

Organization of Scientific Knowledge in Paradigms

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Thomas Kuhn Scientific knowledge is organized
in paradigms

Example of a paradigm in macroeconomics - the
real business-cycle paradigm

| Elements of a paradigm | RBC example |
|--|---|
| • A main model / theory | Solow growth model with stochastic technology |
| • A set of facts / observations of interest | <ul style="list-style-type: none">- Fluctuations in real GDP- Fluctuations in hours worked- Fluctuations in consumption & investment- Fluctuations in productivity |
| • A set of acceptable problems | <ul style="list-style-type: none">- Explain jointly growth & fluctuations- Explain volatility & correlation of certain macro variables |
| • A set of acceptable solutions (acceptable ways to solve problems) | <ul style="list-style-type: none">- Rational agents- Rational expectations- Walrasian, clearing markets |
| • A set of shared techniques & practices | <ul style="list-style-type: none">- Dynamic programming- HP filter |

- Calibration
+ Simulation

- Do not use graphs

• Textbooks describing
the model, techniques, many

"Frontiers of Business
Cycle Research"

Pennsylvania University Press

Edited by Cooley