

Homo-economicus is dead
Long live homo-economicus

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Outline

1. How useful is homo-economicus
2. Choices and preferences
3. Levels of descriptions and signatures

How useful is homo-economicus?

Homo-economicus is dead

Bounded rationality: Tu quoque mi fili

- Rich set of experiments showing preference reversal
- Ever growing list of biases

People are not able to make the choices that maximize their benefits

Homo-economicus: still a useful model?

The repair programmes:

1. Homo-economicus + heuristics
(System 1 and system 2)
2. Utility: Curve fitting observed choice
(Prospect theory, hyperbolic discount)
3. Rationality under constraints
(scarcity of time and cognitive resources, e.g. satisficing)

Why not just doing cognitive psychology?

Homo-economicus: still a useful model?

1. Need for a model that provides the micro foundations of macro-economics (and thus economic policy)
2. A good approximation of cognitive processes and thus a good starting point

Homo-economicus: still a useful model?

2. Truly a good approximation and thus a good starting point

The homo-economicus provides the best null hypothesis.

2.1. Weight of the past:

Rational Choice Theory is the theory to be refuted.

2.2. It works most of the time.

2.3. It is the most plausible starting point
because human cognition is adaptive

Saving the homo-economicus

- Homo-economicus is *the* model for human behavioural ecology
- From ultimate to proximate

Choices and preferences

Causal explanation of choices

1. Payoffs revealed

observe choice, assume optimality and preference
→ discover constraints and payoffs

2. Preference revealed

Assume rationality, control payoffs and constraints, observe choice
→ infer preference

3. Irrationality

- The proximal mechanisms do not warrant optimal choice (heuristics)
- Construction of preferences

Interpreting preferences

1. Evolution prefers inclusive fitness
2. Preferences as describing what it is that people maximize
3. Preferences as psychological mechanisms

Interpreting preferences

1. Evolution prefers inclusive fitness	Behavioural ecology
2. Preferences as describing what it is that people maximize	Behaviorism in micro-economics
3. Preferences as psychological mechanisms	Psychologism in micro-economics

Interpreting preferences

There is no 'best interpretation' of the notion of preference

But there are:

- Different theoretical goals and associated methodology
- Different types of explanation developed

Multiple realizability of adaptive choice

Adaptive choice can be a consequence of:

1. Unmotivated behaviour (including habits and gut feelings)
2. Motivated behavior

Variables: beliefs + motivation

Zooming on preference mechanisms

Adaptive character of preference mechanisms

- Preferences for reproduction: mating, parental investment.
- Social preferences: partner choice

What is the ecology for partner choice?

Signatures of proximal preference mechanisms

- ☒ Strategy is adaptive
- ☒ Strategy accounts for behaviour
- Test in conditions that predict maladaptive behaviour

Heintz, C., Celse, J., Giardini, F., & Max, S. (2015). Facing expectations: Those that we prefer to fulfil and those that we disregard. *Judgment and Decision Making*, 10(5).

Conclusion: investigating preference mechanisms

Rational Choice Theory for understanding nature's goal

Constraints and ways to increase inclusive fitness

Rational Choice Theory for understanding nature's means

Human's mental preferences and their evolved bases

=> Theoretical claim is about adaptive strategies or preference mechanisms?

Thank you!