Davenport formed the link between the "orthodox" group, of whom Clark and the scholars mentioned in the preceding paragraph were the leading exponents, and the band of dissenters who became known as institutional economists and among whom Thorstein Veblen (1857-1929), John R. Commons (1862-1945), and Wesley G. Mitchell (1874-1948) were the outstanding figures. What the group of protestors had in common was their opposition to the type of economics then in vogue and exemplified by the work of Clark and also of the Austrians, who were at that time at the height of their influence and with whom many American economists attempted to come to terms. Pure theory in general and, more specifically, the pure theory of comparative statics as developed in the utility analysis of consumer behavior and in the marginal productivity theory of distribution became the principal targets against which the institutional economists launched their attacks. Only Veblen, however, wanted to destroy the conventional approach by root and branch, whereas the other two took a somewhat more conciliatory position. And only Veblen was a critic not just of conventional economics but of the business civilization of his time, which he condemned in strictures as bitter and severe as those embedded in the work of Marx.

The institutional economists shared the critical attitude to conventional economic theory characteristic of the German historical economists, whose views were diffused by their former students after their return to the United States. The link between institutional economics and German historical economics was especially pronounced with Commons, who came to share his teacher Ely's attachment to the German approach. It was less strong with Veblen, who likewise, but for a briefer period, was a student of Ely's and who judged Ely's views more critically. Of the three master institutionalists only Mitchell spent some time as a student in Germany, but he went to Austria as well and neither experience seems to have profoundly affected his future work.

In a sense, institutional economics formed a counterpart to historical economics, but it was a characteristically American movement with unique features of its own, lent to it by its connection with the American philosophy of pragmatism. Veblen was a student of Charles Peirce's and a colleague of John Dewey's—Peirce, Dewey, and William James were the leading exponents of pragmatism. Mitchell was a student both of Veblen's and Dewey's. There was no such personal link between the great pragmatists and Commons, but the currents of thought generated by them made themselves felt also in his work. Together with related movements in law, history, and other disciplines, pragmatism and institutional economics formed parts of a wider, and again characteristically American, movement of thought which has been interpreted as a "revolt against formalism," that is, the formalism of abstract deductive reasoning in the social sciences. This revolt appealed to experience rather than to universally valid reason, to evolutionary change rather than to the search for "normal" or "natural" conditions, and to man as an active agent rather than as a passive instrument registering the impact of pleasure and pain. The pragmatic revolt thus constituted a sharp break with the natural law tradition, which had enthroned universally valid reason, with the utilitarians' interpretation of human behavior in terms of a calculus of pleasure and pain, and with the economists' concern with the equilibria of comparative statics, indicative ostensibly of tendencies toward normalcy or naturalness.

Under the influence of Darwin the pragmatists stressed the biological aspects of evolution and assigned to social science the task of explaining man's adaptation and survival under the ever-changing conditions of social, political, and economic life. Hence, evolutionary change was one of the watchwords of the pragmatists. Another one was the unity of thought and action in an experimentalism that tested ideas by applying them in practice. A third was the rejection of a priori abstract reasoning and its replacement by empirical studies. The institutional economists, each in his own way, followed the programs indicated by these watchwords and fashioned their work in line with them. Veblen set out to depict, in broad strokes, the evolutionary change of culture. Commons allied himself with the forces of economic reform and aided them with his work as a social inventor. Mitchell pursued painstaking empirical studies along quantitative lines and explored the evolutionary change of the modern economy in terms of business cycles, with one phase generating the next. None of the three had use for the marginal utility approach, which they considered tainted by utilitarianism, for the natural law tradition, which emphasized unity and stability rather than diversity and change, or for the quest for normalcy characteristic of the conventional economists' concern with comparative statics.

Darwin's thought, however, influenced not only the pragmatists and institutional economists but also the social Darwinists. The pragmatists and institutionalists rejected laissez faire and instead taught that natural selection in the struggle for his existence would enable man to learn the art of adjustment to new conditions by deliberate public policies. The social Darwinists, on the other hand, adhered to laissez faire, under which the fittest were guaranteed survival. In this manner, pragmatists and social Darwinists arrived at diametrically opposite conclusions, both ostensibly deduced from the thought of Darwin. Both interpretations left their mark in the United States.
Veblen was the child of two cultures, in neither of which he felt at home. Born in Wisconsin, the son of Norwegian immigrants, he grew up in one of Minnesota's Little Norways, and when at the age of seventeen his father enrolled him at Carleton College he went as an alien who spoke his native tongue. Born in Wisconsin, the son of Norwegian immigrants, he grew up in one of Minnesota's Little Norways, and when at the age of seventeen his father enrolled him at Carleton College he went as an alien who spoke his native tongue.

Veblen was the child of two cultures, in neither of which he felt at home. Born in Wisconsin, the son of Norwegian immigrants, he grew up in one of Minnesota's Little Norways, and when at the age of seventeen his father enrolled him at Carleton College he went as an alien who spoke his native tongue.
hedonistic terms, passive, inert, and reflecting an immutably given human nature. In a passage that exemplifies his style at its best, Veblen wrote:

The hedonistic conception of man is that of a lightning calculator of pleasures and pains, who oscillates like a homogenous globule of desire of happiness under the impulsion of stimuli that shift him about the area, but leave him intact. He has neither antecedent nor consequent. He is an isolated, definitive human datum, in stable equilibrium except for the buffets of the impinging forces that displace him in one direction or another. Self-imposed in elemental space, he spins symmetrically about his own spiritual axis until the parallelogram of forces bears down upon him, whereupon he follows the line of the resultant. When the force of the impact is spent, he comes to rest, a self-contained globule of desire as before.

An excerpt from the same article, where Veblen attempts to denigrate conventional economics by employing the nomenclature of botanical classifications, shows his style at its worst:

If we are getting restless under the taxonomy of a monocotyledonous wage doctrine and a cryptogamic theory of interest, with involute, loculicidal, tomentous and moniliform variants, what is the cytoplasm, centrosome, or karyokinetic process to which we may turn, and in which we may find succor from the metaphysics of normality and controlling principles? What are we going to do about it? The question is rather, What are we doing about it?

What Veblen put in the place of conventional economics was an exposure of the modern business civilization, which illustrated, as a sort of test case, man's frailty in the midst of institutions that had fallen on him as part of the legacy of the race and had ceased to serve him well. Veblen depicted human evolution as having passed through the savage, barbarian, handcraft, and machine-process cultures. Savages, he asserted, are peaceable and poor, and among them is found little differentiation of employment and distinction of classes. Savagery gives way to barbarism as predatory habits of life-warfare, big game hunting-become common, and invidious comparisons are made between exploits and consumption of the superior ranks. Redemption would come, if it was to come at all, from an upheaval of the members of the technical engineering class, whose matter-of-fact working habits made their minds less susceptible to the make-believe that impressed the working class, and who might assume the direction of production.

Such was, in its barest outline and in part in Veblen's own words, the message that can be distilled from his work. Defects there were many—such as Veblen's disdain for all firm rules guiding human behavior, be they derived from the natural law tradition or from utilitarianism; his elitist claim to superior insight, enabling him to discover ubiquitous make-believe; his false disjunction between the captains of industry and the productive technicians; his insipid hope that the latter might save the world; his apparent belief that in the United States manual labor is considered unworthy and that a leisure class flourishes there; his advocacy of increased output as the only true test of economic well-being; his mercantilist notion that one man's gain is another man's loss, a notion entirely inappropriate in an environment where increasing productivity is the rule. But in spite of these and many other defects, Veblen's work had a profoundly disturbing effect on many American economists, who may have taken it more seriously than did Veblen himself. This effect was felt with special intensity during the Great Depression, the moment of truth when conventional economics was put to its most severe test. Considering such advice as that of Fisher, who was presumably the country's greatest economic theorist and who insisted that with the stamina of the American people strengthened by prohibitions there was no need to be afraid of a severe depression, it was not surprising that many found Veblen's views more to the point, in particular his opinion, stated in The Theory of Business Enterprise (1904), that in modern times short-lived depressions had given way to more chronic stagnation: "Dull times," he wrote, "are, in a way, the course of nature; whereas brisk times are an exceptional invention of man or a rare bounty of Providence."

Veblen did not live to see it, but his work, in conjunction with the trauma of the Great Depression, placed the economics profession in a...
MITCHELL AND THE STUDY OF BUSINESS CYCLES

Veblen's distinction between workmanship and what has been called the wastemanship of the captains of industry was echoed in the writings of Wesley C. Mitchell, whose distinction between making goods and making money served as the starting point for his lifelong study of business cycles. To Mitchell, the salient feature of the modern economy was its character of a money economy, in which money is used not merely as a medium of exchange but in which economic activities occur in the form of making and spending money incomes. Whether a person is rich or poor in economic terms is not determined by his ability to turn out useful goods or husband his supplies but by his ability to command an adequate money income and practice pecuniary thrift. Whereas conventional economists might evoke an invisible hand or map out an idealized pattern of a competitive economy in which rational economic behavior would tend to maximize welfare, Mitchell's dichotomy between making goods and making money was grounded in the explicit recognition that there are various ways of making money that do not contribute anything to the nation's welfare or which affect it adversely. The "real" factors—national resources, mechanical equipment, industrial skill—Mitchell considered necessary but not sufficient conditions for the nation's well-being. In the money economy these factors will be utilized only if the men in command of production expect a monetary profit from their use.

The idea that the private pursuit of gain might frustrate the achievement of maximum national welfare was stated by Mitchell in his Business Cycles of 1913, the first of a series of pioneer investigations devoted to this subject. At that time this idea began to interest other economists, and it stood in the center, for example, of Pigou's concurrent work on welfare economics. But whereas in Pigou's writings it served as the basis for the theoretical classification and systematization of cases in which private gain and public welfare were incompatible, Mitchell did not stress this aspect of the matter. Unlike the conventional economists he did not employ equilibrium analysis, and in his Business Cycles: The Problem and Its Setting (1927) he characterized such concepts as "the normal state of trade" as a "fictitious". Instead he moved on to a empirical exploration of the overall performance of the economy, whose inherent instability he attributed primarily to the process of moneymaking. The self-generating business cycle thus became, in Mitchell's writings, a synonym for the historical movement of the money economy of modern capitalism, in which production depends on realized or expected profits, and these, in turn, on the relation between costs and prices and a host of other factors, all interrelated and thus responsible for the spread of maladjustments.

Although Mitchell was a profound student of the various business cycle theories that single out specific elements—monetary factors, weather cycles, over-saving, under-consumption, over-investment or under-investment, and so forth—and employ these on a priori grounds as principles of explanation, Mitchell approached his task without reliance on any of these theories and instead proposed to begin with a factual study of the matter. He gathered the statistical facts in the most painstaking manner, and when the task proved beyond the ability of a single investigator he helped to organize the National Bureau of Economic Research in 1920 and guided its work as the first director of research for a quarter of a century. Since then there have been prepared under the National Bureau's sponsorship a great number of studies on those phases of the economy that lend themselves to quantitative exploration. Although at times, and especially in more recent years, the bureau has sponsored research of a more theoretical type, it has, on the whole, been faithful to Mitchell's empirical approach.

Mitchell's patient gathering of facts in the form of statistical time series, of which he assembled, with the bureau's help, over a thousand, impressed unfriendly critics as a futile exercise in naive empiricism, as limited in its explanatory value as "measurement without theory" was bound to be. Embedded in Mitchell's work and obfuscated by its plethora of statistical data there were, however, many of the analytical tools considered relevant in modern business cycle theory. Thus Friedman was able to distill from Mitchell's 1913 volume such ideas—expressed verbally rather than mathematically and varying in explicitness—as the multiplier and the principle of acceleration, waves of optimism and pessimism, the drain of cash from the banking system, and the decline of the yield expected from new investment, the latter idea belonging to the same family as Wicksell's natural rate of interest, Fisher's rate of return over cost, and Keynes' marginal efficiency of capital.

Although Mitchell was primarily a student of business cycles, he made a number of other important contributions. His first book, A History of the Greenbacks (1903), was an authoritative study of Civil War inflation. In the early 1920s, several decades before work of this type was recognized as a public responsibility and undertaken by the government, Mitchell was the coauthor of a National Bureau study devoted to the conceptualization and estimation of the national income. A student's lecture notes taken in Mitchell's course on Types of Economic Theory in 1934–35 were, until the publication of Schumpeter's History of Economic Analysis, the only record of the sweep of doctrinal history as seen by one of America's master economists. The leading item in a collection of Mitchell's essays, The Backward Art of Spending Money (1937), and the one from which the book derived its title, showed the limited extent to which the rationale of economic calculation applied in the field of consumption, where the art of buynanship was far less developed than that of salesmanship.