Prophet of Innovation: Joseph Schumpeter and Creative Destruction, by Thomas K. McCraw, Cambridge: Harvard University Press, 719 pages, $35.

In Joseph A. Schumpeter's (1883-1950) encyclopedic *History of Economic Analysis*, Schumpeter began by proclaiming that histories of economics should confine themselves to economic *analysis*, which he defined as "the analytic or scientific aspects of economic thought" (1954: 1). Schumpeter then proceeded to ignore his own edict, for over 1000 small-print pages. Having preached analysis-only Schumpeter practiced more ecumenically, weaving together intellectual history, biography, and economic sociology. Indeed, Schumpeter spent most of his last decade writing the 800,000 words of the ferociously erudite *History*, and thereby failing to complete a long-planned work of economic analysis.

Thomas McCraw's splendid new book brilliantly illuminates this Schumpeterian paradox, and the many others that made Schumpeter, as Phillip Mirowski put it, "a living, breathing contradiction" (1994: 5). *Prophet of Innovation* is not just a beautifully drawn portrait of Schumpeter's life and times, it is also a distinguished business historian's meditation on the two opposed cultures of political economy post-1870: history and theory. *The Prophet of Innovation*, among its other accomplishments, tells the story of how a great and productive intellect wrestled with the two-cultures problem in political economy. In the work of Schumpeter, McCraw finds the very personification of political economy's struggle between history and theory.

Just as Schumpeter's work personifies the roles for history and theory in economics, so too does McCraw make Schumpeter's turbulent life and times a metaphor for Schumpeter's great subject, capitalism. Schumpeter was four when his father died. An exile, he moved his household 23 times in his lifetime, living in five different countries. His first marriage failed. Though brilliant and widely accomplished, Schumpeter had to reinvent himself many times. He failed as a lawyer, was dismissed as president of a private Vienna bank, and, as the new Austrian republic's finance minister, lasted a mere seven months. Most damaging of all, in 1926 Schumpeter's second wife Annie died in childbirth, and the child died as well. Schumpeter's beloved mother died in the same year, a three-fold emotional wounding from which Schumpeter, then 42, never fully recovered. Ahead still lay the Great Depression and another murderous war in Europe, which Schumpeter was presciently predicting as early as 1928. “Here was a rarity,” Daniel Bell said of Schumpeter, “an economist with a tragic sense of life” (485).

In political economy, the tragedy is a genre of the growth story, which is to be contrasted with the equilibrium story. All equilibrium narratives end in the same place. In equilibrium. There’s no role for a hero, tragic or other. Even the true protagonist, the Walrasian Auctioneer, is hidden away, unexplained. Growth stories, in contrast, are more open-ended, uncertain, and path-dependant. In growth stories, history matters. Even tragedies, which also end predictably, must tell the beginning first. Thus do political economy’s best-known growth stories provide a hero.

Adam Smith’s hero was the prudent man. Commercial society depends upon the prudent man, who behaves virtuously even when it is in his material interest to do otherwise. The prudent man’s virtues (frugality, foresight, self-control) are of the small-bore, bourgeois variety, but without them, the invisible hand cannot perform its magic.

Marx, too, wrote in the growth genre. So, even Marx’s determinism – wherein capitalism *necessarily* seeds its own destruction – found room for a hero: the radical intellectual. Never mind that the death of capitalism was preordained: it is the radical intellectual who can pierce the veil of his false consciousness to correctly see the truth of historical inevitability, and it is the radical intellectual who can lead the vanguard of proletarian revolt.

For John Maynard Keynes, the hero was the economist *qua* expert (or, as per Robert Skidelsky, *The Economist as Savior*). The hero economist sees the folly of crushing war reparations, and the error of Say’s Law, and urges upon the powerful a new law -- that prudent monetary and fiscal stimulus can restore traction to aggregate demand temporarily mired in a liquidity trap. An enlightened government, which is to say, one prepared to receive tuition from its technocratic betters, can thereby save capitalism from itself. The expert-guided government can reign in capitalism’s destructive tendencies sufficient to realize the ongoing benefits of its awesome productive powers.

Keynes, Schumpeter’s exact contemporary, was his great rival. Schumpeter admired and envied Keynes, but when Keynes died in 1946, Schumpeter’s obituary gave Keynes the same off-key, perfunctory treatment he would later give Adam Smith in the *History of Economic*

Analysis, the "discredit of not adding a single innovation to the techniques of economic analysis" (466).

Schumpeter was not averse to Keynes' economist-as-hero construct. This was a man who liked to say he had aspired to become the world's greatest economist, lover and horseman. Alas, said Schumpeter, pausing for effect, things hadn't worked out so well with the horses. But Schumpeter thought that Keynes' stagnationist ideology provided intellectual cover to those far more hostile to capitalism than he, and, moreover, that Keynes' emphasis on the short run invited trouble from governments naturally inclined to profligacy and incompetence. It was naïve, Schumpeter believed, to hope that the state would do what its economic experts tell it to do.

And, government fecklessness to one side, what if the experts have got it wrong? The tendency to claim too much for abstract theory, to confuse one's model with the actual economy, Schumpeter named the Ricardian Vice. Schumpeter admired and promoted analytical methods. His very first paper was a call for mathematics in political economy, and he was a co-founder of the Econometric Society. No mathematician himself, he incessantly urged mathematical training upon his students and junior colleagues. But Schumpeter believed that economics, especially when its claims were made the basis for policy, required more. Tempting though it was to succumb to the elegance of a story constructed of only a few well-chosen variables, Schumpeter, ever rigorous, argued that a fully realized policy science needed insights from history, sociology, politics, even philosophy.

Schumpeter's hero, of course, was the entrepreneur, "the agent of innovation," and, Schumpeter said, "the pivot on which everything turns" (7). Schumpeter's now famous theory of entrepreneurship was developed first in his pioneering *Theory of Economic Development* (1911), a precocious scholar's attempt to understand the evolution of economies, written during his early academic years, at the University of Czernowitz.

Capitalist economies go up and down. So much would have been evident to any observer who had lived through the business-cycle volatility of the 1890s. But, Schumpeter said, capitalist economics also grow over time, cycles notwithstanding. In the short run, there are ups and downs; but, in the long run, there is growth.

Only 28 years old, the young Schumpeter judged Walrasian-style equilibrium analysis, which he admired, as empirically inadequate -- too irreducibly static to explain economic growth. Equilibrium analysis' passive, price-taking agents, and its implication of continual economic stationarity were at odds with observable real-world business behavior, and with the continual process of disruptive change so evident in real economies. What was needed, he said, was a theory that could explain the dynamism of capitalist economies, and its effects upon growth and business cycles. Schumpeter found his answer in the entrepreneur and his function, innovation. Entrepreneurial innovation propels capitalist economies upward, albeit along a very bumpy track.

The entrepreneur, however, was mostly missing from Anglophone economics, which had long followed David Ricardo by identifying productive function with membership in one of the three great English socioeconomic classes at the turn of the 19th century: labor from the working class, land from the aristocracy, and capital from the merchant class. The Ricardian triad left little room for the entrepreneurial function; 19th century Anglophone economics tended to identify the entrepreneur with the capitalist, or with the manager. Robert Solow's mid-20th-century growth theory recognized that Ricardian factors – more workers, more capital, or more capital per worker -- could not wholly explain economic growth. Innovation mattered, too. Yet, stuck with Ricardo's framework, Solow did not explain innovation, he consigned it to the statistical dustbin of a shift parameter.

In Schumpeter's account, it is the entrepreneur who creates innovation. And innovation is not only invention. Driven by competition to improve technology, finance and organization, the Schumpeterian entrepreneur does more than textbook equilibrium theory allowed. Said Schumpeter in 1942, writing in *Capitalism, Socialism and Democracy:*

> [I]n capitalist reality as distinguished from its textbook picture, it is not [textbook] . . . competition which counts but the competition from the new commodity, the new technology, the new source of supply, the new type of organization (the largest-scale unit of control for instance)–competition which commands a decisive cost or quality advantage and which strikes not at the margins of the profits and the outputs of the existing firms but at their foundations and their very lives (1950: 82).

Innovation, that is, propels the capitalist economy with "gales of creative destruction," the memorable phrase that Schumpeter borrowed from Werner Sombart.

Schumpeter vividly characterized innovation as "industrial mutation," which "incessantly revolutionizes the economic structure *from within*, incessantly destroying the old one, incessantly creating a new one. This process of Creative Destruction is the essential fact about capitalism. It is what capitalism consists in and what every capitalist concern has got to live in. . . ." (1950: 83). Capitalism, Schumpeter continued, "not only never is but never can be stationary . . ." (ibid). Change is the only constant in the evolution of capitalist economies.

But the rate of change is not. Schumpeter argued that capitalist economies evolve not smoothly but discontinuously. Schumpeterian evolutionary change is punctuated rather than gradual – the disruptions of entrepreneurial innovation occur, as Schumpeter put it, at "irregularly regular" intervals. In this important sense, Schumpeter's theory of economic evolution is non-Darwinian. Contrast it with Alfred Marshall, whose *Principles of Economics* frontispiece recorded the same gradualist motto found in *The Origin of Species,* "natura non facit saltum," nature doesn't make leaps.

Schumpeterian competition drives innovation, but it also begets imitators, "swarms" of which copy their rival's innovation, attracting investment, and leading to a boom. When the original innovator's profit advantage is eliminated, investment moves elsewhere, and the sector may even shrink, until the next disruptive innovation, which restarts the cycle. But the Great Depression seemed to challenge Schumpeter's vision: why were entrepreneurs not jump-starting the economy?

Schumpeter's reply was the ponderous, unlovely *Business Cycles* (1939), a monumentally ambitious two-volume book that attempted nothing less than a history of capitalist processes, and that moreover, attempted to model business cycles as the product of interacting medium (40 months), long (8-10 years) and very long (50-60 years) wave cycles. Schumpeter's desire for an exact economics led him to abandon the uncertainty and complexity of "irregularly regular" for the false precision of three-cycle wave theory. Paul Samuelson said that the book "smacked of Pythagorean moonshine" (253).

Other reviewers were kinder, but the general reception of *Business Cycles* was tepid, not least because Keynes' *General Theory* had been published three years prior, and was on its way to becoming a runaway success. McCraw tells of the 1939 Harvard seminar organized by Schumpeter's students to discuss *Business Cycles.* It quickly became clear that no one had read the book, and all anyone talked about was Keynes. Schumpeter, shamed, reacted with a fury he rarely revealed publicly.

McCraw reads *Business Cycles* as an inflection point in Schumpeter's intellectual life: it was the last time Schumpeter attempted to join economic history and economic theory – the turning point "in Schumpeter's decades-long intellectual wrestling match with himself" (271). Schumpeter still believed deeply that "economic historians and economic theorists can make an important and socially valuable journey together, if they will" (475). But, in Schumpeter's remaining decade, and in his own work, increasingly, they would not.

McCraw suggests that the failure of *Business Cycles* may have informed Schumpeter's approach to *Capitalism, Socialism and Democracy*, a book in which Schumpeter located his theory of entrepreneurial innovation and economic growth in the great themes of social thought. Schumpeter once airily dismissed it as a "potboiler," but McCraw regards it one of the great books of the twentieth century. Writing at the darkest moment of a dark century, concerned about the fate of Europe and indeed of the whole of liberal capitalism, Schumpeter shook off the usual (self-imposed) scholarly apparatus, and allowed himself to say what he thought.

The book is indeed a tour de force. Having produced a brilliant critical reading of Marx; Schumpeter then does Marx one better with one of the best analyses of capitalism ever written, in which Schumpeter famously asked, "can capitalism survive?" "No," he answered, "I do not think it can."

This rhetorical stunner was a prediction not a judgment. Schumpeter greatly admired the cultivated bourgeois life he thought was possible only with capitalism. And, capitalism, though it unavoidably distributed its bountiful fruits unequally, was, Schumpeter said, good for the working class in the long run. Arthur Smithies, Schumpeter's student and Harvard colleague put Schumpeter's view this way: "the capitalist achievement does not typically consist in providing more silk stockings for queens but in bringing them within the reach of factory girls for steadily decreasing amounts of effort" (1950: 640).

But these virtues were not enough to save capitalism. Inverting Marx's prophecy, Schumpeter said it is not the immiserated who revolt, but those who have *benefited* from capitalism's fruits. Capitalism's prodigious wealth production funds the creation of a kind of chattering class -- bohemians, bureaucrats, journalists, lawyers, and, yes, academics – whose social standing, enabled by their vulgar entrepreneur grandparents, affords them an aristocratic platform from which to reject and to undermine bourgeois values, the mores that are so essential to economic life under capitalism.

Capitalism, then, formidable as it appears, is *sociologically* fragile. And capitalism is sociologically fragile *because* it is so economically successful. Schumpeter's ironic verdict on the fate of capitalism tells not just of his propensity for contradiction, it also underscores the importance of multi-disciplinary scholarship to Schumpeter. Right or wrong, Schumpeter's prophecy could not have been arrived at with economic theory alone.

Of course, Schumpeter *was* wrong. And some might argue that Schumpeter went astray precisely because he did not stick to economic theory alone. Robert Solow's (2007) review of *Prophet of Innovation* disparaged *Capitalism, Social and Democracy* as so much Big Think, an "overarching [attempt] to capture a whole socioeconomic system in a few grand generalizations."

Prophet of Innovation's valedictory chapter summarizes what the book has already shown, by demonstration: Thomas McCraw is himself a Schumpeterian regarding the nature of political economy. McCraw laments that political economy's history wing has been destroyed in North American departments of economics, and he argues that academic economics has become too narrow. Historical approaches to political economy live on at Harvard Business School, where McCraw is Straus Professor of Business History, Emeritus.

This is no accident. Schumpeterian subjects – innovation, entrepreneurship, business strategy – form the very heart of business school curricula. And Schumpeterian ideas remain influential, fifty-eight years after his death, in departments of politics, sociology and history (497). But they are mostly ignored in Economics departments, in large part because they have proven too difficult to formalize – to fit into the maximization *cum* equilibrium method that still defines academic economics (500).[1]

Schumpeter, his friend and colleague Gottfried Haberler (1950) said, was a great economist because he was so much more than just an economist. Schumpeter's polymathic breadth made his own work extremely difficult to describe, Haberler said, but Thomas McCraw has described it. Fittingly, *Prophet of Innovation* manages the Schumpeterian feat of synthesizing history, economics and biography, all of which were needed to produce this fully realized, beautifully drawn portrait of a complex man, and of his great subject, capitalism -- its

[1] One might admit a partial exception for the "new growth" theory, a relatively recent development.

economics, its social institutions, and, first among equals, its historical record.

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References

Haberler, Gottfried (1950) "Joseph Alois Schumpeter 1883-1950." *The Quarterly Journal of Economics*, Vol. 64, No. 3, pp. 333-372.

Mirowski (1994) "Doing What Comes Naturally: Four Metanarratives on What Metaphors Are For" in Philip Mirowski (ed.), *Natural Images in Economic Thought*. Cambridge: Cambridge University Press, pp. 3-19.

Schumpeter, Joseph A. (1954) *History of Economic Analysis* New York: Oxford University Press.

Schumpeter, Joseph A. (1950) *Capitalism, Socialism and Democracy* (3rd edition). London: Allen and Unwin.

Schumpeter, Joseph A. (1939) *Business Cycles: A Theoretical, Historical and Statistical Analysis of Capitalist Processes*. New York: Macmillan.

Smithies, Arthur (1950) "Memorial: Joseph Alois Schumpeter 1883-1950." *The American Economic Review*, Vol. 40, No. 4, pp. 628-648.

Solow, Robert (2007) "Heavy Thinker," Review of *Prophet of Innovation: Joseph Schumpeter and Creative Destruction,* by Thomas K. McCraw. *The New Republic*, May 21, 2007, pp. 48-50.