

# What is Science?

The Prehistory of STS & The Kuhnian Revolution

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# Theories

Theory	Definition	Progress	Issues
Logical Positivism	Maintains scientific theory exhausted by empirical and logical considerations	Increasing the scope of observations that theories indicate	Induction Conflicting Observations Too Abstract
Falsificationism	One can make predictions of observations from scientific theories best theories make right predictions	Enlargement of theories to cover increasing data	Too Abstract Explain away bad observations
Realism	Science always progresses towards truth through formal relations between data and theories	Systemic methods Accumulation of truths through rational basis	Never know how close you are to the truth
Functionalism	Science serves a social function of providing certified knowledge	Knowledge steadily accumulated over time	Social structure could create bias (underdetermination)

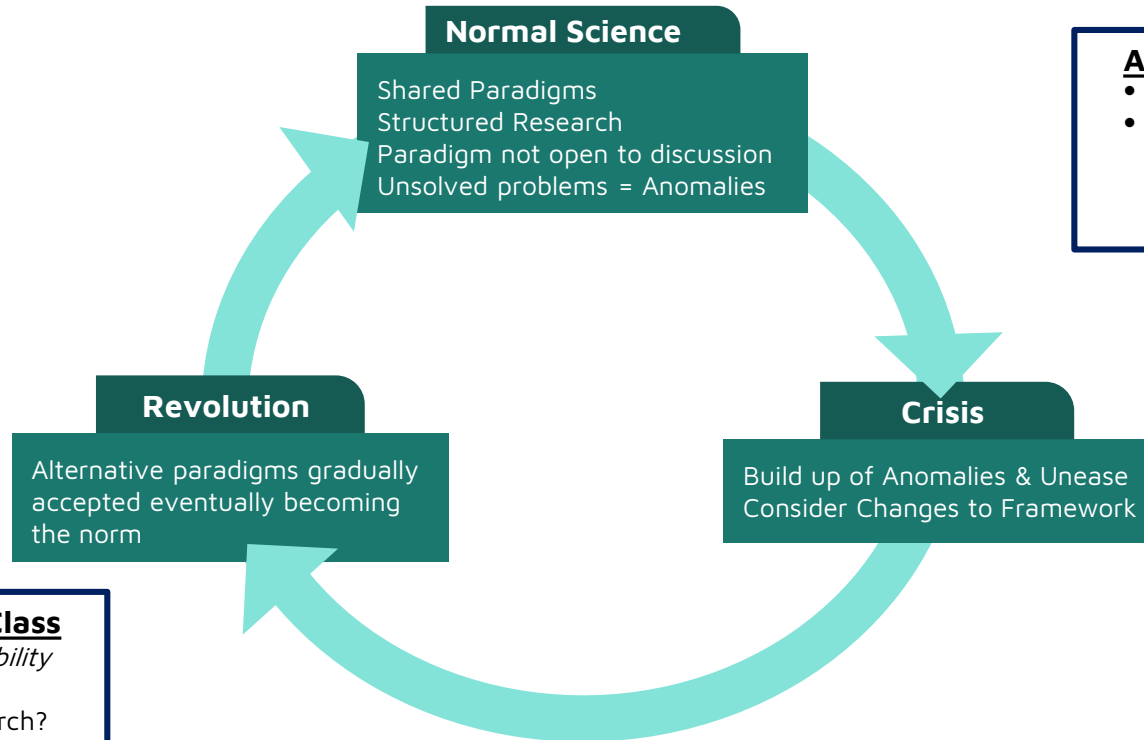


# Technology

“Technology combines the scientific method with a practically minded creativity”

- Polytechnics vs Monotechnics
- Technology is applied science
- Technology and society
- Uneven costs and risks of science and technology
- Active process - no direct translation between science and technology

# The Kuhnian Revolution



## Additional Key Terms

- **Paradigms**
- **Incommensurability**
  - Pidgins
  - Trading Zones
  - Boundary Objects

## Question for Class

- Is *incommensurability* feasible in multi-disciplinary research?



# Questions?

- Is all science social?
- Does technology affect society or does society affect technology?
- Which theories most apply to your research interests?