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Baroque Fantasies of a Peculiar Science

Philip Ball* (*Nature*, UK)

t is easy to mock economic theory. Any fool can see that the world of neoclassical economics, which dominates the academic field today, is a gross caricature in which every trader or company acts in the same self-interested way with cool, omniscient rationality. The theory fails the basic requirement of a science that it can explain or predict the real world, and has evidently failed to make that world any fairer or more pleasant.

he usual defence is that you have to start somewhere. But mainstream economists no longer appear to consider their core theory to be a 'start' at all. The tenets of neoclassical economics are now so firmly embedded that economists who think it is time to move beyond them are cold-shouldered. These ideas have hardened into a rigid dogma, and to challenge them is to invite blank stares of incomprehension – you might as well be telling a physicist that gravity doesn't exist.

hat's disturbing, because even if economists know in their heart of hearts (and not all of them do) that the neoclassical model is indeed a caricature, its shortcomings are rarely acknowledged to those who will go on to run, or pontificate on, the world with a dose of undergraduate economics. 'Although the accepted image of economic society is not the reality', wrote J. K. Galbraith in 1973, 'it is what is available. As such it serves as a surrogate for the reality of legislators, civil servants, journalists, television commentators, professional prophets – all, indeed, who must speak, write, or act on economic questions.'

nd so it is. Neoclassical idiocies persuaded many economists that market forces would create a robust post-Soviet economy in Russia (corrupt gangster economies don't exist in neoclassical theory). Neoclassical ideas favouring unfettered market forces may determine whether we adopt the euro, how we run our schools, hospitals and welfare system. Yet while mainstream economic theory remains fundamentally flawed, we are no better than doctors diagnosing with astrology.

eoclassical economics asserts two things. First, in a free market, competition establishes a price equilibrium that is perfectly efficient: demand equals supply and no resources are squandered. Second, in equilibrium no one can be made better off without making someone else worse off.

t's tempting to infer that, because these conclusions sit so comfortably with right-wing convictions, the dominance of neoclassical theory has political origins. But while neoclassical economics has justified much right-wing policy-making, the truth goes deeper. Economics arose in the eighteenth century in a climate of Newtonian mechanistic science, with its belief in forces in balance. And the foundations of neoclassical theory were laid when scientists were exploring the notion of thermodynamic equilibrium. Economics borrowed the wrong ideas from physics, and is now reluctant to give them up.

his is not to suggest that economic theory is simple. Far from it. It is one of the most mathematically complicated subjects among the 'sciences', as difficult as quantum physics. That too, however, is part of the problem: neoclassical theory is such an elaborate contrivance that there is too much at stake to abandon it.

t is almost impossible to talk about economics today without seeming to endorse its myths. Take the business cycle: there *is* no business cycle in any meaningful sense. In every other scientific discipline, a cycle is something that repeats periodically. Yet there is no absolute evidence for periodicity in economic fluctuations. Prices sometimes rise and sometimes fall. That's not a cycle; it is noise.

his is not semantics: words condition thinking, which is why talk of cycles has led economists to hallucinate all kinds of fictitious oscillations in economic markets. Meanwhile, the Nobel-winning neoclassical theory of the so-called business cycle 'explains' it by blaming economic fluctuations on events outside the market. This salvages the precious idea of equilibrium, and thus of market efficiency. And so analysts talk about the market making 'corrections', as though there is some ideal state that it is trying to attain. But in reality, the market is intrinsically prone to leaps and lurches.

ne can go through economic theory systematically demolishing all the cherished principles that students learn: the Phillips Curve relating unemployment and inflation, the efficient market hypothesis, even the classic X-shaped intersections of supply and demand curves. According to economist Paul Ormerod, author of *The Death of Economics*, one of the most limiting assumptions of neoclassical theory is that agent behaviour is fixed: market agents pursue a single goal regardless of what others do, and the only way one agent can influence another's choices is via the indirect effect of trading on prices. But it is abundantly clear that herding – irrational, copycat buying and selling – provokes market fluctuations.

here are ways of dealing with the variety and irrationality of real agents in economic theory. Indeed, economists insist that all the simplifications of neoclassical theory are recognized and improved on in their literature. Several recent Nobel prizes in economics have been awarded for work that attempts to do just that. This is all true; but it is too easy, too blithe a defence. Neoclassical ideas remain at the core of the subject – they are pretty much all students will encounter, and they often serve as the non-negotiable starting point for economic theory. One group of innovative economists became so fed up with being excluded from mainstream journals because their models were not rooted in neoclassical assumptions that in June they started their own journal.

here is no other 'science' in such a peculiar state, where a demonstrably false conceptual core is sustained by inertia alone. This core, appropriately known as the Citadel, remains impregnable while those inside fashion an increasingly baroque fantasy. But as Alan Kirman, a progressive economist, has said, "no amount of attention to the walls will prevent the Citadel from being empty."

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