succeeding to his father's high position on James's death in 1836. Mill, indeed, worked full-time at the East India Company until the liquidation of that company in 1858 bestowed upon Mill a handsome pension for the remaining 15 years of his life.

8.2 Mill's strategy and the success of the *Principles*

The proximate reason for the enormous success and influence of the *Principles* was the remarkable best-selling triumph of Mill's first book, *A System of Logic* (1843), which caught on with intellectuals and general readers of the age in a way that no tome on logic and epistemology has done before or since.[1] Mill's *Principles* was shrewdly designed as a comprehensive, massive two-volume treatise in the *Wealth of Nations* mould, accessible to economists and laymen alike. It went through no less than seven editions in Mill's lifetime, as well as a cheap 'people's' edition, and an abridged version for the American market. The *Principles* continued to serve as the standard British text in economics through the early twentieth century.

In a fascinating article, Professor de Marchi contends that much of the seeming confusion, muddle and moderation permeating Mill's *Principles* was a deliberate strategy designed to soften up and conciliate the numerous enemies of Ricardianism and thereby to win their support for a covert re-establishment of Ricardian dominance. To put it far more bluntly than does Professor de Marchi, Mill engaged in a strategy of duplicity to confuse the enemy and to win their support for at least the essentials of the true Ricardian doctrine. If de Marchi is correct, there is far more Machiavelli in Mill's dithering 'openness' to all points of view than has been supposed.[2] De Marchi notes that Mill had consciously adopted, since 1829, what Mill called the strategy of 'practical eclecticism', which amounts to lulling and disarming the opposition and, by seeming conciliation, to manipulate them into believing that they had 'spontaneously' arrived at what Mill held to be the truth – in short, a strategy of deception and duplicity.[3]

It is impossible to estimate how much of John Stuart Mill's inveterate and eternal contradictions, qualifications and alterations were due to honest muddle-headedness and how much to devious and evasive intellectual broken-field running. Did Mill himself always know? At any rate, the tactic seems to have worked, as enemies from all sides of economic theory in general and of Ricardianism in particular, were charmed by Mill's middle-of-the-road benevolence to all and sundry. They might not have been converted to hard- or even soft-core Ricardianism, but they were virtually all impressed by Mill's conceding one point after another to themselves or others. (All, of course, except Marx, who, as a pre-eminent cadre type, poured out a proper vial of scorn upon Mill's 'shallow syncretism' and 'attempt to reconcile the irreconcilable.') One by one, Tories, romantics, socialists and 'practical men' warmed up to Mill himself and to his alleged achievements.

Thus we have seen how Mill introduced into economics, and managed to make dominant, the unfortunate hypothetical methodology of positivism, as contrasted to the praxeological system of deduction from true and complete axioms advocated and employed by Say and Senior. (Ricardo had expressed no methodological views, although his method in practice was deduction from a few unreal and deeply flawed axioms.) In the course of pursuing this method, Mill introduced the disastrous and fallacious hypothesis of the 'economic man', which left economics deservedly open to ridicule as false to the nature of man. But Mill's substitution of hypothetical, of at least professedly tentative and humble, positivism, charmed the enemies of deductive praxeology.

For example, there had grown up at Cambridge University a group of militant Baconian inductivists, men who angrily rejected as 'unscientific' any sort of abstract theory in the social sciences. These belligerent anti-theorists, who held that proper theory can only be a patient enumeration and collection of countless empirical 'facts', were the ancestors of American institutionalism and of the German historical school. The Cambridge group of four, who were originally friends as undergraduates, was headed by William Whewell (1794–1866), who became a fellow and then master of Trinity College, an eminent mathematician, a professor of mineralogy and then of moral philosophy at Trinity, and twice vice-chancellor of the University. Another powerful figure in this group was Richard Jones (1790–1855), who succeeded Nassau Senior as professor of political economy at King's College, London, and then succeeded Malthus as professor of political economy and history at Haileybury.[4] Author of a three-volume *History of the Inductive Sciences* (1837) and the *Philosophy of the Inductive Sciences* (1840), Whewell had gushed over Bacon as 'the supreme Legislator of the modern Republic of Science', and 'the Hercules' and 'Hero of the revolution' in scientific method.

In the end, however, Whewell was forced to admit that the inductivist method in economics did not seem able to go beyond destructive criticism to the constructing of any sort of body of economic law. Perhaps that is why Whewell, at least, ended by toying with mathematical Ricardian models, flirting with the kind of abstract economics he had long professed to despise.[5]

William Whewell was not converted from inductivism to positivism by Mill, but he was moved to express approval of Mill's *Principles* as a whole. Others whom Mill charmed were Tory writers long hostile to political economy and to its free trade conclusions. Thus *Blackwood's Magazine* gave the *Principles* a generally favourable review for its author's 'perpetual, earnest, never-forgotten interest,...in the great questions at present mooted with respect to the social condition of man'. And G.F. Young, in the course of a virulent protectionist attack on economics in the Tory *Quarterly Review*, hailed Mill as 'one of the most philosophical and candid of the modern school of economists' – specifically for Mill's positivist admission that political economy was grounded not on correct but only on *partially* true assumptions.

Mill's most conspicuous defection from classical political economy in general, and from Ricardianism in particular, was his numerous concessions to socialism and his apostasy from *laissez-faire*. In general, the British classical economists had not exactly been consistent *laissez-faire* stalwarts, in contrast to J.B. Say and his school in France, including such people as Charles Comte, Charles Dunoyer, Frederic Bastiat, Gustave de Molinari, and their numerous followers. In Britain, consistent *laissez-faire* advocates were to be found rather among writers, intellectuals, and businessmen in Manchester, such as Richard Cobden, John Bright and the recently successful Anti-Corn Law League. They were also to be found in *The Economist*, edited by James Wilson, particularly in its editorial staff writers, Thomas Hodgskin (1787–1869) and young Herbert Spencer (1820–1903). But while the classical economists were not hard-core free market men, they at least tended strongly in that direction; if not a principle, *laissez-faire* was for them at least a guide or tendency to which they could at least partially orient their position. But Mill sharply broke with all that. Steeped in a high moral tone at all times, Mill originated the unfortunate intellectual tradition of conceding that socialism and indeed communism was the 'ideal' social system, and then drawing back by lamenting that it probably could not be attained in this cruel practical world. Pro-capitalists who begin by conceding the moral ground to their opponents are bound to lose the long-run war, if not the short-run battle, to socialism.

Small wonder, then, that various wings of socialists hailed Mill's *Principles*. The Owenite socialists, then the leading socialist group in Great Britain, were highly approving. In addition to words of commendation from Robert Owen (1771–1858) himself, the Owenite writer and lecturer George Jacob Holyoake (1817–1906) was particularly enchanted. The editor of *The Reasoner*, Holyoake hailed Mill's *Principles* with enthusiasm. 'It had been held', he proclaimed, 'that the people were made for political economy' but now, with Mill's *Principles*, 'at length political economy [is] being made for the people'. Holyoake also praised Mill for having spoken of communism 'with more geniality than any political economist had done before', and he gave his working-class readers the benefit of much of that high-priced tome by printing lengthy extracts in the *Reasoner*. No doubt Holyoake was also happy with Mill's proclaimed ideal of a commonwealth of cooperatives, Holyoake being one of the founders and long-term agitators for the cooperative movement in Britain.

Also delighted with the *Principles* was the socialist Thornton Hunt (1810–73), editor of the weekly *Leader*, the main socialist paper in England after

1850. Hunt, a believer in communal ownership and control, particularly welcomed Mill's claim that communism was the ideal state.

But even more important a boost to statism and socialism in Mill's *Principles* was his most un-Ricardian proclamation that while the processes of production were subject to the iron laws of political economy, distribution, on the other hand, was up for grabs, subject to human will and man-made arrangements. Ricardo, whose system rested on allegedly iron laws of distribution, must have turned over rapidly in his grave at that remark. This separation between 'production' and 'distribution' was wholly artificial and totally invalid, since people earn incomes on the market precisely for participating in production, and the two are intimately intertwined. But in making this distinction, Mill gave birth to the calamitous and still prevalent notion that distribution can be changed virtually at will through tax, subsidy or other statist schemes, while the market would still continue to function and produce undisturbed.

It is certainly not surprising that Mill's moral obeisances to cooperatives and communism met warm applause at the hands of the newly burgeoning Christian socialist movement. Of the *troika* of young Anglicans who led the Christian socialists, the Rev. Charles Kingsley (1819–1875) hailed the *Principles*, as did another of the leaders, the attorney John Malcolm Ludlow, in *Fraser's Magazine*.[6] *Fraser's* had been purchased in 1847 by John William Parker, who became its *de facto* editor; Parker was a friend of Kingsley and a Christian socialist sympathizer. The fact that he also happened to be the publisher of Mill's *Principles* scarcely made the paean of *Fraser's* reviewer any less lavish.

8.3 The theory of value and distribution

Mill's handling of the theory of value was characteristic of the man: a hard core of filio-pietism wrapped in layers of enigma and muddle. And so the labour theory/cost-of-production theory of value was restored to a dominant place in classical economics, but hedged about with Mill's usual string of evasive and self-protective qualifications. Thus Mill accepted Bailey's demolition of Ricardo's search for an impossible invariable measure of value. But, on the other hand, Mill displayed his contempt for even the idea that consumption and utility could have any influence upon value by removing consumption from its traditional niche as a basic part of the economics text. Instead, Mill's *Principles* was divided into 'Production', 'Distribution', 'Exchange' and 'Government', with nary a mention of consumption.

Yet, despite Mill's inconsistency and muddle, his stance of humility suddenly dissolved into his astonishingly arrogant claim that his pronouncements would be the last word for all time on the theory of value. In a famous *faux pas*, Mill proclaimed that 'happily, there is nothing in the laws of value which remains for the present or any future writer to clear up: the theory of the subject is complete'. Now, it is true that Mill had the bad luck to be writing these words only two decades before the 'marginalist revolution' completely overturned value theory. But, even so, it was inexcusable for anyone as knowledgeable as Mill was supposed to be in scientific method and the history of science to be caught writing this sort of statement. And Schumpeter tells us that the same sort of *hubris* had marked Mill's *System of Logic*.[7] It is an odd paradox indeed to see a thinker habitually changing course and qualifying every thought and deed, and *yet* insisting that his is the last conceivable word on any particular subject!

Upholding and restoring the dominance of Ricardo's theory of profit, Mill insisted on returning to the Ricardian *dictum* that profits are dependent on, and inversely proportionate to, wages. Cleverly paying obeisance to his friend Nassau Senior's concept of 'abstinence', and agreeing with Senior that profits (interest) were 'the remuneration of abstinence', Mill managed to weaken the concept and to return somehow to insisting on labour as the sole *cause* of profits.[8]

On wages, too, Mill returned squarely to Malthus, differing only by holding out the hope of ameliorating the alleged problem of population growth by enthusiastic and determined use of birth control. The change over the half-century was the difference between the stern preacher and the 'progressive' feminist. Alexander Gray's comment on Mill's passion against what he considered to be excessive births is both witty and apposite:

> In writing on the population question, his [Mill's] voice quivers with a righteous indignation which leads him to a violence of language nowhere to be found in Malthus. Excessive procreation is for Mill on the same level as drunkenness or any other physical excess, and those who are guilty should be discountenanced and despised accordingly.[9]

One of John Stuart Mill's most famous moves in economic theory was his typically dramatic, emotional, and yet carefully hedged 'recantation' of the wages fund doctrine. In company with other classical economists, having explained the supply of labour by the quantity of population, Mill then went on to explain the demand for labour, rather sensibly, as the sum of gross savings, or circulating capital, available for paying workers until the product was produced and sold: this available amount he called the 'wages fund'. This concept was used, again quite intelligently, to demonstrate that should labour unions be able to raise wages for one part of the labour force, this rise could only be at the expense of lowering wages somewhere else.

The wages fund analysis of the demand for labour was, in one important sense, a retreat from Say and others who emphasized that the demand for and prices of factors of production are determined by their productivity in producing consumer goods desired and demanded by the public. For Mill, this retreat was part and parcel of his orchestrated shift back to Ricardo. On the other hand, the wages fund doctrine was correct as far as it went: at any given time, there is a certain amount of gross savings to be invested in paying factors of production. Therefore, paying more in one place because of pressure by suppliers of labour will necessarily reduce demand and payment elsewhere. On the other hand, the wages fund is clearly only a first approximation: for the fund of circulating capital at any given time is not only used to pay wages, but also to pay rent to landlords and interest (profit) to capitalists.

In 1869, Mill's friend and fellow high official at the East India Company, William Thomas Thornton (1813–80), wrote a book entitled *On Labour* critical of Mill's wages fund doctrine. Partly this came as a needed attempt to bring consumer demand, and notably *expected* consumer demand, back into the analysis. But Thornton's main thrust was that the capital fund was not only a fund for wages but also a fund out of which to pay profits to capitalists (and, he might have added, rents on land).

Mill's review of Thornton's book in the *Fortnightly Review* was overly dramatic enough to be seized upon as a 'recantation', and as an indication that unions could indeed raise the average level of wages for workers. Actually Mill, as Schumpeter points out, was simply explaining the doctrine more carefully, and pointing out what should have been obvious: that yes, wages could conceivably increase at the expense of driving profits to zero, but that in the not too long run the result would be failure to maintain as well as to expand capital, and hence the impoverishment of everyone, not least of all the working class. There is nothing here contradictory to the wages fund doctrine. It should be added that Colonel Robert Torrens had made the very same 'concession' on the wages fund 35 years before, and had received none of the attention and noise.[10] The essence of the misnamed 'wages fund' theory was simply a fundamental part of the solidly grounded and established Turgot–Smith theory of capital.[11] How little real significance Mill attached to his 'recantation' is demonstrated by his failure to alter any of his discussion of the wages fund in the seventh and last edition of the *Principles* published during his lifetime (1871), explaining in his new preface that the discussion had not ripened sufficiently to make such a change.

As Professor Hutt has pointed out in his classic work, the prevalent idea that modifying the wages fund theory led straight to economists justifying unionism and collective bargaining was a canard and a red herring created for the occasion by Mill. Adam Smith and McCulloch had justified collective bargaining on the vague notion of labour's alleged 'disadvantage' in bargaining in the labour market. Indeed, Mill himself in the *Principles*, while continuing to hold his original wages fund view, offered the same justification, plus the Ricardian theme that without such collective bargaining wages would be driven down to subsistence level (the iron law of wages once more!). And indeed, Henry Fawcett (1833–84), professor of political economy at Cambridge and a devoted Millian, continued to cling to the original version of the wages fund theory as well as labour's 'disadvantage' argument for trade unions. On the other hand, for example, Mountifort Longfield, a proto-marginal productivity theorist, took the hard line in opposing unions as never being able to effect a general wage increase.[12]

Mill's persistent adherence to the Turgot–Smith–Ricardo theory of savings and capital is demonstrated by one of his famous 'fundamental propositions' on capital, that 'the demand for commodities is not the demand for labour'. Mill was correct on the fundamental nature of this proposition, on the failure of most economists to grasp it, and in hailing Ricardo and Say as two of the economists to stress it particularly. It is no wonder that modern economists, steeped in the fallacies of Keynes, find the proposition 'puzzling'. What it means is that at least the proximate demand for labour is supplied by savings, even though the ultimate demand may be supplied by consumers. More than that: Mill here had hold of the basic Turgot discovery of the time-structure of capital, the fact that savings pays for the factors ahead of production and sale, and that the consumers are last down the line of production. Furthermore, savings builds up a capital structure and increases funds paid to wages and other factors, which cannot get paid unless savings are first taken out of income previously supplied to producers by consumers. This theory of capital provided the building-block for the developed Austrian theory of the time-structure of capital.

It is then not surprising that Mill also supported Say's law, to which his father had contributed so much.[13] In monetary theory, Mill stood squarely in the Ricardian tradition in fervent opposition to irredeemable paper money. However, he deserted that tradition, as we have seen, in favour of the banking school. And while from his banking school mentor, James Wilson, Mill learned of the malinvestments, especially in fixed capital, that occur in business cycle booms, he also adopted the disastrous Wilsonian belief that money plays a passive and unimportant role in these cyclical booms and busts. In this belief, significantly, he harked back to his father's only difference from Ricardo. Indeed, he also adopted a pre-Schumpeterian view that these over-investment booms, followed by corrective recessions, were necessary to economic growth.

8.4 The shift to imperialism

Classical liberalism, whether natural rights or utilitarian, whether English, French or German, was devoted to a foreign policy of peace. Its firm opposition to war and imperialism was the libertarian, minimal-government corollary in foreign affairs to its minimal-government stance at home. Opposition to big government, high taxes and interventionism abroad was the corollary of the same opposition at home. Even when the classical liberals were not totally consistent exponents of *laissez-faire* in either domestic or foreign affairs, their basic thrust was in that direction. Peace and free trade were twin policies – reaching the acme of consistency on both counts in the policy positions and agitation of Richard Cobden, John Bright, the Manchester school, and the Anti-Corn Law League.

Among the British classical liberals, non-intervention and anti-imperialism were the dominant tradition. Colonialism and special privileges to investment abroad were properly seen as part of the monopoly privileges and controls imposed by mercantilism, none of which confers advantage – in fact, imposes considerable disadvantage – on the home population. Jeremy Bentham, James Mill and the others were generally solidly anti-imperialist, and advocated that Britain give up its colonies and grant them independence. Bentham originally included India in this emancipation, but was talked out of it by James Mill, a high official in the governing organization of India, the British East India Company. The James Mill exception for India was based on a utilitarian 'white man's burden' argument that, even though England was losing economically from governing India, it must continue doing so for the sake of the Indians, who were too savage to be able to govern themselves. In that way, James Mill was able to cast an altruist–utilitarian patina over England's often bloody repression in India and over his own role in that oppression.

Mill also was able to propound his own Ricardian assault on the landlord class. Following the Ricardian doctrine that landlords were useless and non-productive Mill advocated special taxes on ground rent; being a high official in India, he believed that he was more likely to influence the tax and legal system there. Hence he advocated British nationalization of Indian land, with the state then renting out the land to Indian peasants as long-term tenants; thus, in a pre-George Georgism, the state would absorb all revenues from land rent. In his turn, John Stuart Mill was happy to advocate the same scheme.

Bentham and James Mill also made an exception to their overall anti-imperialism for Ireland, here not indulging in attacks on 'savagery' but simply asserting that freeing Ireland would be politically impossible. A strange position to take by two theorists usually fearless in advocating unpopular policies! We may speculate, however, an alternative explanation: the English liberal and radical masses, throughout the late eighteenth and nineteenth centuries, were generally *laissez-faire*-oriented, *until* the Tories were able to stir up the rabid anti-Catholicism of these dissenter and non-conformist Protestant evangelicals, and thereby split the liberal ranks. Anti-Catholicism long served as the scourge of British liberalism.

But John Stuart Mill, in this crucial area not very filio-pietistic, was able to help change the face of nineteenth century British liberalism. He was able to take a liberal doctrine generally anti-war and anti-imperialist, though with a few glaring exceptions, and transform it into an apologia for imperialism and foreign conquest. Rather than abandon the empire, as his father and other liberals had urged, John Stuart Mill called for its expansion. Indeed, Mill became the leading force in destroying the philosophic radical party in Parliament in 1838, by splitting their ranks and supporting the violent suppression of the Canadian rebellion of that year.

The younger Mill continued the altruistic argument of his father on India, and expanded it to all other peoples of the Third World. They were all barbarous and needed to be subject to a 'benevolent' despotism. He also expanded this hard line to Ireland, lamenting that Ireland could not be entirely crushed under heel because it was legally a part of the United Kingdom. 'I myself have always been for a good stout despotism, for governing Ireland alike India', Mill proclaimed. Himself a high official of the East India Company, John Stuart Mill argued that rule over barbarous colonies like India was best entrusted to autonomous public/private bodies of 'experts' such as the East India Company, rather than to the vagaries of Parliament and the English public. After the dissolution of the company in 1854, however, Mill saw no problem in Parliament appointing commissions of experts such as himself and delegating rule over India to them.

While John Mill grudgingly agreed that the advanced, white settler colonies had to be allowed their independence, he hoped that they would continue to be governed by Great Britain. For, in contrast to his father and other liberals, Mill believed that colonies conferred positive economic advantages on the home country. For a while, Bentham had succumbed to worries about 'surplus' capital at home, to be relieved by imperial expansion, but James Mill had succeeded in persuading Bentham otherwise. As an adherent and virtual co-founder of Say's law, the elder Mill had realized that Say's law meant that there would be no 'gluts' from overproduction or excess capital; therefore, no colonial or imperial safety valve was necessary. John Stuart Mill, however, was converted to the idea of surplus capital by his old friend Edward Gibbon Wakefield (1796–1862), son of Edward Wakefield, a philosophical radical friend of Bentham and James Mill.

Young Wakefield began the heretical pro-imperialist movement with his *Letter from Sydney* (1829), written not from Australia, but from an English prison, where he had been convicted for the fraudulent kidnapping of a young heiress. With this tract, Wakefield launched the 'colonial reformer' movement, and John Mill proudly proclaimed himself Wakefield's first convert. Mill was much too committed to Say's law to buy the idea of surplus production desperately needing foreign markets, but he was committed enough to the Ricardian fears of a falling rate of profit to advocate postponing this day by subsidizing the investment of British capital abroad. The worry about 'surplus capital' that could not be invested at home, should have been put to rest if Mill had been truly committed to Say's law. As for the falling rate of profit, Mill couldn't transcend the Ricardian framework to realize, first, that there is nothing inevitable about a falling rate of profit (i.e. interest), since wages do not inevitably press upon profits; and second, to the extent that profit rates fall over time it is due to falling time-preference rates, and then it is scarcely a tragedy, nor does it cause a depression or stagnation, since this interest or profit rate only reflects the desires and values of the participants in the market. And also, since interest rates are not determined by nor are they inverse to, the stock of capital, there is no guarantee that these rates will be higher abroad than in home countries such as England.

Thus, by being converted to Wakefield's fallacy of the inevitable accumulation of surplus capital in advanced capitalist countries, John Stuart Mill lent his great prestige to the notion that capitalism economically requires empire in order to invest, to get rid of, allegedly surplus savings or capital. In short, Mill was one of the ultimate founders of the Leninist theory of imperialism.

8.5 The Millians

If Mill was able to disarm much of the opposition from the original enemies of Ricardian economics, he was able to establish the dominance of his own muddled version by converting the youth – always the first group to adopt an important new trend or system of thought, for good or ill. At Cambridge the powerful secret Society of Apostles immediately took up the *Principles* for extensive study and discussion. The Apostles of 1848 included: James Fitzjames Stephen (1829–94), later an eminent journalist and attorney; E.H. Stanley (later Lord Derby) (1826–93), a conservative who would twice become foreign secretary; and Vernon Harcourt (1827–1904), later a Liberal MP and Whewell professor of international law at Cambridge. A little later in the early 1850s there came to Cambridge such young Millians as Stephen's brother Leslie (1832–1904), who would later teach at Cambridge and then retire to write works of history and philosophy, including his three volume masterwork, *The English Utilitarians* (1900). This Millian group also included Henry Fawcett who, although blinded in a hunting accident in his mid-20s, went on to become professor of political economy at Cambridge, and to write his *Manual of Political Economy* (1856) as a way of making Mill's *Principles* easier for students and laymen. Fawcett's *Manual* was used as a textbook in British and American Colleges for many years, and went through six editions. Fawcett later became an MP and postmaster general.

While Mill did not have quite the impact on Oxford as he did on Cambridge, we are assured that by the early 1850s, Mill was already 'a classic, both as a logician and as a political economist'.[14]

Two young economists who hailed the *Principles* in book reviews, became strongly influenced by Mill. One was insurance executive William Newmarch (1820–82), who collaborated in the last volume of Thomas Tooke's *History of Prices*; and the other was Walter Bagehot (1826–77), who would become an extremely influential journalist and financial economist. Bagehot was particularly happy to see Mill weaken the *laissez-faire* precepts of political economy by making his mischievous distinction between 'production' and 'distribution'. It is particularly unfortunate that this cynical semi-statist, an attorney who joined the business of his banker-father, became the son-in-law of James Wilson, and succeeded Wilson as editor of *The Economist* shortly before he died in 1860. This change meant a fateful shift from a militant *laissez-faire* policy to a statist advocacy of, among other things, the aggrandizement of the Bank of England over the monetary system. Along with the abandonment of *laissez-faire* by Bagehot came an increasing abandonment on his part of even Millian economic theory, and a shift toward a nihilistic and historicist institutionalism.

Unfortunately, Millianism came to hold sway, not only over Cambridge and Oxford, but even over Trinity College, Dublin. For almost two decades the Whately chair at Trinity had been the great stronghold of utility theory as against Ricardianism. But first, succeeding William N. Hancock in the five-year Whately chair, in 1851, was Richard Hussey Walsh (1825–62), who returned to a cost-of-production theory of value while pursuing his interest in monetary problems. Walsh had graduated from Trinity in 1846, and his lectures were published as *An Elementary Treatise on Metallic Currency* (1853). Being a Roman Catholic, Walsh was legally barred from a permanent academic career at home, and so after his term as Whately professor was over, he went to the colony of Mauritius as an administrative and census official.

The important successor to Walsh was John Elliott Cairnes (1824–75), who became by far the most important Millian in academia. Born in Ireland, Cairnes studied at Trinity College, and, after graduation, was admitted to the bar. He acceded to the Whately chair in 1856, and the following year Cairns won his spurs by publishing his most important work in economics, *The Character and Logical Method of Political Economy*. So far he followed the pattern of Whately chair-holders, but then he broke the mould by being the first of the Whately professors to follow with a lifelong career in university teaching. In 1859, Cairnes was appointed professor of political economy and jurisprudence at Queen's College, Galway; seven years later, he moved to University College, London until forced to resign by ill health in 1872.

J.E. Cairnes has been known as 'the last of the classical economists'; after Mill's death he assumed the mantle of outstanding British economist in the minds of the public, and in 1874 he lashed out in incomprehension at the revolutionary marginal utility theory of William Stanley Jevons (in Cairnes's *Some Leading Principles of Political Economy*). Cairnes was a determined cost-of-production theorist, granting his only significant exception in his well-known 'theory of non-competing groups'. This theory recognized that where factors of production, in particular labour, did not immediately and fully compete with each other, the prices of the factors are determined by demand rather than by cost. Unfortunately, Cairnes lifted the theory from Longfield's *Lectures on Political Economy* without giving him credit; we know that this was not a case of ignorance of a distinguished predecessor, since Cairnes assigned Longfield's work in his own classes.[15]

Cairnes's work of most lasting value, his *Character and Logical Method*, while including some Millian positivism, was essentially a methodological work in the great Nassau Senior–praxeological tradition. Thus Cairnes, after agreeing with Mill that there can be no controlled experiments in the social sciences, adds the important point that the social sciences, nevertheless, have a crucial advantage over the physical sciences. For, in the latter, '*mankind have no direct knowledge of ultimate physical principles*'. The laws of physics are not themselves evident to our consciousness nor are they directly apparent; their truth rests on the fact that they account for natural phenomena. But, in contrast, Cairnes goes on, '*The economist starts with a knowledge of ultimate causes*'. How? Because the economist realizes that the 'ultimate principles governing economic phenomena' are 'certain mental feelings and certain animal propensities in human beings; [and] the physical conditions under which production takes place'. To arrive at these premises of economics 'no elaborate process of induction is needed'. For all we need to do is 'to turn our attention to the subject', and we obtain 'direct knowledge of these causes in our consciousness of what passes in our own minds, and in the information which our senses convey...to us of external facts'. Such broad and basic knowledge of motives for action includes the desire for wealth; and everyone knows 'that, according to his lights, he will proceed toward his end in the shortest way open to him...'.[16]

Cairnes also demonstrates that the economist uses mental experiments as replacements for laboratory experiments of the physical scientist. He shows too, that deduced economic laws are 'tendency', or 'if–then', laws, and furthermore that they are necessarily qualitative and not quantitative, and therefore cannot admit of mathematical or statistical expression. Thus the extent of a rise in price due to a drop in supply cannot be determined, since subjective values and preferences cannot be precisely measured. In his preface to the second edition of the *Character*, written two decades later in 1875, Cairnes warns against the growing use of the mathematical method of economics, in this case levelling a just criticism at writers like Jevons. For mathematics, in contrast to its use in the physical sciences, cannot yield new truths in economics; and, further, 'unless it can be shown either that mental feelings admit of being expressed in precise quantitative forms, or, on the other hand, that economic phenomena do not depend upon mental feelings, I am unable to see how this conclusion can be avoided'. In the course of his methodological inquiries, and in his battles against Jevons, John Cairnes moved closer to subjective value theory and further from Mill than perhaps he realized.

8.6 Cairnes and the gold discoveries

Cairnes's main contribution to positive economic analysis has been neglected by recent historians, though it was once considered a particularly 'admirable illustration of economic thought and inquiry'. The sudden gold discoveries in California in the late 1840s, followed rapidly by Australia in 1851, and the consequent enormous increase in gold production, raised important questions on their economic consequences in Britain, as well as whether or not the gold pound would depreciate in terms of commodities. Politically, gold standard anti-inflationists tried to minimize the impact of this increased supply on prices, while the inflationists chortled that at least prices would rise greatly. Among economists, men such as Mill and Torrens, previously in the forefront of currency and banking school struggles, displayed remarkably little interest in the entire process. Most of the interested economists took a primitive, proto-Keynesian position that the new gold money would increase capital and employment and therefore would have little effect on prices. If was as if monetary theory had never been discovered!

Perhaps the most banal and absurd paean to the new gold discoveries was emitted by William Newmarch, the disciple of Thomas Tooke. In an address delivered to the British Association for the Advancement of Science in 1853, Newmarch exulted that in Australia 'the effect of the new gold has been to add the stimulus of a very low rate of interest, and of an abundance of capital, to the other great and manifold causes of rapid development'.

Newmarch concluded that

> generally, we are justified in describing the effects of the new gold as almost wholly beneficial. It has led to the development of new branches of enterprise, to new discoveries...In our own country it has already elevated the condition of the working and poorer classes; it has quickened and extended trade; and exerted an influence which thus far is beneficial wherever it has been felt.[17]

Newmarch's inflationist (i.e. monetary inflationist) twaddle was echoed in the Tory *Blackwood's Magazine* by Sir Archibald Alison (1792–1867), a leading Scottish attorney, protectionist and arch-inflationist. Even Professor Henry Fawcett continued the same line, managing to use the wages fund theory for inflationist conclusions. Blithely assuming that the new gold constitutes new capital, Fawcett concluded that therefore the wages fund will increase, raising wages. In fact, it was Fawcett's paper on this question in 1859, his biographer Leslie Stephen tells us, that led 'to the discovery of Fawcett'. From his own perspective, Marx agreed with Fawcett's article, lamenting that the new gold discoveries in California and Australia had lengthened the viability of capitalism, and delayed its revolutionary crisis. Also excited about Fawcett's 'discovery' was the now Bagehot-run *Economist*, which extravagantly hailed the paper as one of those 'very rare occasions' when 'an absolutely new truth can be propounded to such a body'.[18]

On the other hand, there was still a corps of economists pointing out the home truths of the 'quantity theory', namely that the effect of the new gold discoveries would be a rise in prices roughly proportionate to the increase in gold production, accompanied by unfortunate distribution effects, as well as a waste of resources in mining an increased amount of gold.[19] The most important voice, warning of the price-inflationary consequences of the gold discoveries, was the prominent French economist and free trader Michel Chevalier (1806–79). Chevalier raised his voice on the issue throughout the 1850s, his book *On the Probable Fall in the Value of Gold* being translated by Richard Cobden and published in 1859. The veteran and devoted Ricardian essayist and poet, Thomas De Quincey (1785–1859) denounced 'California and the Gold-Digging Mania', in 1852, charging that 'every ounce of Australian gold...should locally be so much more than is wanted'. Bonamy Price, a banking school theorist who had succeeded Senior to the chair of political economy at Oxford, denounced 'The Great City Apostasy on Gold', in 1863, noting that the dominant financial opinion hailing the gold discoveries constituted an aberrant reversion to mercantilist–inflationist fallacy.

The most important response to the gold discoveries was that of John Cairnes, whose interest in the problem was piqued in 1856 by the 'ignorant and preposterous assertion(s)' by William Newmarch and other inflationists. In a series of articles published between 1857 and 1863, Cairnes set forth the quantity analysis, but he also brilliantly went beyond it to resurrect the scholastic–Cantillon process analysis, realizing that the 'distribution' effects of the monetary change process were important parts of the picture that should not be swept under the rug. Cairnes pointed out that the country with new gold mines will be the first to feel their bad effects – the price increases and the waste of resources – after which, as the new gold flows abroad in return for goods, these bad effects become gradually 'exported' to the other countries of the world. In contrast to the gushing of the inflationists, Cairnes showed that the first country to suffer waste of resources from the new gold was Australia, where previously flourishing agriculture was virtually ruined.

The British public and press, however, lost interest in the entire issue by the end of the 1850s. The reason was that prices, after the financial panic of 1857, fell back to being only a little bit higher than ten years earlier. Cairnes pointed out quite correctly, however, that this slight rise in prices masked what amounted to a considerable depreciation of the gold pound, perhaps 20 or 25 per cent. For he noted that 'considering the propitiousness of the seasons, the action of free trade, the absence of war, the contraction of credit [after the crisis of 1857], and the general tendencies to a reduction of cost proceeding from the progress of knowledge, were there no other causes in operation', there would have been a 'very considerable fall of prices at the present time, as compared with, say eight or ten years ago'. In short, without the gold inflation, there would have ben a substantial *fall* in prices, and the slight rise reflected instead a substantial inflationary depreciation of the gold pound. Profound and correct, indeed; but far too theoretical a consideration for the British public, who were content to let the problem go, so long as the effects of depreciation were not starkly visible.

8.7 The Millian supremacy

Thus, by the intellectual authority derived from decades of personal and family prominence and by his work on logic, by force of personality, and by clever strategems employed in his book, John Stuart Mill was able to make his *Principles of Political Economy* the dominant force in British economics from the time of initial publication in 1848. For three decades, Mill and his *Principles* bestrode British economics like a colossus, and, as we shall see in a later volume, England managed to repulse the marginalist Jevonian revolution in the 1870s, at least in its original, undiluted form. Mill had managed to fasten upon Great Britain: a watered-down labour or at least cost-of-production theory of value; a muddled positivist method that gave hostage to inductivist or even organicist critics; a devotion to the gold standard offset by an inflationist, banking school theory of crises and cycles and of gold production, and an adherence to the *status quo* of inflationist Bank of England control and manipulation of the British monetary system. In fact, in every area, John Stuart Mill reimposed the system of Ricardo and his father, but in a far more muddled and diluted manner. In public policy, too, the old Ricardian devotion to *laissez-faire* was replaced by a vague free market presumption to which Mill and his followers were always willing to make extensive exceptions, so free were they of the earlier classical and Ricardian 'dogmatism'. Intellectually, however wrong-headed most of the Ricardianism had been, its positions were at least consistent and clear – even if the reasoning supporting those conclusions was generally tangled and incoherent. But the new Millian