# COPYRIGHT NOTICE:

# **Diane Coyle: The Soulful Science**

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### Introduction

I want to persuade you that economics gets an unfairly bad press. Economics is entering a new golden age, and this book is about the frontiers of economic research and empirical discovery during the past fifteen or twenty years. Yet these accomplishments are not widely known.

On the contrary, the subject frequently comes under attack, not just in academic journals but also in newspapers and political or literary magazines. Here's a typical example: "For the economists, money is a synonym of happiness... It is their philistine notions of personal and national welfare that have helped to ruin the natural world; confused technology with culture; reduced art to money, time to interest, sexual relations to pornography, friendship to advantage, charity to the charity ball and liberty to shopping." "Economics," he splutters, is "unbelievably crude," and far inferior to a good novel in diagnosing the ills of society (Buchan 1995).

At the same time, there is a widespread perception that economists are extremely powerful. Moisés Naim, the influential editor of *Foreign Policy* magazine, writes: "When economists err in theory, people suffer in practice." He calls us "a smug lot" and urges more humility on our part.<sup>1</sup> It's widely believed by those who credit us with such power that members of the guild of economists run their slide rules over government proposals on just about anything. People are unsure about what this involves—I think many believe simultaneously that economics is both very complicated and just plain common sense—but few would question the importance of economic assessments of public policy, and the role of the profession in government, think tanks, and all the arenas of public policy debate.

Unfortunately, this influence is greatly resented by many people who believe that the economist's mental model or method of analysis is highly

<sup>&</sup>lt;sup>1</sup>In "Economist Class," *Foreign Policy*, March/April 2006 (www.foreignpolicy.com/ story/cms.php?story\_id=3389, accessed August 15, 2006).

flawed. While they don't always make this critique explicit, those trained in other disciplines believe economics is too narrow in its focus, caring only about money; too dry and robotic in its view of human nature; too reductionist in its methodology. What's more, I think there's also a widespread fear that the influence of economics, perceived to be on the march, has actually been changing the world and is making it more like the arid, calculating, and uncaring domain of Economic Man.

Let me give an example from my own country, the United Kingdom, which illustrates these attitudes. During the months I was writing this book, the British Broadcasting Corporation screened not one but two whole television series about happiness. Their theme was that the thrust of all government economic policies aimed at boosting economic growth was misdirected, because growth doesn't make us happy. A small flock of books about happiness settled in the bookstores, and were widely reviewed in the newspapers and magazines that cover politics and public policy. The government called in "happiness gurus" to run seminars, and even appointed a happiness expert to the Bank of England committee which sets interest rates. It was widely reported that the said guru's research concluded that having more sex made us happier than would a \$50,000 pay rise.<sup>2</sup> The flurry of favorable comment and policy interest stemmed, I'm certain, from the belief that the happiness research proves the economists wrong: economic growth doesn't make us any happier, so we can ignore what the economists say about everything!

There's just one catch: economists have been at the forefront of the research into well-being, which is the offspring of a fruitful union between economics and psychology. The number of scholarly articles in the *economics* journals with "happiness" or "well-being" in the title has grown rapidly since the mid 1990s. The most prominent happiness experts being called in by policy makers are economists. The new ideas and findings which have emerged from this overlap between economics and psychology are discussed in this book, along with their implications for the whole subject of economics.

Needless to say, I don't believe this work undermines the foundations of my subject at all. The popular unpopularity of economics rests on perceptions which are twenty or thirty years out of date and were always a bit of a caricature anyway. One of my aims in surveying some of the most interesting areas of new research since the early 1980s is to try to bring the perception of what economists do and say up to date.

<sup>&</sup>lt;sup>2</sup>This is an average across sexual partners, of course.

This is a stepping stone to a more ambitious aim, which is to emphasize to nonspecialists and professional economists alike the importance of this subject for the caliber of public policy and the future well-being of our societies. Reading the publications of the policy intelligentsia— *The New Republic* or *The Nation*, opinion columns in *The Guardian* or *New York Times, Le Figaro* or *Le Monde*—or attending policy seminars in these countries, or looking at pamphlets issued by many think tanks, it is clear to me that there has been a kind of romantic backlash against the rationalist foundations of economics.

We economists must take some of the blame. There are too few good communicators among us, and we haven't gone out of our way to explain the fruitfulness of our approach. I admit that many economists are dull and speak in jargon. But there's more to it than our weak PR. This resistance to economics is tied up with the end of the Cold War, the redundancy of the old left-right divisions, and the passing of the Thatcher-Reagan era, which was widely seen as very much a time of triumph for economics and markets. The radical conservatives who were in power in the United States and the United Kingdom during the 1980s drew inspiration and ideas from the strong current in economic research at the time that emphasized the merits of free markets and the rationality of people's expectations and decision making. They were, of course, anticommunists, and it was the era when Ronald Reagan was able to declare victory over communism.

Yet it was not the fall of the Berlin Wall that marked the high tide of this kind of ultra-free-market economics, but rather Reagan's first election victory in 1981. By the time Hollywood caught up, and had Gordon Gekko declare (in the 1987 movie *Wall Streeet*), "Greed is good; greed is right; greed works," leading academic economists had already moved very far from the models of selfish, calculating individuals on which the Gekko view of the economy was based.

My point is not, therefore, a politically partisan one (my personal politics are very much of the flattened-in-the-middle-of-the-road kind). I fear that as long as so many people mistakenly believe economics to be intrinsically right wing, we're in danger of losing the economist's skeptical, empirical way of thinking about society. Unless noneconomists appreciate the vital role of the economic way of thought, we will see increasingly bad, even dangerous, policies.

This is all the more ironic because those scholars working on the frontiers of economics have firmly put behind them the inward-looking reductionism which did indeed sometimes characterize the discipline in

the past. Economics is enjoying a spectacularly fruitful period, in particular where it overlaps with other disciplines such as psychology, history, or anthropology. Economists are offering insights and evidence into the organization of human society which are both pathbreaking—because the tools being used were previously unavailable—and controversial because there is a growing body of evidence challenging embedded political beliefs right across the spectrum. The combination of cheap computing power, the development of new data sets, and innovations in econometrics and in analytical and computational techniques has had a very profound influence on economics, as on other sciences.

This should be of interest to several audiences. Anybody with an interest in politics and public policy should certainly equip themselves with the insights and results I describe here. I hope general readers of books on current affairs will enjoy it too. For professional economists who left the academic world a while ago, this will be a good place to catch up with developments at the frontiers of research, and I give references to further material for those who wish to read more. And I particularly hope researchers in fields other than economics—not only people in the other social sciences or natural sciences, but also our harsh critics in the wider humanities—will be willing to suspend their prejudices about us and find out what we economists are up to these days.

The next eight chapters survey (necessarily briefly) some of the most exciting areas of recent research. They reflect my personal interests there are bound to be important gaps. The first three chapters (part 1) address the fundamental question of economic development, the wealth of nations as our subject's spiritual elder Adam Smith expressed it. What is the evidence from the past? What does economic theory tell us about how to interpret it? How can theory and evidence inform the current policy debate about reducing global poverty?

Part 2 turns from how economies develop over time to the details (the "microfoundations") of how they operate. What valid assumptions can we make about individual behavior and responses to incentives? Or about what information people have on which to base their individual choices? And what is their motivation—what aims drive their behavior and should be reflected in democratic policy decisions? In other words, do people actually want to get rich or be happy?

The final two chapters (part 3) look at how individual economic choices fit into the world. To what extent and in what ways should economic decisions be interpreted as part of nature, fundamentally evolutionary or biological in nature? And how do our choices aggregate to add up

to a social outcome—how do we interact with each other, and what are the links between economics and social organization? This brings the discussion full circle, as social organization is key to questions of economic development.

In the conclusion, I return to the point that economists' way of thinking is both distinctive and essential for good public policy. I hesitate to use the word "methodology," as it's likely to turn off those readers who've made it so far, but there is an important point about the methodology of economics. Part of the critique made of economics by people in other academic disciplines (but especially the humanities) concerns its supposedly false pretensions to scientific status. Many critics, including internal critics, see this as the big mistake made by mainstream economists in the middle part of the twentieth century: we were trying so hard to be a proper science, like physics, that we fell into the trap of a sterile, mechanistic view of human nature and a reductionist vision of society. The mainstream economics of 1945 onwards is often described as "neoclassical." This distinguishes it from the earlier classical economics and signals greater formalism and use of mathematics, and a codification of the standard assumptions made by all economists in their work. These include, for example, the assumptions that people make choices rationally in their own interest, and that aggregate outcomes are the sum of individual outcomes. The term neoclassical is therefore descriptive, but it is also often used by critics of economics as a term of abuse. It's true that there have been plenty of jobbing economists happy to teach and apply unrealistic mathematically based models without thinking seriously about their fit with the "real world"; most of the work discussed in this book has been done by the leading economists, many of them the winners of the Nobel memorial prize, and by no means all of this material has reached current textbooks even at graduate level. I use the term "neoclassical" as a convenient shorthand for the mainstream approach of twentieth-century economics. Part of my argument in this book is that economics has moved decisively beyond the neoclassical assumptions in some areas. We use neoclassical models where it makes sense to do so, for they have proved their worth in many areas, but are no longer restricted by that framework where the evidence is that the assumptions are invalid.

Nevertheless, the distinctiveness and importance of economics remains entirely in its insistence on applying the scientific method to the study of human behavior. However inadequately we put our behavior under the microscope, it is the only valid mode of analysis. In my

mind, the most important founding father of economics is the Enlightenment philosopher David Hume, the embodiment of the skeptical method. Although much less well-known now than his close friend Adam Smith, Hume is widely regarded as a more important philosopher. He influenced, among many others, James Madison and Alexander Hamilton, William James, Immanuel Kant, Jeremy Bentham, and Charles Darwin. Usually labeled an empiricist and a skeptic, Hume's declared aim was the introduction of "the experimental method of reasoning into moral subjects," the development of a "science of human nature." In summing up one of his great works, *A Treatise of Human Nature*, Hume wrote:

It is at least worthwhile to try whether the science of *man* will not admit of the same accuracy which several parts of natural philosophy are found susceptible of.... The sole end of logic is to explain the principle and operation of our reasoning faculty, and the nature of our ideas; morals and criticism as regards our tastes and sentiments; and politics consider[ing] men as united in society and dependent on each other.

He said he wanted to "anatomize human nature in a regular manner" and "draw no conclusions but where he is authorized by experience."<sup>3</sup> This, not the narrow analysis of making profits in the marketplace, remains the aim of economics. Yet it helps to explain, I think, the unpopularity of economists. We economists are unwilling to tolerate imprecision, wishful thinking, or flattering illusion in the study of human behavior and society. I hope this won't deter you from reading on, though, to learn what huge progress economists have made during the past two or three decades in the study of humankind.

<sup>&</sup>lt;sup>3</sup>Hume's 1740 abstract, reprinted in *On Human Nature and the Understanding* (Collier Books, New York, 1972), pp. 289–90. Hume's works are available at www.etext.leeds. ac.uk/hume/.