of atoms: stellar systems
 - 2) cosmic displacements
 - 3) interaction between material and cosmic sectors
4. Biological Existents
 - a. subcells
 - b. cells
 - c. interaction of cells with each other
 - 1) interaction of independent individual cells
 - 2) interaction of dependent individual cells: multicellular organisms
 - 3) interaction of independent individual cells with multicellular organisms

- 4) interaction of multicellular organisms
 - a) same species
 - b) different species
 - d. interaction of cells with physical existents
- 5. Human Existents
 - a. individual humans
 - 1) physiology and development
 - 2) behavior: ego states
 - b. interactions of humans
 - 1) spoken and written transactions
 - 2) rituals, pastimes, games, activities, intimacy
 - 3) marriage, family, and kinship
 - 4) social, political, and economic organization
 - c. interactions of humans with metaphysical units (ethics, intuition, aesthetics)
- 6. Technological Existents
 - a. interaction of humans with physical existents
 - 1) photonics: control of photons
 - 2) subatomics: control of electrons, neutrons, protons, etc.
 - 3) atomics: control of atoms
 - a) microatomics
 - (1) chemical/materials synthesis
 - (2) atomic power generation
 - b) macroatomics
 - (1) structural design
 - (2) motion control (dynamics)
 - (3) energy generation/transformation
 - 4) systematics (combined photonics, subatomics, atomics)
 - b. interaction of humans with biological existents
 - 1) genetic manipulation
 - 2) agriculture
 - 3) medicine

II. The Universal Axiomatic System: Meta-Axioms

- A. Independence of Axioms of UAS
- B. Consistency of Axioms of UAS
- C. Completeness of UAS
- D. Decidability of UAS

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