Volume Title: Wesley Clair Mitchell: The Economic Scientist

Volume Author/Editor: Arthur F. Burns, ed.

Volume Publisher: NBER

Volume ISBN: 0-87014-052-3

Volume URL: http://www.nber.org/books/burn52-1

Publication Date: 1952

Chapter Title: Place in Contemporary Economic Thought

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Chapter URL: http://www.nber.org/chapters/c3099

Chapter pages in book: (p. 153 - 192)

Part Two

EARLY APPRAISALS

Place in Contemporary Economic Thought*

By Paul T. Homan

I

There is a certain consensus of opinion among economists in the United States that the most capable of their number among the younger men is Professor Wesley C. Mitchell. Unlike most economists of earlier generations and the "elders" of the present generation, his reputation is not based upon any compendious or detailed treatise in the field of economic theory. His work has, in fact, been mainly concerned with a field so far from the subtleties of theory as the application of statistical technique to the investigation of economic phenomena. His peculiar competence in this field is the initial basis upon which the consideration in which he is held rests.

He has, however, joined to work of this character a sustained interest in the theoretical problems of economics. From time to time, in speeches and articles, he has developed his views on economic theory, and in his university classroom has perhaps been most effective and popular when dealing with the problems of theory. Concerning the importance or significance of his theoretical views there would be found no such consensus as concerning his competence as an investigator. It is probable, however, that in his views can be found a better expression than elsewhere of a newer trend of economic thought which, in the United States, is producing a marked hiatus between the ideology of the older and younger generations of economists. He may, consequently, be taken, not as the spokesman of a generation of economic thinking, but as an illuminating example of certain currents of thought which, during the present century, have been recasting the intellectual concepts underlying economic theory.

* Originally published as a chapter in Homan's *Contemporary Economic Thought* (Harper, 1928). Here reprinted, with minor changes, by permission of author and publisher.

It is only by a sort of license that one speaks of Professor Mitchell as belonging to the younger generation. Having safely turned the mid-century mark and having served his term as president of the American Economic Association, he might well expect to be included among those who are mature and wise. But one thinks of him against the background of that distinguished and long-lived group of American economists who have for a generation adorned the scene of economic thought. And one also thinks of him in terms of his spiritual consanguinity. In these terms he is perhaps closer to the youngest instructor than to the most venerable of his associates upon the faculty of economics at Columbia University.

Born in a small Illinois town, Mitchell passed through the public schools of Decatur to the University of Chicago. There is no record that he grew up with any other complement of ideas than might be common to any well-brought-up Middle Western boy. He doubtless approached the university armed with little more than small-town common-sense notions, a good mind, and an eager intelligence. He entered the university in 1892 and was there as a student continuously until 1899, with the exception of a single year when he pursued his postgraduate studies at the Universities of Halle and Vienna.

The decade of the nineties was marked by great interest in the theoretical aspects of economic study. The theoretical work centered largely on the refinement and elaboration of the marginal-utility theory of value, and upon the discovery of a theory of distribution congruent therewith. It was during this decade that John Bates Clark was rising to the position of the foremost American economic theorist. The type of theory wrought out during the period, compounded out of the writings of Alfred Marshall, J. B. Clark, and the Austrians, has continued down to the present day to be the kind mainly taught in the schools.

Mitchell's theoretical position has been of quite a different sort, and it should prove enlightening to examine the curious, negative relationship of the development of his views to the drift of theory at that time. In spite of undergoing his apprenticeship during the nineties, circumstances combined to keep him from being swept into the main current. At the University of Chicago the outstanding figure in economics was Professor J. Laurence Laughlin, who, more persistently than any other American economist, clung to the classical tradition. Brought up on Mill, he remained true to Mill's type of analysis and was never seduced by the subtle blandishments of subjective economic theory. He was, indeed, its violent opponent and one of its keenest critics. So far as he made concessions to later thought, his sympathy lay much more with Marshall than with the Austrians. It was under Laughlin's tutelage that Mitchell was inducted into economic studies, and learned to look askance at prevalent doctrines.

Laughlin's primary interest was in currency questions and monetary problems, and it was under his influence that Mitchell undertook his first important task, a study of the greenbacks. This beginning was crucial and decisive, for out of the problems and technique of his doctoral thesis came the nature, scope, and direction of Mitchell's later work. It is not often that the dissertations of graduate students become classics, but such has been the fortune of the *History of the Greenbacks* which remains the standard work on one of the most important episodes in American monetary history.

The part played by Laughlin in Mitchell's development was to catch him young, assist in saving him from the methods of marginal-utility analysis, implant in him high standards of scientific workmanship, and set him upon the statistical investigation of monetary problems. But he did not succeed in implanting an adherence to the doctrines of classical economics in his mind. The nature of the greenback investigation doubtless had something to do with this, as will be seen. But the primary reason may probably be traced to the presence of two men upon the staff of the University of Chicago, Thorstein Veblen and John Dewey.

Dewey was disseminating the novel doctrines of pragmatism from his chair in the department of philosophy, and Mitchell was one of his students. Dewey, of course, was doing nothing if not casting doubt upon systems of philosophy whose chief virtue was their internal logical consistency. He was exposing to view the social origins of the preconceptions upon which systems were built. He was attempting to rebuild philosophy upon a foundation of modern psychology and epistemology. And he was advancing a view of life and knowledge as an adventurous process in which mankind is attempting with developing intelligence to direct and control its increasingly complex environment.

Veblen was in a way the complement of Dewey, or his partner in crime. Dewey, of course, was a social reformer, and Veblen was a satirist. But both alike were under the influence of an evolutionary view of social development. The one in philosophy, the other in economics, was attempting to reshape the thinking in his own field into conformity with the findings of modern science. In their views upon the development of human thought and institutions their thought is to a considerable degree parallel and contiguous, and one infers that Veblen was himself indebted to Dewey. At the time when Mitchell was a graduate student Veblen was in the process of constructing the devastating attack which he made upon formal systems of economic theory. He had been a student of Veblen's since his undergraduate days and was much impressed by the latter's philosophical attack and by his notion of the genetic approach to economic theory. It was, indeed, as an offset to the philosophical influence of Veblen and Dewey that Laughlin had suggested to Mitchell the very concrete and realistic subject of greenbacks for his doctor's thesis. The association was not terminated at the end of Mitchell's period of graduate study, for, after a year as a statistician at the United States Census Office in 1900, he returned to Chicago and was associated with Veblen upon the faculty of political economy at the university for a number of years.

It is plain that Dewey and Veblen, particularly the latter, had a decisive influence upon Mitchell's attitude toward systematic economic theory. From Veblen, too, he drew a framework of ideas into which to fit his thinking upon the problems which engaged his interest. In a limited sense, he may be regarded as a disciple of Veblen, and the extent of his debt our later exposition should make clear.

It would, however, be a serious misconception to regard Mitchell as merely someone to be explained in terms of Laughlin, Dewey, and Veblen. One must limit their influence to something of a germinal sort, providing him in his more impressionable days with, respectively, a direction for his work, a social and philosophical outlook, and a framework of economic concepts of an unorthodox sort. During his years at Chicago he was associated with other men who were struggling in an open-minded way with the problems of economic theory, particularly H. J. Davenport and R. F. Hoxie. He was associated, too, with a group of distinguished workers in the other social sciences, most of whom were working in a pioneering way to reshape their thinking in relation to the increasingly complex problems of modern society, with relatively little reverent adherences to traditional habits of thought. In just what way intellectual influences of this sort combined to shape Mitchell's thinking represents an aspect of the undiscoverable personal equation. It seems merely worth while to mention them in passing, in order to indicate the circumstances under which he worked, which were peculiarly favorable to the development of an independent and emancipated viewpoint.

The History of the Greenbacks, Mitchell's first work, was concerned only in a secondary way with theoretical questions. It was primarily a project in economic history. Yet it deserves some slight attention, as bearing upon the development of Mitchell's later views. The book covers only the period of the Civil War. The first part is taken up with a history of the legal-tender acts, and deals with the financial exigencies which led to them, and with the political situation out of which they arose. The second part, dealing with the economic consequences of the legal-tender acts, is an attempt to determine the influence of a fluctuating standard of value upon the economic welfare of various groups of the population, and upon the production and consumption of wealth. Economic theory of the normalizing sort has, of course, regarded money as a mere convenience and, for purposes of building up theories of value and distribution, assumed a stable monetary unit. Economists, reflecting upon the vagaries of monetary values, had from time to time arrived at various speculative conclusions concerning the effects of the "friction" involved in an unstable unit of money. Mitchell's was, however, perhaps the first extensive objective investigation into the subject.

His investigation was marked by two interesting variations from the speculative treatment of monetary theory. In the first place, he dealt with what, from the point of view of orthodox tradition, was an element of "friction" in the normal operation of economic forces. From the point of view of his own intellectual development, the important fact is that he was from the start interested in the "disturbing," and not in the "normal" aspects of economic adjustment. His mind was being compelled to run back from the objective facts of an unstable monetary unit, a fluctuating price level, and a shifting allocation of distributive shares to the less patent facts which lay behind them—politics, the credit of the government, popular sentiment and belief, and the unequal incidence of price changes upon the real income of various classes. He was exploring economic processes, in which a complex system of money payments stood between the production and enjoyment of goods. Examining the influence of unstable money upon economic welfare, his attention ran not to any beautiful scheme of normal adjustment, but off into the complicated scene of human institutions and states of mind.

The other interesting characteristic of his study was that it was based upon the use of a statistical technique. The data with which he worked were sets of statistical tables, showing the course of bullion prices, commodity prices, wages, interest rates, rent, and profits under the greenback standard. His primary conclusions then dealt with matters of sequence, relative change, and the like, and constituted an inductive display of the effect of the greenbacks upon the purchasing power of the recipients of various classes of income. In effect, his task was the collection and interpretation of relevant statistics. In attempting, however, to explain the meaning of his statistics and to establish causal relationships, he was compelled to go outside his quantitative data. His recourse here was to the economic arrangements through which incomes reach their recipients, and to the course of external events which, by affecting the credit of the government and public confidence in the greenbacks, led to price fluctuations and the further disturbance of the relationship between income groups.

It is not necessary here to go into the nature of his more general conclusions, except briefly. He found that profits increased at the expense of wages, interest, and rent. He concluded that prices fluctuated much more in relation to the state of public confidence in the outcome of the war than in relation to the quantity of the currency. He did not find that high profits stimulated an increase of physical production, nor that wartime "prosperity" was more than an illusion to the great mass of the population. These and other findings he attempted to give no general theoretical importance, presenting them as mere statements of fact for the brief period covered. The bearing of this investigation upon the development of his theoretical views was, however, of undoubted importance. For he was dealing with precisely those topics, value and distribution, upon which economic theory had most fully and confidently spoken. Treating them quantitatively in the light of a universally disturbing currency situation, he found that his conclusions fitted into no scheme of the normal equilibrium of economic forces. Such value as they had was merely by way of elucidating the course of economic welfare within a given period and under given circumstances.

It may be said in passing that the effects of the greenbacks continued to interest Mitchell, and he published in 1908 a companion volume to the *History,* entitled *Gold, Prices, and Wages under the Greenback Standard,* carrying the record down to the resumption of specie payments in 1879. This volume consisted almost entirely of statistical tables, with only text enough to explain the sources and methods, and to indicate the general character of the results. The intention was that the volume should furnish the statistical basis for a thoroughgoing investigation of the economic consequences of the greenbacks during the whole period of their inconvertibility. That task was never completed, due doubtless to the shifting of Mitchell's interest to a wider field of investigation. As anyone who has examined them will understand, the volumes on the greenbacks represent an amount and quality of work almost incredible for a man to have achieved by his thirty-fifth year in the midst of other duties. Thus, long before anyone knew or listened to his views on economic theory, indeed before he seems to have formulated them at all clearly, Mitchell had established a reputation as perhaps the most competent handler of economic statistics in the country.

Mitchell appears to have been jarred out of whatever predilections he may have held for classical or neoclassical economic theory by Veblen's essays near the turn of the century. He was impressed by the view that economics must approach its problems from the evolutionary point of view, and by the idea that the key to an adequate understanding of the working of the economic system must rest upon an understanding of the human habits of thought and institutions which direct economic activity. He was particularly impressed by the distinction which Veblen made between business, or pecuniary, and industrial, or technological, aspects of economic activity. This distinction, developed brilliantly in the *Theory of Business Enterprise* (which Mitchell considers "a great book"), became an essential instrument in his scheme of thought.

The distinction was one peculiarly designed to fit into Mitchell's handling of his own problems. As we have seen, he was engaged in an investigation of economic welfare from the point of view of the effects of an inconvertible currency system. He discovered, of course, that, while welfare depends upon an abundance and equitable distribution of concrete goods, the most remarkable variations in the well-being of classes of the population arose merely from the financial disturbances related to a fluctuating monetary unit. He found, too, that the fluctuations in physical production were in no way parallel or comparable to the extraordinary variations in money prices and pecuniary rewards.

In other ways his investigations were designed to throw his analysis of economic activity into other terms than those of an equilibrium of economic forces. For example, the monetary system which could play such extraordinary tricks upon people's income and their physical well-being was purely a human institution, devised and instituted by a legislature in extreme ignorance of its ultimate consequences. It appeared that the application of human intelligence to the solution of economic problems and to the planning of economic life was a more fertile and fruitful field of study than the subtle elaboration of what logical results would flow from the play of the self-regarding impulses under a competitive organization of economic life. Briefly, economic theory seemed to make too simple and abstract a picture of the institutions through which economic activity found expression. It was through the channel of monetary history that Mitchell became acutely aware of the decisive importance of humanly devised and humanly changeable institutions. And it was these that increasingly caught his interest.

Again, his studies centered attention upon the controlling importance of prospective money profits in directing and controlling industrial processes. It became apparent how loosely profits were related to the supplying of useful goods, how largely they depended upon mere differential trading advantages, and how directly they were affected by exigencies and circumstances of every conceivable sort. There thus sprang up in his mind a vivid interest in the relationship between the businessman's pursuit of profits and the community's concern for the well-being of all its members. Concrete data seemed not to fit in, for example, with J. B. Clark's view of the automatic solution of this problem.

Moreover, the period of time with which Mitchell was concerned in his earlier studies was one of most rapid and spectacular change in American economic life. In business methods, technical methods, population, agriculture, labor relationships, indeed over the whole field of economic organization, there was a rapidity of development which could hardly impress an objective observer as less than a revolution. It was, in fact, the industrial revolution getting thoroughly under way upon the American scene. Other observers, of course, continued to speculate in static terms, while recognizing the immense significance of this "dynamic" movement. It was these phenomena that J. B. Clark had in mind as the fruitful field of the economist's labor. But somehow the older methods of theoretical analysis seemed never quite to come to grips with the facts. No one could classify or codify this sweep of events into economic laws. A puzzling and prominent aspect of the period was that the growth was not regular, but proceeded by fits and starts. Backward and forward swung the pendulum of high profits and low profits, intensity and dullness of industrial activity, plenty and want for laborers.

All these things and a variety of allied questions came of necessity under Mitchell's attention in the course of collecting and interpreting his greenback data. The whole nature, scope, and method of his earlier work came, therefore, to serve as a sort of apprenticeship for his most important contribution to the economic thought of our times, his study of business cycles.[1]

[1] Mitchell's book, *Business Cycles,* was published in 1913. It was written in the years 1909-12, during the period of his residence at the University of California, where he had gone from Chicago, and in the following year when he was unattached to any institution.

II

Crises and panics had long attracted the attention of economists, but during the nineteenth century they were generally entered in theoretical treatises as an afterthought to monetary or banking theory. By the early years of the twentieth century, analysis had, to a limited extent, moved from the earlier recognition of the periodicity of crises to a recognition of the somewhat regularly recurring round of alternating periods of prosperity and depression, or of greater and lesser intensity of business activity. The mounting interest in the subject is attested by the considerable number of theories propounded in explanation of cycles during the first decade of the century. These theories, by well-known and competent economists, were for the most part highly plausible, but suffered from the one major defect that they all offered different explanations. The subject was therefore wrapped in not a little mystery which the diversity of explanations only deepened. At the same time, it was of the most immediate and practical importance, in that the instability of business activity served to accentuate all the imperfections which marred the efficiency of the economic system in serving the needs of the community. It constituted therefore a standing and stimulating challenge to the intellectual faculties of scientific investigators.

It is not unlikely that Mitchell's imagination was most directly touched by Veblen's treatment of the subject in the *Theory of Business Enterprise,* and grew as he became acquainted with the theories of Hobson, Beveridge, Aftalion, Sombart, and others as they appeared. One defect he found in them all, that they betrayed a great paucity of facts. From a certain antecedent standpoint of general theory and from certain limited if relevant facts, each succeeded in raising a logical structure of explanation, the plausibility of which was only marred by the fact that no one was any more plausible than some of the others. Mitchell's approach was novel and, in a degree, revolutionary. And since his approach to this problem is in a considerable degree the key to his whole contribution to economic theory, we may examine it with some care.

His primary conviction was that little could be done with logic, or with mere casual knowledge of a limited range of facts. These had been tried with no better outcome than the mutual defeat of competing theories. What was required, he conceived, was "the collection and analysis of elaborate records of business experience in quantitative form." It seemed to him necessary to consider not some, but all of the facts that might measurably affect the regularity of business activity. The facts, too, must be of a sort not merely capable of discovery, but of measurement. And the only facts which seemed to admit of scientific treatment were statistical facts. "Since in his efforts to make accurate measurements the economic investigator cannot devise experiments, he must do the best he can with the cruder gauges afforded by statistics."[2]

He was, moreover, convinced that the data should not be gathered with reference to any theory already in mind, but that, on the contrary, after the collection of all the available relevant facts had been completed, they should be carefully analyzed and made to yield such conclusions as they themselves contained. Here then we find Mitchell engaged upon a study for which his greenback studies had eminently fitted him, both as regarded the use of statistical tools and as regarded a certain detached and objective viewpoint. The scientific task was enormously larger since his problem ramified into the most remote corners of the intricate processes of the economic system and carried the burden of suggesting remedies for business instability, as well as of discovering its causes. Concerning the theoretical bearing of his task it is not probable that Mitchell gave much thought or had any clear conception at the outset, and the point may be postponed. Probably he saw merely an interesting and important investigation awaiting someone, and saw in it possibilities of quantitative statistical analysis of the sort of which he was master.

However objective one might wish to make such a study, it was nevertheless essential to have some framework of ideas into which to fit the data. In short, there must be some test of relevancy. In setting up this test, Mitchell displays an implicit theoretical position. For he prefaces his investigation by a brief statement of his view of the operation of the economic system. And in this statement, negatively, or by neglect, he may be said to discard adher-

[2] *Business Cycles,* p. 20.

ence to any orthodox view of economic processes; while, positively, his descriptive analysis rests upon the distinction, taken explicitly from Veblen, of the distinction between business and industry. From an isolated sentence in the *History of the Greenbacks*[3] one supposes that he was then beginning to think in those terms. The distinction is more clearly stated in *Gold, Prices, and Wages under the Greenback Standard*[4] in an incidental way. But in the writing of *Business Cycles* Mitchell made it the fundamental conception upon which his whole examination rested.

His approach to the study of business cycles depended, he conceived, upon an adequate understanding of the role of money in the economic organization. In the second greenback volume he had written, "Writers upon money usually state that it performs three functions, serving as a common denominator of value, a medium of exchange, and a standard of deferred payments. To enumerate the functions of money in this fashion, however, is very far from suggesting the importance of the role which money plays in economic life. To understand this role attention must be fixed upon the complex mechanism of prices, rather than upon money itself."[5] "Money prices, in brief, are the formal basis on which the economic relations of individuals in modern society are organized and the formal mechanism by which economic processes are carried on."[6] "The system of prices has a quasi-independence of the will of individuals or even of the whole community. . . . Men who make use of the system of prices in their economic activity are constrained to obey its logic and to adapt themselves as best they may to its technical exigencies."[7]

This view is enlarged upon and clarified in *Business Cycles*. On its economic side, modern life is organized within the confines of the "money economy," an institution of which the essential feature is "not the use of money as a medium of exchange, but the fact that economic activity takes the form of making and spending money incomes."[8] To the community as a whole, material wellbeing is determined by the abundance of useful goods. But to the

[3] Page 395.

[4] Page 280.

[5] *Gold, Prices, and Wages under the Greenback Standard,* pp. 279-280.

[6] *Ibid.,* p. 281.

[7] *Ibid.*

[8] *Business Cycles,* p. 21.

individual, or family, it depends, not upon efficiency in making useful goods, but upon the command of an adequate money income.

Under the money economy, the production of useful goods waits upon the prospect of profit. "The elaborate co-operative process by which a nation's myriad workers provide for the meeting of each other's needs is thus brought into precarious dependence upon factors which have but a remote connection with the material conditions of well-being—factors which determine the prospects of making money."[9] The industrial and commercial processes of producing and distributing goods comprise a highly complicated concatenation of processes, linking the whole industrial system in a mechanical interdependence. The functioning of these mechanical processes, however, awaits the exercise of the discretion of businessmen whose interest in the processes is almost solely confined to the money profit to be obtained from them. In other words, goods produced are a byproduct of the process of earning profits.

The business enterprises, whose interests are primarily pecuniary, are themselves bound together in a system of financial interdependence, somewhat analogous to the mechanical interdependence of industrial processes; and the most marked aspect of this interdependence is the endless chain of interlocking indebtedness between business enterprises. It is the logic and exigencies of this scheme of financial relationships that everywhere dictate the course of action of enterprises engaged in the pursuit of profits; from which "it follows that a theory of modern prosperity must deal primarily with business conditions—with the pecuniary aspect of economic activity."[10] Fluctuations of business activity must therefore be regarded as a problem in the fluctuating prospects of profits. Until that point has been reached, the problem has not even been stated.

From the businessman's point of view, the fundamental condition of business prosperity is the price margin between purchase prices and sale prices, in conjunction with the volume of transactions. The quest of profits thus takes place through the mecha-

[9] *Ibid.*, p. 22.

[10] *Ibid.*, p. 25.

nism of the system of prices. Three types of goods—commodities, services, and rights such as securities and bank credits—are objects of purchase and sales. Between the prices for the various kinds of goods there exists a complicated set of relationships which bind them into a system. "The prices ruling at any given time for the infinite variety of commodities, services, and rights which are being bought and sold constitute a system. That is, these prices are so related to each other as to make a regular and connected whole."[11] The retail prices of commodities are related loosely to one another, and more directly to wholesalers' and manufacturers' prices. The prices of producers' goods are related in a variety of ways to those of consumers' goods. As goods proceed through the series of transactions which carry them to their various ultimate uses, the price margins at one point and another are marked by great diversity; but these diversities are sufficiently regular to furnish to businessmen a tolerable basis for making profits out of supplying the community with the goods it habitually uses.

Without going into Mitchell's careful analysis of price relationships in any detail, we must grasp his conception that the price system constitutes a closed system, "an endless chain." "The prices of producers' goods do not form the ends of the series of price relationships, but the beginnings of new series of relationships which run backward with countless ramifications and never reach definite stopping points."[12] "The price system has no definable limits in time. No analysis can get back to the ultimate term in the endless series of bargains which helped to make the prices of the present. . . . Nor has the system of prices any logical beginning or end."[13] It is "a system infinitely flexible in detail yet stable in the essential balance of its interrelations, a system like a living organism in its ability to recover from the serious disorders into which it periodically falls." This system is the "social mechanism for carrying on the process of providing goods," and its distinctive role is to "render possible the rational direction of economic activity by accounting."

The high development of corporate organization and the complicated division of functions within it cause Mitchell to regard as obsolete and negligible the usual simplified view of the direction

[11] *Ibid.*, p. 27. [12] *Ibid.*, p. 28. [13] *Ibid.*, p. 31.

of economic activity, according to which the "capitalist-employer" is supposed to supply the capital, assume the risks, superintend the operation, and take the profits of his business. He is attempting to set forth a realistic view of the direction of economic activity.

A primary defect of economic organization under the money economy is the lack of effective co-ordination between the operations of independent enterprises. "In detail, then, economic activity is planned and directed with skill; but in the large there is neither general plan nor central direction."[14] Production is "controlled by no large human purpose." It follows the line of prospective profits, not the line of human good. The money economy insures no humanly desirable distribution of goods. It merely assures abundance to those sufficiently canny to intercept a generous money income. Moreover, the smooth functioning of the system is marred by large elements of uncertainty which increase as progressive technique and widening markets baffle the intelligent planning of enterprisers. It is, then, in the nature of the money economy, the structure of the price system, and the defective co-ordination of the separate business enterprises that one must look, under modern conditions of complex economic life, for the explanation of the recurring disorders of the economic system.

It should be understood that the range of ideas which we have been discussing does not constitute any of Mitchell's conclusions from his detailed analysis of business cycles. It is the framework of preliminary ideas within which he proposes to fit his findings. The controlling preconception is the subordination of industrial and commercial processes to the money-making process. "The ebb and flow of economic activity is brought into dependence upon the profits of business enterprises. Upon this basic fact the whole investigation rests. Profits, in their turn, depend upon the margins between buying and selling prices, and upon the volume of transactions. First, then, we must seek for data to measure variations in prices and variations in the volume of trade. . . . The prices of importance in gauging profits are not merely the prices of commodities, but also the prices of labor, of loans, and of business enterprises themselves."[15]

The test of the relevancy of data therefore becomes their bear-

[14] *Ibid.*, p. 38.

[15] *Ibid.*, p. 92.

ing "upon the crucial problem of business profits, either by dealing with factors which determine profits, like prices and volume of trade; or by dealing with necessary conditions for the successful quest of profits, like the currency, banking, and investment; or by offering direct gauges of business success and failure, like the statistics of profits themselves and of bankruptcies."[16]

It may be contended that this descriptive framework has no particular bearing upon one or another type of economic theory, but Mitchell would not concur in that opinion. Marginal-utility theory is mainly concerned with an analysis of subjective values, of which prices are the objective monetary expression. Mitchell is not concerned directly with the subjective side of the valuation process, but emphasizes the organic character of the price structure. It may be held that he does not discredit Austrian theory, and that he is concerned with quite a different problem which does not cut across the value problem. The same comment could be made concerning the relation of his descriptive analysis to the neoclassical value theory, as represented by Marshall's theory of the normal equilibrium of supply and demand. It is true, of course, that his problem is a different one from theirs. But the introductory chapters of *Business Cycles* cannot be intelligently read without perceiving that they rest upon a groundwork of ideas incompatible with any of the variant statements of orthodox economic theory.

The difference centers around Mitchell's conception of the role of money, and the distinction between pecuniary and industrial factors in economic activity. Most modern types of theory with a classical genealogy trace the motives of economic activity back to certain fundamental human traits which may be roughly divided into two classes—those which incite to activity in order to secure the satisfactions of consumption, and those which discourage activity because of the irksomeness of effort. Upon these underlying "real forces" is built up the conception of the system of normal prices representing an objective expression of an underlying human calculation of alternatives. Money enters into the case merely as a convenience, to facilitate the smooth working of the economic system, but not giving it any of its fundamental features.

[16] *Ibid.*

Mitchell, on the other hand, sees money, or the pursuit of a money income, as the primary motive in business activity. This pursuit may be of a highly rational sort, but it is rational only in the sense that the money economy enjoins a certain kind of activity on pain of the failure to acquire the desired income. The money economy is itself a dominating feature of our institutional life which shapes the nature and direction of economic activity. It provides the logic of business, and the fact that business enterprise is guided by that logic throws no light upon and bears but a loose relationship to the material well-being of the community. One may, indeed, follow the logic of pecuniary gain to the patent damage of the community's well-being.

It must, then, be plain that Mitchell's scheme of thought is antipathetic to the methods and conclusions of marginal-utility analysis, to all theories of distribution based upon it, and to all notions of an equilibrium of "real" economic forces which are expressed in a system of prices. He regards economic motivation as largely the outcome of the institutions by which human nature is disciplined. His concern is to discover the nature of these institutions, and then by the study of objective data to explain the consequences of their operation.

As we are interested here only in the more general aspects of Mitchell's theoretical position, it will be unnecessary to follow the detailed argument of his study of business cycles. It may be said briefly that it follows the plan which he had so thoroughly learned to use in his previous greenback studies, of gathering, ordering, and interpreting statistical data. His statistics cover the period from 1890 to 1911, and are drawn from the United States, Great Britain, France and Germany. He follows the course of price fluctuations of consumers' goods at retail and wholesale, of producers' goods, of manufactured goods and raw materials, of organic and inorganic goods. He follows the course of wages, of interest, and of security prices in detail and under various methods of classification. He examines the physical volume of trade; the volume of currency; the condition of banks; the course of saving, investment, new enterprises, and speculation; and the records of profits and bankruptcies. Out of this imposing mass of statistical evidence is drawn a comprehensive statement of the sequence of events during the course of a cycle, accompanied by a series of suggestions of ways and means for stabilizing business.

Quite apart from theoretical considerations, the factual data in *Business Cycles* added enormously to the existing knowledge concerning business fluctuations. And the study, by demonstrating the advantages of realistic treatment, was the decisive factor in turning the investigation of cycles from speculative to quantitative analysis. By tracing the ramifying effects of cyclical fluctuations into endless relationships to other aspects of the economic system, Mitchell gave the lead for many new investigations; so much so, in fact, that within a decade after the appearance of the book the study of almost all current economic problems had been in some considerable degree revolutionized.

Out of his collected data Mitchell attempted to distill a theory of cyclical fluctuations. His theory was, however, of a sort quite distinct from preceding ones. For, while they had, on the basis of certain limited data, proceeded by logical processes to trace fluctuations to one or two outstanding "causes," Mitchell's theory consisted of a statement of certain sequences or relationships which his statistics showed to recur more or less regularly during the progressive movement of business activity from depression to "prosperity" and from "prosperity" to depression. In studying one cyclical period after another, he had, of course, to give due attention to the fact that each cycle was affected, in the process of "cumulative change," by unique, nonrecurring forces such as war demands. In interpreting his statistics he was convinced, however, that these unique forces, though they made each cycle differ characteristically from every other, could be sufficiently abstracted to permit a statement of the regularly recurring sequences and relationships between prices, incomes, physical production, profits, and the other phenomena included in his investigation.

In advancing a theory consisting of a statement of these sequences and relationships, Mitchell appealed to no final or ultimate "causes" of cycles. It appeared to him that the round from prosperity to crisis to depression to recovery, the continual alternation of expansion and contraction of business activity, is cumulatively "caused" by the exigencies of business enterprise as it operates through the money economy under modern industrial conditions.

In a certain definite sense, then, one may say that Mitchell's theory is of a "static" sort. That is to say, he uses the ideas of "process" and "cumulative causation," not to describe the evolution of the institutions through which economic activity takes place, as Veblen had done, but to describe the fluctuations which business undergoes within the confines of a given institutional situation. So far as his investigation is concerned, institutions are a relatively constant, not a highly variable, factor.

Just what the institutional situation is, in terms of which he works, he is at no pains to make clear. He does not, for example, attempt to say how far modern business is competitive, and how far monopolistic, nor whether these alternative modes of business organization affect his results. One will, in fact, search in vain in Mitchell's work for an explanation of what he means by an "economic institution," though he stresses so strongly the importance of institutions. He emphasizes only one, the money economy, but that, of course, is an aspect of economic life which has existed almost immemorially and in the face of the most disparate institutional situations.

If one may cavil at the indistinctness of the institutional picture, it must be admitted, on the other hand, that the conducting of the investigation in the light of a given institutional situation gave to *Business Cycles* its great theoretical importance. The principal argument of orthodox economists against Veblen's evolutionary approach has been that, while it might throw light upon the development of economic institutions, it could add nothing to our knowledge of the process of the economic system as at present constituted. They have, in the more self-conscious atmosphere of the twentieth century, regarded their analysis as concerned with a cross section of time, and have elaborated their systems of normality with the qualification that the principles which they expound are applicable only to the present situation—whatever may have been the economic organization of times past.

By confining himself to the present and immediate past, Mitchell undercut this defense of the orthodox discipline. The whole bearing of his study, in fact, tended to discredit the notions of normality and of an equilibrium of forces. He writes that, "One who turns from reading economic theory to reading business history is forcibly impressed by the artificiality of all assumptions of a 'static' or even a 'normal' condition in economic affairs. For, despite all efforts to give technical meanings to these ambiguous terms, they suggest the idea of an unchanging order, or of an order which economic principles are always tending to re-establish after every aberration. But a review of business annals never discloses . . . a 'static' or a 'normal' state in either of these senses. On the contrary, in the real world of business, affairs are always undergoing a cumulative change, always passing through some phase of a business cycle into some other phase. . . . In fact, if not in theory, a state of change in business conditions is the only 'normal' state."[17]

This disbelief in normality was doubtless held by Mitchell previously to the initiation of the study. But the result of the investigation was to confirm the disbelief. For nowhere could there be discerned any line of normality from which prices diverged or to which they were drawn back. On the contrary, there seemed to be an inevitable cumulation of events which carried business activity through successive phases, to the constant and never-ending disturbance of the material welfare of various classes of people. In the end, therefore, Mitchell was confirmed in the conviction that the only way in which to formulate a realistic statement of economic activity was in terms of a process, of a cumulative sequence of events. In those terms nothing is "normal" and nothing "abnormal." All events and eventualities are equally a part of the process. The economist is obligated, so far as may be, to throw light upon the process, and the only way in which to do this is by way of careful examination of all the objective facts bearing upon whatever problem he may have in hand.

Veblen had, of course, propounded the theory of process as the fundamental notion of economic speculation. Working in those terms, Mitchell succeeded in making the greatest single contribution to knowledge concerning one of the most mysterious phases of current economic life. It may not be too much to say that he only succeeded in doing so by reason of the freedom of his mind

[17] *Ibid.*, p. 86.

from the constricting hold of any formal system of theory. Yet one cannot say that his work demonstrated the uselessness of the more speculative attacks upon this problem. For most of the clues which he followed were furnished by men whose speculations were formally tied to some system as he himself pointed out. And his results demonstrated less any lack of perspicacity on their part than the incompleteness of their theories. They were for the most part not wrong; they merely attributed causation to factors which, on more intimate view, appeared only as a few among many factors in the cumulation of causes. Mitchell would perhaps say that speculative thinkers are useful people to supply leads to stimulate the thinking of scientific investigators. But he would hold that cogitation is no substitute for laborious investigation if we are to arrive at any adequate comprehension of the complicated processes through which the economic system functions.

That, of course, was an idea which had been suggested by such theorists as Clark when he marked out "economic dynamics" as the fertile field for future economic investigation, and Marshall, when he suggested that quantitative analysis must be the field of future importance. Mitchell is decidedly the apostle of quantitative analysis. But he would say that such analysis could only be handicapped by working in subservience to a preconceived system like Clark's, and that the problems encountered would not fall into the categories of Marshall's qualitative analysis. The only scientific generalizations are those which arise out of the data available. Speculative generalizations are only a second-best in the absence of other knowledge, and logical systems deduced from simplified postulates cannot by any stretch of the imagination be held to give an adequate or accurate account of the operation of the economic system.

Enough has perhaps been said to permit the relation of Mitchell's findings to orthodox economic theory to be crystallized into a single point. Veblen's method of demolishing systematic theory is to cast doubt upon its *postulates*. Mitchell appeals to his mass of facts and distills them into a convincing picture of economic processes which lends no support to the *conclusions* of systematic theory. He thus appears, not as a parrot of Veblen, but rather as his complement, proceeding, from a different angle and with a wholly different technique, to complete the discrediting of the scheme of thought in which economic theorists have framed their systems.

Quantitative analysis, in the hands of its very competent user in the field of economics, has thus come to take the form, not of verifying or modifying the conclusions which have been arrived at by qualitative analysis, but of marshaling facts without reference to "principles" and drawing such conclusions or generalizations as the facts themselves afford. It is possible to see, then, why *Business Cycles,* which was not primarily a project in economic theory, has achieved a position of such outstanding importance in the field of theory. The gradual dissemination of the point of view and the conclusions contained in it has not only had the effect of weakening the hold of orthodox economic views upon the younger generation of economists, but has at the same time introduced them to a type of analysis which contains the promise of fruitful results. One may perhaps say that Mitchell's outstanding contribution to the economic thought of his time has consisted in promoting the metamorphosis from the attempt to normalize economic life to the attempt to comprehend the complicated processes of economic life through a realistic quantitative investigation of the facts.

We have perhaps given sufficient consideration to the aspects of Mitchell's theoretical position illustrated by his study of business cycles. It is curious to recall how little attention the theoretical implications of the book elicited upon its appearance. Widely praised by economists as a factual study of cycles, it received only belated and partial consideration as a treatise on economic theory. Its formidable size did not invite full and careful reading, and one must suppose that economic theorists did not generally read, nor fully comprehend, the significance of the second chapter and the other brief scattered passages within which the theoretical framework is stated.[18]

[18] Professor Pigou, for example, in a commendatory review in *The Economic Journal,* March 1914, states that this "massive work—by far the most elaborate treatise on the subject that has yet appeared in the English language—must command the attention of all students of industrial fluctuations." He makes no mention of its relation to general economic theory and, though quoting at length on the general viewpoint, appears not to recognize that it represents

There has been no intention of intimating that his work on the subject was authoritative or final. He himself concluded his study with a modest disclaimer of finality, and with suggestions for future investigation. It is strictly consonant with his view of the economist's task to admit that finality is an unattainable ideal. Impressed with the enormous complexity of the institutional arrangements under which we live, he thinks it the task of many men and many years to uncover and display an accurate understanding of them. His own work thus ranks as but one item in a vast co-operative scientific effort to trace economic processes into their endless ramifications.

Moreover, the ceaseless changes which develop tend to doom any study of current facts to early obsolescence, and to involve investigators in the eternal process of keeping pace with the facts. For, in Mitchell's view, which is a moral view, the facts most worth investigating are those most immediately bearing upon the well-being of the social body. Such facts are, of course, present facts. The search for them is dictated by problems of social maladjustment, and the end in view is social amelioration.

His study of business cycles established Mitchell as the foremost student of that problem, but it was perhaps the fortuitous circumstance of the disconcerting behavior of prices during the war and after that swept him into wider prominence. Under the saddening impact of recent experience, the problem in which he pioneered has come for the time being to be ranked as perhaps the most important and fundamental of our economic problems, with the consequence that Mitchell has come to be regarded as one of the foremost American economists. The fortuitous character of his rise is not, however, likely to detract from the influence of his example, because, for one thing, the problem with which he has been primarily concerned has been recognized as intimately related to almost every other economic problem, and, for another, the objective investigation of economic problems has pushed perhaps permanently into the foreground of the attention of economists. At

a scheme of thought quite antipathetic to his own doctrinal system. Merely to call it a study of "industrial fluctuations" is, of course, to misconceive its nature and to overlook the significance of the title, in which the word "business" is used in a technical sense as contrasted to "industrial," with malice aforethought.

the same time, a growing recognition on the part of the responsible leaders of political and economic groups of the complexity of our economic arrangements has led them to expect economists to play the part of experts.

There is thus transpiring a removal of the circumstances which earlier inhibited American economists from any appreciable influence upon the course of events, and turned their attention largely into speculative channels. Mitchell was, in a sense, the forerunner of this current phase, and is the recognized leader of the group of economists whose interest lies in a realistic approach to economic problems. Of course, other economists before Mitchell had made excellent monographic studies, particularly in the fields of currency, transportation, monopoly, and taxation. Perhaps the difference which marked most of them off from Mitchell and others who work in his spirit was that their investigations started from the preconceptions of a definite system of logical theory. Mitchell's primary preconception, on the other hand, is that the economic process cannot be constrained within the bounds of a system of logic. His goal is objective reality, not logical consistency.

III

If Veblen is the Messiah, Mitchell is at least the high priest of what has come to be called in the United States "institutional economics," the devotees of which are coming to include a considerable proportion of the more capable younger economists. It cannot be said that there is any particular unanimity among them as to the proper scope and method of this new and well-advertised brand of economics. They hold in common a highly skeptical attitude toward the "principles" of all variants of classical economic theory. Their common aim is to throw light upon the institutional arrangements through which the economic process functions. They entertain a somewhat attenuated hope that out of their labors may ultimately arise some sort of synthesis that will constitute a generally acceptable body of economic theory. Loosely bound together, they recognize one another by these signs.

They are in the meantime delving each in his own corner of the economic system under the impulse of various motives. Their work at present consists for the most part of monographic studies. They maintain a high ideal of scientific objectivity, but are in general guided in their choice of subjects for investigation by the desire to be of assistance in an intelligent scheme of social reform. Wherever the operation of our economic institutions appears to raise some human problem they will be found, whether in questions of international finance, railroad administration, business combination, labor relations, legal institutions in their economic bearing, the distribution of income, corporation finance, or what not. Their scent for problems is like that of bears for honey.

For such a group there can obviously be no official spokesman. As the most eminent of their number, Mitchell speaks with somewhat more authority than others. He has, too, given more thought to the general theoretical problems of this type of economics than any of his fellows, and in a disconnected series of papers and articles during the last fifteen years has given expression to ideas which may be pieced together into a sort of philosophy of the institutional approach to economics. We shall briefly examine these ideas in so far as they run in other terms than those imbedded in the framework of *Business Cycles*. It must not be supposed that they represent any consensus on the part of institutional economists. But it must at the same time be understood that they roughly reflect the intellectual background to the work of a great many economists.

It has already been pointed out that Mitchell accepted Veblen's view that economic studies must be congruent with the evolutionary viewpoint. This is the basis for fitting facts into a conception of "process" instead of "equilibrium," and for eschewing the concept of "normality" in economic life. It has further been noted that, while Veblen utilizes his idea of the genetic approach by interpreting history in the large in its economic bearing, as the introduction to rather sweeping generalizations on contemporary economic organization, Mitchell gives the idea content by a minute analysis and interpretation of facts and figures bearing upon a particular limited problem. The genetic approach is obviously one that lends itself to a great variety of method. Taken as a somewhat vague orientation of ideas, it may be said to rank as perhaps the primary preconception of institutional economics, and as an essential part of Mitchell's armory of general ideas. It serves both as the basis of his dissent from older types of theory and as the foundation for the framework of his constructive work.

No problem of economic theory seems more significant to Mitchell than the economist's view of human nature. It is one of the fundamental items of his viewpoint that no theory can be considered scientifically tenable which rests upon a view of human nature at odds with the best authenticated views of psychologists upon the subject. Since modern psychology gives no support to the hedonistic view of human nature, with its emphasis upon action as the result of rational choice between the alternatives of pleasure and pain, all systems of theory that explicitly or implicitly rely upon such a view become in his mind at once untenable. His interest in this aspect of economic theory has led him to follow at least as closely as any other economist the recent literature of psychological investigation, and to take his bearings anew from time to time with the advances in psychological knowledge. To most economists with an interest in psychology the rapidly changing views and diversity of opinion in that field have been frequently disconcerting, not to say irritating. For, attempting to build upon a sound psychological foundation, they find that they have built upon shifting sands. The reaction, among those who demand a feeling of certainty in their economic principles, has been in the direction of a relative or even absolute denial of the dependence of economic theory upon psychology.

Mitchell, however, is plagued by no such impatience. For he thinks that no fields of knowledge dealing with human behavior, as economics does, can attain to thoroughly scientific generalizations until we know "why we act like human beings." He has a sufficiently modest apprehension of the achievements of modern science to admit that there is very much that we do not know. And he is willing to reserve judgment upon doubtful points in the absence of authentic knowledge. He is the better able to do this, in that he is not wedded to any scheme of logical theory which demands at least an implicit set of psychological assumptions.

Like most students of the social sciences who took the trouble to examine it, he was much impressed by William McDougall's *Social Psychology,* which appeared in 1908. Dealing with the functioning, rather than the structure, of the mind, it appeared to bear directly upon the problems of human behavior, with which the social sciences are concerned. This approach to psychology strengthened his disbelief in the psychological postulates of current types of systematic economic theory.[19] And he has, for purposes of his own thinking, for the most part accepted McDougall's central thesis that the instincts are the prime movers in human activity. In this view, the *ends* of life are instinctive, and the instincts which dictate them are stable and enduring. The factor of intelligence, or rationality, enters into the case as an instrumental *means* by which men seek to realize the instinctively appointed ends. For the most part the means employed represent merely types of action which have become habitual. They operate through the agency of established institutions which are themselves no more than crystallized habits of thought and action.

Where, as in business enterprise, the element of rational calculation is obviously an important factor in economic activity, rationality is not related to the underlying ends of life. No more is apparent than that certain types of action are rational in relation to the institutions through which they function. Business enterprise functions through the "money economy" and can be rationally practiced on the basis of a system of accounting. But this means only that men exercise intelligence in the pursuit of a money income and tells us nothing about the relationship between money incomes and the "psychic incomes" or satisfactions which are derived from spending the money incomes. The arts of consumption are, indeed, so almost completely customary in character that they are not at present reducible to analysis in terms of rationality. The point of the argument is plain—that economic rationality is itself a social phenomenon calling for explanation; that it can be explained only by resort to a scientific explanation of human nature; that it grows out of a certain type of institutions, or means to ends;

[19] See, e.g., the discussion of Pantaleoni, Fisher, Clark, and Marshall in an article, "The Rationality of Economic Activity," in the *Journal of Political Economy,* February and March 1910. "A man who reads books like McDougall's and accepts their conclusions may well become skeptical of the value of economic theory like that provided by Jevons, Fisher and Clark."

and that rational action comprises only a limited part of economic activity.

One approaches thus the reason for the peculiar tenderness of economists of Mitchell's type for modern psychology. It forms an inseparable link in the argument for the genetic approach. When it has appeared that the more fundamental, if obscure, ends of action are imbedded in stable instincts, it follows that the great majority of human actions are but the habitual means through which these obscure ends are sought. Habitual action is the creature of time and place, endlessly changing. An adequate understanding of most of our behavior is thus to be sought by tracing the mutations of the institutions which have led up to the present situation. Some notion of the future may be derived from a thoroughly realistic understanding of the present. Mitchell's position here is not far removed from that of Veblen. It crystallizes about the conviction that the important field of economic investigation is the institutional structure of society. Original human nature is, in a sense, removed from the economist's problem. Interest comes to center on that part of behavior which cumulatively changes under the moulding influence of institutions.[20]

Mitchell is particularly receptive to the opinion of Professor Thorndike that human nature is highly plastic, in the sense that action is the result of a highly complex interaction of instinctive propensities, and that what passes for human nature is largely types of action called forth by a given institutional situation. He applauds the substantially similar view of Graham Wallas that the "human nature" of one generation is determined chiefly by its nurture at the hands of the preceding generation.[21] The corollary of these views is, of course, that under different institutions men

[20] "If our present beliefs are confirmed, that the human nature which men inherit remains substantially the same over millenniums, and that the changes in human life are due mainly to the evolution of culture, economists will concentrate their studies to an increasing degree upon economic institutions[,] . . . the factor which certainly admits of change and perhaps admits of control." From the presidential address, "Quantitative Analysis in Economic Theory," delivered before the American Economic Association, December 1924. Published in the *American Economic Review,* March 1925.

[21] See an article, "Human Behavior and Economics," in the *Quarterly Journal of Economics,* November 1914.

might behave quite differently without in any sense violating the dictates of original human nature.

The peculiar appeal of such views to Mitchell is that they form the basis of optimism concerning the possibilities of social reform. They catch him on his moral side, which is strongly developed. They wipe out the conservative defense that this or that reform is "against human nature." They ally themselves naturally to the psychologists' view that intelligence, or thinking, is an instrument reserved for use on special occasions when men are faced by problems not amenable to an habitual solution. It thus appears that, as society is faced with major problems, it may effect an effusion of intelligence which will guide its course toward ends which it has set for itself. The prerequisite for intelligent guidance to socially determined ends is an adequate understanding of our present institutional structure. Thus the social scientists who are engaged in supplying this knowledge are playing an essential part in the progressive solution of social problems.

It follows from Mitchell's attitude toward psychology that the relation of economics to that science is something more than a mere debt. Not only does psychology give economists a framework of ideas within which to conduct their investigations. Conversely, economists are uncovering a mass of facts concerning how men behave and to that extent are making a contribution to social psychology. "It was because hedonism offered a theory of how men act that it exercised so potent an influence upon economics. It is because they (the social psychologists) are developing a sounder type of functional psychology that we may hope both to profit by and to share in the work of contemporary psychologists. But in embracing this opportunity economics will assume a new character. It will cease to be a system of pecuniary logic, a mechanical study of static equilibria under nonexistent conditions, and become a science of human behavior."[22]

The logic of this viewpoint has led Mitchell, in recent years, to incline toward the "behaviorist school" of psychologists. From the standpoint of that school, knowledge of human nature is confined to the observation of its objective manifestations. In the light of that preconception economics becomes less a debtor than a con-

[22] *Ibid.*, p. 47.

tributor to psychology. It supplies the necessary data concerning one type of behavior. To what extent Mitchell accepts this view he has never taken occasion to say publicly. In any case it would little affect his general viewpoint, and it is safer doubtless to interpret him in the light of his published declarations.

Mitchell's viewpoint has by this time been sufficiently examined from various angles to demonstrate the convergence of all his arguments upon his central conviction—that the economist's appointed task is to examine the nature and functioning of social institutions. That conviction is the logical outcome of the genetic approach, or one may say preconception, by which one thinks of a given cultural situation, not as final, but as a passing phase of an endless process. It is supported by the views of many psychologists. And in Mitchell's case it is supported by a strong predilection to assist in the rational guidance of a great and complicated and in some degree mysterious society which, under the bondage of custom, has stumbled somewhat blindly into a forest of human problems.

It is the problems that fascinate him, challenging his intellect and his sympathies, making his scientific work both mentally exciting and morally satisfying. "Whether economics is to us a subject of thrilling interests or a dismal pseudo-science depends upon ourselves. If we come to it with literal minds, seeing only what has been definitely accomplished, we find the discussions dull and the conclusions dubious. But if we come thinking of man's long struggle to master his own fate, then the effort to solve economic problems seems a vital episode in human history, a hopeful portent for the future. Seen in this perspective, economic speculation represents a stage in the growth of mind at which man's effort to understand and control nature becomes an effort to understand and control himself and his society. . . . The future of economics, the question whether men will ever succeed in establishing a serviceable science of human behavior, becomes one of the crucial issues on which hangs the doubtful fate of humankind."[23]

Mitchell's loose formula for economics, that it is a science of human behavior engaged in examining the structure and functioning of the institutions through which economic activity takes place,

[23] From an article, "The Prospects of Economics," in *The Trend of Economics* (1924), p. 3.

is plainly comprehensive enough to include studies of widely differing range and character. It includes orthodox economists in so far as they realistically portray the processes of current life; it has a particular niche of honor for Sombart, Sidney and Beatrice Webb, and Veblen, who learned from Marx "the scientific possibilities in his way of working," and are "studying the evolution of economic institutions in a scientific, as opposed to an historical or a propagandist, spirit."[24] There is a place for the monographic study of the problems of transportation, labor, banking, trusts, and so on. The realization that theoretical economic inquiries cluster about the working of institutions "establishes upon a common plane the work of those who seek to know how economic organization has developed in the past, of those who seek to know how it functions in the present, and of those who seek to know what changes it promises to undergo in the future."[25] "When, however, economic theory is made an account of the cumulative change of economic behavior, then all studies of special institutions become organic parts of a single whole. . . . Economic theory will cease to be a thing apart from applied economics, because economic theory itself will deal with genuine issues."[26]

The reason for undertaking these various sorts of investigation is very plain to Mitchell's mind. It is no detached "idle curiosity," nor any coldly objective desire to know. "In economics as in other sciences we desire knowledge mainly as an instrument of control. Control means the alluring possibility of shaping the evolution of economic life to fit the developing purposes of our race."[27] Without dropping his insistence upon the scientific method of accurate observation, he allies himself to Dewey's conception that human thought and action are inevitably intermixed, to the end of achieving the goals which are more or less clearly set up. In Mitchell's thought these goals seem something more than the immediate goals of individuals or groups. He tacitly personalizes society; and appears to assume that society as such has a will of its own and goals of its own. Social evolution takes on a somewhat dramatic form,

[24] *Ibid.*, pp. 18-19.

[25] From an article, "The Role of Money in Economic Theory," in the *American Economic Review*, Supplement, March 1916, p. 160.

[26] *The Trend of Economics*, pp. 24-25.

[27] *Ibid.*, p. 25.

as a sort of cosmic struggle, in which the social will is striving, in the midst of the discordant purposes of its members, to achieve its ends, by and with the advice of its more intelligent counselors, the social scientists. It is not to be supposed that Mitchell ever permits himself to be drawn so far as this into the imponderable marshes of social philosophy. We wish merely to indicate that, were he more a philosopher and less a statistician, this is where his footsteps would seem to lead.

Enough has been said to indicate the broader outlines of Mitchell's conception of economic theory. It leads him to the very borderland of philosophical speculation. But across that boundary he never steps. For, though Mitchell is somewhat philosophically minded, one is aware always of the restraining influence of a lifetime's work of realistic investigation, of marshaling statistics and interpreting their meaning. He does not have what one would call an original mind, but rather a workmanlike mind. His dissent from orthodox economics is not original. It is taken from Veblen. His subordination of economic investigation to ends of social welfare runs in terms that may be traced to Dewey and Hobson and others within whom the moral urge is dominant. For the general terms in which his thinking runs he is in the position of a debtor to a considerable range of thinkers. The cathartic effect of Veblen's early influence cleared his system of tradition, and left him with a hearty appetite and sound powers of absorption for innovating and progressive thinking in the social sciences. Omnivorous in his reading, catholic in his sympathies, and eclectic in his thinking, he has done much to popularize new approaches to social problems and to make them intellectually acceptable and professionally respectable.

But it is not as a loud-speaker for any set of secondhand ideas that he has achieved his significance in the field of economics. It is in the alliance between his intellectual approach to economic problems and his technical handling of them that he is eminent and important. His method is that of a quantitative analysis. He is the prophet of facts and figures. He believes that in dealing with the mass of phenomena of social organization our one authoritative and impartial source of information is statistics. Much of his energy has been devoted to improving the sources of statistical information available to economists. The rest of it has been largely devoted to collecting such information, interpreting the economic significance of the data which he handles, indicating the relation of the facts disclosed to the common welfare, and devising methods for the social control of the aspects of economic organization where his investigations have indicated that it is possible and desirable.

His enthusiasm for quantitative information is so great that on one or two occasions he has almost permitted himself to say that intelligent social reform is only a matter of possessing the necessary factual data on which to build.[28] Never committing himself quite that far, he nevertheless insists that statistical investigation is the most scientific instrument of economic analysis, and that it constitutes an essential, if not the most important, tool of rational social development. As might be expected of so ardent a champion of facts, he is not a little impatient of mere agitation and propaganda as instruments of reform. They appear to him unintelligent.

This conviction that knowledge of facts, particularly statistical facts, is essential to the proper co-ordination of our complicated economic organization has been pretty thoroughly disseminated and accepted, not only among economists, but among businessmen, officials, reformers, trade-union leaders, one might say among responsible or intelligent people in general. The manifold problems of social adjustment—wage disputes, minimum-wage laws, railway rates, marketing arrangements, business fluctuations, unemployment, allocation of taxes, and what not—all occasion resort to the tangible evidence of quantitative data. It is not Mitchell, of course, who has done this. The phenomenon grew out of a complicated social situation. But, so far as one man can be singled out for credit, he has played a pre-eminent part. He has pioneered in the application of statistical method to economic problems and in all seasons urged the importance of this instrument. He has demonstrated the advantages and uses of statistical analysis, and has been its spokesman and its philosopher.

When so much has been said, one may perhaps wonder whether the nature of Mitchell's work has not decidedly colored his conclusions. For a quarter of a century and more his work has been

[28] See, e.g., an article, "Statistics and Government," in the *Quarterly Publications of the American Statistical Association,* for March 1919.

mainly concerned with price studies, a field within which statistical technique is the primary instrument. His studies have centered around the pursuit of profits, wherein he finds the key to business fluctuations. It is at least an open question whether his own successful use of statistics has not been generalized into an exaggerated statement of their place in the scheme of things.

Moreover, his concern with distinctly "business" processes and "business" habits of thought may explain the primary causal influence which he attributes to the "money economy" as the rationalizing influence in economic activity. One might understand the following passage as a criticism of orthodox economic theory, but it appears as a strangely narrow view for one who assumes the province of economic theory to be the descriptive analysis of economic institutions: "Because it thus rationalizes economic life itself, the use of money lays the foundation for a rational theory of that life. Money may not be the root of *all* evil, but it is the root of economic science."[29] Such bias as Mitchell displays in an exaggerated view of the place of quantitative analysis in economic investigation and of the institutional importance of the money economy in shaping economic activity may reasonably be explained in terms of a lifetime's preoccupations.

It would not, as we have indicated, be true to say that Mitchell sees quantitative analysis as the sole method for advancing economic studies. He merely considers it the most scientific, and stresses the instrument with whose use he is most familiar. He recognizes the existence of important facts that do not lend themselves to quantitative treatment and admits the essential service of qualitative analysis in institutional economics. He says, for example, "Quantitative work cannot dispense with distinctions of quality. In the thinking of competent workers, the two types of analysis will co-operate with and complement each other as peacefully in economics as they do in chemistry."[30] Such passages are, however, of a parenthetical sort, and represent a field of thought upon which he has not been moved to bestow much consideration.

The sort of union between qualitative and quantitative analysis

[29] "The Role of Money in Economic Theory," *op. cit.*, p. 157.

[30] "Quantitative Analysis in Economic Theory," *American Economic Review*, March 1925, p. 12.

which Mitchell foresees is not of the sort that was in Alfred Marshall's mind. Marshall thought that the *kind* of forces that operate in the market place had been pretty well canvassed. Limiting the scope of economic science primarily to the problem of value, he limited the qualitative analysis, which he thought so nearly complete, to the aspects of economic activity bearing upon that problem. He recognized, however, the broad implications of value theory and permitted his analysis to roam widely over the surface of human affairs and to penetrate into their hidden depths. His view was that statistical analysis would give objective evidence of the relative intensity or importance of the play of forces comprised within his general scheme of thought. Concerning the general outlines of value theory, his view displays something of the naive self-esteem exhibited in Mill's famous dictum a generation before.

Mitchell thinks quite otherwise. He considers Marshall's view of economic behavior, as controlled by two opposing sets of motives, an obsolete conception. He does not, therefore, look for any statistical measurement of the force of motives, nor think it desirable that quantitative analysis should be subordinated to any preconceived analysis of the forces at work. He wishes quantitative analysis to address itself strictly to the objective phenomena at hand, supported by whatever analysis of unmeasurable forces is relevant to the particular problem.

Qualitative analysis, relieved from supporting any particular system of theory, takes on a double nature. It is, in the first place, a subsidiary instrument for handling the incommensurable factors which arise in any particular quantitative investigation. Its second and more important use lies in setting the ends of human endeavor. Holding that economic science is the handmaiden of the race in attempting to increase its economic welfare, Mitchell is compelled to recognize that welfare is not a concept that lends itself to measurement. At bottom, concepts of welfare are based upon our sympathies, prejudices, interests, or preconceptions. Mitchell, for example, could doubtless trace the genealogy of the humanitarianism of which he is so warm a partisan. These simple truths he recognizes only to neglect them. One feels it not a little paradoxical that one who views the life-process of the race as an attempt to achieve its dimly perceived and changing purposes should glorify the statistical instrument almost to the point of discounting the ends to which it is a tool, and certainly to the point of neglecting the manifold if intangible forces which enter into the institutional situation.

Mitchell is not a little critical of economic theorists like Jevons, Clark, and Fisher, whose love of logical precision eventuates in the mere "mechanics of utility." It would appear that his own love for facts and figures opens him to a somewhat similar criticism, that his economics inclines to be the "apotheosis of statistics." Statistics, no matter how complete, will not explain the social philosophy underlying a demand for minimum-wage legislation, or trust regulation, or lower railway rates for farm products, or government operation of the coal industry. All this Mitchell would doubtless admit. He might well say that under the necessities of a division of intellectual labor he was willing to let others speculate upon the immediate and remote ends of social policy while he busied himself with collecting the data with which responsible men might assess the ends or upon which they might build a better order.

Such strictures as one may bring against Mitchell, in terms of his own scheme of thought, are principally matters of emphasis. Being so much the spokesman of his own craft, he appears at times to be something less than an adequate spokesman for the institutional approach to economics. He shrinks from the philosophical, the intangible, the incommensurable. And if such reticence is pardonable in the economist whose gaze is centered upon the marts of trade, it ill becomes one who thinks of economics as the study of human behavior and human institutions, in which those elusive characteristics are so pronounced.

Enough has perhaps been said of Mitchell's work, and of his views concerning the scope and method of economics. To inquire whether those views constitute a body of "economic theory" would carry us into a controversy too warm to be comfortable, and not relevant to our purpose. Certainly he has no "system" of economic theory in the sense that Marshall or Clark or Fetter has a system, logically tied together. He has, on the other hand, a foundation of theories upon which his approach is based. He builds upon the biological theory of evolution; the sociological theory of a developing organic society; an epistemological theory of a pragmatic sort; a psychological theory embodying stability of instincts and the subsidiary nature of intelligence; and a theory of the institutional origin of most overt human behavior. He would say that these theories are based upon modern scientific research, and furnish as sound an ideological basis as is obtainable for scientific research into the processes of human society.

He might further contend that systematic economic theory, when run to its source, has a way of merging into psychology, epistemology, metaphysics, and analogy to the physical sciences, wherein its footing is less stable than that of his own scheme of thought. From this he might argue that his view that the central task of economics is an objective study of institutions—their history, processes, direction, and effects upon human welfare—may be validly called a form of economic theory. He might further add that within the confines of a given investigation there would often be need for the use of highly theoretical work of the logical sort by way of filling in the interstices where factual data were not available. He could even admit the uses of systematic theory within the bounds of his approval, as an enlightening display of the logic of certain forces.

Of some such material is compounded Mitchell's claim that he and other "institutionalists" are economic theorists. The claim is perplexing and distressing to those who draw their scheme of thought from orthodox sources. Obviously Mitchell's formula for economic theory is highly eclectic, loose, and inclusive. It has a resting-place for all and sundry, if only they are engaged in elucidating human behavior on its economic side. Hospitality, it is true, proceeds on a plan of graded warmth, from a certain coolness toward logical processes at one extreme, to an effusive cordiality toward statistical analysis at the other. But all are welcome.

Over and around the whole position is wrapped the warm mantle of a high moral purpose. That the function of economics, in conjunction with the other social sciences, is to aid in social melioration is the enveloping preconception. That, of course, is a matter quite apart from science. There is no scientific reason to suppose that the evolutionary process of cumulative causation is amenable to intelligent social control. It may be a matter of blind force, of electrons or chemical processes. And then again it may not be. There is no guide here but faith. And it is in this homely human trait that Mitchell's approach to economics ultimately rests.

Meantime, the view of economics of which Mitchell is the outstanding figure represents the most marked trend of the present time in the United States. Economic theory with a longer classical pedigree is still formally dominant in the schools. Objective economic investigation is to a considerable degree tied to business enterprise, with the immediate incentive of a favorable effect on the credit balance in the profit-and-loss ledger. But an increasing share of the sound scientific work is being devoted to monographic studies of the economic system in detail, to the immediate end of disclosing the manner of its working, to the ultimate end of assisting in intelligent social guidance. Realism is Allah, and Mitchell is his prophet. Paradise may be around the corner.

It is not a little curious that the most eminent of our economic workmen in the field of minute analysis of statistical data should be so heavily indebted to an impressionistic cosmic philosopher like Veblen, who heroically distorts facts and shows no evidence of commerce with figures. Mitchell's work is of the sort that would have pleased Marshall. One thinks of a certain resemblance between them in the union of moral and scientific interest in their problems, and in the scientific precision of their methods.

But Mitchell's work proceeds within a general framework of ideas not consonant with the general ideas of that excellent economist. It serves, therefore, to make more crucial the debated question of what constitutes the essential theoretical equipment of a competent modern economist.