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Institutional Economics: Then and Now

Malcolm Rutherford

During recent years, the term “institutional economics” has been applied to an ever-increasing variety of economic approaches or schools of thought. Most people recognize the terms “institutional economics” or “American institutional economics” or “old institutional economics” (sometimes now “original institutional economics”) as applying to the tradition of economics associated with Thorstein Veblen, John R. Commons, Wesley Mitchell, and Clarence Ayres. Until quite recently this was the only meaning given to “institutional economics.” But in recent years, the term “new institutional economics” has become well-established as referring to the tradition of work stemming primarily from the transactions cost approach of Ronald Coase, Oliver Williamson, and Douglass North. To complicate matters further, the “new institutional economics” label is often extended to cover game theoretic approaches to the evolution of social conventions, and sometimes to the Austrian approaches to institutions and institutional change that build from Carl Menger and Frederick von Hayek. In addition, some people are working to reshape the “old” institutional economics by bringing in material that one can also find discussed within the “new,” and the term is being read back into history in new ways so that those claimed to be predecessors of institutionalism are multiplying.

In this paper I will concentrate on looking at institutional economics in its original sense and from the time it appeared as a self-identified movement in American economics. The term “institutional economics” was first brought to the general attention of the economics profession by Walton Hamilton (1919) in an American Economic Association conference paper. Institutionalism became a significant element in American economics in the interwar period, only to decline

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rapidly in position and prestige after World War II. I will briefly survey the sources of this movement, what gave it its initial momentum and appeal, what contributions it made, and what happened to it. This will give a better understanding of what the institutionalist movement in American economics meant to those who participated (and still participate) in it, and will allow some of the lines of connection and points of difference with other “institutionalisms” to be pointed out.

The Formation and Appeal of American Institutionalism

The conventional view is that the “founders” of institutionalism were Thorstein Veblen, Wesley Mitchell, and John R. Commons. It might be more exact to say that Thorstein Veblen provided much of the intellectual inspiration for institutionalism, although other influences were also important. Wesley Mitchell was deeply involved in the early development of institutionalism as a definite movement, along with Walton Hamilton, Walter Stewart, and John M. Clark. John R. Commons came into the institutionalist picture a little later, after 1924 (Rutherford, 2000b).

To appreciate the nature of early institutionalism, it is important to understand both Veblen’s influence and how it mixed with other elements to produce an appealing agenda. Veblen’s overall framework was one which stressed the cumulative and path-dependent nature of institutional change, the role of new technology in bringing about institutional change (by changing the underlying, habitual ways of living and thinking), and the predominantly “pecuniary” character of the existing set of American institutions (that is, expressing the “business” values of pecuniary success and individual gain by money-making, to the virtual exclusion of all other values). For Veblen, as for other institutionalists, institutions were more than merely constraints on individual action, but embodied generally accepted ways of thinking and behaving. Thus, institutions worked to mold the preferences and values of individuals brought up under their sway. Within this framework, Veblen developed his analyses of “conspicuous consumption” and consumption norms; the effect of corporate finance on the ownership and control of firms; business and financial strategies for profit-making, salesmanship and advertising; the emergence of a specialist managerial class; business fluctuations; and many other topics (Veblen, 1899, 1904).

However, Veblen did not think of existing institutions as necessarily functioning to promote the social benefit—in fact, rather the opposite. Existing institutions, due both to the inertia inherent in any established scheme and to the defensive activities of vested interests, tended to become out of step with new technological means and with the economic issues and social problems they generated. Thus, for Veblen, the existing legal and social institutions of his America were outmoded and inadequate to the task of the social control of modern large-scale industry. In Walton Hamilton’s rendition, this became “a fault line—I don’t like the word lag—between the industrial arts with which we carry on and the antiquated social

organization with which we attempt to harness them" (Walton Hamilton to Clarence Ayres, 15 May, no year). Wesley Mitchell (1923) expressed a similar thought as a conflict between "making goods and making money" or between the common interest in high and stable levels of output and the individual interest in making money.

Veblen was pointing to what he perceived as a systemic failure of "business" institutions to channel private economic activity in ways consistent with the public interest. For Veblen, the "invisible hand" notion of the market may have been applicable to conditions of small-scale manufacturing, but not to conditions of large-scale production, corporate finance, and salesmanship. Veblen was particularly harsh in his attack on the manipulative, restrictive, and unproductive tactics used by business to generate income (including consolidations, control via holding companies and interlocking directorates, financial manipulation, insider dealing, sharp practices of various kinds, and unscrupulous salesmanship), and on the "waste" generated by monopoly restriction, business cycles, unemployment, and competitive advertising. Veblen held out little hope of change short of a complete rejection of "business" principles, but other institutionalists offered this critique in somewhat more measured tones, and with a much greater degree of optimism concerning the possibility of social reform through scientific research and democratic discourse. Veblen's critical insights were frequently combined with a much more reformist position, one in which the problem became one of supplementing the market with other forms of "social control," or one of "how to make production for profit turn out a larger supply of useful goods under conditions more conducive to welfare" (Mitchell, 1923, p. 148).

Veblen's influence was significant in other areas too, but again not in an unmodified way. Veblen (1898) provided a biting criticism of the hedonistic and rationalistic psychology implicit in marginal utility theory and pointed to an alternative based on instinct/habit psychology. Veblen's work on this subject was itself influenced by the psychology of William James, but what was important was not Veblen's specific formulation but the impetus he gave to the idea that economics might be reconstructed on the basis of "modern psychology." Particularly important in this was William McDougall's *An Introduction to Social Psychology* (1908), and John B. Watson's earlier work towards a "behaviorist" approach. Wesley Mitchell (1910) was prompted to write a long two-part article on "The Rationality of Economic Activity." This approach generated enormous excitement at the time. F. C. Mills, who studied with Mitchell at Berkeley and Columbia has written of his experience between 1915 and 1917 as follows (F. C. Mills to Milton Friedman, June 25, 1951):

When I was studying at California and later at Columbia, there was a feeling that exciting new prospects for economics had been revealed by recent work in psychology. In seminar at California, and to a lesser degree at Columbia, the work of McDougall in social psychology, John B. Watson on behaviorism,

Patrick on the psychology of relaxation, Trotter on instincts of the herd in peace and war, Crile and others working in psycho-physiological fields, James Harvey Robinson on the making of the mind, and of course Freud (but this, it seems in retrospect, only incidentally), struck us with tremendous impact. That stream of thought in some ways supplemented the one flowing from Peirce, James and Dewey . . . Veblen again, particularly in raising questions as to why economics was not an evolutionary science, seemed to cut away other pillars. All of this provided a climate thoroughly opposed to the rationalistic tenets of classical economic thought.

This excitement over the search for psychological underpinnings of economics continued through the 1920s. Max Lerner, who was a student at the Robert Brookings Graduate School, where Walton Hamilton taught between 1923 and 1928, has recalled “that vivid interval in American economic thought when we thought that the psychological approach might transform economics and all sorts of horizons opened up” (Max Lerner to Carter Goodrich, June 23, 1933). Similarly, Walter Morton has recalled many of the students at Brookings “talking about the new frontiers of economics, meaning the psychological approach to economic problems” (Walter Morton to Robert Coleberd, March 4, 1973).

Other strands of what became institutionalism are not so traceable to Veblen’s influence. Many institutionalists, including Hamilton, J. M. Clark, John R. Commons, and Robert L. Hale had significant interests in issues of law and economics. Indeed, Commons’s classification as an institutionalist grew out of his 1924 book, *The Legal Foundations of Capitalism*. Commons’s approach was built on his notions of the pervasiveness of distributional conflicts, of legislatures and courts as attempting to resolve conflicts (at least between those interest groups with representation), and of the evolution of the law as the outcome of these ongoing processes of conflict resolution. At the micro level, he developed his concept of the “transaction” as the basic unit of analysis. In turn, the terms of transactions were determined by the structure of “working rules,” including legal rights, duties, liberties, and exposures, and by economic (bargaining) power. More generally, the institutionalist interest in law and economics covered topics such as the evolution of property rights, the legal context of transactions, intangible property and goodwill, valuation of public utilities, rate regulation, many issues in labor law, collective bargaining, health and safety regulations, and consumer protection. It should be noted that both Hamilton and Hale moved into law schools and that they had close connections with legal scholars of the realist school and with a number of Supreme Court justices.

Except for material on intangible property, little of this emphasis on law and economics came directly from Veblen. The major sources were the legal-economic work of Richard Ely (who taught Commons) and H. C. Adams (who taught Hamilton). They, in turn, had been very much impacted by their exposure to the German historical school. The German historical influence was

extremely strong in American economics in the 1880s and 1890s,¹ and this influence fed into institutionalism.

Finally, and of tremendous importance to the attraction of institutionalism, was the claim that it represented the ideal of empirical science.² The major influence here was Wesley Mitchell's combination of Veblenian ideas concerning the significance of the institutions of the "money economy"—an economy characterized by general recourse to market transactions, business conducted for profit, developed monetary and banking institutions, corporate finance, and a complex and closely interrelated price system—with the quantitative and statistical approach he had absorbed as a student at Chicago. Early in his career, Mitchell had begun work on an empirical examination of the evolution and functioning of the institutions of the "money economy," including their development out of the manorial system of labor dues (Mitchell, 1910 [1996]), but in 1910 he abandoned this project as too large and too speculative and refocused on just one part of it. This resulted in Mitchell's (1913) book *Business Cycles*, a work that was widely regarded at the time as a paradigm for a scientific economics. Mitchell thought of business cycles as a phenomenon arising out of the patterns of behavior generated by the institutions of a developed money economy (Mitchell, 1927, pp. 61–188). In his Presidential Address to the American Economic Association, and in other papers, he explicitly connected quantitative work and the institutional approach, arguing that it is institutions that create the regularities in the behavior of the mass of people that quantitative work analyses (Mitchell, 1924, 1925). This idea was not limited to Mitchell, but was also expressed in the work of other institutionalists of quantitative bent, such as F. C. Mills, Morris Copeland, and Willard Thorp.

Institutionalism was held to be more "scientific" than orthodox economics because it was both more empirical and more in line with the latest research in other related disciplines. Of course, the institutionalist ideal of a scientific economics by no means excluded theory, but such theory was supposed to be closer to reality and more open to empirical testing than "orthodox" theory. In the institutionalist vision, empirical evidence was not limited to quantitative and statistical methods, but could include case studies, documentary evidence (trade union

¹ In this period a very large number of Americans completed some or all of their graduate work in Germany, as there were few American graduate programs available, while German universities had high reputations and were accessible to foreign students. In Germany, economics was frequently a part of the faculty of law, and there was a particularly close connection between law and economics. The German historical influence was brought back to America by these students. It was they who founded the American Economic Association in 1885, and made up a large majority of the active academic profession.

² The institutionalist claims to "scientific" method and the debates over the applicability of natural science methods to economics are discussed in more detail in Rutherford (1999) and Yonay (1998). In the interwar period it was institutionalists who tended to claim that the empirical methods of natural science could be applied to economics, while it was the neoclassical economists who were expressing more cautious attitudes. This can also be seen in many of the essays contained in Tugwell (1924).

constitutions, for example), and the study of judicial opinions and court decisions. In this spirit, J. M. Clark (1927, p. 221) argued:

Economics must come into closer touch with facts and embrace broader ranges of data than “orthodox” economics has hitherto done. It must establish touch with these data, either by becoming more inductive, or by much verification of results, or by taking over the accredited results of specialists in other fields, notably psychology, anthropology, jurisprudence and history. Thus the whole modern movement may be interpreted as a demand for procedure which appears more adequately scientific . . .

In the years just after the end of World War I, the institutionalist agenda seemed full of potential. What was being held out was an approach to economics that claimed to be “modern” and “scientific;” that focused on the critical examination of the existing institutional structure; that was in line with the empirical methods of the exact sciences; that would build upon the latest work in social psychology, philosophy, and law; and that was closely connected to important and pressing issues of economic and social reform (Rutherford, 2000b; Yonay, 1998). This was compared to an “orthodox” neoclassical economics that was presented as based on an outmoded psychology and assumptions that were “unrealistic” in critical ways; difficult to apply to real world policy problems; and subject to little, if any, empirical test.³ The institutionalist program attracted a large number of younger economists, and became a significant part of interwar American economics.

The Ascent of American Institutionalism in the Interwar Period

Institutionalism emerged as a self-identified movement in 1918. The timing had something to do with the end of World War I. The war had impressed upon many the great importance of improved economic data and policy analysis, and of the potential role of government in the economy. The period of reconstruction seemed to offer significant opportunities to bring changes to the conduct of economic research, education, and policy. Hamilton, Stewart, and Harold Moulton were particularly excited by the possibilities, and they, along with Mitchell, planned the 1918 conference session where Hamilton (1919) delivered his manifesto “The Institutional Approach to

³ In the first two decades of the twentieth century it is not always easy to establish what was meant exactly by the term “orthodox economics.” There were differences between the major American writers such as F. W. Taussig, J. B. Clark, Frank A. Fetter, and H. J. Davenport, and Alfred Marshall did not have the impact in America that he did in England. It seems that what institutionalists meant by “orthodox” economics is most nearly approximated by J. B. Clark’s static analysis, consisting of marginal utility theory, marginal productivity theory, a theory of competitive price determination, and a theory of pure monopoly. To this might be added some of Irving Fisher’s work on capital, interest, and money.

Economic Theory.”⁴ This group also became heavily involved in the establishment of such research institutes as the National Bureau of Economic Research, the (Brookings) Institute of Economics, and in educational experiments such as the New School for Social Research and the Robert Brookings Graduate School.⁵ The Brookings Graduate School ceased as a distinct entity in 1928, but not before it had produced many students of institutionalist leaning—for example Isador Lubin, Mordecai Ezekiel, and Winfield Riefler—all of whom had notable careers in government.

Moreover, Columbia and Wisconsin became established as major centers for institutionalism. Columbia had Wesley Mitchell, J. M. Clark, F. C. Mills, Rexford Tugwell, and sympathetic faculty in other areas like James Bonbright in business, William Ogburn in sociology, John Dewey in philosophy, and A. A. Berle, Robert Hale, and Karl Llewellyn in Law.⁶ Gardiner Means joined the economic research staff of the Columbia Law School in 1927. The Wisconsin faculty included John Commons, Edwin Witte, Selig Perlman, Martin Glaeser and several others of institutionalist persuasion. These two universities were among the top four in the production of economics Ph.D.s in the interwar period in America (Froman, 1942). Other institutionalist groups existed at Texas (where Clarence Ayres was hired in 1930), and in a number of other schools and colleges.

The institutionalist movement made a number of positive contributions during this period. First, following from their view of science, institutionalists took the issue of improving economic measurement seriously. The NBER not only produced many empirical studies relating to business cycles, labor, and price movements, but also played a vital role in the development of national income accounting, particularly through the work of Mitchell’s student, Simon Kuznets. The NBER business cycle project developed the use of leading economic indicators. In conjunction with the Federal Reserve, the NBER also did much to develop monetary and financial data, including Morris Copeland’s work on money flows (begun in 1944), that later became the flow-of-funds accounts. Moreover, institutionalists were heavily involved in the effort to improve the statistical work of government agencies. Walter Stewart did much

⁴ During the War, Mitchell headed the Prices Section of the War Industries Board. Stewart, Leo Wolman and Stewart all worked with Mitchell there. Hamilton and his friend Harold Moulton worked on reconstruction issues for the War Labor Policies Board. They were also in close contact with J. M. Clark. The AEA session included papers by Walton Hamilton, J. M. Clark, and William Ogburn, and had Walter Stewart in the chair. More detail about this session is given in Rutherford (2000b, pp. 279–280).

⁵ Mitchell was involved in the founding of the NBER and was its first Director of Research. Moulton became the first Director of the Institute of Economics. Mitchell was involved with the founding of the New School and taught there for a few years. Veblen and Wolman were also employed there. In 1923 Hamilton was hired to head the Robert Brookings Graduate School. This school was intended to train graduate students in economics and government. The original idea was that students would work not just with the staff of the school, but also with the research staff of the Institute for Government Research and the Institute of Economics. The School was discontinued with the consolidation of the two Institutes into the Brookings Institution in 1928. A paper on Walton Hamilton and the Brookings Graduate School is a future project.

⁶ It is interesting to note that J. M. Clark, Hale, Llewellyn, and others at Columbia co-taught a seminar in Economics, Law, and Politics (Fried, 1988, p. 222).

to improve the statistical and research division of the Federal Reserve, work that was continued by Winfield Riefler and others. Isador Lubin, followed by Ewan Clauge (a student of Commons), did much to improve the statistical work of the Department of Labor. Copeland, Thorp, and Mills were all involved with the joint American Statistical Association/Social Science Research Council Committee on Governmental Statistics and Informational Services (COGSIS) between 1933 and 1935. Copeland was Executive Secretary of the Central Statistical Board between 1933 and 1939; this board also included Lubin, Ezekiel, and Riefler. COGSIS and the Central Statistical Board between them did a vast amount to improve government statistical services.⁷ This work is sometimes undervalued, but it laid permanent foundations for the development of empirical economics.

Secondly, institutionalists made contributions to a number of key debates in economics on issues such as psychology and economics, business cycles, the pricing behavior of firms, ownership and control of corporations, monopoly and competition, unions and labor markets, various types of market problems and failures, public utilities and regulation, and law and economics. These contributions were framed by their institutionalist viewpoint. It is only possible to give a flavor of the breadth of these contributions here.

In the area of psychology and economics, J. M. Clark's (1918) essay "Economics and Modern Psychology" is especially noteworthy for clearly anticipating more modern work on decision-making costs and bounded rationality. On business cycles, Mitchell's (1913, 1927) and Burns and Mitchell's (1946) work was based on a view of cycles as resulting from complex interactions between business decisions, the banking and monetary system, and leads and lags in the movement of prices. Their work contains many specific hypotheses, and tests of hypotheses (including formal tests) concerning cyclical phenomena. Clark (1917) also developed the accelerator concept out of his reading of Mitchell's *Business Cycles*, and continued to contribute to theoretical and policy debates over cycle theory, full employment, and price controls (Shute, 1997).

The pricing behavior of firms facing high overheads, and the possibly adverse effect of competition under circumstances where marginal cost pricing might not cover overhead, was subject to theoretical analysis by Clark (1923). The notion that, under certain circumstances, competition could be destructive or lead to adverse consequences was a common one among institutionalists. Hamilton's study of the coal industry detailed an industry that was competitive, but afflicted by chronic excess capacity and poor working conditions (Hamilton and Wright, 1925). George Stocking's (1925) Columbia Ph.D. thesis dealt with common pool problems and was entitled "The Oil Industry and the Competitive System: A Study in Waste." Ezekiel (1938) worked on agricultural pricing, including the cobweb model and its implications for the orthodox view of "self-regulating" markets. There was much

⁷The institutionalist involvement in improving government statistical and information services in examined in more depth in Rutherford (2000c).

discussion of the inadequacy of the standard models of perfect competition and pure monopoly, backed up by numerous industry case studies (Hamilton and Associates, 1938). Means (1935) developed the theory of administered pricing, which sparked a large literature on relative price inflexibility. Later, Clark (1940) developed his concept of “workable competition.”

On issues of corporate finance and ownership, Bonbright and Means (1932) co-authored *The Holding Company* (1932), and Berle and Means (1932) *The Modern Corporation and Private Property*. These works much extended Veblen’s earlier discussions of the separation of ownership and control. On labor market issues, a great deal of work was produced on unions, both empirical studies of union membership (Wolman, 1924), and theoretical discussions such as Selig Perlman’s *Theory of the Labor Movement* (1928). Issues of wage determination were discussed in general terms by Walton Hamilton and Stacy May in *The Control of Wages* (1923), and in terms of “the wage bargain” or “the labor bargain” by other institutional labor economists such as Commons (1924) and Sumner Slichter (1931). In this work much attention was given to labor relations issues of collective bargaining and systems of conciliation and mediation.

Clark (1926) discussed a large number of types of market failure in his *Social Control of Business*. These included monopoly, maintaining the ethical level of competition, problems of agency, displacement of people by rapid economic and technological change, poverty, advertising and lack of correct information and standards, lack of equality of opportunity, externalities (“unpaid costs of industry”), public goods (“inappropriable services”), the wastes of “arms race” types of competition (such as competitive advertising), unemployment, the failure to take into account the interests of posterity or future generations, and other discrepancies between private and social accounting.

Bonbright’s (1937) *Valuation of Property* also dealt with the difference between commercial and social valuation, although with an emphasis on issues of the valuation of public utilities. Bonbright (1937), Hale (1921), and Glaeser (1927) all wrote extensively on issues of public utility regulation, with Hale probably having the greatest impact on the direction of court decisions through his campaign of criticism of the “fair value” concept as a basis for rate regulation (Bonbright, 1961, p. 164). The courts’ changing interpretation of the doctrine of “affectation with public interest,” which was used to justify regulatory intervention, and the “public” character of much supposedly “private” business was discussed by Tugwell (1922), Clark (1926), Hamilton (1930) and Hale (Fried, 1998).

More general interconnections between law and economics and the operation of markets were addressed by Hamilton (1938), Hale (1923), and Commons (1924, 1934). Market transactions were conceived of as a transfer of rights, not physical goods, and a transfer that took place in a context of legal and economic power, and always involving some degree of “coercion,” in the sense of some degree of restriction upon alternatives (Commons, 1932; Samuels, 1973). Commons (1934, pp. 55–67) distinguished between bargaining transactions (market transactions) and managerial trans-

actions (hierarchy), and was aware of the substitutability between the two. He produced a discussion of organizations as “going concerns” engaging in “routine” and “strategic” transactions. He also provided a theory of the behavior of legislatures based on “log-rolling,” and a theory of judicial decision-making based on the concept of “reasonableness,” a concept that included, but was not limited to, a concern with efficiency (Commons, 1932, pp. 24–25; 1934, pp. 751–755).

Finally, institutionalists made important contributions to policy in their roles in the development of unemployment insurance, workmen’s compensation, Social Security, labor legislation, public utility regulation, agricultural price support programs, and in the promotion of government “planning” to create high and stable levels of output. Commons had pioneered public utility regulation, unemployment insurance, and workmen’s compensation in Wisconsin, and the Wisconsin model was widely influential. Many institutionalists were active members of the American Association of Labor Legislation, including Mitchell, Hamilton, Slichter, Commons, and many of Commons’s students (including John B. Andrews, the Permanent Secretary). The AALL promoted many reforms to labor legislation as well as medical insurance programs (Chasse, 1994). Medical insurance was later pursued by the Committee on the Cost of Medical Care, which involved both Hamilton and Mitchell.

Institutionalists had significant influence within the New Deal. Commons’s students, such as Witte, Arthur J. Altmeyer, and Wilbur Cohen, played leading roles in the development of federal Social Security programs. Hamilton was a member of the National Recovery Administration Board, and also served as Director of the Bureau of Research and Statistics of the Social Security Board. Berle and Tugwell were two of Roosevelt’s original “Brains Trust,” and Tugwell and Means were the leading advocates of the “structuralist” or planning approach that had influence in the early part of the New Deal. Tugwell was Assistant Secretary of Agriculture. Means also worked as an economic advisor in the Department of Agriculture, and later led the industrial research group of the National Resources Committee, a group that also included Lubin, Ezekiel, and Thorp, as well as Lauchlin Currie. Riefler became Economic Advisor to the Executive Council. Thorp served as Consumers’ Division Director of the National Emergency Council and Chairman of the Advisory Council of the National Recovery Administration. Ezekiel became economic advisor to the Secretary of Agriculture and played a prominent role in the design of agricultural policy. Lubin became Commissioner of Labor Statistics, and, later, Special Assistant to President Roosevelt. Glaeser became special advisor to the Tennessee Valley Authority.

American Institutionalism after 1945

Institutionalism attained a significant position in American economics in the interwar period, both in academia and in government, but then declined in position and prestige. There are quite a number of overlapping reasons for this,

some of which reach back into the 1920s and '30s, but I will focus on just a few of the more important.

Institutionalism clearly did not live up to its own early promise, particularly in its failure to pin down exactly what foundations in “modern psychology” it was supposed to have. After the mid-1920s, psychologists abandoned the instinct/habit approach in favor of a behaviorism that became increasingly narrow and difficult to see as an adequate foundation for economics. In this climate, the enthusiasm for new psychological approaches that had played such a role in the institutionalist movement’s beginnings could not be sustained. Moreover, institutionalist work could be attacked as ad hoc, or as lacking proper foundations in a theory of individual behavior (Koopmans, 1947). Institutionalism probably played a part in ridding economics of explicitly hedonistic language, but it did not develop the alternative basis to convince the profession as a whole to abandon its rationalistic foundations (Lewin, 1996).

It must also be said that institutionalists failed to develop their theories of social norms, technological change, legislative and judicial decision-making, transactions, and forms of business enterprise (apart from issues of ownership and control) much beyond the stage reached by Veblen and Commons. The reasons for this lack of development relate partly to the lack of clear psychological foundations, but also to the focus of interwar institutionalists on immediate and pressing policy problems like business cycles and public utility regulation. In addition, from the late 1920s on, sociology separated itself from economics and became established in separate departments, taking much of the subject matter of social norms and institutions with it.

It is also the case that, from the 1930s onwards, many new developments in theory and methods occurred within more mainstream economics. Institutional ideas on planning as a solution to business cycles had not fared well over the course of the New Deal, and had been replaced by Keynesian ideas (Barber, 1996). In many respects, Keynesian economics took over the role of the exciting “new” economics that institutionalism had played in the early 1920s.

In addition, mainstream economics gained an empirical component with the rise of econometrics. Institutionalists could no longer claim greater “scientific” standing because of their empiricism; indeed, they were accused by Koopmans (1947) of “measurement without theory.” The empirical tradition of the NBER continued, but with little of the association between quantitative work and institutionalism that was such a hallmark of the movement in the interwar period.⁸

Furthermore, neoclassical theory underwent significant development, especially from the 1930s onward, including theories of imperfect and monopolistic

⁸ Milton Friedman’s work is a good example of this. Friedman’s methodological links to the NBER are examined by Hammond (1996).

competition,⁹ and market failures and externalities. Neoclassicism developed a language capable of encompassing many of the issues of concern to institutionalists; issues that had formerly fallen outside of the neoclassical theoretical compass.

In these ways mainstream economic theory took over those aspects of institutionalism amenable to “model analysis” (Copeland, 1951, p. 59), while other aspects were absorbed into what became applied field areas, such as industrial organization, labor economics, and industrial relations. At least until much more recently, these field areas had only loose ties to the theoretical core of the discipline and maintained a substantial institutional component.

Finally, a significant part of the institutionalist agenda of social reform had come to pass, both removing some of the original causes of the institutionalist movement and prompting sharp critiques of the expanded role for government that institutionalists had done so much to put forward. Frank Knight (1932) was an especially unrelenting critic of the institutionalist view of markets and the need for additional methods of “social control.” This attack was maintained by later Chicago school members, notably Henry Simons and George Stigler.

Under these circumstances, it is not difficult to see why institutionalism gradually slipped from a central part of American economics to a marginalized position. This change happened quite gradually, however. Kenneth Arrow (1975, p. 5) has talked about the Veblenian influence still being very apparent at Columbia in the early 1940s, when the only required graduate “theory” course was Mitchell’s course on the history of thought, a course that spent a significant amount of time on Veblen and Commons. It was not until 1947 that Columbia reacted to its relative weakness in neoclassical theory by hiring Albert Hart, George Stigler, and William Vickrey, and even then Karl Polanyi was also appointed to cover European economic history. Mark Blaug (1999, pp. 257–258) recalls his teachers at Columbia in the early 1950s being “nicely divided between pre-war institutionalists like J. M. Clark, Arthur F. Burns, Joseph Dorfman, and Karl Polanyi, and post-war neoclassical economists like George Stigler, Abraham Bergson, Albert Hart, and William Vickrey.” Similar things were occurring at Wisconsin where Commons-style institutionalism continued to be taught by Glaeser and, in agricultural economics, by Kenneth Parsons, but a gulf was opening up between the institutionalists and others. The retirement of the last of the older generation of institutionalists in the 1950s completed the process.

⁹ Edward Chamberlin’s theory of monopolistic competition arose much more from consideration of advertising and product differentiation than out of the literature on increasing returns. The notion that branding and advertising gives each firm “a degree of monopoly on its own brand” was stated by Morris Copeland in a note written in 1925, and, to some extent, Chamberlin’s theory had institutionalist roots. Chamberlin wrote to J. M. Clark that had read his paper “Soundings in Non-Euclidian Economics” with “considerable relish” and that he found the paper’s exercise in studying “‘contrary assumptions’ . . . so congenial to my own spirits that I feel more than ever the link between us.” Chamberlin also speaks of how much of Veblen can be fitted into monopolistic competition “without any trouble at all” (Edward Chamberlin to J. M. Clark, July 30, 1958).

American institutionalism did not disappear, but it certainly changed. Institutionalists formed the small “Wardman Group” in 1959, an organization that later became the Association for Evolutionary Economics.¹⁰ Institutionalism disassociated itself from the positivism that had gained popularity elsewhere (a positivism that, ironically, Mitchell and the NBER had played an important part in creating), and turned away from the methods and the core areas of the discipline that had been taken over by neoclassical and Keynesian economics. Institutionalists continued to work in applied areas, such as public utility regulation and industrial relations, and to argue for more active government regulation and “planning” of the economy (Gruchy, 1974), but there was also something of a movement back to the broader institutional themes found in Veblen and Commons.

Clarence Ayres, in his *Theory of Economic Progress* (1944), attempted to renew the Veblenian emphasis on technology as the driving force behind institutional change. Ayres’s charismatic personality attracted a number of students to the institutionalist ranks. The University of Texas retained its institutionalist character longer than most, and in the 1960s was still the home of a substantial institutionalist group keenly interested in Polanyi, Ayres, and Commons.¹¹ The Commons tradition in law and economics has also been kept alive by Daniel Bromley, Allan Schmid, and Warren Samuels (Samuels, 1971; Schmid, 1978; Samuels and Schmid, 1981; Bromley, 1989). In addition, J. K. Galbraith produced widely read and distinctly Veblenian analyses in his *Affluent Society* (1958) and *New Industrial State* (1971). However, for the sources of the recent and more general revival of interest in institutions one must look elsewhere.

Institutionalisms Old and New

Not only did institutionalism decline in its place in American economics, but the changing nature of mainstream economics led to a narrowing of the range of acceptable work and a squeezing out of such institutional content as existed there. It should be emphasized that despite the institutionalist criticisms of “orthodox” economics, American economics in the interwar period was quite pluralistic, and institutionalist and more orthodox approaches shaded into each other. Even Frank Knight, perhaps the most outspoken critic of the policy aspects of the institutionalist movement, knew Clarence Ayres and other institutionalists well, taught a course in the 1930s on “Economics from an Institutional Standpoint” covering

¹⁰ The original Wardman Group meeting was called by Allan Gruchy and held at Fagg Foster’s hotel room during the AEA meetings. The group consisted of only eleven people. The Association for Evolutionary Economics was founded in 1965.

¹¹ This group included Walter Neale, Wendell Gordon, H. H. Liebhafsky and several others. Walter Neale had studied with the Polanyi group at Columbia, while the interest in Commons came from Liebhafsky.

Veblen, Commons and a number of other institutionalist writers, as well as general problems in the origin and development of institutions and “the task of institutionalism” in “accounting historically for the factors treated as *data* in rationalistic, price theory economics.”¹² Nevertheless, for a period from the late 1940s through to about 1970, institutions became almost a prohibited subject within the mainstream of economics—banished to the ill-regarded discipline of sociology. As Furubotn and Richter (1991, p. 2) have put it: “The existence of political, legal, monetary, and other systems was certainly recognized; but either these systems were regarded as neutral in their effect on economic events and ignored, or they were taken as given and then specified in so perfunctory a way as to suggest that institutional influence was not of much importance.”

What has led to the resurgence of institutionalist thinking in more recent years? The lack of institutional content in the core of neoclassical theory eventually became an issue both on a theoretical level, particularly as new concepts and analytical tools were developed, and on the more applied level of the comparison of market outcomes with regulatory alternatives. Martin Shubik (1975, p. 545) once called general equilibrium theory a “conceptual straightjacket,” a criticism quite close in nature to those made of standard theory by those in the “old” institutionalist movement. Harold Demsetz (1969, p. 1) argued for a “comparative institutional” approach to policy appraisal in place of the “nirvana” approach of “comparing an ideal norm with existing ‘imperfect’ institutional arrangements,” a point that reflected the growing tendency to argue that any departure from “optimal” conditions justified intervention in markets. A concern with unregulated markets was one of the factors behind the original institutionalist movement, while a concern with the overregulation of markets partly motivated the revival of interest in institutions, but in both cases the established formal theory was thought to be missing important elements of reality.

Despite their different motivations and sources, many developments in contemporary economics have found themselves, in one way or another, dealing with topics that had been a part of the older institutionalist tradition. For example, there have been numerous efforts to move economics in the direction of a more plausible theory of psychology, including work on decision-making, bounded rationality, and expectations. This interest in utilizing recent work in cognitive and evolutionary psychology is very reminiscent of the old institutionalists’ interest in what was then “modern” psychology. Similarly, modern work on game theory has also devoted considerable attention both to the modeling of given institutional situations (which define the rules of the game) and to the issue of the evolution of social conventions.

¹² Knight sent this course outline to Ayres for comment. In his covering letter Knight states: “[I]t is unnecessary to say that I don’t place any very high estimate on the constructive value of institutionalist writings as known to me, —including those of C. E. Ayres! What I would like to do would be to take the ‘challenge’ seriously and make some real contribution toward an understanding of institutional development” (Frank Knight to Clarence Ayres, February 16, 1937).

Recent work on the importance of property rights pursues a topic that was in the center of the institutionalist perspective. The concept of transactions costs was implicit in some of the older institutionalist literature, and its more recent explicit development has generated an explosive growth of literature on organizations, contracts, and the role of institutions in economic development. The modern law and economics movement explores an area previously colonized by institutionalists. Much recent work in corporate finance and theories of agency and corporate control takes the pioneering work of institutionalists on the separation of ownership and control as its starting point.

This revival of interest in institutions has had a number of effects. Perhaps the most obvious outcome has been in the development what has become known as the “new institutional economics,” consisting in large part of transactions cost analysis of property rights, contracts and organizations. This new institutional economics has generally identified itself as an attempt to extend the range of neoclassical theory by explaining the institutional factors traditionally taken as givens, such as property rights and governance structures, and, unlike the old institutionalism, not as an attempt to replace the standard theory (Eggertsson, 1990; Furubotn and Richter, 1991, 1997). In this literature, institutions and institutional change have generally been analyzed as ways of reducing transactions costs, reducing uncertainty, internalizing externalities, and producing collective benefits from coordinated or cooperative behavior. There has been a strong tendency in this work to argue that institutions tend toward providing “efficient” solutions to economic problems, an argument that is sometimes supplemented by notions of competition working to select the most efficient organizational form, or set of routines, or rules. A recent survey of the new institutionalist literature is available in Furubotn and Richter (1997), and no such survey will be attempted here. What will be discussed is some aspects of the relationship between the old and the new institutionalisms.

There has been a considerable concern among new institutionalists to differentiate themselves sharply from the “old” American institutionalism (Langlois, 1986; Eggertsson, 1990). There clearly are major differences in methodology, in the theoretical and analytical tools being used, as well as in the basic orientation towards the market and “business” institutions. Nevertheless, some aspects of the new institutionalism do connect back to the old—including a tendency to spread beyond the standard neoclassical boundaries.

One line of connection between the old and the new can be found in Williamson’s remarks about the sources of his ideas on transactions cost economics and organizations (Williamson and Masten, 1995). Williamson (2000, p. xiii-xiv) credits Commons’s use of the “transaction” as the basic unit of activity and refers directly to the older institutionalist tradition in law and economics.

Another connection is to be found in the increasingly common reference to bounded rationality, even as a principle that is central to the new institutionalism (Furubotn and Richter, 1991). Indeed, many of the reasons given for the existence of “routines” or decision heuristics, organizations, conventions, and to institution-

alized rules in general, relate, in part or in whole, to the limits on rationality due to informational and cognitive constraints (Nelson and Winter, 1982, p. 35; Heiner 1983). This point of is quite consistent with old institutionalist criticisms of the rationalist view of man as a “lightning calculator” (Veblen, 1898, p. 73), and with J. M. Clark’s (1918) discussion of decision-making costs. Herbert Simon (1979, p. 499) has recognized the influence of old institutionalists, such as J. R. Commons, on his thinking, and has argued that (old) institutionalism was the “principal forerunner” of the behavioral theory of the firm.

Within the new institutional economics, there has also been a growing appreciation of the fact that institutions that could generate social benefits may not emerge, and that inefficient institutions may emerge and survive. The sources of this insight have arrived from different directions. Game theory has demonstrated that in a variety of finitely and infinitely repeated games, inefficient equilibria exist and persist (Binger and Hoffman, 1989). Economic theory has illustrated the phenomenon of path-dependence and “lock-in.” Further, once distributional issues are included in explaining institutional development and change, it is easy to generate situations where the economic interests of powerful groups will not coincide with the interests of society as a whole (North, 1981). These currents have sometimes intertwined in recent institutionalist work; for example, Jack Knight’s (1992) stress on conflicts of interest arising from the distributional effects of institutions, distributional coalitions, the interactions between the groups who benefit and those who are hampered, and on institutional development as an “ongoing bargaining game among different groups” has close similarities with the overall conception in Commons’s institutional economics, although expressed in the more formal language of game theory.

The work of Douglass North (1990) provides a powerful example of an author who has not only come to abandon his original efficiency explanation of institutional change, but has also come to make extensive mention of the importance of “mental models,” norm-guided behavior, and ideological convictions. North (1981, p. 58) has argued that “the simple fact is that a dynamic theory of institutional change limited to the strictly neoclassical constraint of individualistic, rational purposive activity would never allow us to explain most secular change ranging from the stubborn struggle of the Jews in antiquity to the passage of the Social Security Act in 1935.” Several commentators have argued that North’s more recent work shows “a degree of convergence” with the ideas of the old institutionalists (Hodgson, 1998, p. 185; Rutherford, 1994, 1995).

The new institutionalism has worked to stimulate significant discussion not only of formal rules and governance structures, but also of informal norms and social networks, and of the relationships between them. Some of this discussion has reconnected economics with literatures in sociology and political

science.¹³ There has also been an increased interest in the role of shared values and in the sociological literatures surrounding such concepts as social capital, trust, community, and civil society (Knight, 1998), and in the endogeneity of preferences to processes of institutional change (Bowles, 1998). The development of a dialogue between the new institutional economics and the literatures on the “new institutionalism” in sociology, political science and anthropology is extremely interesting (Brinton and Nee, 1998; Hall and Taylor, 1996; DiMaggio and Powell, 1991; Richter, 1998). There has been no such degree of communication between economics and the other social sciences since the early days of the old institutionalism. If the new institutionalism makes a serious attempt to incorporate this type of work, it may not be able to avoid the tension, already visible in North’s work, between standard neoclassical assumptions and the broader subject matter of social norms and shared values.

The new literature on institutions has had other impacts too, impacts that move outside of the new institutionalism. Aspects of this literature have also served to stimulate attempts to renew the old institutionalism by bringing together more recent work in psychology, evolutionary models, and resource or competence-based theories of the firm with ideas taken from Veblen, Commons, and other old institutionalists. The best example of this trend comes from Geoff Hodgson (1998, 1999). Hodgson argues that the key demarcation between the old and the new institutionalism is that the new institutionalism is yoked to the model of rational individual behavior and the assumption of given individual preference functions. How his own synthesis of ideas will develop and whether it will work to reinvigorate the old institutionalist tradition remains to be seen.

One final effect of the revival of interest in institutions has been to create interest in previously neglected literatures in the history of economics. This has included not only some of my own work on institutional economics, but also work on the origins of law and economics in German historicism (Pearson, 1997), on the “socioeconomics” of Schmoller, Durkheim and Weber (Nau and Steiner, 2000; Nau, 2000), on the influence of Schmoller on Schumpeter’s earlier work (Ebner, 2000), on the institutional component in Frank Knight’s work (Hodgson, 2001), on the “post-Marshallian” tradition in the evolutionary nature of the firm (Finch, 2000), and much more. This recent work has modified the idea of a dominant Anglo/American neoclassical orthodoxy in the interwar period, with a more pluralist and international perspective (Morgan and Rutherford, 1998; Hodgson, forthcoming). Interesting questions arise concerning the interconnections between these various literatures, as well as the changing relationship between economics and related social science disciplines such as psychology and sociology.

¹³ Some of the impetus for combining institutionalist economics with sociology and stems from critiques of Williamson’s concept of human action for failing to recognize the embeddedness of economic action within a structure of social relationships (Granovetter, 1985; Nee and Ingram, 1998). Williamson (2000) offers a response to the “embeddedness” issue which seems certain to engender further discussion.

Many different “institutionalisms” have flourished at various times and places within the social sciences and the discipline of economics. Over time, the interest in institutions has come from different sources and with different, even opposing, motivations. Institutional analysis has been used both to explain the failings of unfettered markets and the need for a greater degree of government intervention, and the failings of government interventions and the need for a greater degree of market freedom. But a common theme is that institutions matter a great deal, and that economists need to think hard about the ways in which institutions shape economic behavior and outcomes, and are themselves shaped by economic, political, and ideological factors. This is not a simple task. As the old institutionalists fully realized, discussion of institutions tends to lead into areas difficult to handle with the standard neoclassical tools.

■ *This paper draws on a number of my recent papers on the history of institutional economics (Rutherford, 1997, 1999, 2000a, 2000b, 2000c) and on archival work using the Clarence Ayres Papers, Center for American History, University of Texas; the Walton Hamilton Papers, Tarlton Law Library, University of Texas; the Allyn Young Papers, Harvard University Archives; the Archives of the Brookings Institution; the James Bonbright Papers, J. M. Clark Papers, Morris Copeland Papers, Carter Goodrich Papers, Robert Hale Papers, and Wesley Mitchell Papers, all at the Rare Book and Manuscript Library, Columbia University; the John R. Commons Papers, and Edwin E. Witte Papers at the State Historical Society of Wisconsin; and the Papers of the War Labor Policies Board at the National Archives, College Park. I have also benefited from access to Allan Gruchy’s papers in the possession of his son, interviews with John Adams, Warren Samuels, Harry Trebing, Mark Perlman, and the recollections of Walter Neale. This research has been supported by a Social Science and Humanities Research Council of Canada research grant (project # 410-99-0465).*

Correspondence Cited

Chamberlin, Edward H. to John M. Clark, July 30, 1958. John M. Clark Papers, Box 5: Correspondence 1940–1963. Rare Book and Manuscript Library, Columbia University.

Hamilton, Walton H. to Clarence Ayres, May 15, no year. Clarence Ayres Papers, Box 3F288, Walton Hamilton folder. Center for American History, University of Texas.

Knight, Frank H. to Clarence Ayres, February 16, 1937. Clarence Ayres Papers, Box 3F290, Frank Knight folder. Center for American History, University of Texas.

Max Lerner to Carter Goodrich, June 23, 1933. Carter Goodrich Papers, Box 1, Max Lerner folder. Rare Book and Manuscript Library, Columbia University.

Mills, F. C. to Milton Friedman, June 25, 1951. Milton Friedman Papers, Box 30. Hoover Institution.

Morton, Walter to Robert Coleberd, March 4, 1973. Accession A86-011, Robert S. Brookings Graduate School Reunion, Box 1, Replies folder. Brookings Institution Archive.

References

- Arrow, Kenneth J.** 1975. "Thorstein Veblen as an Economic Theorist." *American Economist*. Spring, 29, pp. 5-9.
- Ayres, Clarence E.** (1944) 1962. *The Theory of Economic Progress*, 2nd edition. New York: Schocken.
- Barber, William J.** 1996. *Designs Within Disorder: Franklin D. Roosevelt, the Economists, and the Shaping of Economic Policy, 1933-1945*. New York: Cambridge University Press.
- Berle, Adolf. A. and Gardiner C. Means.** 1932. *The Modern Corporation and Private Property*. New York: Macmillan.
- Binger, Brian R., and Hoffman, Elizabeth.** 1989. "Institutional Persistence and Change: Questions of Efficiency." *Journal of Institutional and Theoretical Economics*. March, 145, pp. 67-84.
- Blaug, Mark.** 1999. "The Formalist Revolution or What Happened to Orthodox Economics After World War II?" In Roger Backhouse and John Creedy, eds. *From Classical Economics to the Theory of the Firm: Essays in Honour of D. P. O'Brien*. Aldershot: Edward Elgar, pp. 257-80.
- Bonbright, James C.** 1937. *The Valuation of Property*. New York: McGraw Hill.
- Bonbright, James C.** 1961. *Principles of Public Utility Rates*. New York: Columbia University Press.
- Bonbright, James and Gardiner C. Means.** 1932. *The Holding Company*. New York: McGraw Hill.
- Bowles, Samuel.** 1998. "Endogenous Preferences: The Cultural Consequences of Markets and Other Economic Institutions." *Journal of Economic Literature*. March, 36, pp. 75-111.
- Brinton, Mary C. and Victor Nee, eds.** 1998. *The New Institutionalism in Sociology*. New York: Russell Sage Foundation.
- Bromley, Daniel W.** 1989. *Economic Interests and Institutions: The Conceptual Foundations of Public Policy*. Oxford: Basil Blackwell.
- Burns, Arthur F. and Mitchell, Wesley C.** 1946. *Measuring Business Cycles*. New York: National Bureau of Economic Research.
- Chasse, John Dennis.** 1994. "The American Association for Labor Legislation: An Episode in Institutional Policy Analysis." *Journal of Economic Issues*. September, 25, pp. 799-828.
- Clark, John M.** 1917. "Business Acceleration and the Law of Demand: A Technical Factor in Business Cycles." *Journal of Political Economy*. March, 25, pp. 217-35.
- Clark, John M.** 1918. "Economics and Modern Psychology, I and II." *Journal of Political Economy*. January/February, 26, pp. 1-30, 136-66.
- Clark, John M.** 1921. "Soundings in Non-Euclidean Economics." *American Economic Review*, supplement. March, 11, pp. 132-43.
- Clark, John M.** 1923. *Studies in the Economics of Overhead Costs*. Chicago: University of Chicago Press.
- Clark, John M.** 1926. *The Social Control of Business*. Chicago: University of Chicago Press.
- Clark, John M.** 1927. "Recent Developments in Economics," in Edward C. Hayes, ed. *Recent Developments in the Social Sciences*. Philadelphia: Lippencott, pp. 213-306.
- Clark, John M.** 1940. "Towards a Concept of Workable Competition." *American Economic Review*. June, 30, pp. 241-56.
- Commons, John R.** (1924) 1968. *The Legal*

Foundations of Capitalism. Madison: University of Wisconsin Press.

Commons, John R. 1932. "The Problem of Correlating Law, Economics and Ethics." *Wisconsin Law Review*. December, 8, pp. 3–26.

Commons, John R. 1934. *Institutional Economics*. New York: Macmillan.

Copeland, Morris A. 1925. "The Economics of Advertising—Discussion." *American Economic Review*. March, 15, pp. 38–41.

Copeland, Morris A. 1951. "Institutional Economics and Model Analysis." *American Economic Review*. May, 41, pp. 56–65.

Copeland, Morris A. 1952. *A Study of Money-flows in the United States*. New York: National Bureau of Economic Research.

Demsetz, Harold. 1969. "Information and Efficiency: Another Viewpoint." *Journal of Law and Economics*. April, 12, pp. 1–22.

DiMaggio, Paul and Walter W. Powell, eds. 1991. *The New Institutionalism in Organizational Analysis*. Chicago: University of Chicago Press.

Ebner, Alexander. 2000. "Schumpeter and the 'Schmollerprogramm': Integrating Theory and History in the Analysis of Economic Development." *Journal of Evolutionary Economics*. 10, pp. 355–72.

Eggertsson, Thrainn. 1990. *Economic Behavior and Institutions*. Cambridge: Cambridge University Press.

Ezekiel, Mordecai. 1938. The Cobweb Theorem. *Quarterly Journal of Economics*. February, 52, pp. 255–80.

Finch, John H. 2000. "Is Post-Marshallian Economics an Evolutionary Research Tradition?" *European Journal of the History of Economic Thought*. Autumn, 7, pp. 377–405.

Fried, Barbara H. 1998. *The Progressive Assault on Laissez Faire: Robert Hale and the First Law and Economics Movement*. Cambridge, Mass: Harvard.

Froman, Lewis A. 1942. "Graduate Students in Economics, 1904–1940." *American Economic Review*. December, 32, pp. 817–26.

Furubotn, Eirik G. and Rudolf Richter. 1991. "The New Institutional Economics: An Assessment," in Eirik G. Furubotn and Rudolf Richter, eds. *The New Institutional Economics*. College Station, Tx, Texas A&M Press.

Furubotn, Eirik G. and Rudolf Richter. 1997. *Institutions and Economic Theory—The Contribution of the New Institutional Economics*. Ann Arbor: University of Michigan Press.

Galbraith, John Kenneth. 1958. *The Affluent Society*. Boston: Houghton Mifflin.

Galbraith, John Kenneth. 1971. *The New Industrial State*. 2nd edition. Boston: Houghton Mifflin.

Glaeser, Martin G. 1927. *Outlines of Public Utility Economics*. New York: Macmillan.

Granovetter, Mark. 1985. "Economic Action and Social Structure: The Problem of Embeddedness." *American Journal of Sociology*. November, 91, pp. 481–510.

Gruchy, Allan, G. 1974. "Government Intervention and the Social Control of Business: The Neoinstitutionalist Position." *Journal of Economic Issues*. June, 8, pp. 235–49.

Hale, Robert L. 1921. "The 'Physical Value' Fallacy in Rate Cases." *Yale Law Journal*. 30, pp. 710–31.

Hale, Robert L. 1923. "Coercion and Distribution in a Supposedly Non-Coercive State." *Political Science Quarterly*. September, 38, pp. 470–94.

Hall, Peter A. and Rosemary C. R. Taylor. 1996. "Political Science and the Three New Institutionalisms." *Political Studies*. 44, pp. 936–57.

Hamilton, Walton H. 1919. "The Institutional Approach to Economic Theory." *American Economic Review*. March, 9, pp. 309–18.

Hamilton, Walton H. 1930. "Affectation With Public Interest." *Yale Law Journal*. June, 39, pp. 1089–1112.

Hamilton, Walton H. 1938. "Price—By Way of Litigation." *Columbia Law Review*. June, 38, pp. 1008–1036.

Hamilton, Walton H. and Associates. 1938. *Price and Price Policies*. New York: McGraw Hill.

Hamilton, Walton H. and Stacy May. (1923) 1968. *The Control of Wages*. New York: Augustus M. Kelley.

Hamilton, Walton H. and Helen R. Wright. 1925. *The Case of Bituminous Coal*. New York: Macmillan.

Hammond, J. Daniel. 1996. *Theory and Measurement: Causality Issues in Milton Friedman's Monetary Economics*. Cambridge: Cambridge University Press.

Heiner, Ronald A. 1983. "The Origin of Predictable Behaviour." *American Economic Review*. September, 73, pp. 560–95.

Hodgson, Geoffrey M. 1998. "The Approach of Institutional Economics." *Journal of Economic Literature*. March, 36, pp. 166–92.

Hodgson, Geoffrey M. 1999. *Evolution and Institutions: On Evolutionary Economics and the Evolution of Economics*. Cheltenham: Edward Elgar.

Hodgson, Geoffrey M. 2001. "Frank Knight as an Institutional Economist," in Jeff E. Biddle, John B. Davis, and Steven G. Medema, eds. *Eco-*

nomics Broadly Considered: Essays in Honor of Warren J. Samuels. London: Routledge, in press.

Hodgson, Geoffrey M. Forthcoming. *How Economics Forgot History: The Problem of Historical Specificity in Social Science.* London: Routledge.

Knight, Frank H. 1932. "The Newer Economics and the Control of Economic Activity." *Journal of Political Economy.* August, 40, pp. 433–76.

Knight, Jack, 1992. *Institutions and Social Conflict.* Cambridge: Cambridge University Press.

Knight, Jack. 1998. "The Bases of Cooperation: Social Norms and the Rule of Law." *Journal of Institutional and Theoretical Economics.* December, 154, pp. 754–63.

Koopmans, Tjalling C. 1947. "Measurement Without Theory." *Review of Economic Statistics.* August, 29, pp. 161–72.

Langlois, Richard N. 1986. "The New Institutional Economics: An Introductory Essay," in Richard N. Langlois, ed. *Economics as a Process: Essays in the New Institutional Economics.* Cambridge: Cambridge University Press, pp.1–25.

Lewin, Shira. 1996. "Economics and Psychology: Lessons for Our Own Day from the Early Twentieth Century." *Journal of Economic Literature.* September, 35, pp. 1293–1323.

McDougall, William. 1908. *An Introduction to Social Psychology.* London: Methuen.

Means, Gardiner C. 1935. Industrial Prices and Their Relative Inflexibility. Senate Document 13, 74th Congress, 1st Session. Washington DC: US Govt. Printing Office.

Mitchell, Wesley C. 1910. "The Rationality of Economic Activity: I and II." *Journal of Political Economy.* February/March, 18, pp. 97–113, 197–216.

Mitchell, Wesley C. 1913. *Business Cycles.* Berkeley: University of California Press.

Mitchell, Wesley C. (1923) 1950. "Making Goods and Making Money," in Wesley C. Mitchell, ed. *The Backward Art of Spending Money.* New York: Augustus M. Kelley, pp.137–48.

Mitchell, Wesley C. (1924) 1971. "The Prospects of Economics." in Rexford G. Tugwell, ed. *The Trend of Economics.* Port Washington, NY: Kennikat Press, pp. 1–34.

Mitchell, Wesley C. 1925. "Quantitative Analysis in Economic Theory." *American Economic Review.* March, 15, pp. 1–12.

Mitchell, Wesley C. 1927. *Business Cycles: The Problem and Its Setting.* New York: National Bureau of Economic Research.

Mitchell, Wesley C. 1996. "Money Economy and Modern Civilization (Paper Read Before the Cross-Roads Club of Stanford, May 6, 1910),"

Malcolm Rutherford, ed. *History of Political Economy.* Fall, 28, pp. 329–57.

Morgan, Mary and Malcolm Rutherford, eds. 1998. *From Interwar Pluralism to Postwar Neoclassicism.* Annual Supplement to Volume 30, *History of Political Economy.* Durham, NC: Duke University Press.

Nau, Heino Heinrich. 2000. "Max Weber: The Economist–Institutional and Methodological Aspects in Weber's Social Economics." Paper Presented at the History of Economics Society Meetings, Vancouver, BC.

Nau, Heino Heinrich and Philippe Steiner. 2000. "Institutional Elements in European Socioeconomics: Durkheim and Schmoller." Paper Presented at the History of Economics Society Meetings, Vancouver, BC.

Nee, Victor and Paul Ingram. 1998. "Embeddedness and Beyond: Institutions, Exchange, and Social Structure," in Mary C. Brinton and Victor Nee, eds. *The New Institutionalism in Sociology.* New York: Russell Sage Foundation, pp. 19–45.

Nelson, Richard R. and Sidney G. Winter. 1982. *An Evolutionary Theory of Economic Change.* Cambridge MA: Harvard University Press.

North, Douglass C. 1981. *Structure and Change in Economic History.* New York: Norton.

North, Douglass C. 1990. *Institutions, Institutional Change and Economic Performance.* Cambridge: Cambridge University Press.

Pearson, Heath. 1997. *Origins of Law and Economics: The Economists' New Science of Law, 1830–1930.* Cambridge: Cambridge University Press.

Perlman, Selig. 1928. *A Theory of the Labor Movement.* New York: Macmillan.

Richter, Rudolf, ed. 1998. "Views and Comments on the 'New Institutionalism' in Sociology, Political Science, and Anthropology." *Journal of Institutional and Theoretical Economics.* December, 154, pp. 694–789.

Rutherford, Malcolm. 1994. *Institutions in Economics: The Old and the New Institutionalism.* Cambridge: Cambridge University Press.

Rutherford, Malcolm. 1995. "The Old and the New Institutionalism: Can Bridges be Built?" *Journal of Economic Issues.* June, 29, pp. 443–50.

Rutherford, Malcolm. 1997. "American Institutionalism and the History of Economics." *Journal of the History of Economic Thought.* Fall, 19, pp. 178–95.

Rutherford, Malcolm. 1999. "Institutionalism as 'Scientific' Economics," in Roger Backhouse and John Creedy, eds. *From Classical Economics to*

the Theory of the Firm: Essays in Honour of D. P. O'Brien. Aldershot: Edward Elgar, pp. 223–42.

Rutherford, Malcolm. 2000a. "Institutionalism Between the Wars." *Journal of Economic Issues.* June, 34, pp. 291–303.

Rutherford, Malcolm. 2000b. "Understanding Institutional Economics: 1918–1929." *Journal of the History of Economic Thought.* September, 22, pp. 277–308.

Rutherford, Malcolm. 2000c. "Morris A. Copeland: A Case Study in the History of Institutional Economics." Paper Presented at the History of Economics Society Meetings, Vancouver BC.

Samuels, Warren J. 1971. "The Interrelations Between Legal and Economic Processes." *Journal of Law and Economics.* October, 14, pp. 435–50.

Samuels, Warren J. 1973. "The Economy as a System of Power and its Legal Bases: The Legal Economics of Robert Lee Hale." *University of Miami Law Review.* Spring/Summer, 27, pp. 261–371.

Samuels, Warren J. and Schmid, A. Allan, eds. 1981. *Law and Economics: An Institutional Perspective.* Boston: Martinus Nijhoff.

Schmid, A. Allan. 1978. *Property, Power, and Public Choice.* New York: Praeger.

Shubik, Martin. 1975. "The General Equilibrium Model is Incomplete and Not Adequate for the Reconciliation of Micro and Macroeconomic Theory." *Kyklos.* 28:3, pp. 545–73.

Shute, Laurence. 1997. *John Maurice Clark: A Social Economics for the Twenty-First Century.* New York: St. Martin's.

Simon, Herbert A. 1979. "Rational Decision Making in Business Organizations." *American Economic Review.* September, 69, pp. 493–513.

Slichter, Sumner H. 1931. *Modern Economic Society.* New York: H. Holt.

Stocking, George Ward. 1925. *The Oil Industry and the Competitive System: A Study in Waste.* Boston and New York: Houghton Mifflin.

Tugwell, Rexford G. (1922) 1968. *The Economic Basis of Public Interest.* New York: Augustus M. Kelley.

Tugwell, Rexford G., ed. (1924) 1971. *The Trend of Economics.* Port Washington NY: Kennikat Press.

Veblen, Thorstein. (1898) 1961. "Why is Economics Not an Evolutionary Science?" In *The Place of Science in Modern Civilisation.* New York: Russell & Russell, pp. 56–81.

Veblen, Thorstein. (1899) 1924. *The Theory of the Leisure Class.* London: George Allen & Unwin.

Veblen, Thorstein. (1904) 1975. *The Theory of Business Enterprise.* Clifton, N.J.: Augustus M. Kelley.

Williamson, Oliver E. 2000. "The New Institutional Economics: Taking Stock, Looking Ahead." *Journal of Economic Literature.* September, 38, pp. 595–613.

Williamson, Oliver E and Scott E. Masten, eds. 1995. *Transaction Cost Economics.* Aldershot: Edward Elgar.

Wolman, Leo. 1924. *The Growth of American Trade Unions, 1880–1923.* New York: National Bureau of Economic Research.

Yonay, Yuval P. 1998. *The Struggle Over the Soul of Economics: Institutional and Neoclassical Economists in America Between the Wars.* Princeton, NJ: Princeton University Press.