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Henry Charles Carey

A Study in American Economic Thought

By

A.D.H. Kaplan, Ph. D.

Professor of Economics, University of Denver

Baltimore

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Henry Charles Carey

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Introduction

The period during which Henry Charles Carey made his contribution to American economic thought covers the quarter of a century preceding the American Civil War. When he entered the field with his "*Essay on Wages*" in 1835 the United States had yet to produce an economist of recognised standing; save for an occasional reference to Franklin or Hamilton, the social scientists of Europe seemed oblivious of the existence of an American literature in economics. At the completion of Carey's "*Principles of Social Science*" (1857-60), he had attained not only the fruition of his own thought; he had awakened a European interest in the "American School" and the "American System."

One is struck by the contrast between the contemporary preëminence of Carey and the comparative oblivion in which his name rests half a century after his death. The "Principles of Social Science" was translated into five European languages and Japanese. In Germany, Carey was credited with the revolutionising of economic theory.¹ John Stuart Mill was compelled to restate the law of diminishing returns to meet the telling attacks upon it by Carey.² Patten and Cannan have noted the influence of Carey in giving a dynamic turn to economic discussion.³ France debated the guilt of Bastiat in publishing Carey's theory of distribution as his own.⁴ And Professor Perry, writing in 1878, divided the economic treatises in America into two categories: those modelled after Adam Smith and those modelled after Carey.⁵ Yet today it is difficult to find an American manual on economics containing a reference to Henry Charles Carey. Nor does the name of Carey, the outstanding advocate of the protective tariff when it had to fight for political recognition, come up in the debates of men who make the tariff acts in the United States in this day, when the protective tariff is taken for granted in national politics. Considerations such as these, coupled with the paucity of recent literature on Carey,⁶ have suggested a reëxamination of the Carey incident in the narrative of political economy. This study essays to place the work of Henry Charles Carey in its historical setting, to trace the component parts of his system through his voluminous (at times contradictory) writings, and to appraise his work as a contribution to American economic thought.

¹ Dühring, E.G., *Die Umwälzung der Volkswirtschaftslehre und Sozialwissenschaft durch Carey* (1865).

² Cannan, *Theories of Production and Distribution*, pp. 177-180.

³ *Ibid*; Patten, *Theory of Dynamic Economics*, pp. 14, 21.

⁴ Griswold, "Henry C. Carey," in *Whig Magazine* XV, 422; Patten, *Theory of Dynamic Economics*, pp. 14, 21.

⁵ Perry, A.H., *Elements of Political Economy*, p. 52.

⁶ A well thought out chapter on Carey's approach to the Rent problem is included in J.R. Turner, *The Ricardian Rent Theory, in Early American Economics* (1921). Ugo Rabbeno, *American Commercial Policy* (1895 – translated from the Italian), has a chapter on Henry C. Carey as a Protectionist, in which ridicule occasionally takes the place of informed criticism. For a study that covers the economic system of Carey in its entirety, one must go back to Jeremiah W. Jenks' dissertation, *Henry C. Carey als Nationalökonom*, (Jen, 1885) which has not been translated into English.

Chapter I

Life of Carey

Henry C. Carey's career as an economist began at the close of a successful career as a publisher; it is one of several respects in which the son followed the paths of his father, Mathew Carey.

The elder Carey, born in Ireland in 1760, came to the United States at the age of twenty-four as a political refugee. Mathew had in 1782 been banished from Ireland for his unbridled criticism of Britain's Irish policy; while in Paris the exile became interested in America through contact with Benjamin Franklin, whom he served as printer.¹ After returning to Ireland Carey again wielded his vitriolic pen against the British ministry. He spent a short period in jail and while other charges were pending he succeeded in making his way to Philadelphia, where he landed in 1784. Lafayette, who had met Carey the previous year in France, was in Philadelphia at the time; learning of the arrival of "the persecuted Dublin printer," Lafayette provided the newcomer with financial assistance to set up an American periodical, *The Pennsylvania Evening Herald*.² As a journalist the Irish immigrant became conspicuously identified with the political life in his adopted homeland. His decisive views precipitated a duel with one Colonel Oswald, which incapacitated him for a year; and a less disastrous duel of letters and pamphlets with William Cobbett, which ended in their becoming fast friends. Mathew Carey established a business as bookseller and publisher in 1791, eventually accumulating a competency that left him free for the pursuit of political economy and various civic enterprises. The literary record of the senior Carey is intimately associated with his patronage of domestic manufactures and championship of the "American System." *[begin page 12]*

Mathew Carey founded the Philadelphia Society for the Promotion of National Industry in 1819, and was an active leader of the Pennsylvania Society for the promotion of Useful Manufactures.³ Much of his writing was under the imprint of the two societies. In Mathew Carey's work the crusader propagandist rather than the social scientist stands out. His mood alternates, for the most part, between vehement protest against the alleged international commercial monopoly of England, and a plea for tariff protection to insure the economic independence of the young republic.

Henry Charles Carey was born in Philadelphia December 15, 1793. He entered the bookshop of his father as an apprentice when eight years old. At twelve, we are told, he was sent to Baltimore to represent his father in the establishment or a branch of the business;⁴ he lived there until 1809. Thereafter and until his twenty-first year he was travelling salesman for the firm. His route extended from the New England states to the Carolinas. The influences of this itinerary are observable in Carey's later commentaries on the economic South in relation to the economic North. Upon

¹ Franklin maintained a printery at Passy, where he had the despatches from America printed.

² Mathew Carey's journals were: *Pennsylvania Evening Herald* (1785); *Columbian Magazine* (1786); *The American Museum* (1787-1792).

³ The Pennsylvania Society was organized through the efforts of Tench Coxe and Alexander Hamilton in 1791, as the Society to Establish Useful Manufactures; it was under the patronage of this Society that List published his "Outlines" in 1825.

⁴ William Elder, *Memoir of Henry Charles Carey* (Phila., 1880).

attaining his majority in 1814, he was admitted to partnership. Following the retirement of his father in 1825, Henry C. was made head of the establishment, now styled Carey, Lea and Carey.⁵ The firm was at that time probably the largest publishing house in America. During the greater part of his affiliation with the publishing company Carey acted as reader and critic in the selection of books for publication. In this role he revealed a marked predilection for geographic works, especially books of travel, together with *[begin page 13]* studies in natural history and natural science. Carey ceased to be active in the firm after 1834, when he determined to continue economic studies and to embark upon a literary career in social science. This program he followed practically without interruption until his death in 1879. His voluminous writings aggregated, according to his literary executor, thirteen octavo volumes, about three thousand pages of published tracts, and perhaps an equal quantity of newspaper articles, editorials and correspondence dealing with economic and political subjects.⁶

His varied business and social contacts in themselves afforded Henry C. Carey a unique education. Carey has told how from the age of seven he would accompany his father on walks about Philadelphia, during which Mathew pointed out the local landmarks to his son and dwelt on their economic significance.⁷ The circle in which the elder Carey had moved included leading literary lights, captains of industry and statesmen of the city and nation. But the son far outdid the father in drawing about himself the outstanding citizens of his country and visitors from abroad. The gatherings at the Carey home in Philadelphia constituted what was considered to be the most distinguished salon in America.⁸ A frequent visitor to the Carey home on Walnut Street in the late sixties or early seventies has handed down the following glimpse of the "Carey Vespers":

Mr. Carey had so many books that he turned his front and back parlours (the drawing and dining rooms) into a library. The entire place was filled with literature and works of art. In the back parlour stood two white marble statues: the one of Truth, the other of Silence. In the centre of the room was the famous Round Table. Every Sunday at two o'clock three bottles of exquisite hock wines were deposited at the feet of these statues: a Marcobrunner and a bronze Johannisberger at the feet of Truth, a Dom Deehanay at the feet of Silence. . . . his guests were due at three o'clock and were always remarkably prompt.

So soon as two or three guests arrived Mr. Carey and his company took their seats at the Round Table. Before each person stood a red Hungarian glass. The first bottle, the Marcobrunner, was then *[begin page 14]* opened and passed around, when the conversation began. At the end of about an hour the second bottle, the Johannisberger, was opened and passed around. At the end of another hour, the third bottle, the Auglese, was

⁵ The firm names (and approximate dates) were: Mathew Carey and Sons (1821-25); Carey, Lea and Carey (1825-28); Carey and Lea (1828-32); Carey, Lea and Blanchard (1832-36); thereafter, Lea and Blanchard. Carey and Hart, which published most of Carey's works, was an offshoot of the original firm, later headed by Henry Carey Baird, H. C. Co's nephew and disciple.

⁶ William Elder, *op. cit.*, p. 19.

⁷ Robert Ellis Thompson, *Memoir of H.C. Carey*, Penn Monthly, X, 817.

⁸ Philadelphia North American; Editorial, April 30, 1879.

opened and passed around. When the bottle was exhausted, the company usually broke up.⁹

The group which in this pleasant wise forwarded the education of Carey, and served as foils or adversaries in the process of crystallizing his thought, had variety as well as distinction. In his circle were orthodox free traders and teachers of classical economics, as well as good haters of Britain and cosmopolitan doctrine. Of the former school were C.C. Biddle, who had provided the introduction and notes for the American edition of J.B. Say in 1824; Condy Raquet, author-economist and editor of *The Free Trade Advocate*; Henry Vethake, professor of moral philosophy and political economy at the University of Pennsylvania. Against these and others who adhered to the British school were devoted disciples of Carey in defence of the American System. There was, for example, Judge William D. Kelly, Carey's mouthpiece in Congress, whose consistent championship of protection for Pennsylvania's leading industry earned for him the sobriquet of "Pig Iron Kelly"; Joseph P. Wharton, an associate in the iron and steel business, whose school of commerce was founded at the University of Pennsylvania to teach the virtues of protection for home industries.¹⁰ To them may be added the Rev. William Elder, Carey's literary executor and a tactician on economics; Rufus Griswold, editor of the *American Whig*; Robert Ellis Thompson, protectionist and editor of the Carey-backed *Penn Monthly*, to *[begin page 15]* whom we are indebted for some intimate sidelights on' the personality of Carey.¹¹ From Stephen Colwell, Carey received correction as well as occasional endorsement of his views on currency and finance. From Peshine Smith he obtained the "law of the perpetuity of matter," on which Carey predicated a demonstration of the providential oversight of human propagation.¹² Politicians who occasionally sat in on the Carey Vespers included James G. Blaine; Ulysses S. Grant (as ex-president); the colourful General Robert Patterson, who dabbled in political and economic theories when he was not discussing his part in the strategy of Bull Run.¹³ Morton McMichael, editor of the *North American Review*, *Saturday Evening Post* and other Philadelphia periodicals, was one of several literary lights who regularly graced Carey's round table; and Ralph W. Emerson is mentioned among the men of the day who made it a point, when visiting Philadelphia, to be with Henry C. Carey.¹⁴

⁹ Alexander Del Mar, "The Round Table of Henry C. Carey," *Gunton's Magazine*, XIII, 99.

¹⁰ In making his gift to the University of Pennsylvania, Wharton laid it down as one of the objects of the school to teach "How by suitable tariff legislation a nation may keep its productive industry active, cheapen the cost of commodities, and oblige foreigners to sell them at low prices, while contributing largely toward defraying the expenses of its government; and lastly, the necessity for each nation to care for its own, and to maintain by all suitable means its industrial and financial independence, the right and duty of self-protection must be firmly asserted and demonstrated." Wharton, *Is a College Education Advantageous to A Business Man?* pp. 32-34 (quoted in Ugo Rabbeno, *American Commercial Policy*).

¹¹ R.E. Thompson, *Memoir of Henry C. Carey*, *Penn Monthly*, X, 824. Also cf. Del Mar, *op. cit.*

¹² H.C. Carey, *Principles of Social Science*, Preface, p. 6.

¹³ Though Carey did not seek political office, he was high in the councils of the Republican party from its inception, until he joined the Greenback Party.

¹⁴ Del Mar, *op. cit.*

Carey visited in Europe during 1857 and 1859, the second time to participate in economic conferences at the invitation of his ardent admirer Eugen Duehring, and other friendly German nationalists like Max Wirth and Schultze-Delitsch. These visits afforded the American valuable contacts with men like John Stuart Mill, Humboldt, Cavour, Liebig, Ferrara, Chevalier and equally brilliant intellectual figures of the continent. Elder refers to a correspondence remarkable for its extent and regularity, which Henry Carey carried on with his contemporaries in Europe. Carey seems to have acquired an early facility in the use of French, and to have mastered German after he attained middle age. By and large, it cannot be said that any provincialism in Carey is traceable to an ignorance of world affairs or men of affairs.

For the rest, he has been described by Thompson as a man [begin page 16] of easy, simple manner and kindness of disposition; possessed of a store of anecdote and bright repartee; prone to reckless, half-humorous speeches; of a racy, intense individuality; with a richly characteristic voice and beautiful black eyes; in conversation "even more unreserved and open to misrepresentation than in his writings;. . . it was easy for stupidity to misconstrue and malice to misrepresent the man's real character."

Editorial comment on the passing of Henry Charles Carey, in the newspapers of the day, commonly referred to him as "America's most widely known private citizen."

Chapter II

Economics in Carey's Day

Henry Carey entered the lists of economic authorship a year after the death of Malthus, twelve years after the passing of Ricardo. James Mill, then in his sixty-second year, shared with McCulloch - six years his junior - the acknowledged leadership of the British school. Senior had just completed his celebrated Report of the Royal Commission on the poor laws, and was engaged in the preparation of his general treatise on political economy. The law of diminishing returns from land, the pressure of population on subsistence, the wages fund theory and Ricardian rent - these bulwarks of the classical structure had been effectively fixed into the framework of the science. Against the expositions of the elder Mill and of McCulloch neither Chalmer's refutation of the Malthusian "law" nor Richard Jones's vigorous criticism of Ricardian rent could command attention. Senior was content with a refinement of details in the orthodox synthesis. The Maltho-Ricardian system, credited with steering contemporary politics in the "right" direction, rested easy in respected authority

In America, formal political economy maintained its respectability in the halls of learning by keeping close to the traditions of its European ancestry. In the Harvard (1825) and Yale (1827) catalogs, the treatise of J.B. Say was listed as the prescribed text.¹ Professor McVickar's *Outlines of Political Economy* (1825), which he used with his students at Columbia, was admittedly a reprint of McCulloch's article in the Britannica, supplemented by McVickar's notes and comments. Dr. Thomas Cooper, who as president of the South Carolina College had published *Lectures on the Elements of Political Economy* (1826), departed from the old world [begin page 18] texts only in the greater emphasis that he placed on *laissez faire* and the evils of a protective tariff. In line with Dr. Cooper, Thomas R. Dew emphasized free trade in his lectures at William and Mary,² his fame resting on the fact that as a southerner he attempted the

¹ Seligman, E.R.A. - Early Teaching of Economics in the U. S., in *Economic Essays in Honor of John Bates Clark* (J.H. Hollander, Ed.) pp. 307 and 315.

² *Lectures on the Restrictive System, Richmond, 1829, p. 195.*

economic defence of slavery in connection with an attack on the Tariff of 1828. By 1835 there had also been published the substance of Newman's lectures at Bowdoin (*Elements of Political Economy*, 1835) and Vethake's at the University of Pennsylvania (*Introductory Lectures on Political Economy*); neither of these is found, however, to be more than a restatement of McCulloch, supplemented by an occasional reference to American conditions. Indeed, little is to be found in the work of the professional academicians to have inspired the seeker after a key to the economic forces that were so swiftly driving the young republic toward a commanding position.

If one is to find forerunners of Henry Charles Carey among the Americans, he must look elsewhere than among the formal centres of learning, or the orthodox followers of the Smith-Malthus-Ricardo tradition.

Closer to the common experiences of American life, and more potent in steering contemporary American thought, were the pamphleteers who aired their reactions to immediate questions of public policy. Among these Benjamin Franklin was a pioneer. As early as 1729 he voiced the colonists' protest against the curtailment of their paper currency. He advocated expansion of the currency as a prerequisite for lower interest rates, higher wages and increased production, and as a means for the encouragement of immigration to the colonies.³ Taking a leaf from the book of the Physiocrats, he considered land a desirable collateral for the paper currency that he advocated. Against the British strictures on colonial manufactures, Franklin originally contended that the abundance of cheap land, permitting the average man to set up for *[begin page 19]* himself as a farmer, prevented wages in America from falling to a level that would permit successful competition with English manufactures. Though the colonial population was being doubled every twenty years, he could see no prospect or rendering hired labor cheap or plentiful in so vast an area.⁴ After the Revolutionary War, Franklin subscribed to the now vaunted American position on the economy or high wages, asserting that well paid labor made for a higher level of skill, intelligence and alertness, paving the way to the use of more efficient methods and the employment of modern machinery.

Like his French contemporaries, Franklin espoused *laissez-faire*, and appears to have had little sympathy with tariffs for the protection of manufactures,⁵ though he did question the validity of a prosperity that was based on foreign trade gained through the payment of low wages, wherein "half the nation must languish in misery."⁶ For the shirking or emphasis to American manufactures a more significant influence is that of Alexander Hamilton and his able assistant, Tench Coxe.

Hamilton, like Franklin, was exposed to the contemporary physiocratic doctrines; he also revealed a wide reading of Adam Smith and the more prominent members of the early British school. But the stress of practical problems to be faced called for an American departure. Britain had refused to make a commercial treaty with the United States, while France and Spain had set up a barrier or contempt for "the lowest and most obscure or the whole diplomatic tribe," as Jefferson complained. Hamilton's

³ "Modest Inquiry into the Nature and Necessity of a Paper Currency" (1729). Cf. Wetzel, Benjamin Franklin as an Economist, p. 9 (J.H.U. *Studies in Historical and Political Science*, Series 13, ix).

⁴ "Observation concerning the Increase of Mankind" (1751). Franklin's figures on population in America were utilized by Adam Smith, Godwin and Malthus (Wetzel, *op. cit.*, p. 12).

⁵ Wail of a Protected Manufacturer (1789).

⁶ Reflection on the Augmentation of Wages, etc. See Wetzel, p. 23.

celebrated Report was thus in part a defensive proposal against the unfriendliness of nations from whom the new republic might otherwise have been content to obtain manufactured goods. Two considerations of parallel importance were the necessity for immediate revenue and the strengthening of the still soft bond of union [begin page 20] among the states. These factors are all evident in the arguments advanced by Hamilton in the *Report of the Secretary of the Treasury on the Subject of Manufactures*, which he submitted to Congress in December, 1791. There he called attention to the damage inflicted upon the American manufactures fostered during the Revolutionary War, by the deluge of foreign goods upon the resumption of peace; and - therefore urged the desirability of an economic policy designed to free the new republic from dependence on foreign powers for its essential supplies.

Following Adam Smith, Hamilton pointed to the possibilities of the new industrial era, with its marked efficiencies in the division of labor and wider use of machinery; like Smith, he denied to agriculture the exclusive role in the creation of national wealth. But Hamilton went further in suggesting peculiar advantages for the United States in the promotion of manufactures. Manufactures would provide employment for elements of the population not ordinarily engaged in production - women and children; the new employment opportunities would encourage immigration; the young nation would climb out of its primitive stage limited by agriculture, as it afforded greater scope for diverse talents and additional capital through the promotion of manufactures. Bounties and tariff protection would help new American industries through their infancy, until they were strong enough to meet foreign competition - after which time the ideal of unhampered international trade could be resumed. Finally, the establishment of manufactures would create a home market for the consumption of agricultural produce, thus contributing to the economic as well as political stability of the Union.⁷

Congress, while largely rejecting the suggestion of bounties, and to some extent frowning upon the violation of *laissez faire* traditions which was implicit in tariff legislation, nevertheless did impose import duties in aid of the national revenue. With that precedent Congress paved the way for a national system of protective tariffs. Little of the theory of [begin page 21] the protective tariff in America has gone very far beyond the principles laid down by Hamilton in his Report. (Carey's attempted departures are reserved for later consideration.⁸)

In fathering the national debt, and even identifying the public debt with productive capital, Hamilton gave effect to his desire to enlist support for the Union.⁹ Like Franklin, he advocated alleviation of the shortage of currency in the States: his program embraced a bi-metallic currency supplemented by note issues of the United States bank, not to mention the government bonds that he hoped might serve as an auxiliary medium of circulation.¹⁰

⁷ Report on Manufactures; *American State Papers*, I, 124-127.

⁸ See p. 50, *infra*.

⁹ As early as 1781 Hamilton wrote: "A national debt, if not excessive, will be to us a national blessing. It will be a powerful cement to our Union" (Quoted in Rabbano, p. 295).

¹⁰ A pet argument of Hamilton's in support of encouraging manufactures, was that manufactures and plentiful currency went hand in hand. Thus: "the uniform appearance of an abundance of specie as the concomitant of a flourishing state of manufactures, and of the reverse where they do not prevail, afford a strong presumption of their favourable operation upon the wealth of a country." (From

Mathew Carey frankly acknowledged the inspiration of Hamilton by copious quotations from the Report in his *Essays on Political Economy* (1822) and other tracts in which Carey served as crusader for the American System.

Closely allied with Hamilton in fostering a nationalistic economy was Tench Coxe. As assistant secretary of the treasury and commissioner of the revenue (1790-97) Coxe furnished the factual props for Hamilton's recommendations. The data which Coxe prepared on the commerce and manufactures of the country, though crude by present statistical standards, constituted the major survey of the American economic situation of the time. Economists of the succeeding generations, including the Careys, found them highly useful.¹¹ *[begin page 22]*

In an earlier work, entitled *An Inquiry into the Principles on Which a Commercial System for the United States of America should be Founded*, etc. (1787), Coxe presented the neo-mercantilist view that the coasting trade of the United States be restricted to American vessels. His literary support to American manufactures was supplemented by vigorous activity in the founding of the Society for the Establishment of Useful Manufactures, which Hamilton sponsored, and the Pennsylvania Society for the Promotion of Manufactures, with which Mathew Carey and Friedrich List were both identified at a later date.

Thomas Jefferson during his ministry at Paris had become thoroughly imbued with Physiocratic views; in his campaign for the presidency he championed the agricultural frontier and the South against the capitalist interest in the North. But he, too, became a staunch friend of American manufacturers. As president he urged Congress to give protection to home industries, and even drew comfort from the Embargo Acts, in so far as they tended to stimulate the revival of American manufactures.¹² The Embargo and the Non-Intercourse Acts did in fact precede a marked advancement of domestic crafts.

In Albert Gallatin, as secretary of the treasury, manufacturers who sought protective tariffs found a determined opponent. Not only did he thwart any increase in the tariff rates, while in Jefferson's and Madison's cabinets, but twenty years later we find him a leader in the opposition to the Tariff of Abominations.¹³ Yet he took evident satisfaction in reporting to the President, in 1809, that "the injurious violations of the neutral commerce of the United States, by forcing industry and capital into other channels, have broken inveterate habits, and given a general impulse, to which must be ascribed the great increase of manufactures during the last *[begin page 23]* two years."¹⁴ Gallatin's deep interest in strengthening the economic fabric of the federal system was further exhibited when he formulated his celebrated scheme of internal improvements

the *Report on Manufactures*, p. 284, in A.H. Cole, "Industrial and Commercial Correspondence of Alexander Hamilton.")

¹¹ Coxe's principal contributions to the economic literature of his time were (I) "A View of the United States of America, in a series of papers, written at various times between the years 1787 and 1794." (2) "Examination of Lord Sheffield's Observation on the Commerce of the United States," (3) "A Statement of the Arts and Manufactures of the United States of America, for the year 1810."

¹² See Jefferson's *Message to Congress*, November 8, 1808.

¹³ Gallatin prepared the memorial to Congress from the Free Trade Convention held in Philadelphia in September and October, 1831, which proved influential in the repeal of the Tariff of 1828.

¹⁴ *American State Papers, Finance II*, 430.x

to be undertaken by the national government, including transcontinental highways, canals, and the improvement of inland waterways and harbors.

In the field of finance, Gallatin's chief contribution was the enforcement of thrift and careful budgetary control in the conduct of the treasury. Rigorously holding down the federal budget, even to the virtual elimination of a national army and navy, Gallatin kept expenditures below revenues and effected a substantial reduction of the public debt established by Hamilton. This he accomplished in spite of the Louisiana purchase in 1803 and the curtailment of customs revenue during the Embargo and Non-Intercourse periods, not to mention the expenditures under Madison in preparation for the war against Britain. His reports concerning the public revenues were models of clearness and accuracy. Gallatin's one point of agreement with Hamilton was in his appreciation of the value of the national bank to the government, "for the safe keeping of the public moneys, transmission of public moneys, collection of revenue, and loans." Taking issue with Madison and the Jeffersonian party, Gallatin favored the renewal of the bank charter, and regarded the failure to renew as a national calamity.¹⁵

The War' of 1812 was accompanied by the spread of a belligerent nationalism in the United States. Under the flood of European goods that followed the Peace of Vienna, defence of the domestic economy against foreign invasion became a burning issue, at times taking on a decidedly anti-British tinge. The 1820's are noteworthy in American economics for the appearance in rapid succession of several extended treatises on political economy. Written by laymen, they dwelt on the practical politico-economic questions of the day and in common they essayed a revolt against the cosmopolitanism of [begin page 24] the classical British school. The earliest of these¹⁶ was written by Daniel Raymond, a Connecticut lawyer who settled in Baltimore. His book was conceived, the preface tells us, as "an humble effort to break loose from the fetters of foreign authority; from foreign theories and systems of political economy, which from dissimilarity in the nature of their governments, render them altogether unsuited to our country." Along with Raymond, two other natives of New England Alexander Everett¹⁷ and Willard Phillips¹⁸ - compose a triumvirate of lawyers who stand out in the pre-Carey decade as leaders of a literary revolt against the classical synthesis. Like John Rae¹⁹ in Canada, and Friedrich List, who was then resident in the United States,²⁰ they distinguish between private riches and national wealth; and they share the view that the productive capacity of the nation is the true measure of its wealth.²¹ The national wealth is not confined to the physical productions of man that are privately owned and exchanged. It includes the character and skill of the population, the natural resources, and even the cooperation of government in stimulating high productive capacity and fostering an equable distribution of the

¹⁵ Charles A. Conant, *History of Modern Banks of Issue*, 19,27, p.340.

¹⁶ *Thoughts on Political Economy*, Baltimore, 1820.

¹⁷ *New Ideas on Population* (Boston, 1823).

¹⁸ *A Manual of Political Economy, with particular reference to the Institutions, Resources, and Condition of the United States*, Boston, 1828.

¹⁹ *Statement of Some New Principles on the Subject of Political Economy, Exposing the Fallacies of the System of Free Trade, and of some Other Doctrines maintained in the Wealth of Nations*, Boston, 1834.

²⁰ List's *Outlines of American Political Economy* was written and published in Philadelphia, 1827.

²¹ Charles P. Neill, "Daniel Raymond," *Johns Hopkins University Studies in Historical and Political Science*, XV, 239.

national income.²² Since it is a function of government to encourage the harmonious development of agriculture with manufacture, tariff protection is favored as a means for that end.

In Raymond there is special emphasis on the moral considerations believed to affect the national economy, notably on *[begin page 25]* the evils of slavery.²³ Paper money, banks, and banking he regarded with the utmost suspicion, as mysterious instruments of the rich for the economic enslavement of the masses.

(This sentiment was not uncommon, of course, in an age of peasant proprietorship and small-scale enterprise; it was to such suspicion of bankers, one might recall, that Andrew Jackson appealed in his veto of a re-charter for the United States Bank.) Phillips, however, presenting by far the best balanced treatise of the three, gave a clear analysis of the banking function and of credit paper.²⁴ In his treatment of value, Phillips foreshadows the view later emphasized by the psychological school: "The desire to obtain any particular thing gives it its value. As value is created by this desire, so it is limited by its intensity." Neither Raymond, who evinced a distaste for theoretical analysis, nor Everett, whose prime concern was population, devoted any appreciable attention to a theory of value.

Land was treated characteristically as a form of capital, subject to earnings like interest and profits. Raymond says: "Some writers, and especially Mr. Malthus, have taken great pains to establish a distinction in principle between rent paid for the use of land and the price paid for the use of commodities or personal property. . . when in fact no such distinction exists, except in name."²⁵ Phillips denies the existence of no-rent land, referring to the "somewhat metaphysical and now almost-exploded theory which has a temporary popularity in Great Britain" that rent arises from the necessity of cultivating inferior soil.²⁶ Characteristic of his dynamic view of economic progress is the observation that "nothing is more erroneous than this supposition, so frequently made, of a stationary amount of capital and industry."²⁷

Though these national economists occasionally parted company on other aspects of economic thought, they were one in their vigorous opposition to the Malthusian view of population - the subject to which Everett's work was largely confined, and to which they all gave special consideration. In that respect there may be joined with them the name of Jacob Newton Cardozo,²⁸ a Charleston editor whose southern patriotism did not permit him to look with favor upon the protective tariff. Aside from their abhorrence for a doctrine which, according to Phillips, would "hail famine as a deliverer and pestilence as a subject of thanksgiving," they laid stress on the increase of skill and productive ability that accompanied the increase of numbers.²⁹ Everett went so far as to insist that while population increased in geometric figures, the increased productivity made

²² Turner, *op. cit.*, pp. 23, 24, 32, 36, 37.

²³ Neill, *op. cit.*, p. 225.

²⁴ Phillips, *Manual*, chs. x and xi. Phillips even takes occasion to say: "In a comparison of government paper and bank paper as currency, there can hardly be a doubt that the bank paper is preferable." P. 261.

²⁵ Raymond, *Thoughts*, Second Edition, I, 184; quoted in Turner, p.28.

²⁶ Phillips, *op. cit.*, p. 108.

²⁷ *Ibid.*, p. 171.

²⁸ *Notes on Political Economy* (1826).

²⁹ Phillips, p. 106.

possible by the increase of manpower was of logarithmic proportions (1,10,100, etc.).³⁰ The law of diminishing returns was tacitly discounted. In line with Franklin's view, they urged that the rapidity with which population increased was regulated by the economic environment, and adjusted itself thereto. In a new country the doubling of the population every twenty-five years was hardly sufficient for a rapid development of its untapped resources. In an older country in which social organization has already reached a high state of development, the increase of population is correspondingly less. The increase of population, according to Cardozo, " depends on the extent of the improvements in agriculture, and the inferior land is laid down in tillage exactly in proportion as these improvements extend. This is the reverse of the new theory which connects the augmentation of population and produce with the in- *[begin page 27]* creased difficulty, instead of the increased facility of production."³¹

In summarizing the literary contribution of America to economic science, as of 1835, we may say that the work of the academicians in the new country added nothing to the economic doctrines of the British classical school. The budding American school of public-minded laymen, reflecting the optimism of a new, growing country, produced no work to command general attention, either in America or in the old world; but at least it expressed a virile reaction to the contemporary economic environment. It is to the latter company of literary pioneers that Henry C. Carey belongs. It was his function to synthesize the various phases of the American outlook into a system of political economy.

³⁰ *New Ideas on Population*, Second Edition, p. 26.

³¹ Cardozo, *Notes on Political Economy*, p. 35. Quoted in Turner, p.77.

Chapter III

Development of Carey's Economic Thought

The Carey who entered upon a career of economic literature at the age of forty-two displayed little of the diffidence of the novice. When he wrote the *Essay on Wages* (1835) he had acquired an evident familiarity with the work of Adam Smith, Malthus, Ricardo, James Mill, and McCulloch, and had done some critical reading of Senior, Richard Jones, and Jacob.¹

In Adam Smith's emphasis on improving production as the key to economic betterment, Carey readily acquiesced. But though he retained a special reverence for Smith, he found it difficult to reconcile the dismal, post-Napoleonic outlook of the Classical school with the facts of the life about him. The economy of Malthus and Ricardo suggested that population, driven by biologic forces, must press against a diminishing supply of natural resources, even as man's efforts to make nature yield her produce were meeting with increased resistance. But Carey's United States was at the very time engrossed in the conquest of her untapped resources, the development of 'which would tax the energies and ingenuity of an increasing population for an indefinite period. Land was plentiful; labor was scarce. The wages of the American worker increased as population increased; indeed immigration was actively encouraged, to speed up the process. To give universality to the system of Malthus and Ricardo, in the face of American experience - when every addition to the family was hailed as a victory for the homestead in the battle against the labor shortage - was seemingly to build economic doctrine upon myth.

The Neo-classicists noted the tendency to increasing returns with the extension of manufactures;² but why, an *[begin page 29]* American would ask, reserve a special law of diminishing returns for land? Land carried no halo in the United States when squatters were pouring into the Ohio-Mississippi valleys and land sold for the labor of clearing them to receive a new wave of settlement. The disposition of land was as readily effected as that of personal property. The hired farmer of yesterday was the tenant of today and the proprietor of tomorrow - and perhaps again the hired worker of the day after. Land was treated like any other form of capital, and the economic implications of its earnings suggested little distinction from the economics of capital in general.

The British school assumed a fixation of the classes, landlords, capitalists, laborers, with interests mutually opposed. In American experience the barriers of caste were commonly trespassed; there was no strongly intrenched tradition of aristocracy, nor of inherited occupation. The rise from humble beginning to high estate was an accepted phenomenon. Limitations on individual freedom and individual enterprise were sharply resented. Landlords exchanged manual labor with each other, as they participated in the construction of each other's buildings and in the harvesting of each other's crops.

The United States, in a period of rapid growth and exuberant national consciousness, coloured the economic outlook of Americans even as the conditions faced by the England of 1800 accounted for the pessimistic economics of Malthus or Ricardo. This was strikingly illustrated by Friedrich List. When he came to the United States in 1823,

¹ See chapter headings in the *Essay* on these authors and discussions thereunder.

² Senior and J.S. Mill, for example.

he had been steeped in the classical economics taught in his native Germany. Of the revolutionizing effect of the new land on his outlook he could say:

. . . .when afterwards I visited the United States I cast all books aside - they would only have tended to mislead one. The best work on Political Economy which one can read in that modern land is actual life. There one may see wilderness grow into rich and mighty states; progress which requires centuries in Europe goes on there before one's eyes. That book of actual life I have earnestly and diligently studied and compared with the results of my previous studies, experience, and reflections. . . and the result has been (as I hope) the preparing of a system which. . . is not founded on bottomless [begin page 30] cosmopolitanism but on the nature of things, the lessons of history, and on the requirements of the nations.³

The revolution in List's outlook, it will be recalled, was measurably inspired by his association with that very circle of Philadelphians of which Mathew Carey was a centre. It was under the patronage of the Philadelphia Society for the Encouragement of Manufactures that List had published his *Outlines* in support of a national economy and tariff protection. It were strange if Henry Carey, born into and a part of the very environment that so deeply moved List, did not prove equally reluctant to accept the pessimistic, teachings of the British school.

Indeed we shall find that in the course of his progress as an economist, Carey's views, likewise, undergo a noteworthy transition. Entering as a comparatively respectful student of classical theory, and an admirer of Adam Smith, he passes through a period of doubt and emerges as an iconoclast among his contemporaries. He abandons *laissez-faire* as too cosmopolitan (if not too British), and pins his faith on a national economy. The crusader spirit of the elder Carey crops out in the writing of his son, who evolves an American System in protest against the gloomy economists of the Old World. He discards the brazen law of wages, diminishing returns, Malthusian principle of population, and Ricardian distribution. In Carey's social philosophy man and nature are part of a divine Harmony of Interest - a system in which man gains progressively by association with other men, increasing his power over nature as he learns to acquire with diminishing sacrifice the generous bounties of nature. Carey strove for a teleological economics in which land, like other forms of capital, yields to the growing effectiveness of labor; in which labor acquires an increasing share of an increasing total product, while all elements in the economy share together in the rewards of economic improvement. [begin page 31]

Carey's first literary effort, his *Essay on Wages*,⁴ appeared in 1835. The preface asserts that the work was prompted by a reading of Senior's *Lectures on Wages*, delivered at Oxford five years earlier.⁵ The *Essay on Wages* reveals Carey in his first guise, as an ardent advocate of economic freedom, a disciple of Adam Smith, possessed of unbounded faith in the efficacy of *laissez-faire* to allay the economic ills of nations. The purpose of his essay is to show "that restrictions and monopolies -

³ Quoted in Gide and Rist, *History of Economic Doctrines*, pp. 96. 97.

⁴ *Essay on the Rate of Wages: with an Examination of the Causes of the Differences in the Condition of the Labouring Population Throughout the World* (Philadelphia, 1835).

⁵ Nassau Senior, *Three Lectures on the Rate of Wages*, delivered before the University of Oxford in Easter Term, 1830. *Lecture on the Cost of Obtaining Money*, delivered before the University of Oxford, in Easter Term, by Nassau W. Senior (London, 1830).

wars, and heavy taxation - low wages, poverty and wretchedness - go hand in hand; while free trade, freedom of action - peace-moderate taxation-high wages, and abundance, are all associated."⁶ It is interesting to find that the man who was to be the most celebrated champion of the protective tariff burst into print to refute mercantilism, and felt, in 1835, that:

It is a disgrace to our age to see two such nations as those of Great Britain and France each hedging round its commerce by restrictions that limit their exchanges to a million or two pounds per annum, thus doing all in their power to frustrate the designs of a Deity, who, in giving to different parts of the earth different powers of production, paved the way for that intercourse which is most beneficial to mankind.⁷

Senior had asserted in his lectures that "the rate of wages (i. e., the quantity and quality of the commodities obtained by the laborer and his family) depends on the extent of the fund for the maintenance of laborers, compared with the number of laborers to be maintained."⁸ Taking that dictum for a starting point, Carey holds that the key to higher wages lies in the increase of capital, which in turn conditions the size of *[begin page 32]* the wages fund. "Upon capital depends production; upon production depends wages. Where production is small, wages cannot be otherwise than small."⁹ The growth of capital may lower the rate of profit, but profits increase in the aggregate because of the additional goods consumed by the advancing laborers.¹⁰ Carey's formula is that "the rate of wages is determined by the ratio of capital to population."¹¹ Moreover, "in two countries, alike in the proportions which capital and revenue bore to population, which could not be the case unless there was also equality in the security of person and property, as well as of freedom of trade and of action, there would be equality of wages unless prevented by difference in the government expenditure."¹²

As may be expected, Carey enters the lists as a champion of high wages. "Where wages are highest, there capital increases most rapidly."¹³ And again, "high wages are an infallible evidence of prosperity."¹⁴ He denies, however, that a high rate of wages is equivalent to a high labor cost; thus, "the only competition to be feared by the United States, is that of those nations in which the rate of wages is highest - not that of Hindustan, Italy, or Poland, but that of Great Britain, France, and the Netherlands."¹⁵

⁶ *Essay on Wages*, p. 9.

⁷ *Ibid.*, p. 14. The reference to the beneficent designs of the Deity is characteristic of Carey, and many an argument is disposed of with the statement that it would be contrary to the plan of a beneficent Deity.

⁸ Senior, *op. cit.*, p. 19.

⁹ *Essay*, p. 179; *ibid.*, p. 35.

¹⁰ *Ibid.*, p. 31. Carey quotes with approval the doctrine of Adam Smith that "demand and supply govern the rate of labor, and that where capital is increased most rapidly the increased demand for labor would lower the rate of profits, by which the labourer would be benefited."

¹¹ *Ibid.*, p. 38, *et passim*.

¹² *Ibid.*, p. 39.

¹³ *Ibid.*, p. 23. He refutes Malthus, Ricardo, and McCulloch, to whom he ascribes the theory of high wages, low profits, and vice versa.

¹⁴ *Ibid.*, p. 247.

¹⁵ *Ibid.*, p. 181.

With Adam Smith and Senior, Carey takes an optimistic view of the role of machinery in economic progress. Machine improvements do not depress the general rate of wages, though they may cause temporary hardship to the hand laborer who would compete with the newer process. On the contrary, the application of the machine improvements provides the basis for the higher real wages.¹⁶ In England, despite the poverty among laborers (which he attributes to the Corn Laws and other government "stupidities"), the real wages of current labor have been higher than in the preceding three centuries.¹⁷ As for land returns, he takes the native position that "land is only a machine," and it follows "that if the owner can find a mode of using it that will render it doubly productive, he is in the same position with a man who doubles or trebles the product of labour by an improvement in the power loom, or any other machine."¹⁸

Carey refuses to be perturbed by the law of diminishing returns and, in particular, by its Malthusian implications. "As yet we know nothing of the productive powers of the earth," he tells us in the *Essay*.¹⁹ More than that, "we also know that in every country where the government will permit it, there is a steady improvement of condition with the increase of population; we know that the difficulty is not to supply food but to find a market for it." Then in an interesting and flowery diatribe Carey assures us that "under the wisdom of the arrangements of the Deity," in regard to man as in every other part of creation, "we may trust that population will limit itself," and that "if to man was granted the power of increase in a geometrical ratio, there was at the same time implanted a principle which secures him against its effects, the desire of bettering his condition."²⁰
[begin page 34]

It is evident that at the writing of the *Essay*, Carey had difficulty in accepting Ricardo's explanation of land returns, and we can see the desire for a more satisfactory doctrine. He finds, as an instance, that soils of second, third and fourth grade in Pennsylvania,

¹⁶ *Ibid.*, p. 57. Carey distinguishes between money wages and real wages, p. 62.

¹⁷ Referring to the condition of the laborers in England, and to the *Subsistence Theory of Wages* as enunciated by James Mill, Carey says: "I do not doubt their poverty, but do doubt their being as poor as they were one, two, or three centuries since; and if they are not so, capital must, according to Mr. Mill's own theory, have increased more rapidly than population." *Ibid.*, p. 20.

¹⁸ *Ibid.*, p. 37. In the *Essay* we are introduced to this pet illustration which he uses so frequently in his later works: "The first dose of capital applied to land was a spade, the next a plow, then the cradle and horse rake, and it is highly improbable that any farmer will admit capital so used pays him less interest than that previously applied in the shape of a reaping hook, and land rake."

¹⁹ *Ibid.*, p. 239.

²⁰ *Ibid.*, p. 242. Carey treats us to a good example of his style as he continues: "Having done all in our power to make man 'poor and miserable' - to prevent the growth of capital or any improvement in his situation - and finding that there is a great deal of poverty in the world, we inquire the cause, and find it arises out of a mistake in the Deity, who fitted man to increase in a geometrical ratio, while he permitted the fruits of the earth to increase in an arithmetical ratio only, thus making poverty and misery inseparable accompaniments of the human race. This result is highly satisfactory to us, as it transfers to the Deity what should rest upon our own shoulder, and we then invent the starvation check, discourage matrimony that we may promote profligacy, and thus check population; while the earth is as yet, in a great measure, untouched, and is capable of supporting thousands of millions in those parts where cultivation is almost unknown."

close to the settled markets, are commanding a rent far greater than the more distant soils of Ohio and Indiana of the first quality. Yet fresh doses of capital were being daily administered to the Ohio and Indiana lands in preference to the higher-rent land of Pennsylvania. Hence he leans to the view that, regardless of prior settlement, or formal classification as superior or inferior, land and capital are joined in whatever combination will yield the largest net earnings-that aggregate of earnings is inseparably blended, as the reward of capital and labor.²¹

Though the *Essay on Wages* is primarily a plea for *laissez-faire* - "the true doctrine," as Carey calls it - there are passages which suggest his later modifications of that doctrine. Thus in his severe criticism of absenteeism as impeding the growth of capital, he presents the case for close association of men and capital, of distribution and consumption, at the seat of production. In that connection he says:

It can hardly be doubted for a moment that if all the landlords of Ireland were to conclude to live at home for one year, and expend the same amount among their tenants and tradesmen, that they had been accustomed to spend among the people of London, Paris, or Rome, there would be a greater increase of capital among the mechanics and tradesmen of Ireland, than if they had remained abroad. Less money would be spent in those cities and there would be a smaller increase of capital than usual. In like manner the absentees of New York and Philadelphia contribute to the support of the hotel keepers and *[begin page 35]* tradesmen of Quebec and Montreal. If they had remained at home, and spent the same sum, the profits would remain with the tradesmen of their cities.²²

Perhaps enough has been said to indicate the nature of the start made by Carey in the *Essay on Wages* toward the development of his economic thought through the successive years. It represents a willing acceptance, in the main, of Adam Smith, coupled with an impatience at the efforts of Smith's successors to break down the Smithian faith in *laissez-faire*.²³ "The laws of political economy are universal in their application," he contends; and he deplores the efforts of Malthus and others to overlay with a complex network of gloom (born of the urge to explain away "England's misdeeds") that which, he asserts, is really "the simplest of sciences."

Carey's desire to universalise the science, so that its principles might be in accord with conditions in the United States and in all the world, applies to his next literary venture, *The Harmony of Nature*.²⁴

In the interval Carey had the satisfaction of seeing an appreciative reference to his *Essay* in *Senior's Outline of Political Economy*, which after appearing in the *Encyclopedia Metropolitana* was republished in book form in 1836. Carey also took note of the mockery with which *The Spectator*²⁵ had greeted his exposition -

²¹ *Ibid.*, p. 234.

²² *Ibid.*, p. 46.

²³ *Ibid.*, p. 59.

²⁴ *The Harmony of Nature, As Exhibited in the Laws Which Regulate the Increase of the Population and of the Means of Subsistence; and in the Identity of the Interest of the Sovereign and the Subject; the Landlord and the Tenant; the Capitalist and the Workman; the Planter and the Slave* (1836).

²⁵ December 12, 1835. Carey refers to *The Spectator's* facetious criticism in the preface to *The Harmony of Nature*.

particularly Carey's characteristic method of belabouring each of his points in the *Essay* with long quotations and pseudo-statistics on many lands, from the United States to Hindostan and China. Whatever may have produced his deprecating attitude toward *The Harmony*, the fact remains that although Carey's firm published it, he did not permit it to get into circulation. His friend William [begin page 36] Elder has said that Carey felt *The Harmony* had not achieved that organization of economic science and its underlying laws for which he was groping.²⁶ Nevertheless the book embodies the general plan of Carey's social philosophy from which, allowing for details yet to be filled in, he deviated little in his later work.

In *The Harmony of Nature*, Carey is still the champion of a thorough-going *laissez-faire*.²⁷ But he concentrates his attention on the Malthusian views of population and Ricardian rent. His thesis, as might be inferred from the title, is that in Nature - harmonious Nature - there is no inherent opposition such as that of population against subsistence, landlord against laborer, or capital against labor.²⁸

Ricardo's definition of rent is challenged on the ground that rent is not caused by "original indestructible powers of the soil," but represents essentially man-made values accruing to the land by virtue of the employment of capital thereon, the settlement of population close thereto, and of improvements in transportation. It is here that Carey first lays emphasis on what he regards as Ricardo's neglect of the man-made factor of situation, which to Carey is more potent in the creation of land values than is the factor of fertility.²⁹ "What are called natural advantages are dependent so much upon accident and caprice that we cannot attach value to them or attribute to them the payment of rent."³⁰ And as for the advantage of situation, "it will always be found to be only the proximity of capital."³¹ Putting the matter another way, he assures us that "rent begins because by the application of [begin page 37] capital the land has been raised from an inferior soil to a superior one."³²

The Maltho-Ricardian premise, that a rise in rent in a country is always the effect of "the difficulty of providing food for its augmented population," is repugnant to Carey. His own version reads: "The rise of rent is always the effect of the increasing wealth and of the increased facility for providing food."³³ The increasing facility of subsistence, contrary to Malthus, goes hand in hand with increase in population and the concurrent benefits of association. We are further told that "the fact of the payment of rent is evidence that the capital applied produces more than the usual rate of profit."³⁴ Thus rent represents a differential for capital favourably placed over the normal return on capital not so favored.

²⁶ Cf. Elder's *Memoir*, p. 18.

²⁷ *Harmony of Nature*, p. 103 *et passim*.

²⁸ *Ibid.*, pp. 2-6.

²⁹ *Ibid.*, p. 13; it is of interest to find Carey employing (p. 16) concentric circles to illustrate the evolution of marginal lands of various qualities, and an explanation of the effect of distance from the market on the price of produce as well as rent, much after the manner of von Thünen. There is no evidence that Carey then knew of von Thünen's work.

³⁰ See p. 37.

³¹ *Ibid.*, p. 38.

³² *Ibid.*, p. 32.

³³ *Ibid.*, p. 112.

³⁴ *Ibid.*, p. 24.

A similar tendency to universalise the concept of entrepreneurial differentials can be traced through Carey's discussion of the views of Malthus and Ricardo on the price of foodstuffs. Here Carey takes the position that food prices are determined like those of cotton cloth or any other standard commodity:

The price of grain, like all other articles, is regulated by the cost of production in the least favorable circumstances under which it is required to be raised . . . the rent of land or of the mill will consist of the difference or part of the difference between the product of that particular land or mill and those which can only be cultivated or used without paying rent.³⁵

Thus the land differential is like that accruing to any capital favourably invested or managed.

That rents should rise at the expense of wages and profits is contrary to the trend of normal progress. Where rents are high, the cultivators are prosperous; where rents are low, they obtain barely enough to support life. "Where the landlord is well paid for the use of his land he leaves a large proportion of the produce in the hands of the producer, whereas, *[begin page 38]* where he is ill paid he leaves an exceedingly small portion."³⁶ The rent per acre increases, with greater production; but "proportionate to the revenues of the cultivator, the rent decreases."

A harmony is likewise set forth as between wages and profits - in a rich country wages and profits are high because production is good; while in a poor one both must be low.³⁷ The productive power of the nation is proportioned to the capital accumulated; "as wages and profits rise, that rise is accompanied by a tendency to increase in the proportion assigned to the laborer, and to decrease in the proportion assigned to the owner of capital and to the dealer who performs the exchanges." In fine, "where wages are highest, profits are highest, and capital and population increase most rapidly."³⁸

The Harmony furnishes us with characteristic definitions which are repeated in Carey's later works. Thus: "Everything that has exchangeable value is embraced by the term capital." Essentially there is no distinction between rents, interest and profits - they constitute "distinctions without differences."³⁹ Rents and interest, too, are both profits - "the compensation paid . . . for the use of capital, the fruits of past labor." There is a formal rate of interest, the rate which is acquired from the highest grade of securities. Everything above this formal rate of interest is "paid as a reward for the devotion of his time and attention in conserving his investments, to enable him to insure himself against any loss that may arise out of the mode of investment he has chosen."⁴⁰ Thus we have the suggestion by Carey of a division between capital returns and wages of management. In another section Carey distinguishes profits from wages by saying that "profits are the compensation obtained for the use of capital, the accumulated labor of past times, while wages are obtained by present labor and are the reward of time, attention and talent. *[begin page 39]* The one is paid for the use of things; the other for that of men."⁴¹

³⁵ *Ibid.*, p. 122.

³⁶ *Ibid.*, p. 163. Cf. p. 112.x

³⁷ *Ibid.*, p. 171.

³⁸ *Ibid.*, p. 312.

³⁹ *Ibid.*, p. 177.

⁴⁰ *Ibid.*, p. 178.

⁴¹ *Ibid.*, p. 184.

Did we assume that Carey withheld *The Harmony of Nature* from the public gaze because of its incomprehensiveness, we should find support in the fact that during the months that followed its printing Carey worked feverishly on whipping his thoughts into a systematic body of doctrine. Before a year had passed the first volume of his *Principles of Political Economy* was out. The second and third volumes followed in 1838 and in 1840, respectively.⁴²

The Principles of Political Economy

It is by way of a labor-cost concept of value that Carey approaches his general scheme of a dynamic economic order. The sequence is about as follows:

In the desire to maintain and improve his condition, man applies himself to the labors of production; these consist in "the appropriation, alteration or transportation of the gifts of nature." The goods produced "have value in his estimation, because of the labor that has been given in exchange for them."⁴³ These values constitute his revenue. As he learns to look to the future, man consumes only a portion of his revenues for immediate wants; the remainder he lays by "for future enjoyment, or to aid him in future production." The portion laid by constitutes capital.

With the aid of capital, man's labour acquires a new facility in production; it is in effect an improvement in the quality of labor, whereby less labor is required for the production of goods and the accumulation of new capital. While "the value of all commodities at the time of production is estimated by *[begin page 40]* the quantity and quality of labor required to produce them," the value of commodities already accumulated-which includes, of course, capital - "is limited by the cost of *reproducing* them. . . the increased power of accumulating capital tends to lessen the value, in labour, of that already existing, and to diminish the proportion of the product of labour that can be demanded in return for permitting it to be used."⁴⁴ So does the value of things fall, as the value of man rises; "the portion which he (the laborer) retains is termed wages, and that which is received by the owner of capital is termed profits." Thus wages, the reward of human labor, are "the compensation paid for the aid of men"; while profits are "the compensation paid for the aid of things."⁴⁵ But as labour improves in effectiveness it benefits the capitalist even though it leaves him a smaller proportion of the product of labour - "labour is, by the improvement of quality, rendered so much more productive that this *diminution in the proportion* claimed by the capitalist is attended by an *increase in the quantity of commodities* obtained in return for the use of any given amount of capital."⁴⁶

This mutuality of interest embraces the trader. Beginning with the rude state of society when the quantity of commodities to be exchanged is small, and the stimulus to improved transportation is slight, both capitalist and laborer are obliged to allow a large proportion of the product as the profits of trade. But with every improvement in the

⁴² *Principles of Political Economy*:

I. Part the First: Of the Laws of the Production and Distribution of Wealth, (1837);

II. Part the Second, (1838);

III. Part the Third, (1840); Part the Fourth, (1840).

⁴³ *Principles of Political Economy*, I, 7.

⁴⁴ *Ibid.*, Summary, I, pp. 40 *et seq.*

⁴⁵ *Ibid.*, I. P. 140.

⁴⁶ *Ibid.*, pp . 337 *et seq.*

quality of labour, the quantity of products to be divided and exchanged is increased. Trade becomes more common, and involves less of risk and superintendence; whence "the trader is enabled to obtain constantly increasing profits of trade from a constantly diminishing proportion of the commodities which pass through his hands. Both capitalist and laborer are, therefore, enabled to obtain a constantly increasing measure of the conveniences, comforts, and luxuries of life in exchange for their products."⁴⁷

[begin page 41]

We are now prepared for the generalization that "The interests of the capitalist and the laborer are thus in perfect harmony with each other, as each derives advantage from every measure that tends to facilitate the growth of capital, and to render labor productive, while every measure that tends to produce the opposite effect is injurious to both."⁴⁸

The third side of Carey's triangle of harmony concerns land and population. The desire of improving his condition impels man to seek the aid and cooperation of his fellow men. In the infancy of society "the want of capital compels men to roam over extensive tracts of land to obtain sufficient to support existence. He relies exclusively upon the superior soil."⁴⁹ Population being thus thin and scattered, and cooperation being in its infancy, "fertile land is abundant, but he has not the means of rendering it productive." Even if successful in his search for food, primitive man possesses neither the means of transporting nor of preserving that which he does not require for immediate consumption. Life is therefore a constant alternation of waste and starvation.

Eventually, as skill develops, our primitive laborer's exertions yield him his first capital; and "with the first accumulation of capital, he acquires the power to resort to an inferior soil for subsistence." With the further accumulation of capital, born of improved tools and methods, "he brings into action soils still more inferior, and with every such change finds increased facility in obtaining the necessities of life from [begin page 42] a diminished surface." Men are drawn into closer relations with each other, unite in the division of employments, and render each other's labor so much more productive that "there is a constant diminution in the proportion of the population required for the production of food," hence a greater percentage is released for the production of clothing, shelter, and comforts.⁵⁰

The concentration of population to enjoy the benefits of association is in turn counterbalanced, when capital has become more abundant, by the tendency of a

⁴⁷ *Ibid.*, p. 141.

⁴⁸ *Ibid.* A similar interdependence is alleged to exist as between nations - "every measure that tends to lessen production in one nation, tends to lessen the reward of both laborer and capitalist in every other nation." *Ibid.*, p. 339.

⁴⁹ *Ibid.*, p. 340 *et passim*. This was twelve years before the advent of *Past, Present and Future* (1848), in which Carey reversed the sequence of land appropriation. Even at the writing of the *Principles*, however, Carey is by no means docile in acceptance of a universal order of cultivation from superior to inferior lands. He not only emphasizes "the effect of labour in giving value to soils," but he carefully points out that "the soils first cultivated are very frequently not those of highest fertility." Such soils, of which the black loam timber lands of the Ohio-Mississippi valley are cited as an example, must await the application of capital, after which they are rendered far superior to the lighter soils originally settled on the Atlantic Coast. *Ibid.*, I, 38-39.

⁵⁰ *Ibid.*, I, 339.

portion of the increasing population to extend itself naturally ("like a pyramid," Carey explains) to outer rims beyond the main centres. This extension permits a more varied interchange of commodities and greater opportunities for the productive employment of capital.⁵¹

So, in a society unhampered by wars, excessive taxation and government interferences, the increase of productivity, of capital and of population go hand in hand; what makes for one makes for the others. The value of things (which offer less and less resistance to an improving quality of labor) tends to fall, and the value of man correspondingly rises. The return to labor gains over the rate that goes to capital (including land). In the march of progress,

Poverty and misery gradually disappear and are replaced by ease and comfort. Labour becomes gradually less severe and the quantity required to secure the means of subsistence is diminished, by which he is enabled to devote more time to the cultivation of his mind. His moral improvement keeps pace with that which takes place in his physical condition, and thus the virtues of civilisation replace the vices of savage life.

These "laws" of a dynamic economy having been enunciated in the first volume, Carey betook himself to the proof of them through an examination of the history of typical societies. Even as he gathered and organized his material, his optimism was subjected to a severe test by the financial crisis [*begin page 43*] of 1837, in which his own substantial fortune was gravely endangered. The nation had in the first half-century of its existence successfully weathered the financial strain of its War of Independence, the assumption of state debts, the purchase of the Louisiana territory, the War of 1812. It had not only paid off its national debt of \$86,000,000, but was embarrassed with a plethora of public revenue that piled up faster than the government could spend it. Sensing the great future of a country that had already accomplished these things, Americans discounted the years to come as they fought for a share of the prospective enhancement of the national wealth. An orgy of speculation in the lands of the vast public domain set in. The sales of public lands, which had progressed at a steady rate to 1834, in which year they totalled 4,659,218 acres, leaped under the spur of the speculators to the figure of 20,074,870 acres for 1836. New banks sprouted like mushrooms from the new communities. Relieved of the steadying influence of the Bank of the United States, when President Jackson vetoed its recharter and transferred the public funds to the pet state banks, the national credit embarked on a spree of inflation. Bank notes rose in volume from \$103,693,495 in 1835 to \$149,185,190 by 1837. English bankers, eager to share in the glamorous prospects in the New World, poured a hundred and forty million pounds of bullion into American banks. The per capita circulation increased in the two-year interval from \$9.86 to \$13.07, to match the frenzied pace at which there proceeded the construction of additional canals, railways and highways, and of new centres of population.⁵²

The crisis came while Carey was still engaged on "Volume the Second: The Causes Which Retard Increase in the Production of Wealth, and the Improvement in the Physical and Moral Condition of Man." While at a later date, he referred to the revolutionary effect of the depression years on his economic outlook, there was at this time no apparent wavering of Carey's faith, although the subject of credit is the one to [*begin page 44*] which the second volume of the *Principles* gave the major emphasis.

⁵¹ "While population is becoming daily more dense in the neighborhood of the great centre of capital, it is also daily extending itself over a wider space." *Ibid.*, III, 8.

⁵² Conant, *op. cit.*, pp. 625-628.

While nearly everyone else appeared to be clamouring for restrictive legislation, and the states were revising their constitutions so as to tighten the reins against a recurrence of another such period of economic expansion, Carey had taken up his pen in behalf of untrammelled *laissez-faire*. After reviewing in considerable detail the experiences of England, France, and the United States in the operation of their banking systems, he draws the conclusion:

Where there is the most perfect freedom in the employment of capital, there the safest and least expensive currency is to be found.⁵³

The extension of credit and banking facilities he conceived as an aspect of the division of labor, in which "trade in money gradually separated itself from others, as does that in sugar and cloths." Thus "banks are labor-saving machines . . . at which money is bought and sold." They were amenable, he found, to the general course through which he had traced man's economic progress. Every advancement in production and exchange has been accompanied by a diminution in the ratio of the volume of currency to the volume of exchanges:

Money is used for facilitating exchanges. So are wagons. When the facilities of intercourse are small, a large quantity of money is required for performing a small amount of exchanges. When the roads are bad, many wagons are required for transporting a small quantity of commodities.⁵⁴

He saw nothing to be gained by restrictions hampering the free organization of men in the formation of banking and credit agencies; over-regulation with regard to reserves merely tended to promote accumulations in the hands of bankers, for their own profit. The crisis, he contended, had been due not to the freedom of credit and banking, but to the misuse by the privileged bankers of deposits over which the special charter banks enjoyed a monopoly. The obvious fact that unrestrained speculation had hastened the crisis did not swerve Carey from his position. Banking, like any other di- *[begin page 45]* vision of labor, must be permitted to develop naturally, not artificially hampered nor stimulated; "in order that men should make a judicious use of freedom it is necessary that they shall have been accustomed to feel free." Thus Carey viewed the panic as a reaction from a policy of restriction:

Most governments, among others, those of the United States, have undertaken to determine who shall and who shall not trade in money. The existence of these restrictions has tended to induce a belief that much profit was to be realized from that trade, and whenever there has been a disposition to remove the restrictions, there has existed an almost universal disposition to rush blindly into it, establishing banks wherever they were permitted without attending to the fact that lenders and borrowers are essential to the existence of such institutions. . . Capital has been introduced from a distance, to the injury of both lender and borrower, and the result has been the ruin of all the parties concerned precisely as men are ruined who attempt to prematurely establish manufactures or to commence mining operations."⁵⁵

⁵³ *Ibid.*, II, 258.

⁵⁴ *Ibid.*, II, 235.

⁵⁵ *Ibid.*, II, 244.

And so Carey, still the champion of *laissez-faire* and natural harmonies, advocated free banking and limited liability for stockholders. The Free Banking system was established in New York in 1838 and followed by other states, on a plan of currency issue that formed the basis for the National Bank Act a quarter-century later. Carey's championship of limited liability and a liberal credit policy won for him the approbation of John Stuart Mill and other liberal contemporaries.⁵⁶

The third volume of the *Principles*, which appeared in 1840, dealt with the advantages of a natural population growth (Part the Third), and with the role of government in economic life (Part the Fourth). It need not detain us at this point, since it covered, in great detail, ground already traversed in his *Harmony of Nature*.⁵⁷

As Carey looked back upon his *Principles* in later years he took particular satisfaction in noting that he had been first to *[begin page 46]* enunciate the doctrine that labor is the cause of all value, and that the measure of value is the labor of reproduction, or the labor saved the purchaser. He was at pains to point out that Bastiat had taken the doctrine from Carey without having given him due credit.⁵⁸ The controversy was amicably settled by a correspondence in the course of which Bastiat acknowledged that "that grand and consoling cause, the accord of the interests of classes, is more indebted to no one than to Mr. Carey;" and in which the French economist further expressed his regret at having failed to give full acknowledgment in his writings of the American origin of the theory of value as a cost of reproduction, or labor saved.⁵⁹

The years that followed proved to be not only a period of financial trial for Carey, but of disturbing doubts as well. Carey himself has explained that down to 1840 there had been little opportunity for comparing the relative effects of free trade and protection in the United States, since the major part of the nation's history had been passed during a period of wars abroad which created an artificial demand for American shipping and American raw materials. The gradual reduction of duties under the compromise tariff of 1833 had been accompanied by the great boom that proceeded apace till 1837. The panic was followed by an extended period of depression and bankruptcies marked, in Carey's words, by "one monetary crisis following another until at length confidence entirely disappeared and commerce had been almost entirely annihilated."⁶⁰

The general condition was reflected in Carey's own experience as the owner of a paper mill and of a coal mine, both of which steadily lost money while the tariff was undergoing decrease between 1836 and 1840. These might have shaken his belief in the efficacy of free trade.⁶¹ Carey nevertheless *[begin page 47]* predicted to his friends

⁵⁶ Elder Memorial, pp. 15-16. According to Robert Ellis Thomson, Carey was hailed as a fellow free trader by Bastiat, Benjamin, Rampal, and Schulze-Delitsch (Memoir on H.C. Carey, *Penn Monthly*, X, 821).

⁵⁷ See part 3, ch. i, for tables presented by Carey to disprove Malthus' geometric progression, which are not contained in his other works.

⁵⁸ Preface, *Principles of Social Science*.

⁵⁹ For an account of the controversy see Thompson, *op. cit.*, p. 821; and Griswold, "Henry C. Carey," *The American Whig Review*, N.S., VII, 79-86.

⁶⁰ *Principles of Social Science*, Ed. 1873, Preface, XII.

⁶¹ Several other suggestions present themselves with respect to Carey's conversion from free trade to protection. Carey's discussion of the British system of free trade was consistently critical, betraying his feeling that British capital held American industry and finance in a considerable degree of enslavement. Thus the policy of protection presented itself to him as a way of breaking down the British

that the high protective tariff contemplated in 1842 would bring the country to even greater depression. But the tariff of 1842 came and the years that followed brought a business turn decidedly for the better. The effect of the tariff of 1842 on the state of the nation and the mind of the author has been thus described by Carey:

Scarcely had it become a law, when confidence began to reappear, and commerce to revive - the first steps toward the restoration of the whole country, in the briefest period, to a state of prosperity the like of which had never before been known. Seeing that these remarkable facts were totally opposed to the free-trade theory, the author was led to study the phenomena presented in the free-trade period from 1817 to 1824, and in the protective one which commenced in 1825, and ended in 1834 - the one terminating in bankruptcy and ruin similar to that which had again exhibited itself in 1842, and the other giving to the country a state of prosperity such as had again been realized in 1846. Looking then abroad, he saw that the phenomena presented by other nations were precisely in accordance with those that were here observed - the protected communities advancing steadily in wealth and strength, while those which were unprotected were as steadily declining toward anarchy and ruin. The more he studied these facts, the more did he become satisfied that the free-trade theory embodied some great error; but in what did it consist, and where might it be found? To these questions, he was, for years, unable to give an answer in any manner satisfactory, even to himself.⁶²

Elder has intimated that Carey discussed his dilemma quite freely with his contemporaries. He tells us, for instance, that:

In the closing months of 1842, seeing the wonderful change effected by the protective tariff then in operation, in conference with John C. Calhoun he suggested that there must be some great law that would explain the fact that we always grew rich under protection, whereas we always ended in bankruptcy after free trade.⁶³

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We learn further from Elder that "a year or two later as he (Carey) says, there came to him as with a flash of lightning a conviction that the whole Ricardo-Malthusian system is an error, and that with it must fall the system of British free trade."⁶⁴

The first published intimation of Carey's change of heart on the question of *laissez-faire* came in 1845 when he issued his pamphlet on *Commercial Associations of France and England* in which for the first time he suggested the practicability of protection as a step

domination of other countries with its financial and manufacturing supremacy. Then there is the further consideration, which often crops out in his *Harmony of Interests* and in his pamphlets from this time on, that an intensifying of internal commercial intercourse among the states was essential to the unity of the nation. Finally, there was the probable influence of List, whose *System of National Economics* appeared in 1841. (Although Baird claims that Carey probably did not have access to the work, in view of his ignorance of German, until a decade later.)

⁶² *Ibid.*, Preface, XII.

⁶³ Elder, *op. cit.*, p. 26.

⁶⁴ *Ibid.*

in the equalization of opportunities among nations.⁶⁵ This would mean, as Carey realized, a negation of the synthesis of natural laws which he had so laboriously built up in his *Principles*, unless he could find some means of reconciling his easy faith in the normal progress of nations and men with so frankly artificial an expedient as the protective tariff. In *The Past, the Present, and the Future* (1848) Carey announces a solution to his problem:

The volume now offered to the public is designed to demonstrate the existence of a simple and beautiful law of nature, governing man in all his efforts for the maintenance and improvement of his condition, a law so powerful and universal that escape from it is impossible but which nevertheless, has heretofore remained unnoticed.⁶⁶

Carey had recognized the intimate connection between Ricardo's rent doctrine and international free trade. Obviously, if rent rose as the increase of population compelled a resort to inferior soils, then the relief from such increase must come from access to the raw products of new countries in which the law of diminishing returns from land had not yet come into operation. It appeared to Carey, therefore, that the vindication of a protective tariff must involve a negation of the Ricardian doctrine of rent - and particularly that part of the doctrine which dealt with the sequence of land [begin page 49] occupation from superior to inferior soils. Such a negation, obviously, Carey was not at all loath to establish. He had long before made the mental reservation that Ricardo's theory of rent was not universally true. Carey was henceforth to assume the more positive position that Ricardo's doctrine was "universally false." It is by that gate that we enter his new system, in which a hypothetical Robinson Crusoe passes from the primitive to the contemporary stages of agriculture.

Ricardo assumed that the best soils - those capable of yielding the largest net return - were the first to come under cultivation. The Ricardian rent differential emerged with the occupation of the poorer lands yielding a lesser return than those previously occupied. The growth of rent might be temporarily retarded by an increase of wealth or improvement in the mode of cultivation; while every obstacle to improvement tended to accelerate the rise of rent. Thus, in Carey's explanation of Ricardian rent, it is the supposed necessity of employing poorer soils that produces rent: the cultivator's poison is the landlord's meat. It is this implication of a conflict of interest in the rent factor that Carey made his special object of refutation. The implication might be true, Carey would say, if man really moved from richly-yielding to poorly-yielding soils. But suppose the course of occupation were otherwise? That it has been otherwise, is the burden of Carey's "reversal of the Ricardian doctrine."

Calling upon his wide acquaintance with general geography and economic history, Carey builds up his case in substantially the following sequence:

1. In the original stages of settlement, it is the readily worked land-the light sandy soil along the upper hillsides that is brought under cultivation.⁶⁷ Only as capital

⁶⁵ An earlier intimation of Carey's willingness to recognize the feasibility of protection, under some conditions, is afforded in a letter which he wrote in January of 1837 to Everett D. Wall, protesting against a decrease in the duty on coal. (In Carey Correspondence, Collection of the Pennsylvania Historical Society.)

⁶⁶ *Past, Present and Future*, Preface.

⁶⁷ Says Carey of his Crusoe in this first stage: "Making with his stick holes in the light soil that drains itself he drops the grain an inch or two below the surface."

increases, population increases, and the implements of husbandry are [begin page 50] improved, are men enabled to enter upon the cultivation of the richer but more resistant soils - the undrained meadow or timbered lands reaching down into the valleys below.⁶⁸

2. In making the progress from poorer to richer soils, the tendency is for men to come into closer association with each other, engaging in an increasing variety of activities that complement each other, working up and consuming the products which they extract from the soil at their hand.⁶⁹

3. In the normal course of things, every successive step should be marked by an increasing power to break down the resistance of nature, as men developed "instruments of association" for the acquisition of nature's unfolding riches - "for extracting still greater power over the materials provided by the Creator for his (man's) use and awaiting his draft." But this tendency to association, with its concomitant evolution of diverse employments in mutual proximity, has been hampered by a free trade policy which has led to the centralization of manufactures and power on a single little island. Here is his justification for a tariff: in defence against an entrenched power which in his view prevented the operation of natural laws in the development of other nations.⁷⁰

That Carey still considered himself an advocate of ultimate [begin page 51] free trade,⁷¹ is apparent from the character of his recurring apologia:

Ibid., p. 10. Later: "at the next step we find him bringing into activity a new soil, whose food producing powers were less obvious to sight than those of that first attempted. . . . He can now make holes four inches deep."

⁶⁸ A rather detailed examination of the course of settlement in the United States and abroad bears this out to Carey's satisfaction, and leads him to generalize thus:

"Everywhere we see them, as population gradually increases, descending equally gradually, the sides of the hills and mountains toward the rich lands at their feet: and everywhere, with the growth of numbers, penetrating the earth to reach the lower soils, to enable them to combine the upper clay, or sand, with the lower marl, or lime and thus compounding for themselves a soil capable of yielding a larger return than that upon which they were first compelled to expend their labors." *Ibid.*, p. 48.

⁶⁹ *Ibid.*, p. 15: "Population spreads itself along the faces of the hills and down into the lower lands, becoming more and more dense at the seat of original settlement, and with every step we find increasing tendency to combination of action for the production of food, the manufacture of clothing and household utensils, and the preparation of machinery for aiding in these operations."

⁷⁰ "Without protection every species of manufacture is a lottery, and will so continue while the policy of England remains unchanged." *Ibid.*, p. 304.

⁷¹ Carey's good friend, Rufus W. Griswold, writing in 1851, said of him: "Mr. Carey is a free trader. In his first book he advocated the British doctrine of diminished duties as the means of bringing about free trade. In his *Past, Present and Future* he admits his error and shows that the protective system was the result of a constructive effort at the correction of a great evil inflicted on the world by British legislation and that the only course towards perfect freedom of trade is to be found in perfect production." *American Whig Review*, N.S., VII, 84.

The right of resistance to wrong is inherent in every man, and every man and every nation may be at times compelled to resort to war in self-defence. War is an evil, and so are tariffs for protection. Yet both may be necessary, and both are sometimes, necessary.

That the tariff had been instrumental in checking the diffusion of the population and the tendency to an unhealthy specialization in single crops, Carey seems to have believed. "Concentration is now advancing in the United States," he tells us, "because the interferences of England are diminished; and we see mills slowly rising throughout the southern states." Carey made much of the point that without a tariff our agriculturists would continue to spread themselves over the land in a careless, extensive type of husbandry marked by a rapid exhaustion of the soil, without incentive to replenish it. Under free trade, he admonished, they were at the mercy of the importer in the foreign market, who determined their price for them and charged them the cost of transporting their exported grain abroad. Against such an economy Carey insistently urged the fructifying power of concentration and association - for example:

The meadow land of Pennsylvania is not worth the clearing, because the market for its products has no existence; and until the consumer shall place himself side by side with the producer, it can have none. Place him there, and nothing will be lost. The rich soils will give forth the product and the refuse will remain on the spot, to go hack into the ground; thus the produce of the rich will fatten the poor ones.⁷²

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In waving his bludgeon over the Ricardian order of cultivation Carey gave himself a pleasurable sensation of pounding another peg into the coffin of the Malthusian doctrine. He had established the sequence from sparse populations and poor soils to greater numbers and richer soils, "the increase in numbers being thus proved to be essential to the increase in the supply of food. Here was a Harmony of Interests directly opposed to the discords taught by Mr. Malthus."⁷³

The reception accorded to *The Past, the Present and the Future* was a mixed one. While Prussia and Scandinavia applauded, Carey's academic countrymen treated the "new doctrine" as the ebullitions of an untutored zealot who would be an economist. Thus Griswold, deploring the scant American appreciation of Carey's works, said: "They are text books in the colleges even of Sweden and Norway, while at the University in the Street next door to that in which the author has his residence, books are adopted, composed of ideas from empirical and nearly obsolete systems."⁷⁴

Be that as it might, Carey was from 1848 onward the devoted champion of diversified industry and an adequate home market, matching the zeal of his father before him. In newspaper, magazine, pamphlet, and book, he hammered away (with "unwearying wearisomeness," according to Professor Roscher) at the theme that national prosperity consists in "placing the consumer by the side of the producer" so that "with every step in this course he will obtain increased returns from a diminished surface."

⁷² *Ibid.*, p. 303: The influence is here seen of the work of Justis von Liebig, whose studies in soil chemistry were at the time stirring the scientific world. Carey makes much of the point that to export organic produce in exchange for manufactures was to take the richness from our soil and leave it abroad to fertilize other soils.

⁷³ *Principles of Social Science*, Preface.

⁷⁴ Griswold, *op. cit.*, p. 79.

For a period of about seven years Carey was virtually the editorial writer of the *New York Tribune* on economic questions,⁷⁵ ceasing to act in that capacity only when Greeley supported the low tariff of 1857.⁷⁶ He was a founder and leading contributor to *The Plough, the Loom, and the Anvil* (1848-52) from which a collection of his writings was published in *[begin page 53]* book form as *The Harmony of Interests* in 1852. The following year there appeared from his pen *The Slave Trade Domestic and Foreign*. Here Carey emphasized the aspect that slavery was but one manifestation of the effect of an economy in which men sacrificed the benefits of association and diversified employment to the service of a foreign market. Limiting themselves to a single crop, having to meet the conditions in the British cotton market, the southerners were finding themselves under the recurring necessity of quickly exhausting their soil, deserting it, and going on to exploit another virgin area. Without a home market, the South had no incentive to the development of a careful husbandry, nor to the utilization of capital for improvements. They sought and used the cheapest and least intelligent labor at hand - that of the slave who required only primitive housing and who could readily be moved from place to place. Thus Carey strove to show that free trade and slavery went hand in hand, "forcing down Northern wheat to make cotton and sugar in the South profitable." The South, he wrote, needed protection and manufactures even more than did the North which agitated it. Free trade for the United States meant "cheap land, cheap labor, low cotton; and dear cloth, dear iron - thus establishing a tendency toward a decline of the power of man over nature."

Carey joined the Republican Party upon its formation in 1856, and helped to give it its protectionist turn. Carey's conviction that free trade was the real threat to the Union is reflected in a conversation, reported by Thompson, which took place when Carey visited George M. Dallas, our minister to England, in London during the summer of 1857. When asked by Dallas on what date the new capitol would be completed, Carey replied, "By 'the date of the dissolution of the Union.'"

"What! Mr Carey, you do not mean to say that the Union is going to break up?"

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"Yes, sir, no country could stand the strain of this accursed free trade policy of ours."⁷⁷

The proposed low tariff of 1857 brought forth a flood of letters from Carey to President Buchanan, some of which were personal, others collected and published in 1858 as *Letters to the President on the Foreign and Domestic Policy of the Union, etc.* During the same year there appeared the first volume of Carey's magnum opus, *The Principles of Social Science*, which he completed as a three-volume work in 1860.

The Principles of Social Science; gives us nothing new so far as the main outlines of Carey's economic system are concerned. His views on value, on distribution, on the order of settlement and protection-all these reappear in their familiar dress. The main departure from his previous works is rather one of form. Still bent on the creation of a system of universal harmonies, Carey trespasses over the grounds of natural history and natural science so that he may demonstrate the close relationship between the order of nature and the affairs of mankind. Man tends toward his fellow man "as the planets gravitate toward each other." Centralization and decentralization among men;

⁷⁵ Elder, Note, p. 31.

⁷⁶ Clippings of Carey's *Tribune* editorials are preserved in a volume which forms part of the Carey Library collection at the University of Pennsylvania.

⁷⁷ *Penn Monthly*, X, 826.

the formation of local centres and their relation to the larger political organizations; the internal and external relations of groups - these are all illustrated and explained in terms of the solar system and physical phenomena: as planets and satellites; laws of motion and gravitation; of attraction "in the ratio of the mass and the proximity," etc. He speaks of man as the "molecule of society"; he refers to "the great law of molecular gravitation as the indispensable condition of the existence of the being called man." Thus a protective tariff is a force that

tends to the establishment of decentralization, and to the production of local employment for time and talent, tends to give value to land, to promote its division, and to enable parents and children to remain in closer connection with each other - and the stronger the ties that bind together the members of the various families of which the community is composed, the more perfect will be their revolution on *[begin page 55]* their own axes, and the greater the attraction within the bosom of the communities which constitute the State.

So much for the method of presenting social science as the offspring of natural law.

Two exceptions may be suggested to the general statement that the *Principles of Social Science* reveals no economic doctrine not already contained in Carey's previous work. The first bears on the problem of population, which Carey has restated to include what he is pleased to call "the law of the perpetuity of matter." To this he appends, in passing, a statement akin to Herbert Spencer's, on the progressively slower rate at which living species multiply as they advance in the complexity of their physical structure and nervous systems. The second, and from a practical standpoint the more vital subject matter that may be called new, is Carey's presentation of the case for a plentiful supply of currency: a doctrine that later drew him into the Greenback Party.

The doctrine of "the perpetuity of matter," designed to refute diminishing returns as expounded by Malthus and Ricardo, was taken over by Carey from the *Political Economy* of his kindred spirit, Peshine Smith, whom Carey quotes at considerable length.⁷⁸ One need hardly be told, after reading this chapter on The Increase of Mankind, that Carey was freshly imbued at the time with the epochal discoveries of the great school of naturalists and chemists then shaping scientific thought. Carey's exposition abounds with references to the work of Agassiz, Guyot, Liebig, and Schleiden, and is virtually a statement of the theory of evolution as it stood shortly before the publication of Darwin's monumental work.

Starting from a consideration of matter in general, Carey, takes note of the fact that though it cannot be increased, it is constantly undergoing progressive changes of form; atoms and molecules are continuously passing through cycles of association and dissociation, of growth and decay. The vegetable *[begin page 56]* kingdom, through chemical process, is capable of converting the inorganic constituents of the mineral world - the earth, the rock, and the atmosphere - into organic compounds and living tissues. The animal kingdom, lacking this power of spontaneous absorption and conversion of inorganic matter, depends for its food and life upon the existing organic matter already prepared by the vegetable world. Thus the presence of the vegetable world had to precede the existence of animal life.

The animal, relieved (by the presence or vegetation) from functioning solely as an agent of chemical action, could direct a part of its energies in the development of

⁷⁸ *Principles of Social Science*, I, ch. iii. "Of Increase in the Numbers of Mankind."

instinctive activity-to learn in it limited way, eventually, the value of associating with others of its kind in the capture of its prey.

Development thus beginning in the stomach of vegetables is continued in that of animals, until the earth is, by degrees, prepared to serve the purpose of man-and with his coming we find the important difference that where as all other animals were bound to continue forever the slaves of nature, he alone was gifted with the faculties required for enabling him to become her master and to make her do his work".⁷⁹

Under his intelligently directed hand, nature gives new evidence of its yet unfathomed capacities for sustaining him, as "stiff pine gives way to the graceful barley, while beautiful fields of clover replace the rank weeds of the swamp, and the gaunt wolf disappears from the land that now maintains the highbred horse and the well-informed man."

⁷⁹ *Ibid.*, I, 71; Carey here continues his story of vital development by explaining the cycle of growth and decay of living organisms in nature. In this connection he indicates the complementary character of vegetable and animal chemistry - the plant takes in carbonic acid and exhales oxygen while the animal inhales oxygen and exhales carbonic acid. The statement is illustrated in one instance (p. 79) as follows:

	Takes in	Produces
The Plant	{ <i>Carbonic acid</i> by its leaves; { <i>Water</i> by its roots.	{ <i>Oxygen</i> from its leaves; { <i>Starch &c.</i> , in its solid substance
The Animal	{ <i>Starch and fat</i> in the stomach { <i>Oxygen</i> in the lungs	{ <i>Carbonic acid and water</i> { from the skin and the lungs

And at another time (p. 82) as follows:

	Taken in by	Produced
The Plant	{ Phosphoric acid, lime, common { and other salts from the soil	{ Perfect substance { of plants
	Takes in	Produces
The Animal	{ a. Parts of plants { b. The bone and tissues, { with oxygen from the lungs	{ Perfect bone, blood, { and tissues. { Phosphates and other { salts in the excretions.
The Soil	{ Excretions of animals, dead { animals and plants.	{ Phosphoric acid, { lime, &c., &c.

These illustrations are taken verbatim from an article in *Blackwood's Magazine* (May, 1853) by Dr. Johnston. Read in their context, it is readily seen that Carey uses them in support of the point already referred to (above, n. 72) on the need of returning to the land the produce that has been taken from it - a cardinal argument with Carey for association and decentralization. To treat it as one of Carey's main points in direct refutation of Malthus on population (as some text writers have done) seems hardly worthwhile.

It is through association with his fellows that man has achieved this mastery. The greater the degree of association, the greater the diversity of employments, the more readily does he obtain his subsistence from the bounties of nature. Thus, contrary to Malthus, density of population becomes the aid rather than the hindrance in meeting the problem of subsistence.⁸⁰

In so far as Malthus had made a point of the geometric ratio in which man may multiply, as against the arithmetic increase of subsistence, Carey again points to the error of the hypothesis, showing how different have been the rates or increase in different environments and stages of civilization. In his previous works he has refuted those ratios on the general ground that they are contrary to a beneficent order or nature. At this later date, he bolsters his refutation by calling attention to the fact that the more highly developed the *[begin page 58]* living organism is, the longer is the period required for bringing it into being, and the slower is the rate at which its kind increases. Under this natural adjustment, therefore, Carey sees no reason to fear that human population may outstrip the supply of the organisms required for man's subsistence. Add to this the idea of a progressively more fruitful agriculture as man reaches down to richer and richer soils, and the case for an optimistic outlook on man's material future is, in Carey's view, completely demonstrated.⁸¹

On the subject of wealth, Carey had consistently taken the position that it is "the power of man to command the services of nature," utility being "the measure of that power."⁸² The rapidity with which this mastery is achieved will depend in a large measure upon the abundance and availability of circulating medium, by which exchanges are facilitated and: association is fostered.

The power of money to advance economic progress is a subject on which Carey's views are very positive, leading him to take sharp issue with the classical economics. For Carey, an increase in the supply of the money metals - gold and silver - was more than a matter of altering the ratios at which money and commodities are exchanged.

The more abundant the supply of those metals, the more instant become the exchanges of society, the greater is the economy of mental and physical force, and the greater the power to produce commodities to be given in exchange for further supplies of these great instruments of association and combination.⁸³

In progressive societies, Carey submits, the history of prices has been marked by a relative decrease in the prices of finished goods. Which is to say, in effect, that under an economy fostering diversified industry within compact communities, the gap tends to close up between the price obtained by the farmer or miner, and the price of the finished product to which has been added the large items of transportation and handling. These items are borne by the isolated extractive laborer, whether he is selling his raw produce to, or receiving *[begin page 59]* the finished goods from, the distant centres of population and financial power. Place the extractive by the side of the finished commodity, and these burdens are correspondingly reduced.⁸⁴

⁸⁰ *Ibid.*, I, 89.

⁸¹ *Ibid.*, III, 296 et seq.

⁸² *Ibid.*, II, 301, 308.

⁸³ *Ibid.*, II, 306.

⁸⁴ *Ibid.*, II, 307.

Inasmuch as bank notes add to the supply of currency, their liberal issue wins Carey's approval. "Bank notes increase the utility of those metals, and should, therefore, attract and not repel them." Hence, "it is a pure absurdity for the United States to be engaged in the policy of hoarding specie and discouraging note issues" (which was the effect, presumably, of the sub-treasury system). His advocacy of free banking and limited liability for banks is consistent with his position twenty years earlier.

In their movements the precious metals, like all other commodities, gravitate toward those places at which they have the highest utility. These centres are the very places "in which land most rapidly acquires a money value, or price those, consequently, in which the value of the metals, as compared with land, most rapidly diminishes - and those in which the charge for the use of money is lowest." Conversely, according to Carey, the precious metals tend to leave those places in which their utility is small, in which population is sparse, land value is low, interest is high. (As part of his evidence supporting this maxim, Carey attributes the increase of pauperism, at the time, to the large exports of specie from the United States. In similar vein, he points out that the gold of California does not remain there, and only touches the Atlantic coast as it waits to be transferred to Britain.)⁸⁵

Thus there is an identity of movement for raw materials and precious metals-both go toward the centres "in which the power of association most exists" - where land and labor command the highest prices, and finished commodities command the least. With approval, he quotes Hume's Essay on Money: "In every kingdom into which money begins to flow, in greater abundance than formerly, everything takes on a new face: labor and industry gain life; the merchant becomes *[begin page 60]* more enterprising; the manufacturer more diligent and skilful; the farmer follows his plough with more alacrity and attention." This is more grist for Carey's mill, with which to grind out a new virtue for the power of association - because the precious metals flow "from those countries whose people are engaged in exhausting the soil, to those in which they renovate and improve it . . . from those at which the price of raw products, and of land itself, is low - from those at which money is scarce and interest is high."⁸⁶

This is as far, however, as Mr. Carey is willing to go with Mr. Hume. Obviously, Carey was unwilling to follow Hume in the view that increase in the supply of gold and silver merely "obliges everyone to pay more of those little yellow or white pieces for everything he purchases."⁸⁷

Carey's concern for a plentiful supply of the precious metals led him, in the *Principles of Social Science*, to an emphasis on the balance of trade which certain German writers, notably Held and Lange, have characterized as "Carey's reversion to mercantilism."⁸⁸ Their justification comes from Carey's pronouncement that "money cannot have that stability of value which is required for constituting it a proper standard of value in any country in whose favor there is not a steady and regular balance of trade payable in the precious metals."⁸⁹ Along with this proposition Carey offers another, "that the country which maintains a policy tending to promote the export of raw materials must have

⁸⁵ *Ibid.*, II, 311, 313.

⁸⁶ *Ibid.*, II, 325.

⁸⁷ Hume's *Essay on Money* quoted, *ibid.*, II, 326.

⁸⁸ Adolf van Held - Carey's Socialwissenschaft und das Mercantil. system (1866). Friedrich Albert Lange-Die Angebliche Umwälzung der Socialwissenschaft durch Carey (1866).

⁸⁹ *Principles of Social Science*, II, 435.

against it a balance of trade requiring the export of the precious metals, and must dispense with their services as measures of value."⁹⁰

The latter proposition ties in, it will be perceived, with Carey's advocacy of protection. Reviewing the commercial policy of the United States from its beginnings through the Walker tariff of 1857, Carey concludes that under free trade [begin page 61] the export of raw materials abroad, coupled with the low prices therefor, was accompanied by the export of the precious metals. Under protection the prices of home-grown raw materials rose, their home consumption was stimulated, "the precious metals flowed in and confidence was complete."⁹¹

The deliberate effort of the author to make all parts of the *Principles of Social Science* conform to a central theme is apparent at all stages of the work. Whether he is discussing distribution, land settlement, or the protective tariff, Carey never loses sight of the relation of the considered factor to the Power of Association. Improvement of labor; accumulation of capital; cultivation moving from poorer to richer soils; the laborer's value rising as that of commodities declines; wages going up relative to rent and interest; the price of raw materials approaching finished goods; the laborer climbing toward the capitalist in his power of consumption and standard of living; increased freedom of the individual, gained through independence of foreign domination; the export of surplus product, drawing in the precious metals; protective tariffs, stimulating progressive well-being by bringing the loom and the anvil to the side of the plough, the consumer to the producer, in a progressive diversification of employments in decentralized concentrations of local population - such are the contrapuntal themes in Carey's symphony on the Power of Association.

Carey's writings after the *Principles of Social Science* (see Appendix, *infra.*) are chiefly of polemical nature, designed to enliven the issues of the protective tariff, freedom of action in the field of banking and credit, and the growth of centres of diversified industrial activity in the agricultural sections of the country. In 1872 came his last book, *The Unity of Law*. It is interesting chiefly as an evidence of doubt on Carey's part that his social system had, in his previous statements thereof, achieved the rounded perfection and unity at which he had aimed. It is virtually a condensation of the *Social Science*, differing only in the more deliberate effort to [begin page 62] treat social science as an aspect of natural philosophy. His last literary effort, an article entitled "*Repudiation - Past, Present and Future*," voiced the opposition typical of his later years to the resumption of specie payment; it was printed shortly before his death in 1879.

In the brief critical review of Carey's economic doctrines which is to follow, the form which Carey gave them in his *Principles of Social Science* will serve as the basis for discussion.

[begin page 63]

⁹⁰ *Ibid.*, II, 438.

⁹¹ *Ibid.*, II, 436-439.

Chapter IV

Validity of Carey's Doctrines

If the economic doctrines of Henry C. Carey have been set forth with any degree of fidelity in the preceding pages, it should be evident that his writings were surcharged with the consciousness of a mission to perform. He was not satisfied with a description of the economic organization; the facts of life must be organized into principles or laws; and these laws must show the way to a happier economic and social order.

Carey's work is so strikingly earmarked with bold generalizations that it is hardly fruitful to test it by the standard of its invulnerability to flaw-seeking. The holes in his armour become apparent the moment he exposes it. Lange, Francis Walker, and others have already amused themselves by poking their pens through the openings. We may therefore use our time and space to better advantage by calling attention to the residue of substantial worth in Carey's interpretation of the economic system, despite the phantasy and exaggeration that enliven it as literature but mar it as science. Approached in this way, an estimate of Carey may incidentally account for his powerful hold on the thinking and the affections of his willing disciples. It may further help to explain the fact that Carey, rather than his critics, sensed the course which American economic life was to pursue, and the peculiar contribution which his country was to make to the technique of material well being.

The one aspect of the teachings of the classical school which to Carey was more repugnant than any other was its construct of that mythical automaton, the "economic man." In the system of the British economists, the mass of humanity seemed doomed to eternal hunger as it fought its losing battle against the law of diminishing returns and the iron-law of wages. To present such a doctrine to his American countrymen was, in his view, not only blasphemy against a beneficent Divine Order; it was to put a damper on the lively ambi- *[begin page 64]* tions of a young people proud of its pioneer achievements and aspiring to progressive betterment of its already tolerable condition. Hence Carey's conviction that the classical economics must be untrue, and that one mission of the economist worthy of the name must be to prove it untrue. Having accomplished that, he must then point the way to such adjustments in economic society as would lead to progressive improvement in man's estate.

Carey's economic doctrines may be conveniently treated under the following general heads:

- 1, Value and Distribution;
- 2, Population;
- 3, Land and its Increment;
- 4, Currency and Prices;
- 5, The Protective Tariff;
- 6, The Interrelation of Social and Natural Science.

Value and Distribution

Following Adam Smith and Ricardo, Carey approached the problem of distribution through a consideration of Value, which represented for him, "the resistance to be overcome before we can enter upon the possession of the thing desired."

(Value measures "the power of nature over man," while utility is "the power of man over nature.") Like other economists who worked from Adam Smith as a base, Carey was confronted with a choice between the two meanings that Smith had given to the term

value. The first, which applied "to that rude state of society which precedes both the accumulation of stock and the appropriation of land," made the value of commodities depend upon the relative quantities of labor applied to them. But with the entrance of rent and capital into production, the labor required to produce a good did not fully account for its value. Facing that difficulty, Smith shifted to his second definition of value, wherein it was determined by the amount of labor which a commodity could command, instead of the labor embodied in the commodity. This empirical turn which Smith gave his concept of value lost for it the universality demanded by the logical mind of Ricardo. The latter rejected the substitution of "labor commanded" for "labor embodied," and proceeded to [begin page 65] work out his historic refinement of the labor embodied definition of value, in which the inconvenient factors of rent and capital were so ingeniously disposed of.¹

Carey, ever the admirer of Adam Smith (even when he disagreed with him), took over the concept of "labor commanded" as the more dynamic, and attempted to give it the semblance of that universality which Ricardo felt that Smith had sacrificed. Thus in Carey's definition, Value is based on labor cost or sacrifice, but it is the cost of reproduction rather than the cost of production that is the cause of value. In using the concept of reproduction value, Carey sought to emphasize the dynamics of production. The quality of labor is undergoing improvement as the result of experience and capital accumulation; the amount of labor required to attain a given object decreases; the value of goods falls, "the value of man rises."

How could the cost of reproduction determine the value of goods that are not reproduced - obsolete goods, for example? This question has been frequently directed at Carey's definition. The fact is, that Carey had this question in mind. He recognizes, for example, that the axe of tempered steel, which Crusoe acquired with the fortunate arrival of a vessel, is worth many units of the "rude axe of flint," though the latter had cost many times the labor that produced the newer implement. The cost of reproduction is not a cost of mere physical duplication, but rather that of reproducing the satisfactions which the article is capable of giving.² A more efficient tool naturally reduces the value of existing tools of lesser efficiency, for which it becomes the substitute.³

The element of reproduction-effort saved with which Carey invests his definition of value may likewise be scrutinized in relation to the scarcity of the good. Do not scarce articles sell for prices out of proportion to the cost of producing them?

[begin page 66]

To which Carey replies, "Why is Jenny Lind' so highly valued? Because of the obstacles to be overcome before an equal voice can be produced."⁴ Or we might follow Carey through his example of pearls, which he used in the *Political Economy*. Pearls are high because they are scarce. But that scarcity, says Carey in effect, may be translated into the cumulative efforts which must be made per unit of appropriated pearls. Should mounds of pearls be discovered, or could pearls be synthetically produced that are indistinguishable from those now painfully sought in their natural

¹ See J.H. Hollander, *David Ricardo*, pp. 67-71.

² See *Principles of Social Science*, I, ch. vi, especially p. 153.

³ A careful reading of Carey on reproduction cost will show that he anticipated the objections of Alfred Marshall on this score. See Marshall, *Principles of Economics*, Eighth Edition, pp. 401-402.

⁴ *Principles of Social Science*, I, 174.

state, then the cost of reproducing pearls will have been reduced and their value accordingly diminished.

It should be noted that Carey is interested primarily in reproduction cost in terms of cost to society as a whole, rather than for individual transactions. We find he does the same thing when he speaks of the costs of bringing land close to the market. In similar vein when he speaks of the case of a rare first edition of an old book, he insists that however high may be the price bid, nevertheless

the real value of the book is to be found in the pleasure of instruction to be found in its perusal; and that is now obtainable at a tenth of the cost of labor required in the early days of the printing art. All such values as that above referred to (i. e., the bid and sale value) are as purely imaginary, and as dependent upon fashion, as were those of Holland in the days of the tulipomania. Value is limited by the cost of reproduction; and when a commodity cannot be reproduced, as in the case of the Boccaccio . . . its value has no limit but in the fancy of those who have the desire to possess it, and have the ability to pay for it.⁵

Here we have Carey discarding value-in-exchange altogether, and taking value in use as the one with which he is mainly concerned. That being the case, we should expect Carey to explain the relation between utility and value. On that phase we find him decidedly inadequate, and even confused. Contrasting Value, as the measure of nature's power over man, with Utility, the measure of man's power over nature, he says that with progress value declines while utility grows. *[begin page 67]*

"The two thus move in opposite directions, and are always found existing in the inverse ratio of each other."⁶ Surely he does not mean to say that the value of a given commodity varies inversely with its utility. Looking to the context, what he has in mind is that the total utilities of all the goods that man's labor can command, are on the increase; which is of course equivalent to his corollary, that the value of commodities (in terms of the labor required to reproduce them) tends to decline. But this hardly helps us as an explanation of the part utility plays in the evaluating of given units of given commodities. Nor does he add much toward a clarification of his problem when he says: "To form value an article must have utility; but utility, while necessary to value, is not the cause of value."

We wonder how Carey might account for an instance like that of the growing popularity of saurkraut juice. No more labor is required to produce it, now that its vitamin content and healthful properties have come to be appreciated, than was the case when it was poured off the kraut as useless. Yet we have a sharp difference in its value: worth nothing or next to nothing a year ago, the kraut juice is now being served at a price per glass equal to that of grape juice. Cases of this kind cannot be passed by as exceptions, like Carey's rare Boccaccio above referred to. The failure to give more than the most casual consideration to utility, as a dynamic element in value, is the more deplorable in Carey since he continually stressed improved consumption habits as an index of societal progress.

The difficulty of holding Carey's use of words to a consistent meaning is well exemplified by his further use of the phrase "the utility of man," concerning which he says:

⁵ *Ibid.*, I, 160, note.

⁶ *Ibid.*, I, 179.

Measuring himself against his products and his instruments man attributes to himself every increase of utility in the materials by which he is surrounded. The greater that utility, the higher is his own value, and the less that of the things he needs. The cost of reproduction steadily declining, he himself as steadily rises-every reduction in the value of existing capital being so much added to the value of man"⁷

[begin page 68]

Man, then, has both utility and value. That being the case, the value of man, by Carey's definition, should be according to the cost of reproducing him.⁸ If science should mitigate the pain, cost or labor of reproducing children, then according to Carey man's value would have to decline to the extent of the lessening of the sacrifice involved. Obviously, one cannot be too technical with Carey.

Carey's definition of value was but a starting point, to enable him to move on to his optimistic theory of distribution. As labor improves, and becomes productive enough to achieve a surplus, the advent of that surplus-capital - greatly eases the problems of further production. Labor, aided by capital, now gains with accelerated speed on nature's resistance to human effort. Commodities, more readily acquired, decline in value. The surplus, the product of past labor, steadily increases in total; the price for the use of capital, product by past labor, goes down. Labor gains on capital; labour's unit price goes up, while only the total of capital's share, due to the larger quantity of wealth produced, increases. The relation of trader to laborer is similar. With few products, and widely scattered consumers, the cost of handling is a large share of the final cost. As production becomes more plentiful and larger quantities pass through the trader's hand, as transportation improves and security of person becomes greater, the contribution of the trader to the final good looms less large. His total income will be greater, because he handles a larger total with less effort; but his unit charge against labour's product becomes less. Thus the laborer gains relatively and absolutely, on the capitalist and trader. The capitalist and trader lose relatively to labor, but increase their total income. Thus do the poor approach the rich in wealth and opportunity, but all gain in the march of progress.

Is the picture true? So far as Carey's own country was concerned, it apparently was. As a new country acquires a greater population, communications, and regularity of econo- [begin page 69] mic habits, the risks to capital decline; the interest rate comes down from a risk rate toward the pure interest rate. This distinction between pure interest and risk interest Carey did not clearly make in just such terms. But his emphasis on the increasing regularity of the social order, with the march of progress, suggests this. As for the profits of trade, the normal unit rates of profit on retail transactions are naturally higher than those required for established wholesale business. And that is what Carey's contrast between the pioneer trader and the subsequent established trader amounts to, in the final analysis.

That labor must inevitably obtain a larger share of the product, as capital increases, is after all pure assumption. In the world of realities, from day to day, wages come down as well as go up; unemployment reduces the morale as well as the income of the laborer; captains of industry may increase their gains by reducing output as well as increasing it. The gains of technological advance are not invariably shared with labor.

⁷ *Ibid.*, III, 111.

⁸ Carey actually says this: "the value of man, like that of all other commodities, is measured by the cost of reproduction, and not by that of production." *Ibid.*, III, 130.

The pecuniary side of business, by which economic wealth and power are measured, does not of necessity work hand in hand with the welfare side, as Carey would have us believe - not even in times of peace, security of person, and the related desiderata mentioned by Carey. To produce such a regular march of progress as Carey portrays, something more than complete freedom for the individual would be required.

Nevertheless, there are flashes of profound insight in Carey's viewpoint. The dependence of the laborer's income upon his productivity is kept in the foreground of his discussion, serving as effective antidote to the then prevailing wages fund doctrine, wherein labour's sustenance was determined by past savings rather than by its own production. In his treatment of the role of the trader Carey makes a distinction akin to that later developed by Francis Walker, between the management and the profit elements in the conduct of enterprise. And his concept of labor approaching capital and profits, if not true to the actualities of life for all times and climes, has the virtue of setting forth with peculiar attractiveness the goal toward which economic efforts should be directed.

Population

Carey's treatment of population is not merely optimistic; shorn of its ornamentation, it is found to be constructive and essentially sound. Yet no part of Carey's writing has provided a more fertile field for indiscriminate ridicule, than his treatment of population. A tireless reader of current works in natural history, in which the literature of the middle nineteenth century was so rich, Carey literally overshot his mark by the very abundance of evidence or testimony that he offered in support of his views. Thus he has afforded critics a tempting opportunity to sport with his "carbonic acid" theory,⁹ with his assumption of the adjustment of birth rate to the complexity of the nervous organism,¹⁰ and his argument concerning the beneficence of the Divine Order. It may be pointed out, however, that the first two are quotations from the works of other writers, offered as additional (but really unnecessary) support for his own viewpoint. And as for the "argument" derived from the beneficence of the Deity, that is essentially a means of introducing his main thesis, set in direct contrast with Malthus' lumping of wars, pestilences, etc. as "acts of Providence." It should be apparent from the very form which Carey has employed: "Can it be that the Creator has been thus inconsistent with himself. . . Can it be then that after having given to man all the faculties required for assuming the mastery of nature, it has been a part of His design to subject him to absolute and irreversible laws, in virtue of which he must inevitably become nature's slave? Let us inquire."¹¹

Carey does not deny the existence of the misery and wretchedness in Malthus' England; nor does he deny that other examples of such increasing misery are to be found. His *[begin page 71]* attack is on the implication that the facts cited by Malthus justify the Malthusian doctrine. Carey's argument on the subject of population consists of two parts. The first is a denial of the universality of the Malthusian doctrine. The second is that population conditions are essentially man made - they are not a fatality to which man must resign himself-¹² they can be man-controlled, so that the course of population becomes a positive, beneficent factor in human progress.

⁹ See p. 56, above.

¹⁰ Which he accredits to Spencer (*A Theory of Population*, in the *Westminster Review*, 1852). See *Principles of Social Science*, III, 312.

¹¹ *Ibid.*, III, 265.

¹² "As taught by Messrs. Malthus and Ricardo, Social Science has been well described as being 'the philosophy of despair, resting upon an arithmetic of ruin.'"

Disproving the Malthusian ratios of population to subsistence is a simple matter. Carey has no difficulty in piling up the evidence that the rate of human reproduction is not a constant. The fecundity of tribes and races, he shows, is a factor of the utmost variability - the Pacific coast Indian, in the presence of an abundance of food, was prolific, the hunter Indian of the plains was comparatively sterile - environmental conditions have provided demands of varying intensity upon the reproductive powers of the human animal. Cases are cited in which increase of population has been accompanied by increase of subsistence. In England, he points out, real wages have increased with the increase of population.¹³ Hence increase of population does not account for the existing misery even in Malthus' country. Even though we were to ascribe the character of a constant to the sex instinct, says Carey, that would not be equivalent to establishing the constancy of the rate of reproduction.

But aside from the factors in nature itself that militate against any such multiplication of the species as Malthus has suggested, Carey's primary interest is in distinguishing what he describes as the "real man" from the helpless victim of natural forces which Malthus portrays: "Security against the disease of over-population is to be found in the development of the real MAN, as distinguished from the human animal treated of in Ricardo-Malthusian books - a being that eats, *[begin page 72]* drinks, and procreates, and has but the form of man."¹⁴ This is the theme that he carries into his examination of the relative well-being, responsibility, and prudence of communities on the basis of land ownership and governmental policies. Difficulties of subsistence he finds to be most acute among populations which on the one hand are mere hives of human drudges in industrial centres, or on the other are retarded by a purely agricultural economy catering to distant centres of industry and population. The association of men into decentralized groups, of diversified and mutually complementary employments, furnishes the normal economic motives for increase in a pioneer country like the United States. Likewise, it makes for a normal adjustment of population in older countries. Thus Carey's thesis brings him to the elucidation of a land policy and a governmental policy whereby the desired decentralization and diversification may be achieved.

In his discussion of population, Carey appears to place the chief emphasis on the necessity of modifying human institutions to meet the requirements of the population, by positive effort, instead of glossing over the maladjustments of the existing order with the explanation that the maladjustment is nature's work, not man's. His attitude is typical of the aggressive attack of the American people upon the problem of the standard of living.

Land and its Increment

We have seen in our earlier discussion that insofar as Carey regarded land as part of the general category of capital, he was following the common tendency among American economists. He likewise was reflecting conditions in the United States of the early nineteenth century when the stony acres of New England were left behind for the richer acres available to settlement in the Ohio and Mississippi valleys. The new land, virtually free, acquired values only as improvements were made thereon and incidental developments in transportation and social conveniences brought the land closer *[begin page 73]* to the market. Observing these phenomena, Carey plausibly contended that it was the capital expended upon the land which gave it value, rather than the original

¹³ *Ibid.*, III, 91. Cf. Cannan, *op. cit.*, pp. 174-175.

¹⁴ *Principles of Social Science*, III, 310.

properties of the land itself. There was no no-rent land in the British sense-of land of inferior fertility pressed into use under a lower margin of cultivation. The new lands of the Mississippi Valley were appropriated from choice, being far richer than those of the previously settled sections of the country; the older, poorer lands, were actually abandoned as unnecessary. The order of cultivation in the United States thus seemed to belie the movement which Ricardo had described, in which only the best lands were first occupied and the poorer lands brought into cultivation under the pressure of increased numbers.

Who "makes" land in the economic sense-nature or man? Carey's explanation of the nature of rent hinges on the manner in which he has answered this question. If we accept the Ricardian view, land has been endowed by nature with original and indestructible powers, independent of man's contribution. The growth of population compels men to cultivate land which lacks these qualities; the price for its produce must be high enough to justify their labors on such inferior land. Under these circumstances the limited quantity of rich land produces for its cultivator a surplus in excess of that which is obtainable from the last land cultivated under the pressure of increasing population. These conditions prevailing, does there not accrue to the owner of the land, as a share applicable to the superior quality of the land itself, an increment equivalent to the measure of that superiority? And does it not follow that, the price of the produce having been fixed by the cost of cultivating the crop on the inferior land, the differential earned by the superior land has had no bearing on the price?

Carey recognizes the plausibility, at first blush, of accounting for rent in this way. But, he asks us, should we not at the same time "regard it as in the highest degree absurd, if anyone were to undertake to prove that prices were paid for oxen because one ox is heavier than another; that rents [begin page 73] are paid for houses because some will accommodate twenty persons and others only ten; or that all ships command freights because some ships differ from others in their capacity?"¹⁵ Carey's implication is plain. Better land, like better oxen or ships, commands a higher price or rental than poorer land or oxen or ships; but insofar as each is put to use the price it commands is reflected in the labor expended on them and the utilities derived therefrom. It takes capital and labor to bring to its useful state a good ship, a good ox, or a good piece of soil. Without the effort of man there are no utilities in any of these forms of capital. To Ricardo and his disciples, living in a country where land had been cultivated for many years, where the capacities of the different soils were taken for granted, original and indestructible powers of soils might be discussed with propriety. But in a pioneer country Carey could readily see how much of man's sweat went into the task of making land capable of producing a crop. Hence land of itself was nothing. It was man who endowed it with qualities. In some instances man's efforts, in combination with the properties of the land, produced a better result; in others, a lesser reward came to him. That would be true of enterprise and capital-use in general. The rent obtained, however, was due to the fact that the combination of the man and capital - the capital consisting both of the land and of improvements - produced a crop more than sufficient to sustain him. This very fact, that land produces a surplus beyond subsistence, accounts for rent. In other words, rent would apply to productive lands even if all the land of the country were of the same quality,¹⁶ of the same fertility, and equally close to markets so distributed that the distance from farm to market would not be an appreciable factor. The fact that farmers on the land produce a surplus which the artisans of the towns need, and that those in the towns require the surplus which the

¹⁵ *Past, Present, and Future*, pp. 18-19.

¹⁶ Cf. H.D. McLeod, *History of Economics*, pp. 584-587; but see *contra*, F.A. Walker, *Land and Its Rent*, p. 81.

farmers produce, creates the price for the use of the land. It would do so in the same [begin page 75] way that the existence of any other machine which produced a surplus beyond the cost of maintaining it, would command a rent. As Carey sums it up, (bearing in mind the definition of value as cost of reproduction),

the price ,charged for the use of land is, like that charged for the use of all other commodities and things, but compensation for the accumulations resulting from the labors of the past-that price tends everywhere to diminish in its proportion to the product obtained by help of the machine - and, there is but one system of laws for the government of all matter, let the form in which it exists be what it may.¹⁷

In his *Unity of Law*, after referring to the law of diminishing returns as enunciated by the Maltho-Ricardians, Carey says:

A tendency towards subjection of the masses, or, in other words, towards slavery, having been thus established as a necessary result of divine institutions, Mr. Mill certainly did not err when telling his readers that the law of the constantly decreasing productiveness of agricultural labor whose existence he had thus assumed, was 'the most important proposition in political economy'; and that, were the law different, 'nearly all the phenomena of the production and distribution of wealth would be different.'

That last phrase of Mill seems to compensate Carey for all the pains to which he had gone to reverse the Ricardian order of cultivation, as he resumes:

So far he (Mill) was entirely right. When, however, the baselessness of the Malthusian assumption had been distinctly shown; when it had been proved that the work of cultivation had in all ages and countries necessarily commenced on the poorer soils, passing steadily, as numbers, wealth, power, and civilization grew, towards [begin page 76] those more rich, with constantly increasing facility in obtaining supplies of food and other products of the soil; when it had been shown that such proceeding was in full accordance with the law in virtue of which poor and scattered men find themselves, in every department of occupation, compelled to commence with poor machinery, passing thence to that which is better; when these things have all been proved by means of facts occurring in every age and every part of the world, it is certainly somewhat remarkable that a

¹⁷ *Principles of Social Science*, I 164. Carey's assertion that land is "but compensation for the accumulation resulting from the labors of the past," suggests the brilliant attack which Walker has made on Carey's assumption that rent is not paid for the differential lying in the original and indestructible qualities of the land itself. Carey, to strengthen his point, frequently asserts that real properties "would exchange for only a small portion of the labor that would be required for their reproduction were their sites restored to their original condition." That being the case, Walker inquires, how does Carey know that all of its labor value may not have been destroyed, so that the values now left are primarily due to the superiorities of the site? *Land and Its Rent*, pp. 77, *et seq.* Carey, of course, in speaking of the total labor expended on the site, treated the reduction of that value as a phase of his theory of distribution - past labor declines in present value, as labor improves in its effectiveness. But Carey's looseness of phrase readily opens him to the attack of an acute critic.

philosopher like Mr. Mill should have contented himself with merely denying the existence of any 'invariable law,' and demanding proof that 'the return to labor from the land, when population and wealth increase, agricultural skill and science remaining the same, is not a diminishing one.'¹⁸

The very suggestion of arguing about what would happen "when population and wealth increase, agricultural skill and science remaining the same," is incomprehensible to Carey. He retorts:

As well might he (Mill) claim of an opponent to prove that had mining skill and science remained the same from the days of the Plantagenets, the return to mining labor would not have been a steadily diminishing one. Both cases being alike impossible of occurrence, they are equally unworthy of place in a work which professes to furnish scientific information.

These remarks, it might be said, mirror the crux of the difficulties between Carey and the Ricardians. They build on hypotheses applicable to static conditions, albeit to make the argument clearer by that device. Carey, unable to detach himself from the dynamic outlook of a young nation, will have none of it; he persists in showing how things happen when "the world do move." And the movement interests Carey only in one direction - forward.

Thus nothing in Carey could fairly be construed as a denial of the fact that on a limited area, with the state of the arts undergoing no change, diminishing returns must set in. Carey's increasing returns are always posited on the demand for more efficient production and distribution methods, which the very increase of population must tend to stimulate. But even the continuous improvement of the economic arts would not justify Carey in assuming that population can keep on increasing, on a limited area, without pressure on subsistence. Else why should Carey's Crusoes move off their *[begin page 77]* first hillside farms to come down to the more fertile fields at all? The fact that the next field is more fertile makes an easy way out of the dilemma of insufficient subsistence on the hillsides. But what of the time when all these rich valleys, whose resistance progressive man eventually overcomes, are all taken up? Carey himself realized that eventually we must face that problem. In his earlier works, he pointed to all the untapped resources in the earth and in ourselves, that have yet to be exploited. "Diminishing returns for humanity is a long way off," he consoled himself then; that problem was reserved for the distant future, for the beneficence of the Deity. In his *Principles of Social Science*, however, he sought a more definite check against diminishing returns, than his general faith in the Creator. There he fell back, as we have seen, on Spencer's theory that cerebral development and fecundity were mutually regulative tendencies.

The optimism of Carey on the question of land and subsistence does not consist in the fact that he denies diminishing returns in the abstract. What he does emphasize is that there are an infinite number of situations and improvements to be utilized, whereby man may progressively benefit by increase of population. As for "standing room only" on the earth, Carey would say that before we have to face such a condition we shall be so constituted that our physical needs and animal instincts will be sufficiently subservient to our intellectual development to solve the problem of overpopulation.¹⁹

¹⁸ *Unity of Law*, p. 21.

¹⁹ Professor J.R. Turner, in his able examination of Carey in relation to diminishing returns, calls attention to Carey's grasp of the principle of proportionality, developing the thought that a better adjustment of existing resources is equivalent

Meanwhile, he says in effect, let us worry less about our numbers, of which we still need more, and concentrate on the ways and means of continuing to grow in our economic effectiveness: we have a long history of increasing returns before us.

Currency and Prices

It is questionable whether Carey has made any permanent contribution to the principles of currency and banking, but his views took on special significance in their historical setting. When Carey advocated free banking, and limited liability in banking, he was not only flying in the face of those who felt that the panic of 1837, through which they were passing, was no time for letting down the bars on credit and banking; he was attacking powerfully entrenched politico-financial interests that were jealous of their special-charter monopolies.²⁰ In the movement for free banking which began in New York and was the basis of the National Banking Act of 1863, and which eventually spread to all but one state of the Union, Carey played his prominent and useful part.

Carey's interest in the small entrepreneur, particularly the farmer, whom he regarded as the backbone of the nation, may have been the chief motive in his advocacy of a large currency and in his joining the Greenback Party. The plight of the debtor class, which was obtaining low prices for its produce following the Civil War, while the capitalist class was enjoying increased purchasing power in the goods of the producer, was a discordant note in Carey's economic harmonies.

Carey's exaltation of money as the great instrument of association ("precious metals are to the social body what the atmospheric air is to the physical body"), led him into taking the stand that there could be no such thing as an over-supply of the precious metals.²¹ Disregarding the brand *[begin page 79]* of Mercantilist which critics have placed upon him, it is interesting to see by what devious way Carey reaches his conclusion of the impossibility of a money excess. "Gold," he says, "follows in the train of raw materials generally, and these are found invariably travelling to those places at which the rude products of the earth command the highest price, while cloth, iron, and manufactures of iron and other metals, may be purchased at the lowest; the greater the flow in that direction, the greater is the tendency to further enhancing the prices of the former, and reducing those of the latter." From this he deduces that "so far from having the effect of causing men to give two pieces for an article that could before have been had for one, has, on the contrary, that of enabling them to obtain for one piece the

to increase in resources. Incidentally, Carey refers to the fact that as man's tastes became more varied, his demands on nature should increase. This is true, unless our tastes increase in refinement of existing facilities, rather than in new demands for raw materials. (Cf. Turner, *op. cit.*, pp. 132-140.)

²⁰ "The first banks chartered in the United States were creatures of special laws. So long as the party with which they were affiliated was in power, they were protected from the creation of new competitors. Consequently persons who were not in political favor could not engage in banking until such time as their friends were in the legislative saddle." (G.W. Dowrie, *American Monetary and Banking Principles*, p. 101).

²¹ "The more abundant the supply of those metals, the more instant become the exchanges of society, the greater is the economy of mental and physical force, and the greater the power to produce commodities to be given in exchange for further supplies of these great instruments of association and combination." *Principles of Social Science*, II, 306.

commodity that before had cost them two; and that such is the case can be readily shown."²²

Carey" shows" the truth of his thesis by arguing that like ships and roads and bridges, "money tends to diminish the obstacles interposed between the producer and the consumer."²³ The elimination of these obstacles leaves more for the producer and consumer to divide between them; the power of association grows; agriculture becomes a science; manufactures find a greater demand; land and labor increase in relative value, while that of finished products declines.²⁴ In similar vein he refuses to admit that an oversupply of money may discourage exports from the oversupplied country and flood its markets with imports. Bearing that argument in mind, he says:

Every addition to the stock of money, as we are assured by the ingenious men of modern days engaged in compiling treasury tables and finance reports, renders a country a good place to sell it, but a bad one in which to purchase; . . . To what countries, however, is it that men have most resorted when they have wanted to purchase? Have they not, until recently, gone almost exclusively to Britain? It has been so, assuredly; and for the reason, that there it has been that finished commodities were cheaply furnished. Where have they [*begin page 80*] gone to sell? Has it not been to Britain? It has certainly been so; and for the reason, that there it was that gold, cotton, wheat, and all the rude products of the earth, were dear.²⁵

Now we have the clue to Carey's strange reasoning. He has evidently scrambled causes and effects. Because money has been flowing to Britain, and there industry was diversified and manufactures were cheap, he assumes that manufactures increased, and manufacturing improvements cheapened finished goods, primarily as a *result* of the inflow of gold. He believes the argument to be clinched when he concludes (with italics) that "*the reduction (in finished goods) has taken place in the very countries into which the gold of the world has steadily flowed, and into which it is now flowing.*"²⁶

In his treatment of interest, Carey's mental process is similar. He starts out by saying:

The strength of a community among the nations of the world grows with the decline in the charge for the use of money, or rate of interest. That decline is always a consequence of the influx, and of the increased utilization, of the precious metals."²⁷

The converse he also finds true, that increase of the interest results from the efflux of the supply. But does not this merely mean that money flows toward the place where it can command a better rate? No, says Carey; just as "wheat tends toward the grist mill, and there flour is cheapest," just as "cotton tends toward the mills at which it is to be spun and woven, and cloth is there very cheap," so the precious metals seek the countries where interest is lowest, to wit:

²² *Ibid.*, p. 327.

²³ *Ibid.*

²⁴ *Ibid.*, pp. 315, 327, *et passim*.

²⁵ *Ibid.*, II, 327.

²⁶ *Ibid.*, p. 328.

²⁷ *Ibid.*, p. 349.

Such precisely is the case with the precious metals which are always tending towards the places where their utility is greatest where men most combine their efforts-and where the charge for the use of money is lowest; leaving those in which their utility is small and in which combination of action least exists, a, state of affairs always attended by a high rate of interest.²⁸

Add to such statements Carey's insistence on a favorable balance of trade, apparently under all conditions;²⁹ his con- [begin page 81] fusion of money with capital; his failure to appreciate the effects of business crises or of the co-existence of a depreciated currency on the movement of the precious metals-as we pile up these factors of unbalanced presentation, we can readily understand the observation of Rabbeno, confirming Held and Jenks,³⁰ that Carey's overemphasis of much gold and much money as undiluted blessings" constitutes a retrograde movement of notable importance."³¹

Carey has, indeed, pushed his defence of plentiful money as an unqualified good beyond the point of reasonableness. His critics, however, might also have pointed out the one element of validity in Carey's view. It lies in his appreciation of the stimulating value of a plentiful currency on enterprise. Given a people of the American temperament, the opportunity to borrow freely has translated itself into a readiness to speculate, discover and invent. Carey has reflected the avidity of the American of the nineteenth century for getting his hands on money with which to start something; the presence of currency has stimulated the demand for its venturesome use. Out of it has come the speedy conquest of our resources; the readiness to strike out into new fields and new methods; and the magnificent scale, dwarfing everything before it, on which American industry is being conducted. Carey took it for granted that these must be the effects of the presence of capital, and he carried the point beyond all considerations of the familiar curtailing and modifying factors that can arise.

Association

To borrow a familiar figure from Carey we may say that Association is the sun toward which all other parts of his system gravitate. His theories of value and distribution, of [begin page 82] population and increasing returns, land settlement, money and prices, the protective tariff-the place of them all in Carey's social philosophy is fixed by their relation to the Power of Association as a centre.

Social science, as Carey defines it, is "the science of the laws which govern man in his efforts to secure for himself the highest individuality, and the greatest power of association with his fellow men." Man's individuality is brought out when he can give free expression to his instinct of gregariousness: in the economic sense, when he is part of a closely knit group of mutually interdependent producers, each a consumer of the products of the other. This is what Carey terms Concentration - the loom near the plough, and the plough near the anvil. He contemplates a national community of

²⁸ *Manual of Social Science*, p. 290.

²⁹ "Money cannot have that stability of value which is required for constituting it a proper standard of value, in any country in whose favor there is not a steady and regular balance of trade payable in the precious metals." (*Ibid.*, p. 435).

³⁰ On the view of all three, see Rabbeno, *op. cit.*, pp. 371-375. Jenks has also exposed Carey's serious abuse of statistics regarding the benign effects of increased paper and specie money. See Jenks, *op. cit.*, p. 176.

³¹ Rabbeno, p. 374.

decentralized groups, each with an autonomous existence in the economic sense. It may export surplus, and receive in return those products which cannot be locally produced. But it strives to finish its own raw products within its own territory. To the extent that it does so, this concentration enables men to climb out of the rut of a primitive economy. The community accumulates capital for its local needs; improves the quality of its labor through the employment of machinery and the division of labor; increases its purchasing power, rises in the standard of living, and advances in the leisure arts. Thus is the individual raised to a state of economic and intellectual freedom as well as economic security. Such a group, actively engaged in securing the highest adjustment to its environment, is not at the mercy of a distant centre of population and financial power.

The opposite state is characterized as one of "centralization and dispersion." Therein the large centre of population has acquired a monopoly of manufactures and trade; it has arrogated to itself the disposal of capital and the market for raw materials. Its control over raw materials keeps the agriculturist at the sole task of meeting that demand. The producer must send his raw produce in the ships of the monopolists, suffering the transport charges and accepting the price made for him and his produce in the market centre. He must *[begin page 83]* buy the finished goods from that centre, and again incur the transportation charge from the manufacturer to his homestead. Thus the pioneer sells cheap and buys dear, while the traders at the market accumulate the profits of handling, and money flows toward the centre. The isolated producer is the colonial slave, the traders and financiers are his masters.

Now how can the pioneer country, economically a mere colony of the established centre, achieve its independence? Carey's answer is, create demand for the produce right at the producer's door. The buyer of the produce must be encouraged to come to the producer. The encouragement lies in keeping out the manufactures of the menacing Centre, until the pioneer community has attained a state of economic development when it need no longer fear the domination of the Centre. This is the business of government-tariff protection. Adequately protected, the manufacturer will buy his raw materials from the home producer, and the latter will receive full value for his raw produce. Thus provided with wherewithal, the farmer in turn buys the finished goods from his manufacturing neighbor. Each benefits from the presence of the other. The growth in local population stimulates the demand for more produce, and the farmer, having acquired a little capital from his improved selling position, ventures down to the richer but more resistant soil, which he then subdues with the aid of new implements. He can now produce more, to satisfy a larger clientele of buyers of his raw materials. He has these customers at his door, his own neighbors; he is no longer at the mercy of strangers, whether selling, buying, or borrowing capital. What he has taken out of the earth in crops goes back to fertilize the earth which has yielded its bounty.³²

To be sure, this is the familiar home market argument for protection, in the dress of Carey's design. Carey's *[begin page 84]* statement was intended to give the principle of protection a universal application. But it was especially pertinent to the contemporary scene. The roving pioneer was raising wheat for the export market in a careless, extensive culture, with little regard for the establishment of settled communities. A third

³² "Our great mother, the Earth, gives nothing, but she is willing to lend everything; and the larger the demand made upon her, the larger will be the supply, provided that man recollect that he is but a borrower from a great bank in which punctuality of repayment is as much required as in the banks of America, France or England." (Carey's *Manual*, p. 52).

of the nation's territory was subject to the rule of King Cotton, almost to the exclusion of every other fealty, moral or political. Spurred on by the demand of the English spinners, the cotton growers of the South were exhausting the soil as rapidly as they could. Having taken all that the soil could give, without replenishment, the southern growers abandoned their farms to go over the same process on new virgin soil. There was no compunction about leaving an established homestead. On the other hand, the system fostered the continuance of slavery - carrying one's labor supply along, from place to place. Moreover, the system apparently made for a divided loyalty. England was the leading customer, and to England the South looked for its culture and its finished goods. The ties with the North were loose, and in imminent danger of being cut. Thus protection appealed to Carey, as it did to many of his contemporaries in the north, as a means of tightening the precarious bonds between the conflicting sections of the nation. That the potentialities of a great internal commerce and diversification of employments existed within the nation, subsequent history has amply proved. As recently as 1893 one able overseas critic of Carey vented his irony on the absurdity of supposing that the South could ever have important manufacturing centres for the finishing of its raw cotton, and other raw products.³³ Yet today it is unnecessary to dwell on the remark- *[begin page 85]* able adaptability to manufacturing that the South has shown, from North Carolina to Texas, or on how diversification of southern crops has made headway during the period of manufacturing development.

There remains, however, the larger question as to how far the protective tariff could serve or has served as a major panacea for the ills of centralization and dispersion that Carey criticised. It would hardly be accurate to say that the tariff has given us a harmonious division of the nation's population into "decentralized concentrations." Nor can it be said that all parts of the country have received anything like equal benefits from the tariff, nor have the rich been slowed up in their wealthy-getting pace, so that the laborer's status might catch up with the capitalist's (as Carey deemed the normal course of progress to be). The harmony of interests which Carey seemed to expect from the tariff was perhaps too much to expect from either free trade or protection. Carey, at any rate, is spared the pain of comparing his vision of intra-national harmonies with the current battle of farmers versus manufacturers, or of Wall Street versus Main Street, as the "highest tariff in history" is recurrently fashioned. He has likewise been spared the disillusionment of witnessing what we accept with equanimity today -- such a centralization of economic power in the financial centres of the United States as to make that English domination of which he complained seem puny by comparison. Carey, were he alive today, would also be under the necessity of explaining the phenomenon that our largest and most successful industries, including such outstanding examples as automobiles, farm machinery, radios, and clerical machines, have risen to foremost rank among our manufactures and have paid the highest wages yet given to workers of like skill, without the aid of a tariff; while the highly protected American beet sugar industry lives off child labor and a Mexican peon's standard of living.

³³ "Carey's insistence, in demanding the association of manufactures with agriculture, and the bringing together of producers and consumers, can only be explained by supposing that he desired that. . . in spite of the difference of climate, soil, manufactures should be developed, and that immediately, in the southern ones as well as those in the north. And this is clearly what he means when he invited South Carolina, Virginia and the other States to follow the examples of Massachusetts - the manufacturing district par excellence. It would be a loss of time to refute such an argument." (Rabbeno, *American Commercial Policy*, p. 380).

In these comments on the relation of the tariff to Carey's ideal of association, we have the advantage over him of hindsight. But a less excusable error on Carey's part is his insistence on the heavy costs of transportation, in arguing the *[begin page 86]* wastefulness of free trade as against the economy of protected diversification. Carey had opportunities in his own day to recognize the declining roles which distance and transportation costs were assuming in economic exchanges. So ardent an advocate of machinery and improvements as Carey should have realized that the saving from these efficiencies might more than offset transportation costs, so that in certain cases important manufactures might be of great advantage to the producer who purchased them. Again, might not the competition among foreign manufacturers to sell the American consumer who produced raw products, be just as severe as the competition of our extractive products for the favor of the consumers in the manufacturing centres abroad? To universalise Carey's position regarding the benefits of association, he should have to apply tariffs between distant sections within the country. Yet we know, from every page in his *Harmony of Interests*, that he wanted the closest economic-intercourse between the North and the South, the East and the West, of his own Country. It needs but to be added, as did John Stuart Mill, that prohibitive transportation expense is itself the truest form of protection from foreign competition.³⁴

Social and Natural Science

In tracing the development of Carey's thought, we have seen how he started out with an *Essay on Wages*, how this evolved into a treatise on the laws of economic distribution *The Harmony of Nature* and the *Principles of Economics*. Then came the blending of economic laws with the science of the soil from which man derived his subsistence - *The Past, the Present and the Future*. The end toward which he had been working later comes to light when he abandons the boundaries of economics to give us his *Principles of Social Science* - a study of individuality and association among men as part of the natural order. In each successive work there is the desire to extend the rules of human conduct into *[begin page 87]* natural science, to give economic laws the character of "universal truths-truths to which no exceptions can be found." Nothing else will do for Carey.³⁵ The *Unity of Law* reveals the final effort to convince himself and the world of the identity of the laws which govern the social and physical worlds.

Much of the bizarre in Carey's work is traceable to this straining for universal truths, whereby the identity of the principles of social science and natural science may be established. Consider his fondness for the term always with which he prefaces his pet principles. Always, man moves from the hillsides to the meadows and timbered valleys below; always, money moves to the countries where interest is lowest; always, with the growth of wealth, labor and its direct produce grow dearer, while capital and manufactured goods become progressively cheaper. There can be no exceptions. Thus he weakens his arguments by failing to allow for the choices of human nature. Ridiculing Ricardian economics as "a science of assumptions,"³⁶ which sets up a mechanistic economic man far removed from the "real man" of aspirations and morals, Carey himself has set up assumptions of mechanistic laws in human conduct that are far more difficult to accept than those which he criticizes.

In the preface of his *Social Science*, Carey thought it worth while to call the attention of the reader to the fact that until then "the great and really fundamental law of the science the one required for the demonstration of the identity of physical and social

³⁴ Mill, *Principles*, Book 5, ch. i, referred to by Rabbeno, p. 369.

³⁵ *Unity of Law*, p. 69.

³⁶ *Ibid.*, ch. i.

laws, still remained to be discovered; but it is now. . . given in the second chapter of the present volume." We turn to the second chapter and there find that he has discovered" the great law of molecular gravitation as, the indispensable condition of the existence of the being known as man." He proceeds to show us that just as in the solar system, attraction and motion are in the ratio of mass and proximity, so gravitation among men "is in the direct [begin page 88] ratio of the mass, and in the inverse one to the distance."³⁷ Why then, do not men, the most gregarious of animals, tend toward a single spot of the earth? Because, Carey explains, like the satellites which otherwise would fall inward and crumble in ruins upon the planets they attend, so too men must have their own local centres of attraction to prevent them from abandoning their individuality and powers to the human centres of gravity, like "London and Paris, the rival suns of our system."³⁸

So far as scientific proof of the validity of building social laws upon physical laws is concerned, this is much ado about nothing; for it disregards the complex institutional aspects of society and the varieties of organization each of which may be eminently suited to the respective people, place and time. The most we can say for the pains that Carey took to build up his physico-social identities is that they served Carey as an aid in carrying over to his readers and disciples 'the sense of movement and dynamics in modern economic life. In doing so he stirred his fellow economists to a renewed searching and questioning of the accepted theories that had led political economy into blind alleys.

[begin page 89]

³⁷ *Principles of Social Science*, I, 43.

³⁸ *Ibid.*, p. 43.

Chapter V

Conclusion, Carey's Contribution

It was true, as Griswold lamented, that the works of his friend Henry Charles Carey were denied admittance "at the University in the street next door to that in which the author has his residence"; it was equally true, as Thompson noted, that Carey was "the author whom, before all others, they (the students in British universities) were to refute in their prize essays." Neither of these comments should be difficult to understand.

In his uncompromising advocacy of his favorite tenets, in his unwillingness or inability to see many of the obstacles to their application under all conditions, Carey is often a trial to his most sympathetic reader. Certainly his *Social Science* would be no convenience for formal presentation to students seeking a balanced appreciation of the complexities of Economic life. As a stimulant to controversy, on the other hand, perhaps only Ricardo has excelled him. There were few lukewarm admirers of Carey in his day; one was either his ardent disciple or his bitter opponent -- for Carey neither asked nor gave quarter in disputation with opponents. A new generation of younger economists in Germany hailed him as the prophet of their new empire's economic future. They followed him as they followed List, toward the ideal of a strong nation, standing on its own feet in every branch of economic life, looking to its own centres rather than to London or Paris for aid and knowledge. John Stuart Mill, recognized by his own generation as the standard expositor of Ricardian economics, only with reluctance gave Carey any serious consideration. Yet Mill was compelled to acknowledge the need, which Carey had exposed, of bringing the established traditions of political economy into line with the realities of life in the nineteenth century. Mill ended by making significant amendments to his earlier generalizations of the classical doctrines. Thus Carey shook the established [begin page 90] school out of its lethargy and aided in the successive movements which first gave rise to the historical school, and then brought economic scholarship and research to grips with the current business scene.

Carey exerted a salutary influence in challenging the assumption that landlord and tenant, capital and labor, had inevitably opposing interests - the see-saw theory of the British school. By emphasizing the possibilities of rising wages in the enhancement of purchasing power, and the intelligent utilization of laborers, he showed the improvement in the status of the laborer to be a boon to landed and industrial capital as well. He expressed the slogan of high wages and prosperity a century before "the school of Henry Ford."

To the younger nations, faced with the established supremacy of England and other early starters in the Industrial revolution, he held out the practical promise that they could climb out of their lower state of development and enjoy the fruits of diversified industries. One's immediate environment had yet unfathomed possibilities for adaptation and exploitation; every community may be made to enjoy an increasing share of those social benefits that come with increase in the variety of employments and the wider use of capital for the improvement of production. Nature's resources are boundless; the resistance of nature is but a spur to increased activity. Nature is ready to yield up her resources, social as well as economic, to men who will undertake their intelligent conquest. In making that his theme, Carey not only interpreted the spirit and the facts of American life to older and less optimistic peoples, but held out to them the same possibilities of better adjustment and more potent achievement.

The classical economics labored the point that supply was inevitably limited in the face of growing demand. Carey overreached himself in insisting that always and everywhere, to use his own words: "Demand produces supply." While neither view is susceptible to universal application, Carey's had at least the merit of restoring a waning faith in the potentialities of human resourcefulness.

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Appendix

Books

	Year
Essay on the Rate of Wages	1835
The Harmony of Nature (printed but not published)	1836
Principles of Political Economy (3 vols.)	1837-38-40
The Past The Present and The Future	1848
Harmony of Interests Agricultural, Manufacturing, Commercial	1850
The Slave Trade, Domestic and Foreign	1853
Principles of Social Science (3 vols.)	1858-59
Manual of Social Science (edited by Miss McKean)	1864
The Unity of Law; as exhibited in the relations of Physical Social, Mental, and Moral Science.	1872

"Concurrently with the production of these volumes, and continuously since the date of the last of them, Mr. Carey was engaged in the discussion of the various topics of general concern falling within the range of political economy, in newspaper articles, which would make many volumes if collected in that form. Those of his works to which he has given the pamphlet form are named in the following list" (Elder, Memoir of Carey).

Pamphlets

The Credit System in France, Great Britain, and the United States (pp. 130)	1838
This subject was subsequently still further treated in a magazine published in New York, to the extent of over 100 pp.	1838-39
Answers to the Questions, "What Constitutes Currency; what are the Causes of Unsteadiness of the Currency; and what is the Remedy?" (pp. 81)	1840
Commercial Associations of France and England (pp. 40)	1845
What Constitutes Real Freedom of Trade (pp. 53)	1850
What the North Desires (pp. 8)	1850
Two Diseases raging in the Union - Anti-Slavery and Pro-Slavery (pp. 11).	1850
The Prospect, Agricultural, Manufacturing, Commercial and Financial, at the Opening of the Year 1851 (pp. 84).	1851
How to Increase Competition for the Purchase of Labor and How to Raise the Wages of Labor (pp. 16)	1852
Two Letters to a Cotton Planter (pp. 27)	1852
Ireland's Miseries and their Cause (pp. 16)	1852
The Working of British Free Trade (pp. 52)	1852
British Free Trade in Ireland (pp. 16)	1852
Letter to a Farmer of Ohio (pp. 16)	1852
Three Letters to Hon. R.M.T. Hunter, U.S.S. (pp. 42)	1852
The Present Commercial Policy of the Country (pp. 10)	1852
Letters on International Copyright (pp. 72) - Second Edition, with .additions (pp. 88)	1868
The North and the South (pp. 40)	1854
Coal, Its Producers and Consumers (pp. 19)	1854
American Labor vs. British Free Trade (pp. 48)	1855
The True Policy of the South (pp. 15)	1855

Present Situation and Future Prospects of American Rail roads (pp. 8)	1855
Money. A Lecture before the American Geographical and Statistical Society	1856
Letters to the President, on the Foreign and Domestic Policy of the Union, and its Effects as Exhibited in the Condition of the People and the State (pp. 171)	1858
Financial Crises, their Causes and Effects. Letters to William C. Bryant (pp. 58)	1860
The French and American Tariffs Compared (pp. 29)	1861
The American Civil War (pp. 23)	1861
The Way to Outdo England without Fighting Her. Letters to Hon. Schuyler Colfax on the Paper, the Iron, the Farmer's, the Railroad, and the Currency Questions (pp. 165)	1865
The Public Debt, Local and National (pp. 16)	1866
Contraction or Expansion; Repudiation or Resumption (pp. 47)	1866
Resources of the Union. A Lecture before the American Geographical and Statistical Society (pp. 26).	1866
The National Bank Amendment Bill (pp. 8)	1866
Reconstruction-Industrial, Financial, and Political (pp. 79)	1867
Review of the Decade 1857-1867 (pp. 40)	1867
The Finance Minister, the Currency, and the Public Debt (pp. 40)	1868
Resumption; how it may be Profitably Brought About (pp. 16)	1869
Shall We have Peace? Peace Financial and Peace Political (pp. (6)	1869
Review of the Report of the Hon. David A. Wells, Special Commissioner of the Revenue (pp. (6)	1869
Our Future (pp. 7)	1869
Review of the Farmer's Question (pp. 12)	1870
Wealth-of What Does it Consist? (pp. 11)	1870
Memoir of Stephen Colwell (pp. 35)	1871
The International Copyright Question Considered (pp. 30)	1872
The Rate of Interest and its Influence on the Relations of Capital and Labor. Speech in the Pennsylvania Constitutional Convention (pp. 22)	1873
Capital and Labor. Report of Committee on Industrial Interests and Labor in the Pennsylvania Constitutional Convention (pp. 31)	1873
Currency Inflation. How it has been Produced, and how it may be Profitably Reduced. Letters to Hon. B. H. Bristow, secretary of the Treasury (pp. 20)	1874
The British Treaties of 1871 and 1874 (pp. 38)	1874
Monetary Independence. Letter to Hon. Moses W. Field (pp. 12)	1875
The Senate Finance Bill (pp. 12)	1875
Manufactures-At Once an Evidence and a Measure of Civilization (pp. 7)	1875
To the Friends of the Union Throughout the Union (pp. 4)	1876
Appreciation of the Price of Gold. Evidence before the U. S. Monetary Commission (pp. 16)	1876
Commerce, Christianity, and Civilization versus British Free Trade. Letters in reply to the London Times (pp. 36)	1876
The Three Most Prosperous Countries in the World (pp. 2).	1877
Resumption-When and How will it End?, (pp. 12)	1877
Repudiation-Past, Present and Future (pp. 42)	1879

Of these pamphlets a selection in one volume, 8vo., and another in 2 vols., 8vo., both entitled *Miscellaneous Works*, as well as a third, in one volume, 8vo., entitled *Miscellaneous Papers on the National Finances, the Currency, and other Economic Subjects*, have been published by H.C. Baird & Co., Philadelphia.

In that portion of Mr. Carey's library bequeathed to the University of Pennsylvania there are three large scrap-book volumes of his contributions to the editorial columns of the *New York Tribune*, from 1850 to 1856. An examination of these papers shows that he was, through this period, the Protectionist editor of the *Tribune*.

Quite three thousand pages of pamphlets were published by him, and from 1848 to 1852 he contributed monthly and often very extended and elaborate articles, requiring much research, to *The Plough, the Loom, and the Anvil*, which was established largely through his influence, and was published in Philadelphia by his friend and early and ardent disciple, the late John S. Shinner. He wrote, besides, almost constantly for the Philadelphia North American, of his friend Morton McMichael, and a great many articles for other papers. His strictures on railroad monopoly during 1848-50 would make two large 8vo. volumes. (Memoir, p. 39, by Elder.)

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