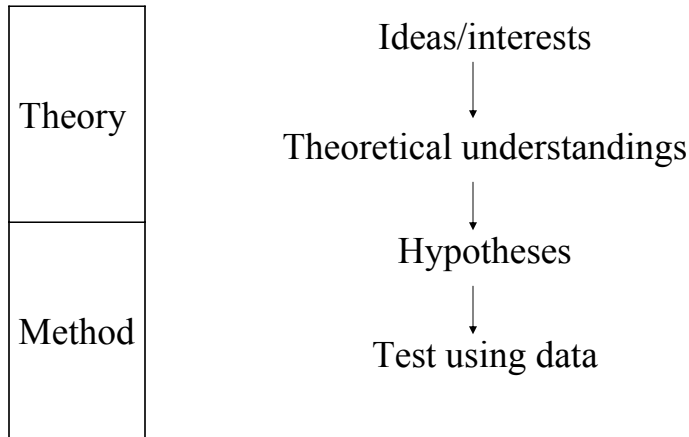


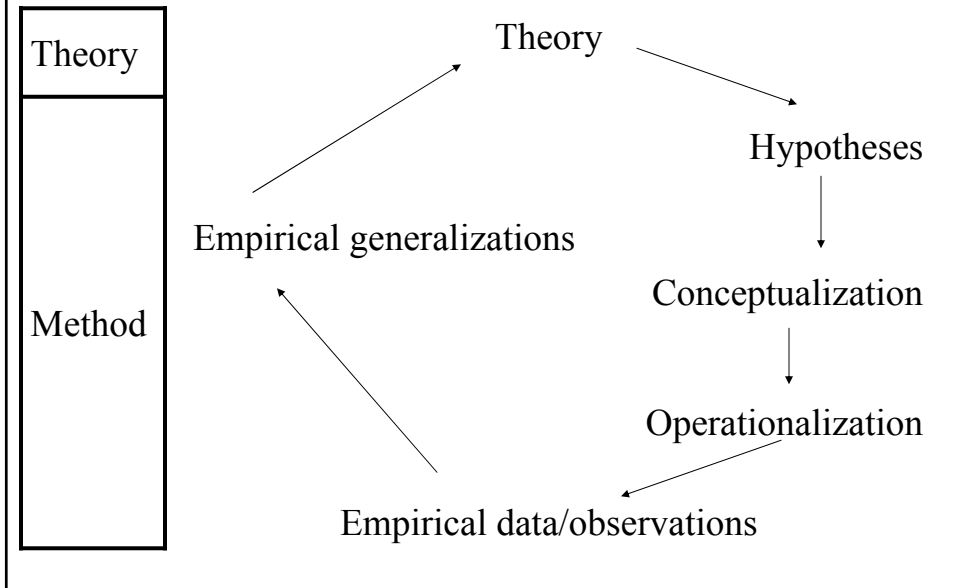
## Traditional Model of Science



## Traditional model of science: Definitions

- **Theory:** proposition to explain social regularity
- **Hypothesis:** expectation derived from theory
- **Method:** translate into testable hypotheses
- **Deduction:** using theory to derive hypotheses
- **Problems?**
- **Induction:** reformulating theory

# How Science Really Works



## How Science Really Works: Definitions

- Theory: proposition or set of propositions
- Hypothesis: formal statement (express direction)
- Conceptualization: how to measure
- Operationalization: exact measurement
- Empirical data collection/Data analysis
- Empirical generalization
- Reformulating theory: feedback

## Empirical example

