

# The 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"><li>- Fluctuations in real GDP</li><li>- Fluctuations in hours worked</li><li>- Fluctuations in consumption &amp; investment</li><li>- Fluctuations in productivity</li></ul>
• A set of acceptable problems	<ul style="list-style-type: none"><li>- Explain jointly growth &amp; fluctuations</li><li>- Explain volatility &amp; correlation of certain macro variables</li></ul>
• A set of acceptable solutions (acceptable ways to solve problems)	<ul style="list-style-type: none"><li>- Rational agents</li><li>- Rational expectations</li><li>- Walrasian, clearing markets</li></ul>
• A set of shared techniques & practices	<ul style="list-style-type: none"><li>- Dynamic programming</li><li>- HP filter</li></ul>

- Calibration  
+ Simulation

- Do not use graphs

• Textbooks describing  
the model, techniques, many

"Frontiers of Business  
Cycle Research"

Pennsylvania University Press

Edited by Cooley