

Western Philosophy of Social Science

Lecture 2. Causal explanation in the social sciences

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I. Causal explanation

- Explanations in the social sciences are almost invariably **causal** explanations: to explain the outcome or the regularity, we undertake to discover the causes / conditions / circumstances that combine to bring the outcome about.
- What is a causal explanation?

Examples of social causal claims

- Population increase causes technological innovation.
- A free press causes a low incidence of famine.
- The fiscal system of the ancien regime caused the collapse of the French monarchy.
- Transport systems cause patterns of commerce and habitation.
- New market conditions cause changes in systems of norms

Examples

- A new irrigation system causes changes in family organization
- Concentrated urban demand causes development of an infrastructure to support a flow of timber and grain into the metropolis
- The principal-agent problem represented by cattle herding in Kenya causes the emergence of the practice of bridewealth
- Citizens' shared sense of justice causes stability or instability of existing legal system

Goals and challenges of causal explanation

- Goal: to identify the conditions involved in postulating causal relations among historical entities, structures and processes
- Challenge: how do social structures exercise causal powers?
- Challenge: do causal claims need to be generalizable?
- Challenge: how does the historian identify and justify a causal hypothesis?

Singular and generic causal ascription

- singular causation: an iceberg caused the sinking of the Titanic
- generic causation: hyperinflation causes political instability
- a singular causal judgment can be supported by hypotheses about generic causation

II. Theories of causation

- Causal regularities
 - A causes B = events of type A are always followed by events of type B
- Necessary and sufficient conditions
 - A causes B = A is a necessary and/or sufficient condition for B
- Causal mechanism
 - A causes B = there exists a chain of causal mechanisms leading from A to B
- Probabilistic causation
 - A causes B = the occurrence of A raises the probability of occurrence of B

Causal realism

- The Humean approach--causation is defined as constant conjunction of factors--is philosophically misguided.
- Analysis in terms of necessary and sufficient conditions is also not fundamental.
- Social explanations depend on identifying causal mechanisms.
- When causal mechanisms exist, both regularities and necessary and sufficient conditions are to be found. So mechanisms are most fundamental.

Causal realism

- The central idea of causal ascription is the idea of causal powers and causal mechanisms: to assert that A causes B is to assert that A in the context of typical causal fields brings about B (or increases the probability of the occurrence of B).
- In looking for a causal explanation of a particular outcome P we are assuming that there is a set of properties, conditions, and events which occurred prior to P and which, as a consequence of the causal powers of these factors, brought P into being.

III. Causal realism

- Causal realism postulates that there are real, causally influential structures and processes which have genuine historical effects and which are amenable to rigorous scrutiny and explanation.
- Causal relations are not constituted by regularities or laws.
- Rather, social causal relations are constituted by the causal powers and causal mechanisms of various social entities and circumstances.

What gives rise to social causal powers?

- Social entities exercise causal powers through the effects that they have on individual choices, preferences, and beliefs.
- Institutions, organizations, states, trading systems, property systems – all have social effects through their ability to influence individual's choices.
- Institutions offer incentives, constraints, costs, benefits, and opportunities.
- These factors have direct influence on individuals' choices.

Causal powers of institutions

- The causal properties of a social entity consist in the structures that it embodies that affect the actions of individuals (through incentives, opportunities, powers, information).
- Social entities exert influence in several possible ways:
 - They can alter incentives for individuals
 - They can alter preferences
 - They can alter beliefs
 - They can alter the powers or opportunities available to individuals.
 - They can impose costs on certain lines of action.

Causal mechanisms

- Seek out the individual-level and local-level mechanisms through which social outcomes emerge
- For example, “prisoners’ dilemmas,” “public goods problems,” “principal-agent problem”
- Example: a system of paths through a forest
- Transport system as a mechanism of urbanization and market extension
- University admissions system as a mechanism of increasing / decreasing social stratification

Agents and structures

- There are two directions of influence between individuals and institutions within the context of the microfoundations framework.
- Structures constrain individuals.
- Individuals through their actions affect, change, and invent institutions.

Generic causal properties of social entities

- Generic causal properties of social institutions derive from a common existential situation for a group of agents; identify an accessible solution; and infer that this institutional arrangement will recur repeatedly.
- Generic social causal ascriptions thus depend on common characteristics of agents (e.g. the central axioms of rational choice theory).

IV. Causal reasoning in the social sciences

- several distinct goals are possible:
 - identify common processes; generalization
 - identify singular or exceptional processes; differentiation
- A common research goal: identify the causal properties of a specified set of structures, variables, or circumstances

What is comparative inquiry?

- It is social or political research that focuses on the causes and effects of social structures and dynamics and pays close attention to cross-case comparisons
- Identify similar structures and processes in different social and historical settings
- Example: How does micro-organizational structure affect the incidence of corruption?

Comparative methodology

- There are a small number of logical methods of empirical inference through which a hypothesis may be tested.

Small-N methods

- select a set of cases in which the variables of interest are present (or absent); examine outcomes; examine mechanisms and processes
- Probe the causal characteristics of these structures through observation of their behavior in different settings.
- Employ Mill's methods of similarity and difference; Boolean analysis of cases
- Complication: probabilistic causation

Case-study methods

- Causal realism gives a justification for the application of a common method of social inquiry, the case-study method.
- The case-study method is a legitimate method of causal inquiry in the social sciences.
- The researcher may engage in an analysis that we may call “process-tracing”: he/she needs to begin to offer hypotheses about the causal relations among the factors that emerge from the case study.

Examples of single-case studies

- The historical circumstances of the Chinese Revolution.
- The outbreak of World War I.
- The occurrence of the Great Depression.

Large-N methods

- If a set of factors are causally related and if we can produce a sufficient number of cases, then we should be able to observe statistical associations and correlations among these factors.
- We can therefore make use of statistical methods in areas where it is possible to observe a significant number of different cases, to suggest causal hypotheses about relations among variables.

Large-N methods

- Example: are there features of institutional organization that are more conducive to corruption than other alternatives?
- Method: observe a large number of organizations; code for a list of organizational characteristics; “operationalize” the concept of corruption; and look for correlations.

Social theory and social causation

- The empirical procedures commonly used to probe causation in the social sciences (Mill's methods and its generalizations, and various tests of statistical association) almost always underdetermine the true causal story for a given ensemble of phenomena.

Social theory and social causation

- Causal realism thus demands social theory—collective action theory, theory of bureaucracies and institutions, class conflict theory, economic geography, rational choice theory, theory of social-property regimes, etc.—since we need to have an analysis of the causal powers of the various factors in order to account for the links in the causal diagram.



La Gare Montparnasse, 1895

