University of Victoria | Economics

Department Discussion Paper DDP2008

ISSN 1914-2838

INSTITUTIONAL ECONOMICS AND JOHN DEWEY'S INSTRUMENTALISM

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July 12, 2022

Abstract
Previous discussions concerning the relationship between John Dewey's pragmatic instrumentalism and institutional economics have focused on Clarence Ayres and on issues of valuation. This paper gives attention to the actual conduct of economic investigations by institutionalists such as Wesley Mitchell, Walton Hamilton, and John R. Commons. It is argued that many aspects of Dewey's instrumentalism are clearly displayed in the problem centered, investigational, and experimental methods employed by institutionalists, and in their commitment to problem solving and social control. The association of institutionalist methods with Dewey's instrumentalism implies that many of the standard criticisms of institutionalist methods are misplaced. These criticisms, that institutionalism lacked proper theoretical perspective and produced work that was overly descriptive, have been made predominantly from a logical positivist methodological perspective, and ignore Dewey's notions of science that informed the institutionalist approach. Appraising institutionalist successes and failures from the point of view of the methodology they actually adopted provides a much more nuanced criticism, one based on the strengths and weaknesses of the underlying instrumentalist methods they employed. In particular, some serious difficulties with the application of Dewey's experimentalism to social science are located.

Keywords: Institutionalism; Instrumentalism, John Dewey, Wesley Mitchell; Walton Hamilton; J. R. Commons.
JEL Classifications: B15; B25; B31; B40; B41

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1. Introduction

As noted by Wade Hands "it is almost a cliché that any discussion of American institutionalism must include a reference to the 'impact' of pragmatic philosophy," but, with the exception of the very clear and obvious relationship between John Dewy and Clarence Ayres, Hands seems to regard most of the proposed connections between institutionalism and pragmatism to be "rather controversial" (Hands 2001, p. 231). The argument to be made here is that connections between institutionalism and pragmatism, and especially of John Dewey's pragmatic instrumentalism, during the period when both were at their peak, are not hard to see. This is less a matter of explicit references to Charles Peirce or Dewey, or to any writings in philosophy, but more a matter of the practice of institutional economists. Institutional economics in the interwar period can be seen as an attempt to carry out a research program along instrumentalist lines.

It must be said that Veblen is something of an exception to this characterization. Veblen's work does share a number of characteristics with Peirce and Dewey, but his basic view of science was not instrumental, so several aspects of the instrumental approach common to other institutionalists are not evident in Veblen's writings. This is a key factor in Veblen's relative lack of interest in practical reform efforts. Veblen did not subscribe to the enthusiasm for "social control" that was shared by Dewey and virtually all other institutionalists, as his view was that significant institutional change could only come from evolutionary processes that altered the "discipline" of life. A different issue concerns Clarence Ayres. Ayres clearly had a close relationship with Dewey and was strongly influenced by his ideas, but Ayres' training was in philosophy not economics, and his major works focused on questions of valuation and the definition of "progress" (Ayres 1944). What I want to focus on here is the *economic* research

done by institutionalists, and Ayres did very little economics of the type done by other institutionalists.

2. Dewey's Instrumentalism

Dewey's view of science is that it consists of a process of *inquiry* that is ongoing and has no terminus. What gives rise to inquiry is, in the first instance, what Dewey calls an "indeterminate situation." This situation is one in which the constituent parts do not "hang together." The situation is "uncertain, unsettled, disturbed" and evokes doubt and questioning. These doubts are due to the indeterminate nature of the situation being faced, and cannot be resolved by mental processes. Resolution requires an active and operational response (Dewey 1938, pp. 105-107).

The process of inquiry begins by transforming the indeterminate situation into a defined problematic situation or problem. The way in which the problem is conceptualised or defined will then determine how the resolution of the problem is approached, what data are selected for collection and examination, and what specific suggestions are entertained (Dewey 1938, pp. 107-108). As the process of inquiry proceeds it may become necessary to redefine the problem or reconceptualize it.

Starting from a problem situation, the next step is to search out its constituents, or as Dewey puts it "the facts of the case." These facts "constitute the terms of the problem because they are conditions that must be reckoned with or taken account of in any relevant solution that is proposed. Possible solutions are suggested by the "determination of factual conditions which are secured by observation" (Dewey 1938, p. 109). Proposed solutions are ideas, hypotheses, and

involve both means and ends. The ends here are not to be seen as ultimate ends, but ends-in-view. The proposed solutions are sets of anticipated consequences, forecasts, or predictions. Observation and hypothesis making interact:

> Observation of facts and suggested meanings or ideas arise and develop in correspondence with each other. The more the facts of the case come to light in consequence of being subjected to observation, the clearer and more pertinent become the conceptions of the way the problem constituted by these facts is to be dealt with. On the other side, the clearer the idea, the more definite, as a truism, become the operations of observation and of execution that must be performed in order to resolve the situation (Dewey 1938, p. 109).

The exact methods to be used in this process of inquiry are not tightly circumscribed, they are the methods of reason, intelligence, reflective thought, empirical investigation, theorising, prediction, experiment, and appraisal of consequences. Dewey puts particular emphasis on what he calls experimental reasoning. This too is thought of in broad terms, but it breaks down the distinction between knowing and doing. Knowledge is gained by trying to do things in the material world. In terms of the physical sciences Dewey argues that:

> It came into being when men intentionally experimented, on the basis of ideas and hypotheses, with observed phenomena to modify them and disclose new observations. This process is self-corrective and self-developing. Imperfect and even wrong

> hypotheses when *acted upon,* brought to light significant phenomena which made improved ideas and improved experimentations possible (Dewey 1931, p. 276).

The attempt to solve a problem in practice will reveal new information which may result in a change to the proposed means or a re-evaluation of the ends themselves. Both means and ends are in a constant process of appraisal and re-appraisal. Science is fallible, but failures will result in attempts to find other solutions that work. Experience may also result in changes to underlying values, to the notion of what worthwhile goals consist of. In Dewey's work, values are subject to exactly the same processes of empirical scientific inquiry.

The fundamental purpose of inquiry is to arrive at solutions to problem situations, or, in other words, to make indeterminate situations determinate. The aim is to discover "what works in the solution of concrete problems and furthers or enhances human life" (Hands 2001, p. 227), or what is an effective *instrument* for the solution of the problem concerned. This is an active and ongoing process of discovery. The goal here is not truth in the sense of correspondence to some external reality, but instrumentally effective knowledge. In this philosophy what is "true" is what has been shown to work.

In terms of social science Dewey was well aware of the particular difficulties presented in the social realm. The complexity of the subject matter, the dynamic and evolving nature of society, the social context within which problems have to be solved, and the need for democratic agreement on solutions, all make problem solving much more difficult. Furthermore, the traditional separation of theory from practice has retarded progress. Dewey argues that among "practical" people there is often an assumption that a problem is already well defined and just needs a solution. This ignores the need for "controlled *analytic* observation" to properly define

the problem. In natural science a great deal of technique is employed in determining the nature of the problem, obtaining data, determining the pertinence of that data as evidence, ensuring their accuracy, and arranging them in "the order in which past inquiry has shown to be most likely to indicate appropriate modes of procedure" (Dewey 1938, p. 494). On the other hand, "scientific" people sometimes argue along simple positivistic lines that arriving at valid generalizations just requires the collection of sufficient factual information. Dewey points out that hypotheses are required in the selection and ordering of factual information: "A generalization is quite as much an antecedent of observation and assemblage of facts as it is a consequence of observing and assembling them" (Dewey 1938, p. 498).

Dewey also confronts the idea that reference to practical affairs must be excluded from science, that a social science can be developed separate from practice or application. In contrast, Dewey argues that any problem of scientific inquiry that does not grow out of an actual or practical problem is "factitious" and scientifically "dead," just a form of "intellectual busy work:"

> In social inquiry, genuine problems are set only by actual social situations which are themselves conflicting and confused. Social conflicts and confusions exist in fact before problems for inquiry exist. The latter are intellectualizations in inquiry of these "practical" troubles and difficulties. . . . In fine, problems with which inquiry into social subject-matter is concerned must, if they satisfy the conditions of scientific method, (1) grow out of actual social tensions, needs, "troubles"; (2) have their subject-matter determined by the conditions that are material means of bringing about a unified

situation, and (3) be related to some hypothesis, which is a plan and policy for existential resolution of the conflicting social situation (Dewey 1938, pp. 498-499).

Dewey also sharply criticizes the "conceptual" or deductive approach that has dominated the history of economics. Classical economics, in his view, rested its claims to scientific standing upon certain ultimate "first truths" and on the possibility of "rigorous 'deduction'" of actual economic phenomena from these truths. These conceptions were not regarded as hypotheses to be employed in observation and tested by their consequences; they were seen as unquestionable truths. They were framed neither by reference to problems existing at a particular time and place nor as methods of solving currently existing problems, but as universal principles. "In consequence, the three indispensable logical conditions of conceptual subject-matter in scientific method were ignored; namely, (1) the status of theoretical conceptions as hypotheses which (2) have a directive function in control of observation and ultimate practical transformation of antecedent phenomena, and which (3) are tested and continually revised on the ground of the consequences they produce in existential application" (Dewey 1938, pp. 504-506).

Dewey was a strong proponent of experiments in social science. These would take the form of experiments in "social control." For Dewey, such experiments in control should not wait upon the prior development of a social science. He argues that the "reverse is the case," that the "building up of social science, that is a body of knowledge in which facts are ascertained in their significant relations" is dependent upon attempts at social control. "If we want something to which the name 'social science' may be given, there is only one way to go about it, namely by entering upon the path of social planning and control" (Dewey 1931, pp. 276-277). The primary goal of social science endeavor, then, is not the development of some consistent body of general

theory, but to solve problems. Dewey does not claim that an instrumental social science can become a science in the same sense as physics, given the particular nature of the social phenomena it deals with. Social science can, however, meet the logical conditions of scientific inquiry; it can be a science.

3. Institutionalist Economics

When one examines the institutionalist literature on economic research one finds certain terms and related concepts repeated frequently. In previous work I have described the institutionalist program as one of "science and social control" (Rutherford 2011). The very term "social control" implies a central concern with problems and their solution, and the reference to "science" here can be seen as having a definite instrumentalist meaning. Institutional economists thought of a scientific approach to the discipline in terms of being *problem centered*, *investigational*, *experimental*, and aimed at effective *social control*. Economics is presented as consisting of: (1) identifying significant economic problems; (2) investigating such problems empirically; (3) developing hypotheses and policy ideas, (4) implementing policy conceived of as an experiment; and (5) achieving social control of the problem in question. Examples of this approach to social science within institutionalism abound, but I will primarily focus here on some salient examples taken from the work of Wesley Mitchell, Walton Hamilton, and John R. Commons.

Wesley Mitchell

Wesley Mitchell had a great deal of contact with John Dewey, first as a student at the University of Chicago and later as colleagues at Columbia University and The New School.

Mitchell and his wife, Lucy Sprague Mitchell, also founded an experimental nursery and teacher training school in New York (The Bureau of Educational Experiments) along the lines of Dewey's educational theories.

Mitchell's driving motivation was his desire to create the kind of social science research that "could provide the knowledge that would allow mankind to control social forces," develop social policy, and solve important economic and social problems (Biddle 1998, p. 43). Mitchell's scholarly reputation was established with his 1913 volume *Business Cycles* (Mitchell 1913). Mitchell had chosen to work on a problem of pressing social and economic importance, but also one for which a significant amount of data were available. Mitchell describes the book as offering an "'analytic description' of the complicated processes by which seasons of business prosperity, crisis, depression, and revival come about in the modern world" (Mitchell 1913, p. vii). The first part of the book is a review of then current business cycle theories, including those of Beveridge, May, Hobson, Aftalion, Bouniatian, Spiethoff, Lescure, Veblen, Sombart, Carver, Fisher, and Johannsen, and a setting out of the problem. Business cycles are seen not as occasional events due to special causes, but to some "inherent characteristic of economic organization or activity." The multiple different proposed explanations led Mitchell to believe that there was little point in trying to test each one in turn. What is required is "clear comprehension of the facts." The existing theories indicate "certain facts to be looked for, certain analyses to be made, certain arrangements to be tried" (Mitchell 1913, pp. 6, 20).

Part two of the book is made up of "the facts of the case:" statistical data dealing with cycles in the US, England, France, and Germany between 1890-1911. The data include prices, wages, interest rate, share prices, business volumes, currency, the central banks, savings, investment, profits, and bankruptcies. This is followed by the third part: the "analytic

description" of the "rhythm of business activity" that describes how each phase of the cycle leads into the next, based largely on the leads and lags in the movements of prices and wages, profit expectations on the part of businesspeople, and the behavior of the banking system. In order to improve the working of the system Mitchell suggests changes to the banking system to prevent panics, countercyclical government and railway purchases, and Irving Fisher's plans for a stabilized dollar, but puts as much emphasis on improving methods of forecasting (Mitchell 1913, pp. 586-596).

Mitchell continued to work on the problem of business cycles. In 1921 a sharp downturn in the economy prompted the formation of a Committee on Business Cycles as part of the President's Conference. The Committee involved the then recently formed National Bureau under Mitchell's directorship to take on the job of reporting on the "facts of unemployment and the leading plans which have been suggested for preventing or mitigating it" (Mitchell 1923). The study was allowed only five months, a circumstance that Mitchell felt were "a reflection of an under-developed public appreciation of the social importance of careful study as the basis for social action." Despite the need for more research, Mitchell argued that attempts at forecasting cycles or engaging in policy were not premature:

> if forecasts are based upon the best analysis which can now be made of past business experience, they constitute a step in the process of winning more knowledge. No forecast is more instructive than one which proves wrong, provided the reason for its failure can be ascertained (Mitchell 1923, p. 17).

Possible policies included "long-range planning of public works, a change in the policy of banks regarding credit ratios, or the establishment of a novel form of unemployment insurance." The results of such policies may be uncertain:

> But if we never act in social matters until we have perfect assurance regarding the consequences which will follow, we shall never act at all. Social experimentation, based on clearly thought out hypotheses and accompanied by careful record-keeping, is one of the essential processes in increasing social knowledge and gaining social control (Mitchell 1923, p. 18).

In 1923 Mitchell launched a new attack on the problem of business cycles at the National Bureau. The first volume produced *Business Cycles: The Problem and its Setting* appeared in 1927. The book can be seen as an updating and considerable expansion of the first part of Mitchell's 1913 work. As the title suggests, the book is intended to provide a working definition of the problem, develop hypotheses to guide the factual investigation, and discuss the available sources of information: the "defining the problem" stage of Dewey's instrumental method. Again, Mitchell indicates his goal is to provide an "analytic description" of the cycle. In Mitchell's view cycles do not have a single cause or set of causes: in the course of a cycle causes become effects that become causes. Mitchell also links this approach to the use of statistical methods as "what time series can be made to show are functional relationships" only. Causality is something that is read into the statistics, although neither does he suggest too "stiff" a refusal to employ causal expressions (Mitchell 1927, pp. 54-55). As a preliminary way of dealing with the maze of processes, Mitchell indicates that he will organize discussion around

the effect of each factor on the current and prospective profits of businesses, but in the final analytic description "we shall concentrate attention on the net resultants of interrelated changes in many variables and relegate causal analysis to incidental uses" (Mitchell 1927, p. 471).

The working definition Mitchell arrives at is "Business cycles are a species of fluctuations in economic activities of organized communities. The adjective "business" restricts the concept to fluctuations in activities which are systematically conducted on a commercial basis. The noun "cycles" bars out fluctuations which do not recur with a measure of regularity" (Mitchell 1927, p. 468). The working plans include the use of existing theories, business annals, and statistical series in order to find what features have been characteristic of all or most cycles. Statistical investigations must be guided by rational hypotheses. The investigation aims at answering the question: "How do business cycles run their course?" rather than "What causes business cycles?" (Mitchell 1927, pp. 469-470).

In reply to a letter from J. M. Clark asking about his method, Mitchell argued that the behavior of economic agents is often more complex than it would appear from simply deducing behavior from simple assumptions such as the importance of profit for the businessperson: "There is much in the working of business technique which I should never think of if I were not always turning back to observation" (Mitchell 1928, 415). Scientific method for Mitchell consisted of "the patient processes of observation and testing—always critical testing—of the relations between the working hypotheses and the processes observed." This involves theorizing, but the place for theorizing is "*inside* the investigation," rather than thinking out "a deductive scheme and then verifying *that*" (Mitchell 1928, pp. 413-415).

Mitchell's project did eventually produce *Measuring Business Cycles* (Burns and Mitchell 1946). Here Mitchell extended his criticism of standard deductive methodologies.

First, empirical testing may simply be neglected. Second, the simplifying assumptions may give the theory only a "problematic relation" to real-world data and make it in practical terms untestable. Third, even if it is testable, the researcher will focus on only those processes on which it "centers attention," meaning that many other theories could be similarly verified. Finally, the researcher may suffer from a verification bias and adduce only that evidence that supports his case (Burns and Mitchell 1946, pp. 8-9). This book represents a vast expansion and updating of the second part of the 1913 volume establishing "the facts of the case." The intent was to follow this book with a final volume, expanding on the third part of the 1913 volume, and laying out the final analytic description of the rhythm of business activity. This work was not completed before Mitchell's death in 1948. It would not have contained *a* theory of business cycles, but an attempt to show "what cyclical behavior is characteristic of economic activities" (Burns and Mitchell 1946, p.10).[1]

In the interim, the experience of the Great Depression led Mitchell to develop his ideas concerning policy experimentation. Mitchell was clear in his view that new forms of social control were necessary to deal with the problem of business cycles and he suggested a form of national planning. Previous efforts at planning he criticized as being either "piecemeal" and overlooking the interdependencies of social processes, or "emergency planning in the face of impending disaster" done with too little time to "use what wisdom we have." Mitchell suggests a National Planning Board with advisory powers. The Board could conduct research through its own staff or other agencies and advise on policy "proceeding in an experimental fashion" (Mitchell 1935, pp. 99-102). Such a Board would have to be a continuing one as "social

[1] A final volume *What Happens During Business Cycles* (Mitchell 1951) was produced after Mitchell's death based on a "progress report" he had produced.

problems are ever assuming new forms." It would also face the problem of unclear or conflicting social purposes:

> In a democratic country national planners would have to serve as an agency for accomplishing what the majority desired. But by throwing light upon the consequences that different lines of action would produce they could contribute much toward making social valuations more rational. Perhaps in the long run the chief gain from trying to plan national policies in the light of their probable consequences would be the attainment of a more valid scale of social values than now prevails among us (Mitchell 1936, p. 135).

Walton Hamilton

Walton Hamilton was first exposed to Dewey's thinking by Charles H. Cooley who had been a student of Dewey's and was Hamilton's teacher at the University of Michigan. Later, Hamilton had "many years association in the writings of Mr. Wesley C. Mitchell who had been very close to Mr. Dewey."[2]

Hamilton was one of institutionalism's first and strongest advocates of the social control of industry. Hamilton's 1918 American Economic Association paper that first introduced the profession at large to what he called the "institutional approach to economic theory," takes the position that anything that "aspires to the name of economic theory" should be "relevant to the problem of control" (Hamilton 1919a, p. 311). This idea of social control involves an economics that concerns itself with "gathering facts and formulating principles necessary to an intelligent

[2] Address given by Walton Hamilton on the occasion of John Dewey's 80th birthday. Walton Hamilton Papers, Box 69, Folder 3.

handing" of economic problems. The "problems" that Hamilton had in mind can be found in his text book *Current Economic Problems* (1919b) and include such items as business cycles, railway regulation, monopoly and unfair competition, unemployment and economic insecurity more generally, trade unions, industrial conflict and labor law. The educational programs in economics that Hamilton developed, first at Amherst and then at the Robert Brookings Graduate School were heavily problem centered. The program at Brookings was described as being itself an "experimental" one. Hamilton's stated aim in these programs was to give attention to "problems rather than disciplines" and "relevant inquiries rather than academic categories." Hamilton intended his programs to "teach the art of handling problems" (Hamilton 1926a). Course titles included such as "Types of Industrial Control" and "The Ends and Means of Social Control." Hamilton talked of the economic system being subject to direction and control, and best directed "by knowledge of specific problems and the facts of the case" (Rutherford 2011, p. 172-173). What he offered his students was "an invitation to detailed study" and participation in the "intelligent direction of social change" (Hamilton 1926a).[3] The mention of "detailed study" is noteworthy, as for Hamilton, the details of industrial and business practice mattered a great deal.

Over his career Hamilton involved himself in numerous investigations of specific problems including irregular employment and low wages, the bituminous coal industry, medical care, the broadcasting industry, consumer protection, the price policies of large corporations, anti-trust, patents, and business regulation generally. His view was that the unregulated market was failing to provide acceptable results in these areas and more. His main concerns were with the welfare of workers and consumers, and of raising the standard of living.

[3] These programs are discussed in more detail in Rutherford (2011)

Hamilton's work on the coal industry is an interesting case. It had been widely accepted for some time that the bituminous coal industry was a serious problem area, and issues surrounding the coal industry became a particular area of investigation at Brookings. Hamilton worked with his colleague Helen Wright to produce two books on the industry. The first book sought to outline the present state of the industry and the factors responsible for that state of affairs. They find the bituminous coal industry characterized by persistent excess capacity, irregular operation, unsafe working conditions, low wages, strikes and labor unrest. Hamilton and Wright note that the industry is competitive, but competition has not brought about a stable equilibrium but a situation of "chaos." This state of affairs they attribute to technological changes increasing productivity combined with a cost structure of high overheads and bankruptcy laws that allow for reorganizations and that do not eliminate excess capacity from the industry. Individual mine operators are simply trying to survive as best they can, but the aggregate result is the "evil" of too much capacity and low profitability (Hamilton and Wright 1925; Hamilton 1926b).

Hamilton and Wright produced a follow up book in 1928 detailing a proposed solution. This solution is a modified version of a proposal made for the British coal industry by Henry Clay. Hamilton and Wright suggested the creation of a single United States Coal Corporation with control divided equally between representative bodies of workers and consumers. Shares in existing coal companies would be exchanged for bonds in the new, separating control from the right to income from capital. Hamilton and Wright were aware of the controversial nature of these proposals and of the difficulties of implementation, but their hypotheses did provoke discussion and it was quite widely accepted that centralization of the industry was required. The coal industry came under the National Recovery Administration codes during the New Deal, and

Hamilton was himself a member of the Consumer's Advisory Board of the NRA. The negotiations over the coal code were extremely difficult and fraught, and the result was a relatively weak attempt at control of wages, prices and production, but at the same time it embodied a move toward the treatment of the coal industry as a public utility (Johnson 1966). With the demise of the NRA code system as a result of the Supreme Court decision in the *Schechter* case, the regulation of the coal industry was continued with the passage of the Bituminous Coal Conservation Act of 1935 (Guffey Coal Act), described by one corresponded as "Hamilton's Coal Bill."[4] This Act created the Bituminous Coal Commission to regulate prices, wages, working conditions, allocate production, and create a code of competition. It also contained a provision for consumer representation. The bill levied a tax on coal but with all but one percent rebated for compliance. The bill has been described as "very neat: a bona fide panacea" (Watkinson 1987, p. 104), but it too ran into legal difficulty at the hands of the Supreme Court on the grounds that wages and working conditions were a result of local conditions. A replacement bill removing the contentious elements, but retaining the control of prices and production and the system of tax and tax rebate, was passed in 1937.

The Act cannot be said to have been entirely successful, given the complexities of the industry, but Hamilton responded to criticism of the Act by arguing that such criticisms indicated only the need for refinements and adjustments to the regulations, and not an abandonment of the effort while still in its "experimental stage." The Act is "an instrument fitted to an economic function," and while it has not "yet hit upon just that detail of policy through which its objective is to be gained" the experiment should be continued (Hamilton 1941). Hamilton's arguments for continuation were not successful, but the problems of the coal industry did not disappear.

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[4] Letter to Walton Hamilton from a correspondent at Yale Law School, signature page missing, 19 May 1933, Hamilton papers Box 66, Folder 6.

A second example of Hamilton's investigations and experimental thinking is his work on price policies and anti-trust. The idea for the price policies work came initially in connection with a desire to study the working of the NRA codes,[5] and were directed by Hamilton for the President's Cabinet Committee on Price Policy. The demise of the NRA codes caused a shift in plans, but the studies were continued. (Hamilton and Associates 1938).

Hamilton's price studies are difficult to summarize or make generalizations about, but this is his point. Hamilton argues that industries are not alike, they have their own particular sets of practices, usages, and conventions that have grown up within the trade. They differ in the scale of enterprises, in the number of competitors, in the structure of costs, in the existence of joint products, in the arrangements made with suppliers and distributors, in the impacts of new technology or new regulations, in the methods of advertising and packaging, and in the particular methods used to confine or limit competition. Each industry's pattern is also undergoing continuous change (Hamilton and Associates 1938). Significantly, Hamilton argues that there is no sharp line of demarcation between competition and monopoly, "nor even a line running from perfect competition through monopolistic competition, oligopoly, duopoly, to pure monopoly on which particular cases may be set down." To do so is to make "hypothetical economic phenomena the subject of mathematical exercises." The "trick may be pulled off; but the result is not a picture of the pragmatic reality called industry" (Hamilton and Associates 1938, p. 23).

Right at the time of the publication of this work Hamilton was appointed as Special Assistant to Thurman Arnold who had been put in charge of the Anti-Trust Division of the Department of Justice. Hamilton immediately saw a connection between his price studies and the direction he felt anti-trust enforcement should go. In Hamilton's view the studies had two

[5] There was an increasing concern that the codes were aiding cartels and leading to higher prices.

main purposes: to help understand how prices are actually made in practice, to investigate "what lies back of a price—to make it high or low—to restrict or enlarge supply—to bring it within the reach of the few or the many" (Hamilton 1936), and to provide a proper factual basis for the consideration of business regulation and anti-trust. On Arnold's appointment he wrote to his publishers that Arnold "insists that the Department of Justice must get down to concretions, deal with each industry separately, and shape the Anti-Trust Acts in such a way as to bring them into accord with the web of industrial usage," an "application of the approach worked out in *Price and Price Policies*."[6]

> The road towards industrial government runs by way of authority and the particular. A proper freedom of collective action, within strict limits of public interest, must be accorded the agencies of business. The state in formulating public policy, must have a wide discretion, and statutes should be written in the broadest of terms. But a way of order and a program of control can be crowded into no set formula. The general standards of industrial code and legislative standard must be adapted to the shifting circumstances of particular industries. Since usage is forever on the make the exercise of authority must be grounded in a continuing exploration of industrial arrangements (Hamilton and Associates 1938, p. 555).

In line with Hamilton's hopes, Arnold did pursue a very active anti-trust policy and did adopt a case-by-case approach based on close study of conditions in each specific industry. Hamilton was involved in a number of cases some of which related to his previous work or the

[6] Letter from Hamilton to Hugh Kelley, McGraw Hill, 11 May 1938. Hamilton Papers, Box 72, Folder 2.

studies done in *Price and Price Policies*. For example, the cases against the automobile industry, the dairy industry, the oil industry, and the American Medical Association.[7] In addition, Hamilton was closely involved in the case against the motion picture industry and in the substantial investigation into the abuse of the patent system to limit competition.

Apart from his involvement in specific cases, Hamilton developed a series of proposals for the reform of the anti-trust system. He argued for a shift from a legalistic to an administrative basis, and for a development of the advisory opinion and consent decree to allow for a "code of industrial behavior to be approved in advance." Government and industry would cooperate in developing "a line of business activity which is believed to accord with public policy". (Hamilton and Till 1940b, p. 19). Such agreements would be subject to change with changing conditions. Hamilton realized that such a system could not come into force "full blown" but "must begin as a cautiously experimental power" (Hamilton and Till 1940a, p. 108).

Hamilton's proposals went further than Arnold was willing to go, particularly as Arnold thought retaining the threat of prosecution was important and was not keen on a wholesale shift to an administrative system. But Arnold did utilize consent decrees where where "defendants proposed industry-wide relief that fully restored competition beyond what could be achieved through a successful prosecution or civil action by the government and the defendants permitted meaningful monitoring by the government (Waller 2004, pp. 580-581). He also instituted a policy "by which businesses interested in ascertaining the legality of future action could seek the opinion of the Antitrust Division regarding its enforcement intentions toward the proposed

[7] Hamilton had been closely involved in the discussions surrounding the NRA Code for the petroleum industry, on the side of the consumer interest. Hamilton's previous involvement in the debates about medical care were substantial. He was a member of the Committee on the Costs of Medical Care and supported compulsory insurance and group practices. See Rutherford (2011, pp. 70-72; 79-80). Automobiles and milk were included in the price studies.

conduct. In return, the business could count on not being charged criminally, even if the government ultimately opposed the conduct" (Waller 2004, p. 581), exactly as Hamilton had suggested.

Hamilton's *Price and Price Policies* was critically reviewed by Vernon Mund for its failure to utilize standard theoretical categories. For Mund, the theories of competition and monopoly are abstractions from the concrete (Mund 1939). For Hamilton nothing like perfect competition or pure monopoly can be found in practice, and to impose such categories on the data is to engage in dogma not industrial inquiry.

> In the social studies there is a host of honest workers who are willing to don overalls, do exciting drudgery, and shape findings to reality. Their emergent work, from tentative hypothesis to tentative hypothesis, is at once descriptive and analytical, factual as well as theoretical. But in the philosophy of Mr. Mund and his kind there is no place for such things as another set of postulates, concepts fashioned out of concretions, the joyous ride into the winds, the story of how it all came about, the mores of industries, the usage that becomes an institution, the spirited inquiry that raises more questions than ever it answers. A study of industrial folk-ways is taboo because the folk-ways of a fundamentalist faith forbid (Hamilton 1939, p. 104).

John R. Commons

John R. Commons seems to have come to the pragmatism of Charles Peirce and John Dewey through his own reading. Part of his education was at Johns Hopkins, but he did not overlap with Peirce. From Peirce, Commons took the concept of the "active mind," and from

Peirce's essay "How to Make Our Ideas Clear" his notion of "scientific pragmatism" as a method of investigation. Peirce's meaning was "if a *theory* "works" when tested by experiments and verified by others, then the *theory* is true and right, so far as present knowledge is concerned and all the known facts are included." Dewey's inclusion of the ethical element of "*desirable social* consequences" Commons called "social pragmatism:" the "pragmatism of human beings—the subject matter of the science of economics" (Commons 1934a, pp. 150-151).[8]

Commons and his students[9] did huge amounts of investigation into issues involving labor unions and labor issues in general. This work, however, was always directed towards a practical end involving such issues as collective bargaining, unemployment, minimum wages, hours of labor, health and safety, social insurance, and the administration of labor law (see Commons and Andrews 1916). Paul and Elizabeth Raushenbush describe Commons's appeal to students as being due to his interest in "applying academic insights to the problems of the day," and trying to "use his brains, and enlist the brains of his students too, in seeking solutions of economic problems." Students were attracted as they "were being invited to participate in an attempt to deal with difficult problems on an intelligent and practical basis," and to engage in what they called "action research" (Raushenbush and Raushenbush 1979, pp. 3-9). In the introductory chapter to his *Institutional Economics* (1934) Commons himself described his active involvement in labor and other policy issues, from immigration to monetary policy—beginning in 1883 with his first membership in a labor union—as fifty years of participation in experiments (Commons 1934a, pp. 3, 9). Commons and his students had considerable success in developing legislation on such matters as civil service reform, public utility regulation, workman's compensation, unemployment insurance, and social security. His experimentalist

[8] Aspects of Common's pragmatic instrumentalism are discussed by Biddle (1990; 1991).
[9] It is really not possible to separate Commons' work from that of his students.

point of view, derived from his efforts at deciding disputes and reconciling conflicting interests, principles, and purposes, was also the source of his investigational framework of transactions, going concerns, working rules, and reasonable values. All of these concepts came out of his investigations and attempts to implement policy.

Commons' efforts concerning workmen's compensation provide one example. It was widely recognized at the time that the old common law method of dealing with workplace accidents was failing. The Courts' interpretation of contributory negligence resulted in claims for compensation for injury being denied or substantially reduced. Wisconsin did have safety legislation but it was not effective. Commons found that in 1911 well over a million dollars was paid in insurance premiums by employers, ten thousand accidents occurred, 100 being fatal and the rest causing disability of seven days or more, and yet barely $300,000 reached only 10 percent of the injured employees or their dependents (Commons 1913). Commons told his students that he regarded the existing law as inadequate and wanted to have a proposal on "what to do about safety" ready for the upcoming legislative session. He and his students researched the legislation passed in European and other countries. According to Commons' autobiography he had fifty undergraduates speaking half a dozen languages, supervised in groups by graduates "charting up, in large sheets hung on the walls the labor laws of all countries" (Commons 1934b, p. 129). Commons also conducted a great deal of legal research on the characteristics the legislation would have to have to both gain sufficient support to be passed by the State legislature and withstand legal challenge in the courts.

The Wisconsin legislation set up the Industrial Commission of Wisconsin which was to both administer and enforce factory safety. Instead of attempting to specify a detailed list of safety requirements the act simply stated that the employer had a responsibility to protect the life,

safety, health, and welfare of employees, the Commission being authorized to draw up specific rules. The Commission put a great deal of emphasis on accident prevention, so that inspectors could work with employers to improve safety, rather than simply search for violations. This is an example of the mutuality Commons always sought in his solutions to problems.

Commons thought of commissions such as the Wisconsin Industrial Commission as a "fourth branch of government." It is administrative, but it also has functions of "investigation and research." The research and investigation it undertakes is neither academic or journalistic, it is "constructive investigation," and should lead to "such administration of the law that those enjoined to obey it would respect and support it." As a part of his effort to write a bill that would allow the Commission to be able to experiment with rules and, at the same time be acceptable to the legislature and courts, Commons developed his ideas of "reasonable regulation through constructive investigation," and made the key step of defining reasonable as "best practice" (Commons 1913, pp. 251-253; Brandeis 1972, p. 128).

A further example is the work done by Commons on unemployment. He begins by discussing different types of unemployment, turnover, seasonal, and cyclical, with his focus on the last two. His attack on the issue was similarly two-fold: to attempt to pass unemployment compensation legislation of a type that would contain incentives for employers to stabilize their own employment, and to work on measures that would operate through the Federal Reserve System to stabilize the "credit cycle." Commons' aim was always to make employment constant, and not to accept unemployment as inevitable, or to simply provide a dole. Commons' unemployment compensation bill (the Huber bill of 1921) was worked out after a careful examination of European experience with unemployment insurance schemes (Commons 1921). Commons' scheme was modelled on his workman's compensation law: a mutual insurance fund

is created operated by employers with contributions from employers only. Contribution rates would be set on the basis of claims experience giving an incentive to employers to maintain steady employment. In addition, bankers would be incentivized to be more cautious in their lending during inflationary times, in the knowledge that lay-offs would be expensive. The bill failed on the opposition of employers, but "Commons and his students made unemployment insurance a biennial issue in the Wisconsin legislature." The continued reintroduction of the Huber bill was itself an achievement in keeping the issue alive (Nelson 1967/8, p. 119-120). On the side of the "credit cycle" Commons did a great deal of work in support of the Strong bill that proposed giving the Federal Reserve an explicit responsibility for the stabilization of prices. Commons developed statistical information, discussed the, then still recent, discovery and use of open market operations, and gave testimony (Commons 1927). The bill failed, but the mandate of the Federal Reserve was eventually expanded to include explicit recognition of price stability as a goal in the Federal Reserve Reform Act of 1977.

A renewed effort was made in 1931-32 by Commons' students and colleagues Elizabeth Brandeis, Paul Raushenbush, and Harold Groves. The Huber bill system was amended to provide for separated reserves for each employer, so that each employer was responsible only for his own employees. If an employer provided steady work for his employees and his fund reached $75 per-worker he could cease further contributions (Raushenbush 1932). With the unemployment problem worsening, this bill (the Groves bill) passed the Wisconsin legislature early in 1932. The Wisconsin system also established an Advisory Committee initially to advise on administration. The Committee, however, was soon "advising about desirable legislative changes," and was later given a mandate to do so (Rausenbush and Raushenbush, 1979, p. 73).

Commons himself continued his advocacy of commissions as agencies for investigation and experiment. Writing in 1939, he argued that the "pragmatic application" of the social sciences is to be found in the new field of administration: "Administration is pragmatic social philosophy. It brings together again, this time by methods of scientific investigation, the separated fields of economics, ethics and jurisprudence" Commons 1939, p. 523). Commons argued that such commissions could fit within the American constitutional system, supplementing but not usurping the authority of legislatures or courts. This "fourth branch" of government "is an investigational branch" but its investigations are not "the mere search for truth, they are designed to improve conditions within the field assigned." They are investigational and inventive bodies, but are themselves at the "experimental and debatable stage" and subject to "alarmed attacks." For Commons, this was "all the more reason" for the social sciences to "focus their investigations, and train their investigators within, this fourth department of the American experiment in government" (Commons 1939, pp. 529-531).

In his last book, *The Economics of Collective Action* (1950), Commons comes closest to laying out his investigational methods. He begins by defining economic activity in terms of collective action, individual action, transactions, and capitalism. Within this system of economic activity problems arise, frequently in terms of conflicts of interest. Problems are approached initially in terms of the various aspects of economic activity, what Commons calls "simplified assumptions:" sovereignty, scarcity, efficiency, futurity, and custom. This step works to define the problem and organize further investigation. In this investigation the units of the transaction and going concern are key, but also certain *relativities* have to be kept in mind: similarities and difference, working rules, part-whole relations, and historical development. Solutions to problems generally involve the creation of institutions capable of generating a reconciliation of

conflicting interests, relating to Commons's theory of reasonable value. It is noteworthy that the early drafts of *Collective Action*, were called *Investigational Economics* (Commons 1998).

Some Others

Hamilton, Mitchell, and Commons do not nearly exhaust the list of institutionalists who adopted pragmatic and instrumentalist ideas. Hamilton's colleague, Walter Stewart, spent a summer at Columbia to take courses from Dewey. Likewise, Rexford Tugwell, once at Columbia, took courses from Dewy and developed his ideas concerning the experimental method in economics, a notion he took to his own work in the New Deal (Tugwell 1924; Rutherford 2011, p. 235). Of course, many involved with the New Deal characterized it in experimental terms. Jerome Frank spoke of the New Deal as "an elaborate series of experiments which will seek to ascertain whether a social economy can be made to work for human welfare" undertaken by "experimentalist" lawyers and economists.[10] Morris Copeland, a student of Hamilton and J. M. Clark's wrote a long appendix to his PhD thesis on pragmatism with many references to Dewey and to the idea of "thinking as an instrument in the solution of a problematic situation."[11] Commons' student Edwin Witte defined institutional economics as based on problem solving and using a pragmatic approach (Witte 1954). Even J. M. Clark who was less empirical in his methods than most institutionalists called his approach a pragmatic one (Clark 1924). Clark always attempted to keep his theorizing as close to the facts as possible[12] and argued for an

[10] Except from an address given by Jerome N. Frank, General Counsel of the AAA, to the Association of American Law Schools, December 30, 1933. Walton Hamilton Papers, Box7, Folder 8.
[11] Morris Copeland Papers, Box 8.
[12] A good example would be Clark's book on overhead costs (Clark 1923). Writing to Mitchell, Clark said "I sometimes think 'theory,' of the abstract sort, is a device for converting usefully-enlightening ideas about behavior and motivation into paper mechanisms whereby armchair theorists can grind out misleading results." Wesley Mitchell papers, Box 8, J. M. Clark Folder.

economics "actively relevant to the issues of its time" (Clark 1919). Clark's book *The Social Control of Business* (Clark 1926) was a major contribution to the institutionalist literature on social control. Many other examples could be given.

4. An Appraisal

The institutionalist emphasis on problem solving, investigation, experiment, and social control should be more than clear. If it is taken that the institutionalist notion of science in the interwar period was based on an interpretation of Dewey's instrumentalism, then it is apparent that many of the standard critiques of institutionalist work, made both then and since, are misconceived. The criticism of institutionalism as overly descriptive, lacking theory, or even anti-theoretical are all based on the application of logical positivist ideas to institutionalism. Institutionalists did do large amounts of empirical work but this was done not with the idea that generalizations would magically appear from masses of undirected data collection, but from inquiries directed toward specific problems and guided by hypotheses as to the data of relevance for the problem concerned. If institutionalism in seen as the application of instrumentalist methods, then its successes and failures might be better seen as relating to the strengths and weaknesses of the Deweyian methodological program it adopted. This has added significance given the argument by Wade Hands that pragmatic and instrumental ideas are making a return to discussions concerning the philosophy of science (Hands 2001, p. 251; 2004).

The institutionalist program was aimed at the solution of economic problems, or at successful social control. At the time the major issues facing economics and policy makers were matters of public utility regulation, monopoly, imperfect competition, business cycles, unemployment, and labor law. In terms of solutions to these problems it would be hard to be

critical of institutionalists as they were often successful, and many of their failures were not in their suggested solutions they but in the political will to implement the policy "experiment" they proposed. Institutionalist work aimed at problem solving did produce a vast array of legislation aimed at dealing with various perceived shortcomings of the market. It also produced a great deal of practical knowledge concerning the techniques of regulation and the work of commissions.

Moreover, the applied and practical work they did formed the basis for many further developments. Commons and Hamilton charted the interrelations of law and economics, contributing to what has become known as the first law and economics movement. Commons' developed his own theoretical framework based on the transaction, an idea that has become part of transactions cost economics. Hamilton was one of the first to warn of the problems of agency capture, long before Stigler (Hamilton and Till 1940, p. 25), an issue that, for Hamilton, was at least partly due to the lack of proper representation of the consumer interest on commissions. The tension between Hamilton's empirical price studies and Chamberlin's untestable monopolistic competition models resulted in the Structure, Conduct, Performance approach to industrial organization (Rutherford 2011, pp. 317-319). Simon Kuznets' work at the NBER included the development of national income accounts, and Copeland later added flow of funds accounts. Mitchell's work on business cycles inspired J. M. Clark's accelerator theory and F. C. Mills' statistical work on price inflexibility. Mills' work, in turn, fed into the views of Rexford Tugwell and others in the New Deal that anticipated Keynes in a number of ways (Rutherford 2011, pp. 292-295). Institutionalists such as J. M. Clark also produced some very prescient criticisms of Keynesian models.

This is a considerable record of achievement, but thinking about Dewey's idea of social policy experiment in the light of institutionalist experience, and considering carefully the difficulties of social experimentation, does raise a number of issues. Mitchell pointed out that experimentation would require well thought out hypotheses and carful record keeping. He "held no brief" for experiments based on "emotional reaction to social ills" of for "experimenters who do not count costs, proceed with caution, provide for recording results, or anticipate modifications" (Mitchell 1923, p. 18). Economic policies, however, even if initiated with an experimental intent may not live up to even Mitchell's conditions. Experiments get adopted, adjusted, or abandoned for political reasons, the carry through of the experiment over time may be lacking or become neglected, other conditions may change in ways hard to measure or even comprehend, and the complexity of the social world may confound the interpretation of results. Dewey himself argued:

> Wherever purposes are employed deliberately and systematically for the sake of a certain desired social results, there it is possible, within limits, to determine the connection between the human factor and the actual occurrence, and thus to get a complete social fact, namely the actual external occurrence in its human relationships. Prohibition, whether noble or not, is not an experiment in any intelligent scientific sense of the term. For it was undertaken without any effort to obtain the conditions of control which are essential to any experimental determination of fact. The Five Year Plan of Russia, on the other hand, whether noble or the reverse, has many of the traits of a social experiment, for it is an attempt to obtain certain specified social results by the use

> of specified definite measures, exercised under conditions of considerable, if not complete, control (Dewey 1931, p. 276).

This sets an extraordinarily difficult standard for proper social experiments. It is also a point of view that may well be related to Dewey's extreme criticism of the market system. If one requires at least considerable control of experimental conditions for social experimentation to be valid, then anything less than "social planning" will not do. According to Dewey, if the social situation out of which facts emerge "is itself confused and chaotic" because it expresses "unregulated purpose and haphazard private intent" we shall "only add intellectual confusion to practical disorder" (Dewey 1931, p. 277).

As Wade Hands has noted, Dewey's political economy implies the desirability of a form of social democratic economic planning, and there is a clear tension between Dewey's pragmatic instrumentalism "with its fallibilism, context sensitivity, and anti-teleology," and his promotion of the idea that "it is possible to engage in wide scale social engineering and economic planning" (Hands 2004, p. 265). Some institutionalists, such as Rex Tugwell, also endorsed economic planning, and Mitchell advocated an "advisory" National Planning Board, but none of them argued that national planning was a *prerequisite* to the experimental method. Rather, some form of planning (and there were many varieties suggested) was discussed in terms of it being a potential *solution* to macroeconomic problems. Similarly, most institutionalists, with the exceptions of Veblen and Ayres, accepted the instrumental importance of markets, and saw their proposed social controls as supplementing and regulating the market, not replacing it. As Mitchell put it: the question is "how to make production for profit turn out a larger supply of useful goods under conditions more conducive to welfare (Mitchell 1922, p. 149).

This then raises a further question. If experimental conditions cannot be controlled in the way Dewey suggested, then does the experimental method hold the same promise in social science as in the natural sciences? If the answer is in the negative then the relative lack of "systematic theory" in the institutionalist literature may be due to this reason. My argument would be that the empirical and policy strengths of institutionalism as well as its relative theoretical weakness are alike the result of the methodological approach borrowed from Dewey.

This raises two final points. First, and despite what has been called Dewey's "latitudinarian" view of science, it is easy to agree with Hands that Dewey was not pluralistic enough (Hands 2004, p. 266). Not all problems in social science can be approached via the experimental method due to an inability to sufficiently control the experimental situation, or because the questions or problems involved may simply not be solvable by instrumental means. This is particularly the case where questions of fundamental values are involved. This suggests that social science will of necessity consist of a mix of methods both theoretical and empirical, non-experimental and experimental. Second, if, as Hands argues, ideas about scientific knowledge have moved in a direction more conducive to pragmatic ideas, it is to be hoped that the effect on economic practice will be to encourage both experimentalism and pluralism, and, just possibly, to taking the efforts of Dewey's earlier followers in economics as worthy of more serious attention.

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