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# "Utility and Welfare I: The History of Economic Thought" by Frank Ackerman

Those who succeed in penetrating the mathematical armor cannot fail to notice the narrowness at the heart of modern economics. Contemporary theory takes for granted a one-dimensional understanding of human goals, restricted to the maximization of the satisfaction of existing, unchanging desires for ever more private consumption. Where does this conceptual narrowness come from? Why is a broader understanding of human motivation excluded from economics? In pursuit of an answer, this section and the next explore the historical origins of the modern economic treatment of welfare, values, and well-being.

The discipline was not always so single-minded. One of the great 19th-century economists, John Stuart Mill, could write:

Except on matters of mere details, there are perhaps no practical questions... which admit of being decided on economical premises alone.

Mill, of course, was not speaking of the need for advanced mathematical knowledge, but rather of the need for historical, social, and, above all, ethical perspectives on economic problems. Leading economists from Adam Smith to Mill to Alfred Marshall (the period covered in this section) were also philosophers; Smith and Marshall both received their first teaching positions in moral philosophy. Yet it is their more technical work, those aspects of their writings that could be formalized in models, that have become part of the ongoing development of the discipline of economics. On the moral and philosophical side, there have been periodic changes in intellectual fashion, but no evidence of cumulative advances.

Amartya Sen has suggested that economics has two different origins, one in ethics and the other in concerns more closely related to engineering.<sup>2</sup> He traces the ethical questions about economics back to Aristotle, and the engineering concerns to another author of the same era: Kautilya, an advisor to the Indian emperor in the 4th century B.C. There is, however, nothing approaching a continuous debate on either of these perspectives over the ensuing 2,500 year span. For the purposes of this essay it will be sufficient to start with the background of Adam Smith and the genesis of modern economics.

### FOUNDING FATHERS: SMITH AND BENTHAM

For Smith, as for many early economists, ethical and "engineering" issues were intertwined. He is famous for his analytical work, such as his description of the efficiency of the division of labor

and the operation of the competitive market. In this area, he built on the earlier work of William Petty, as well as the French physiocrats, while adding new insights with a clarity and comprehensiveness that made *The Wealth of Nations* a classic.

Smith's ethical writings, while less famous today, occupied a substantial part of his career. The "invisible hand" metaphor for the harmonious mechanism of a competitive market first appeared in the earlier and more philosophical of his two major works, *The Theory of Moral Sentiments*. A number of authors have examined the relationship between Smith's ethics and economics, including John Salter in the first article summarized here. For the background to Smith's philosophy, it is also useful to consult the article by Istvan Hont and Michael Ignatieff, which is cited (and criticized) by Salter.

Smith learned philosophy from members of the comparatively new school of utilitarianism, which was emerging as an alternative to the earlier "natural law" perspective. Utilitarians held that the moral course of action was that which promoted the greatest happiness of the greatest number of people. This stood in contrast to the older moral tradition that there were natural laws, derived from divine revelation, logic, or understanding of human nature, that defined the right way to act and live. Vocabulary and concepts derived from both schools can be found in Smith's writings.

The natural law tradition and its ambiguous implications for private property and markets reflect the contradictory opinions of Thomas Aquinas, whose 13th-century writings framed the terms of medieval philosophical debate. Aquinas argued that even though God's estate on earth was originally given to humanity in common, individual possession was a rational addition to natural law, since it provided incentives to care for property and work hard to improve it. However, in cases of famine or other urgent necessity, property rights could be overruled by the original claim of all to share in the community of goods.

As capitalist relationships became more and more the norm in western Europe in the 17th and 18th centuries, natural law theorists tended to resolve the contradiction in Aquinas' views in favor of property rights. A succession of authors, of whom John Locke is the best known, secularized the account of natural law that supported private property, and made the emergency claims of the poor on society increasingly limited and exceptional. These philosophical developments paralleled events in the marketplace: in both England and France, ancient laws limiting the price of grain and ensuring provision for the poor were increasingly ignored in good years, but still occasionally invoked when harvests were bad.

Adam Smith's contribution to this debate was to maintain that property rights should be favored in all cases, and that government should not place restraints on the market, even to provide low-priced grain to the poor when harvests failed. What was the ethical justification for this seemingly heartless stance? Hont and Ignatieff cite passages from Smith's earlier work in which he optimistically claimed that the prosperity resulting from the division of labor in a competitive market will provide for the poor more effectively and reliably than any government intervention.

Salter rejects this argument and finds a break between Smith's younger, more optimistic philosophical writings and his mature economic analysis in *The Wealth of Nations*. The latter

work still expressed the hope that in the long run, and in most particular situations, the market will provide adequate subsistence for all--but the hope is no longer a certainty. Meanwhile, property rights have become absolute and are not constrained by anyone else's claim to subsistence. In the worst case, according to Salter's reading of *The Wealth of Nations*, Smith's ideal market would be quite harsh to the poor.

Worst cases, however, do not loom large in Smith's upbeat presentation. The reputation of classical economics as the "dismal science" came only later from other authors. Another decidedly nondismal voice, heard just after Smith, was that of Jeremy Bentham. While Smith, like a number of authors discussed later, could be described as an economist who also wrote philosophy, Bentham was a philosopher who also wrote economics. Bentham did not invent utilitarianism, but he became its most influential proponent, developing and popularizing its implications in some detail.

As described in the chapter by John Bonner summarized here, Bentham relied on a psychological theory of hedonism that would be dismissed as simplistic today (or even, as Thorstein Veblen noted, a century ago). Behavior is said to be motivated by pleasure or pain; an individual's net satisfaction, or pleasure minus pain, is a quantifiable entity called "utility." All the same, Bentham's notion of utility had a number of subtleties that were not always preserved by economists who followed him. Self-interest, for Bentham, included charity, sympathy, and respect for social conventions, motivations that are banished in many later, formalized models of utility maximization. His proposed "calculus" of pleasure and pain involved consideration of several elements of each sensation, such as intensity, duration of feeling, certainty or uncertainty, the probability of being followed by a similar or opposite sensation, and the number of people affected.

Bentham developed numerous proposals for specific economic reforms; few succeeded in his day, as Bonner points out, though some were adopted in later years.<sup>3</sup> A liberal reformer by political inclination, Bentham's philosophy expressed an egalitarian individualism: each individual's happiness is counted equally, and each is the best judge of his/her own satisfaction. Utilitarianism was, however, inconsistent with other contemporary philosophical expressions of individualism and equality. Both the Declaration of Independence of the American Revolution and the Declaration of the Rights of Man of the French Revolution received a contemptuous disimissal from Bentham, since both documents spoke about natural rights, not just about happiness.

Bonner notes that Bentham offered little guidance on how to go about measuring and adding up individual utilities in order to determine whether the greatest happiness had been in fact achieved. This was no accidental oversight; there was no practical method of empirical measurement of utility. Thus it was convenient for utilitarians that laissez-faire economics predicted social harmony in the marketplace; the two theories went hand in invisible hand.<sup>4</sup> With an economic theory showing that everyone's happiness is maximized by competition, moral philosophers could avoid the impossible task of measuring and adding utilities.

## MID-CENTURY CHANGES: MILL, BASTIAT, AND MARX

Utilitarianism went on to play a central role in the development of neoclassical economic theory, which will be discussed in the next section. But its acceptance by economists in the course of 19th century was uneven. Classical economics, with its labor theory of value, had little need of Bentham's utility concept. According to R.D. Collison Black, intellectual interest in utilitarianism was receding by mid-century, and was only revived by the publication of John Stuart Mill's *Utilitarianism* in 1863.

Mill, however, was a decidedly unorthodox utilitarian; by strict Benthamite standards he could be described as "a reformer who claimed to be a utilitarian," in the words of the first E.K. Hunt chapter summarized here. Mill's utilitarianism included the notion that there was a hierarchy of qualitatively different types of pleasure, allowing for a more complex picture of human motivation. Moving away from Bentham's pure individualism, Mill recognized the importance of social influences on individual attitudes, and hence concluded that individuals were not always the best judges of their own interests. Similarly, Mill defended classical economics, private property, and the free market, except when they failed to work well. Unlike Adam Smith, Mill believed that the government should offer public assistance to the poorest members of society, and should in general work toward a more equitable distribution of income.

A type of intellectual schizophrenia seen in Mill recurs among leading liberal economists of later generations, such as Marshall, Pigou, and Keynes. Two rival orientations coexist within the same person; Sen's two origins of economics have achieved only a truce, not a permanent reconciliation. Mill the ethical visionary contemplated the complexity of human nature and looked forward to an ideal, cooperative society of the future, after immediate economic problems have been solved and human character has been ennobled. Meanwhile, Mill the economic engineer examined the operation of the competitive, capitalist economy of his day, explaining it to others and seeking to improve its efficiency. Mill offered an agenda of reforms, aimed at amelioration of the most painful and inequitable effects of the market, as an attempt to bridge the gap--but his reforms are by no means logically necessary consequences of his economic analysis.

Two other approaches from the same period offer very different reconciliations of ethical ideals and economic reality. Frederick Bastiat, the author that Hunt contrasts with Mill, set out to demonstrate that capitalism, despite its inequalities, was indeed the ideal form of economic organization. The key to Bastiat's approach was the rejection of the labor theory of value, still generally accepted by economists at the time, in favor of a formally parallel treatment of the productive effort and contribution of workers, capitalists, and landlords. Though little remembered today, Bastiat was cited by Jevons as one of the important influences on his development of neoclassical economics.

The second approach was to accept the critique of existing inequality and injustice and to demand that economic reality be transformed along more ethical lines. In the hands of Karl Marx this became the basis for a sweeping theory of history and society and a call to political action whose impact on the world exceeded, until recently, that of other economic theories. If prevailing economic institutions are fundamentally oppressive, why not overthrow them? If labor is the source of value, why don't those who labor also control the uses of the value they create? These ideas soon spread widely enough that they could no longer be ignored, even by economists who totally disagreed with them.

With Marx, as with Adam Smith, a longstanding debate has questioned whether his earlier writings are connected to or disjoint from his later economic analyses. Hunt's article on the subject, summarized here, argues for a close connection, viewing Marx's later economic theories as answers to his earlier philosophical questions. Capitalist production, for Marx, represents the alienated social potential of human existence; money is the reification of abstract labor time, a fetishized symbol that allows private appropriation of the social product. Analysis of the failures of the capitalist economy is the foundation for understanding what could and should be created in its place. Practical politics aside, the subtleties of Marx's social thought far surpassed those of other economists, and raised a number of themes taken up by 20th-century sociology.

### THE NEOCLASSICALS AND THEIR CRITICS

Meanwhile, the new school of neoclassical economics was emerging. In the early 1870s, quite similar ideas were independently developed by Jevons, Menger, Walras, and probably by Marshall as well (though he did not publish his work until later). By the 1890s the neoclassicals had come to dominate British economics; their descendants continue to define economic theory today. The key to the new approach was the notion of declining marginal utility. This explained Adam Smith's famous paradox of water and diamonds: water is essential for life, yet its price is little or nothing compared to inessential but expensive diamonds. The explanation was that, despite the vastly greater total utility of water, so much of it is consumed that the last unit has little marginal utility. Diamonds have little utility in total, but so few are purchased that an additional one still has substantial value on the margin.

The neoclassical approach thus originally rested on the assumptions that there is a single, quantifiable thing called utility, and that people seek to maximize it. Joan Robinson, in the essay summarized here, described utility as a metaphysical and circular concept; evidence for the existence and extent of utility came only from the market phenomena it was supposed to explain. The mathematics offered a soothing symmetry of sacrifice: as with Bastiat, all factors of production, not just labor, experienced disutility from participation in the production process, and were rewarded accordingly.

The rapid rise of the neoclassical school, sometimes described as the "marginal revolution," remains a bit of a historical puzzle. Mark Blaug, in his detailed history of economic thought, identifies no less than six economists who had proposed the idea of marginal utility between 1834 and 1855 (Lloyd, Longfield, Senior, Dupuit, Gossen, and Jennings), as well as others, such as Cournot and Bastiat, who had previously developed important aspects of what later became neoclassical economics. Moreover, he claims that the reaction to Marxism is unlikely to have motivated work done in the 1860s or early 1870s, since Marxist ideas first gained widespread acceptance in the 1880s. The search for an alternative to Marx may have hastened the adoption of neoclassical theory, but came too late to explain its origins. What, then, did the intellectual revolution of the 1870s consist of?

From the beginning, an increase in mathematical complexity was one of the defining characteristics of the neoclassical school. (The exception was Menger, whose claim to be a founder of neoclassical economics has always been somewhat debatable.) Marshall maintained a nonmathematical prose exposition in the text, and wrote of the dangers he foresaw in excessive

use of "long chains of deductive reasoning"; nonetheless, he developed the mathematics in his extensive notes and appendices. Others made the mathematics even more central to their exposition.

Economists have long been influenced by, and sought to emulate, the mathematical rigor and success of natural sciences, as is detailed in an intricate history by Philip Mirowski. John Stuart Mill maintained that the methods of research in economics should be identical to those in astronomy, perhaps the most prestigious science of the early 19th century. Rapid development of new mathematical models in physics led to a number of successes in the 1860s; Jevons and Walras quite explicitly set out to adapt the same approaches in economics. Marshall, offering his usual subtle qualifications, advocated biological analogies as more appropriate, but went on to state that since biology was more complex than physics, mechanical analogies must play a relatively large role in the foundations of economics.

Together with the new mathematical techniques came a change in the scope of economic problems being analyzed. The classical economics of earlier years, like 20th-century macroeconomics and development economics, focused on the process of economic growth; in contrast, neoclassical theory tended to assume fixed resources and analyzed the constrained maximization problem of obtaining the greatest possible profit, or utility, from the given starting point. One of Joan Robinson's important theoretical contributions is relevant to this issue: there is a potential circularity in using capital as a factor of production in an explanation of prices, since the quantity of capital does not exist independent of prices. The mathematically symmetrical treatment of the payment of capital and labor thus becomes all the more problematical, as Robinson's essay explains.

Marshall is again the exception on this point, making a provocative distinction between short-run analyses with fixed resources, and long-run analyses where growth may occur (his treatment of the latter encounters a different objection from Robinson). The extent of the differences between Marshall and other early neoclassical authors, which is addressed in the article on Jevons and Marshall by R.D. Collison Black, is one of the intriguing questions in the history of economics that is summarized here.

Jevons represents a relatively pure case of the engineering origins of economics. His studies in the sciences had a major impact on his economic theories. He strongly preferred Bentham and Bastiat to Mill's amended, nuanced utilitarianism, let alone other currents in philosophy. Old-fashioned calculation of pleasure and pain was enough of a theory of human behavior and motivation for Jevons; he did much to promote Bentham's reputation as the philosophical forefather of neoclassical economics. Black offers only a slight modification of the traditional picture, suggesting that in the case of Jevons, mathematical advances were coupled with regression in social and philosophical understanding. One of the major new ideas of the day, the theory of evolution, had some influence on Jevons and other early neoclassicals. But aside from Marshall's speculations about biological analogies, the principal message that economists received from the work of Darwin and Spencer was the facile idea that market competition represents a natural process of "survival of the fittest."

Marshall is different, but is not simply the opposite of Jevons. Rather, Marshall resembles Mill in presenting separable ethical and economic arguments; the connection between the two modes of discourse is personal, not logical. Marshall admired Mill, and much preferred his modified utilitarianism to Bentham's original. Like Mill, Marshall saw a hierarchy of higher and lower human motivations and advocated measures that were intended to help people move up the ethical ladder. The efficiency of the free market was desirable because it usually promoted admirable character traits; extremes of poverty should be alleviated because of their damaging effects on character. The result is not a synthesis of ethics and efficiency so much as a process of picking personal favorites: Marshall favored protective legislation limiting factory work by women and children, for example, but opposed minimum wage laws.

A sympathetic account of Marshall's social thought by John Whitaker, who advocates the incorporation of a broader moral vision in modern economics, concludes that Marshall was very much a product of his times:

With all [the Victorian era's] virtues, he shared to the full the defects of his ageits tendency to moralize and a certain parochialism and narrowness of vision....[I]t is hard to absolve him entirely of charges of a certain naivety and unrealism as to human nature which limits the permanent value of his vision on social issues.<sup>8</sup>

Black, likewise, suggests that the way in which Marshall presented his ethical judgments--in difficult, overly qualified language, divorced from his formal economics--made it possible for later economists to use his ample technical contributions while ignoring his philosophy.

Further discussion of Marshall's approach to economics, and its contrast to later neoclassical developments will appear in the next section. For now, it should be recalled that the neoclassical school, while quickly rising to prominence in the late 19th century, was not without its critics. The principal opposition came not from the dwindling ranks of classical economists, but from advocates of a more historical, institutional, and empirical approach to the field. In Germany, an especially bitter methodological controversy left the historical school dominant until the 1920s. In the United States, one of the most important critics of neoclassical theory, Thorstein Veblen, also advocated a more historical and institutional approach to the subject.

As indicated in the last summary in this section, by E.K. Hunt, Veblen approached economics from a philosophical perspective quite distinct from the utilitarianism of the neoclassical theorists. As with Marx, the stance of an outsider allowed Veblen the freedom to incorporate a more sophisticated theory of human nature and needs, while analyzing economic institutions in detail. Veblen's sarcastic dismissals of the fiction of utility maximization remain more readable and relevant than most hundred-year-old economics tracts. He saw human behavior, instead, as governed by two sets of instincts, the creative and the exploitive, expressed in ever-changing institutional contexts. The points of commonality with Marx are extensive: Veblen saw the institution of private property as a historically specific event that led to inequality and subjugation; business ownership constantly threatens to thwart the creative, cooperative potential of workers; government is dominated by the capitalist class, dedicated to preserving property

rights and fond of promoting patriotism and imperialism, for ideological as well as financial reasons.

Less obvious, but also important, are the distinctions between Veblen and Marx. Veblen never attempted anything comparable to Marx's quantitative theories of wages, profits, prices, and investment, nor did he explore crises and depressions in the same detail. In fact, Veblen's description of indefinitely expandable consumerism almost appears to deny the possibility of long-term insufficiencies in aggregate demand. On the other hand, Veblen had a better understanding of consumerism, patriotism, and gender inequalities than Marx; the analysis of the power of consumerism and patriotism may have led him to more pessimistic political conclusions.

Although Veblen, again like Marx, has more influence on sociology than on economics today, this was not always the case. Kenneth Arrow, describing his graduate school days at Columbia University in 1940-42, has said that neoclassical theory in general was far from dominant, while the work of Veblen was a prominent part of the curriculum.

Such days are long gone in mainstream economics at the end of the 20th century. The further transformations of economists' treatment of utility and welfare are the subject of the next section.

#### **Notes**

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<sup>1.</sup> From the preface to his *Principles of Political Economy*, as quoted in Everett. J Burtt, Jr., *Social Perspectives in the History of Economic Theory* (New York: St. Martin's Press, 1972), 106.

<sup>2.</sup> Amartya Sen, On Ethics and Economics (New York: Basil Blackwell, 1987).

<sup>3.</sup> For an older account that views Bentham's contributions to practical politics and economic theory in a more positive light than Bonner, see Jacob Viner, "Bentham and J.S. Mill: The Utilitarian Background," *American Economic Review* 39 (March 1949), 360-82.

<sup>4.</sup> Gunnar Myrdal, *The Political Element in the Development of Economic Theory* (New Brunswick, NJ: Transaction Publishers, 1990; and Cambridge, MA: Harvard University Press, 1954), Chapter 2.

<sup>5.</sup> On the endogeneity of preferences in Mill's framework and its potential importance for economic theory, see Michael S. McPherson, "Mill's Moral Theory and the Problem of Preference Change", *Ethics* 92 (January 1982), 252-73.

<sup>6.</sup> Mark Blaug, *Economic Theory in Retrospect*, 4th edition (New York: Cambridge University Press, 1985), Chapter 8.

<sup>7.</sup> Philip Mirowski, *More Heat Than Light: Economics as Social Physics, Physics as Nature's Economics* (New York: Cambridge University Press, 1989), Chapter 5.

<sup>8.</sup> John Whitaker, "Some Neglected Aspects of Alfred Marshall's Economic and Social Thought," *History of Political Economy* 9 (1977), 161-97; quote from 196-97.

<sup>9.</sup> Kenneth Arrow, "Thorstein Veblen as an Economic Theorist," in *Essays in Economics: The John Commons Memorial Lectures*, ed. Michael Szenberg (Boulder, CO: Westview Press, 1986), 47-56.