AN INSTITUTIONALIST PERSPECTIVE ON LAW AND ECONOMICS (CHICAGO STYLE) IN THE CONTEXT OF UNITED STATES LABOR LAW*

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I. OVERVIEW

[T]his literature [law and economics, Chicago Style] falls in the category of ... "economics imperialism,' which is an attempt on the part of economics to take over all the social sciences." ... [It] has been produced largely by economists who know no law and a handful of lawyers who have learned their economics from these same economists, all of whom are bound together by their acceptance of eighteenth-century hedonism and a philosophy produced under the influence of two ripe apples—one observed falling by Newton and the other eaten by Adam and Eve.1

Economic analysis has been one component of legal decision making for many decades. For instance, economic valuations on damages, impact analyses on potential administrative rulemaking, and projected liability assessments are common. In the last forty years, however, the methodology of economic analysis itself has undergone substantial change. In an effort to turn economics into a

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1. Herbert Hugo Liebhafsky, Price Theory as Jurisprudence: Law and Economics, Chicago Style, 10 J. ECON. ISSUES 23, 40 (1976).

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"legitimate hard science," a majority of economists adopted a methodological approach that they perceived to be equivalent to that followed in the physical sciences.

Unfortunately for the legal profession, the physical science-like approach and quantitative gamesmanship of these "positive" economists, often asserted without any caveats as to limitations of methodology, have intruded upon public policy analysis. Of these economists, the most vocal have been some of a subset of neoclassical economists—the "Chicago School." In and of themselves, such intrusions into legal decision processes are not uncommon, nor is it uncommon for multi-disciplinary trained lawyers to use the social sciences in their advocacy of particular positions. However, the Chicago-style law and economics proponents are distinctive, not in their urging of a particular paradigm, but in their arrogant attempt to represent an ideology-based paradigm as scientific truth. This Article analyzes the Chicago-style law and economics paradigm in the context of labor law and policy from an institutionalist perspective.

One of the interesting factors in any public policy analysis is the methodological approach embraced by the body politic decision maker. Underlying these methodological frameworks is a set of shared beliefs that outlines their proponents' view of the "proper" way to conduct a "scientific" inquiry identified as a "paradigm." Because few areas of law so actively embrace virtually all areas of societal working rules, methodological issues and underlying paradigms have particular importance in the area of labor law/relations. Moreover, few areas of law are so strongly influenced by unarticulated notions of class relationships, polemic economic and liberty valuations, and structural conflicts between participants in ostensibly democratic political organizations and societal relationships vis-à-vis authoritarian private organizations and command-obedience relationships.3 Within the labor law context, the methodological talisman of the law and economics proponents—economic efficiency can be examined in a multi-disciplinary performance context of power, conflict, and causation,⁴ and its utility as a predictive and explanatory theoretical tenet of legal decision-making may be readily assessed.

Many people in the United States today have a general notion of what economics is about but are unaware that the discipline includes several different and competing schools of thought. Thus, Part II provides a brief perspective on the place of the Chicago School of neoclassical economics within the discipline of economics before we move to a detailed and specific critique. Part II briefly examines classical theory, institutional theory, Marxist thought, and Keynesian economics. This section is not exhaustive but is designed to acquaint a non-economist with various schools of economic thought.

^{2.} THOMAS S. KUHN, THE STRUCTURE OF SCIENTIFIC REVOLUTIONS 43–49 (2d ed. 1970). These frameworks obviously affect the decision processes of the participants. See also HERBERT A. SIMON, ADMINISTRATIVE BEHAVIOR: A STUDY OF DECISION MAKING PROCESSES IN ADMINISTRATIVE ORGANIZATIONS (3d ed. 1976); JAMES B. ATLESON, VALUES AND ASSUMPTIONS IN AMERICAN LABOR LAW (1983).

^{3.} The employment relationship is central to most societal members. From this is drawn our identity and, in large part, our political, social and economic value system. See infra notes 78-81.

^{4.} Power, conflict, causation are central to assessing actual performance and steps taken by the legal order to accommodate the public purpose or public good aspect of the activities. See infra notes 146–52 and accompanying text.

Abstract theoretical arguments, even about such important issues as methodology, rarely makes exciting reading. As such, labor law and policy are useful real world benchmarks upon which to assess theoretical constructs. Part III provides this benchmark by discussing the policy objectives of the National Labor Relations Act⁵ (NLRA or Act) and identifying both its economic and structural impacts. This section argues that although the policy goals of the NLRA may have been largely, although by no means exclusively, economic, the mechanisms to achieve the legislative purpose were through the control of power exercises. This section consequently discusses the underlying premises of entrenched policy formation and power control mechanisms which effectuate labor law and policy.

Part IV examines the role of economic analysis in the context of labor law. Law and economics proponents argue that their methodology closely parallels the methodology used in the physical sciences and hence results in "scientific" analyses. This section examines their paradigm of policy behavior and formation. As this section argues, their paradigm of "doing science" is not the same as that used in the physical sciences. Therefore, their results do not turn upon "scientific truth" but upon the self-selected, ideologically-based universal laws and antecedent conditions assumed in their analyses.

Part IV's critique of the Chicago-style law and economics methodology would be short-sighted if it resulted in the exclusion of economics from the analysis. Economics, of course, should play a significant role in labor policy analysis. Part IV, therefore, offers an alternative methodology for incorporating economic concerns in the policy analysis. In this section, the institutional economics paradigm is examined through a similar methodological lens. Institutional economics represents one branch of economics and can be understood as a "way of analyzing the economy and economic behavior based on the evolution of social practices and their relationship to one's ability to make a living." The institutional paradigm is then compared and contrasted with the Chicago-style law and economics paradigm, revealing what the authors believe is the methodological superiority of the institutionalist perspective for policy analysis.

The concluding section, Part V, summarizes the major underlying premises of the law and economics, Chicago style, and the institutionalist methodologies in the context of labor law policy. Placed in the context of performance, this Article concludes that institutional methodology more closely parallels the methodology of legal analysis and offers a viable alternative to the forced fit of the Chicago-style law and economics methodology. Understanding of methodology is essential to prevent misuse and misrepresentation of results. Thus the Chicago-style law and economics approach should be recognized for what it is—an ideological argument with the same validity as any other ideological component in the legal process. It is a belief system trying to pass as science and should be treated as such.

^{5. 29} U.S.C. §§ 141–197 (1983).

^{6.} W. ROBERT BRAZELTON ET AL., ALTERNATIVE STREAMS IN ECONOMIC ANALYSIS 65 (1986).

II. DIFFERENT SCHOOLS OF ECONOMIC THOUGHT

The 1991 Nobel Prize for Economics went to a retired University of Chicago law professor, Ronald Coase, for his theories of corporations and his work in law and economics.⁷ The celebration by people who believe in the Chicago School of Law and Economics had a religious fervor.8 Magazine pieces talked as if the Law and Economics school from the University of Chicago was nothing short of revolutionary in its impact on the teaching of law.9

However, as John Maynard Keynes suggested, 10 economic theories, both those which are correct and those that are incorrect, influence ideas in a variety of other fields in ways which are not always apparent. This influence is troubling because non-economists and many economists tend to perceive of economics analysis as if there were only one monolithic theory of economics to which everyone subscribes.¹¹ This tendency seems especially pronounced in the interaction of law and economics wherein "THE" school of economics which has had the greatest impact on law and economics in the recent past is the Chicago School of economics.12

This perception that the Chicago model is "THE" only approach to the integration of law and economics encourages an over-simplified view which is solely ideologically biased and narrow. Before this perspective is judged as correct or incorrect, one would be well to understand the nature of the ideological bias and alternative views. While this might be accomplished by reading broadly in the philosophy of science, economic methodology and history of economic thought, the typical reader will probably never study these subjects in depth. So, with some foreboding, and acknowledging that every simplification involves some distortion, this section endeavors to provide an overview of some of the relevant schools of economic thought that might be useful to understanding law and economics.

A. Classical Theory

The history of economic thought is characterized by competing schools which are based on different methodologies with different ideological and philosophical foundations. The ideological bias of a school influences both the questions asked and the methodology to be used.¹³ When the conclusions of a

Privitization, Property Rights and Contracts, BARRONS, Oct. 28, 1991, at 12.

9. See Theodore P. Roth, Law and Economics, U. CHI. MAG., Aug. 1991, at 28 ("These days even its harshest critics say Law and Economics is the most cogent and influential legal theory that exists.").

JOHN MAYNARD KEYNES, THE GENERAL THEORY OF EMPLOYMENT INTEREST AND MONEY 383 (1964).

See, e.g., LARUE T. HOSMER, THE ETHICS OF MANAGEMENT vi (2d ed. 1991). 12. See, e.g., ROBERT COOTER & THOMAS ULEN, LAW AND ECONOMICS (1988);

RICHARD A. POSNER, ECONOMIC ANALYSIS OF LAW (3d ed. 1986). 13. One of the strongest assertions of this point is made by the economist E.K. Hunt

[W]hen I discuss the values and ideological aspects of the various theorists' writings, there is no intention of conveying the notion that the having of values, per se, is a basis for criticizing a thinker. I believe that the contention that some theorists are "value free" is either a self deception or an attempt to deceive others.

Peter Passell, Economics Nobel to a Basic Thinker, N.Y. TIMES, Oct. 16, 1991, at D1; Carol Jouzaitis & Harlene Ellin, Chalk up Another Nobel for U. of C.: Coase Cited in Economics, CHI. TRIB., Oct. 17, 1991, § 3, at 1.

8. See, e.g., L. Gordon Crovitz, Ronald Coase, Practical Economist: A Nobel Prize for

school of economic thought are used for analysis or policy choices without recognition of the ideological foundations of that school, that ideological bias will be unwittingly introduced.

In the development of modern economic thought, the relations between law and economics have been explicitly considered a number of times. Classical economics, the Institutionalists, the Chicago School of Neoclassical economics, and the Marxists take very distinctive approaches to the subject. Each begins from a particular perspective about human nature, the role of government and the efficiency of markets. A methodology is then selected which is consistent with that perspective. Unlike the physical sciences, rejection of hypotheses in economics or invalidating a paradigm in the social sciences is more difficult due to the nature of the material.¹⁴

The work of Adam Smith is an appropriate starting point for a discussion of modern economics and its relation to law. The Theory of Moral Sentiments, 15 The Wealth of Nations, 16 and Lectures on Jurisprudence 17—published notes taken during Smith's lectures on jurisprudence at Glasgow—provide a framework by which Smith explained how the self-interested individual's behavior is brought into harmony with society. Smith's system has three parts: first, a moral system in which sympathy constrains the self-interest; second, a market system in which the market channels self-interested behavior into socially desirable forms; and third, a system of jurisprudence which was described in one place as the "theory of the rules by which civil governments ought to be directed," and in another as "the theory of the general principles of law and government." 18

In *The Theory of Moral Sentiment*, Smith attempted to identify the origins of moral judgments (approval & disapproval).¹⁹ In that book, as Ekelund and Hébert observed, Smith characterized man as a self-interested creature "who nevertheless seemed capable of making moral judgments on the basis of considerations other than selfishness."²⁰ This apparent paradox was resolved, for Smith, through the faculty of sympathy which influences the observer to hold self-interest in check and place himself in the position of a neutral. In this way, Smith reaches a sympathetic notion of morality which transcends selfishness.

Many critics have viewed *The Theory of Moral Sentiments* as inconsistent with the emphasis Smith put on self-interest as a driving force in the mar-

- E.K. HUNT, HISTORY OF ECONOMIC THOUGHT: A CRITICAL PERSPECTIVE xii (2d ed. 1992).
 - 14. JOAN ROBINSON, ECONOMIC PHILOSOPHY 23-25 (1962).
 - 15. ADAM SMITH, THE THEORY OF MORAL SENTIMENTS (Dugald Stewart ed., 1892).
- 16. ADAM SMITH, THE WEALTH OF NATIONS (R.H. Campbell et al. eds., Oxford University Press 1976).
- 17. ADAM SMITH, LECTURES ON JURISPRUDENCE (R.H. Campbell et al. eds., Oxford University Press 1978).
 - 18. Id. at 4.
 - 19. SMITH, supra note 15.
- 20. ROBERT B. EKELUND, JR. & ROBERT F. HÉBERT, A HISTORY OF ECONOMIC THEORY AND METHOD 100 (3d ed. 1990).

Judgments should not be made on the basis of whether or not a theorist had values—since every one of them did have values—but on the basis of the concrete nature of those values.

ketplace in The Wealth of Nations. 21 However, other informed observers have tended to see The Wealth of Nations as a logical extension of The Theory of Moral Sentiments, while recognizing that this is not a unanimous position. Adam Smith's position in economics has been explained well in this way:

Adam Smith is today considered the father of economics because he was above all a system builder. There is evidence that he began to construct a general system of analysis two decades before the publication of The Wealth of Nations, and the outlines of that system were clearly visible before 1776. Smith's system combined a theory of human nature and a theory of history with a peculiar form of natural theology and some hardheaded observations of economic life. Narrowed to the economic sphere, his system featured the activities of agriculture, manufacturing, and commerce. Exchange in this system is facilitated by the use of money, and production is characterized by the division of labor. The three main features of his central analysis are the division of labor, the analysis of price and allocation, and the nature of economic growth.²²

The central issue that Smith set out to define and resolve was the relationship between the individual and the state and the proper function of the state in relation to its members. His views on these matters rested on the foundation of his theology—a Greek-Scholastic doctrine of natural law tempered by Scottish common sense.

The Physiocrats²³ extolled a natural order based on natural law which they believed had a higher sanction (reflecting the mind of the Creator) than positive law, which is merely the proclamation of a legislative assembly. Thus, the Physiocrats were at the threshold of laissez faire "as an integument of natural law."24 Both the Physiocrats and Smith argued in essentially the same vein. Smith was convinced that a natural harmony exists in the economic world that makes government interference in most matters both unnecessary and undesirable. "The invisible hand, the doctrine of natural liberty, the wisdom of God (seen even in the folly of men) are all part of the argument."25

Smith based his analysis of society upon what he believed was the unchanging nature of humankind. First, according to Smith, human beings are interested primarily in things nearest us and much less interested in things remote from us in either time or space; thus, we are all of considerable importance to ourselves. Second, and a corollary of the first principle, we all have an overwhelming desire to better our condition—whatever our condition may be at the moment. In many ways, Adam Smith's "economic man" in The Wealth of Nations is not unlike his "moral man" in The Theory of Moral Sentiments: Both are creatures of self-interest. However, sympathy is the faculty that holds selfinterest in check for moral man, whereas competition is the economic faculty that restrains self-interest for economic man. In fact, competition ensures that

^{21.} This apparent inconsistency, which "came to be known as the 'Adam Smith Problem," PATRICIA H. WERHANE, ADAM SMITH AND HIS LEGACY FOR MODERN CAPITALISM 8 (1991), is discussed in detail in id. at 8-15. Those interested in the details of this debate are urged to refer to Professor Werhane's excellent and thoroughly documented book.

^{22.} EKELUND & HÉBERT, supra note 20, at 100. 23. "The Physiocrats were a group of French social reformers who were intellectual disciples of Francois Quesnay (1694–1774)." HUNT, supra note 13, at 42. For a general discussion of Physiocrats, see id. at 42–45.

^{24.} EKELUND & HÉBERT, supra note 20, at 101.

^{25.} Id. at 102.

the pursuit of self-interest in the marketplace will improve the economic welfare of society. This, in Adam Smith's day, was a liberal idea because it implied that a society without extensive government controls would not degenerate into anarchy.²⁶

B. Competing Schools of Economic Thought

The following section describes other schools of economic thought. In each section, three items are stressed: (1) the view of human nature embraced by the school; (2) the role of the market; and (3) the role of government. The different ways that each group defines the concept of economics are also examined.

1. The Institutionalists

The institutionalists are a group of economists who believe that the political economy should be studied as a social science in which social practices and their evolution are examined with an eye toward how they affect one's ability to make a living in society. The traditional notion is that economics is the study of the allocation of scarce resources; in contrast, institutionalists see economics as a social science which looks at the material aspects of human existence.²⁷ Institutionalist economics is also known as evolutionary economics because it embodies an evolutionary method that relies on experience, experiment, trial and error.²⁸

The philosopher-king of the institutionalists²⁹ was Thorsten Veblen, who taught at the University of Chicago, ironically now a university popularly associated with Milton Friedman, Ronald Coase, and Richard Posner. Some cite Veblen as the founder of the institutionalist school.³⁰ In addition to Veblen, Richard T. Ely and John Rogers Commons contributed substantially to the development of institutional economics.³¹

Institutionalists use two concepts to help them understand the material world: technology and social institutions. These two concepts are used to explain both consumption and production. Gruchy explains that

Where a customary way of thinking or behaving becomes a persistent element in a culture of an organized social group, it takes on the concrete form of an institution, and hence Veblen defines an institution as a customary mode of thinking or as a "settled habit of thought common to the generality of men."³²

- 26. Id. at 103.
- 27. Brazelton, supra note 6, at 65-67.
- 28. Id. at 67.
- 29. Interview with Larry Reynolds, Ph.D., Professor of Economics, Boise State University in Boise, Idaho (October 31, 1991).
 - 30. BRAZELTON, supra note 6, at 66.
- 31. For foundations of institutionalist economics, see generally RICHARD T. ELY, AN INTRODUCTION TO POLITICAL ECONOMY (rev. ed. 1969); RICHARD T. ELY, THE LABOR MOVEMENT IN AMERICA (1886); JOHN ROGERS COMMONS, LEGAL FOUNDATIONS OF CAPITALISM (Augusta M. Kelley Publishers 1974) (1924) [hereinafter COMMONS, LEGAL FOUNDATIONS]; JOHN ROGERS COMMONS, THE ECONOMICS OF COLLECTIVE ACTION (reissue 1970) [hereinafter, COMMONS, COLLECTIVE ACTION].
- 32. ALLAN G. GRUCHY, MODERN ECONOMIC THOUGHT: THE AMERICAN CONTRIBUTION 68 (2d prtg. 1967) (citing THORSTEIN VEBLEN, The Limitations of Marginal Utility, in THE PLACE OF SCIENCE IN MODERN CIVILISATION 239 (1919)).

Thus, institutions such as private property, credit, absentee ownership, or leisure can be dominant social forces that determine the course of individual behavior. This approach differs from the conventional usage in sociology in which institutions are usually defined as structures.³³ In this sense, then, institutions are aspects of learned behavior that come from and are verified by ceremonial process.³⁴

The growth or development of institutions is conditioned by two factors, the material environment and the persistent propensities of human nature. By material environment, Veblen meant the economic conditions or methods of production that materialize in industrial technology. Since the basic drives of human nature do not change, it is the changing industrial technology which is largely responsible for changes in institutions. Thus, as Gruchy explains, as the technology underlying man's way of making a living changes, new mental habits are generated which may evolve into new institutional arrangements.³⁵ In this way, the entire institutional complex guiding human behavior is subject to disruption by changing technology.

Technology, for the institutionalist, can be understood as one "learned aspect of human behavior." It "forms correlated patterns based upon and deriving from a functional process. This functional process is an instrumental or tool using process." But technology is not merely tools; rather, tool existence implies the skills necessary for tool using, and a principle of this branch of economics is that tools and skills are inseparable.

The way in which an economy functions then can be understood as being determined by the way in which the technology and the institutions of that society interact.³⁸ Since tools are capable of being combined and applied to new functions, the more tools a society has, the greater its possibilities; hence, technology is a progressive, dynamic, and "forward-urging" aspect of the economy. Dynamic technology is then curbed by static, "past-binding" institutions. Institutions resist change; and the way in which technology and institutions interact is the essence of the institutional theory of the economy.

2. The Marxists

"All Marxists are institutionalists; but not all institutionalists are Marxists." So in an epigram may be explained the link between Marxist economics and institutionalism. A number of beliefs about economics are held in common by the two schools; for instance, both schools see economics in a broad social context and both see economics as centered on human nature and needs. This approach is sharply different than the dominant neoclassical view

^{33.} BRAZELTON, supra note 6, at 73.

^{34.} Id. at 73. Ceremonial processes derive from myths, legends, traditions, and superstitions. The mores of a group embody the moral viewpoint of the group and determine what is "right" or "wrong" beyond question. The mores prescribe a way of behaving known as ceremonial, and ceremonial behavior determines rank and status in the community on the basis prescribed by the myths. Id. at 73-75. See generally JOSEPH CAMPBELL, THE POWER OF MYTH (Betty Sue Flowers ed., 1988).

^{35.} GRUCHY, supra note 32, at 69.

^{36.} BRAZELTON, supra note 6, at 75.

^{37.} Id.

^{38.} Id. at 78.

^{39.} Interview with Peter Lichtenstein, Ph.D., Professor and Chairman of Economics, Boise State University, in Boise, Idaho (Nov. 4, 1991).

(Samuelson and others) that economics is the distribution of scarce resources among competing demands.⁴⁰ Joan Robinson laid out the fundamental differences between Marxist and traditional orthodox economics (Keynesian/neoclassical) in these words:

[First], ... the orthodox economists accept the capitalist system as part of the eternal order of Nature, while Marx regards it as a passing phase in the transition from the feudal economy of the past to the socialist economy of the future. And, second, that the orthodox economists argue in terms of a harmony of interests between the various sections of the community, while Marx conceives of economic life in terms of a conflict of interests between owners of property who do no work and workers who own no property. ...

The orthodox economists, on the whole, identified themselves with the system and assumed the role of its apologists, while Marx set himself to understand the working of capitalism in order to hasten its overthrow. Marx was conscious of his purpose.⁴¹

What separates Marxist economics from other institutionalist economics are a belief in the Labor Theory of Value and a theory of human nature as being essentially shaped by the society in which human beings live. This section examines human nature first and then returns to the Labor Theory of Value. Classical and now neoclassical economics assumed human nature was hedonistic (motivated to seek pleasure and avoid pain) and rational (motivated by reason); and, moreover, this human nature was a permanent characteristic of the species. Marx, in contrast, believed that human nature was whatever society demanded and that we humans "reasoned according to standards set by a given society." Further, Marx contended that creation of value was the result of participation by individuals in a social process of creating the means for a collective or social life (the Labor Theory of Value); thus, to Marx, work need not be an imposition but could be a means of realizing human potential.

"Marx's [labor] theory of value has caused much confusion and generated much controversy." 45 However, many critics overlooked the point that Adam Smith also endorsed a labor theory of value. 46 According to Marx's theory, the capitalist system is conquering fresh spheres from peasant and handicraft economies, and population is increasing; but the real wages, in general, remain constant at the level established in the pre-capitalist peasant economy. The total surplus in real terms is the ever-increasing difference between total output and total real wages. The value of a commodity consists not only of the labor-time directly employed in producing it but also of the value of the raw materials and plant involved. 47 The value of the means of production, in turn, is derived from

^{40.} For instance, Samuelson's very successful textbook gives this definition: "Economics is the study of how societies use scarce resources to produce valuable commodities and distribute them among different groups." PAUL A. SAMUELSON & WILLIAM D. NORDHAUS, ECONOMICS 5 (13th ed. 1989).

^{41.} JOAN ROBINSON, AN ESSAY ON MARXIAN ECONOMICS 1 (2d ed. 1967).

^{42.} BRAZELTON, supra note 6, at 89.

^{43.} Id.

^{44.} Id

^{45.} ROBINSON, supra note 41, at 10.

^{46.} See, e.g., THE ESSENTIAL ADAM SMITH 175-76 (Robert L. Heilbroner ed., 1986) (quoting SMITH, supra note 16, ch. V).

^{47.} ROBINSON, *supra* note 41, at 10–13.

the labor-time which is required to produce them. And, for Marx, "nature without human assistance, such as land, wind, water, [etc.], transfer[red] no [value] to the product." ⁴⁸

Marx contended that the development of the capitalist system is founded on the existence of a class of workers who have no means to live except by selling their labor power. Capitalism's exploitation of the worker is dependent upon a "margin between [the] total net output and the subsistence minimum of the workers." Thus, "if a worker can produce no more" than he requires to stay alive for one day, that worker is not a "potential object of exploitation." In sum, Marx saw capitalism as a system in which a few owned the wealth which the many created through their labor; and the result for the workers was that they were alienated from their work which became oppressive and from the products of their labor which they did not control or enjoy. "Marx combined his Hegelian vision of dialectical historical change with a dispassionate analysis of the specific contradictions of capitalism to create a model of capitalist development" which can be used to explain the business cycles in western society in a way that still attracts adherents. 51

Marxists have embraced a theory of the state in which the dominant characteristic of the state is "the ruling committee of the bourgeosie." The capitalist state, Marxists contend, is by necessity an accomplice to the process of capital accumulation; "the state, like the rest of the social structure, is determined by the economic base." Issues of special concern for neo-Marxists include the link between economic status and political influence, taxes, employment law, antitrust, and the extent of capitalist control over foreign policy. 53

Perhaps, the most significant impact of Marxist thought in the area of law can be found in the writings of the Critical Legal Studies (hereinafter "CLS" or "CRITS" scholars, a diverse group who are working to establish a so-called "modern" view of law in legal education.⁵⁴ Proponents of CLS argue that legal education, while trying to appear objective and neutral, is actually loaded with values and perspectives which subtly condition students to favor the *status quo*. As one observer describes the movement:

CLS scholarship is growing. Many of their writings analyze law in an attempt to expose the assumptions about individuals and groups implicit in it. Legal doctrine, they say, is presented in law schools and to the public as natural and dependent on history, and is necessary, inevitable and, in large measure, just. But, this view serves the interests of those entrenched in power, whether it be labor unions, school boards, management or whomever. The point here is that these interests often work at cross purposes to those of the individual citizen and keep them [sic] from imagining a different or better legal order. CRITS maintain that the apparent objective logic of legal reasoning and what appear as the ponderous, tightly constructed scholarly articles in law journals make it

^{48.} Id. at 13 (citing KARL MARX, 1 DAS KAPITAL 186 (1920)).

^{49.} Id. at 17 (citing MARX, supra note 48, at 171).

^{50.} Id. at 17

^{51.} BRAZELTON, supra note 6, at 99.

^{52.} Id. at 101.

^{53.} *Id*.

^{54.} The Conference on Critical Legal Studies was established in 1977. For a good overview of this area, see Clark Byse, Fifty Years of Legal Education, 71 IOWA L. REV. 1063, 1080-85 (1986).

seem that law and our legal system are formal bodies of "real" knowledge, but that they are both really indeterminate. In short, we do not know as much about law, our collective selves and society as the heavy and important-looking writings about law would lead you to believe. 55

3. The Keynesians

Scholars agree that Lord John Maynard Keynes invented macroeconomics. ⁵⁶ The publication of *The General Theory of Employment, Interest and Money* at the bottom of the Great Depression heralded the age of Keynesian Economics. One economic historian asserts that Lord Keynes agreed with "nearly every tenet of neoclassical theory⁵⁷ except for the belief that aggregate demand would always equal aggregate supply at the full-employment level of income." The argument continues that Keynes wrote *The General Theory* in an attempt to "preserve" capitalism after the devastation of the Great Depression had shaken faith in the system. ⁵⁹ Keynes, so the argument concludes, turned away from Marx's explanation of the instability of capitalism out of ideological distaste. ⁶⁰

At that time, the accepted wisdom was represented by Say's Law which held that, while there could be temporary shortfalls, the economy found its equilibrium at full employment; and the flow of demand that sustained the economy came from that full employment.⁶¹ A century earlier, Robert Thomas Malthus had come up with a counterpart for short demand, a theory of overproduction; this theory was roundly rejected as a fallacy.⁶² Lord Keynes found Malthus, however, much more ideologically attractive than Marx and endorsed some of Malthus's ideas, including the inevitability of capitalism.⁶³

If Say's Law held, shortage of demand could not exist; and if shortage of demand did not exist, no case could be made for governmental action to stimulate demand.⁶⁴ However, Keynes embraced Malthus's theory and moved on to the main points of Keynesian economics, to wit: (a) repeal of Say's Law; (b) the under-employment equilibrium; and (c) a call for government spending unsupported by revenues to stimulate demand.⁶⁵ Like Adam Smith and Karl Marx before him, Keynes revised economic theory to meet the needs of a changing world.⁶⁶ More than any single person, Keynes is responsible for converting economics from a descriptive theory of what is into an instrument of public

^{55.} Art Wolfe, Introduction to the Study of Law 28 (1990) (unpublished manuscript, on file with authors).

^{56.} See generally KEYNES, supra note 10. See also JOHN KENNETH GALBRAITH, ECONOMICS IN PERSPECTIVE: A CRITICAL HISTORY 222-27 (1987) (noting the "anticipation" of the so-called Keynesian Revolution in both Sweden and the United States).

^{57.} See infra notes 72–75 and accompanying text.

^{58.} HUNT, supra note 13, at 504.

^{59.} *Id.* at 497–98.

^{60.} Id. at 498-99.

^{61.} Say's Law as summarized in GALBRAITH, supra note 56, at 221.

^{62.} Id. at 222.

^{63.} HUNT, supra note 13, at 498-99.

^{64.} GALBRAITH, supra note 56, at 222.

^{65.} Id.

^{66.} Id. at 221-28.

policy which can be used to promote objectives such as full employment and international monetary stability.⁶⁷

Keynes, however, had little impact on the area of law and economics because he tended to embrace so much of neoclassical theory. One author analyzes Keynes's work in these terms: "Keynes wished to furnish capitalist governments with theoretical insights that would help save capitalism. In doing so, it was necessary for him to abandon some tenets of neoclassical theory. But, as we will see, he wanted to retain as much neoclassical ideology as possible." Current Keynesian thinking falls into two groups. The first group is usually denoted by a hyphen (post-Keynsians) and is concerned with complex growth analysis using mathematical models. The second group (post Keynesians) are critics of the form of "Keynesianism" accepted by most present-day economists. They argue that modern Keynesians have forgotten Keynes's emphasis upon uncertainty and expectations concerning the future. Use turn now to the national labor laws.

4. The Neo-Classicists

"We are all Keynesians now."⁷² This much is frequently taken for granted in economic circles, at least insofar as macroeconomics is concerned. This subsection briefly highlights the major differences between the Keynesians and the monetarists, an important group of neoclassicists. The monetarists, a revival of the classical theory in the context of free market neoclassical economics, led by Milton Friedman hold that (a) wages and prices are flexible, (b) property rights are exclusive, enforceable and transferable—thereby eliminating externalities and public goods; and (c) that the both *ex ante* savings and investment prevailing in the economy are functions of the interest rate.⁷³

In contrast, the Keynesians argue that (a) wages and prices are not flexible; (b) that savings are a function of income while investment is a function of interest rates and productivity of capital; and (c) that the demand for money is a function of income, the velocity of money, interest rates and the expected interest rate.⁷⁴

The dispute between the monetarists and the Keynesians is founded in their respective ideologies, but is fought on empirical grounds. The monetarists hold that the velocity of money is stable or is growing at a constant rate (and

^{67.} See generally DUDLEY DILLARD, THE ECONOMICS OF JOHN MAYNARD KEYNES: THE THEORY OF A MONETARY ECONOMY (1948); ALVIN HARVEY HANSEN, A GUIDE TO KEYNES (1953).

^{68.} HUNT, supra note 13, at 506.

^{69.} BRAZELTON, supra note 6, at 61.

^{70.} Id.

^{71.} Id. ("[P]ost Keynesians believe in a rather high degree of uncertainty in economics. Due to uncertainty, the expectations of the business community may be rather erratic. ... As there is uncertainty in the economy as a whole, there is even more uncertainty in financial markets.").

^{72.} This sentiment is attributed to Milton Friedman (1965) as quoted in THE MACMILLAN BOOK OF BUSINESS AND ECONOMIC QUOTATIONS 68 (Michael Jackman ed., 1984).

<sup>1984).
73.</sup> Interview with R. Larry Reynolds, Ph.D., Professor of Economics, Boise State University in Boise, Idaho (Dec. 9, 1991). See also EKELUND & HÉBERT, supra note 20, at 536-57; and id. at 556-57 (citing a number of Friedman's publications).

^{74.} Interview with R. Larry Reynolds, supra note 73.

use long term data to show that it is) while the Keynesians argue that velocity is not stable and use short term data to support their arguments. Monetarists hold that investment decisions are elastic with respect to interest rates to show that public sector spending "crowds out" private sector investment. The Keynesians see a marginal efficiency of investment function which is far less elastic with respect to interest rates.

This concludes our section on schools of economic thought. Perhaps, the reason for the existence of different schools of economic thought is the complexity of the subject. One text captures that thought in these words:

[Mlere "facts" alone are incapable of imparting any guidance. The number of possible arrangements [of facts relating to the U.S. economy] is so large that it is hardly likely that trial and error would arrive at a useful interpretation. Therefore, some principles must be developed to enable investigators to select and order these phenomena ("facts") in order to understand their meanings. These principles are codified in the professional practices of economists, and they form the basis of undergraduate and professional education, where they are referred to as "economic theory."75

III. THE POLICY AND POWER FOCUS OF THE NATIONAL LABOR RELATIONS ACT

A. Operating Premises in Legislative Policy Formation

The unranked policy goals of the National Labor Relations Act included reducing disruptions to interstate commerce occasioned by industrial warfare between employers and labor organizations; encouraging the process of collective bargaining; encouraging industrial democracy as it relates to both labormanagement and union-employee rights; and the channeling of employer-employee conflict through dispute resolution forums—the National Labor Relations Board (NLRB or Board), the collective bargaining process and arbitration, all of which have particular expertise in labor-management relations.⁷⁶

BRAZELTON, supra note 6, at 87.

29 U.S.C. § 151 (1983). Many treatments make fleeting references to the NLRA

Act's policy, which deserves a closer reading:

The denial by some employers of the right of employees to organize and the refusal by some employers to accept the procedure of collective bargaining lead to strikes and other forms of industrial strife or unrest, which have the intent or the necessary effect of burdening or obstructing commerce by (a) impairing the efficiency, safety, or operation of the instrumentalities of commerce; (b) occurring in the current of commerce; (c) materially affecting, restraining, or controlling the flow of raw materials or manufactured or processed goods from or into the channels of commerce, or the prices of such materials or goods in commerce; or (d) causing diminution of employment and wages in such volume as substantially to impair or disrupt the market for goods flowing from or into the channels of

The inequality of bargaining power between employees who do not possess full freedom of association or actual liberty of contract, and employers who are organized in the corporate or other forms of ownership association substantially burdens and affects the flow of commerce, and tends to aggravate recurrent business depressions, by depressing wage rates and the purchasing power of wage earners in industry and by preventing the stabilization of competitive wage rates and working conditions within and between industries.

Additional economic goals arguably included the wage-push effect of increased wages on consumer demand in a recession economy and the attendant economic stimulation of depressed industries.⁷⁷

These policy goals, however, must be viewed in the broader context of the employment relationship and societal structure. Employment and occupation have a far greater significance than mere economic subsistence.⁷⁸ Employment molds and, in turn, is molded by institutions and society at large rendering labor/employment law too complex and rich to be subsumed within a narrow

Experience has proved that protection by law of the right of employees to organize and bargain collectively safeguards commerce from injury, impairment, or interruption, and promotes the flow of commerce by removing certain recognized sources of industrial strife and unrest, by encouraging practices fundamental to the friendly adjustment of industrial disputes arising out of differences as to wages, hours, or other working conditions and by restoring equality of bargaining power between employers and employees.

Experience has further demonstrated that certain practices by some labor organizations, their officers, and members have the intent or the necessary effect of burdening or obstructing commerce by preventing the free flow of goods in such commerce through strikes and other forms of industrial unrest or through concerted activities which impair the interest of the public in the free flow of such commerce. The elimination of such practices is a necessary condition to the

assurance of the rights herein guaranteed.

It is hereby declared to be the policy of the United States to eliminate the causes of certain substantial obstructions to the free flow of commerce and to mitigate and eliminate these obstructions when they have occurred by encouraging the practice and procedure of collective bargaining and by protecting the exercise by workers of full freedom of association, self-organization, and designation of representatives of their own choosing, for the purpose of negotiating the terms and conditions of their employment or other mutual aid or protection.

Labor Management Relatiôns Act, Findings and Declaration of Policy (1935). See also Archibald Cox, Law and the National Labor Policy (1960); Charles

OSCAR GREGORY & HAROLD A. KATZ, LABOR AND THE LAW (3d ed. 1979).

Facial placidity and the continued economic structural dislocations have weakened unions, but history has documented the rise and fall of union strength with the booms and busts of the economy. The NLRA was designed to smooth out the roller coaster of economics and achieve the higher aspirations of increased long term economic, political, social, and educational growth for the public good as a whole. See generally 2 NLRB, LEGISLATIVE HISTORY OF THE NATIONAL LABOR RELATIONS ACT (1949); 2 NLRB, LEGISLATIVE HISTORY OF THE LABOR MANAGEMENT RELATIONS ACT (1947). Both labor and management can easily overlook the long term interrelationships and public purpose in favor of short term gains, but this is the perspective the Act requires. See Ray Marshall, The Future of the American Labor Movement: The Role of Federal Labor Law, 57 CHI.—KENT L. REV. 521, 526–31 (1981); Clyde Summers, Past Premises, Present Failures, and Future Needs in Labor Legislation, 31 BUFF. L. REV. 9, 17 (1982).

77. See supra note 7.

78. See generally Thomas A. Kochan & Harold A. Katz, Collective Bargaining and Industrial Relations 455–56 (2d ed. 1988); Freeman & Medoff,

supra note 76.

This position has been implicitly attacked by the law and economics approach espoused by the "Chicago School" rendering complex societal interactions subordinate to a myopic economic efficiency methodology. See, e.g., POSNER, supra note 12; Ronald Coase, The Problem of Social Cost, 3 J.L. & ECON. 1 (1960). For an application of these theoretical arguments to the collective bargaining process see Stewart J. Schwab, Collective Bargaining and the Coase Theorem, 72 CORNELL L. REV. 245 (1987). Cf. Mark Kelman, Consumption Theory, Production Theory, and Ideology in the Coase Theorem, 52 S. CAL. L. REV. 669 (1979); Liebhafsky, supra note 1; Herbert Hugo Liebhafsky, The Problem of Social Cost—An Alternative Approach, 13 NAT. RESOURCES J. 615 (1973). See also James B. Zimarowski, Public Purpose, Law, and Economics: J. R. Commons and the Institutional Paradigm Revisited, 90 W. VA. L. REV. 387 (1988).

economic efficiency theory.⁷⁹ Through a mechanism that manifests the elusive concept of the public good or public purpose, our legal and social infrastructures support a system of employment and occupational rewards by "classif[ying] ... activities in the body politic deemed to be of value to the rest of the public, rather than a classification of individuals."⁸⁰ Through a private

79. Employment and occupation influence the value structure of individuals. As such, progress toward political democracy and related concepts of justice as well as industrial democracy can be enhanced or constrained by institutional rules.

Individuals ... learn the custom of language, of cooperation with other individuals, of working towards common ends, of negotiations to eliminate conflicts of interest, of subordination to the working rules of the many concerns of which they are members. They meet each other, not as physiological bodies moved by glands, nor as globules of desire moved by pain and pleasure, similar to the forces of physical and animal nature, but as prepared more or less by habit, induced by the pressure of custom, to engage in those highly artificial transactions created by the collective human will.

JOHN ROGERS COMMONS, INSTITUTIONAL ECONOMICS: ITS PLACE IN POLITICAL ECONOMY 73-74 (1934) (citations omitted).

Production ... involves not only the making of goods to gratify existing wants, but also the creation and guidance of demand, the whole process of bargaining and negotiation by which the terms of division are settled, and the underlying function of defining and enforcing rights of person and property, which determines to just what extent business can be parasitic and still remain legal. And in a more fundamental way still, the individual is so molded in body, mind, and character by his economic activities and relations, stimuli and disabilities, freedoms and servitudes, that industry can truly be said to make the men and women who work in it no less truly than the commodities it turns out for the market.

JOHN M. CLARK, SOCIAL CONTROL OF BUSINESS 46 (2d ed. 1939).

80. COMMONS, LEGAL FOUNDATIONS, supra note 31, at 328-29. One function of law is to provide inducements and restrictions on scarce resources to advance the public good. Legislative enactments are concerned with the long term good for society, not necessarily the myopic goals and interests of individuals and employers. Professor John R. Commons, in his classic work The Legal Foundations of Capitalism, stated:

The public is not any particular individual, it is a classification of activities in the body politic deemed to be of value to the rest of the public rather than a classification of individuals This [public purpose] is the process of classification and reclassification according to the purposes of the ruling authorities, a process which has advanced with every change in economic evolutions and every change in feelings and habits towards human beings, and which is but the proportioning and reproportioning of inducements to willing and unwilling persons, according to what is believed to be the degree of desired reciprocity between them. For, classification is the selection of a certain factor, deemed to be a limiting factor, and enlarging the field of that factor by restraining the field of other limiting factors, in order to accomplish what is deemed to be the largest total result from all

Id. at 328-29.

The proportioning of resources also includes the proportioning and reproportioning of power in a society and gives rise to the establishment of economic as well as political systems. See, e.g., MICHAEL E. TIGAR & MADELEINE R. LEVY, LAW AND THE RISE OF CAPITALISM 3-7 (1977) (describing the historical development of the merchant class and its growth in wealth and power).

Many courts have had difficulty articulating what "public policy" is and its proper role in

law. Justice Wanamaker of the Ohio Supreme Court stated:

What is the meaning of "public policy"? A correct definition, at once concise and comprehensive, of the words "public policy," has not yet been formulated by our courts. ... In substance, it may be said to be the community common sense and common conscience, extended and applied throughout the state to matters of public morals, public health, public safety, public welfare, and the like. It is that general and well settled opinion relating to man's plain, palpable duty to his

ordering mechanism, private activities deemed to be of benefit to the public at large are encouraged.⁸¹ But, importantly, not all private activities are given blanket approval. The public infrastructure provides inducement to private wealth producers "according to beliefs in their public value, with the intention of reproportioning the national economy and thus enlarging the commonwealth." What is of "value" to the public good necessarily includes many poorly defined, intangible interests and often requires the accommodation of equally supportable but inherently conflicting interests, including individual liberty and freedom, property rights, the role of institutions, and status.⁸³

fellow men, having due regard to all the circumstances of each particular relation and situation.

Sometimes such public policy is declared by Constitution; sometimes by statute; sometimes by judicial decision. More often, however, it abides only in the customs and conventions of the people-in their clear consciousness and conviction of what is naturally and inherently just and right between man and man. It regards the primary principles of equity and justice and is sometimes expressed under the title of social and industrial justice, as it is conceived by our body politic. When a course of conduct is cruel or shocking to the average man's conception of justice, such course of conduct must be held to be obviously contrary to public policy, though such policy has never been so written in the bond, whether it be Constitution, statute, or decree of court. It has frequently been said that such public policy, is a composite of constitutional provisions, statutes, and judicial decisions, and some courts have gone so far as to hold that it is limited to these. The obvious fallacy of such a conclusion is quite apparent from the most superficial examination. When a contract is contrary to some provision in the Constitution, we say it is prohibited by the Constitution, not by public policy. When a contract is contrary to a statute, we say it is prohibited by a statute, not by a public policy. When a contract is contrary to a settled line of judicial decisions, we say it is prohibited by the law of the land, but we do not say it is contrary to public policy. Public policy is the cornerstone—the foundation—of all Constitutions, statutes, and judicial decisions; and its latitude and longitude, its height and its depth, greater than any or all of them. If this be not true, whence came the first judicial decision on matter of public policy? There was no precedent for it, else it would not have been the first.

Pittsburgh, C., C. & St. L. Ry. Co. v. Kinney, 115 N.E. 505, 506-07 (Ohio 1916).

81. COMMONS, LEGAL FOUNDATIONS, supra note 31, at 330.

82. Id. at 329.

83. The tension between defensible positions is inherent in legal decision-making taking the form of common place balancing tests. Consistency and adherence to precedent, however, must be tempered with the recognition of a dynamic system evolving into more complex institutional structures and integrated markets. Nevertheless, failure to act in a given area is not without consequences. The difficulty in choosing which classification of activities enlarges the public good is readily apparent.

Customs are, indeed, the raw material out of which justice is constructed. But customs differ, customs change, customs are good and bad, and customs conflict. They are uncertain, complex, contradictory, and confusing. A choice must be made. Somebody must choose which customs to authorize and which to condemn or let alone. Carter maintains his thesis [common law is made by God or Beneficent nature] only by distinguishing "custom" from "bad practice." "Custom" is good custom; "bad practice" is bad custom. Who shall say? Is it the voice of God? Is it the law of Nature? Is it universal reason, or the vox populi? Carter criticized the Supreme Court because, in a railroad consolidation case it did not authorize the modern custom of business in consolidating corporations and eliminating competition. Apparently that custom is the voice of God. Others approve the Supreme Court when it condemns the modern custom of labor organizations in boycotting employers whom they deem unfair. Apparently that custom is not the voice of God.

The NLRA84 represents Congress's recognition of the tremendous importance of employment and employment stability to modern individuals. It also recognized the inevitability of conflict between competing employer-employee interests which, given the inequality of pre-Act power distribution, led to disruptions in commerce affecting the public good.85 With the recognition that there can be no freedom of contract unless there is freedom to contract, the NLRA established protected statutory rights to facilitate the creation of institutional structures to enforce both rights to organize employees and representational duties.⁸⁶ Moreover, the collective bargain replaced individual bargains facilitating a measure of group protection from economic coercion.87 And, through the articulation of unfair labor practices (ULPs) and enforcement of prohibitions against them, specific employer-employee-labor union conflicts were overseen by ostensibly impartial forums.⁸⁸ Thus, one goal of labor policy

The default or silence position in collective bargaining interpretation as well as the areas of employee discipline and testing are just such complex issues couched in industrial custom. Conceptually, the underlying conflict between "management rights" and "individual rights" suggests an examination of the 'balance' between these conflicting interests drawn from industrial custom, common law, and the policy of the NLRA. See James B. Zimarowski, Interpreting Collective Bargaining Agreements: Ambiguity, Silence and NLRA Section 8(d), 10 INDUS. REL. L.J. 465, 470–72 (1989).

84. 29 U.S.C. §§ 141–188 (1983).

See supra notes 3 and 78-81.
29 U.S.C. § 157 (1973). The statute provides:
Sec. 7. Employees shall have the right to self organization, to form, join, or assist labor organizations, to bargain collectively through representatives of their own choosing, and to engage in other concerted activities for the purpose of collective bargaining or other mutual aid or protection, and shall also have the right to refrain from any or all of such activities except to the extent that such right may be affected by agreement requiring membership in a labor organization as a condition of employment as authorized in section 158(a)(3) of this title.

In H. K. Porter Co. v. NLRB, 397 U.S. 99 (1970), the Court stated:

The object of this Act was ... to ensure that employers and their employees could work together to establish mutually satisfactory conditions. The basic theme of the Act was that through collective bargaining the passions, arguments, and struggles of prior years would be channeled into constructive, open discussions leading, it was hoped, to mutual agreement.

Id. at 103.

87. American Steel Foundries v. Tri-City Cent. Trades Council, 257 U.S. 184 (1921).

[Labor unions] were organized out of the necessities of the situation. A single employee was helpless in dealing with an employer. He was dependent ordinarily on his daily wage for the maintenance of himself and family. If the employer refused to pay him the wages that he thought fair, he was nevertheless unable to leave the employ and to resist arbitrary and unfair treatment. Union was essential to give laborers opportunity to deal on equality with their employer.

Id. at 209. See also NLRB v. Allis-Chalmers Mfg. Co., 388 U.S. 175, 175-80 (1967).

88. See 29 U.S.C. § 158(a), (b) (1988) for an articulation of unfair practices. Other rights were enforced through a system of private ordering established in collectively bargained grievance and arbitration forums.

The Act does not include the violation of contract terms as an unfair labor practice. An earlier version of the senate bill did include violations of "the terms of a collective bargaining agreement or the terms of an agreement to submit a labor dispute to arbitration" as unfair labor practices. S. 1126, 80th Cong., 1st Sess. § 8(a)(6) (1947), reprinted in 1 NLRB, LEGISLATIVE HISTORY OF THE LABOR MANAGEMENT RELATIONS ACT, 1947, at 109, 109–11, 114 (1974) That version of the senate bill also contained a similar provision applicable to labor organizations. Id. § 8(b)(5), at 114. Both provisions were struck from the final Act. This does not imply that the Board and the courts are precluded from examining contract language, only that such inquiries are dependent upon unfair labor practice provisions or contract enforcement through section 301, 29 U.S.C. § 185 (1983). NLRB v. C & C Plywood Corp., 385 U.S. 421 (1967).

was to channel economic conflict, but employment has a greater significance than utility-maximizing behavior by labor and management. The Act and earlier courts recognized a second, dependent area of employer-employee conflict, the command-obedience power relationship, and took steps to re-order the power distribution within those relationships.⁸⁹

The modification of the command-obedience power relationship is often classified under such terms as "industrial democracy" or "industrial due process." Such modifications are based on the view that the democratic principle upon which the nation was founded should not be limited to the political arena but should extend to the industrial arena as well. Decisions and value systems imposed in the work place may be more important to the worker than decisions in legislative halls. As such, "[d]emocratic principles demand that workers have a voice in the decisions that control their lives; human dignity requires that workers not be subject to oppressive conditions or arbitrary actions." The conflict between the ideal of industrial democracy and the authoritarian institutional structure of industrial organizations as represented by the traditional command-obedience relationship between employer-employee is readily apparent and has been a fertile ground for conflict resolution through arbitration, by the Board, and by the courts.

See also J.I. Case v. NLRB, 321 U.S. 332 (1944). As the Steelworkers Trilogy held, arbitration as a private ordered dispute resolution forum is shown great deference. See United Steelworkers v. American Mfg. Co., 363 U.S. 564, 567-68 (1960) (determination of arbitrability a proper function of the arbitrator); United Steelworkers v. Warrior & Gulf Navigation Co., 363 U.S. 574, 582-83 (1960) (doubts as to coverage of arbitration clause should be resolved in favor of coverage); United Steelworkers v. Enterprise Wheel & Car Corp., 363 U.S. 593, 596 (1960) (arbitration awards entitled to court enforcement if they draw their essence from the contract). See generally David E. Feller, A General Theory of the Collective Bargaining Agreement, 61 CAL. L. REV. 663 (1973); Clyde W. Summers, Collective Agreements and the Law of Contracts, 78 YALE L.J. 525 (1969).

^{89.} See John Rogers Commons, The Problem of Correlating Law, Economics & Ethics, 8 WIS. L. REV. 3, 9–11 (1932); COMMONS, supra note 79, at 64–67. Command-obedience relationships or managerial transactions appear in the formation of employment relationships. In a conceptually fascinating area, private authoritarian organizations are given, aided by the power of the legal order, the ability to command and discipline legally designated inferiors. At the same time, until the erosion of the employment at will doctrine, the inferior had little or no rights in the employment. See COMMONS, LEGAL FOUNDATIONS, supra note 31, at 283–312, John Rogers Commons, The Right to Work, 21 THE ARENA 131 (1899). In the creation of command-and-obedience relationships, the social order balances liberty interests and property interests.

^{90.} See MILTON DERBER, THE AMERICAN IDEA OF INDUSTRIAL DEMOCRACY, 1865–1965 (1970); Clyde W. Summers, Industrial Democracy: America's Unfulfilled Promise, 28 CLEV. ST. L. REV. 29 (1979) [hereinafter Summers, Industrial Democracy]; Clyde W. Summers, Individual Protection Against Unjust Dismissal: Time for a Statute, 62 VA. L. REV. 481 (1976) [hereinafter Summers, Individual Protection]. See also Summers, supra note 76; Paul Weiler, Promises to Keep: Securing Workers' Rights to Self Organization Under the NLRA, 96 HARV. L. REV. 1769 (1983).

^{91.} Summers, Industrial Democracy, supra note 90, at 29.

^{92.} Nevertheless, the concept of industrial democracy provides the intellectual basis for restructuring the command-obedience relationship in statutory as well as common law evolution. This restructuring is exemplified by the erosion of the employment at will concept and the numerous statutes addressing employee health and safety, privacy, information access, pensions, etc. Moreover, this restructuring represents a recognition of the dynamic and evolutionary nature of our social order. The evolution to more complex and integrated markets as well as concentrations of economic power in private organizations, many exceeding the GNP of many nation states, suggest the need to reexamine many old command-obedience relationship rules constructed for less complex institutions and markets. In Freeman and Medoff's, What Do Unions Do?, supra note 76, at chs. 1 & 6, the traditional economic perspective on labor unions

B. The Focus of the NLRA: Conflict and Power or Economic Efficiency?

The mechanism to achieve the unranked, and often conflicting, policy considerations involved altering the power balance between employees and employers by legislative means.⁹³ The NLRA's power exercises can be viewed

was augmented by the "active voice" perspective. As such, the study attempted to integrate economic studies with behavioral concepts. The study is considered one of the most significant contributions to the industrial relations literature spawning numerous symposiums and critiques. It challenges the position that unions do not add to the economy, only take, and therefore it is in the public interest to limit union power. Professors Freeman and Medoff, however, raise an "active voice" face paralleling the concerns of industrial democracy. After summarizing a broad data base, they conclude that, on the whole, unions contribute more positive aspects than negative.

93. See James B. Zimarowski, A Primer on Power Balancing Under the National Labor Relations Act, 22 U. MICH. J. L. REF. 47 (1989). Industrial relations in the industrial democracies are far from peaceful. Nor are labor power confrontations new to the American continent. Labor historians can trace labor power confrontations as far back as 1619 in the Jamestown colony. WILIAM CAHN, A PICTORIAL HISTORY OF AMERICAN LABOR 60 (1972) (citing records of the Virginia Company, dated July 21, 1619). The diversity of American labor and the violent attempts to quash the movement for short term political and economic gain are not

far removed from contemporary managerial analysis.

Conflict between employees and employers is inevitable and unions are a natural response to the employee's needs to counter the employer's power response. Unions are not, as many conservative writers believe, conspiracies of the left or extensions of organized crime. They are merely organizations, arising from the course of events, designed to serve a purpose or fill a need akin to other business, trade, fraternal, or educational organizations. Moreover, unions are dynamic and diversified. As Robert Hoxie stated they "are prone to act and to formulate theories afterward." ROBERT HOXIE, TRADE UNIONISM IN THE UNITED STATES 34 (1920). Hoxie observed:

[The] union program, taking with it all its mutations and contradictions, comprehends nothing less than the various economic, political, ethical and social viewpoints and modes of action of a vast and heterogeneous complex of working class groups, molded by diverse motives; it expresses nothing less than the ideals, aspirations, hopes, and fears, modes of thinking and action of all these working groups. In short, if we can think of unionism as such, it must be as one of the most complex betterogeneous and protean of modern social phenomena.

of the most complex, heterogeneous and protean of modern social phenomena. *Id.* at 35. Given this nature, the union is also one of the most vulnerable to destabilization.

Reduction of conflict using power balancing mechanisms is not novel now nor was it novel at the enactment of the NLRA. Early common law and statutes were ill suited to construct remedies beyond those for protection from physical coercion. The property and liberty for which employees seek protection, while necessarily including protection from physical coercion, also includes protection from economic coercion. As an early English jurist noted, "[n]ecessitous men are not, truly speaking, free men, but, to answer a present exigency, will submit to any terms that the crafty may impose upon them." Vernon v. Bethell, 2 Eden 110, 113, 28 Eng. Rep. 838, 839 (Ch. 1762).

The lack of a legal forum to redress conflict occasioned by economic coercion, or in many cases, a legal forum actively against labor interests is well documented in labor history. Control of the court bias against labor organizations was part of the rationale for the Act. See 29 U.S.C. § 101 (1983) (policy statements). See also Anti-Injunction (Norris-LaGuardia) Act of 1932, 29 U.S.C. §§ 101-115 (1983). The result of unredressed conflict led to labor confrontations of unusual intensity and violence. Among the more notorious power imbalances in labor history were the use of yellow dog contracts (requiring, as a condition of employment, that an employee would have no contact with union organizers) and labor injunctions. For a contrary view see Richard A. Epstein, A Common Law for Labor Relations: A Critique of the New Deal Labor Legislation, 92 YALE L.J. 1357 (1983). Professor Epstein argues that the common law provided sufficient and adequate protections for employees. As such, the labor laws were unwarranted interference. Compare the responses by Paul R. Verkuil, Whose Common Law for Labor Relations?, 92 YALE L.J. 1409 (1983) and Julius G. Getman & Thomas C. Kohler, The Common Law, Labor Law, and Reality: A Response to Professor Epstein, 92 YALE L.J. 1415 (1983), pointing out the selective and static nature of Epstein's

in three interrelated contexts. First, the Act places express statutory limitations or approval mechanisms upon identified power exercises. 94 Second, a class of power exercises in the form of mandatory bargaining items are channeled through the mediating effects of the collective bargaining process.95 Collaterally, the mandatory-permissive bargaining item dichotomy created by the Court's interpretation of § 8(d) of the NLRA defines an areas of power exercises unchanneled through the potential mediating influence of the collective bargain.96 Moreover, when viewed in a power context, this interpretation protects permissive actions from interference through the $\S 8(a)(5)$ and $\S 8(b)(3)$ good faith bargaining obligation.97

Third, the NLRA was built upon an existing employer-employee relationship based in custom and common law and, in theory, embraces a private-or-

common law as well as the realities of conflict and power exercises. See also Anti-Injunction Act of 1932, 29 U.S.C. §§ 101-115.

- 94. Principal among these are the statutory restrictions on secondary activity, hot cargo clauses, picketing and the permanent replacement of economic and sympathy strikers. These factors tend to prevent effective solidarity with other labor groups keeping a labor dispute localized often times against an organization national or international in scope. See generally James B. Atleson, Reflections on Labor, Power and Society, 44 MD. L. REV. 841 (1985).
 95. 29 U.S.C. § 158(d) (1983). Section 158(d) provides:
 - - (d) For the purposes of this section, to bargain collectively is the performance of the mutual obligation of the employer and the representative of the employees to meet at reasonable times and confer in good faith with respect to wages, hours, and other terms and conditions of employment, or the negotiation of an agreement, or any question arising thereunder, and the execution of a written contract incorporating any agreement reached if requested by either party, but such obligation does not compel either party to agree to a proposal or require the making of a concession: Provided, That where there is in effect a collective bargaining contract covering employees in an industry affecting commerce, the duty to bargain collectively shall also mean that no party to such contract shall terminate or modify such contract, unless the party desiring such termination or modification-
 - (1) serves a written notice upon the other party to the contract of the proposed termination or modification sixty days prior to the expiration date thereof, or ... sixty days prior to the time it is proposed to make such termination or modification:
 - (2) offers to meet and confer with the other party for the purpose of negotiating a new contract or a contract containing the proposed modifications;
 - (3) notifies the Federal Mediation and Conciliation Service within thirty days after such notice of the existence of a dispute, ...
 - (4) continues in full force and effect, without resorting to strike or lock-out, all the terms and conditions of the existing contract for a period of sixty days after such notice is given or until the expiration date of such contract, whichever occurs later.
- 96. NLRB v. Wooster Div. of Borg-Warner Corp., 356 U.S. 342 (1958). The majority in Borg-Warner held:
 - [T]hese provisions [section 8(d)] establish the obligation of the employer and the representative of its employees to bargain with each other in good faith with respect to "wages, hours, and other terms and conditions of employment" The duty is limited to those subjects, and within that area neither party is legally obligated to yield. As to other matters, however, each party is free to bargain or not to bargain, and to agree or not to agree.
- Id. at 349 (citation omitted). See also Brockway Motor Trucks v. NLRB, 582 F.2d. 720 (3d Cir. 1978). In practical terms, the elaboration of mandatory bargaining subjects is crucial, for such matters must be discussed in the bargaining sessions before any unilateral action with respect to them is taken. Id. at 725.
 - 97. Chemical Workers v. Pittsburgh Glass, 404 U.S. 157 (1952).

dered preference for dispute resolution within the NLRA framework.98 As such, custom- and common law-based articulations of respective rights and correlative duties related to contract interpretation, employee discipline, freedom of expression, privacy considerations, protection of property rights, among others, create areas of employer-employee power conflict.99 Within the above context, however, one must recognize the dispute-resolution forum's role in approving or disapproving power exercises based upon conceptions of what serves the public purpose or public policy.100

The NLRA's power balancing functioning is theoretically designed to mitigate disruptions in interstate commerce and facilitate the growth of industrial democracy. From one view, this produces an efficient allocation of resources furthering public good. But an efficiency theorem alone hardly embraces the richness of the processes involved, and efficiency was not the only policy underlying the NLRA. The Act's framework for power exercises can be viewed as limitations on particularly deleterious aspects of economic coercion but, encompassing the broader concerns of industrial democracy, power exercises under the NLRA have significant ancillary effects on economic concerns which are primarily grounded in the custom- and common law-based command-obedience relationships.

This Article responds to the suggestion that the Chicago-style law and economics paradigm be used in the area of labor law and policy. Although their actual influence on labor law and policy institutions has thus far been unspectacular, Chicago-style law and economics proponents have applied their paradigm to a range of labor law and policy problems. A well-developed body of labor law literature reflects Chicago-style economic methodology and generally favors a legal regime which allows labor markets to order themselves "efficiently" through the workings of some pre-conventional, empirically verifiable force. For example, Professor Richard Epstein has argued for the repeal of the NLRA, concluding that the vagaries of pre-Wagner Act common law produced more efficient economic results.¹⁰¹ Judge Posner has decried the "cartelization" of labor supply by unions, which he believes results in prices for

See supra notes 84-85, 89-92 and accompanying text. 98.

All organizations have rules and law is a subset, albeit the most significant one, of

the broader category of working rules in society. Writes Professor John Commons:

Law was looked upon, not as the working rules of a going concern adopted by the participants in a world of limited resources accordingly to the principle of scarcity, but as a mechanical unfolding of ideal concepts of liberty, justice and law. The individual was the unit, liberty the goal and law the mechanism. Yet every concern must have its working rules, which are its laws. These spring from authority concern must have its working rules, which are its laws. These spring from authority, custom, habit, initiative, or what not. They are the common law, the statute law, the equity jurisprudence of the concern. The state, the business concern and the cultural concern are alike in their dependence on these working rules, the difference being mainly in the kind of sanctions, whether physical, economic, or moral, which they can bring to bear in enforcing the rules. And the declarations and enforcement of the rules create a complete outfit of rights, duties, liberties and exposures of each member occupying each position in the particular

COMMONS, LEGAL FOUNDATIONS, supra note 31, at 332-33.

One difficulty is deciding which rules to give legal effect. For an interesting discussion of working rules vis-à-vis contract rules in the collective bargaining setting, see Feller, supra note 88, at 774-804.

^{100.} See supra notes 80-83 and accompanying text.

^{101.} Epstein, supra note 93.

labor services which exceed "efficient" levels. 102 This quest for "efficiency" also reached the debates over plant-closing legislation, subcontracting, and work relocation. Because of its empiricism, the Chicago-style economic methodology presents seductive opportunities for resolution of difficult and complex issues by advancing deceptively clear courses of action and promising predictable results. The fallacy of this "science" of efficiency is readily exposed in analyzing power exercises inherent in labor relations. As this Article shows, the labor law prescriptions of the Chicago law and economics scholars stand upon a particular economic methodology—one particularly ill-suited to explain and predict outcomes in labor law contexts which lie outside the theoretical realm.

Conceptually, power can be viewed as a calculus of compliance vis- \hat{a} -vis noncompliance vis- \hat{a} -vis

Costs to B of noncompliance (or disagreement) with A's terms

Costs to B of compliance

Costs to B of compliance (or agreement) with A's terms

Thus, A's power will increase as B's cost of noncompliance increases or, conversely, cost of compliance decreases. Stated another way, A's power is greater where B's costs of noncompliance are greater than its costs of compliance. The costs and, therefore, power can be both real or simply perceived, encompassing both tangible and intangible concerns. Power exercises essentially induce movement of position which either advances or retards elusive public policies. Moreover, power always presses against some resistance; it does not operate in a vacuum. Power, then, concedes nothing without a demand backed by countervailing power.¹⁰⁴ Thus, to complete the expression:

^{102.} POSNER, supra note 12. By "efficiency," Posner means "exploiting economic resources in such a way that 'value'—human satisfaction as measured by aggregate consumer willingness to pay for goods and services—is maximized." RICHARD A. POSNER, ECONOMIC ANALYSIS OF LAW 10 (2d ed. 1977). This formulation has its roots in the neo-classical assumption that each individual, in interactions with others, rationally seeks to maximize self-utility, that is, to derive as much satisfaction as possible given the constraints of limited resources. Id. at 3-4.

^{103.} Drawn from the conceptualization by NEIL W. CHAMBERLAIN, COLLECTIVE BARGAINING ch. 10 (2d. ed. 1965). See also Terry L. Leap & David W. Grigsby, A Conceptualization of Collective Bargaining Power, 39 INDUS. & LAB. REL. REV. 202 (1986).

^{104.} The concept of power, its use and abuse is at the core of many early political writings. Consider the observation of Thomas Hobbes:

For I doubt not but if it had been a thing contrary to any man's right of dominion, or to the interest of men that have dominion, that the three angles of a triangle should be equal to two angles of a square, that doctrine should have been, if not disputed, yet, by the burning of all books of geometry, suppressed, as far as he whom it concerned was able.

THOMAS HOBBES, LEVIATHAN 91 (Liberal Arts Press, Inc. 1958) (1651). Even a conservative monarchist such as Hobbes was not immune to censorship of his writings. *See also* GREGORY S. KAVKA, HOBBESIAN MORAL AND POLITICAL THEORY (1986).

Costs to A of noncompliance (or disagreement) with B's terms

Power of B =

Costs to A of compliance (or agreement) with B's terms

Generalizing, a party's power to impose significant costs of noncompliance on its opposition is directly related to its success at the bargaining table, the shop floor, or a public arena. The noncompliance costs resulting from power exercises in the multiple transactions which the NLRA attempts to structure are not weighted equally, nor are they all capable of being represented in neoclassical economic theory. Therein lies the arena for the methodological conflict between the law and economics proponents and tradition-based labor law analysis. That this conflict has not yet errupted openly into the realm of labor law practicum does not devalue the significance of the theoretical contest.

IV. ECONOMIC ANALYSIS IN LABOR LAW

A. Chicago-Style Law and Economics.

That the law and economics proponents are not a monolithic group is evident from their varied writings and the varied purposes to which they put economic analysis. In accordance with the view that the "Chicago School" economics approach is a narrow, but vocal, subset of neoclassical economics, law and economics writings from the different schools of economic thought must be similarly classified. Although some would deny the existence of a Chicago "School" of economic thought, 106 there is a remarkable degree of homogeneity among the views of economists trained at the University of Chicago and/or by economists trained by graduates of that university. Even a cursory scan of the law and economics literature reveals a dominance by the initial works of Chicago-style proponents, including Judge Richard Posner, Professor Ronald Coase, and the writings of Professor Richard Epstein. 107 Because these scholars have embraced the Chicago School methodology and are both prolific and influential in labor law and policy, an understanding of the Chicago School paradigm is required.

^{105.} The legislative and judicial balancing process enhances or constrains a party's interest by controlling power—the ability to impose a cost of noncompliance upon its opponent. As argued earlier, these power exercises embrace noneconomic as well as economic-based factors and policy concerns. Simply inventorying the power exercises is, however, not enough. Power exercises are not absolute but are situational and dynamic. See generally Samuel B. Bacharach & Edward J. Lawler, Power and Tactics in Bargaining, 34 INDUS. & LAB. REL. REV. 219, 220 (1981). Power exercises are goal directed and produce actual and/or perceived costs of noncompliance.

Šee Zimarowski, *supra* note 93, Table 1, at 68–70 (providing detailed treatment of employer arsenals).

^{106.} See George J. Stigler, Comment, 70 J. POL. ECON. 70 (1962) (Chicago Professor's response to an H. L. Miller article identifying a Chicago School of Economics).

^{107.} See, e.g., POSNER, supra note 12; Coase, supra note 78; Epstein, supra note 93. See supra note 93. The Journal of Law and Economics also serves as a major outlet for this

Among the tenets of this school of economic thought are: (1) a strong belief in the efficiency and equity of the free market; (2) a strong belief in the relevance of neoclassical microeconomic theory; 108 and, most importantly for purposes of this Article, (3) a strong belief that a distinction can be made between positive and normative economics; *i.e.*, between an objective and scientific explanation of "what is" in the economy and subjective, value-laden, and unscientific declaration of "what ought to be" in the economy. 109 Thomas S. Kuhn has defined such a shared set of beliefs among participants in a particular field of inquiry as a paradigm. 110 According to Kuhn, a paradigm provides the framework within which a researcher/decision-maker can work and helps to determine such things as which problems are worthy of study, how problems are defined, which research procedures are considered legitimate, and what criteria are to be considered as valid for the evaluation of results.

paradigm's approach to legal issues. Of note, most authors in this journal are trained in economics rather than law.

108. See Alfred S. Eichner, Why Economics Is Not Yet a Science, 17 J. ECON. ISSUES 507 (1983). Professor Eichner outlined four theoretical constructs that form the core of neoclassical microeconomic theory. They include:

(1) A set of indifference curves for each and every individual that when aggregated for all households represent the relative preferences for any two or more goods by the society as a whole;

(2) A set of continuous, or smooth, isoquants for each and every good produced that when taken together represent all the combinations of labor and other inputs that can be used to produce those goods;

(3) A set of positively sloped supply curves for all the different firms and industries comprising the enterprise sector, and

(4) A set of marginal physical product curves for all of the inputs used in the production process, not just the labor inputs but ... even more critically, the "capital" inputs.

Id. at 510.

These constructs form the foundation of a corpus of theory based on the concept of methodological subjectivism or the belief that the only "real" human entity is the individual. From this atomistic perspective, societies and groups are seen as nothing more than imaginative concepts and, consequently, all explanations are based on laws and statements that describe individual behavior. Cf. PAUL DIESING, PATTERNS OF DISCOVERY IN THE SOCIAL SCIENCES (1971). These "laws and statements," however, have long been criticized by psychologists as being unrealistic. See, e.g., Herbert A. Simon, On the Behavioral and Rational Foundations of Economic Dynamics, 5 J. Econ. Behav. & Organization 35 (1984). Basically, the neoclassicalists state that producers and consumers are rational, or able to select the optimal bundle of goods for consumption or inputs for production, via a global comparison of relative prices facilitated by perfect information. The neoclassical system contains no provisions for imperfect and/or delayed information, personal biases, the limitations of human cognitive ability, or factors other than relative prices (i.e., custom, habit, tradition) that affect human production and consumption decisions. Stated differently, the tenets of the neoclassical theory are static and hence unable to account for the ways in which individual behavior actually forms and evolves. See also GEOFFREY M. HODGSON, ECONOMICS AND INSTITUTIONS: A MANIFESTO FOR A MODERN INSTITUTIONAL ECONOMICS (1988); Warren J. Samuels, The Chicago School of Political Economy, in THE CHICAGO SCHOOL OF POLITICAL ECONOMY 1, 1-18 (Warren J. Samuels ed., 1976); Liebhafsky, supra note 1, at 41 n.2 (citing H. Lawrence Miller, On the Chicago School of Economics, 70 J. POL. ECON. 64, 64-70 (1962)).

109. ARJO KLAMER & DAVID COLANDER, THE MAKING OF AN ECONOMIST 21 (1990). Colander and Klamer surveyed graduate students at the University of Chicago and five other "top" economics programs for their views on "economics, the economy, and graduate school." From both the homogeneity of the Chicagoans' responses and their degree of adherence to the tenets ascribed to the Chicago School, Colander and Klamer concluded that: "there definitely seems to be a Chicago school of economics." *Id.* at 28.

110. THOMAS S. KUHN, THE STRUCTURE OF SCIENTIFIC REVOLUTIONS 10 (1962).

1. The Unity of Science and the Deductive Covering Law Model

The Chicagoans' belief that economic analysis can be conducted in an objective and valueless manner stems from their adherence to a unity of science thesis. This view holds that scientific analysis can be undertaken in *any* academic discipline provided it proceeds according to a "proper" set of methodological procedures. The set of procedures considered by the Chicagoans to be "proper" comes from a philosophy of science known as logical positivism. 12

Modern logical positivism can be viewed as a synthesis between two competing views on the nature of explanation—rationalism and empiricism.¹¹³ Rationalist thinkers believe that reality has an order and that humans can only come to know such order through reason. Consequently, they see an explanation as valid only if it is logically correct. Empiricist thinkers, on the other hand, see reality as a collection of discrete experiences. As a result, they believe that a valid explanation can only be derived from observation. The weakness of the rationalist approach is that it contains no mechanism for choosing between competing explanations of the same phenomenon that are each logically correct. The weakness of the empiricist approach is that any generalization based solely on observation is, by its very nature, uncertain. Logical positivism is an attempt to combine the strengths of rationalism and empiricism while avoiding their weaknesses.

A convenient vehicle for portraying the essence of the modern logical positivist approach is the deductive covering law model of explanation. This model was proposed in 1948 as a way of illustrating how "scientific" explanations are formed in the physical sciences. 114 As shown in Figure 1, the deduc-

^{111.} See Arnold Zellner, Bayesian Analysis in Econometrics, 37 J. ECONOMETRICS 27 (1988). See also Bruce J. Caldwell, Positivist Philosophy of Science and the Methodology of Economics, 14 J. ECON. ISSUES 53 (1980); BRUCE J. CALDWELL, BEYOND POSITIVISM: ECONOMIC METHODOLOGY IN THE TWENTIETH CENTURY (1982).

^{112.} Daniel R. Fusfeld, The Conceptual Framework of Modern Economics, 14 J. ECON. ISSUES 1 (1980). Fusfeld argues that the term "logical positivism" is most correctly associated with the original views of the "Vienna circle," a group of European intellectuals credited with the establishment of logical positivism, and should not be used to define the modern version that is employed by neoclassical economists. He suggests the term "logical empiricism" for this approach instead. Id. at 43 n.1.

^{113.} Charles K. Wilber & Jon D. Wisman, The Chicago School: Positivism or Ideal Type, 9 J. ECON. ISSUES 665, 666-68 (1975). See also Charles K. Wilber & Robert S. Harrison, The Methodological Basis of Institutional Economics: Pattern Models, Storytelling, and Holism, 12 J. ECON. ISSUES 61 (1978).

^{114.} C.G. Hempel & P. Oppenheim, Studies in the Logic of Explanation, 15 PHILOSOPHY SCI. 135 (1948). We do not wish to imply that the deductive covering law model is all that there is to logical positivism nor that all economists are in complete agreement about the nature of explanation in economics. Nevertheless, we feel that there is a substantial amount of literature on economic methodology that supports the arguments presented herein. See, e.g., Richard M. Cyert & E. Grunberg, Assumption, Prediction, and Explanation in Economics, in A BEHAVIORAL THEORY OF THE FIRM 298 (Richard M. Cyert & James G. March eds., 1963); Wilber & Wisman, supra note 113; Wilber & Harrison, supra note 113; Kenneth D. Mackenzie & Robert House, Paradigm Development in the Social Sciences: A Proposed Research Strategy, 3 ACAD. MGMT. REV. 7 (1978). A complete treatment of other views on the nature of explanation in economics, including those views that stand in disagreement with the arguments presented herein, are beyond the scope of this Article. See generally MARK BLAUG, THE METHODOLOGY OF ECONOMICS: OR HOW ECONOMISTS EXPLAIN (1980); CALDWELL, supra note 111; Michael J. Radzicki, On Extending the Institutionalist Paradigm: The Appropriate Place for System Dynamics within the Economics Profession, in PROCEEDINGS OF THE 1986 INTERNATIONAL CONF. OF THE SYSTEM DYNAMICS SOCIETY 465 (J. Aracil et al. eds., 1986). The most recent, and somewhat controversial, non-logical positivist view of how economists

tive covering law model consists of two parts: general "laws" of nature (the Ls) and antecedent conditions (the Cs). The general laws are those that are known to exist unchanged over time and space¹¹⁵ while the antecedent conditions are facts about the world that relate to the phenomenon being explained. Both of these parts are *required* to be true or thought to be true and to contain empirical content.¹¹⁶

The explanandum (E) is the phenomenon of interest that is to be explained. It takes the form of an empirically testable hypothesis that has been logically deduced from the explanans through the use of mathematics or other rules of logic. Observations from the real world are compared to the explanandum and, if they correspond, the explanandum is confirmed. When this occurs, the explanans is considered to be a "scientific" (as opposed to ad hoc) explanation because it has subsumed or "covered" the phenomenon of interest by one or more general laws of nature. Science thus proceeds forward as explanandums are tested, confirmed, and accumulated.

explain is presented in Donald N. McCloskey, The Rhetoric of Economics, 21 J. ECON. LITERATURE 481 (1983). See also Bruce J. Caldwell & A.W. Coats, The Rhetoric of Economists: A Comment on McCloskey, 22 J. ECON. LITERATURE 575 (1984); Donald N. McCloskey, Reply to Caldwell and Coats, 22 J. ECON. LITERATURE 579 (1984).

115. For example, the law of gravity is know to exist, in the same form, in 1988 as in 1888 and in China as well as the United States.

116. For example:

Why did the walls of a room painted white blacken? A possible explanation of this phenomenon is that (C_1) the paint contained lead carbonate, (C_2) sulfur was contained in the gas used for lighting the room, and (L_1) lead carbonate combines with sulfur to form lead sulfide, which is black.

Jaegwon Kim, Explanation in Science, in 3 THE ENCYCLOPEDIA OF PHILOSOPHY 159 (Paul Edwards ed., 1967). Or consider an example drawn from neoclassical economics:

In the immediate period following World War II after automobile production had resumed in the United States, recently manufactured automobiles which were sold as "used" cars had higher prices than similar automobiles which were sold as "new" cars ... The explanandum, therefore, is a used 1946 car selling for a higher price than a new 1946 car of similar make and model. The explanans consist of the following:

- C₁ Manufacturers set prices on new automobiles but not on used automobiles.
- C₂ Evidence indicated that at the prices set on new automobiles, the quantity demanded was greater than the quantity supplied.
- C₃ Dealers were able to transform new cars into used cars by having them driven a short distance.
- C_A New car dealers also have used car lots.
- L₁ Firms (dealers) exploit known opportunities for increasing their profits.
- The Law of Demand indicates that at any particular price there are some consumers willing to pay a higher price if necessary to obtain the product.

KALMAN J. COHEN & RICHARD M. CYERT, THEORY OF THE FIRM: RESOURCE ALLOCATION IN A MARKET ECONOMY 23 (1975).

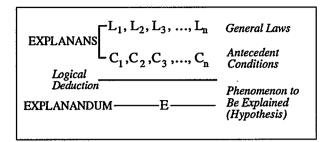


Figure 1: The Structure of the Deductive Covering Law Model

In terms of explanation in neoclassical economics, the general laws of the covering law model are represented by the various economic "laws" embedded in the structure of neoclassical theory. These include such microeconomic constructs as the law of demand, the law of diminishing marginal utility, and the law of diminishing returns. The antecedent conditions, on the other hand, are represented by the assumptions, initial conditions, and ceteris paribus conditions, that are necessary for the corpus of theory to hold true. Explanandums or hypotheses are mathematically deduced from the theory and tested using either direct observation of events in the economy or, more typically, various econometric techniques applied to numerical data. When utilized, numerical data is chosen to correspond as closely as possible to the concepts portrayed in the theory. The econometric testing procedures involve the estimation of the explanandum's parameters (such as marginal productivities and price elasticities) and the determination of their statistical significance. Good statistical correlation between the hypothesis and the numerical data is required for the explanandum to be confirmed.

One additional assertion embodied in the deductive covering law model is that explanation and prediction are symmetric concepts. This means that they are both descriptions of the same phenomenon with the only difference being that, in the case of prediction, the deduction of the explanandum comes before the real world observation, while in the case of explanation, the order is reversed. In short, under the tenets of logical positivism, to predict is to explain. Conversely, in the logical positivist method, an explanation is only considered to be "scientific" if it could also have been used to predict what was first observed.

Although some argue that the deductive covering law model embodies the essence of logical positivism and the neoclassical economic method, the methodology of the Chicago School has an additional "twist" to it. This twist, dubbed the "F-twist" by critic Paul Samuelson, 117 was first put forth in a 1953 essay by Chicago School economist Milton Friedman. 118 Friedman wrote his essay in response to, what was at the time, mounting criticism of the neoclassical

118. MILTON FRIEDMAN, The Methodology of Positive Economics, in ESSAYS IN

POSITIVE ECONOMICS 3 (1953).

^{117.} Paul Samuelson, Problems of Methodology-Discussion, 53 AM. ECON. REV. 231 (1963). See also Paul Samuelson, Theory and Realism: A Reply, 54 AM. ECON. REV. 736 (1964); Paul Samuelson, Professor Samuelson on Theory and Realism: Reply, 55 AM. ECON. REV. 1164 (1965); Stanley Wong, The "F-Twist" and the Methodology of Paul Samuelson, 63 AM. ECON. REV. 312 (1973).

theory of the firm. This criticism was directed at the unrealistic assumptions embedded in the theory by behavioral psychologists from, primarily, what was then the Carnegie Institute of Technology.¹¹⁹

The major assumptions that were attacked by the psychologists were those postulating that producers are able to maximize their profits or minimize their costs by selecting the *optimal* combination of inputs necessary to produce a given level of output. ¹²⁰ In neoclassical theory, the producer is able to accomplish this because he is assumed to react rationally to complete and perfect flows of information on the relative prices and productivities of all inputs used in the production process. The producer is assumed to be able to acquire additional units of each input up to the point at which its marginal revenue equals its marginal cost. The behavioral psychologists argued that no actual producer could ever have access to complete and perfect information and, even if one did, the producer would not possess the cognitive ability to organize it into a form that would facilitate an optimal production decision. In terms of the covering law model, the psychologists argued that the antecedent conditions (the Cs) were not true and hence the overall explanation or theory was not valid.

Friedman responded to this challenge by arguing that the assumptions under which a theory can be expected to hold true need not be descriptively accurate for the theory to be considered valid. Instead, he argued that the theory's validity should be judged by its ability to predict events that have not yet happened or that have not yet been discovered to have happened. To support this claim, Friedman cited examples from physics, biology, and billiards. He noted for example that, although the law of falling bodies (i.e., that any falling body accelerates at thirty-two feet per second per second) is valid only in a vacuum, it can be used to make generally good predictions about the acceleration of bodies falling on the earth. That is, in a wide range of circumstances, bodies that fall in the actual atmosphere behave as if they were falling in a vacuum. In the language so common in economics, this would be rapidly translated into "the formula assumes a vacuum." 121 Friedman concluded that the neoclassical theory of the firm should be retained because it yields empirically correct deductive predictions about the behavior of firms and markets through the use of the assumption that producers act as if they are rational. In terms of the covering law model, his argument rejects as necessary the criteria that the antecedent conditions (the Cs) be true or thought to be true. In fact, Friedman went even further by postulating that: (1) it is desirable to generalize a theory by making its assumptions less real—provided it predicts well; and (2) the choice between two theories that predict equally well should be made via the maximum use of Ockham's razor: The simpler of the two should be chosen. 122

An interesting debate has developed since 1953 when Friedman wrote his original essay. It concerns the proper camp in which to place the Chicago School's methodology and has basically arisen for two reasons. First, as a result of Friedman's rejection of the requirement that assumptions be descriptively accurate, the symmetry between prediction and explanation, so central to the

^{119.} See SIMON, supra note 2.

^{120.} Actually, J. DE V. GRAAFF, THEORETICAL WELFARE ECONOMICS (1967), lists seventeen descriptively inaccurate assumptions in neoclassical theory.

^{121.} FRIEDMAN, supra note 118, at 18.

^{122.} See Zellner, supra note 111, at 29-32.

type of logical positivism represented by the covering law model, is effectively severed in the Chicago School's paradigm. This separation gives rise to the notion that "valid," "logical positivist," theories need only to predict—not explain. 123

Second, the Chicago School economists have rarely, if ever, abandoned one of their theories when it did not yield an accurate prediction. ¹²⁴ This occurs because the Chicagoans chalk-up a failed prediction to either a loosening somewhere of a *ceteris paribus* condition or to a measurement problem with the numerical data used in their econometric tests. Indeed, one can argue that the methodology of the Chicago School is actually a form of rationalism because Chicago School theories are completely insulated from rejection. ¹²⁵ Thus, because neither the inability to predict nor the descriptive inaccuracy of its assumptions will lead to its abandonment, the validity of a Chicago School theory is determined solely through an inspection (and acceptance) of its internal logic. ¹²⁶

In contrast, many prominent scholars believe that Chicago School economists are not rationalists but instrumentalists. Instrumentalists describe theories as neither true nor false but merely adequate or inadequate for a given problem.¹²⁷ One scholar, however, notes that philosopher Karl Popper "equates instrumentalism with logical positivism and denounces them both."¹²⁸ Another writes that "Friedman is not guilty of 'instrumentalism'"¹²⁹ and refers to Friedman's essay as "Popper-with-a-twist applied to economics."¹³⁰ Curiously, Friedman has never responded, in print, to anything that has been written about his essay. He has, however, recently stated that he "completely accepts" the characterization of his views as instrumentalist.¹³¹

2. Implications for Legal Methodology

The relevance of the foregoing discussion of *economic* methodology for *legal* methodology lies in the persuasive strength of law and economics propo-

^{123.} In fairness to Friedman, he did not use the covering law model to build his case and it is not known whether or not he was aware of it when he wrote his essay.

^{124.} Wilbur & Harrison, supra note 113, at 69; Wilbur & Wisman, supra note 113, at 671.

^{125.} Wilbur & Wisman, supra note 113, at 666, 671.

^{126.} For an illustration of the insulation of the Chicago School theory see Charles K. Wilber, *Empirical Verification and Theory Selection: The Keynesian-Monetarist Debate*, 13 J. ECON. ISSUES 973 (1979).

^{127.} See Wong, supra note 117, at 324. See also Lawrence A. Boland, A Critique of Friedman's Critics, 17 J. ECON. LITERATURE 503 (1979); James R. Wible, The Instrumentalism of Dewey and Friedman, 17 J. ECON. ISSUES 1049 (1984); CALDWELL, supra note 111.

^{128.} Wendell Gordon, The Role of Institutional Economics, 18 J. ECON. ISSUES 369 (1984).

^{129.} MARK BLAUG, ECONOMIC THEORY IN RETROSPECT 703 (3d ed. 1978).

^{130.} Id. at 714. See also Mark Blaug, Kuhn Versus Lakatos, or Paradigms Versus Research Programmes in the History of Economics, 7 HIST. OF POL. ECON. 399 (1975).

^{131.} Lawrence A. Boland, Boland on Friedman's Methodology: A Summation, 21 J. ECON. ISSUES 380, 382 (1987). Thus, it appears that despite the title of his essay, Friedman has changed his mind about claiming that his methodology is positivist. See William J. Frazer & Lawrence A. Boland, An Essay on the Foundations of Friedman's Methodology, 73 AM. ECON. REV. 129 (1983).

nents such as Richard Posner and others who command attention. ¹³² Even a cursory examination of the law and economics literature show the influence of the Chicago School's reality-defying explanans. Consider two such general positions advocated by the law and economics, Chicago style, proponents. The paramount statutory purpose behind the NLRA and all legislation, the Chicago-style law and economics proponents argue, is simply economic efficiency. ¹³³ Drawing from Richard Posner's general proposition, "the ultimate decision in many lawsuits is, what allocation of resources will promote economic efficiency." ¹³⁴ The decision process is guided by which party's interest has the greatest market value. ¹³⁵

In the context of labor law scholarship, Chicago-style law and economics proponents and kindred spirits acknowledge that economic modeling has not traditionally been applied to explain the statutory market restructuring manifest in the NLRA and similar legislation, ¹³⁶ or the outcomes produced by various power exercises under the Act and related legislation. Recognizing that the NLRA was also concerned with redistributing bargaining power or wealth, ¹³⁷ they instead invoke efficiency analysis to critique the redistributive institutions mandated by statute, such as legally-protected concerted employee activity ¹³⁸ and collective bargaining ¹³⁹ as hindrances to the operation of market forces, arguing that alternative laissez-faire legal orders would produce more efficient results. ¹⁴⁰ This work in general displays little regard for the NLRA's basic goal of promoting industrial democracy, ¹⁴¹ viewing pursuit of these goals as part of

^{132.} One scholar makes the point in these words: "[T]here [is] no way to judge a theory except by the strength and energy of its advocates, ... power is the ultimate source of truth." Fusfeld, supra note 112, at 9.

^{133.} POSNER, supra note 12.

^{134.} Id. at 320.

^{135.} Liebhafsky, supra note 1, at 24. See also, Kelman, supra note 78; Warren J. Samuels, The Coase Theorem and the Study of Law and Economics, 14 NAT. RESOURCES J. 1 (1974).

^{136.} See Karl E. Klare, Judicial Deradicalization of the Wagner Act and the Origins of Modern Legal Consciousness, 62 MINN. L. REV. 265 (1978).

^{137.} Thomas J. Campbell, Labor Law and Economics, 38 STAN. L. REV. 991, 992-93 (1986). Professor Campbell is somewhat unusual in his deference to the non-economic policies expressed in the NLRA. In the context of his critique of economists who view the statutory grant of monopoly power to unions as based solely on economic efficiency concerns, he states: "My main criticism of the limited amount of previous economic analysis of labor law is its tendency to ignore legislative history in formulating the legitimate goals of labor law [T]he economist must first recognize that Congress intended a wealth transfer, not merely efficiency enhancement." Id. at 995. Judge Posner, on the other hand, perceives the goals of the Act as openly hostile to pursuit of efficiency by the firm. See Richard Posner, Some Economics of Labor Law, 51 U. Chi. L. Rev. 988, 999-1011 (1984).

^{138.} See Posner, supra note 136, at 990-91.

^{139.} See, e.g., Schwab, supra note 78; Douglas L. Leslie, Labor Bargaining Units, 70 VA. L. REV. 353 (1984).

^{140.} Epstein, supra note 93.

^{141.} See, e.g., Schwab, supra note 78, at 256. Professor Schwab discounts the primacy of the redistributive and democratic objectives of federal labor law legislation, stating that "these alternate societal goals have been overshadowed by the concern for industrial peace." For a discussion of these alternate power-equalization goals, see supra notes 85-105 and accompanying text. In fairness, Schwab acknowledges the legitimacy of enforcing the Act's distributive goals, and the limitations of the Coase theorem when transaction costs or other factors prevent efficient operation of labor markets, but he appears to endorse Posner's prescription that the appropriate legal response to such market failure is to adopt compensatory rules that attempt to "mimic the market." Id. at 287. See also Richard Posner, Statutory Interpretation—In the Classroom and in the Courtroom, 50 U. CHI. L. REV. 800 (1983);

the economic "cost" of the policy choices embedded in the Act. Some prominent Chicago-style law and economics proponents have, however, attempted to take their methodology beyond the limitations of critique.

While acknowledging its normative or critical role, Judge Posner expressly declares that his economic analysis of law is positivist; that it is of value in explaining rules and the outcomes they produce. 142 He does not insist that efficiency always is, or should be, the sole value expressed in legal rules. 143 But the insistence of the Chicago-style law and economics scholars on viewing all legal ordering of economic relationships through the lens of comparative efficiency belies any nominal deference to the relative importance of other policy goals. Allocational efficiency is the lodestar, the highest good, and the standard by which all legal rules are tested under the paradigm. While it has been more successful in this respect in other areas of the law, Chicago-style law and economics in labor law and policy has proven to be a less useful tool of positivism than as a normative critical device. Yet some law and economics proponents envision a positivist role for their paradigm in labor law and policy.

Positivist positions advanced by law and economics proponents in the labor law context illustrate the deficiency of the Chicago School paradigm. Professor Schwab writes that the principal policy goal expressed in the NLRA was the preservation of "industrial peace" 144 which manifested Congress' "desire[] to maintain a capitalist economy and to promote smooth and efficient commerce."145 From this, he concludes: "It thus seems natural to equate the goal of industrial peace with the goal of an efficient economy where capital and labor flow freely."146 Thus, he postulates, a system which depends upon collective bargaining as a means of securing industrial peace cannot promote this efficiency-based goal by adopting particular rules, because the affected parties may "contract around legal rules" through the statutorily-integral device of collective bargaining. Applying the Chicago-style paradigm to the plant relocation context, he predicts that the parties in any event will bargain to an efficient outcome regardless of legal rules imposed by the Act's construction.147

Richard Posner, Utilitarianism, Economics and Legal Theory, 8 J. LEGAL STUD. 103 (1979). Cf. supra note 63. For arguments in favor of revitalizing the NLRA's legacy of industrial democracy, see Karl E. Klare, Workplace Democracy & Market Reconstruction: An Agenda for Legal Reform, 38 CATH. U. L. REV. 1 (1988); Alan Hyde, Democracy in Collective Bargaining, 93 YALE L.J. 793 (1984).

^{142.} POSNER, *supra* note 12, at 18. 143. *Id.* at 17–18.

^{143.}

^{144.} Schwab, supra note 78, at 252-54.

^{145.} Id. at 254.

^{146.}

^{147.} Schwab applied the Coase theorem, which stresses individual utility-maximization, to predict that rules imposed by the NLRB or the courts concerning midterm transferability of work cannot affect job security or the mobility of capital during the contract term. Instead, the parties' preferences determine the contract terms. "Recall that, in justifying Milwaukee I, the Board proclaimed that the result [transfer of work to another plant violated section 8(a)) (1), 8(a) (5) and 8(d) of the NLRA] promoted industrial peace by fostering contract stability." Id. at 260. See Milwaukee Spring Div. of Ill. Coil Spring Co., 265 N.L.R.B. 206 (1982), rev'd on reh'g, 268 N.L.R.B. 601 (1984), aff'd sub nom., UAW v. NLRB, 765 F.2d 175 (D.C. Cir. 1985). "If contract stability means that the company should not be able to transfer work during the contract term, the Coase theorem demonstrates that the Board's decision is irrelevant. Regardless of the Board's holding, the company will stay only if a union values a stay clause more than the company values mobility." Schwab, supra note 78, at 260.

Therefore, he argues, legal rules cannot affect the long-term efficiency of the collective bargain.

Professor Campbell, while more solicitous of the NLRA's non-economic tradition, 148 suggests resort to economic analysis in labor law as a predictive "gap-filler," to provide guidance in the face of an unclear statute. 149 Professor Campbell, relying on a familiar explanans, the elasticity of the derived demand for labor, attempts to take law and economics analysis beyond issues concerning the formation and preservation of labor monopolies in bargaining relationships toward a more comprehensive theoretical model of how a labor union might use its monopoly power to make various tradeoffs between consumers, employers and employees.¹⁵⁰ From his analysis, Campbell extracts a fairly simple explanadum:

Labor is entitled to engage in any activity deriving benefit by reason of the labor monopoly at the firm or industry level. Labor may also use its efforts to manipulate elasticities of substitution at the firm or industry level, and elasticities of supply of other factors at either level. It may not, however, attempt to benefit by manipulating the elasticity of demand for the final product of the firm or the industry. 151

In addition, a central tenet of recent law and economics proponents is that the Chicago-style methodology is useful as an instrument of exposing sub rosa explanations for legal decisions which are different from explicit rationales advanced by the decision makers. In essence, the argument runs that law often unconsciously seeks the goal of efficiency without admitting it, or by shrouding implicit promotion of efficient resource distribution in other explicit policy goals. 152 This approach is also evident in scholarly commentary on several controversial labor law decisions.

Indeed, certain recent judicial and NLRB decisions concerning subcontracting and plant relocation or closing decisions, while certainly not explicitly embracing Chicago-style law and economics conceptual methodology, or that paradigm's fetish for efficiency, seem to reflect a pronounced sympathy for the economic effects of statutory limitations on firms' ability to respond efficiently to market declines. In First National Maintenance Corp. v. NLRB, 153 the Supreme Court declared that the firm could respond to lagging demand for its services through a partial closure without subjecting the decision to mandatory collective bargaining. Several commentators have explained this decision as an example of a rule of law promoting efficient functioning of labor markets. 154

^{148.} See Campbell, supra note 137, at 992.

^{149.} Id. at 993.

Id. at 1004-10, 1022-47. 150.

^{151.} Id. at 1061-62.

^{152.} See, e.g., POSNER, supra note 12; David Locke Hall, Judicial Deference to Collectively Bargained Pension Agreements: The Implicit Economics of a Legal Standard, 4

HOFSTRA LAB. L.J. 111 (1986).
153. 452 U.S. 666, 686 (1981).
154. Michael L. Wachter & George M. Cohen, The Law and Economics of Collective Bargaining: An Introduction and Application to the Problems of Subcontracting, Partial Closure, and Relocation. 136 U. PA. L. REV. 1349, 1390–95 (1988); Jeffrey D. Hedlund, Note, An Economic Case for Mandatory Bargaining Over Partial Termination and Plant Closing Decisions, 95 YALE L.J. 949 (1986); Armen A. Alchian, Decision Sharing and Expropriable Specific Quasi-Rents: A Theory of First National Maintenance Corporation v. NLRB, 1 SUP. CT. ECON. REV. 235 (1982).

More recently, Professors Wachter and Cohen advanced a theory concerning a firm's response to declines in product demand, focusing on labor market dynamics internal to the firm. 155 Like Schwab, they agree that market forces operate to render legal rules essentially irrelevant in affecting efficient outcomes in bargaining encounters, but only with respect to the external labor market. 156 With respect to labor markets internal to the firm, they believe that legal rules can "correct" for market failure to ensure results that approximate those predictable under a neoclassical model.¹⁵⁷ They postulate that firms may efficiently act unilaterally in adapting to such conditions by subcontracting or relocating work "as long as they incur a sunk-cost-loss." 158 Under their view. recent decisions involving firm subcontracting, partial closure and work relocation decisions may be justified as "consistent with efficient contracting in the internal labor market."159 They state: "The sunk-cost-loss rule makes explicit the economic intuitions underlying these opinions and demonstrates a consistency across the cases that is not otherwise obvious."160 For example, the NLRB's decision in Milwaukee Spring II,161 in which a firm decided to relocate its assembly operations to a non-union plant in response to the loss of a major customer, has also been defended as an economically efficient firm decision. 162 Similarly, the Board in Otis Elevator II,163 in which the firm had refused to bargain over a relocation decision, adopted a test of whether relocation was a mandatory subject of bargaining has been identified as one emphasizing internal firm efficiency. 164

Perhaps the most interesting manifestation of Chicago-style positivism in labor law and policy involves Judge Posner himself. Recent decisions and commentary suggests that he may be taking his understanding of the function of the NLRA, which is informed by his economic analytical methodology, from the academy to the bench. 165 Judge Posner's scholarly writings reflect his view that unionization under the NLRA tends to cartelize labor markets, with a resulting

^{155.} Wachter & Cohen, supra note 154.

Id. at 1353. In Wachter and Cohen's view, external labor markets, by which they mean markets for new employees, "closely resemble the textbook economic model in which the supply of and demand for labor determine the wage. These markets approach allocative efficiency because of the mobility of workers and competition among firms for these workers. Under such circumstances, the law cannot enhance the efficiency of the economic result." Id.

^{157.} Id. at 1357-58.

Id. at 1354-55. See generally id. at 1354-61, 1379-86. For a discussion of the scope of the term "sunk-cost-loss," see id. at 1360 n.45.

^{159.} Id. at 1354-55. The cases which Wachter and Cohen analyze under their "sunk-costloss" model are: Fiberboard Paper Prods. Corp. v. NLRB, 379 U.S. 203 (1964); First Nat'l Maintenance Corp. v. NLRB, 452 U.S. 666 (1981); Otis Elevator Co., 269 N.L.R.B. 891 (1984) (Otis Elevator II); and Milwaukee Spring Div., 268 N.L.R.B. 601 (1984), aff d sub nom., UAW v. NLRB, 765 F.2d 175 (D.C. Cir. 1985) (Milwaukee Spring II). See Wachter &

Cohen, supra note 154, at 1378-99. 160. Wachter & Cohen, supra note 154, at 1355.

^{161.} Milwaukee Spring Div., 268 N.L.R.B. 601 (1984), aff'd sub nom., UAW v. NLRB, 765 F.2d 175 (D.C. Cir. 1985). The union in Milwaukee Spring II had bargained, but eventually reached deadlock. Id. at 601.

^{162.} See Wachter & Cohen, supra note 154, at 1405-15; Schwab, supra note 78, at 251-53.

^{163.} Otis Elevator Co., 269 N.L.R.B. 891 (1984).

^{164.} See Wachter & Cohen, supra note 154, at 1402-05. 165. See, e.g., Continental Web Press, Inc. v. NLRB, 742 F.2d 1087, 1090 (7th Cir. 1984) (Posner, J.); NLRB v. Res-Care, Inc., 705 F.2d 1461 (7th Cir. 1983) (Posner, J.).

increase in labor prices above efficient levels. 166 He has stated in a judicial opinion that NLRB decisions display an "all too frequent bias toward unions." 167 A recent article examined five of Judge Posner's labor law opinions which "indicate that he is willing to override the Board's decisions whenever necessary to enforce the spirit of [labor/management] neutrality expressed in the [1947] Taft-Hartley Amendments [to the NLRA],"168 which Posner views as a congressional mandate to equalize the NLRA's pro-union bias.

While these examples by no means exhaust the recent literature evincing a law and economics approach to labor law, they clearly demonstrate the currency of the Chicago-style methodology, and the imprint of logical positivism. Generally, when examining a particular conflict situation, Chicago-style law and economics mandates a decision which maximizes the economic efficiency of the party having the most market power, 169 and, because the discipline of the market is accepted as unassailable truth, 170 it is taken on faith that society will inevitably benefit. The Coase theorem, which informs many of the Chicago School's arguments for limited legal and governmental regulation of markets and bargaining relationships, assumes a free market as a universal law/truth governing all behavior, and that, with no antecedent transaction costs, exclusive reliance on a bargaining paradigm will assure that all transactions will achieve economic efficiency, regardless of the starting points of the bargaining parties. 171 The presence or absence of legal rules or entitlements are viewed as, at best, irrelevant¹⁷² or, at worst, forces which impair attainment of efficiency through the discipline of the market. 173 The theorem postulates that the relative entitlements of bargaining parties, including the power positions established by legal working rules, will not materially affect the outcome of bargaining encounters.¹⁷⁴ But the predictive capacity of these models depend upon blind assumption of a rigid set of antecedent conditions necessary for its operation: that the parties have perfect information and that no transaction costs exist. Needless to say, the existence of such optimal conditions in real world labor markets is rare,175

Posner, supra note 137, at 991, 998; Posner, supra note 12, at 239. 166.

East Chicago Rehabilitation Ctr. v. NLRB, 710 F.2d 397, 402 (7th Cir. 1983), cert. 167. denied, 465 U.S. 1065 (1984).

^{168.} Leonard Bierman, Judge Posner and the NLRB: Implications for Labor Law Reform, 69 MINN. L. REV. 881, 884 (1985).

See Klare, supra note 136. 169.

Campbell, supra note 137, at 992-93. 170.

^{171.} See 29 U.S.C. § 159(a) (1982); See Posner, supra note 137, at 990-91. See also Schwab, supra note 78, at 273-78 (concluding that Coase's "invariance" thesis is valid in the labor law contest in certain circumstances).

Schwab, supra note, 78 at 246.

^{173.}

See e.g., id.; Leslie, supra note 139.
Daniel R. Fischel, Labor Markets and Labor Law Compared with Capital Markets and Corporate Law, 51 U. CHI. L. REV. 1061, 1064 (1984).

^{175.} In the lexicon of neoclassical economics, the presence of imperfect information and transaction costs are referred to an "market failures" which impair attainment of an efficient outcome. Recent scholarship has documented that labor markets are in practice subject to complex forms of market failure, amply demonstrating the severe limitations of the Chicago school's efficiency analysis as an accurate predictive device. See FREEMAN & MEDOFF, supra note 76, at 3-25; see also Klare, supra note 141, at 32-35. See also supra note 108 (discussing neoclassical theories' lack of provision for imperfect and delayed information, limitations of human cognitive capacity, personal biases, and other non-price-related factors affecting production and consumption decisions).

To the degree that the underlying paradigm is in error, any legal decisions emanating from it will also be erroneous. As amply demonstrated in the critical literature, adapting the Chicago-style methodology to legal policy analysis can result in significant distortions of reality. 176 Foisting this approach upon labor law and policy is only possible if the purposes and policies of the NLRA are ranked in a manner favoring those policy goals which can be the subject of economic modeling, such as avoidance of disruptions in the flow of interstate commerce, 177 or assuring stable wage rates. 178 Favored policy objectives are recast in terms of economic efficiency, while more ephemeral policies enshrined in the NLRA are subordinated, or more precisely—because they are incapable of neoclassical economic modeling¹⁷⁹—ignored outright as unproductive of efficient outcomes.

The complex behavioral and political dimensions of respective power arsenals of labor and management and control over the costs of non-compliance do not lend themselves to adequate neoclassical economic modeling. 180

B. Institutional Methodology—An Alternative Approach

The paradigm of the Chicago School, with its "F-twist view" of the "proper" way to conduct "scientific" economic analysis, is by no means the final word on the subject. Indeed, a group of economists, broadly classified as institutional economists, have long adhered to a paradigm that is strikingly different from that based on F-twist logical positivism and yet, arguably, every bit as legitimate. In fact, when this alternative paradigm is related to the traditional practice of legal research and, more specifically, to the conduct of research and decision-making in labor law, it is much more appropriate for the study of law and economics than is the paradigm of the Chicago School. 181

1. The Tenets of Institutional Economics

Institutional economics has been defined as both the "economics of dissent" and as the "conscience of the economics profession." 182 Basically, institu-

176. See Epstein, supra note 93.

177. See supra notes 106-47 and accompanying text.

178. See 29 U.S.C. § 151 (1982) (one policy goal of NLRA to assure stable wage rates); Wachter & Cohen, supra note 154, at 1352 n.5 (NLRA "describes as one of its goals the 'stabilization of competitive wage rates'. This language suggests an appreciation of the goal of economic efficiency.") (citation omitted).

179. Professor Campbell, in explaining why labor law has not traditionally been the subject of economic analysis, notes: "the motivations behind the labor laws respond to the one area regarding which classical microeconomics offers the least guidance: a desire to transfer wealth from one group of persons to another." Campbell, supra note 137, at 992.

Id. at 1004-11.

181. See Irvin M. Grossack & Samuel M. Loescher, Institutional and Mainstream Economics: Choice and Power as the Basis for a Synthesis, 14 J. ECON. ISSUES 925 (1980); William M. Dugger, Methodological Differences Between Institutional and Neoclassical Economics, 13 J. ECON. ISSUES 899 (1979); Wilber & Harrison, supra note 113.

For a complete discussion of the tenets of institutional economics see ALLAN G. GRUCHY, THE RECONSTRUCTION OF ECONOMICS: AN ANALYSIS OF THE FUNDAMENTALS OF INSTITUTIONAL ECONOMICS (1987); Symposium, Evolutionary Economics 1: Foundations of Institutional Thought, 21 J. ECON. ISSUES 951 (1987); Thorstein Veblen, Why is Economics Not an Evolutionary Science, 12 Q.J. ECON. 373 (1898) (generally considered to be the first paper of the subject). It must be steesed that, although similar in many respects, institutional economics is not Marxian economics and many differences between the two schools of thought exist. See also supra text accompanying notes 27-55. Indeed, Gruchy has gone so far as to

tional economists object to the tenets of neoclassical economic theory and the attempt to force economic analysis into a F-twist logical positivist framework. The institutionalist methodology focuses "upon ... an holistic and evolutionary view of the structure-behavior-performance of the economy ... in a system of general interdependence or cumulative causation." The methodological problems of self-validated universal truths, and simplistic, puerile modeling are mitigated. Using the familiar case study approach, institutionalists seek to construct pattern, in contrast to predictive, models drawing from a factual basis rather than unassailable universal truths. In contrast to the neoclassical economists to whom prediction obviates the need for explanation, the institutionalists view understanding through pattern models as resulting in explanation. 184

The institutionalists see social systems as evolving political-economiccultural processes. Human decision-making is studied in a behavioral context as it actually occurs—that is, as a dynamic, cultural, structural, institutional, imperfect phenomenon—instead of as a theoretical, static, constrained optimization problem based solely on information about relative prices. 185 More specifically, institutional economists believe that human behavior is goal-directed (instead of price-directed) and that the goals pursued both determine and are determined by the values, rules, laws, incentives, traditions, and technologies (i.e., the structure) of the social system. 186 Further, because within this framework people interact while pursuing incompatible goals, the institutionalists see conflict as the primary consequence of goal-seeking behavior and as the engine of evolution for a social system. For a society as a whole, moreover, the institutionalists believe that the groups that possess the most power are the ones that are able to dominate the conflicts and force their goals to the top of the social agenda. As a consequence, institutional economists see their role as one of designing policies that can mitigate socioeconomic conflicts, balance power relationships, facilitate the assembly of an equitable state of socioeconomic

183. Warren J. Samuels, The Journal of Economic Issues and the Present State of Heterodox Economics, Report to 1974 and 1976 AFEE Executive Board 41, quoted in Wilber &

Harrison, supra note 113, at 73.

185. For example, an actual person may decide to eat fish on Friday out of habit or because it is a religious or family tradition, and not because its substitution into a theoretical bundle of goods leads to a maximization of his or her utility, given a global set of relative prices

and a budget constraint.

identify four main categories of institutionalists, each of which differs significantly from each other. Allan G. Gruchy, *The Current State of Institutional Economics*, 41 AM. J. ECON. & SOC. 225 (1982). See also Allan G. Gruchy, *Neo-Institutionalism, Neo-Marxism, and Neo-Keynesianism: An Evaluation*, 18 J. ECON. ISSUES 547 (1984).

^{184.} See Radzicki, supra note 114. Since the legal system cannot ignore causation, power and conflict, as well as a description and understanding of the relationships, the institutionalist methodology is preferrable as it closely parallels the case study methodology used in legal analysis.

^{186.} For an elaboration on the assumption of goal seeking behavior see DAVID HAMILTON, NEWTONIAN CLASSICISM AND DARWINIAN INSTITUTIONALISM: A STUDY OF CHANGE IN ECONOMIC THEORY (1953); ALLAN G. GRUCHY, CONTEMPORARY ECONOMIC THOUGHT: THE CONTRIBUTION OF NEO-INSTITUTIONAL ECONOMICS (1972); Allan G. Gruchy, Institutional Economics: Its Development and Prospects, in ECONOMICS IN INSTITUTIONAL PERSPECTIVE: MEMORIAL ESSAYS IN HONOR OF K. WILLIAM KAPP 11 (Rolf Steppacher et al. eds., 1977).

goals, and aid in a society's attainment of its goals. This role closely resembles that of the legal system and legal methodology.

In direct contrast to the Chicago School's positivist approach, institutional economists employ a pattern-modeling approach to explanation, understanding, and policy formation. Instead of deducing, in a top-down fashion, predictions from timeless universal laws embedded in theories with descriptively inaccurate assumptions, institutional economists construct pattern models from the direct observation of actual human behavior. The institutionalists obtain their observations from case studies undertaken in field settings and from controlled experiments.¹⁸⁸ The pattern-modeling approach is considered to be the modern version of a "look and see" method of economic analysis and the case approach.¹⁸⁹

Pattern modeling is based on the philosophy of holism. In the same way that one cannot appreciate the music of a symphony by listening to only one instrument, nor recognize the scene depicted in a jigsaw puzzle through the inspection of only a single piece, holism postulates that social systems can only be understood through an examination of all of their parts and the ways in which they are joined together. This again is in stark contrast to the Chicago School's reductionist methodology which is based on the view that the correct way to study a social system is through dissection and isolation of its individual parts.¹⁹⁰

The construction of a pattern model proceeds in a manner that has been likened to a detective piecing together the clue's at a scene of a crime, a physician diagnosing a disease, or a lawyer formulating legal argument. An institutional economist searches the social system under study for the various themes that illuminate its oneness and wholeness. These themes are the pieces of soci-

^{187.} See, e.g., GRUCHY, supra note 32, at 473-539 (discussing Gardner C. Mean's Administrative Economics Policies).

^{188.} An example of a field study is an institutional economist joining a coal company as a miner (or at least spending significant amounts of research time with coal miners as they worked on their jobs) to see and experience the coal mine's operation, from labor-management relationships to mining techniques, first hand. The institutionalist's information would thus come from a variety of sources including observation, interviews, personal experiences, and any available numerical information (i.e., the number of mine related fatalities each month or the number of tons of coal mined per worker per day). Professor John R. Commons required his graduate students in labor economics to do this very thing—that is, to spend time working as manual laborers in order to gain first-hand experience. See Martin Bronfenbrenner, Early American Leaders—Institutional and Critical Traditions, 75 AM. ECON. REV. 13 (1985). In the case of controlled experiments, a much newer subfield of economics called "experimental economics" is involved. Experimental economics is concerned with using the methods of behavioral psychology to test the response of human subjects to various stimuli in controlled laboratory conditions that mimic situations of economic decision making. Often this involves the subject participating in some sort of economic "game". The controlled conditions of the laboratory are thought to facilitate greater accuracy in the observation and measurement of human decision choices. See Charles R. Plott, Industrial Organization Theory and Experimental Economics, 20 J. ECON. LITERATURE 1485 (1982); John D. Sterman, Testing Behavioral Simulation Models by Direct Experiment, 33 MGMT. SCI. 1572 (1987).

^{189.} See GRUCHY, supra note 32.

^{190.} In further contrast to the hierarchical, top-down, structure of the deductive covering law model of explanation, a pattern model of explanation can be thought of as having its explanans and explanandum at the same level of generality. See Wilber & Harrison, supra note 113, at 76-77. A well known allegory that illustrates the folly of the reductionist approach is The Blind Ones and the Matter of the Elephant, in TALES OF THE DERVISHES: TEACHING-STORIES OF THE SUFI MASTERS OVER THE PAST THOUSAND YEARS (Idries Shah ed., 1969).

ety's structure—the values, incentives, laws, rules, etc., and their interrelationships—that contribute to an understanding of why people in the system make the choices they do. Once identified, these themes are joined together into an overall pattern of explanation.¹⁹¹ Through the insights gained during the pattern model's construction, the institutional economist is able to formulate policy recommendations to decision-makers and the public which account for the competing interests of all parties.

2. Institutional Dynamics

One of the most common criticisms of pattern modeling is that it is not very precise or "rigorous." Similar criticism has also been made of legal methodology. Generally speaking, this criticism can be translated into: Pattern modeling is not mathematical. The institutionalist's traditional response is that the constraints imposed by mathematics would force the loss of the rich social science flavor that is the hallmark of pattern modeling. In other words, institutionalists argue that the introduction of mathematics would hamper their ability to include any and all themes that are perceived to be important, regardless of their physical and measurable natures or metaphysical and nonmeasurable ones.

Recently, however, a means of adding mathematical rigor and precision to the pattern-modeling process, without the need to sacrifice any of its richness, has been proposed. 192 This method, termed "institutional dynamics," not only preserves the strengths of the traditional pattern-modeling approach, but also adds significantly to its value. Institutional dynamics is a marriage between the traditional pattern-modeling methods of institutional economists and system dynamics computer-simulation modeling.

The traditional pattern-modeling approach suffers from three main weaknesses.¹⁹³ First, because of the enormous amount of information available (especially when conducting a case study in a field setting), the institutionalist researcher often experiences difficulty identifying the various themes that are vital to an emerging pattern explanation. Second, even if the institutionalist is able to identify the important themes, he has no way of structuring them beyond the spoken or written word. And third, since institutional economists are interested in the evolutionary behavior of social systems and in policy formation, they must necessarily identify the dynamic behaviors inherent in their pattern explanations in order to evaluate, over time, the consequences of alternative policy choices. In the traditional approach, however, this can be problematic because the unaided human mind is a poor dynamic simulator and, thus, generally unable to keep track of the consequences of a policy change as it winds its way through the complex pattern that comprises a social system.

^{191.} Professor Fusfeld prefers the term "Gestalt" model to pattern model because he feels it is based on the fundamental premise of Gestalt psychology: "learning takes place by a process of integrating new ideas and information with other ideas and information in a pattern of relationships meaningful to the individual." Fusfeld, supra note 112, at 29. Abraham Kaplan, on the other hand, suggests the term "concatenated model" for obvious reasons. ABRAHAM KAPLAN, THE CONDUCT OF INQUIRY 329 (1964).

192. Michael J. Radzicki, Institutional Dynamics: An Extension of the Institutionalist Approach to Socioeconomic Analysis 22 L ECON ISSUES 633 (1988).

Approach to Socioeconomic Analysis, 22 J. ECON. ISSUES 633 (1988).

193. Id. See generally Jay W. Forrester, System Dynamics—Future Opportunities, in SYSTEM DYNAMICS 7 (A. Legasto et al. eds., 1980).

The addition of system dynamics computer-simulation modeling, however, strengthens traditional pattern modeling where it is weak. System dynamics, as is institutional economics, is based on the tenet that goal seeking is the fundamental human behavior. Goal seeking is formally represented in the system dynamics model by negative feedback loops. In a negative loop, a computer compares its perception of the actual state of a system with its desired or goal state and, if a discrepancy exists, motivates action that feeds back to change the actual state of the system. In addition, a second class of feedback loops, known as positive loops, exists in system dynamics modeling. Generally speaking, these positive loops are used to formally represent the self-reinforcing growth (or decline) processes of a system.

Thus, system dynamics models are constructed with two types of building blocks: positive and negative feedback loops. These loops are used to formally map out a social system's structure and then simulate the causes and effects that define its evolutionary behavior. They can also be used to overcome the weaknesses of the traditional approach to pattern modeling. Relevant themes can be separated from the irrelevant by the criteria that they be part of a feedback loop. These relevant themes must then be explicitly represented with computer source code where, the very act of translating their verbal and/or written description into their mathematical counterparts, forces clarity and logical consistency into the pattern-modeling process. Finally, simulation of the model

The second difference involves the concept of equilibrium. Chicago School economists build models that yield stable equilibria, despite the fact that actual economic systems rarely, if ever, exist in such a state. Conversely, institutional dynamicists almost always build models that yield their most interesting insights in a disequilibrium state.

^{194.} Actually, representing a social system's evolutionary behavior of a social system with feedback loops is not new to institutional economics. Gunnar Myrdal, for example, long advocated the use of the concept of "circular and cumulative causation" in the analysis of social systems. Gunnar Myrdal, *Institutional Economics*, 12 J. ECON. ISSUES 771 (1978). What is new to institutional economics, of course, is the formal representation of this concept using computer techniques.

^{195.} Both physical and metaphysical variables and relationships can be formally represented in an institutional dynamics model. The technical details of how to do it, however, are beyond the scope of this paper. The interested reader is referred to GEORGE P. RICHARDSON & ALEXANDER L. PUGH, INTRODUCTION TO SYSTEM DYNAMICS MODELING WITH DYNAMO (1981); B. RICHMOND & S. PETERSON, STELLA II: AN INTRODUCTION TO SYSTEMS THINKING (1992); and Radzicki, supra note 192. See also Michael J. Radzicki & John D. Sterman, Evolutionary Economics and System Dynamics, in EVOLUTIONARY CONCEPTS IN CONTEMPORARY ECONOMICS (Richard W. England ed., forthcoming 1993); Michael J. Radzicki, Institutional Dynamics, Deterministic Chaos, and Self-Organizing Systems, J. ECON. ISSUES 57 (1990). Although it is mathematically possible to use a system dynamics software package such as STELLA or DYNAMO to build an economic model consistent with the beliefs of the Chicago School, an institutional dynamicist would probably never do so as the fundamental perspectives of the two groups of economists differ significantly. Indeed, three main differences between the modeling approaches of the two schools can be identified.

The first difference involves the concept of economic rationality. Chicago School economists build models based on the assumption that producers and consumers make "rational" or "optimal" decisions (e.g., they maximize their utility and minimize their costs), despite an overwhelming amount of evidence from psychology concluding that human beings behave otherwise. Institutional dynamicists, on the other hand, build models that are "bounded rational" and based on results from psychology, behavioral decision theory, and actual field and laboratory observation of human decision making. See, e.g., 1 HEBERT A. SIMON, MODELS OF BOUNDED RATIONALITY 237 (1982) ("It is only when one tries to understand the actual mechanisms of decision-making—as distinguished from the classical concern with what a man would do if he shared God's omniscience—that one appreciates that the central problem in this kind of rational behavior is to obtain information").

The second difference involves the concept of equilibrium. Chicago School economists

enables the institutionalist to see the evolutionary behavior inherent in the pattern that he has identified. Importantly, if this behavior does not correspond to the evolution of the actual social system, the institutionalist learns that the pattern he has identified is not yet correct and that more research is required. 196

Yet another criticism against patten modeling is that it is a "bottom up" or inductive approach that leads to detailed specific instances but, due to its lack of generality resulting from the absence of a corpus of theory, no "scientific" results. This criticism, as it turns out, has been leveled by neoclassical and institutional economists alike. 197 A number of institutionalists have responded to this challenge by showing that pattern modeling is indeed guided by a corpus of holistic theory and is, simultaneously, the first step in the process of constructing these holistic theories.

The next level of generality above the specific instance of the pattern model is the real typology. 198 Real typologies are more general conceptual entities assembled from the commonalities that exist in numerous unique pattern models. An example would be the institutionalist conceptualization of an advanced industrial economy consisting of three main sectors: governmental, monopolistic, and competitive—each interacting, but with the governmental and monopoly sectors working to help one another while the competitive sector bears the brunt of any socioeconomic hardships.

When the commonalities that have been identified as occurring in numerous real typologies are assembled into holistic theories, the process of moving to a higher level of generality is repeated a second time. These theories are the fundamental rudders that guide the institutionalist's search for themes at the pattern modeling level and help to define the tenets of the institutionalist paradigm.¹⁹⁹

The last difference involves a high degree of institutional detail that is thought to be necessary for "proper" economic modeling and analysis. Chicago School economists build models that, by design, are very general, simple, and devoid of institutional detail. Institutional dynamists, on the other hand, build detailed models which can essentially be thought of as "computerized case studies." The strength of an institutional dynamics model vis-à-vis a traditional case study, of course, is that "what if" scenarios can be tested. See Michael J. Radzicki & Donald A. Seville, An Institutional Dynamics Model of Sterling, Massachusetts: Indicative Planning at the Local Level (1993) (unpublished manuscript, on file with the Department of Social Science & Policy Studies, Worcester Polytechnic Institute, Worcester, Mass. 01609); Michael J. Radzicki, MicroWorlds and Evolutionary Economics, in PROCEEDINGS OF THE 1992 INTERNATIONAL CONFERENCE OF THE SYSTEM DYNAMICS SOCIETY 533 (Jac A. M. Vennix et al. eds., 1992); Michael J. Radzicki, Methodologia Oeconomiae et Systematis Dynamis, 6 SYSTEM DYNAMICS REVIEW 123 (1990).

^{196.} Scholars have stated that the purpose of constructing a pattern model is to gain a better understanding of why people living in a particular social system behave as they do and to facilitate improved policy formulation. In terms of a comparison with the Chicago School paradigm, however, the role of prediction with a pattern model has not been addressed. The result of research into this issue showns that, whether or not noise (randomness) is present in a pattern model of a complex, nonlinear, feedback system, the prediction of its future state is generally impossible. See JAY W. FORRESTER, INDUSTRIAL DYNAMICS (1961); Lorenz, Deterministic Nonperiodic Flow, 20 J. ATMOSPHERIC SCI. 130 (1963).

^{197.} For an institutionalist critique of this nature, see James I. Sturgeon, *Induction and Instrumentalism in Institutional Thought*, 18 J. ECON. ISSUES 599 (1984). Sturgeon is by no means the only institutionalist to voice a concern over this issue.

^{198.} See DIESING, supra note 108, at 197–202; Wilber & Harrison, supra note 113, at 78.
199. Wilber and Harrison have suggested that Gunnar Mydrals' theory of circular and cumulative causation is one example of a holistic theory; Radzicki has compiled a somewhat

The addition of system dynamics modeling to institutional analysis also adds value to this process of assembling real typologies and holistic theories. As all institutional dynamics pattern models are constructed with the same fundamental building blocks, positive and negative feedback loops, the institutionalist's search for commonalities becomes a search for identical combinations of feedback loops. System dynamicists refer to these common structures as "general structures" and have found many that exist in socioeconomic systems. In addition to making the identification of real types and holistic theories more precise, the use of system dynamics modeling makes the study of the evolutionary behaviors of these constructs possible.

3. Instrumentalism, Pragmatic Philosophy, and the "Validity" of Pattern Models

The econometric models used by the Chicago School economists to represent and test their explanandums and confirm their explanans are judged to be "valid" if certain statistical criteria are met. These include the values of Student's t and F statistics that indicate, with a large probability, that the various parameters of a model (its estimated first partial derivatives or rates of change with all other factors held constant) are significantly different from zero and "accurate" predictions, as judged by some squared difference criteria.²⁰⁰

Institutional economists, on the other hand, take quite a different view of the question of model "validity." They reject the belief that a particular pattern model must be judged in a binary sense as either "valid" or "invalid" and, as an alternative, offer the continuous view that confidence in a pattern model can be built along several dimensions. The institutionalists accomplish this confidence by subjecting a computerized pattern model to a battery of seventeen tests—some quantitative, some qualitative. As more and more of these tests are passed, an institutionalist's confidence in his pattern explanation grows.²⁰¹

This particular view of modeling stems from the philosophical foundations of the institutionalists' evolutionary approach. Based on the instrumentalist or pragmatic philosophy, pattern modeling is seen as a structured learning process that has no end. A pattern model is never seen as complete, but merely in its latest stage of development. As more information is acquired, the structure and complexity of any pattern model evolves. Institutional dynamics enhances this evolutionary learning process because the explicit representation and simulation of a pattern model causes the modeler (or another person) to experience ideas that he would not otherwise have had. Indeed, the real value from computerized pattern modeling can come, not from any particular model, but from the modeling process itself.²⁰²

larger list. See Wilber & Harrison, supra note 113, at 79; Radzicki, supra note 192, at 643-44 & 643 n.12.

^{200.} For a discussion of t and F statistics, see DEREK ROWNTREE, STATISTICS WITHOUT TEARS: A PRIMER FOR NON-MATHEMATICIANS 139-54 (1981).

^{201.} See Jay W. Forrester & Peter M. Senge, Tests for Building Confidence in System Dynamics Models, in SYSTEM DYNAMICS, supra note 193, at 209; John D. Sterman, Appropriate Summary Statistics for Use in System Dynamics Models, 10 DYNAMICA 51 (1983).

^{202.} JAY W. FORRESTER, Counterintuitive Behavior of Social Systems, in COLLECTED PAPERS OF JAY W. FORRESTER 211 (1975).

From this perspective then, it is perhaps clearer why Friedman is considered by some to be an instrumentalist. According to these methodologists, Friedman's underlying position is that a model or theory is neither valid or invalid but merely a predictive tool that will be replaced if and when a better one comes along. Ironically, at this very general level, the Chicago School's economists share a methodological perspective with the institutionalists. Where the views of these two groups differ is in both the specific use and level of generality of the model—namely policy formulation through prediction generated from a very general, nonspecific model versus policy formulation through understanding generated from a detailed, specific model.²⁰³

C. A Summary Comparison

In order to summarize the viewpoints outlined in the preceding two sections, Table I presents a point-by-point comparison of the tenets of the Chicago School paradigm and the institutionalist paradigm.

Table I
A Head-to-Head Comparison of Neoclassical/Chicago School and Institutionalist Methodology

Neoclassical/Chicago School	Institutionalist
1. A common, objective model of explanation unites all Science in all disciplines.	1. A common model of explana- tion unites all institutionalists but not necessarily with other scien- tific disciplines.
2. Seek to construct predictive (hierarchical) models or theories.	2. Seek to construct pattern (concatenated) models or theories.
3. Hallmark of model or theory is predictive realism obtained from a highly simplified structure.	3. Hallmark of model or theory is understanding which is facilitated by descriptive realism in its structure or pattern.
4. Basis of predictive model is laws.	4. Basis of pattern model is facts.
5. Prediction equals Explanation.	5. Understanding equals Explanation.

^{203.} To be fair, some institutionalists disagree with the strict categorization of logical positivist models as predictive (as though a Chicago School economist gains absolutely no shred of improved understanding through the use of an F-twist logical positivist model) and pattern models as explanatory (as though an institutionalist can't use a pattern model to make a prediction). See Fusfeld, supra note 112. In addition, Swaney and Premus make the case that the logical positivist approach might be useful to institutionalists if the theories used are based on adequate empiricism—that is, if the covering law model is strictly followed. James A. Swaney & Robert Premus, Modern Empiricism and Quantum Leap Theorizing in Economics, 16 J. ECON. ISSUES 713 (1982).

6. Institution (actual) is unit of analysis.
7. Psychological perspective is behavioralism.
8. Individual preferences are molded by the institutions in which a man lives, works and plays.
9. Individual behavior is understood, i.e., explained, when it is documented and shown to fit into an institutional structure of behavioral norms. There are thus no preconceived assumptions about behavior.
10. Pattern model is tested empirically by comparing hypothesized institutional structures (qualitative patterns) with observations. Emphasis is on causation.
11. View is holistic, systemic, and dynamically revolutionary.
12. Generalities from different pattern models are assembled into a real typology.
13. Holistic theories employing general characteristics of human economic systems are the end result of the institutionalist method.

V. A BETTER WAY: INSTITUTIONALIST METHODOLOGY AND LABOR POLICY ANALYSIS

Law professionals can readily recognize the parallels between legal methodology and the methodology of the institutionalists. Moreover, the criticisms leveled at the institutional methodology and pattern modeling are similar to those leveled against legal reasoning, *i.e.*, it is not "rigorous" (mathematical) and therefore not "scientific." In response, law professionals have reluctantly

begun to embrace the "science" of the law and economics proponents based primarily on the strength of its advocates and a lack of methodological understanding. This Article has disputed both the "science" and rigor claims by exposing the Chicago-style methodology as questionable ideology.

To put it most charitably, the Chicago-style methodology could be justified as merely a tool, albeit of questionable policy use, but simply the best "scientific" tool available until better tools are developed. Simply put, the better, and mathematically rigorous tools are being developed. As the institutionalists argue, pattern models and "institutional dynamics" incorporate a larger, richer fact base from which to understand and form policy alternatives. Seen in the context of labor law policy, this Article's descriptive statements concerning the policy and power bases of the NLRA detail a convergence of traditional labor law analysis and the institutional methodology.

The understanding of relationships among societal members are drawn from legal case study and participant observations.²⁰⁴ In contrast to the law and economics, Chicago style's, attempt to force-fit analyses into a set of questionable universal laws and antecedent conditions, the institutionalist focus, and that of the legal system, is power, conflict, and causation. Descriptive reality recognizes that in every conflict situation there are unequal distributions of physical, moral, and economic power. The scope and uses of power are influenced by the nature of the institutions and public policy they manifest in the form of legal and customary working rules and designated status. To understand these power relationships, there first must be a description of the power relationships. Institutionalist John R. Commons' descriptive analysis provided at least one basis for understanding. A common unit of comparative analysis between institutions exercising power is the "transaction," Transactions, however, like other power exercises, are encouraged or restrained by the social order's proportioning of inducements in furtherance of the public good.²⁰⁶ Thus, the commonplace notion of bargaining transactions posits an arm's length transaction between two parties deemed equals before the law. Bargaining transactions enlarge the public good through the transfer of wealth by voluntary agreement, through persuasion if economic power is equal or coercion if unequal.²⁰⁷

Professor Commons argued that the simple bargaining transaction model (embraced exclusively by the Chicago-style proponents) was inadequate to describe the more complex interactions among societal members.²⁰⁸ As such, Commons modeled two additional transaction constructs: managerial transactions and rationing transactions. The "managerial transactions" are concerned with the product of wealth through the creation of command-obedience relationships. The law recognizes one party as a legal superior to the other within the limits of the relationship as set by common law, statutes, or constitutions.²⁰⁹

^{204.} See Wilber & Harrison, supra note 113, at 74–76. The early writings of Professor John R. Commons, cited extensively throughout this Article, contributed significant theoretical and practical insights to societal relationships. See COMMONS, LEGAL FOUNDATIONS, supra note 31; COMMONS, supra note 79.

^{205.} See COMMONS, COLLECTIVE ACTION, supra note 31, at ch. 4; COMMONS, supra note 79, at ch. 2; Commons, supra note 89, at 5-12.

^{206.} See supra note 11.

^{207.} Commons, supra note 89, at 5-9; COMMONS, supra note 79, at 59-64.

^{208.} COMMONS, *supra* note 79, at 59-64.

^{209.} Commons, *supra* note 89, at 9–11; COMMONS, *supra* note 79, at 64–67.

Thus, the "rules" pertaining to the employment relationship, agency concepts, and fundamental organization law are created. As labor/employment lawyers know, this area is in constant and rapid flux as more employer-employee conflicts make their way through the legal system. The "rationing transaction" posits a relationship between legal superiors and legal inferiors in which an authority superior to them all apportions wealth and power. These transactions establish much of the property law as well as government-sanctioned monopolies over goods, services, or in labor law the exclusive representative unions. These complex transactions are, of course, interdependent, but to deny their existence or assume them away in an analysis does a disservice. The regulation of organizations and the hybrid systems of quasi private ordering present in labor law well-represent managerial and rationing transactions.

With a recognition of the complex structure of underlying managerial transactions, the NLRA is much more than a mere set of economic bargaining transactions assumed by the law and economics proponents. Moreover, recognizing the structure and policy of the NLRA in apportioning wealth and power through private ordering, the Act is a rationing transaction embracing and modifying elements of both bargaining and managerial transactions. As such, Chicago-style law and economics, with its focus exclusively upon the bargaining transaction, cannot fully embrace the complexity necessary for proper analysis. Additionally, the covering model discussed earlier, central to scientific analysis, does not save the Chicago-style methodology from exposure as anything more than mere ideological argument. 212

Through construction of the NLRA, Congress, courts, and the NLRB play a significant role in this institutionalized conflict resolution and power-balancing processes. Borrowing again from the writings of Professor John Commons, and applying the categorization scheme developed elsewhere in this Article,²¹³ an institutional perspective may be used to develop a coherent framework for analyzing the broader balancing function and the resulting changes in rules which affect the outcomes of specific conflicts.²¹⁴ That this general process theory closely resembles familiar principles of legal analysis is, of course, more than fortuitous.

The institutionalist's starting point is to determine the scope of the policy and purpose "for which the artificial mechanism was designed, fashioned and remodeled."²¹⁵ Here, the "artificial mechanism" refers to collective bargaining and other private ordered dispute resolution devices sanctioned under the NLRA.

Next, the essential issue is evaluated in light of the economic and non-economic policies of the NLRA²¹⁶ to determine the extent to which the positions of the parties "accomplish [those] purpose[s] in an efficient or economical

^{210.} Commons, supra note 89, at 11-12; COMMONS, supra note 79, at 67-69.

^{211.} Commons, supra note 89, at 12.

^{212.} See also Donald N. McCloskey, The Rhetoric of Law and Economics, 86 MICH. L. REV. 752 (1988).

^{213.} See Zimarowski, supra note 93, Table I, at 68-70.

^{214.} See supra notes 80-89 and accompanying text. See generally Zimarowski, supra note 78.

^{215.} See COMMONS, LEGAL FOUNDATIONS, supra note 31, at 377.

^{216.} See supra notes 76-92 and accompanying text.

way."²¹⁷ If the institutionalist concludes that the Act's goals are obstructed, the inquiry then shifts to identification of the "limiting factor[s] out of the thousands of cooperating factors that obstructs the operation" of the mechanism.²¹⁸

The decision is then guided by a determination of the extent to which the balancing institution can and may control identified limiting factor(s) "in order to facilitate [operation] of the mechanism and accomplish its purpose." The power-balancing institution then accordingly "adopts or changes the shop rules, working rules, common law or statute law that regulates the actions and transactions of the participants."219 In this manner, the judicial and legislative balancing processes²²⁰ manipulate limiting or strategic factors²²¹ which influence the outcomes of bargaining and managerial transactions.

Adopting an institutional methodology, the evaluation of factors interacting to achieve purpose is drawn from case performance in a power balancing context. But the performance base, across the multidisciplinary areas in labor/employment law, requires methodological uniformity of inquiry. In this endeavor, the scope of legislative purpose and policy, including both the economic and noneconomic policy articulations, must be affirmatively incorporated into the balancing analysis. Second, the particular factors necessary to create the positive and negative feedback loops interacting in the conflict situation must be articulated. And third, these factors must be categorized to determine which power exercises²²² are strategic or limiting, which are environmental or mitigating (cooperating) factors (outside the volitional control of the parties in conflict), and, when placed in the context of the NLRA, a distinction recognized between those which are controlled through legislative policy and those controlled through judicial policy construction. The Chicago-style law and economics methodology is incapable of adequately representing the richness of these relationships.

But these factors, one must recognize, operate in a dynamic, evolutionary system. The strategic factors (control on particular power exercises) are situational, not cumulative at a given moment, but successively changing as parties shift (utilizing dynamic feedback loops) power to exploit structural weaknesses and imbalances in their opposition as environmental and mitigating factors change the fabric of the evolving system.²²³ For example, two judicially created power loci, the Mackay replacement doctrine²²⁴ and the mandatory-permissive bargaining item dichotomy, ²²⁵ had minor impacts upon the fulfillment of NLRA

^{217.} COMMONS, LEGAL FOUNDATIONS, supra note 31, at 377.

^{218.}

^{219.} See supra note 99.

Much of the balancing under the NLRA is left to the NLRB and the courts. The interpretation and construction of the NLRA initially is vested in the expertise of the Board. As such, the NLRB's decisions and interpretations should be afforded great deference. See, e.g., Prill v. NLRB, 835 F.2d 1481 (D.C. Cir. 1987); Local 2179, United Steelworkers v. NLRB, 822 F.2d 559 (5th Cir. 1987).

^{221.} See supra note 99.

^{222.} See supra note 99.

COMMONS, supra note 79, at 628. Technically speaking, in an institutional dynamics model this type of evolutionary behavior occurs as a result of continual change in the strength and dominance of the various feedback loops.

^{224.} NLRB v. Mackay Radio & Tel., 304 U.S. 333 (1938). See also Hal Keith Gillespie, The Mackay Doctrine and the Myth of Business Necessity, 50 TEX. L. REV. 782 (1972).

^{225.} See supra note 96.

legislative policy and purpose in the 1960s.²²⁶ But, due to the changing social-economic-political environment, these factors presently seem to have a more significant impact upon policy achievement. Thus, the system is in constant flux, particularly in the judicially-created power control areas, and should be examined at both the particularized conflict level as well as within the overall power balancing paradigm.

CONCLUSION

Judicial analyses are always at risk as new data is accumulated and incorporated into the balancing analysis. The utility of the institutional methodological approach is to constantly rework the power balancing function of the NLRA to adjust and counter the influence of factors deleterious to NLRA policy achievement. The burden placed upon the courts, and particularly an impartial and professional Board,²²⁷ are significant. Nevertheless, in contrast to the narrowness and ideological base of the Chicago style, such a broad based approach is commanded by the complex and often conflicting bargaining, managerial, and rationing transactions which occur within the ambit of the NLRA.

Economics, institutional, neoclassical or Chicago-style, will always play a significant role in labor law. But the economic methodology as practiced by the law and economics proponents from the Chicago School has severe methodological limitations rendering its use as a panacea of policy making highly suspect. It is ideology passing as "science" and should be treated as such. To grant the Chicago-style law and economics propositions greater weight under the guise of "scientific" truth is methodologically unsound and does the analysis a disservice.

^{226.} In the 1960s, the low unemployment rate fueled by a war-driven economy as well as structural differences in the need for skilled labor muted an employer's ability to replace striking workers.

^{227.} Board politics have always played a role in labor-management relations. Contrary to some labels, there has never been a "pro-labor" Board, only variations to the right of the ideological center. Under the direction of Chairman Dotson, however, the Board was viewed as more pro-employer than in previous Republican administrations. The political gamesmanship played by administrations with the Board contributes to its lack of continuity and predictability in decision-making. See generally Charles J. Morris, Board Procedures, Remedies and the Enforcement Process, in Symposium, THE LABOR BOARD AT MID CENTURY (BNA eds., 1986).

