VICTORIAN WRITING ABOUT RISK

Imagining a Safe England in a Dangerous World

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CHAPTER ONE

Banishing panic: J. R. McCulloch, Harriet Martineau and the popularization of political economy

In the first three decades of the nineteenth century, a number of British liberal intellectuals attempted to popularize the "laws" of classical political economy in the hope, as the statistician William Farr put it, that "knowledge [would] banish panic." There is a sense, in many of these works,² that knowledge of economic laws might quiet the growing unease of the middle and upper classes and the growing unrest of the laboring classes in regard to the increasingly industrialized market economy. Among the most successful popularizers of classical political economy were Harriet Martineau and J. R. McCulloch who both wrote best-selling³ works that attached abstract "laws" to their concrete correlatives, in an attempt to make them more easily understood and accepted by the reading public. Martineau's *Illustrations of Political Economy* is a collection of stories, the plots of which reveal the happy endings that await those who place their faith in a market left to its own "natural" workings. McCulloch's Statistical Account of the British Empire supplies numbers, tables, descriptions, comparisons, historical surveys and expert opinions that illustrate the supremacy, when compared to both other places and other times, of the natural resources, industry, commerce, education, government, religion, poor laws, and vital statistics of Britain. In both works, England is represented as self-sufficient and secure. The risks of Britain's new economy and social structures disappear in the predictability offered by the regularities of McCulloch's numbers and the resolutions of Martineau's plots.

The words of William Farr's aphorism — "knowledge will banish panic" — resonate with particularly Victorian meanings. "Knowledge," in the increasingly empirical nineteenth century, is valued in proportion to its content of information and facts; other kinds of knowledge, the more abstract processes associated with speculation, or with the ability to theorize, recede in prestige. Facts conferred respectability: J. R. McCulloch defined and defended political economy as "not a science of

speculation but of fact and experiment." E. P. Thompson notes the emphasis on information as opposed to theory or speculation in the "improving" educational endeavors of Methodists, Evangelicals and Unitarians alike in the Victorian period. The Society for the Diffusion of Useful Knowledge, which was founded in 1827 and which published McCulloch's *Statistical Account*, defined useful knowledge specifically as *information*. Although the SDUK directed its efforts particularly toward "educating" (or re-educating) the increasingly politicized laboring classes, a writer in the *Poor Man's Guardian* characterized the "useful knowledge" purveyed by the SDUK as "namby-pamby stuff published expressly to stultify the minds of the working people and make them spiritless and unresisting victims of a system of plunder and oppression"

Victorians produced and published facts in unprecedented quantities: the statistical societies of Manchester and London (founded in 1833 and 1834 respectively) collected and circulated masses of information, as did the parliamentary commissions which produced the widely read Blue Book Reports.⁸ Statistics, the "empirical arm of political economy," were presented as disinterested facts from which various laws could be just as disinterestedly inferred. Ian Hacking, in *The Taming of Chance*, describes the impact of statistics on nineteenth-century thought:

Statistical laws came to be regarded as laws in their own right, and their sway was extended to natural phenomena. A new kind of "objective knowledge" came into being, the product of new technologies for gaining information about natural and social processes. There emerged new criteria for what counted as evidence for knowledge of this kind. The statistical laws that could thus be justified were used not only for description but also for explaining and understanding the course of events.¹⁰

In his *Principles of Political Economy*, J. R. McCulloch insists on political economy as the non-partisan result of a rigorous and unmitigated empiricism:

the economist... takes the facts furnished by the researches of statists [i.e., statisticians]; and after comparing them with each other, and with those deduced from other sources, he applies himself to discover their relation and dependence. By patient induction, by carefully observing the circumstances attending the operation of particular principles, he discovers the effects of which they are really productive, and how far they are liable to be modified by the operation of their principles. It is thus that the various general laws, which regulate and connect the apparently conflicting but really harmonious interests of every different order in society, may be discovered, and established with all the certainty that belongs to conclusions derived from experience and observation. ¹¹

Economic laws were, in this context, carefully represented as counterparts of the natural, immutable and inevitable laws of the physical sciences. T. R. Malthus's use of numbers, for example, made the conclusions in his *Essay on Population* seem absolutely inescapable. In Gertrude Himmelfarb's positivistic estimation, "the numerical precision gave an authority, a mathematical exactitude, and certitude to the theory which enhanced its appeal and was almost mesmerizing in its effect." ¹²

From the realm of the natural, it was only a short leap to the realm of the providential. Stefan Collini describes the way in which, in the work of the Reverend Malthus,

[e]conomic laws seem to be equated with God's laws in an effort to deliver the quietus to any prospect of beneficial change in social and political circumstances; human devices of any kind seem puny and helpless in the face of Nature. It is not so much a case of economic laws, but of biological necessity determining social and political arrangements.¹³

Yet in the first three decades of the nineteenth century, a universe arranged by nature or God was not always apparent. Social unrest, manifested in machine breaking, rick burning and rioting; the power and danger of technological innovations from railroads to power looms; the unpredictability and severity of market cycles; and a tradition of dependence on the resources, labor and markets of increasingly rebellious colonies all contributed to a sense of contingency and uncertainty for all classes, even at moments of prosperity. Even Charles Babbage, whose name is synonymous with scientific progress, experienced a fear of technology when he visited an iron works run by a hundred horsepower engine: "The intensity of the fire was peculiarly impressive. It recalled the past, disturbed the present, and suggested the future . . . candour obliges me to admit that my speculations on the future were not entirely devoid of anxiety."14 The theories of classical political economy offered relief from the anxiety produced by this contingency and uncertainty. These theories promised continually to reveal a safe and stable reality just behind the convincing but misleading appearance of social and economic turmoil.

The fact of immutable, beneficent laws and the consequent lack of a need for human intervention combined in the theory of classical political economy to assuage cultural anxiety: economic and social relations are not humanly made, nor are humans responsible for, or even capable of, improving these relations. Classical political economy was thus cosmological in that it attributes to the world a not entirely comprehensible, but nonetheless reliable, structure and dynamics. In this sense, theories

like those of the classical economists blur the distinctive boundary theorists like Anthony Giddens would draw around the experience of modernity, particularly the idea that the acceptance of contingency and uncertainty is peculiarly modern. Giddens argues that risk as a concept signifies the modern recognition of "not just the possibility that things might go wrong, but that this possibility cannot be eliminated. The phenomenology of such a situation is part of the cultural experience of modernity."15 I am arguing that the theories of political economy, and, in the next chapter, anticontagionism, were quite precisely an attempt to eliminate the possibility that things might go wrong. What classical political economy attempted to do, particularly in its popularizations, was to cleanse the economic realm of contingency and uncertainty, to make it predictable. The functioning of the economy was placed in the reliable hands of nature and, explicitly in Malthus's writing, of God. 16 In consequence, the Victorian middle class found itself charged with a very comfortable double duty: on the one hand, it was to refrain from trying to regulate or modify the workings of the macroeconomic sphere, and on the other hand, it was enjoined to aggressively pursue its own selfinterest in the microeconomic one.

To return to Farr's prediction, that knowledge of political economy "will banish panic," it is worth noting that Farr locates panic in the present with this use of the future tense. The popularizers of political economy, the most famous of whom could "demand from publishers higher payments than any but the most popular novelists,"¹⁷ reworked what Carlyle described as the "dismal science" of Malthusian and Ricardian economics into a reassuring gospel of ever-expanding growth and ever-increasing prosperity. With stories of the beneficence of machines and the evil of strikes; with tables showing the abundance of English herrings cured gutted and ungutted (see Fig. 1); with lyrical descriptions of the thickness of English coal beds and the excellence of its cheese, McCulloch and Martineau set about "proving" to their anxious readers that the new economy was not a juggernaut about to crush them underfoot but some much slower and safer vehicle heading toward an ever-improving way of life for all classes. The class conflict, falling rates of profit, overpopulation, and mass death confronted by Malthus and Ricardo disappear in their accounts, or are, even more persuasively, frankly confronted but then swiftly dispatched to the realm of error.

Despite the optimism of Martineau and McCulloch, their colleague Farr's use of the word "banish" betrays a lack of confidence about the possibility of curing panic. "Banish," according to the *OED*, means to "outlaw," as well as to "exile, to expatriate, to expel, to dismiss." To

Years ending	Total Quantity of Herrings Cured.		Total Quantity of Herrings	Total Quantity of Herrings Exported.			
April 5.	Gutted.	Ungutted.	Total.	Branded.	Gutted.	Ungutted.	Total.
	Barrels.	Barrels.	Barrels.	Barrels.	Barrels.	Barrels.	Barrels.
1811	65,430	26,3971	91,8274	55,6621	18,880	19,253	38,313
1812	72,5151	39,004	111,5191	58,430₺	27,564	35,256	62,820
1813	89,900%	63,5871	153,4884	70,0271	40,1004	69,625	109,725
1814	52,931½	57,611	110,5421	38,184	34,929	83,4741	118,403
1815	105,3721	54,767	160,1394	83,376	68,938	72,3674	141,305
1816	135,981	26,670%	162,6513	416,436	81,5441	26,143½	107,688
1817	155,776	36,567½	192,343	140,0181	115,4804	23,148	138,628
1818	204,2704	23,4204	227,691	183,089	148,1474	14,192	162,389
1819	303,7774	37,1161	340,894	270,0221	212,3011	14,860±	227,162
1820	347,1904	35,301	382,4914	309,700}	244,096	9,420	253,516
1821	413,308	28,887	442,1954	363,872	$289,445\frac{1}{2}$	5,360	294,805
1822	291,6261	24,8974	316,5424	263,205	212,8901	2,065₺	214,956
1823	225,037	23,832	248,869	203,110	169,459 1	985-}	170,445
1824	335,450	56,7404	392.1903	299,631	$238,505\frac{1}{2}$	1,125	239,630
1825	303,397	44,2684	347,6654	270,844	201,8821	134	202,016
1826	340,118	39,1154	379,2334	294,4221	217,053	20	217,073
1827	259,1714	29,324	288,4954	223,606	165,741	695	166,406
1828	339,360	60,418	399,778	279,3174	210,766	893	211,659
1829	$300,242\frac{1}{2}$	55,737	355,979 1	234,827	$202,813\frac{1}{2}$	3,062	205,875
1830	$280,933\frac{1}{2}$	48,6234	329,557	218,418	177,776	3,8784	181,654
1831	371,096	68,274	439,370	237,085	260,976	3,927	264,903
1832	313,1134	49,547	362,660%	157,839 1	$214,820\frac{1}{4}$	2,6794	217,490
1833	$353,684\frac{1}{2}$	63,279	416,9644	168,259 1	$218,422\frac{1}{2}$	2,255	220,684
1834	382,6774	68,853	451,5314	178,0001	$269,133\frac{1}{4}$	2,960	272,093
1835	217,2421	60,0741	277,317	85,0794	$156,229\frac{1}{2}$	2,580	158,805
1836	399,334	98,2801	497,6144	192,317	$270,846\frac{1}{2}$	2,547	273,393
1837	290,169	107,6604	397,829	114,192	$187,238\frac{1}{4}$	2,027	189,265
1838	382,400	125,374	507,774	141.552	$229,160\frac{1}{2}$	5,997	235,158
1839	382,229	173,3304	$555,559\frac{3}{4}$	153,6594	233,690½	6,040	239,739
1840	$405,379\frac{1}{2}$	138,565	543,945	152,231	250,554	1,968	252,522
1841	431,157	126,1054	557,2621	154,189	246,851	3,286	250,137
1842	489,620½	177,6244	$667,245 \frac{1}{4}$	190,922 1	283,530	1,206	284,736
1843	442,290	181,1291	623,419 3	162,713	$287,043\frac{1}{4}$	4,757	291,800
1844	473,556	191,803	655,3594	182,988	$311,167\frac{1}{2}$	2,349	313,516

Note.—In the six years ending 5th of April, 1815, the bounty on herrings cured gutted was 2s. per barrel, while there was a bounty at the same time of 2s. 8d. per barrel, payable by the excise, on the exportation of herrings, whether cured gutted or ungutted, but which ceased on the 1st of June, 1815. In the eleven years ending 5th of April, 1826, the bounty on herrings cured gutted was 4s. per barrel; in the four succeeding years the bounty was reduced 1s. per barrel each year, till the 5th of April, 1830, when it ceased altogether, and has not since been renewed.

Figure 1 "Abstract of the total quantity of White Herrings Cured, Branded for Bounty, and Exported, in so far as the same have been brought under the Cognizance of the Officers of the Fishery, from the 5th of April, 1810, distinguishing each Year, and the herrings Cured Gutted from those Cured Ungutted." From J. R. McCulloch, A Descriptive and Statistical Account of the British Empire (1847). This table of herrings vividly illustrates the joys of counting just about anything in Victorian statistics.

banish panic is thus not to eradicate it, but to move it or hide it, to make it illegal and therefore unrepresentable, or to export it, to send it somewhere else. In later chapters we will follow into exile the panic banished by Farr and his colleagues. In Farr's aphorism, and in the overstatements and aggrandizements of McCulloch and Martineau, panic is indirectly but thoroughly acknowledged as a permanent and disruptive feature of the culture of modernity; the need to eliminate it is represented in

calculations of risk that attempt to make the enduring and unendurable presence of uncertainty bearable. We will see the powerful but transitory nature of the consolations offered by the modern cosmology that was early Victorian popular political economy.

The changes Martineau and McCulloch made in classical theory in order to create modern cosmologies – the discovery and invention of an inordinate amount of good news in the "dismal science," most prominently – were precisely what made their works capable of offering powerful consolation to Britons caught up in the intensive changes of the first thirty years of the nineteenth century. McCulloch's statistics and Martineau's tales suggest an important division of textual labor between popular, fleeting accounts of political economy and the more enduring works on the subject. The works of Smith, Ricardo and Malthus – as well as of novelists like Dickens, Gaskell and Eliot – did not explain industrial capitalism as a utopia-in-progress: indeed, Ricardo's account of the conflicts inherent in class relations and Malthus's depressing view of the deadly outcome of healthy human sexuality¹⁸ suggest that the market is a tragic but inescapable and even necessary mechanism.

McCulloch and Martineau repackage this tragedy as readily removable error. Indeed, their works seem to have provided immediate consolation for their middle class readers because they suggest that the pains of capitalism are due to misunderstanding and wrong action. Obedience to the laws of the market will lead to prosperity for all classes – eventually. We will see, however, that this powerful and immediate kind of consolation was of brief duration, largely because of its increasingly improbable optimism.

Ι.

J. R. McCulloch's career reveals an extraordinary devotion to disseminating, by all possible means, what he saw as the truths of classical political economy both to the middle classes and to the increasingly restive and politicized laboring classes. He worked as a public lecturer, a university professor, and an enormously prolific (although notoriously self-plagiarizing¹⁹) author of articles for numerous publications, most notably the *Edinburgh Review* and the *Encyclopaedia Britannica*. His numerous books include the highly popular *Dictionary of Commerce*, *Principles of Political Economy* and an extensive bibliography of political economy. Although most of McCulloch's work was directed at a middle class and educated readership, *The Statistical Account of the British Empire* was pub-

lished and distributed under the auspices of the Society for the Diffusion of Useful Knowledge, as part of that organization's on-going, and quite explicit efforts to bring the laboring classes into ideological conformity with the new economic order. Given McCulloch's energetic proselytizing, it seems no accident that in the single book-length study of McCulloch – D. P. O'Brien's J. R. McCulloch: A Study in Classical Economics – the man becomes the discipline in the subtitle.

McCulloch, disparaged by Dickens, Carlyle and Marx as a heartless and buffoon-like publicist for *laissez faire*, ²⁰ unabashedly defined the strategy necessary for the popularizers of this doctrine:

The economist who confines himself to the mere enunciation of general principles, or abstract truths, may as well address himself to the Pump in Aldgate, as to the British public. If he wished to be anything better than a declaimer, or to confer any real advantage on any class of his countrymen, he must leave general reasoning, and show the extent of injury entailed on the community by the neglect of his principles; how their application may be best effected; and the advantages of which it will be productive. ²¹

McCulloch promotes an intellectual division of labor in which he and his fellow experts would work out theories in all their complex abstraction, and then diffuse them to the public by way of concrete examples, the details of which would concern, and thus interest, their audiences directly. In this division of labor, the knowledge fit for the many, which included most of the middle and all of the laboring classes, ought to be restricted to specific data selected by experts.

McCulloch, in the *Statistical Account*, presents a wealth of geographical, zoological, botanical, and agricultural data to "prove" that Britain is self-sufficient in natural resources: Britain's cheese, copper, iron, coal, wool, cotton, climate, people, lakes, puffins, turnips and bees are variously described as the most excellent or most abundant throughout the world and throughout history. The two volumes of the *Account* seem almost to be designed such that the casual reader, taking a volume off the shelf and dipping in at any point, can be comforted by this excellence and abundance of British resources. McCulloch leaves no stone unturned; indeed, when he turns his attention to stones he carefully describes the value found upon them: "[e]ven the lichens have yielded an article of utility and of commerce; and that they might do so more extensively, there can be no question."²²

Various vital resources, fish and coal in particular, are both enumerated in charts and tables *and* described as "inexhaustible" and "exhaustless," to suggest both the impossibility of counting them accurately and

perhaps also the lack of any reason to count them at all. These resources reside in the realm of what might be called a statistical sublime, in which the amount – of iron, of fish, of wool, of coal – is so vast as to either defy or render superfluous the computational skills of a statistician, even one with McCulloch's abilities. In a discussion of coal, for example, McCulloch quotes an expert, one "Mr. Taylor," to the effect that "the coal fields of Durham and Northumberland are adequate to furnish the present annual supply for more than 1340 years" (4:1:599). "More than 1340 years" is a rather odd quantification. The specificity of "1340" is undermined but also reassuringly supplemented by the fuzziness of "more." "1340" is quite precise and thus indicates some very sophisticated calculations but the qualification of "more than" opens onto the infinite, where calculations are blissfully unnecessary. Numbers, contrary to what a late twentieth-century reader might expect, are actually used to sketch and suggest, rather than to define and delineate the blessings of Britain in any final way, since to define too closely might be to restrict the bounty a responsive reader might imagine.²³

McCulloch paradoxically argues against the Ricardian system he professes to be supporting, the very heart of which is that "economic growth must sooner or later peter out owing to scarcity of natural resources." The figures of the *Statistical Account* show that, contrary to Ricardo's predictions, home production of wheat was keeping pace with increasing domestic needs. McCulloch thus replaces the prospect of inevitable decline with the much more reassuring promise of seemingly infinite natural resources, remaking Ricardo's essentially tragic economic theory into a utopian one.

This view of an unending abundance of domestic resources was also an important element in McCulloch's arguments for free trade and against colonization and protectionism. As trade and investment increasingly overflowed the confines of empire in the early nineteenth century, colonial monopolies, such as that of the British West Indies on sugar, came to be an anachronistic impediment to economic expansion. The West Indian colonies, the jewel in the crown of empire in the late eighteenth century, became a political and financial liability as former slaves rebelled and the planter class continued to insist on protectionism. Not only were the British less and less dependent on Caribbean markets as outlets for metropolitan goods, there was also cheaper sugar, including newly developed beet sugar, increasingly available elsewhere McCulloch, accordingly, dismisses the idea of British dependence on its possessions:

Nothing, in fact, can be a greater mistake than to suppose, as many have done, that we are mainly indebted for our wealth, and to the high place we occupy among the nations of the earth, to our colonial possessions. We owe these distinctions to the favourable situations and physical capacities of our native country, the intelligence and enterprise of our people, and the emulation inspired by our free institutions . . . (I:I:597)

McCulloch denies that Britain has ever been dependent on its colonies, rather than admitting an historical trajectory in which, as Eric Williams has described it, "the colonial system was the spinal cord of commercial capitalism in the mercantile epoch," but became an unwanted appendage in the era of industrial capitalism.²⁶ In effacing this trajectory, McCulloch posits British independence as something essential and unchanging, rather than a result of complex historical and ideological changes, including the literal exhaustion of resources and people in the Caribbean, as well as an increasingly diffused dependence on international, and not necessarily colonial, goods and markets. Nonetheless, even though the wealth flowing to the metropolis from the Caribbean was, in fact, becoming economically negligible by the 1830s, it had not yet become negligible in the public imagination. Jane Eyre and Vanity Fair, novels of 1847 and 1848 respectively, feature Caribbean wealth as a crucial source of income. McCulloch acknowledges the symbolic importance of the Caribbean in order to dismiss its material significance:

A notion seems to have been at one time pretty general in this country, and is still far from being exploded, that the colonies in question [in the West Indies] were of especial consequence, from their furnishing our markets with ample supplies of so important an article as sugar. But there is not now, and, we believe, never was, any foundation for such a notion. Sugar is one of those products of which the culture is generally diffused all over the tropical regions . . . (1:1: 596)

The culture of sugar *had* become generally diffused by this period, and it was far cheaper for the British to buy it from Cuba, Brazil or Mauritius, where slave labor was still employed and the land was still fertile, or to buy beet sugar in Europe, than it was to produce it in the depleted Caribbean colonies. In arguing the free trade position, McCulloch brought the public up to date, in effect, on the realities of the new international economy without acknowledging that a momentous change had taken place. Since, in McCulloch's account, the colonies were never essential to British well-being, the sting and the threat of actual and possible colonial loss is removed, both retro- and prospectively. As Bernard Semmel has pointed out, the loss of the American

colonies produced "forebodings of disaster" which were not completely assuaged by 1837. McCulloch admits that

[t]he American war seems to have decided, in as far as experience can decide anything, the question in regard to the policy of retaining colonies in a state of dependency that are determined to govern themselves. No colonies were ever regarded as half so valuable as those which now form the republic of the United States; and it was generally supposed that their emancipation would be decisive of the fate of England, that her sun would then set, and for ever! But have we really lost anything by that event? (4:2:531)

McCulloch answers this question at some length, pointing to Britain's relief from the task of governing, while still enjoying a "preference" in American markets. McCulloch represents free trade (rather accurately, one might add) as imperialism without the expense and nuisance of colonial government.

McCulloch argues his version of classical political economy using a blend of quantification, narration, polemic and description. Mary Poovey attributes this mixing of description and quantification to an uncertainty on the part of early statistical writers about the relative persuasive powers of "figures of arithmetic" as opposed to "figures of speech." These early statistical writers had no way of knowing, given the newness of large numbers of large numbers, if what are now (sometimes) regarded as "hard facts" would be more convincing than soft speeches. One result of this ambivalence is that early statistical works are consistently written in what Poovey describes as "mixed genres." Unlike contemporary statistics, these works, in addition to numbers in the form of lists, tables, charts, and graphs, routinely included narratives, policy polemics, social criticism and historical surveys. This multi-genre approach perhaps tried to circumvent "[t]he charges that numbers can be made to say anything and that they are boring if not unreadable."27 In other words, statistics are both potentially productive of excessive and uncontrollable meanings as well as potentially non-productive of any meaning at all and hence useless, not to mention very dull. Excess and emptiness were thus guarded against with hybrid representations, in which there would be something to interest, to convince and to tranquilize everyone. A heterogeneous discourse of number, description, story, comparison and history, by virtue of its being multiply "verifiable," if only in the viscera of its readers, stood a better chance of explaining away many possible sources of uncertainty, contingency and insecurity and thus banishing the panic of its readers.

This patchwork approach indicates that the apparently totalizing positivism of the early statistical pursuit of reality turns out to be a fragmented empiricism, in which bits and pieces of evidence may be taken to indicate but not to delineate definitively, the finally unknowable (because infinitely rich) but unquestionably superior totality of Britain in general and England in particular. The confidence that the world can somehow be grasped whole if enough of it is counted is unwittingly undermined by the impressionistic nature of McCulloch's numbers. Moreover, the bits and pieces are admittedly not randomly selected. McCulloch was at moments quite unselfconscious about the overdetermined nature of statistical inquiry and statistical evidence:

Observations are scarcely ever made or particulars noted for their own sake . . . in the peculiar phraseology of this science [i.e. political economy] it is the *effectual demand* of the theorist that regulates the production of the facts or raw materials, which he is afterwards to work into a system.²⁸

McCulloch thus admits the essentially deductive nature of induction by describing the ways in which a "system" governs the collection of facts. Just as McCulloch's figures on grain production seriously undermine Ricardian theory, this admission deals a serious blow to the integrity of the very project of the early statistical movement, which was dedicated to transforming political economy into a science by replacing subjectivity and speculation with neutral fact:

What the founders [of the statistical movement] seem to have had in mind was the creation of a science of government, the principles of which would be discovered outside the realm of partisan dissension and arise from the accumulation of simple, irrefutable social facts.²⁹

And yet McCulloch, for one, seems to have understood quite well that facts were never "simple" or "irrefutable." The construction of political economy as a science seems to have been a highly self-conscious public relations campaign: if political economy was represented as a "science," it would acquire, in the public mind, the inevitability and disinterestedness of the processes associated with science, and it would be shown to transcend class and class interests. The middle classes would not have to worry about the ethical implications of *laissez faire*, and the laboring classes would have to accept the laws of political economy as inescapable, and abandon, ideally, radicalism and revolution.

The idea of political economy as a science requires significant help from other Victorian "sciences", including that of race. McCulloch, for example, props up the faltering laws of *laissez faire* by strategically bringing in the Irish, to explain the distress of the hand-loom weavers:

We doubt much, notwithstanding the currency of the opposite opinion, whether the hand-loom weavers have been materially injured by the introduction of the power-looms. (Their condition was bad before the power loom) . . . their low wages are not occasioned by the competition of the power-looms, but by the easy nature of their employment. . . . Thus this department of labour is greatly overstocked, and the price necessarily falls. The evil is aggravated by the multitudes of Irish who have flocked into Lancashire . . . and learn to weave as the easiest employment they can adopt. Accustomed to a wretched mode of living in their own country, they are contented with wages that would starve an English labourer. They have in fact so lowered the rate of wages, as to drive many of the English out of the employment, and to drag down those who remain to their own level. (4:2:696–697)

The Irish explain the market's failure to correct itself. They spread the poverty they bring with them from Ireland, reducing the English to their own condition. And McCulloch has his information on the Irish from a venerable source: Edmund Spenser. McCulloch explains that there is no need to worry about the apparent out-datedness of Spenser's A View of the Present State of Ireland (1633) because, "[t]he habitations of the mass of the Irish people are quite as bad, at this moment, as they were three centuries ago; and are now, as then, crowded with cows and pigs as well as men . . ." (4:2:519). McCulloch cites no source for his contemporary information, and it is worth noting that many English (and even Scottish) subjects were also routinely living with their cows and pigs in the nineteenth century. McCulloch's reliance on Spenser subjects the Irish to the dehistoricizing process Edward Said has described in regard to the Western construction of the "Orient": the Irish, an imagined monolith produced by writers like Spenser and McCulloch, do not change, they have no history. And in case anyone might blame the situation of squalid Irish habitations on the absentee colonizing of the English, McCulloch writes a lengthy apologia on "Absentees and Middlemen," in which he concludes that their "injurious influence has been very much exaggerated" (4:2:539).

In McCulloch's construction, England is safe insofar as it is not Irish; but the influx of the Irish both threatens England and provides a ready excuse for why England has not become a free market utopia. In this use of the Irish, McCulloch rescues English laborers from a place at the bottom of the social scale by placing another class – Irish laborers – beneath them. Classes are subdivided by nationality, leaving a fractured

laboring class with seemingly disparate interests. No English person can identify with the Irish, who in addition to being responsible for their poverty, are also frequently represented by the English as enjoying it.³⁰

The effectiveness of this displacement was mitigated, however, by the Act of Union in 1800 and the Catholic Emancipation Act of 1829. These Acts put Ireland (and Irishness) in the position of being both inside and outside Britain, since they effect an amalgamation of the two countries rather than an incorporation of one nation by another. The Irish as a people, and Irishness as a concept, can no longer be completely banished as foreign because they have become part of a unified Britain. Because of this ambiguous status, in which Ireland partakes of being both inside and outside, foreign and domestic, the Irish, and Irishness, become all-purpose excuses for problems in the formulations of *laissez-faire* apologists, and, as we will see in the following chapter, of anticontagionist sanitary reformers, as well.

McCulloch's confidence in the explanatory ability of the science of political economy made him somewhat obtuse about the potential impact of the information he was publishing. He raised, for example, and in effect publicized for the first time, the previously little-known statistics concerning infant mortality in Britain. The most disturbing finding of the early years of the statistical movement was that children under five were dying at a rate of greater than fifty per cent in many of the great towns. McCulloch initially tries to dismiss this figure as "a paradox of a high birth rate." By way of further explanation, he cites Mr. Richman's "Preliminary Remarks to the Census of 1831":

... a rapid increase of population infers the birth and existence of a large proportion of infants, and, therefore, a large proportion of short-lived persons; thereby accelerating *pro rata*, the time of life or age at which one half of the population are dead. (I:I:420)

Infant mortality is high, in other words, because there are too many children in the population and children tend to be innately and indeed recalcitrantly short-lived.

McCulloch dutifully reports that in Lancashire, thirty-one per cent of female infants and thirty-six per cent of male infants die before the age of two years; he then denies what both radical and conservative critics of industrialism took to be obvious:

No good evidence has ever been given, or, we believe, can be given, to prove that factory labour in the cotton and woollen mills at Manchester and other great towns is injurious to the health either of adults or non-adults employed in them; so far as the excessive mortality referred to by Mr. Richman is not accounted for by the rapid increase of the population, it is explained by the extremely destitute condition of a large portion of the population not employed in factories; by the damp, ill-ventilated, miserable houses in which many of the poor live; and the filth and want of cleanliness so disgustingly prevalent among the Irish part of the population. (1:1:420)

McCulloch begins by dismissing the idea that anyone can prove that factory labor is injurious to health. He then shows that the evidence of excessive mortality in the great towns need not be connected to factory labor; he refers it to the "rapid increase" in the population, to the destitution of those not working in factories, to the living conditions of the poor, and to the filth of the Irish. Of course, McCulloch is roughly correct to cite an increase in population, the destitution of the non-industrial laborer, poor housing conditions and filth as the proximate causes of the excessive mortality among the populations of the nineteenth-century factory town. But the factories themselves, and the way of life they created, were not just directly related to these causes, but were the primary cause of the miserable housing of the poor and the filthy living and working conditions of the Irish, the English, the rich and the poor.

Although McCulloch begins the above passage as a discussion of the appalling infant mortality in Lancashire, he quickly and skillfully moves away from the difficulties created by so many dead infants, first by making them seem both larger and less helpless by calling them "non-adults," and then by moving on to a discussion of the causes of ill health (rather than death) of all age groups. But the infant (or non-adult) mortality statistics apparently continue to trouble McCulloch, and he finally decides to dispense with them altogether as irrelevant:

The determination of the average expectation of life at birth is, however, of comparatively little practical importance. The great object is to ascertain the probability of life at any given period, or the chances that an individual of a certain age has of attaining to any other age . . . (I:I:42I)

McCulloch now sets out to convince his readers that infant mortality is not important, or at least not for "practical purposes." But by this time, McCulloch's repeated attempts to rationalize these numbers have resulted in a belaboring of bad news. McCulloch and other statisticians found themselves in the position of disseminating frightening information that they could not adequately explain, rationalize or neutralize.

Perhaps it is a lingering sense of his own inadequacy to explain away high infant mortality that drives McCulloch, in what initially seems to be a contradictory ideological move, to champion the enlarging bureaucracy of the liberal state and its interventions into the new-fangled sanctity of private life. He finally turns responsibility for the dead infants back on their parents, and recommends the collection of information as an excellent method of social discipline and control:

Books of blank certificates, and statistical nosology, have been distributed among all the qualified medical practitioners of England – nearly 11,000 in number; and the causes of death are certified in 9 cases out of 10 by the medical attendant. When a person dies unattended by a qualified medical man, the assigned cause of death is entered as "not certified." Thousands of children are still suffered to fall victims to disease, ignorance, neglect, and quackery but the number is diminishing, as parents have been recalled to a sense of duty by the dread of seeing the delinquencies registered. (1:1:412)

McCulloch demonstrates in this passage a number of the salient features of early British sociological thinking. As Philip Abrams has described it, "the terms of analysis are the custodial state standing face to face with individuals in need of help, correction, or regeneration." Abrams notes that although the early statisticians frequently faced evidence that might cause them to rethink entirely the social structure, they were remarkable in their consistent ability to "find an explanation for the incidence and distribution of poverty that squared with a self-regulating and optimistic conception of society." McCulloch insists that the deaths of poor children are the result of a lack of a "sense of duty," making child mortality a moral and individual problem of poor parents, which could be corrected by publishing their children's deaths in statistical tables and thus "recalling" them to a sense of duty.

In maneuvers like this, McCulloch pulls back from the edge of a statistical sublimity in which numbers provide dangerously prolific possibilities for meaning, but he does not solve the problem of the statistical sublime itself. The publication of what Ian Hacking has described as "an avalanche of numbers" in the early nineteenth century opens up the possibility of an infinite semantic proliferation, a situation definitively resistant to theoretical control. Letting numbers loose proves a risky business; authors like McCulloch could well provoke panic with the publication of the very knowledge that was supposed to banish it. The use of statistics made it clear that numbers can be used to construct a host of narratives and that they can resonate in dangerously unpredictable directions. Statistical knowledge cannot reliably banish panic, and indeed might evoke it.

Nonetheless, for a few critical years in the late 1830s and early 1840s,

the sales figures of the works of McCulloch and Martineau suggest that they initially assuaged middle class anxieties. These anxieties were also addressed through reassurances given to the middle classes by political economy pundits that popular explanations and demonstrations of political economy would be read by the increasingly dangerous, which is to say politicized, laboring classes, and that the laboring classes would be converted to and pacified by the tenets of *laissez faire*. The Oxford economist Richard Whately, writing in 1831, describes how *laissez-faire* doctrine might be made palatable to a large audience:

There are some very simple but important truths belonging to the science we are now engaged in, which might with the utmost facility be brought down to the capacity of a child, and which . . . the Lower Orders cannot even safely be left ignorant of . . . Much of that kind of knowledge to which I have been alluding, might easily be embodied, in an intelligible and interesting form, not merely in regular didactic treatises, but in compilations of history, or of travels, or in works of fiction, which would afford amusement as well as instruction. ³⁵

This is precisely the project Martineau undertakes in *The Illustrations of Political Economy*, published in nine pocket-sized volumes from 1832 to 1834. Much of Martineau's intended working class audience had already participated in or been exposed to a "varied and powerful" opposition to political economy. ³⁶ Fortunately for Martineau and her publishers, the middle classes were still consuming such works with relish, ³⁷ and apparently they did not mind being addressed as if they had the capacities of children.

The protagonist of Harriet Martineau's novel *Deerbrook* asks, "What can religion be for, or reason or philosophy, whichever name you call your faith by, but to show us the bright side of everything?" In the *Illustrations of Political Economy*, Martineau shows the bright side of an industrialized and deregulated market. Just as McCulloch's numbers suggest the infinite natural and industrial bounty of England, Martineau's narratives suggest the delightful array of happy endings that await those who place their faith in *laissez faire*.

ΙI.

It is perhaps not surprising that Martineau, who became so successful at addressing cultural anxiety, describes herself as a child plagued by phobias:

[P]anic struck at the head of the stairs, and I was sure I could not get down; and I could never cross the yard to the garden without flying and panting, and fearing to look behind, because a wild beast was after me.³⁹

Martineau's disabling anxiety is relieved by her discovery of "laws," first of the Necessitarian doctrines of Unitarianism,⁴⁰ and then those of political economy:

I finally laid hold of the conception of general laws . . . My labouring brain and beating heart grew quiet, and something more like peace than I had ever known settled down upon my anxious mind . . . From the time when I became convinced of the certainty of the action of laws, of the true importance of good influences and good habits, of the firmness, in short, of the ground I was treading, and of the security of the results which I should take the right means to obtain. $^{41}\,$

Martineau's world becomes secure; the ground under her feet is guaranteed in its firmness by the existence of laws that regulate "results." Predictability and solidity replace her vertiginous sense of the contingency and fragility of the world around her. Her tales of political economy impart this sense of a predictable and solid economic and social structure, and her confident optimism was no doubt a significant ingredient in their remarkable success. 42

In addition to her own experience of anxiety, and a consequent intuitive understanding of how anxiety can be relieved, Martineau also had her own experience of the vicissitudes of the market. In 1826 she and her family were bankrupted by a bad investment. This bankruptcy propelled her from part-time, amateur writing to a full-time literary career. The bright side of bankruptcy was that it provided her with a "scope for action":

I began to feel the blessing of a wholly new freedom. I, who had been obliged to write before breakfast, or in some private way, had henceforth liberty to do my own work in my own way; for we had lost our gentility.⁴³

The iron laws of political economy rescued Martineau from the iron laws of domestic economy and a woman's place within it: instead of having to hide her work, she now could and must engage in it openly and productively. For Martineau, a middle class woman who was not supposed to be either willing or able to earn her own living, the invisible hand of the market was mercifully impartial; it brought disaster down upon her and her family, but it also allowed her to regain financial security through writing a series of tales that explain and defend the system under which she has paradoxically been both victimized and liberated. For this reason, Martineau had considerable credibility as an apologist for *laissez faire*, and could preach the doctrine of submission to its laws from her own difficult, but rewarding, experience. Valerie Sanders suggests the extent of Martineau's propensity for "proffering her

intellectual history for public edification" in her wish to leave "her brain and skull for phrenological research." ⁴⁴

For all of Martineau's credibility and, indeed, expertise in managing anxiety, the *Illustrations* could not provide their readers with enduring consolation. The work, after an intense but brief period of popularity, fell into a decline from which it has scarcely begun to recover. Although, as the word "Illustrations" suggests, the tales aspire to realism, they are actually more like myths in that they offer a "stable unifying philosophy by which to interpret a given subject matter," the subject matter in this case being Britain's new market. For Martineau to resolve her plots within the conventions of realist fiction would mean that she would provide humanly made and idiosyncratic solutions to the problems of a "free" market. Instead, her plots are resolved by laws, and these laws operate according to the reliable and providential mechanisms of the market. She has no need of the individualistic, idiosyncratic plotting typical of realism; rather, her fictions attempt to attain what is an initially productive but finally an inefficacious generic hybrid: realist myth.

The swiftness with which Martineau's plots resolve the problems they represent may also have contributed to their inability to assuage panic in the long term. Janice A. Radway, in her study of late twentiethcentury romance reading, reports that the texts regarded as "failed romances" by the readers she interviewed made the mistake of delivering pleasure and relief before they had evoked "equally powerful feelings of anger and fear."46 There seems to be a need during the reading process for difficult emotions to be heightened before they are relieved: perhaps because of such a temporary heightening, the relief is more intense and more lasting. Although my theory of the Victorian psychology of reading must necessarily be highly speculative, I wonder if Martineau's readers did not question whether or not they had truly earned, in the attenuated emotional labor required for the reading of her tales, the happy endings she so readily provides. Her law-governed plots work like short-acting drugs: they take effect quickly for readers in need of easily understandable solutions to overwhelming and complex problems, but they wear off equally quickly, requiring the complementary action of additional doses of short-term relief and also of texts that provide more complicated and therefore more long-acting resolutions to the problems at hand.

The *Illustrations* are a series of tales, in nine volumes, that aimed to educate, as well as to console, a wide audience. R. K. Webb has argued that the tales had a dual purpose, and were actually addressed to two

audiences: they both urged the lower classes to "accept the inevitability of the bourgeois industrial order . . ." while also "blasting away at entrenched interests and inherited prejudices." Martineau's work is thus radical, in the Victorian, middle class sense of the word: she tries to return to fundamentals, even if this return proves to be unsettling. Unlike McCulloch, Martineau is protective of social order but not necessarily of *the* social order.

This difference is evident in the first tale of the *Illustrations*, "Life in the Wilds." In southern Africa, a group of marauding Bushmen prey on a British settlement, steal all of the "capital" of the British, and turn the settlers from a "state of advanced civilization to a primitive condition of society." Martineau, in an explanation unusual for any Victorian, portrays the Bushmen's revenge as the result of European colonization, in effect turning the responsibility back on the apparent victims:

The Bushmen were the original possessors of much of the country about the Cape, which the British and the Dutch have since taken for their own. The natives were hunted down like so many wild beasts. This usage naturally made them fierce and active in their revenge. The hardships they have undergone have affected their bodily make also; and their short stature and clumsy form are not, as some suppose, a sufficient proof that they are of an inferior race to the men they make war upon. If we may judge by the experiments which have been tried upon the natives of various countries, it seems probable that if Europeans were driven from their homes into the mountains, and exposed to the hardships of a savage life, they would become stunted in their forms, barbarous in their habits, and cruel in their revenge. (1:4)

Martineau rejects the biological tenets of Victorian racial theory, and puts forward an environmentalist explanation for the condition of the Bushmen. By bringing the Bushmen into a three-dimensional foreground, rather than leaving them in the background as part of the menacing African scenery, Martineau complicates considerably the apparently simple implications of her tale. In order to demonstrate "primitive accumulation," Martineau has "primitives" reduce the English settlers to primitiveness, but she also makes the behavior of the primitives an understandable response to the brutalities of colonization.

One effect of this complication is that the virtue of the English characters in her story is impugned from the beginning. Although Martineau effaces the agency of the colonizers by using the passive voice — "the natives were hunted down like wild beasts" — it is nonetheless clear that the hunters of the Bushmen are people like the settlers. Two parables collide: the first teaches that aggression is dangerous and the legitimate

anger of the colonized emerges in an act of revenge that, in turn, reduces the colonizers to the condition of the primitive colonized. This lesson is partially disavowed by a second one in which the English can never be reduced to a primitive condition because they have the experience of economic development and thus whatever else is taken from them, "the intelligence belonging to a state of advancement remains" (1:22). The English settlers recover from primitive economic conditions rapidly because of their intellectual capital, which cannot be taken from them. But it is precisely the imperial impulse, a crucial ingredient in the "intellectual capital" of capitalism, which has brought them to Africa in the first place. So although the virtue of the settlers may be undermined, their security and self-sufficiency are underscored. The aggressions of colonized peoples may be understandable, but they will never be permanently successful because of the superior and untouchable intellectual capital possessed by the British.

The settlers' loss of all capital provides a situation in which the evolution of an economy can be narrated at a fast-forward pace. The settlers are, in general, models of British industriousness, and set about making tools right away. But one character, Arnall, a former shopkeeper, is distressed at being reduced to a "labourer," "having a very limited notion of the meaning of the word" (1:35). It seems as if Arnall may be a threat to the community because of his selfish unwillingness to labor. True to the tenets of Adam Smith, however, Arnall's pursuit of his own self-interest turns out to benefit the community at large: Arnall conceives of a plan for catching buffalo and antelopes by digging a pit that is used as a snare. "This magnificent plan entered Arnall's head one day when he was thinking how he might distinguish himself in a genteel way, and show himself a benefactor to the settlement without sacrificing his dignity" (1:56). Arnall's vanity benefits the larger society, even though it initially appears to be antisocial.

As soon as tools are fashioned, a spontaneous division of labor occurs. Three boys manufacturing bows and arrows divide the work such that each boy does that which he can do best. The division of labor leads to the invention of machinery, because "men, women and children are never so apt at devising ways of easing their toils as when they are confined to this sort of labour, and have to give their attention to it" (1:77). Martineau represents manufacturing, the division of labor and the invention of machinery as processes that are as "natural" and spontaneous as child's play. The boys naturally divide their labor, they naturally