Introduction to the Philosophy of Social Science

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Outline

Course Description

- Focus on the naturalistic methodology of social science.
- Investigate how to apply the theory of complexity and dynamic systems to social sciences.
- The topics are subject to changes.

Aims of the Course

- **General survey**:
- Philosophy of social science
- Complexity Theory: philosophy, mathematics, computation
- Philosophy of emergence
- Agent-based modeling

Topics

Philosophy of Social Science (2-3 weeks)

- Value and Objectivity
- Naturalized Epistemology
- Reductionism

Topics

Complex Systems (4 weeks)

- Linear Dynamic Systems
- Non-linear Dynamic Systems
- Chaos
- Fractals

Topics

Social Complexity (3 weeks)

- Social Complexity Theory
- Agent-based Modeling

Topics

Emergence (2 weeks)

- Social Emergence
- Cognitive Science and Social Science

Topics

Other topics we can talk about (3-4 weeks)

- Statistical Mechanics
- Causal Feature Learning
- Game Theory

Course Project

- Presentation
- Writing

Readings

Readings might change along the way.

- Mark Risjord. Philosophy of Social Science: A Contemporary Introduction (2014)
- Paul Blanchard. Differential Equations, 4th edition (2012)
- Stephen P. Turner. Cognitive Science and the Social: A Primer (2018)
- Claudio Cioffi-Revilla. Introduction to Computational Social Science (2017)

Readings

I will share ideas from the readings.

- Keith Swayer. (2005) Social Emergence
- Mark A. Bedau, Paul Humphreys. Emergence: Contemporary Readings in Philosophy and Science (2008)

Outline

1. Course Information
2. **Philosophy of Social Science**

Philosophy of Social Science

- Philosophy concern what it means to be human. Human nature is a social nature.
- The questions distinctive of the philosophy of the social sciences are encompassed within three broad themes: normativity, naturalism, and reductionism.

Philosophy of Social Science

- The questions of normativity concern the place of values in social scientific inquiry.

- The questions of naturalism concern the relationship between the natural and the social sciences. Must the social sciences emulate the successful methods of the natural sciences? Or are there dimensions of human society that require unique methods or kinds of theorizing?

- The questions of reductionism ask how social structures relate to the individuals who constitute them. Do churches have causal powers over and above those of their members? Or can all social-level correlations be explained in terms of individual beliefs, goals, and choices?

Example 1: The Democratic Peace

"Now the republican constitution apart from the soundness of its origin, since it arose from the pure source of the concept of right, has also the prospect of attaining the desired result, namely, perpetual peace. And the reason is this. If, as must be so under this constitution, the consent of the subjects is required to determine whether there shall be war or not, nothing is more natural than that they should weigh the matter well, before undertaking such a bad business. For in decreeing war, they would of necessity be resolving to bring down the miseries of war upon their country." – Kant[1795]

Example 1: The Democratic Peace

- Kant's argument, for example, supposes that the free choices of the citizens determine whether a nation goes to war.

- If researchers hewed closely to Kant's presuppositions, they would look at why individuals voted or did not vote for war-mongering politicians.

- By contrast, many social scientists have examined whether particular kinds of government institutions cause or inhibit war.

- In other words, their philosophical assumption is the opposite of Kant's: The causes of war are found at the social level.

Example 2: Azande Witchcraft

"If it were known that the death of a man X had been avenged upon a witch Y then the whole procedure would be reduced to an absurdity because the death of Y is also avenged by his kinsmen upon a witch Z." – Evans-Pritchard, 1937

Example 2: Azande Witchcraft

- Azande witchcraft looks puzzling to us only because we have not yet understood it.

- If they practice vengeance magic in good faith, Evans-Pritchard must have misunderstood it.

- The problem of other minds: How can we come to understand what "witchcraft" means to the Azande?

- Are all humans rational? And what does "rationality" amount to anyway?

Example 3: Freedom Riders and Free Riders

- Rosa Parks refuse to give up her bus seat to a White passenger.
- Each individual therefore had a strong motivation not to challenge the system of segregated seating on the buses of Montgomery, Alabama.
- Yet if all acted together, the laws would change. Th e Civil Rights Movement of the 1950s and 60s eventually succeeded only because enough people defied the punishments.

Example 3: Freedom Riders and Free Riders

- How did altruistic cooperation emerge?
- liberal view vs. communitarians

Normativity

- Concepts like "democracy" and "peace" cannot be defined in ways that are completely independent of political values.
- Epistemology and value freedom: If the social sciences are not value-free (in a particular way), can they be objective?
- Aiming at social change
- Values affect human behaviors. What are values, rules, and social norms?

Naturalism

- "Naturalism" is the name for a variety of views holding that the social sciences should be like the natural sciences in some important way.

- Epistemological forms of naturalism concern issues about theory, explanation, and method: "qualitative" and "quantitative"

- Those who oppose metaphysical naturalism argue that humans or human societies are distinctive in some deep way: René Descartes

- Does understanding human behavior require special methods? And does it require forms of theory different from those in the natural sciences?

Reductionism

- Can the social sciences be reduced to psychology, which in turn reduces to biology?

- Does everything ultimately reduce to physics?

- Epistemological reductionism holds that theories at one level can be replaced by theories at a lower level.

- Metaphysical claims about reduction, on the other hand, contend that entities, properties, processes, or events at one level are nothing but objects at another.

- Perhaps all reductionists are naturalists. But the converse is not true.

Reference

- Mark Risjord (2014) *Philosophy of Social Science: A Contemporary Introduction*, Routledge.