

L.B. 2/1/30

- I. Introductory statement re. philosophical background of Yoga and Western Science.
  - A. Western Science has been traditionally Realistic.
    1. The world given through the senses directly or indirectly is Real.
      - a. Such sensory illusion as may exist is corrected by other sensory data.
      - b. The objective world is self-existent as such.
      - c. Consciousness is not a determinant as to real relationships.
        - (1) i.e., Epi-phenomenalism and Parallelism in which Consciousness does not affect the autonomy of the external system.
    2. Space and Time considered as external and independent of consciousness and matter.
    3. Phenomena of Life and Psychology interpreted in these external, mechanistic terms.
      - a. This tendency still persistent as in Behaviourism.
  - B. Yoga philosophy and science starts with Consciousness as primary fact.
    1. Objectivity exists only as field of Consciousness.
    2. Only world which can have any meaning for science is a known world, hence world in Consciousness.
    3. Consciousness is thus the prime determinant.
      - a. Hence in psychology in sense of self-analysis is found key to all knowledge.
      - b. Thus physics becomes but a statement of the mode of action of conscious forms.
        - (1) The causative key not to be found in mechanical relationships.
        - (2) But in living conscious process.
    4. The senses not a means of contacting the Real.
      - a. They give but an appearance such as a mirage.
      - b. Such appearance may be produced centrally as in hypnotic suggestion.
      - c. Mere analysis of relationships of sensory forms not competent to show them different from the stuff of hypnotic ~~suggestion~~ impression.
    5. Space not real but the form or mode of experience.
      - a. This is essentially the kantian view.
    6. Time not real but produced from succession of states of consciousness.
    7. Basic Reality is a Supersensuous and indestructable life or abstract Consciousness.
- II. Basic principle in Theory of Knowledge of Yoga Philosophy.
  - A. Primary knowledge is direct and immediate by identification of Knower with the Known.
    1. On objective planes this leads to mathematical or Platonic method of deduction from universals to particulars.
  - B. Western Science tries to build from particular sense impressions to generalizations.
    1. This is but a process of more or less skilful guessing.

III. Comparison of scientific concepts of Occult Teaching and those of Western Science in 19th century and at present time.

- A equals older science.
- B equals occult science.
- C equals present science.

1

- A. Many indistructable elements.
- B. One primary element of which all forms are modifications or compounds.
- C. Electronic constitution of matter. Chemical elements various compounds of positive and negative electrons.

2

- A. One elementary chaemical substance cannot be transformed into another.
- B. Transformation of chemcial form can take place and can be controlled by man.
- C. Transformation of chemical elements observed in nature, i.e., radio-activity. ~~But man has found no means of controlling this process.~~ *Controlled by man in case of H knocked out of He.*

3

- A. Matter in chemcial sense cannot be destroyed or added to. Energy or force acts upon matter but independent having its own law of conservation.
- B. Matter and energy but two aspects of one and the same principle. This root or primary substance not produced de hihilo nor destructable.
- C. Matter may be destroyed as matter by becoming formless energy. We have now the law of Conservation of Matter-energy.

4

- A. Universe tending to run down by dissipation of energy into space.
- B. Universe subject to recurrent manifestation such as out-breathing and in-breathing. All process is cyclical.
- C. In bodies like stars matter breaks down into energy. This energy in space goes through process of reformation into matter throwing off Cosmic Rays in process. Matter attracted in turn to ponderable bodies. Hence a cyclic process. *Held by Multiverse.*

5

- A. Space is infinite and non-substantial not affecting nor affected by the presence of matter.
- B. Objective space is finite and substantial as it is the root-substance, Akasha, in its finite modification as Astral Light.
- C. In Teory of Relativity space regarded as finite though unbounded. Has a substantial character such that it is warped in the vacinity of ponderable bodies.

6

- A. Time is absolute and moves on unaffected by presence or absence of motion.
- B. Time a form of experiencing produced by succession of states of consciousness. *Born and dies.*
- C. Time is relative to mode of observation and state of relative motion. *Time born with heterogeneous matter.*

7

- A. Space, time and matter three independent facts.
- B. Space, time and matter interdependent with Consciousness
- C. Space, time and matter three interdependent variables in a synthetic, relativistic complex.

8

- A. Sensible matter is objectively Real.
- B. Sensible matter is but a mode of appearance.
- C. Sensible matter as something real has vanished for the physicist. It is but a mode of appearance of electrical energy. *Wave cycles*

9

- A. The Universe is a complex capable of complete theoretical interpretation in mechanical terms.
- B. The objective universe is but an effect of subjective or ~~quasi-subjective~~ causes. No external causal nexus possible by which future of system can be predicted.
- C. Study of discontinuity in angular momenta of electrons has led to theory of unpredictability of future of system. "The Theory of Uncertainty".

10

- A. Matter is essentially dead and static subject to external impulse.
- B. All matter living. Some quiescent, some forms kinetic.
- C. Phenomena of radio-activity has led to view of world as changing, living and growing, in other words, as dynamic.

11

- A. Light is merely a mode of motion in the ether.
- B. Light is an actual substance made of living cells.
- C. There is a tendency to-day toward the view that light is substantial and corpuscular. Although the phenomena of interference still seems to require the wave theory.

12

- A. Different forms of energy interchangeable, as electricity becoming heat, light, etc., etc.
- B. The one form of energy does not change into the other. Thus where resistance to electricity through wire produces light, there is not reduction of amount of electricity.
- C. Ether waves can detach electrons from atoms giving them a kinetic energy independent of intensity of incident waves but proportioned to frequency. In other words, there is not an energetic equality between the ether wave and the kinetic energy of the detached electron.

13.

- A. Maintained that surface of earth rested upon a molten interior.
- B. Center of earth not molten.
- C. Studies of tide action on fluids, transmission of earthquake vibration etc. makes idea of fluid interior untenable.

14.

- A. Earth originally very hot and becoming progressively cooler ever since.
- B. Earth temperature subject to law of periodicity.
- C. As far back as we can read the geological record there is an alternation of warm and glacial periods. Measurements of radie activity at earth surface indicates earth becoming warmer now.

15

- A. Age of earth variously estimated but mostly much under 1,000,000,000 years.
- B. Earth cycle 4,320,000,000 years we being now at about mid-point.
- C. Jeans in last Smithsonian Institute Report gives age as about 2,000,000,000 years with about 2,000,000,000 more to go.

16

- A. Man's age generally held not to go back of post-glacial drift.
- B. Man as a physical being over 18,000,000 years old. Goes back into secondary period.
- C. Idea of an Eocene man now being entertained.

Quotation from Milikan

"The foregoing discoveries of our generation have taught us a wholesome lesson of humility, wonder, and joy in the face of an as yet incomprehensible physical universe." p199  
Smithsonian Report 1937

IV. Conclusion.

- A. Science is coming steadily closer to the view of the Ancient Wisdom.
- B. This should direct the student to a serious consideration of the philosophical groundwork of that system.