

6. Applying the conclusion. This involves:
  - a. testing against new evidence
  - b. generalizing about results

(this model was proposed by a professor of philosophy at Lehigh University)

#### D. The Uniform and Dependable Operation of Natural Processes

This principle is the foundation of modern experimental science, without which modern science as we know it would be impossible. The universal laws in nature which men seek to establish are expected to be such as will permit dependable prediction and effective control of future events by their aid.

#### E. The Reliability of the Principle of Homology

"The only postulate the evolutionist needs is no more than a logical extension of what the layman considers a truism or a self-evident fact, namely, that fundamental structural resemblance signifies genetic relationship that, generally speaking, the degree of closeness of structural resemblance runs essentially parallel with closeness of kinship. . . If we cannot rely upon this postulate, which may be called the principle of homology, we can make no sure progress in any attempt to establish the validity of the principle of evolution.

"We account for the common possession of certain structural peculiarities by all members of a given kind of species of animal or plant by saying that such characters have been derived from a common ancestor. It is only a short step in logic to conclude that two similar kinds of species of animal have been derived one from the other or both from a common ancestral species. Once having taken this step, we are on the road that leads inevitably to an evolutionary interpretation of natural groups . . . it is logically impossible to draw the line at any level of organic classification and say that structural resemblance is the product of heredity up to such and such a level, but that beyond this arbitrarily chosen point heredity ceases to operate.

"The principle of homology and its necessary implications constitute the only postulate that is necessary for the evolutionist to make in order to go ahead on a sound basis with a presentation of the evidences of evolution. Give him this one point, and he asks no further concessions."

-- Horatio Hackett Newman, Evolution Genetics and Eugenics (Chicago: The University of Chicago Press, 1956), pp. 53,55.

#### F. The Proved State of the Theory of Evolution

"This book is an attempt by one historian of life to convey an understanding of the forces acting on and through life and to interpret the history in terms significant to us all as humans. The whole emphasis is on these things: the principles of evolution and the human meaning of evolution. No space is devoted to proofs that evolution has, in fact,