INSTITUTIONAL ECONOMICS

AT COLUMBIA UNIVERSITY

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This paper draws on archival work using the James Bonbright Papers, J. M. Clark Papers, Joseph Dorfman Papers, Carter Goodrich Papers, Robert Hale Papers, and Wesley Mitchell Papers, all at the Rare Book and Manuscript Library, Columbia University, the Arthur F. Burns Papers at the Eisenhower Library, Abilene, Kansas, and the John R. Commons Papers at the State Historical Society of Wisconsin. My thanks to Lowell Harriss, Aaron Warner, Eli Ginzberg, Donald Dewey, Mark Perlman, Daniel Fusfeld, Mark Blaug, and Walter Neale for sharing their recollections of Columbia. Thanks also to my research assistant Cristobal Young. Any errors are my responsibility. This research has been supported by a Social Science and Humanities Research Council of Canada research grant (project # 410-99-0465).

1. Introduction

In a number of recent papers I have attempted to outline the nature of the institutionalist movement in American economics in the interwar period (Rutherford 2000a, 2000b, 2000c). At that time institutionalism was a very significant part of American economics. In terms of research output and the production of graduate students, the main centers for institutionalism were the university of Chicago (until 1926 and the departure of J. M. Clark), the University of Wisconsin, the Robert Brookings Graduate School (which existed only briefly between 1923 and 1928), and, after the arrival of Wesley Mitchell in 1913, and J. M. Clark in 1926, Columbia University. Columbia University became the academic home of a large concentration of economists of institutionalist leaning, and other Schools and Departments in the University, particularly Business, Law, Sociology, and Philosophy, also contained many people of similar or related persuasion. Taken in aggregate, Columbia has to rank as the largest and most important center for institutional economics from the mid 1920s to the late 1940s. After that, institutionalism began to decline in its professional standing. At Columbia, this was reflected in a growing concern with the Department's relative weakness in theory, and, in 1947, the hiring of Albert Hart, George Stigler, and William Vickrey.

Despite this central place within the institutionalist movement, little has been written on Columbia institutionalism in overall terms. The Columbia economists most clearly associated with institutionalist ideas include Wesley Mitchell, J. M. Clark, F. C. Mills, Paul Brissenden, James Bonbright, Robert Hale, Joseph Dorfman, Carter Goodrich, Rexford Tugwell, Leo Wolman,[1] Horace Taylor, A. F. Burns, and, later on, Karl Polanyi. Perhaps A. R. Burns, and Eveline Burns, should also be included as being, at the least, sympathetic to institutionalist ideas.

The Department of Economics was, over this period, a graduate department offering degrees within the Faculty of Political Science. The Faculty also contained the graduate departments of Sociology, History, and Public Law. Not all teachers of the undergraduate economics programs at

Columbia College and Barnard College were involved in graduate teaching. Rexford Tugwell and Horace Taylor were never elected to the graduate faculty. Outside of economics, Karl Llewellyn, and A. A. Berle were members of the Law School and of the Department of Public Law. Robert Hale moved from Economics to the Law School, and Gardiner Means held an appointment as a member of the economic research staff of the Law School between 1927 and 1933, and was an associate in law from 1933 to 1935. Sociology contained William Ogburn (until 1927), and History contained such luminaries as Charles Beard and James Harvey Robinson. Outside of the Faculty of Political Science, the Philosophy Department contained John Dewey, whose instrumentalist philosophy was widely influential and closely connected to institutional economics. There were also close relations between the School of Business, established in 1916, and the Department of Economics. James Bonbright and Paul Brissenden, as well as other economists, were appointed in the School of Business, and F. C. Mills held a joint appointment. In addition, there was Mitchell's National Bureau of Economic Research, which had close connections with several Columbia faculty, and employed many Columbia students and graduates.

There has been substantial material produced on the work and careers of Wesley Mitchell (Biddle 1998), J. M. Clark (Shute 1997), and Rexford Tugwell (Sternsher 1964), but virtually nothing on the broader issues that relate to institutionalism as a movement. This paper will not focus on the work of individuals so much as on how Columbia became a center for institutionalism, the relationships between the various people of institutional orientation who were there, the overall character and content of Columbia institutional economics, and on how the decline of institutionalism was reflected in the history of the Columbia Department.

2. Columbia Economics 1900 to 1918

Columbia's Economics Department in the early 1900s was quite small but of high quality and, as noted above, part of a larger School (after 1912, Faculty) of Political Science. The Economics

Department contained some notable people, including E. A. R. Seligman, Henry R. Seager, Henry L. Moore, and, of course, J. B. Clark. Franklin F. Giddings, the sociologist, was also a member of the Department until a separate Department of Sociology was formed in 1905. Seligman and J. B. Clark had both studied in Germany and had absorbed a large amount of historical school influence. Seligman, for example, studied in Heidelberg and Berlin, and on returning obtained both an LLB and a PhD at Columbia. He was active with R. T. Ely in the founding of the American Economic Association in 1885. He taught graduate courses in history of political economy, railroad problems and regulation, and did a great deal to establish the field of public finance.

J. B. Clark, like R. T. Ely, had studied under Karl Knies at Heidelberg. Clark's first book *The Philosophy of Wealth* (1886) contained a strong ethical dimension and a concern with the possibly retrogressive impact of "unrestrained competition." His later work on marginal productivity theory established him as America's leading economic theorist. In this work Clark gave the static and idealised competitive market model a normative role, but it must be remembered that Clark did not think that actual markets conformed to this ideal type. He was deeply concerned with the problem of combinations and trusts, supported trade unions, and advocated various other policy interventions in order to bring actual dynamic market outcomes closer to the ideal. Clark's interests, however, moved increasingly into the area of international relations, and he retired in 1923.

Henry R. Seager and Henry L. Moore were appointed in 1902. Seager had been a student of Simon Patten's at Pennsylvania. He shared an interest in the problem of trusts with J. B. Clark, but was also very well known as a labor economist and as an effective advocate of social insurance. He knew J. R. Commons well, and students of Commons's, such as William Leiserson and Henry E. Hoagland, went on to complete their doctorates at Columbia. Seager remained an important influence within the Columbia Department until his death in 1930, and he produced many students in labor economics.

Henry L. Moore had done graduate work at Johns Hopkins under J. B. Clark and became a pioneer in mathematical statistics and mathematical economics (Mirowski 1990). According to Dorfman, he "paid special attention to the recent contributions to statistical theory of the Oxford economist, Francis Edgeworth, and of Sir Francis Galton and Karl Pearson, whose laboratories he visited frequently" (Dorfman 1955, p. 186). Moore did not enjoy teaching the more elementary statistics courses, and instruction in statistics was supplemented by the appointment of Robert Chaddock in 1911. As the Chair of the Department, it was Seligman's desire to put Columbia "as far in the lead in practical statistics, as she is already in the lead in economics and sociology" (Seligman 1910, quoted by Dorfman 1955, p. 188).

Vladimir Simkhovitch was appointed in 1905 to teach economic history. He had been trained at Halle where he had met Wesley Mitchell. In 1908 he took over J. B. Clark's course on socialism.

It is clear from this that the Columbia Department of Economics had particular strength in economic theory, statistics, railroad regulation, labor problems, public finance, and corporations and trusts. Some notable graduates from the program in the period before Mitchell's arrival were William Z. Ripley (1893), Alvin Johnson (PhD 1905), J. M. Clark (PhD 1910), B. M. Anderson Jr. (PhD 1911), and William Leiserson (PhD 1911). Paul Douglas was also a student at Columbia in 1913 and 1914 (although he did not graduate until 1921). He took courses from J. B. Clark, Seligman, Chaddock, and Seager, as well as from Charles Beard in History. He also read some of Dewey's work (Douglas 1971, pp.28-29). Despite J. B. Clark's presence in the Department it cannot be said that the Department as a whole, or the students they produced, were narrowly neoclassical in nature. As Paul Douglas's autobiography makes clear, New York was an intellectual ferment and a hotbed of reform movements (Douglas 1971, pp. 31-32), and the atmosphere at Columbia reflected that in the city. Training in economics also drew upon the broader resources of the Faculty of Political Science. Until 1917 every doctoral student had to offer a major area and two minor areas.[2] For economics students, one minor area had to be sociology, the other minor area could be drawn from other Departments in the Faculty of

Political Science, such as History or Public Law. The Sociology Department had a stress on quantitative methods, both the sociology and economics students being taught by Chaddock, who was later aided by Frank A. Ross of the Department of Sociology. One graduate was William Ogburn (PhD 1912), who returned to Columbia as a member of the Sociology Department in 1919. He had close connections with Carleton Parker, who had enthusiastically taken up the application of instinct psychology to issues in labor economics (see Parker 1920), as well as with many others who became associated with institutional economics.[3] The relationship between the Departments of Economics and Public Law was also noteworthy. For example, William Ripley took administrative law as his second minor area, while J. M. Clark split his between American history and constitutional law (Shute 1997, p. 10). Seligman's own background in law contributed to the close interweaving of economics and law, a feature that was to continue to be characteristic of Columbia.

There is no difficulty in seeing why the Columbia Department should have been interested in hiring Wesley Mitchell when the opportunity arose. Simkhovitch, having known him from Halle, was particularly keen to have him as a colleague, but Mitchell was extremely well regarded by the rest of the Department, and by the profession at large. Although Mitchell had been much influenced by Thorstein Veblen's emphasis on the importance of pecuniary and business institutions, and had been critical of standard views of rationality (Mitchell 1910), American economics of the early part of the Twentieth Century was both pluralistic (Morgan and Rutherford 1998), and full of discussion of various different types of psychology. Mitchell's somewhat unorthodox bent was no barrier to his career.[4] He had a broad interest in theory, including recent European and American contributions, and in 1913 he had just finished *Business Cycles* (Mitchell 1913), a book that cemented his reputation as a scholar of the first rank. He was seen at Columbia as a "man interested in theory and equipped to attack theoretical problems in a truly scientific spirit, and with the aid of the broadest training here and abroad" (Dorfman 1955, p. 191).

On the publication of *Business Cycles*, Seager wrote to Mitchell: "It is a splendid achievement. . . I had no idea that you had so nearly finished or that it was to be such an exhaustive study. Its publication sets a new standard for American economic scholarship" (Henry R. Seager to Wesley Mitchell Nov 5, 1913, Wesley Mitchell Papers). Slightly later, Henry Moore wrote:

> Since I first read Prof Clark's Theory of Distribution, no work by an American economist has given me such great satisfaction. Your grasp of the whole complex of facts, your cautious step by step progress and your sagacity in tracing the relation of economic changes must give keen pleasure to all of your readers. You have difficulty in concealing your contempt for pretentious, speculative treatments of economic questions, and your enthusiasm for inductive research makes your statistical tables glow. I am glad with all my heart that we are so closely associated in the same university (Henry L. Moore to Wesley Mitchell, September 13, 1914, Wesley Mitchell Papers).[5]

Mitchell's move to New York was prompted partly by Lucy Sprague Mitchell's desire to move to New York to pursue her interest in educational reform, but Mitchell was also interested in New York as a place compatible with his research interests. Since Veblen and Allyn Young had left Stanford, Mitchell felt he lacked colleagues in California who understood and were interested in his work on Types of Economic Theory. For his broader work on the nature and functioning of the "Money Economy" (of which *Business Cycles* was a part) he felt he "needed the chance to come into contact at first hand with the workings of pecuniary institutions and to observe how the minds of the men who control the powerful business enterprises are formed by their daily tasks" (L. S. Mitchell, 1953, p. 231). Mitchell had resigned from Berkeley without a job in New York, but made an arrangement with Columbia to teach one course related to his current research for the nominal salary of $700. The following year he was elected as Professor of Economics. At this time, Mitchell was primarily interested in working on his Types of Economic Theory, relating the history of economic thought to the development of the institutions of the money economy. In some years he taught a full year course on Types of Economic Theory, in other years he taught a one semester course on Types of Economic Theory and a semester course on Business Cycles. The former course dealt mainly with "Current Types of Economic Theory" including Jevons and Marshall's neoclassical economics; American contributors such as J. B. Clark, Frank Fetter, Joseph Davenport, B. M. Anderson Jr.; some European contributors such as Walras, Schumpeter, Schmoller and the German Historical School; J. A. Hobson's welfare economics; and finished with a section on Thorstein Veblen (Dorfman 1967). Over the next few years Mitchell developed his material on the Classical economists and became interested in Wieser.[6] He began a book manuscript on Types of Economic Theory, but it was never completed. Some of this material appeared as articles, including "Wieser's Theory of Social Economics" (Mitchell 1915a), "The Role of Money in Economic Theory" (Mitchell 1916), and "Bentham's Felicific Calculus" (Mitchell 1918). He also wrote an important work on index numbers (Mitchell 1915b), various articles on security prices, and maintained his interest in psychology and economics (Mitchell 1914).

Mitchell was followed to Columbia by F. C. Mills, a student of his at Berkeley. Mills had also worked with Carleton Parker and had participated in Parker's study of the life of casual laborers in California. For this work Mills became a special agent of the United States Commission on Industrial Relations, travelling himself as a migratory laborer and hobo on farms and lumber camps.[7] At Columbia, Mills studied with Mitchell, Henry Moore, and also with John Dewey. Mills completed his PhD in 1917 on the topic of "Contemporary Theories of Unemployment and Unemployment Relief." After the War he was hired by Columbia, initially as an instructor in Economics. Later, he held a joint appointment in the Business School and the Economics Department and was, for many years, on the staff of the NBER.

Other notable Columbia graduates from this period include Oswald Knauth (PhD 1914), N. I.

Stone (PhD 1915), Paul Brissenden (PhD 1917), and Robert Hale (PhD 1918). Stone would later co-found the National Bureau of Economic Research with Mitchell, while Knauth was one of the first researchers employed at the NBER. Brissenden, like Mills, had been a student at Berkeley, and had also worked as a special agent for the United States Commission on Industrial Relations. His dissertation, *The IWW: A Study of American Syndicalism* (Brissenden 1919), became the standard work dealing with the history of the IWW. Brissenden became a professor in the School of Business and much involved with labor mediation and arbitration. Hale completed his LLB at Harvard, and began teaching economics at Columbia in 1915. He attended John Dewey's lectures in philosophy in 1915/16, and completed his doctoral dissertation "Valuation and Rate Making: The Conflicting Theories of the Wisconsin Railroad Commission" in 1918. Mitchell was a member of his dissertation committee (Fried 1998, p 10). Later, he developed courses in law and economics, and ultimately moved into the Law School.

3. Mitchell, Clark, and the Development of Institutionalism

The term "institutional economics" was not current in the literature until introduced by Walton Hamilton in a paper entitled "The Institutional Approach to Economic Theory" (Hamilton 1919). This paper was a part of an American Economics Association conference session held in 1918 that also contained related papers by J. M. Clark, and William Ogburn, and had Walter Stewart in the Chair. Discussion concerning the planning of this session had included Mitchell. The session was deliberately designed both to challenge more "orthodox" theory and to lay out an alternative, institutional, approach. This approach was to be focussed on institutions and their role in affecting economic behavior and outcomes, be based on a "modern psychology," be relevant to issues of "social control," and utilize proper "scientific" method including quantitative and statistical research (Hamilton 1919, Stewart 1919). Institutional economics would consist of the study of the nature and functioning of the "economic order" rather than exercises in "formal value theory." According to Hamilton, the "leaders" of this institutional approach included Thorstein Veblen and Wesley Mitchell, but, as I have argued elsewhere, the people most widely seen as the active proponents of institutionalism in the 1920s were Hamilton himself, Wesley Mitchell, and J. M. Clark (Rutherford 2000b).

Mitchell had been much influenced by Veblen and by John Dewey during his graduate student years at Chicago. Veblen's emphasis on the role of institutions in molding behavior, his criticism of the psychology of hedonism, and his critique of business or "pecuniary" institutions all greatly impacted on Mitchell. Although Mitchell disapproved of Veblen's failure to check his conclusions against facts, Veblen's influence remained clearly evident both in Mitchell's critical work on the rationality of economic activity (Mitchell 1910), his interest in alternative psychological foundations, his concern with the link between the rise of pecuniary institutions and prevailing habits of thought, and in his insistence on seeing business cycles as a phenomenon of the institutions of a developed money economy (Mitchell 1927). After Hamilton's introduction of the term institutional economics, Mitchell changed from describing Veblen's work as "evolutionary" or "genetic" to "institutional" (Mitchell 1967, p. 610, n. 3), so that the final section of his Types of Economic Theory course became "Thorstein Veblen's Institutional Economics." Mitchell himself became seen as the leading exponent of the quantitative branch of the institutionalist movement, and it was largely Mitchell's work, and the influence of his quantitative approach, that permitted institutionalists to claim to be following empirical scientific methods (Rutherford 1999).

In addition, Mitchell remained in close personal contact with Veblen, and was very familiar with virtually all of those who became associated with the institutionalist movement. Mitchell knew both Walton Hamilton and Walter Stewart from at least 1916 when they were developing a novel undergraduate program at Amherst College. This program had a strong institutionalist orientation and produced students such as Willard Thorp, Louis Reed, and Carter Goodrich, who would all later develop Columbia connections.

J. M. Clark was also very active in the formation of institutionalism. From 1910 to1915 he was on the faculty at Amherst College, at which point he moved to Chicago where he remained until 1926. Clark took Veblen's critique of "orthodox" economics seriously, and struggled to accommodate Veblen's insights with the ideas of his father. What resulted from this union of diverse influences was an interest in the development of a "dynamic social or institutional economics, or 'realistic economics'" (J. M. Clark to Roche-Agussol, Sept 14, 1918, Joseph Dorfman Papers), and a concern with the "social control of business." Clark knew Mitchell's work well, corresponded with him on business cycle issues, and developed the accelerator concept out of his study of Mitchell's *Business Cycles* (Clark 1917). In addition, Clark provided an analysis of the impact of the growth in overhead costs on the pricing behavior of firms, and the implications for business cycles of that behavior (Clark 1923). Clark was also familiar with the work of Carleton Parker and Wesley Mitchell on psychology and economics, and wrote a particularly penetrating essay on "Economics and Modern Psychology" (Clark 1918). He directly critiqued orthodox theory in his "Soundings in Non-Euclidian Economics" (Clark 1921). Clark also knew Hamilton well. He co-edited *Readings in the Economics of War* (1918) with Hamilton and Harold Moulton, and, as mentioned above, participated with Hamilton, Ogburn, and Stewart in the conference session that launched the notion of "institutional economics." Clark's contribution, "Economic Theory In An Era of Social Readjustment," complemented Hamilton's in calling for an economics "relevant to the issues of its time" and based on a more properly "scientific" method (Clark 1919).

During his time at Chicago, Clark did much to maintain the institutional element in the Department. He supervised Morris Copeland's doctoral thesis "Some Phases of Institutional Value Theory" (1921). Other Chicago PhDs between 1918 and the early 1920s that demonstrated clear institutionalist leaning included Sumner Slichter, Harold Innis, Hazel Kyrk, Carter Goodrich, and Helen Wright.

4. Institutionalism at Columbia 1918-1929

During the War Mitchell headed the Prices Section of the War Industries Board and worked on a study of prices during the war, work that also involved Leo Wolman. After the War, in 1919, Mitchell resigned from Columbia and was closely involved with the establishment of the New School for Social Research, along with James Harvey Robinson, Charles Beard, Alvin Johnson, and other "liberals."[8] Veblen was also employed at the New School for a few years until he retired, and Leo Wolman was a faculty member there from 1919 to 1928. The New School, however, could not offer degrees,[9] and Mitchell returned to Columbia, at a much improved salary, in 1922.

Another other major project that involved Mitchell while he was away from Columbia was the creation of the National Bureau of Economic Research. Mitchell's concern with statistical and factual knowledge, and the need for improved research in the social sciences, had been given new urgency by the experience of the War. In 1918 Mitchell became President of the American Statistical Association. His Presidential Address, "Statistics and Government" (Mitchell 1919) specifically related his War experience to the need for more work on "social statistics." The basic idea of a research bureau to undertake objective and factual investigation in economics was first broached in 1917 in discussions between N. I. Stone and Malcolm Rorty. They involved Edwin Gay and Wesley Mitchell, and also enlisted the support of others such as T. S. Adams, John R. Commons, and Allyn Young. The NBER was established in 1920 with Mitchell as Director of Research. The original research staff included Oswald Knauth, and Frederick Macaulay, both Columbia PhDs, and Willford King, from Wisconsin.

Mitchell returned to Columbia in 1922 and at a critical point in his career. He launched into a major project to update his 1913 work on business cycles with the aid of the NBER. This project was originally conceived of consisting of two main volumes "The Problem and its Setting," and "The Rhythm of Business Activity," along with accompanying volumes of statistical data. In the 1920s members of the NBER research staff included Leo Wolman, and Columbia graduates such as Frederick Macaulay, F. C.

Mills, Willard Thorp, and Simon Kuznets.

Thorp had done his undergraduate work at Amherst, where Walton Hamilton had persuaded him to move from mathematics to economics and showed him "that mathematics could be used through statistics as a tool in economics" (Thorp 1947). He completed his PhD dissertation on "The Integration of Industrial Operation" in 1925, and, along with Mitchell, produced the volume *Business Annals* for the NBER (Thorp and Mitchell 1926). Thorp would later return to Amherst as a Professor of Economics and write an institutionalist text book, *Economic Institutions* (Thorp 1928), but he remained on the staff of the NBER until 1933, and would later serve on the Board. Kuznets came to Mitchell's attention as a result of his MA essay dealing with Schumpeter and critiquing Schumpeter's scientific methodology. Mitchell was deeply impressed with this essay and as a result offered Kuznets a position at the National Bureau with the idea of teaching him how to do empirical economics (Perlman, forthcoming). Kuznets completed his doctoral dissertation "Cyclical Fluctuations; Retail and Wholesale Trade, United States, 1919-1925" in 1926. He became a full member of the research staff at the NBER the following year, working both on seasonal fluctuations and national income accounting. Kuznets's appreciation for Mitchell, and his full awareness of Mitchell's institutionalism, can be seen in his essay "The Contribution of Wesley C. Mitchell" (Kuznets 1963). Kuznets's own empirical work shares Mitchell's sensitivity to institutional context, and the effect of variation in institutions on empirical relationships. For Kuznets, it was vital to "understand the circumstances under which the data are produced," necessitating "detailed historical knowledge of the changing institutions, conventions, and practices that affected the production of the primary data" (Fogel, forthcoming). Wolman's principal NBER work was his empirical study of union membership, *The Growth of American Trade Unions, 1880-1923* (Wolman 1924), while Mills worked on price studies (Mills 1927). All of this work was closely related to Mitchell's overall project on business cycles. The first of the projected volumes, *Business Cycles: The Problem and its Setting,* appeared in 1927.

In 1924 Mitchell served as President of the American Economics Association. His Presidential address "Quantitative Analysis in Economic Theory" made the claim that quantitative methods would bring about significant changes in economics. Speculative and "mechanical" types of theorizing will be replaced more "objective" and "experimental." Also, because it is institutions that standardize behavior, and "thereby facilitate statistical procedure," the quantitative workers will "have a special predilection for institutional problems" (Mitchell 1925, pp. 7-8). Mitchell even suggested that quantitative work would be sure to focus attention on the Veblenian problem of the relation between making goods and making money (Mitchell 1925, p. 7). Lionel Edie called this address "a genuine manifesto of quantitative and institutional economics," one that stated "the faith of a very large part of the younger generation of economists" (Edie 1927, p. 417). Also in 1924, Mitchell wrote a long review of John R. Commons's *Legal Foundation of Capitalism* (Mitchell 1924) calling it a contribution to the institutional type of economics. Among the "younger men" contributing to this institutional type of economics he listed J. M. Clark, Sumner Slichter, Robert Hale, and Rexford Tugwell.

In terms of teaching, Mitchell continued to offer his Types of Economic Theory Course, now expanded to include the Classical period and to incorporate his work on Wieser. Later, the course also gained a chapter on Gustav Cassel's mathematical approach, and a final section dealing with J. R. Commons. This gave the last quarter of the course a highly institutionalist cast with sections dealing with John A. Hobson, Gustav von Schmoller, Thorstein Veblen, and John R. Commons. Mitchell also regularly taught his course on Business Cycles. The time he spent in the Department was, however, limited by his commitments at the NBER.

Mitchell was not the only person associated with institutionalism at Columbia. Even before Mitchell returned to Columbia, the Department was beginning to expand its teaching staff. Also, a number of economists were hired into the School of Business, and some business courses "became a regular part of the Department's offering under the Faculty of Political Science" (Dorfman 1955, p. 196).

This hiring included a significant institutionalist element. Mitchell's student, F. C. Mills had been appointed Assistant Professor of Business Organization in 1920, and was soon to be made Associate Professor of Business Statistics. In addition to his price studies for the NBER, he wrote a widely used statistics text book (Mills 1924). Robert Hale was appointed a Lecturer in Legal Economics in 1922. By the early 1920s he was already well embarked on his critique of the Court's treatment of "fair value" in rate regulation cases. Hale's point was that the value of a property as a going concern is based on the expected return, hence the notion of "a fair return on the actual value" simply turns out to be "the earnings that the company is already expecting" (Hale 1921, 1922). Hale had also begun his work attacking the notion that government regulation represented "coercion" while markets were non-coercive. Hale wrote a scathing review of T. N. Carver's *Principles of National Economy* (Hale 1923), pointing out the coercive elements in all market transactions. As Hale put it, when the government protects a property right it is not only abstaining from interference with the owner when he deals with the thing owned, but also "forcing the non-owner to desist from handling it, unless the owner agrees" (Hale 1923, p. 471). Hale also viewed the Court's doctrine of "affectation with public interest" as being no more limiting to regulation than argument based on what best serves the "public welfare" (Fried 1998, p.106). Hale knew Commons's work on law and economics well, and he worked with Walton Hamilton on public utility regulation.

James Bonbright began as an instructor in economics in 1919, completed his Columbia PhD dissertation on "Railroad Capitalization: A Study of the Principles of Regulation of Railroad Securities" in 1921. He and Hale had a common interest in the basis for rate regulation, and became close friends. Bonbright became a member of the School of Business where he developed courses on Corporation Finance and the Regulation of Public Utilities. In the 1920s he wrote many articles dealing with corporate finance issues (including problems with no-par stock, the rights of security holders in corporate reorganizations, and railroad capitalization), and public utility rate regulation (including valuation and depreciation issues).

In addition, Rexford Tugwell had been was appointed as an Instructor in 1920 and became Assistant Professor in 1922. Like Seager, Tugwell had been a student of Simon Patten's. He was placed in charge of the development of the Contemporary Civilization course taught to undergraduates, out of which came the text book *American Economic Life: And the Means of its Improvement* (Tugwell, Munroe and Stryker 1925). He published his paper, "The Economic Basis for Business Regulation" in 1921 (Tugwell 1921), which was a condensed version of his University of Pennsylvania doctoral dissertation *The Economic Basis of Public Interest* (Tugwell 1922a). As the titles suggest, these pieces are a defence of the regulation of business in the light of increasing returns, consolidations, monopoly power, and the resulting damage to the interests of consumers. Large scale businesses are "affected with a public interest" which can justify regulation. Tugwell was also working on following up his interest in psychology and economics that he had absorbed from Carleton Parker and William Ogburn, and published a discussion of this topic, "Human Nature in Economic Theory," in 1922 (Tugwell 1922b). He went to lectures given by John Dewey, out of which he developed his idea of "experimental" or instrumental economics (Tugwell 1924a, 1982, p. 157), and attended Mitchell's course on Types of Economic Theory on more than one occasion (Tugwell 1982). In 1924 Tugwell produced his edited volume *The Trend of Economics* (Tugwell 1924b). Many of the essays in this volume were supposed to represent the "new" institutionalist position, and in addition to Tugwell himself, the book contained essays by Wesley Mitchell, F. C. Mills, Robert Hale, William Weld (also an Assistant Professor at Columbia and a 1920 Columbia PhD), and Paul Douglas, as well as Sumner Slichter, Morris Copeland, George Soule, A. B. Wolfe, and J. M. Clark. Tugwell much admired Mitchell, as can be seen from his 1937 appraisal of Mitchell's work (Tugwell 1937), but he was passed over for appointment to the graduate faculty.[10]

In 1924 James W. Angell was hired to cover monetary economics. Angell was a student of Allyn

Young's from Harvard and was closer to neoclassical economics than many at Columbia. Nevertheless, he had good relations with Mitchell, and, in the mid to late 1930s, had many discussions with Mitchell concerning his proposals for studies on money for the NBER.

The institutionalist component in Columbia's Economics Department received its next boost from the appointment in 1926 of J. M. Clark to a new chair as Research Professor in Economics. The other candidate considered was Jacob Viner, but although Viner was regarded as the better teacher,[11] Clark was seen as having the greater research potential. Undoubtedly, sentiment for Clark's father, and Columbia's "ambivalent attitude towards Jews," played a role too (Ginzberg 1990, p. 15). Clark indicated to Seligman that his main interest was in "social-institutional-dynamic theory" (Dorfman 1955 p. 194). In 1926 Clark had just published his *Social Control of Business* (Clark 1926), a work very much in line with the pro-regulatory perspective expressed by Tugwell and Hale, and which explicitly referred to their work as well as to Veblen, Hamilton, and Commons. Clark argued that industry was quite generally a matter of public concern, and that "individualism" did not afford sufficient safeguards. His book discussed a vast number of market problem and failures which, in various ways, called for additional measures of "social control" (see Rutherford 2000b).

A year later Clark published a survey on "Recent Developments in Economics," a piece that gave considerable attention to Veblen, J. A. Hobson's welfare economics, "the realistic and inductive method," the "social point of view," and to "the institutional point of view" (Clark 1927a). Clark defined institutional economics to include, in addition to Veblen's work, C. H. Cooly on social value, John Dewey on the social construction of the human mind, R. T. Ely's and J. R. Commons's work on law and economics, and the articles of Hamilton, Ayres, and Ogburn, and perhaps "supported" by Carleton Parker's. Clark also included the work of W. C. Mitchell which he saw as having "contributed powerfully" to the institutional point of view (Clark 1927a, p. 273-274). In 1928 Clark asked Mitchell to write a piece concerning the development of his methodological ideas, and persuaded him to let him publish the letter as a part of his “Wesley C. Mitchell’s Contribution to the Theory of Business Cycles” contained in the collection *Methods in Social Science* (Clark 1931). Clark also published articles on the “Relation between Statics and Dynamics” (Clark 1927b), and on “Inductive Evidence on Marginal Productivity” (Clark 1928), an article that led to much discussion with Paul Douglas, whom he knew from Chicago.

In 1928 Eveline Burns was appointed as a Lecturer, and her husband A. R. Burns, was appointed at Barnard College. Between 1926 and 1928 the Burnses were on Rockefeller Fellowships. Eveline Burns had been in the Department of Economics at the London School of Economics, specializing in wage theories and regulation. In the United States she studied labor economics at The New School, Columbia, the Brookings Graduate School, Harvard, Chicago, and Stanford. Her supervisors included Wolman at the New School, Seager, Mitchell, and Brissenden at Columbia, Hamilton at Brookings, Paul Douglas, Jacob Viner and Henry Schultz at Chicago, F. A. Taussig and Allyn Young at Harvard. She taught labor economics and later moved into the area of social security.[12] A. R. Burns developed a research interest in industrial organization.

Institutionalist elements also existed outside of the Economics Department and School of Business. William Ogburn was in the Sociology Department between 1919 and 1927. Ogburn had previously worked with Carleton Parker and Rexford Tugwell at the University of Washington. He had a particular concern with the impact of technological change in creating “maladjustments” within the social organization. Ogburn’s notion of the immaterial parts of culture “lagging” changes in the material aspects, is very reminiscent of Veblen’s work. He was also a leader in the area of quantitative sociology, and was editor of the *Journal of the American Statistical Association* from 1920 until he left Columbia for Chicago in 1927. He was succeeded in that role by Frank A. Ross, also of the Sociology Department. Throughout the interwar period *JASA* published extensively in the areas of economic and social statistics, with the work of many of the more quantitatively orientated institutionalists well represented.

Another critical development in the 1920s concerned the realist approach to law, which had particular importance at Columbia, and which linked closely to the institutionalist work in law and economics. The realist approach to law was represented at Columbia by Underhill Moore, Walter Wheeler Cook, Herman Oliphant, and Karl Llewellyn. Walton Hamilton, who moved to Yale Law School in 1928 was also very much a part of the realist movement. Realism was a demand for law to become like the other empirical social sciences (Schlegel 1995). The study of the law should be "fact based," with notions of precepts and principles of law being replaced by a focus on actual practices and behavior. "Real rights" were defined as a prediction of "what the courts will do in a given case, and nothing more pretentious" (Llewellyn 1930, p 448). The answers that courts were "called upon to give could not be deduced mechanically from an abstract jurisprudence of rights, but emerged instead from the unexamined and unarticulated cultural and political assumptions of the judges themselves" (Fried 1998, p. 12). There was also a considerable interest in the role of the law in shaping economic behavior and outcomes. Moore and Cook were instrumental in bringing Hale into the Law School. Llewellyn moved from Yale to Columbia in 1924, but at that point he was already very familiar with the work of Hale and Commons (see Llewellyn 1925). Hale co-taught a seminar in Economics, Law, and Politics with Llewellyn, J. M. Clark, and others, and in 1924/25 and 1926/27 a seminar on the law of business organization was co-taught by Oliphant and Bonbright with participation from Hale, Underhill, Moore, and Llewellyn (Fried 1998, pp. 222-223). However, Cook left for Yale, and by 1926 had moved on to Johns Hopkins, where he formed the Institute of Law.[13] Oliphant also left Columbia to join Cook at Johns Hopkins.

The interest in the Law School concerning business organization was strengthened further with the arrival of Adolf A. Berle in 1927. Berle, who had been a Lecturer on Finance at Harvard Business School, had received funding from the SSRC for "A Study of the Trends of Recent Corporate Development." The proposed use of a joint law and economics approach to the analysis of the corporation was much approved of (Lee and Samuels 1992, p. xx). Berle required an academic home for this project and approached Columbia Law School who appointed him as a lecturer, later Professor, of Law. Berle required someone to assist him on the economic side of the project and he recruited Gardiner Means to that position. Means had been a graduate student in economics at Harvard and had taken courses from W. Z. Ripley, who was soon to produce his *Main Street and Wall Street* (1927), and also a course on Valuation from James Bonbright, who commuted to Harvard to lecture. Means was not impressed with the orthodox theory he learnt from Taussig, feeling that it applied only to a pre-industrial economy (Lee and Samuels 1992, p. xix).

As for the doctoral students in economics produced from Columbia up to the end of the 1920s, those worthy of note in the context of the institutionalist element at Columbia and who were hired by the University (Mills, Hale, Bonbright, Brissenden) or by the NBER (Thorp, Kuznets) have already been mentioned. Others who displayed institutionalist ideas were George Stocking (PhD 1925) who wrote *The Oil Industry and the Competitive System: A Study in Waste* (Stocking 1925), and went on to the University of Texas; Horace Taylor (PhD 1928) who wrote on the topic of "Making Goods and Making Money," the same title as a paper given by Mitchell in 1922 to a joint session of the American Society of Mechanical Engineers and the American Economic Association, and who later took over many of Tugwell's responsibilities for the undergraduate economics program at Columbia; and Robert Brady (PhD 1929) who worked closely with J. M. Clark, wrote on "Industrial Standardization," and went to Berkeley where he maintained a strong institutionalist presence for many years (Dowd 1994). There were also several prominent labor economists produced, some showing elements of institutionalist influence. Among these might be placed Paul Douglas (PhD 1921), who spearheaded the attempt to have Veblen nominated for the Presidency of the AEA in 1925.[14]

Not everyone was happy with the institutionalists, however. Henry Schultz was a student of Moore's, completed his dissertation on "The Statistical Law of Demand" in 1925, and spent an unsatisfactory year working for Harold Moulton at the Institute for Economics, before being appointed to Chicago. He complained that "some economists, among whom are to be included not a few members of the institutional school, have, unfortunately, gotten the impression that any attempt to derive a law of demand must needs be based on no better psychology than that of James Mill. A few of them go so far as to deny the existence of the law of demand" (Schultz 1928, p. 95). In the same year Schultz's Chicago colleague, Jacob Viner, subjected Mitchell's views as expressed in his AEA Presidential Address to substantial criticism (Viner 1928), causing Mitchell to draw back from some of his bolder pronouncements (Mitchell 1928).

5. Institutionalism at Columbia in the 1930s

The early 1930s saw some major changes to the University and Department. In 1929 John Dewey retired, although he continued writing for many years more. Within Economics, Moore retired in 1929, Seager died in 1930, and Seligman retired in 1931. On Seager's death Mitchell was appointed as Acting Chief Executive Officer of the Department, a post he held for a only about a year before asking to be relieved. Seligman's Chair passed to Robert Haig, a former student and Professor in the School of Business, Seager's course on trusts and corporations was taken over by A. R. Burns, who was elected to Faculty of Political Science in 1935, while Eveline Burns developed the speciality of social insurance. A number of new appointments were made also, and several of these indicate Mitchell's influence. Carter Goodrich was hired from Michigan in 1930 to develop the area of American economic history. Goodrich had been a student at Amherst with Hamilton and Stewart, and at the time of his appointment to Columbia he was a colleague of Morris Copeland's at Michigan. His interests also included labor economics, his doctoral dissertation published as *The Frontier of Control* (Goodrich 1920) was a study of British workshop politics and had been conducted with funding arranged by Hamilton, and the advice and help in Britain of Henry Clay and G. D. H. Cole. His best known work was *The Miner's Freedom: A*

Study of Working Life in a Changing Industry (Goodrich 1925). In 1931 Leo Wolman was hired to take over the area of labor economics. Wolman had a long history of contact with Mitchell and at the time of his appointment to Columbia he was on the staff of the NBER. Wolman was also on the research staff of The Amalgamated Clothing Workers of America, and, as remarked by Ginzberg, "no major economics department had, up to that point, picked a professor from the ranks of the trade union movement, even if from its research staff" (Ginzberg 1990, p. 17). Mitchell clearly had much to do with this appointment, although Wolman also had support from the Chair of the Department of Public Law and others. In addition, a junior appointment was found for Joseph Dorfman, a Mitchell student then still working on his biography of Veblen. Dorfman completed his study in 1934. The only clearly non-institutionalist hire was Harold Hotelling, who was hired from Stanford in 1931 to take over Moore's courses in mathematical statistics and mathematical economics.

Mitchell's NBER hired Columbia graduate students A. F. Burns and Solomon Fabricant in 1930, Milton Friedman in 1937, and Moses Abramovitz in 1938. A. F. Burns soon became Mitchell's principal collaborator. A. F. Burns was a student of Mitchell's and completed his dissertation, "Production Trends in the United States" in 1934. Abramovitz was a J. M. Clark student, his 1939 dissertation dealing with the Clarkian theme of "An Approach to a Price Theory for a Changing Economy." Fabricant also completed in 1939 with a dissertation entitled "Capital Consumption and Adjustment." Friedman had been a student of A. F. Burns at Rutgers, and of Henry Schultz's at Chicago. At Columbia he attended Mitchell's course on Business Cycles, but became much more a student of Hotelling's. Friedman's work at the NBER was initially concerned with the estimation of the incomes of independent professionals. Friedman took over this project from Simon Kuznets, and it formed the basis of his 1945 Columbia PhD dissertation "Incomes for Independent Professional Practice (with Simon Kuznets)."

The NBER was still putting vast efforts into pursuing Mitchell's program on business cycles. At some point in the 1930s, the original two volume conception became three volumes. The second was to be "Business Cycles: The Analysis of Cyclical Behavior," but the project became ever larger, and was eventually broken up with different parts allocated to different researchers. Reading the Mitchell papers one can easily sense Mitchell's growing frustration and his increasing desperation to finish the measurement part of the project. In 1938 Burns wrote to Mitchell concerning progress on the project. He mentions some thirteen monographs either underway or planned which are to provide the "statistical groundwork for the volume on the Rhythm of Business Activity," but goes on to make numerous suggestions for additional information that Mitchell may require for the "theoretical volume" (Burns to Mitchell December 12, 1938, Wesley Mitchell Papers). It seems likely that Mitchell would have made attempts to have Burns appointed to Columbia, but, if so, he did not succeed. Burns was appointed only after Mitchell's retirement in 1944.

The immediate problems of the Depression also demanded attention. Mitchell, Wolman, Ogburn and others were involved with the Committee on Recent Social Trends. Mitchell chaired this committee and Ogburn was director of research from 1930-1933. Out of this came *Recent Social Trends in the United States* (1933). Later, the Committee on Recent Social Trends and the NBER co-sponsored J. M. Clark's *Strategic Factors in Business Cycles* (1935a). In the same year Clark wrote *Economics of Planning Public Works* (1935b) for the National Planning Board. In these works Clark gave much attention to the stabilization of consumer incomes, and was working towards his own understanding of the multiplier concept (Shute 1997, pp. 92-103). In Addition, Mitchell, Wolman, J. M. Clark, A. A. Berle, and others, both from Columbia and elsewhere, contributed to the Columbia University *Report on Economic Reconstruction* (MacIver 1934). Mitchell claimed the *Report* stated "more effectively than any other document known to me what I take to be the basic economic problem that now confronts mankind" (Mitchell 1934, p. 82). Among the *Report's* recommendations were monetary stabilization, raising wage rates in proportion to cost reductions achieved through technological change, long period budgeting and planning for public works, elaborate regulation of large corporations, establishment of unemployment reserves, and Federal incorporation and supervision of all banks of deposit. Goodrich wrote several papers on unemployment insurance issues and internal labor migration, Wolman wrote on many labor legislation issues and on social security. Eveline Burns became a consultant to the Committee on Economic Security. In 1936 she was hired by Walton Hamilton, then Director of Research for the Social Security Board, to teach those who would be administering the social security program, and wrote her *Toward Social Security* (E. M. Burns 1936). Goodrich consulted for the Resettlement Administration and the Social Security Board and was involved from 1936 to 1946 as United States Government member of the governing body of the International Labor Organization. Wolman became Chairman of the Labor Advisory Board of the NRA, while Mitchell served, until the end of 1935, as a member of the National Planning Board.

Mills's work from this period shows a concern for the effects of technological change combined with price inflexibilities as a cause of depression (Woirol 1999). Tugwell pursued a similar theme in his "Theory of Occupational Obsolescence" in 1931, which related unemployment to rapid technological change, combined with the failure of firms with high overheads to pass on cost savings in the form of lower prices. Instead, firms attempted to maintain prices and build up reserves. Tugwell's "Principle of Planning and the Institution of Laissez-Faire" (1932) went much further, arguing for a radical reconstruction of institutions to permit a planned economy. This was followed up with his book *The Industrial Discipline and The Governmental Arts* in 1933. Tugwell, along with Berle and Raymond Moley, formed the original Roosevelt "Brains Trust," and Tugwell joined the New Deal administration in 1933. After being granted three leaves of absence from Columbia, it was made clear that he had to choose, and he resigned from Columbia in 1937. Horace Taylor was teaching at Columbia College and took over many of Tugwell's responsibilities.

The early to mid 1930s also saw a very significant output of research of an institutionalist nature dealing with issues of corporate concentration, and the decline of competition. Berle and Means published the results of their collaboration in *The Modern Corporation and Private Property* (1932), a work that pointed to the concentration of decision making power in very few hands. Means' contribution to this work consisted both of statistical work on the importance of the large corporation and the distribution of stock ownership, and the economic arguments concerning the implications of the separation of ownership from control for traditional theory (Lee and Samuels 1992, p. xxi). Means also collaborated with Bonbright in the production of *The Holding Company* (1932), a project that began as an effort to investigate the use of holding companies in railways, but soon expanded to public utilities and holding companies in general (Lee and Samuels 1992, p. xxi). It was out of this work with Berle and Bonbright that Means developed his concept of administered pricing.[15]

Also relevant to this line of investigation was A. R. Burns's book *The Decline of Competition: A Study of the Evolution of American Industry* (1936) which included discussion of trade associations, price leadership, price discrimination, price stability, and non-price competition. This book has been seen as occupying a space between the theoretical work on imperfect competition produced by Edward Chamberlin and Joan Robinson, and the empirical industry studies such as those undertaken by Walton Hamilton (Hamilton and Associates 1938). Chamberlin's work in particular was extensively discussed by institutionalists, and Clark himself later developed his concept of "workable competition" out of his critique of the imperfect competition literature (Clark 1940).

Bonbright and Hale continued to work on valuation and public utility regulation issues. Bonbright produced his two volume *The Valuation of Property: A Treatise on the Appraisal of Property for Different Legal Purposes* in 1937. In terms of the more general interrelation of law and economics, Hale began teaching a course called "Social Control in Economic Life" which later evolved into his "Legal Factors in Economic Society." A 1936 outline for the first course indicates four major parts: control over the interests of others; control over *conduct* of others and its economic consequences; political policies and economics; and contests for control of the governing power. An undated outline for the latter (probably about 1939 or 1940) indicates a course divided into sections titled: introduction–popular distinction between public and private force–force and law; official use of force and constitutional safeguards; unofficial use of force and legal limitations; the law as a conscious corrective of economic processes; ultimate authority in the exercise of force–sovereignty; and government and civilization (Robert Hale Papers). Elsewhere in the Law School, Llewellyn had produced his realist manifesto, "A Realistic Jurisprudence–The Next Step" (1930), quickly followed by his study of contract "What Price Contract–An Essay in Perspective" (1931). Llewellyn's insight here was to ask why the legal machinery of contract was required at all. If promise, performance and adjustment did not "normally occur without the law's intervention, no regime of future dealings would be possible" (1931, p. 718). In a complex and mobile society, however, legal means of enforcement of promises become necessary, but "a contract is no substitute for performance; rights are a poor substitute for goods," and the contact itself will not fully define the relationship between the parties while it is still ongoing. A legal contract provides a framework for group organizations and relationships between individuals or groups, but a "framework which almost never accurately indicates real working relations, but which affords a rough indication around which such relations may vary, an occasional guide in cases of doubt, and a norm of ultimate appeal when the relations cease in fact to work" (1931, pp. 736-737).[16]

In terms of the graduate level program in economics, the requirements for entry into the doctoral degree, and for completion of the degree, were still very loose. Neoclassical theory was little regarded, the only required theory course being Mitchell's Types of Economic Theory. Graduate students were left largely to their own devices, with little more than some occasional advice and encouragement to guide them (Ginzberg 1990, p. 18). Mitchell continued to teach his courses on Business Cycles. According to Milton Friedman, who attended Mitchell's business cycles course in his 1933/34 year, Mitchell presented the latest research and "displayed enthusiasm and engagement–and hence had a real impact on students" (Friedman and Friedman 1998, p. 45). Hotelling provided strong courses in mathematical economics and statistics, but relatively few Columbia students possessed the background to manage his courses.

There were efforts made by the students to obtain improved instruction in theory. In 1932 a group of students persuaded Mitchell, Clark, and James Angell to start a Seminar on Economic Theory (Ginzberg 1990, p. 16). Lowell Harriss recalls Mitchell having the students study Marshall as well as Commons on law and economics, but that most of the course was spent on topics such as banking, taxation, labor, public utilities, and industrial organization. There was "no hint of any Methodenstreit," Mitchell was "generous and enquiring, not inclined to evaluate neoclassical theory or compare its value (by what standards?) relative to institutionalism" (Lowell Harriss to Malcolm Rutherford February 23, 2001; and Interview with Lowell Harriss, March 9, 2000). A little later Eli Ginzberg persuaded Mitchell to undertake, with his help, a Seminar on Economic Changes and Economic Theory. A tentative outline from Ginzberg dated 1938 suggests the seminar might include a discussion of (1) the problem of value, including Bonbright's *Valuation of Property*, Commons's *Legal Foundations,* and Keynes's *General Theory*; (2) competition and monopoly, including Chamberlin and A. R. Burns; (3) the labor market, including Beverage, Hicks' *Theory of Wages*, and Selig Perlman's *Theory of the Labor Movement*; and (4) the money market, including Hansen, Myrdal, and Keynes' *General Theory* (Ginzberg to Mitchell, September 20, 1938, Wesley Mitchell Papers).[17] In the late 1930's, Ginzberg persuaded Roswell McCrea (then both Dean of Business and Chair of Economics) to offer a course in neoclassical economics. As the Economics Department did not wish to add to its existing offering the course was offered through extension, and, interestingly, taught by Milton Friedman and Moses Abramovitz (see Hammond 2000).

It is clear that the large majority of Columbia economists had little use for abstract neoclassical economics, stressing instead the need for more "realistic" theorizing, empirical work, and legislative and social reform. Despite this, people who attended Columbia in the 1930s recollect only occasional references to "institutional economics" in the classroom. Although in the 1920s both Mitchell and Clark had often referred to the "institutional approach to economics" and had classified each other, as well as several others, as institutionalists, there seems to have been a tendency to become more cautious in promoting the idea of a distinctive institutional approach than had been the case in the 1920s.

The reasons for this are several. The notion of rebuilding economics on the basis of "modern psychology," which had been a powerful part of the original appeal of institutionalism (Rutherford 2001), had run into the shift of psychology away from instinct psychology, and the progress originally hoped for by Hamilton, Mitchell, and Clark along these lines had not been made. Mitchell's views on scientific objectivity and of quantitative methods leading to the substitution of institutional for orthodox theory had also begun to be questioned more persistently. Eli Ginzberg, while still a student of Mitchell's and Clark's wrote, but did not publish, a paper critical of Mitchell's concept of scientific objectivity in 1931 (Ginzberg 1997), and Robert Lynd, then in the Sociology Department at Columbia, also criticised Mitchell and the NBER's notions of objectivity in his *Knowledge for What* (1939). Mitchell defended his position in a public discussion arranged by the economics student society (Biddle 1998; L. S. Mitchell 1953, pp. 553-568). Criticism of Mitchell's idea of quantitative methods supplanting standard theory came once again from Henry Schultz, this time in the form of a lecture entitled "The Quantitative Method With Special Reference to Economic Inquiry" given in 1937. This paper can be seen as an attack on Mitchell's opinion expressed in his Presidential Address that utility theory would tend to "drop out of sight in the work of the quantitative analyst." Schultz sent Mitchell a copy, who replied that he thought Schultz had been "a bit rough" on him, and responding to the charge that he had "overlooked" various matters (Wesley Mitchell to Henry Schultz, February 9, 1937, Wesley Mitchell Papers). In a subsequent letter Mitchell concluded that they had "different degrees of faith in the explanatory power of "pure theory" as applied to the phenomena presented by experience" (Wesley Mitchell to Henry Schultz, February 19, 1937, Wesley Mitchell Papers).

Indeed, the whole idea of an identifiable "institutional economics" had come under increasing attack, notably by Paul Homan in a 1932 AEA roundtable (Homan 1932).[18] Although Clark responded to

Homan and defended a broad view of institutional economics (Clark 1932), the growing variety of "institutionalist" work, perhaps typified by Commons's *Institutional Economics* (1934), left even some who thought of themselves as institutionalist bemused. James Bonbright's reaction to Commons's work on reasonable value was to express his failure to understand the point of view "despite the fact that I would suppose myself to be writing from the standpoint of an institutional economist." Bonbright wondered if the name "institutional economics" had "not become a name for several entirely different points of view" (James Bonbright to Wesley Mitchell, March 25, 1937, Wesley Mitchell Papers). This was combined with the impact of the many new developments in theory that occurred throughout the 1930s. As Ginsberg's suggested seminar outline indicates, students were interested in Hicks, Chamberlin, and Keynes, as well as in the institutionalist work of Bonbright, Commons, Perlman, and A. R. Burns.

In this atmosphere, it not surprising that few students closely identified with the institutionalist label, although some greater or lesser amounts of the institutionalist attitude rubbed off on many graduates. For example, Eli Ginzberg (PhD 1935) and Moses Abramovitz were both Clark students. Both thought very highly of Clark, and co-edited the collection of his papers *Preface to Social Economics* (Clark 1936), but it seems neither thought of themselves as an institutionalist. The exceptions to this are Louis Reed (PhD 1930), who was for a while a member of the institutionalist group that formed at the Washington Square College of New York University in the early 1930s, and that produced the institutionalists textbook *Economic Behavior* (Atkins et al. 1931). John Gambs (PhD 1932), a Carter Goodrich student who became one of the founders of The Association For Evolutionary Economics, and, of course, Joseph Dorfman (PhD 1935).[19]

The experience of working with the empirical approach of Mitchell and the NBER was also a major formative influence on many who worked there, including Abramovitz, Fabricant, A. F. Burns, and Milton Friedman. Like Kuznets, Abramovitz and Fabricant seemed to absorb some of Mitchell's emphasis on institutions and the importance of institutional context. Burns, although more Marshallian than Mitchell, nevertheless shared Mitchell's awareness of the limitations of relatively simple theories (including Keynesian theory), and the need for careful empirical investigation. In terms of method, Burns was probably even more deliberate than Mitchell. Burns had a very major influence on Friedman, and Friedman greatly admired both Mitchell's and Burns's work. The institutional element, however, seems to have become increasingly attenuated, although one can still find institutional elements in Friedman's work (Hammond 2001). Nevertheless, there can be no doubt that the institutionalist concern with empirical investigation as embodied in the NBER fed into the more mainstream profession, sometimes in opposition to other empirical approaches, such as those represented by the Cowles Commission.

6. The Waning of Institutionalism at Columbia

In the early 1940s the Columbia Economics program still retained something of its institutionalist character. Kenneth Arrow has talked about the Veblenian influence being very apparent at Columbia in the early 1940s, when it was still the case that the only required graduate "theory" course was Mitchell's course on Types of Economic Theory (Arrow 1975). However, in 1944 Wesley Mitchell retired. Clark took over teaching the teaching of the history of economic thought and A. F. Burns was hired into the Department to take over Mitchell's course on business cycles. As noted above, Burns, while still very much in the Mitchell empirical tradition, was more Marshallian in orientation than Mitchell had been. Clark was also becoming less assured of his attachment to the institutionalist label. Writing to J. M. Keynes in 1941 he expressed concerns about the undiscriminating application of a formal theoretical system, declaring himself "enough of an 'institutionalist' (whatever that might mean) to have more than a lurking distrust of equations," but "not enough of an institutionalist to ignore their importance" (J. M. Clark to J. M. Keynes, July 24, 1941, J. M. Clark Papers).

A. F. Burns also succeeded Mitchell as Director of Research at the NBER. The Burns and Mitchell volume *Measuring Business Cycles* appeared finally in 1946. This work displayed what Mitchell had come to call "the NBER method" of using the concepts of specific and reference cycles as a way of approaching the cyclical behavior of many different economic processes. Welding this together into a theory of cycles was to be the next (third) stage of the project (Wesley Mitchell to Ragnar Frish, November 13 1936, Wesley Mitchell Papers). The Mitchell and Burns volume was immediately attacked by Tjalling Koopmans of Cowles as "Measurement without Theory" (Koopmans 1947), an attack that came as a severe shock to those involved at the NBER.

The growing importance of mathematical statistics was also being felt within Columbia. Hotelling had found a place for Abraham Wald in 1939, and in 1942 he and Hotelling developed a separate doctoral program in mathematical statistics. At much the same time, the wartime Statistical Research Group, under the Office of Scientific Research and Development, was started at Columbia. The SRG's greatest development was sequential analysis, and the group involved not only Hotelling and Wald, but also Milton Friedman, James Savage, and George Stigler. In 1946 Hotelling left Columbia for the Institute of Statistics at North Carolina, threatening to take Wald with him. In order to retain Wald, a new Department of Mathematical Statistics was established in 1946 (Anderson 1955; Wallis1980).

In 1945 Columbia hired Abram Bergson and Ragnar Nurske to provide instruction in international economics. In 1947 Columbia faced the problems caused by the loss of Hotelling and the Department's evident weaknesses in theory by hiring Albert Hart, George Stigler, and (in a junior position) William Vickrey. The 1946 Appointments Committee consisted of Clark, Goodrich, Mills, A. F. Burns, and Angell, so it cannot be said that institutionalists were not well represented. The Committee recommended Hart for the existing vacancy, Stigler for a new position, and listed Friedman, Vickrey, and H. Greg Lewis as future possibilities. The Committee expressed a preference for people who could combine theory with courses in other fields, as opposed to "theory specialists" (Report of the Committee on Appointment in Economic Theory, November 16, 1946, J. M. Clark Papers). All of the new appointees had applied interests, and Stigler had been working for the NBER since 1943. Although Vickrey was much more theoretical and neoclassical than the older faculty, he was himself a Columbia PhD and had very broad interests, including the regulation of public utilities. He and Bonbright often discussed regulation issues, and Vickrey even used to attend the meetings of the Association for Evolutionary Economics. Stigler, on the other hand, was quite out of sympathy with the institutionalists anti-market biases and quickly developed a reputation for giving J. M. Clark students a difficult time. To some extent this was reciprocated.

At the same time, the institutionalist element at Columbia was given a significant stimulus by the hiring of Karl Polanyi. Polanyi was hired on a visiting basis to cover courses in European economic history left uncovered as a result of the retirement of Simkhovitch in 1944 and Shepard Clough's return to the Department of History in 1947. Carter Goodrich was primarily responsible for bringing Polanyi to Columbia. Polanyi had originally written to Walter Stewart asking about the possibility of visiting a US university to help with his research, and Stewart had recommended Polanyi to Goodrich (Stewart's former student from Amherst) in a letter indicating that Polanyi's research interest was "to apply the institutional method to the study of the history of political and social thought in England since Hobbes" (Walter Stewart to Carter Goodrich, November 15, 1946, Carter Goodrich Papers). Polanyi spoke on "The Controversy of Institutionalism in Economic History" to the Economics Club, and a University Seminar on Polanyi's work continued through to about 1953/54. Columbia economics faculty who attended Polanyi's seminar included Goodrich, A. R. Burns, and Vickrey. The visiting arrangement with Economics ended in 1953, but Polanyi continued to hold a regular seminar with the group that produced *Trade and Market in the Early Empires* (Polanyi et al., 1957). One Polanyi student who participated in the both seminars was Walter Neale.[20]

Speaking of the 1950s, Mark Blaug (1999, pp. 257-258) recollects his teachers at Columbia in the early 1950s being "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." Similarly, Daniel Fusfeld recollects being taught microtheory by Vickery and Stigler, macrotheory by Hart and Angell, economic history by Goodrich and Polanyi, history of thought by Dorfman, statistics by Mills, business cycles by A. F. Burns, and the soviet economy by Bergson (Daniel Fusfeld to Malcolm Rutherford, October 7, 1999).

The links between the Law School and Economics seem to have declined in importance, as few former students from this period speak of Hale or of taking courses in Law. Hale retired in 1949, and Llewellyn moved to Chicago in 1951. Other retirements also had effect. J. M. Clark retired in 1953, never having produced the major general statement of his views that he had embarked on in 1946 (J. M. Clark to Carter Goodrich, December 13, 1946, J. M. Clark Papers). In 1953 A. F. Burns left to become chief economic advisor to President Eisenhower, Wolman retired in 1958, Mills in 1959, Bonbright in 1960, A. R. Burns in 1962, and Goodrich left Columbia in 1963, the year after an internal committee (Angell was the Chair, other members were Harold Barger, A. F. Burns, Carl Shoup and Gary Becker) recommended abandoning European economic history as a field in favor of economic growth and development and econometrics (Report of the Committee on the Future Shape of the Department, April 4 1962, Carter Goodrich Papers).

Doctoral students of obvious institutionalist persuasion become very hard to find after the early 1950s. Forest Hill was a Goodrich student who graduated in 1950. Hill went to the University of Texas and was the first editor of the *Journal of Economic Issues*. Daniel Fusfeld was J. M. Clark's last student and graduated in 1953 with a dissertation on the roots of the New Deal. One interesting point, however, relates to a somewhat different line of influence. Goodrich's research in the late 1950s and early 60s dealt with the issue of canals and American economic development. Students who received their doctorates working on this general subject under Goodrich included Harvey Segal (PhD 1956), who became the second editor of the *JEI*, and Julius Rubin (PhD 1959). Rubin was appointed at Columbia but later denied tenure and moved to Pittsburgh. Goodrich also taught and significantly influenced Robert Fogel. Given Fogel's research interests, Goodrich suggested he transfer to Johns Hopkins to work with Kuznets. Here again we see institutionalism feeding into a newer empirical tradition, this time in economic history.[21]

7. Conclusion

As might be expected, the history of institutionalism at Columbia reflects the history of the movement more generally. From the time the term "institutional economics" was invented, and through the 1920s, a considerable following was attracted to the movement. As I have argued elsewhere, institutionalism was associated with empirical methods, with the critical examination of the functioning of existing institutions, with research on business cycles, the pricing behavior of firms, the functioning of markets, corporate finance, public utility regulation, labor legislation, and various social reform issues, and was associated with contemporary movements in philosophy, sociology, psychology, and law (Rutherford 2000b; 2001).

All of these elements came together at Columbia as nowhere else. With Mitchell, J. M. Clark, Robert Hale, Bonbright, Mills, Tugwell, and others in Economics or Business, and with John Dewey in Philosophy, Ogburn in Sociology, and Llewellyn, Berle, and others in Law, Columbia in the 1920s and 1930s demonstrates the full range of the institutionalist program. In the development of this institutionalist group at Columbia, it is clear that there were networks of personal contacts, for example between Mitchell, Hamilton, and Hamilton students such as Goodrich, between Carleton Parker, William Ogburn, and Rexford Tugwell, and between Mitchell and Leo Wolman that, were undoubtedly important in the pattern of hiring. Wesley Mitchell clearly played a vital role, both by his own presence and through his role in hiring in the early 1930s, but many other factors also contributed. The Department under Seligman and Seager, and particularly the latter, already had leanings in the institutionalist direction, and the point of view associated with institutionalism in economics was also making itself felt in other Departments and Schools. For example, institutionalist law and economics is often associated just with J. R. Commons, but at Columbia the interest in law and legal institutions was not only just as evident, it was more fully integrated into other aspects of institutionalism.[22]

The material presented above confirms the ranking of Columbia as *the* major center for institutionalist research in the interwar period. The work of Mitchell, Clark, Tugwell, Bonbright, Hale, together with the work of Berle and Means, A. R. Burns, and the research directed by Mitchell through the NBER, represents a very major body of creative endeavor over a vast range of subjects. This institutionalist work may not have been contained within a single well defined theoretical framework, but it sprung from a shared set of preconceptions concerning the institutional nature of the economic system and the need for empirical and applied analysis. It was certainly not purely descriptive or lacking in theoretical ideas.

Nevertheless, despite this array of institutionalist talent and the very substantial flow of institutionalist research, it seems that in terms of the production of students who became associated with institutionalism themselves, the high water mark was reached by the end of the 1920s. In terms of appointments institutionalism reached its peak in the very early 1930s, although even here it should be noted that Wolman and Goodrich were not new PhDs, but themselves products of the 1920s. The people appointed then, of course, kept the institutionalist approach very much a part of the Columbia scene for many years after, but the results of this research indicates that even by the early 1930s institutionalism as a movement was not attracting the same interest among students as it had in the earlier 1918-1929 period. Another aspect of this is the weakening attachment to the "institutionalist" label, given criticism of the concept and the considerable diversity that seemed to be contained within it.

The Columbia institutionalism of the 1920s and 1930s, then, did not renew itself, so that the retirement of the older generation in the 1950s quickly removed all but a few traces. There are many reasons for this decline. Some have to do with general academic developments that I have discussed in more detail elsewhere. First, the links between institutionalism and the then "modern psychology," to sociology, to John Dewey's instrumentalism, and to legal realism, that were very much a part of the original appeal of institutionalism, all suffered from the developments that occurred in these fields in the 1930s. In Yonay's terminology (Yonay 1998) institutionalism lost many of its "allies." Second, the discipline of economics itself had moved on with the development of theories of imperfect competition, externalities, regulation, unemployment, and techniques such as econometrics (Rutherford 2000a, 2000b). In the post 1940 period people such as Bonbright and J. M. Clark increasingly came to talk in the neoclassical or Keynesian language of marginal cost pricing or aggregate demand. In many ways the central concerns of institutionalists with empirical work, and with problems of cycles, monopolistic competition, and market failures became part of mainstream economics (Rutherford 2001).

In addition, it must be said that there were factors at work specific to Columbia. Columbia did not hire many of the best products of the combination of the institutionalist element and the NBER. Burns was eventually hired on Mitchell's retirement, but Kuznets, Abramovitz, Fabricant, were not, and although some attempts were made to hire Friedman they were either too little or too late. It is interesting to speculate on how Columbia might have been different had it striven to retain more of the Mitchell tradition within its own economics department. It is also the case that Columbia faculty never really pushed their institutionalism on students. Furthermore, neither Mitchell nor Clark were present in the Department more than two days a week, and by all reports Columbia was impersonal and not very collegial in character. Faculty and students did not socialize much. One does not get the feeling of a faculty highly involved with their students, or that creating a band of faithful followers was ever a part of the Columbia ideal.

NOTES

1. It has been remarked to me that Wolman was not a liberal and was quite sceptical about unions. Wolman certainly had doubts concerning certain aspects of the Wagner act and its administration, but he supported social security, unemployment insurance, workmen's compensation, minimum wage laws, and many aspects of the New Deal. Moreover, Wolman was very much a part of the institutionalist group. He taught at the University of Michigan in 1912, in 1919 Hamilton, Stewart, Lubin, Wolman, and Veblen held a weekend conference at Amherst for "an investigation of the economic order" (Dorfman 1973, p. 214), and he was "largely the architect" of the voluntary joint contributory scheme of unemployment insurance first established in the Chicago garment industry, and that had J. R. Commons as its administrator (Dorfman 1959, p. 521). He did become increasingly conservative later in his career.

2. After 1917, the final examination for the doctoral degree was restricted to economics alone. Seven subjects had to be taken, of these three subjects were required of all candidates (the history and theory of economics, statistics, and economic history) and three of the four others were to be selected from a list of eight (public finance, money and banking, the labor problem, trade and transportation, corporations and trusts, business economics, insurance, and agriculture).

3. Ogburn knew many of the institutionalist economists well. He introduced Carleton Parker to the psychological literature that so inspired him. He taught at Reed College and at the University of Washington with Carleton Parker and Rexford Tugwell before going back to Columbia. He was a paper presenter along with J. M. Clark and Walton Hamilton at the American Economics Association session in 1918 where Hamilton introduced the term "institutional economics"

(Ogburn 1919).

4. After spending a year at Harvard in 1908/099, Mitchell was made an offer of a permanent job there. Mitchell turned it down partly because of the emphasis on teaching at Harvard, but he also wrote to Taussig that he was concerned he was too unconventional in his economics. Taussig replied: “One reason we wanted you was to get a man who was *not* conventional” (F. A. Taussig to Wesley Mitchell, February 16, 1910, Wesley Mitchell Papers). Irving Fisher also tried hard to get Mitchell to accept a position at Yale.

5. Although Moore had been a student of J. B. Clark’s and placed more emphasis on theory than Mitchell, Mirowski has pointed out that Moore’s work utilized pragmatic and empirical notions of science and that his methodological position, which gave priority to empirical findings, was not that far from Mitchell’s or F. C. Mills’s. Relationships between Mitchell and Moore deteriorated later, as Mitchell “spurned Moore’s weather theory and rejected the use of periodograms in economic analysis” (Mirowski 1990, pp. 603-604; see Mitchell 1927, pp. 259-260).

6. Joseph Schumpeter taught at Columbia for the 1913/14 year and came to know Mitchell. He wrote to Mitchell on his appointment to Columbia: “I rejoice in the thought that you will as a matter of course rise to a position of leadership in our science and, let us hope, have it in a state different than it is now” (Joseph Schumpeter to Wesley Mitchell, no date, Wesley Mitchell Papers). Schumpeter knew of Mitchell’s interest in Weiser and wrote a letter to Mitchell in 1923 to introduce von Hayek, as a pupil of Weiser’s who wished to get in touch with American authorities. Hayek spent 1924 in the US, and Mitchell and Hayek had correspondence concerning Weiser, and also concerning Mitchell’s “Role of Money in Economic Theory.” In 1926 Hayek wrote to Mitchell: “While my theoretical predilections have remained unchanged, I realize now the weak points of abstract economic theory which seem to most of you to make the

pure theory more or less useless for the explanation of the more complex phenomena of the money economy. It seems to me now that pure theory has actually neglected in a shameful way the essential differences between a barter economy and a money economy and that especially the existing theory of distribution needs a thorough overhauling as soon as we drop the assumption of barter and pay sufficient regard to *time*. I hope however to be able to supply some of the missing links between orthodox economic theory and one applicable to the processes of modern economic life. If my memory is correct you have already pointed out some of the discrepancies in your article mentioned above which I read when in New York. Since then I have studied with the greatest interest Foster and Catchings' "Money", who certainly deserve credit for insisting in their admirable book on this point" (F. A. Hayek to Wesley Mitchell, June 3, 1926, Wesley Mitchell Papers).

7. Mills had the nickname "Turk." Mark Perlman recalls Paul Brissenden saying that this was because when Mills did field research for the US Commission on Industrial Relations, "he would report in secretly and then disappear 'over the hills like a Turk'" (Mark Perlman to Malcolm Rutherford, January 8, 2001).

8. The impetus to the formation of the New School (originally thought of as the "Free School") was the question of freedom of speech which erupted in 1917 in a dispute between Charles Beard and the University President Nicholas Murray Butler over American intervention in the War. Beard resigned, and other faculty protested in various ways. James Harvey Robinson was the prime mover in establishing the New School.

9. Under New York law the School required an endowment of $500,000 before it could offer degrees. The School turned to adult education and Mitchell could not find the kind of research students he wished to have.

10. Tugwell indicates that his book *Industry's Coming of Age* might have "caused my superiors to

decide, Mitchell dissenting, that I might stay on at Columbia, perhaps, because I seemed to be administering the teaching of economics in the college successfully, but that I was not likely to develop into a real economist" (Tugwell 1982, pp. 184-185). Ginzberg recollects that Simkhovitch was opposed to Tugwell, and goes on "there was no small amount of surprise and chagrin among members of the graduate department when their little esteemed colleague, Tugwell, together with Raymond Moley and Adolph Berle–turned out to be charter members of FDR's Brain Trust" (Ginzberg 1990, p. 17).

11. Viner and Clark were warm friends at Chicago, and remained so. Clark was a shy individual but a very careful thinker. In conversation and in seminars he was prone to silences of epic length. His Research Chair obliged him to do only as much teaching as he wished, and he usually spent only two days a week in the Department.

12. Eveline Burns was hired as a lecturer by Seligman with a promise that she would be given a regular position as soon as obstacles in the form of funding and certain objections to the hiring of a woman were overcome. This regularization of her position did not occur and she complained about her lack of status in 1937 (Eveline Burns to Wesley Mitchell, December 8, 1937, Wesley Mitchell Papers). Mitchell attempted to come up with a solution (V. G. Simkhovitch to Wesley Mitchell, January 20, 1939, Wesley Mitchell Papers), but she left Columbia in 1942 never having been more than a lecturer. She returned as a Professor of Social Work to the New York School of Social Work, which had become part of Columbia University, in 1946.

13. One of J. R. Commons's students, Anna Mae Campbell, wrote to him in 1926 that she was attending the jurisprudence seminar given by Cook at Johns Hopkins. Cook found out she was a Commons student and had altered the time of the seminar to allow her to attend. She writes that Cook "is showing that each case is based upon some hypothesis which has a real variable in it, that is, the *meanings* of the words in the hypothesis are susceptible of change and that the judges

in adopting any one hypothesis unconsciously attribute their own meanings to the words involved" (Anna Mae Campbell to J. R. Commons, October 31, 1926, John R. Commons Papers). Commons had correspondence with Llewellyn concerning his legal economic theories, and was invited by Llewellyn to visit Yale and teach for five and a half weeks in the summer of 1925 (J. R. Commons to Karl Llewellyn, 15 November, 1925, J. R. Commons Papers).

14. Paul Douglas's autobiography (Douglas 1971) does not mention Mitchell, although he was at Columbia in about 1914. It took him many years, and until after he was employed at Chicago, to finally submit his Dissertation. Douglas is a nice example of the sort of combination of reformist, institutionalist, and neoclassical influences that were not uncommon at the time.

15. Means published a number of articles out of this work with Berle and Bonbright. He was invited by Harvard to combine these articles with an additional section interpreting their significance and submit the resulting manuscript as his doctoral dissertation. He did so but his committee (E. S. Mason, E. H. Chamberlin, and A. E. Munroe) found the theoretical section not well developed. The committee did eventually accept the first part of his dissertation, which contained the more factual material, and in 1933 Means received his degree (see Lee and Samuels 1992, pp. xxii).

16. The nature of the realist enterprise and its connection to economics can be seen in outline in a recent collection of realist work (Fisher, Horowitz and Reed 1993). This collection is divided into several parts including "Law and the Market" which contains work on offer and acceptance and on contract, including Llewellyn's article on contract mentioned above; "The critique of the Public/Private Distinction" including Hale's paper on "Coercion and Distribution in a Supposedly Non-Coercive State;" and "Law and Organizational Society" including John Dewey on the "Historic Background of the Corporate Legal Personality," and a selection from Berle and Means *The Modern Corporation and Private Property*.

17. The various snippets of outlines for this seminar contained in Dorfman's edition of Mitchell's

Types of Economic Theory (Mitchell 1969) indicate that even as late as 1943 the seminar contained material on Veblen and Commons.

18. In an earlier paper (Rutherford 2000b) I speculated on the source of the idea that Veblen was the only real "institutional economist." This seems to me now to have originated with Mitchell, who gave such advice to Paul Homan in 1930 in connection with Homan's article on institutionalism for the *Encyclopedia of the Social Sciences*, although that is not how Mitchell had used the term himself in earlier years (Mitchell 1969, p. 734). Allan Gruchy also appears to have followed this lead.

19. Ralph Souter might also be mentioned here. Souter came to Columbia from New Zealand on a Rockefeller Foundation travelling fellowship. He wrote a dissertation entitled "Prolegomena to Relativity Economics" (1933), which, according to Geoffrey Hodgson, attempted a synthesis of a type of Marshallian evolutionary economics and the best of institutionalism. Souter also argued for the integration of the social sciences and was critical of Talcott Parson's attempts to create an autonomous discipline of sociology. Souter was a lecturer in economics at Columbia between 1930 and 1935, at which point he returned to New Zealand, and held a Chair at the University of Otago. He died in 1946 at the age of 49 (Hodgson, forthcoming).

20. Walter Neale attended Columbia as a graduate student in 1947/8 and 1950/1, but then went to the London School of Economics where he received his PhD in 1953. On his return he was hired by Yale and rejoined the Polanyi group.

21. Mark Perlman was also a Goodrich student, graduating in 1950 with a thesis on the arbitration court in Australia. Perlman also worked with Paul Brissenden. Goodrich left Columbia for the University of Pittsburgh. Perlman was appointed there the same year, 1963.

22. The networks between Columbia and Wisconsin and Texas are also interesting. Mitchell knew Commons well and taught Commons's work in several of his courses, Selig Perlman's *Theory of*

the Labor Movement was highly thought of by Goodrich and appears on various reading lists, and Bonbright and Martin Glaeser knew each other well because of their mutual interest in public utilities. Hale knew Commons's work well, although he had his doubts about many of the details of Commons's interpretation of court decisions (Robert Hale, Notes on Commons's *Legal Foundations*, Robert Hale Papers), and Wolman had connections with Commons from early on, although he became increasing opposed to the pro-union Wisconsin approach to labor issues. Neither place seems to have hired from the other. Ayres sent many of his best students to Columbia to study with Clark, whom he admired, but his work was rarely, if ever, mentioned at Columbia, and his *Theory of Economic Progress* (1944) met with a very cool reception from both Clark and Dorfman (see Rutherford 2000a).

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