## It's of the Evidence, Not the Events: Explanation in the Historical Sciences

## Aviezer Tucker (Charles University Prague)

## **Abstract**

Since the past is not given or immediately known, all our knowledge of the past is inferential. The historical sciences (History, Comparative Historical Linguistics, Textual Criticism, Phylogeny, Archaeology, much of Geology, and Cosmology) are primarily engaged in explaining present evidence that preserves information about its origins. The historical sciences typically use historical common causes to explain information preserving similarities or correlations between units of evidence such as texts, testimonies, homologies, DNA sequences, languages, mineral deposits, and materials remains. These explanations usually proceeds in three consecutive stages: First, they prove that the evidence is more likely given some common cause than given separate cause; second, they discriminate among five possible causal nets (I distinguish them according to the shape of their models as the V, W, K, H, and A models) that may connect the evidence with common causes; finally, if the evidence is more likely given one of these causal nets, historians may attempt to infer the character traits of the common causes of the evidence.

Explanations of historical events are usually themselves inferred holistic units that are common causes of the evidence. The theoretical background that historians use to determine historical common causes is of information theories, about its transmission in time. There is typically little mutual relevance among the historical and theoretical sciences. I demonstrate this claim by considering the relation between the social sciences, concerned with finding regularities between social types, and human History, concerned with inferring common cause tokens. History can neither confirm nor refute social science theories. Social science theories are useful for historians only as information transmission theories and in affecting the priors of some historical hypotheses. Otherwise, the complexity of history and the inability to conduct controlled experiments severely limit the mutual relevance of history and the social sciences. Epistemically, History has much more in common with evolutionary biology than with sociology.