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**PRINCIPLES OF INSTITUTIONALIST
RESEARCH METHODOLOGY**

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Principles of Institutional Research Methodology¹

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Abstract

Despite basic agreement that the *raison d'être* for the field of economics is the identification, development, and refinement of policies and programs which will improve the economic performance of the economy, institutional and neo-classical economists have developed radically different research methodologies. Institutional economists argue that if one views the economic system as constantly evolving, then economic research must be directed towards understanding how and why the economy, at a particular point in time and space, is evolving. Towards this end, institutional economists take a pragmatic approach which relies on empirical research conducted in a holistic and open-ended fashion.

In contrast, neo-classical economists contend that the economy is guided by economic forces which guide (push?) the economy from one equilibrium point to another. In the neo-classical world, the role of the economist is to develop accurate models of these forces to assist policy makers in evaluating the costs and benefits of adopting alternative courses of action. In developing their mathematical models of the economy, neo-classical economists use a mixture of empirical data and theoretical insights based on idealistic models of the functioning of the economy.

While concentrating primarily on explaining the Institutional research methodology to non-institutionalists, this paper also contrasts the pivotal philosophical and practical differences between the institutional and neo-classical schools of thought. Key points of discussion include the nature of the pragmatic approach and its relationship to the scientific method, the research strategy (i.e., narrow and predefined versus holistic and open ended), the use of qualitative and/or mixed quantitative/qualitative research strategies, and the role of values and theory in the research process.

Introduction:

Institutionalist (or Evolutionary) and conventional (neo-classical) economists would both agree that a principal task of the economic profession is providing advice on how a society can increase the material welfare of its members. The two schools of thought have, however, markedly different perspectives on what this means in practice. Institutionalist and conventional economists disagree about the basic nature of the economy and its economic institutions; the types of problems with which the economic profession should concern itself; the relevance of social factors in their analyses; and how economic research should be conducted.

From an institutionalist perspective, economics "is the science of social provisioning"² From this perspective, the primary task of the economists is not the allocation and efficient use of scarce goods, but rather the establishment of an *economy* which can meet the needs of humanity by providing the goods and services necessary to meet societal needs. Institutionalists emphasize that "To define economics as the 'science of scarcity' or as the 'science of efficiency' is to miss the main point of the institutional definition of economics, which is to emphasize the positive function of the economic system as a providing agent and as a potential source of abundance"³ To the extent that goods are scarce, the objective should be how to make them less scarce, rather than how to best allocate the available goods. Part of the answer lies, of course, in the efficient use of available resources. But part of the answer also lies in increasing the productivity of the society by removing institutional constraints which block the development and/or full use of new technologies.

Furthermore, by stressing the social basis of the provisioning process, institutionalists emphasize that the individual decisions of economic agents take place within an institutional or social framework. While it is important to understand and analyze the actions and motivations of individual economic agents (individuals or firms), the analysis must take place within a specific cultural (social) context. One studies the actions and thoughts of individual economic actors in order to better understand the culture in which they operate.

²Allan Gruchy, *The Reconstruction of Economics: An Analysis of the Fundamentals of Institutional Economics*, (Westport, Connecticut: Greenwood Press, 1987), p. 21. (emphasis added)

³ibid, p. 23

Naturally, the differences between institutional and neo-classical economists concerning their conception of the objectives and boundaries of economics manifests itself in their research objectives. Conventional economists are primarily concerned with determining the optimal use of the available resources, measuring economic parameters, and predicting future economic values in their research efforts. In contrast, institutionalists are primarily interested in understanding the current functioning of the economy, how and why economic institutions are changing, and the implications of those changes on the ability of society to provide for the needs of all of its members. According to Charles Wilber, the institutionalist "starts with a given situation and seeks to explain the dynamics of existing structures and situations. What moves the economy? What makes it work? What kinds of values does it support and instill? What motivates individuals to do anything? What is the nature of conflict and who has the power to get what they want and to influence structures and other people."⁴

Unfortunately, for those of us brought up within the cultural and educational (i.e., institutional) framework of the late twentieth century, the Institutional School *appears* to lack a scientifically valid research methodology. The apparent lack of a valid research methodology is primarily due to fundamental differences in how one views the objectives of the scientific research process. If the primary objective is to understand rather than to measure, and the world is viewed as constantly evolving rather than static, then there is an inherent need for a more open-ended and pragmatically defined research methodology than those used in the "hard sciences." Unfortunately, institutionalists have had a difficult time explaining their methodology in terms which the non-initiated could understand. Hopefully, this paper will help fill this need.

The paper will begin by briefly examining the pragmatic basis of the institutionalist approach. The paper will then turn to elucidating the main tenets of the institutional approach. While there is, naturally, disagreement among institutionalists concerning the nature of institutionalist research, most would agree that research conducted within an institutional framework would typically be scientific, but not necessarily quantitative; Darwinian rather than Newtonian in

⁴Charles K. Wilber, and Robert S. Harrison, "The Methodological Basis of Institutional Economics: Pattern Model, Storytelling, and Holism," *Journal Of Economic Issues* XII (1 1978)

analysis; theoretical, but wary of generalizations; Non-teleological in outlook; normative in approach; holistic in perspective, if not in focus; and open-ended in strategy.

While the primary objective of this paper is to provide the reader with a brief introduction to institutional research methodology I have found it necessary to contrast the institutional and conventional (i.e., neo-classical) approaches. As D.H. Lawrence once wrote, 'things have there being in their opposition.'

In comparing the research methodologies of the two schools of thought, I have found it advantageous to use 'ideal types' to illustrate the basic differences in the methodological perspective. As is always the case, the use of ideal types is fraught with difficulties. In practice, one finds among the practitioners of both philosophies, considerable differences of opinion on how economic research should be conducted. In particular, most neo-classical economists are well aware of the limitations of their approach and will deviate from the approach when necessary.

Nonetheless, it is worthwhile to contrast the institutional approach with an admittedly 'idealistic' or 'text-book' model of the neo-classical approach for two reasons: First, it enables the reader to more easily and clearly understand the practical and philosophical differences between the two approaches. Understanding the 'ideal' research methodology of a field tell us much about the theoretical perspective of the field. While acknowledging that we are dealing with a spectrum of beliefs regarding the appropriate research methodology, one can safely argue that, first, significant philosophical differences concerning the appropriate method for conducting economic research exist, and second, conventional and institutional economists tend to fall on opposite sides of the spectrum.

The second justification for using 'ideal types' as an heuristic device, is that even if the methods are not consistently followed, their existence has a significant impact in shaping research results. As Bruce Caldwell has pointed out, the text-book methodologies which the major journals within a field support are important in shaping the explanations and solutions to real problems which an applied field develops: "Most [research] methodologies are prescriptive; they limit the range of acceptable theories and explanations in science. Such normative methodologies also place restrictions on what constitutes

legitimate criticism; they prohibit not only certain types of theories, but certain types of methodologies as well.”⁵

Finally, in discussing the institutionalist research methodology, I have found it useful in several places to cite the writings of the proponents of qualitative evaluation approaches. Over the last twenty years, proponents of qualitative evaluation have done an excellent job of developing understandable guidelines for conducting research within a pragmatic-holistic framework using qualitative data collection and analysis techniques.

Pragmatic in Orientation:

One can not discuss the institutionalist approach without acknowledging its ties and intellectual debt to the pragmatic approach developed and championed by Charles Peirce, William James, and John Dewey in the early 1900s. While the pragmatic approach has fallen into disrepute among many academicians for its supposed lack of scientific rigor, the approach lives on, both within the institutional school of economics, and among proponents of qualitative methods of evaluation.

The primary goal of pragmatic inquiry (in the James-Dewey tradition) is to provide policy makers (private and public) with the information they need in order to make policy decisions which will assist in the establishment, in a democratic manner, of a more humane, equitable, and healthy society. Pragmatists asserted that research should be focussed on understanding the consequences of actions in the real world given the specific contexts of the situation.

Furthermore, pragmatists argued that the ‘truthfulness,’ ‘value,’ or ‘warranted assertion’ of an idea is a function of the performance or ‘workableness’ of the idea within a given situation. Opponents of the pragmatic approach have attacked this position as implying that pragmatists took ‘truth’ to be a varying commodity, depending solely on whether the researcher believed that the idea was useful.

To a large extent the debate about ‘truth’ exemplifies the differences between the hard scientists and the pragmatic social scientist. To the extent that reality is fixed and constant, the goal of science is, and should be, the discovery of the underlying laws which govern the system. In contrast, if a system is constantly evolving, it is equally important to understand the practical consequences of action

⁵Caldwell, Bruce J. 1982. Beyond Positivism: Economic Methodology in the Twentieth Century. London: George Allen & Unwin. p. 2

on the system at a particular point in time and space. Given the changing nature of the system, the practical consequences of an action will vary as the system changes. 'Truth' in this case is not a constant, but changes as the system evolves.

It is important to emphasize that the truthfulness of an assertion is not related to whether or not an idea is practical, as some critics of the pragmatic approach have argued. Peirce argued forcibly that the use of the word 'pragmatism' to describe his approach was a translation of Kant's *pragmatisch* and did not "mean 'practical' but empirical or experimental: pragmatic laws are 'empirically conditioned,' based on and applying to experience." Truth, therefore, depends not only on its 'workableness,' but also its congruence with reality.⁶

In his discussion of the foundations of pragmatism, T.H. Thayer points out that for Henry James and John Dewey, "the truth of ideas and beliefs is relative to the situations in which ideas and beliefs occur. In any one situation, the truth or falsehood of an idea does not exist as some property peculiar to the idea itself, nor in a relation between the idea and some fact—truth, for the pragmatist, is rather a characteristic of the performance of an idea in a [specific] situation."⁷

Pragmatists argued that events and/or objects are never isolated, but are always components of a living and evolving system. It is therefore necessary to take a holistic perspective in conducting empirical research. As formulated by John Dewey, the pragmatic research approach involves multiple stages. In the initial stages of the research, the researcher identifies those issues which are problematic and determines the type of data needed to find solutions to the problem. During the middle stages of the research, through careful observation and description of the workings of the system, the researcher forms hypothesis and identifies potential solutions to the problems. In the final stages of the research, the researcher tests the hypotheses and potential solutions formed in the middle stages by collecting more data, and when possible, applying the solutions to experimental situations. The process, however, does not have a definite beginning and an end. Inquiry is a continuous process whose aim is the steady improvement of society. Furthermore, pragmatic research typically begins with an inductive approach and then moves back and forth

⁶Thayer, H. S. 1964. Pragmatism. In A Critical History of Western Philosophy. Edited by D. J. O'Connor. 437-462. London: The Free Press of Glencoe, Collier-Macmillan Limited. p. 458

between inductive, deductive, and abductive⁸ modes of analysis, with the inductive mode providing 'theoretical-grounding,' (insuring that any hypothesis developed is 'grounded' in reality) the abductive mode providing new theoretical insights, and the deductive mode providing verification.

In the positivist tradition, prediction and explanation are one and the same: If you can predict an event, you have obviously discovered the causes of the event and can safely explain why the event occurred. In contrast, in the pragmatic tradition, predictive models are built upon an understanding of the social forces at work. Pragmatists point out that given the continuous changes in the institutional structure of society, the relationship between the variables of interest are likely to change. Therefore, unless you understand the social forces at work, there is only limited grounds for confidence in the ability of a model to accurately predict the future.

The similarity between the pragmatist approach as described by Dewey and the institutionalist approach as practiced today can readily be seen in the writings of Wilber and Harrison⁹, Allan Gruchy¹⁰, Yngve Ramstad¹¹, and Wendell Gordon and John Adams¹² who describe the institutionalist research process in terms very similar to those used by John Dewey. For example, Wilber and Harrison describe the institutionalists research methodology as a 'pattern model' preceding in three stages:

"In the first step, the institutionalists become participant-observers who gather data about the economic activities of the real world and so remain close to that world. In the second step, tentative hypotheses about parts of the total economic system are constructed, and various pieces of evidence are gathered to

⁷Ibid, p. 454

⁸As quoted in Mirowski, Philip. 1987. The Philosophical Bases of Institutional Economics. *JEI* 21 (3) : 1001-1038. Charles Peirce coined the concept of abduction and described it as follows: "Abduction is the process of forming an explanatory hypothesis. It is the only logical operation which introduces any new idea; for induction does nothing but determine a value, and deduction merely evolves the necessary consequences of a pure hypothesis"

⁹Wilber & Harrison, 1978

¹⁰Gruchy, Allan. 1987. The Reconstruction of Economics: An Analysis of the Fundamentals of Institutional Economics. Westport, Connecticut: Greenwood Press.

¹¹Ramstad, Yngve. 1986. A Pragmatist's Quest for Holistic Knowledge: The Scientific Methodology of John R. Commons. *JEI* XX (4) : 1067-1105.

create a many-sided and complex holistic view of the economic system. In the third step, the various hypotheses are linked together in a pattern or model of scientific explanation. This pattern endeavors to capture the meaning or nature of the interactive relationships between the parts and the whole. The institutionalists, in pursuit of holism, seek to achieve an increasingly finer degree of coherence between his pattern model and the real economic world. Wilber points out that this model can never be finished or completed product because it changes as the economic system changes. Like the economic system ..., the holistic pattern must reflect the development of the economic system by remaining open and never becoming a finished product."¹³

Institutionalists emphasize that the results of the research are never final, because the underlying reality is constantly changing.

In keeping with the pragmatic approach, institutionalists place great importance in the applicability of their research in solving the problems of society. In contrast to neo-classical economists who concentrate their analyses on the monetary costs and benefits of alternative policies, institutionalists are concerned with the non-monetary effects of policies and the interrelationship between economic policies and social outcome. Furthermore, as Paul Osterman has emphasized, institutionalists stress that policy formation must be based on a clear understanding of the problem: "public policy must be grounded in an institutional understanding of private economic structures and organizational policies."¹⁴

Scientific, but not necessarily Quantitative

Within the institutionalist tradition, great emphasis is placed on the importance of conducting research in a scientific fashion in which hypotheses are developed and tested empirically. Nonetheless, the institutionalist research methodology is often attacked as being unscientific by conventional economists. They claim that the use of qualitative data in institutionalist analyses, the explicit inclusion of values within the analyses, and the institutionalist's rejection of a

¹²Gordon, Wendell, and John Adams. 1989. Economics As Social Science: An Evolutionary Approach. Riverdale, Maryland: Riverdale.

¹³Gruchy, Allan. 1987 p. 54

¹⁴Osterman, Paul. 1988. Employment Futures: Reorganization, Dislocation, and Public Policy. Oxford: Oxford University Press.p. 12

formalist-Cartesian approach based on the tenets of logical positivism totally discredits any claim that the institutionalist approach is scientific.

Institutionalist respond by arguing that economics is a cultural science and that the attempt of neo-classical economists to imitate the precision and rigor of classical physics as practiced during the nineteenth and twentieth century is misguided.¹⁵ As a cultural science, it is not only appropriate to use a mixture of qualitative and quantitative data in economic analyses, it is often essential. For the institutionalists, the issue is not which approach (quantitative, qualitative, or mixed) is better, but which is the most appropriate given the particular research problem.

Furthermore, institutionalists point out that even within the 'hard sciences', there is no singular method for conducting scientific research. Each field has it's own definition as to what constitutes 'good science,' and the definition is constantly evolving as new approaches are developed and old approaches discredited. At a very general level, the different approaches taken in conducting scientific research are typically a function of the available knowledge and data. When the physical properties of relations are knowable and workable¹⁶, scientists will often attempt to adopt a Cartesian approach to model reality (e.g., applied physicists). When the basic outline is known, but the actual equations unknowable, scientists typically rely on a combination of statistics and formal models to model reality, but determine flexible limits on the applicability of their predictions (e.g., weather forecasters and economists). When the basic physical properties are unknown, science uses abductive logic to develop theories based on all of the available data, qualitative and quantitative. (e.g., naturalists).

The pragmatic-institutional approach lacks the rigor of the Cartesian approach because it realizes that the type of analysis that a scientist is able to engage in depends on the subject matter being studied. Institutionalists argue that the validity of a measure depends

¹⁵With the development of Quantum Mechanics, The Theory of Relativity, Wave Theory, and the Science of Chaos, during the twentieth century, Physicists, unlike neo-classical economists, accepted the fact that many physical relationships are indeterminate, and that new methods of analysis were needed in studying non-determinate relationships.

¹⁶The theory of Chaos points out that many physical properties exhibit patterns which may be deterministic but are neither knowable or workable [i.e., even if we knew the underlying relationship, it would not enable us to predict how the system would operate except in the short-run.

on its results, and not on its form. While they acknowledge that the formalist approach used by conventional economists often produces models which are more elegant and appealing from an aesthetic viewpoint than those produced using an institutionalist approach, the models are not necessary more helpful in understanding or dealing with the problems which society faces..

'Natural' versus 'Pure' Scientific Approaches:

As mentioned earlier, in conducting their research institutionalists typically find it necessary to move between inductive, deductive, and abductive modes of analysis. In formulating their hypotheses, however, institutionalists prefer the more inductive approach of the natural scientists to the deductive or pure science approach of economic theoreticians. In natural sciences, scientists typically use a mixture of observations, experiments, and inductive logic to formulate theories on the workings of a system. In contrast, in the pure sciences, the approach normally involves the application of deductive logic to idealistic models of reality.¹⁷

Institutionalists have little faith in the deductive approaches of conventional economists which typically rely on 'idealistic' models, 'natural prices,' and 'self-evident' truths. Institutionalists argue that economic relations are determined within a given cultural milieu, and therefore, any model which does not take into account the cultural milieu is incomplete. Since the institutional patterns of a society are constantly evolving, economic truths have spatial and time boundaries. For these reasons, institutionalists are cautious about applying theoretical generalizations to different cultural settings or the same setting at different points in time. Institutionalists argue that the attempt to impose 'idealistic,' and often unrealistic, models on economic phenomena hides more than it reveals.

Similarly, they argue that the insistence of conventional economists "on making and keeping economics exact has tended to cause economists not to cultivate those areas where the mathematical approach is not fruitful. As a result the scope of economics has been

¹⁷According to the Oxford Dictionary, a **pure science** is "one depending on deductions from self-evident truths, as mathematics, logic, or one studied without practical applications" while a **natural science** is "one dealing with material phenomena and based mainly on observation, experiment, and induction." p. 938, The Concise Oxford Dictionary, 1982 edition.

unduly narrowed."¹⁸ Despite their natural science biases, institutionalists point out, that social outcomes and individual actions can not be studied in the same manner as one would study the response of maize to fertilization. As Karen Louis points out "social phenomena are essentially different from those observed by the hard sciences and that, in order to understand them adequately, we must understand how they occur and what they mean to members of the social structure. A holistic understanding of human social structures and behaviors requires a qualitative, observationally based study on individual cases rather than an experimental manipulation and analysis of selected variables."¹⁹

In regards to conducting economic research, David Hamilton points out that it is usually necessary to understand the motivations, objectives, and viewpoints of the individual economic agents and the interrelationships between the agents, if one wants to understand how and why an economic process unfolds the way it does: "Economic theory is a science of human behavior, and it cannot slough off psychology by concentrating on price analysis *in vacuo*. Prices and the 'price system' have no meaning except in terms of human behavior; they are manifestations of a culturally conditioned pattern."²⁰

Advantages of Qualitative Data

While qualitative data is less useful than quantitative data in measuring the strength of a particular relationship, qualitative data often provides greater certainty in understanding how and why a particular relationship exists and/or a social process evolves. In addition, the quantification of social data does not protect against bias but often only disguises it. As Michael Patton notes, "The ways in which measurements are constructed in psychological tests, questionnaires, cost-benefit indicators, and routine management information system data are no less open to the intrusion of the evaluators biases than making observations in the field or asking questions in interviews. *Numbers do not protect against bias; they merely disguise it.*"²¹. Similarly, Patton points out that the attempt to achieve an objective

¹⁸Hamilton, David. 1978. Evolutionary Economics: A Study of Change in Economic Thought. Albuquerque: University of New Mexico. p. vii

¹⁹Karen Seashore Louis, "Multi-site/Multi-method Studies," *American Behavioral Scientist* 26 No. 1 (September/October) 1982. p. 7.

²⁰Ibid p. 43.

²¹Michael Quinn Patton, *Qualitative Evaluation Methods*, (Beverly Hills: Sage Publications, 1980) p. 336.

standpoint by maintaining a sense of distance from the research setting and the people being studied, "does not guarantee objectivity, it merely guarantees distance."²²

Proponents of qualitative research methods also argue that by using multiple research methods, the researcher is able to obtain a better understanding of the underlying issues and, in many cases, greater confidence in the research findings than would be obtained using a strictly quantitative approach. On the one hand, if the different methods produce convergent results, one can be more confident in the research findings. Since the multiple methods produced similar results, the results are unlikely to be due to an inherent bias in the research method (e.g., the model used assumed that consumers respond only to real price changes and not to nominal changes in price). On the other hand, if the alternative techniques produce divergent results, then the results indicate that a more complex explanation of the phenomenon of interest is needed.

From the institutionalist point of view, it would be far better to make more use of all of the available data, i.e., both the quantitative and the qualitative data. Qualitative data should not be shunned simply because one cannot establish confidence intervals with which to evaluate its validity. In addition, to the extent that the policy recommendations depend upon theoretical insights, those insights should be based on an understanding of how the economy is evolving and the implications of technological and institutional change on the policy issues of concern. Theoretical insights should not be based on an idealistic and unrealistic model of the economy.

Darwinian rather than Newtonian in Analysis:

David Hamilton, in his book *Evolutionary Economics: A Study of Change in Economic Thought*, argues strongly that the fundamental difference between the neo-classical and institutional Schools of Economic Thought is their treatment of change within the economic system. Hamilton contends that the neo-classical school, with its Newtonian heritage, views change as originating from outside the economic system, while the institutionalist school, with its Post-Darwinian heritage, views change as developing from within the system.

Within the neo-classical-Newtonian framework, change is typically viewed as discontinuous and independent of the economic system. In

²²Ibid, p. 377.

response to the change, the previous equilibrium is thrown into a state of disequilibrium which is resolved through the internal mechanistic forces of the economic system. The task of the neo-classical economist is to measure the effect of the independent or exogenous variable (i.e., the initial change) on the endogenous economic parameters. In contrast, as David Hamilton points out, the institutional economist "considers change to be a part of the economic process. Instead of viewing the economy as a fixed system periodically prodded into movement to a new point of non-motion, he holds that the economy is at all times undergoing a process of cumulative change, and that the study of economics is the study of [this] process."²³

Even when neo-classical economists attempt to study the process of economic change, as when they study economic growth, they nonetheless use a mechanistic-Newtonian framework in their models. As Hamilton explains, within the traditional model economic progress results from increases in the means of production which are made possible by (financial) capital accumulation.²⁴ To the extent that technological change enters the picture, it enters it in a mechanistic fashion. Within the a'cultural framework of the neo-classical economics, it is impossible to explain why one society is able to save a higher percentage of their income than another. Or why one society seems more conducive for the invention of new products, while a second society seems more adept at developing more efficient means of industrial production.

Where classical economists often identify progress with pecuniary gain, institutionalists identify progress with the advance of science and technology, which are seen as the prime movers of the economy. As Hamilton points out, "In the usual classical treatise, a mention of technology is incidental to the major task in hand, the exposition of pecuniary principles. In the institutional treatise, technology and its impact on social organization is frequently the central theme of the book."²⁵ Institutional economists place tremendous emphasis on understanding both the role of technological change in shaping and changing the institutional superstructure of a society, and the effects of institutional superstructure on encouraging or blocking the development and use of new technologies. From the institutional standpoint, the key problem facing economists is not simply one of how

²³Hamilton, p. 17.

²⁴ibid, p. 102.

²⁵ibid, p. 109.

to make markets more efficient so as to increase total output (i.e., the size of the 'pie'), but rather how to assist the process of technical change in a way which increases the ability of society to meet the needs of all of its members. Economic growth is very important, but the growth must occur within a framework which insures that all members of the society receive an equitable share of the material fruits produced by the society. Technical change which increases the size of the pie, but reduces the portion received by the poorest members of the society is viewed as counter-productive to the health of the community.

In the neo-classical approach, economic growth is seen as a mechanistic response to economic forces operating within the system while the causes of other types of economic change are seen as occurring from outside the economic system, and therefore outside the boundaries of economic inquiry. Conventional economists have, therefore, have devoted little energy to understanding how and why the economy is changing and what effect these changes will have on the *effective*²⁶ ability of society to meet the needs of all its members. In contrast, increasing the effective ability of the society to provide for material needs of all of its members is the primary concern of institutional economics. A key component of institutionalist based research is in identifying, explaining, and evaluating the changes which are occurring in the institutional structure of society. But even in research which is not explicitly focussed on change, institutionalists argue that the analysis needs to consider explicitly, first, how changes occurring within the larger society are affecting the economic parameters of interest, and second, how changes in the the economic parameters of interest will effect the larger society.

Theoretical, but wary of generalizations

Neo-classical economists have attacked institutionalists for being overly descriptive and non-theoretical in their work. In actuality, institutionalists place great importance on the development of theory. Since economic relationships and events can not be understood in isolation, but must be related to the larger, and constantly evolving broader picture of events within the society, institutionalists see

²⁶While the material wealth of a society may be increased by technological developments, there is no guarantee that the increased wealth will lead to an increase in the *effective* (realizable) ability of the society to provide for the needs of all its members. The ability of a society to meet the needs of its members depends on both its material capabilities and its institutional structure.

in the work place, or future demand for electricity), but the actual research proceeds in an open-ended fashion (discussed below). Theoretical issues often emerge out of the research in an inductive fashion. As Michael Patton points out in conducting qualitative research, "A qualitative research strategy is inductive in that the researcher attempts to make sense of the situation without imposing preexisting expectations on the research setting. Qualitative designs begin with specific observations and build towards general patterns. Categories or dimensions of analysis emerge from open ended observations as the researcher comes to understand organizing patterns that exist in the empirical world under study. ... The strategy in qualitative designs is to allow the important dimensions to emerge from analysis of the cases under study without presupposing in advance what those important dimensions will be."³⁰

This does not mean that every research project must conduct extensive empirical observations, but rather that the theories are formed on the basis of the existing empirical data and previously developed grounded theories. However, to the extent that there are gaps in the existing data base which need to be filled, the gaps are filled by either collecting additional empirical data or, when it is impossible for time and monetary reasons to collect additional data, by drawing inferences from the existing empirical data, rather than through the use of deductive logic based on idealistic models of reality.

Furthermore, in conducting research which looks at the institutional structure of the economy, it is important that not only the theory, but also the concepts used in forming the theory emerge from the research. As ethnographers have long realized, "If it is our serious purpose to understand the thoughts of a people the whole analysis of experience must be based on their concepts, not ours."³¹ A theory is maintained only as long as empirically observed phenomena remain consistent with the theory.

Another critical difference with neo-classical economics is the permanence of theory. Given the emphasis on economic change in institutional economics, only the most general theories (e.g., institutional change is induced by technological change) are assumed to be valid over the long-run. As mentioned earlier, most theoretical conclusions are bounded in time and space and are not automatically applicable to other points. As Cronbach argued, "Generalizations

³⁰Patton, p. 41

³¹Boas, 1943 Quoted in ???

decay. At one time a conclusion describes the existing situation well, at a later time it accounts for rather little variance, and ultimately is valid only as history."^{32 33}

From this perspective, the purpose of institutional analysis is to provide decision makers (including the general public) with the types of information they need (i.e., empirical data and theoretical generalizations) in order to reach sound decisions about specific policy options. Typically, this will require the formation of theoretical hypothesis based on empirically observed facts. It is for this reason that institutionalists view their work as being theoretical, it is, however, theory which is grounded in reality and tied to that reality.

Non-teleological in outlook

A teleological philosophy is one which believes that there is a purpose to natural and/or social systems. In a system which exhibits teleological order, the structure of the system, as well as happenings which occur, are a result of the purpose or design of the system. As The Encyclopedia of Philosophy points out, "The distinctive thing about teleological order is that it introduces the notion of processes and structures being fitted to bring about a certain result."³⁴

There are two basic types of teleological arguments: organicism and historicism. The organic variety assumes that the various parts of a 'species' (or ecological or social system) have been designed to produce the whole. An organic system, if left alone, is assumed to be self-regulating and self-maintaining. In contrast, the historic variety assumes that the present is a result of the past, and likewise, the future (will be similarly/has been) determined by historical forces beyond the control of society. The historical view assumes "that men are caught up in some inexorable process that possesses something like a life of its own."³⁵

Neo-classical economists have adopted an organismic perspective, assuming that if only the Government would stop interfering in the workings of the economy; the economy, guided by the invisible hand,

³²Quoted in Patton, p. 280.

³³While I have quoted extensively in this section the work of Qualitative Evaluators, it should be pointed out that Institutionalists place far more importance on the development of theory than many of the proponents of qualitative evaluation do, who at times seem to argue that the development of theory or the search for truth is not a very useful endeavor.

³⁴Paul Edwards, ed., The Encyclopedia of Philosophy. New York: Macmillan Publishing Co. & The Free Press, 1967, Vol. 8, p. 84

³⁵*Ibid*, Vol. 4, p. 54

would become self-regulating and self-maintaining and would obtain the maximum obtainable welfare given the existing state of technology and resource availability. Marx, on the other hand, adopted an historic perspective in assuming that class conflict and economic crises are internal to the operation of the capitalist system and would eventually lead to socialism.

In contrast, institutionalists assume that the economy is not only constantly evolving, but that the particular direction it evolves in is determined by the actions of individuals and groups of human agents reacting to changes in technological possibilities and/or previous changes in the institutional structure of the society. Institutionalism is, therefore, non-teleological since the system is neither self-maintaining nor self-regulating. There is no way to attribute an end-purpose or result to the current structure, its operation, and/or direction of change.

Normative in Approach

Institutional economists claim that "all cultural sciences, including economics are normative sciences in the sense that they take account of the values that people have and of the values that people hope to achieve."³⁶ Research is never value free, nor should it be: In the first place, since the researcher's values influence the types of topics which s/he chooses to research, the researcher's values are embedded in the research design. This does not mean that the researcher allows his/her values to influence the analysis, but rather that the researcher makes one's values explicit, both to oneself, and also to one's audience in order to insure that his/her own values have not colored the research results.

In the second place, the values of the economic agents are also legitimate focuses of research. In order to understand how the institutional structures (values, beliefs, rituals, laws, etc...) of a society are evolving, it is necessary to understand the motivations and beliefs of the economic agents. Institutionalists argue that it is not enough to determine what the mathematical relationship between a set of variables was in the past, one must also understand how and why those relationships formed and the likelihood of those relationships changing in the future. Within the institutionalist framework, understanding a relationship is far more important than measuring that relationship.

³⁶Gruchy, p. 37.

And finally, in defining the task of the institutional economist as helping a society to increase the material welfare of its members in a democratic, non-invidious, and environmentally sound manner, institutionalists have explicitly accepted the responsibility of being more than simply impartial technicians. Their task is to examine the workings of the society, to identify instrumental and ceremonial values, and to work towards the establishment on an economy which can meet the needs of all of its members in a more equitable and sustainable manner.

The Positivist Approach of Neo-classical Economics

In contrast, conventional economists have adopted a logical positivist approach which eschews values, concentrating instead on formal mathematical relationships. In their theoretical work, a logical positivist approach assumes that the best way to understand the functioning of a system is to start from known laws that regulate the system, formalize those laws into mathematical relationships, and then deduce hypothetical results from those relationships. The problem which proponents of this approach faced was how they could prove that the laws they used as a starting point were the correct ones, and not mere conveniences or conventions as argued by their opponents. Initially, the Vienna School argued that only those statements which could be verified by reference to empirical observations had cognitive meaning. This, however, meant that universal statements were meaningless since they can not be verified. Karl Popper attempted to circumvent this problem by arguing that it was adequate that laws and theories were potentially falsifiable. The process of science was then one in which scientists developed potentially falsifiable laws which were accepted as valid until empirical observation showed they were false. Scientific progress was a result of slowly weeding out the false laws from the 'valid' ones.

In their empirical work, which was used to test the potentially falsifiable hypotheses and laws, the positive approach argued that only positive facts and observable phenomena were relevant. As such, the positivist approach assumes that one can determine the relationship between observable events (empirical facts) without having to examine the subjective state (motivations) of the human agents. To the extent that neo-classical economists concerned themselves with motivations, they adopted a model of "*economic man*" which posited man to be a rational maximizer of his/her utility..

In conducting empirical research in a positivist vein, the researcher assumes that the motivations of human agents are knowable and relatively fixed and/or, that the empirical observable facts exercise an external and compelling force on human behavior. In addition, the positivist approach is by definition non-normative in that it presumes, first, a researcher should not and will not let his/her personal values affect the research findings, and second that the values of the economic actors included within the research frame do not enter into the analyses except as observable phenomena.

Unfortunately, there are many problems with the positivist approach in conducting economic research. First, it is anti-holistic and requires an atomistic approach to scientific research. Second, it is not conducive to exploratory research or the discovery of new ideas. As philosophers of the history of science have noted, the formal axiomatic structure of the positivist hypothetico-deductive approach does not lend itself to the development of theory: "The fact that axiomatic structures can never lead into the new and hitherto unknown, that they are, precisely because of their logical coherence, quite unfruitful, does not seem to have bothered the advocates of the hypothetico-deductive view. The logicians of this era were apparently not interested in the question of theory origin or theory growth, but only in the question of the best mode of formalizing theories that were already known."³⁷

Third, Popper's dictum that only potentially falsifiable theories are valid has proven to be inadequate in separating valid from invalid propositions and laws. The use of *ceteris paribus* clauses has meant that it is often difficult if not impossible to reject a law. As Arthur C. Danto has pointed out, "Some law like sentences may be known false, at least to the extent that they admit of observational consequences, but often the antecedent of a law like sentence is sufficiently hedged with *ceteris paribus* riders, to which we may add indefinitely, that one need not surrender a law save as an act of will."³⁸ Even when a universal truth is shown not to be universally true, it is rarely abandoned. Rather, it is taken to be true in all cases for which it has not been falsified. For example, even though it has been shown that consumers do not always act rationally (i.e., nominal prices matter), neo-classical economist continue to assume they act rationally, arguing that unless they can be shown that they don't act rationally within the specific

³⁷ Dictionary of Philosophy, Vol. 4, p. 291

³⁸ibid, p. 298.

context of the research problem, the assumption of rationality is still the best guide.

Finally, the positivist mechanistic approach of neo-classical economics force neo-classical economists to assume that humans respond in knowable and predictable ways to economic stimuli. This assumption, however, contrasts with the equally important neo-classical assumption that the desires and motivations of economic agents are exogenous from the workings of the economic system.

On the one hand, neo-classical economists assume that human actors are free of cultural baggage and always act in a rational and free manner in order to maximize their individual welfare unshaped by social and economic forces.³⁹ On the other hand, neo-classical economists in adopting a positivistic methodology have assumed that it is sufficient to examine only the observable actions and facts in studying social outcomes. Understanding the motivations behind those actions is unnecessary since the empirically observable facts are assumed to exercise an external and compelling force on human behavior (which is equivalent to arguing that humans respond in knowable and relatively constant ways in response to economic stimuli). If this were not the case, it would make little sense to argue, for example, that the income elasticity of demand for children on the part of married women of child bearing age is 'X.' The economists assumes that in response to a change in income, the average demand for children within the society will change by a knowable and relatively constant amount. In contrast, institutionalists argue that while humans have the capability for independent rational critical decision making, their rationality is influenced and/or shaped by biological factors, institutionally learned behavior patterns, impulsive or emotional drives of a largely habitual nature.

Ironically, while the neo-classical assumption of 'free will' is absolutely necessary in order to demonstrate through deductive logic that perfectly competitive markets guided by the invisible hand maximize the total welfare (if market forces shape human desires, than there is no way to show that perfectly competitive market outcomes are socially-optimal), the neo-classical assumption that economic forces exercise an external and compelling force on human behavior is equally necessary in justifying their research methodology. The only way out of this conundrum is to assume that the motivations which shape human actions were formed long before markets or society

³⁹Gruchy, p. 4.

ever existed, and that the competitive marketplace only reveals and allows the realization of those preexisting desires. In other words, to assume that market outcomes are 'natural.'

Holistic in Perspective, if not in focus:

In adopting a holistic perspective, institutionalism have broken with neo-classical economists in two fundamental ways. On a practical level, institutionalists have rejected the artificial discipline boundaries adopted by neo-classical economists and their unwillingness to include variables which can not be quantified in their analyses. On a philosophical level, institutionalists have rejected methodological individualism as a guiding principle.

While the specific objectives of the research can be narrowly defined (e.g., 'What effect would the adoption of import quotas have on producers?'), institutionalist analysis must be grounded in a holistic framework which takes into account social, cultural, and political variables. Within an institutional framework, the economic system is seen as a sub-system of the larger socio-cultural institutional structure within which it is embedded.⁴⁰ Unlike conventional economists, the economic system is not perceived as operating independently of society's cultural framework.

Furthermore, while the data collection and analysis stage of the research will normally focus on only a small subset of the potentially relevant variables, there should be a theoretical and, if possible, an empirical basis for excluding other potentially relevant variables. In other words, the scope of the research is not determined by artificial boundaries between the various fields of social science, but rather is determined by the nature of the problem and knowledge from previous research concerning the range of relevant variables. The validity of the research will, naturally, be dependent not only on the validity of the data collection and analysis but also on the appropriateness of the research scope in including all of the important economic, social, cultural, and political factors.

Because of their holistic perspective, institutionalists do not find it very useful to think in terms of any fixed boundaries which define the scope of economics and are prepared to include many factors in their analysis which conventional economists ignore or claim are best left to be analyzed by researchers within the other social scientists. The disregard of the neo-classical defined discipline boundaries has led

⁴⁰ibid, p. 2.

many neo-classical institutionalized (i.e., trained) economists to claim that in adopting the techniques of the cultural anthropologists, institutionalists have become anthropologists, sociologists, and political scientist; and, therefore, no longer deserve to be called economists. From the institutionalists standpoint, however, the distinction between economics, anthropology, sociology, and political science is not related to either their methodology (all are in essence cultural sciences) or in their boundaries (since all social sciences must, out of necessity, take a holistic approach), but rather in their area of focus. Economists concentrate (focus) on the process of social provisioning, the economic institutions within which that process occurs, and the economic effects of changes in the institutional structure of society, while sociologists and anthropologists concentrate on the social structure of a society and political scientists on the workings of government. To the extent that the changes are interlinked, there is grounds for cross-fertilization between the disciplines.

Allan Gruchy asserts that in the final analyses, the critical differences between neo-classical, Keynesian, Marxist, and institutional economist are directly related to "their views about what material should be included within the purview of their science and how this material should be analyzed."⁴¹ From an institutionalist standpoint, the critical problem with the conventional school is their restrictive focus.

And while a persuasive case can be made that neo-classical economists, particularly the 'New-Institutionalists' have broaden their scope (i.e, they now are more open to including non-economic variables in their models), they have not changed their focus or their objectives. That is to say, while conventional economists have become more adept at including dummy variables in their models in order to incorporate shifts in the economic system, they are still focussed on the effect of institutional change on the equilibrium solution (or path by which a solution is reached) rather than the change in the institutional structure itself and the likely direction and effect of future institutional changes on the ability of the society to provide for the needs of all of its members.

⁴¹Allan Gruchy, p. 1

Problems of Methodological Individualism

Methodological individualists assume that an explanation of any social system or large scale social event *must* lie within an understanding of the motivations, actions, and attitudes of the individual human agents. However, while focussing on individual motivations, methodological individualists typically limit their analysis to anonymous individuals. In other words, while methodological individualists focus on the motivations actions, and attitudes of the individual human agents, they assume that the individuals are driven by the same motivations. One, therefore, only needs to know the general motivational structure (e.g., rational maximizers) and not the specific motivations of the actual individuals. Methodological individualists point out that in studying physics "information about specific particles is not required,"⁴² one only needs to know the general principles which guide the movements and actions of the specific particles.

Furthermore, methodological individualists reject the notion that social forces, which can not be deduced from an examination of individual motivations and actions, exist. In other words, all social forces are "mere aggregates or configurations of the actions, attitudes, relations, and circumstances of the individual men and women who participated in, enjoyed, or suffered them."⁴³ Similarly, they reject the notion that individual actions and motivations can only be understood within an understanding of the institutional structure of a society.

Methodological individualism and logical positivism are intrinsically linked together in that logical positivism is built upon a methodological individualistic foundation. Together, they assume that the techniques of physics, as used in the nineteenth and twentieth century are the most appropriate for guiding scientific research. As J.W. Watkins points out "the principle of methodological individualism is a correlate of the principle of mechanism in physics."⁴⁴ W.H. Dray points out that "The best illustration of the same [mechanistic] explanatory procedure in social science is afforded by classical economics, which regards macro states of the market as resultants of

⁴²Dictionary of Philosophy, Vol. 4, p. 54.

⁴³ibid, p. 53.

⁴⁴ibid

the dispositions and consequent activities of individual producers and consumers."⁴⁵

In contrast, the Keynesian approach adopted a holistic perspective in that it rejected the assumption that one could deduce national outcomes solely by examining the individual actions of economic agents. The Keynesian-Monetarist synthesis, however, returned macro-economics to its individualistic approach. The Rational Expectations proponents pursued this return to its logical conclusion by arguing that since human agents always act rationally, one can derive macro-economic models from micro-economic ones.

Proponents of a holistic approach have repeatedly pointed out examples where the methodological individualistic approach does not work. In response, methodological individualists have simply argued that "failures of application simply indicate a need for further analysis and research."⁴⁶

A Holistic Example

Possibly, the best way to understand the holistic versus methodological individualism debate is with an example from biology. An individualist perspective would argue that to understand the whole, one needs to understand the functioning of the various parts (e.g., organs). The whole is then understood by combining the various parts. In contrast, a holist would argue that one cannot understand the parts unless one understands the whole. One cannot understand the particular structure and purpose of a part unless one understands the function of that part in facilitating the survival of the whole. Through the process of natural selection, parts develop in ways which facilitate the survival of the hosts. Mutations which are conducive to the survival of the species are more likely to become widespread than those which are detrimental to the survival of the host.

Holists would argue that a somewhat similar dynamic occurs within a social system. Parts develop because the system creates opportunities. For example, the expansion in trade in grains during the nineteenth century created a need or opportunity for futures market in grains to develop. In order to understand the futures market, one must understand both the niche it fills within the system as well as the motivations of the economic agents who created and maintain the market.

⁴⁵ibid

⁴⁶ibid, p. 54.

It is necessary to emphasize, that the holistic process, as discussed above, is not teleological. There is no assumption that the system is self-maintaining or self-regulating. Rather the assumption is that the system will continuously evolve in ways that cannot be totally predicted based on a current understanding of the system. Existing theoretical and/or statistical relationships cannot be extrapolated blindly into the future, both because humans possess the creative ability to develop new outlooks, new approaches and new solutions in dealing with their environment, and also because most systems typically exhibit a degree of randomness. Since it is impossible to know with any degree of certainty the types of technological advances that will be made and opportunities that will develop in the future, or whether and how those opportunities will be utilized, the future cannot be predicted on the basis of the present.

Open Ended in Strategy:

Given the dual assumptions that it is important to understand the institutional structure and that the institutional structure is constantly evolving in response to technological change, institutional research is by nature open-ended in design. As the research proceeds, unanticipated issues are likely to emerge and will need to be examined while issues which were assumed to be important will turn out to be of little consequence.

This does not mean that the research does not follow a research strategy, but rather that the strategy is fluid and evolves as the research progresses. Unlike neo-classical oriented research, in most cases, institutional research will not follow a well-defined linear formula in which, first testable hypotheses are derived in a deductive fashion from theory; second, relevant variables to test the hypotheses are identified; third, data is collected; and fourth, the hypotheses are tested. Rather, institutional research typically involves shifting between inductive and deductive modes of logic. As Michael Patton explains, in naturalistic ('pragmatic') inquiry, the

"investigator moves from varying degrees of a 'discovery mode' to varying emphasis on a 'verification mode' in attempting to understand the real world. As the research begins the investigator is open to whatever emerges from the data, a discovery or inductive approach. Then, as the inquiry reveals patterns and major dimensions of interest, the investigator will begin to focus on verifying and elucidating what appears to be emerging—a more deductive approach to data collection and analysis."

"... Discovery and verification mean moving back and forth between induction and deduction, between experience and reflection on experience, and between greater degrees and lesser degrees of naturalistic inquiry."⁴⁷

Drawbacks

While this paper has emphasized the advantages of adopting an institutionalist approach, there are, of course, drawbacks. In particular, conducting research within an institutional framework is far more difficult than using a neo-classical framework for the following reasons:

- 1) The institutionalist approach does not provide its practitioners with clear guidelines on how research should be conducted, or evaluated by other members of the field.
- 2) The theoretical foundations do not provide an underlying idealistic model upon which theories can be deduced .
- 3) The pattern-modelling approach is labor intensive. Research conducted in the institutionalist tradition often takes longer than comparable work in neo-classical tradition for the following reasons:
 - A) Rather than beginning with a specific research question, institutional economists begin their research by empirically grounding themselves in the subject matter so as to identify the relevant issues.
 - B) In that the research often moves back and forth between inductive and deductive modes of analysis, the research process involves repetitive stages.
 - C) The analysis of qualitative data takes more time than that of quantitative.
 - D) Institutional research requires field work. It can not be entirely conducted in front of a computer.
- 4) The models which institutionalists construct have limited predictive ability.

Conclusions:

While the primary objective of this paper is to introduce the reader to the basic tenets of institutional research methodology, I have chosen

⁴⁷Patton, pp. 46-7

to contrast the institutional and conventional approaches in order to emphasize the distinct features of institutionalism.

In this paper, I have attempted to argue that institutional and neo-classical economists have radically different conceptions regarding the appropriate methodology for conducting economic research. The different conceptions are due to important philosophical differences concerning the meaning of science and the nature of the scientific method, the nature of reality, and the focus (i.e., subject matter) and goal of economics.

As discussed in this paper, the key areas of difference in the research methodology used by proponents of the two schools are the following:

- 1) While there is no disagreement concerning the fact that economics is a science, the two schools have radically different notions of what the scientific method is and/or should be. Operating within a positivist framework, conventional economists believe that the scientific method requires the empirical testing of theories which have been deduced from the basic principles of how a free market economy performs. The primary goal of economics is to provide private and government policy/decision makers with accurate predictions of the costs and benefits of adopting alternative policies. Within the positivist framework of neo-classical economics, prediction and explanation are interchangeable: to predict is to explain, to explain is to predict. Unless you can successfully predict an event you have not understood it

In contrast, the institutionalist operates within a pragmatic-cultural scientific framework in which theories are developed in an inductive (or at times abductive) fashion on the basis of empirical observations. These observations are then subject to empirical testing in order to ascertain their validity. In the institutionalist perspective, it is the constant testing of one's theories empirically which justifies economics being referred to as a science.

- 2) Conventional economist tend to view the world as exhibiting fairly constant competing forces which are always struggling to achieve an equilibrium. The task of an economist is to correctly model these forces in order to predict the effect of exogenous changes on the resulting equilibriums. In contrast, institutional economist see the economy as constantly evolving and view their primary task as being one of understanding how and why it is evolving, and, two, devising policy recommendations which will facilitate the evolution of

society in ways that improve its ability to provide for the needs of its citizens in a democratic and environmentally sound manner.

- 3) Both schools stress the role of theory in their analyses. Conventional economists are looking for universal theories, while institutionalist are wary of all but the most general of universal theories. They are, therefore, much more interested in the development of theories to deal with specific situations and problems.
- 4) While acknowledging the fallacy of the assumption, most conventional economists operate as if they believed that in the absence of government interference, competitive market forces would assure that the maximum welfare possible was obtained. Institutionalist, while acknowledging the important role that a competitive market plays in meeting the material needs of the members of a society, argue that economic outcomes are not simply the result of competitive market forces but are also due to differences in economic power. Institutionalists do not believe that the system is self-correcting in a manner which will assure that all of a society's citizen's material needs are met. Instead, they believe, that human actors must, in a pragmatic fashion, consciously move the society in a progressive direction which increases the ability of the society to meet its members material, social, and cultural needs.
- 5) With the exception of monetary values, neo-classical economics shuns values. Institutional economics embraces them.
- 6) Conventional economists tend to favor a linear-incrementalist approach to conducting research in which narrowly defined problems are identified, modeled, and then empirically tested.. In the conventional model, hypotheses are typically deduced from idealistic conceptions of how the economy functions. In contrast, institutionalists are more open-ended about the research process, shifting between inductive, deductive, and abductive modes of analysis as the research progresses.

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