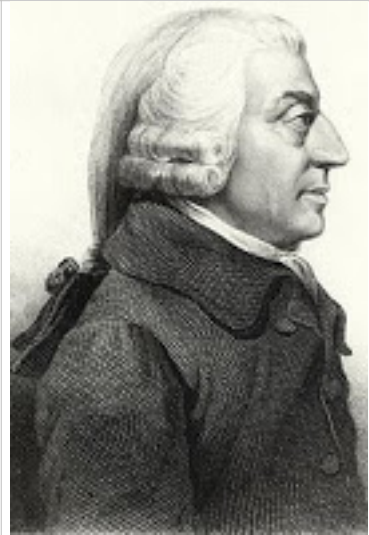


Section 1: Overview of Economics and Psychology

The world is complex and our attention is limited and often distracted so that others can manipulate us. We see the world through a glass darkly. Look at the nobleman in front gazing at the conjurer in Bosch's famous print. Now look at the conjurer's partner behind him stealing his money purse. Much of economic behaviour has this feature of our perception and beliefs leading us into jeopardy, with the thief often being ourselves.



Adam Smith

The two expansive disciplines of Economics and Psychology are hitting off one another in ways that are creating fascinating new ideas that are changing how we think about human interactions and having immediate effects on how all of us live our lives in multiple, often hidden, ways. The history of psychology can be traced to scholars in Germany and the US in the 19th century who began to directly investigate mental processes in an empirical manner not hitherto formalised in philosophy. Economics, as a discipline, had no real separate identity in antiquity but finds various expressions throughout the medieval period. While it is almost disrespectful to set the date of its founding, a t-shirt I once saw that read "Economists: confusing people since 1776", of course, bears out the fact that after Adam Smith's epic tome "The Wealth of Nations", it was no longer possible to be considered in the running to be the founder of economics as a discipline.

History of Economics and Psychology

Given the fact that both disciplines lay claim to be the science understanding human behaviour, you would assume the interactions would be regular and intensive. And in some sense, they have been. The late 1800s saw widespread attempts to ground Economics in real empirical evidence about the causes of pleasure and pain. The question of utility was examined in many settings and a number of major thinkers including Fechner attempted to place the study of human behaviour on an empirical footing. Marshall famously referred to these attempts at Hedonomics, a phrase he used as a mild put-down.

Behaviourism in 20th Century Psychology

Two major events in US academia explain a large part of the disjunction between the two fields we see at undergraduate level very starkly. On the one hand, Psychology began to strive more for empirical realism, culminating in the dominance of behaviourism as an overarching paradigm for the field. Armed with an array of experimental paradigms and the development of a set of laws of association and conditioning, the behaviourists, led by John Watson, set out to explain all human behaviour as the product of associations built up over life through conditioning.

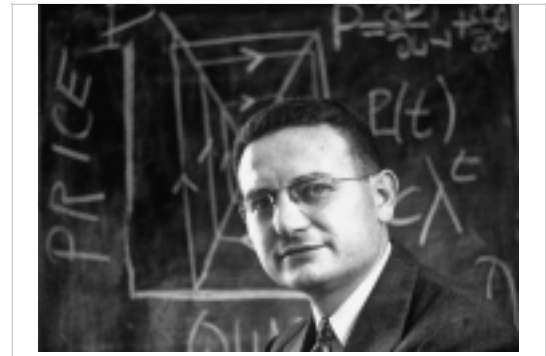


John Watson

1.2 Key Concepts in Behavioural Economics

Economics as Axiomatic Science

Meanwhile, economists were beginning to suffer physics envy, with many of the leading US academics seeking to set Economics on a sound axiomatic footing. The publication of major works such as Samuelson's formulation of discounted utility theory, the development of Arrow-Debreu equilibrium theory, the development of game theory and many related intellectual advancements propelled Economics and *rational-choice* Economics, in particular, into the forefront of Western thinking, guiding thought about how markets should be organised and regulated even questions such as how cold-war strategy should be played.



Paul Samuelson

And so it came to pass that Economics textbooks were increasingly populated with axiomatic proofs built up from elementary concepts of human behaviour, using notions of optimality and equilibria that could be applied to a range of economic problems. The study of Economics today is very much as a discipline where rational, utility and profit-maximising individuals and firms strategically interact under different market structure constraints. Such models then took on a life of their own. Feedback loops between Economics and the real-world led to many of these models being thought about and increasingly taught as if they were naturally occurring phenomenon and not models that theorists had invented to solve particular problems at particular times.

And, even worse, all of this is a very shallow description of what many of these people actually wrote. Samuelson never believed that individuals performed the type of calculations required in his discounted utility theory. Reading the textbook IS-LM model would make one believe that Keynes was a fairly mild figure with a constrained view of how humans interacted. And yet reading Keynes directly, and you are struck with how intensely he thought about the psychology of investment and consumption. The General Theory is as much what we would call behavioural economics today as any modern work. And even Adam Smith's other major work "The Theory of Moral Sentiments" is a lengthy meditation on how people behave in social situations, with whole chapters on altruism, morality, convention and all of those other things we assume away quite early in an Economics education.



Daniel Kahneman

The cognitive revolution collides back with Economics

Most excitingly, the 60s and 70s saw the emergence of thinkers directly challenging the dominance of rational choice models in Economics. The seminal work of Herbert Simon opened up the formal study of bounded rationality that has had implications across science. The psychologists Daniel Kahneman (who would later win the Economics Nobel in 2002) and Amos Tversky also did seminal work during this period, most famously with their "Prospect Theory" paper, which acted as a descriptive model of peoples behaviour in contrast to the normative approach of Expected Utility.

1.3 Key Concepts in Behavioural Economics

Rethinking our assumptions

Thinking through these issues raises profound questions. Look back at the assumptions made in Economics and use them as rocket ships to explore the vast universe of economics and policy.

1. Preferences are complete.
2. People discount the future exponentially.
3. People make rational judgements with the information available.
4. People prefer more choice to less in all circumstances.
5. People seek to maximise utility.
6. People value losses and gains symmetrically.
7. People care for their own/family utility only.

But, there are so many **challenges to these assumptions**:

1. Can we ever say preferences are complete? In some market, this may be more realistic than others but the set of options is a variable and never fully known.
2. Exponential discounting increasingly looks a poor account of how people process the future.
3. The extent to which people prefer more options may also be a variable dependent on interactions between their own characteristics and the choice environment.
4. Loss aversion is heavily observed both in humans and animals and places important constraints on markets and trade.
5. Identity considerations can lead to patterns of behaviour that look completely at variance with an attempt to live a long, healthy and wealthy life.
6. Depending on context, we may also value others utility to a higher degree than suggested in the standard model.

Economics and intellectual exploration

In conclusion, Economics is an intense questioning of how people behave and how we can design institutions. Each of the sometimes dry assumptions we make in microeconomic textbooks emerged from centuries of debate. They are living and moving assumptions. Each one potentially unlocks the key to new institutions and new ways of living. We shouldn't, like Robin Williams, tear up our textbooks. They are too expensive. But do tear up your assumptions. Participate in this debate.

Readings

1. Carroll et al. (2009), [Optimal Defaults and Active Decisions](#), Quarterly Journal of Economics.
2. Benartzi & Thaler, [How Much is Investor Autonomy Worth?](#), The Journal of Finance.

1.4 Key Concepts in Behavioural Economics

3. Benartzi & Thaler, [Save More Tomorrow: Using Behavioral Economics to Increase Employee Saving](#), Journal of Political Economy.
4. Choi et al. (2006), [Reducing the Complexity Costs of 401\(k\) Participation Through Quick Enrollment](#), NBER Working Paper.
5. Madrian & Shea, [The Power of Suggestion: Inertia in 401\(k\) Participation and Savings Behavior](#), Quarterly Journal of Economics.
6. Sunstein & Thaler (2003), [Libertarian Paternalism](#), American Economic Review.