Thought Experiments and Counterfactuals for Historians and Political Scientists

Hypothesis III holds that A → B, where "A" and "B" are states treated as binary events by the application of laws pertaining to classes of events to which these events belong.

Hypothesis IV: Observation of B in the presence of A confirms Hypothesis II only if the event that, counterfactually, it is also believed, and implicitly claimed, that "A" would not have led to "B".

Hypothesis V actually entails:

Social scientists report such claims by generating thought experiments (longer stories) in which all other aspects of the world, or as many as possible, are imagined to remain the same, except that instead of "A", "Not A" is present—for example "C".

Agent-Based Modeling: 

The diagram above indicates four agent-based modeling runs undertaken in the context of a single theoretical position (bluish or reddish-brown sides of the display, represents choice of one set of alternative interpretations produced by a diamond, cross, star, and half moon). In standard experiments with PS-I the number of independent runs undertaken in the context of a single theoretical position (bluish or reddish-brown sides of the display, represents choice of one set of alternative interpretations produced by a diamond, cross, star, and half moon). In standard experiments with PS-I the number of independent runs undertaken in the context of a single theoretical position (bluish or reddish-brown sides of the display, represents choice of one set of alternative interpretations produced by a diamond, cross, star, and half moon).

Political Scientists use Thought Experiments to generate counterfactuals inspired by alternative interpretations of historical artifacts. These are intended to evaluate the explanatory power of various empirical findings or theories. The normal problem for political scientists is that many such counterfactuals may also be consistent with the particular theory at issue. That is as easy to distinguish which "counterfactuals" are actually "counter-empirical"—conclusions that could not have occurred but that are entertained because of the coincidental occurrence of events that produced these or other sets of counterfactuals, or interpretations and conclusions.

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Thanks to Ben Eidelson, Dan Miodownik, the National Science Foundation, and the Solomon Asch Center for Study of Ethnopolitical Conflict at the University of Pennsylvania. For more information about PS-I and for complete results go to: http://www.polisci.upenn.edu/abir/ or ilustick@sas.upenn.edu

Locating the History We Have Within the Distribution of Counterfactuals

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Agent-Based Modeling:

Counterfactuals as Data
in Thought Experiments

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Middle East Polity: Multiple Futures and Illustrative Results

Four Histories: Medium Range of Environmental Variation
Bias range: -3, +3; time = 1000

Four Matching Streams of Perturbations under Two Conditions

Four Matching Histories: Wider Range of Environmental Variation
Bias range: -3, +4; time = 1000

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