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SYMPOSIUM ISSUE: PRESENTED BY LATINA/O CRITICAL LEGAL THEORY, INC.: EDUCATION & PEDAGOGY: **Using Socio-Economics and Binary** Economics to Serve the Interests of Poor and Working People: What Critical Scholars Can Do To Help

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... By learning, teaching, employing, and promoting the principles of socio-economics as a foundationally holistic, value-conscious, factually accurate method of analyzing law-related economic issues and by teaching it to others and promoting its acceptance ever more broadly in legal education, LatCrit scholars can better serve the interests of poor and working people by hastening the time when socio-economics entirely supplants the prevailing law and neoclassical economics approach to such issues. ... Part V concludes with a brief consideration of how critical scholars can better serve the interests of poor and working people by assisting in the growing movements: to replace the law and neoclassical economics approach with the socio-economic approach, and to include within teaching, scholarship, advocacy and other service, the binary economic analysis of the dynamics of wealth distribution, wealth maximization, and the competitive right to acquire capital with earnings of capital. ... Other approaches include "institutional law and economics," "behavioral law and economics," "new institutional economics," "feminist law and economics," "left-wing law and economics," and a much earlier approach to law and economics (by means limited to neoclassical economics) sometimes called "the first law and economics" and "the first great law and economics movement." ... Before proceeding further, it should be noted that although binary economics has found a welcome home within socio-economics, because socio-economics is always open to new ways of understanding economic phenomena, binary economics, nevertheless, has validity independent of socio-economic methodology and should be of interest to all economists, lawyers, and others concerned with matters of growth, efficiency, and distribution, whether or not they accept the socio-economic methodology. ... The logic supporting the binary property/economic paradigm indicates that the voluntary operation of an ownership-broadening economy (which would gradually result from opening to all people the six institutions by which capital is presently acquired primarily with the earnings of capital) provides not only a broader distribution of wealth and income, but also substantially more real growth than would a traditional economy. ... Accordingly, (1) the technical relationship used in the theory of marginal productivity that governs conventional understanding of the relative employment of capital and labor in production, and (2) the factor income shares derived from production are significantly dependent on the distribution of capital acquisition with the earnings of capital. ... In light of the fact that (1) the distribution of future earning capacity is an essential motivating ingredient for the creation of present productive capacity, and (2) the productive power of capital produces and distributes ever more income and leisure, indicates that the capital that buys itself for well-capitalized people can buy itself even more profitably if all people are included in the process of capital acquisition.

TEXT:**[*173] I. INTRODUCTION**

If anyone in legal education doubts whether there are a growing number of law teachers (1) concerned about the well-being of poor and working people in the U.S. and throughout the world, (2) opposed to practices of subordination and other injustices, and (3) eager to do something to improve things, let them attend a LatCrit meeting. LatCrit scholars, along with feminist scholars and other critical scholars, have (1) raised consciousness and sensitivity to the deep patterns and practices regarding subordination and the abuse of power, (2) heightened normative concerns related to legal policy and justice, and (3) taken positive steps to create an environment where teachers with a critical perspective are more often hired, tenured, and promoted to positions of power and authority within legal education. Institutions, which a generation ago were a part of the problem, have increasingly become a part of the solution. Yet, presentations, comments, and conversations at the 2008 Thirteenth Annual LatCrit Conference at Seattle University revealed that there

is widespread agreement among these scholars that much subordination and injustice continue and that there is much more good work to be done.

These scholars share a widespread agreement that one of the most serious problems that persists is that of economic injustice. Most agree that the failure to achieve economic justice is systemically related to the distribution of economic opportunity and economic power. And few critical scholars disagree that economic injustice is not only an unsolved problem in itself, but a problem that helps those with power to perpetuate other injustices. [*174] Finally, it is fair to say that among critical scholars, there is almost no support for the school of thought within legal education commonly known as law and economics¹¹ (but more accurately called "law and neoclassical economics"). There is considerable agreement that this approach to law-related economic issues, as it is commonly practiced, does not serve the interests of poor and working people very well; and it may be viewed fairly as an instrument of subordination (primarily because it fails to consider, or consider fairly, the causes and effects of the highly concentrated distribution of wealth that prevails in the U.S. and throughout the world). But beyond this broad agreement among most of the attendants at the LatCrit XIII Conference, there was no widespread agreement or even clear understanding as to the causes of economic injustice, the institutions that perpetuate it, or what critical scholars can do to beneficially address the problem. This lack of widespread agreement and understanding regarding economic matters is characteristic of society as a whole. When one considers that clarity regarding economic issues and rights is of vital importance to people everywhere, and that one of the most important duties of lawyers and other advocates is to enable clients to identify and secure their essential rights and responsibilities in society, such clarity should also be of vital importance to critical scholars in legal education, practicing lawyers, and others who advocate for poor and working people. This article is offered to assist critical scholars to reform legal education so that advocates for poor and working people are provided the educational opportunity to gain greater clarity regarding law-related economic issues in order to enable them to better serve their clients in the economic realm.

To more effectively address and remedy the problem of economic injustice, this article argues that LatCrit scholars, feminist scholars, and scholars of other critical schools (herein "critical scholars") should learn, teach, employ, and promote two important, related subjects that are receiving increasing attention but that are still not widely understood: socio-economics (a broad interdisciplinary approach to economics grounded in [*175] the scientific method and moral philosophy that draws upon all disciplines relevant to the understanding of economic phenomena) and binary economics (a subject within socio-economics that places great importance on democratizing the process of capital acquisition as a means of promoting widespread prosperity and economic justice for all people).¹² By learning, teaching, employing, and promoting the socio-economic approach to law-related economic issues, scholars will enhance legal education, scholarship, service, and practice in ways that better serve the interests of poor and working people because socio-economics places special emphasis on the causes and effects of the distribution of economic opportunity and wealth on economic phenomena and economic justice. By learning, teaching, employing, and promoting binary economics, scholars will advance understanding of an approach that will enable people to identify and secure a very important, but little understood, economic right that is obscured by the law and neoclassical economics approach: namely, the right to acquire capital with the earnings of capital.

Part II of this article: provides a brief overview of law and neoclassical economics; identifies its limitations; and, explains how its misapplication in legal reasoning has been used to undermine the legitimate interests of poor and working people for the benefit of those in power. Part III describes the alternative socio-economic approach and explains how it can: supplement the law and neoclassical economics approach with an approach both more rigorous and favorable to the interests of poor and working people; preserve economics' proper application; and, prevent its abuse by recourse to sound economic principles--principles that are widely recognized in the broader discipline of economics but ignored by many of the advocates of law and neoclassical economics. Part IV provides an overview of binary economics and explains how binary economic principles can be used to empower poor and working people in a lasting way that both distributes earning power more broadly and promotes economic well-being for all people without redistribution. To achieve this economic empowerment, Part IV explains [*176] how binary economic principles can extend the democratic, competitive access to the institutions of finance that presently facilitate capital acquisition with the earnings of capital primarily for well-capitalized people to all people. These institutions include corporate finance, fiduciary law, commercial credit, private and public insurance and reinsurance, and central bank monetization. Part V concludes with a brief consideration of how critical scholars can better serve the interests of poor and working people by assisting in the growing movements: to replace the law and neoclassical economics approach with the socio-economic approach, and to include within teaching, scholarship, advocacy and other service, the binary economic analysis of the dynamics of wealth distribution, wealth maximization, and the competitive right to acquire capital with earnings of capital.

II. LAW AND NEOCLASSICAL ECONOMICS

As intimated in Part I of this article, based on information provided in numerous presentations and conversations at the 2008 Thirteenth Annual LatCrit Conference at Seattle University, there was virtually no support for the law and neoclassical economics approach to law-related economic issues. There was considerable agreement that this approach to law-related economic issues, as it is commonly practiced, does not serve the interests of poor and working people very well; and to the contrary, the approach may be fairly viewed as an instrument of suppression. Critical scholars view the law and neoclassical economics approach negatively primarily because it ignores the causes and consequences of the highly concentrated distribution of wealth that exists in the U.S. and almost everywhere in the world. Beyond this criticism, LatCrit participants most often criticized law and neoclassical economics for its unrealistic foundational assumptions and its lack of empirical rigor. Others candidly confessed that in their teaching and scholarship, they chose to simply ignore the law and neoclassical economics jurisprudence. And this choice to ignore law and neoclassical economics is [*177] also widely reflected in much critical literature. However, none of the participants I encountered thought that either merely criticizing or simply ignoring law and neoclassical economics would reduce the economic injustice in society or would prevent its negative impacts on the interests of poor and working people.

The stark reality is that formal legal education is overwhelmingly dominated by an approach to law and economics that poorly serves the interests of poor and working people. Because of this dominance, generations of law students have graduated and become lawyers with either an inaccurate, incomplete, or complete lack of understanding of many, if not most, law-related economic issues. Thus, many lawyers with responsibilities to assist poor and working people work with diminished ability to do so. Reducing this harm requires (1) formulating one or more positive alternatives to law and neoclassical economics built on a better and more complete foundational understanding of law-related economic issues that better serves the interests of poor and working people, and (2) winning widespread acceptance of those alternatives within legal education. As explained in Parts III and IV, separately and together, socio-economics and binary economics provide such alternatives in many important law-related contexts. As explained in Part V, critical scholars can do much to hasten the widespread acceptance of socio-economics and binary economics so as to better serve the interests of poor and working people.

Before proceeding further, however, it should be noted that although law and neoclassical economics is by far the dominant approach to law and economics within legal education (and the only approach that usually comes to mind among legal scholars who are unfamiliar with that field), it is by no means the only approach to law and economics found within legal education. Other approaches include "institutional law and economics,"ⁿ³ "behavioral law and economics,"ⁿ⁴ "new institutional economics,"ⁿ⁵ "feminist law and economics,"ⁿ⁶ "left-wing law and economics,"ⁿ⁷ and a much earlier approach to law and economics (by means limited to neoclassical [*178] economics) sometimes called "the first law and economics"ⁿ⁸ and "the first great law and economics movement."ⁿ⁹ Each of these approaches takes issue with various aspects of the troublesome law and neoclassical economics approach; and to the extent that they become better understood and advanced more widely in legal education, each alternative approach certainly would both (1) enhance the understanding of law-related economic issues, and (2) better serve the interests of poor and working people. However, these alternatives are presently largely beyond the mainstream of the neoclassical approach that dominates teaching, scholarship, and research in "law and economics." It remains to be seen whether in time these approaches, either separately or together, might grow to become a part of the dominant approach to law and economics so as to achieve the dual goals of rendering "law and economics" both (1) a more rigorous and lawyerly approach to law-related economic issues, and also (2) an approach that better serves the interests of poor and working people. Nevertheless, for reasons explained more fully below, I believe that the socio-economic approach (which includes all of these approaches and more) is a superior approach to achievement of both goals.

A. Economic Theory, Neoclassical Economics, and the Neoclassical Economic Paradigm

Although, by the plain meaning of its components, the phrase "law and economics" used within legal education would seem to denote an academic enterprise that incorporates the full richness of the discipline of economics to inform and enhance legal analysis in a fair and balanced way (as good teaching and scholarship in harmony with lawyers' professional ethics would seem to require), sadly this is not the case.ⁿ¹⁰ This richer range of economic theory and practice encompassed in the discipline of economics is of course enormously important in informing one's understanding of how people behave economically, how economic institutions should be structured, how the economy works, how the economy should work, and [*179] how people should determine and advance their economic interests in society. Whether derived from a formal study that leads to an advanced degree or merely from the popular media, one's understanding of economics significantly influences a great deal of one's beliefs about many things. In the U.S., for example, it influences

whether a person is a Democrat, Republican, or Independent; a left-winger, a right-winger, or a centrist; a liberal, conservative, moderate, or radical; a capitalist or socialist; a believer in market solutions or government solutions to problems; and whether one favors or opposes more taxation and redistribution. One's understanding of economics influences how people analyze why poverty persists, what the requisites for equal opportunity are, and how people do and do not achieve their highest good. It shapes people's reactions to the importance of autonomy and community, as well as to private and public property. It shapes the way academics approach their teaching, scholarship, and service in many of the social and natural sciences, in business and law, and in many interdisciplinary endeavors, as well as the judgments of the university administrators who set their salaries and distribute awards of distinction and other perquisites. One's understanding of economics influences the agendas of many charitable institutions, most, if not all, of the major foundations that explore "policy analysis," and many government agencies; therefore, it influences their willingness to fund a wide array of university activities. It influences the editorial slant of broadcast, cable, print, and online media, commentators, and analysis. It influences one's approach to Christianity, Judaism, Islam, and other faiths. When there is disagreement in the classroom and in society, if the disagreement is not one of religion or secular morality, chances are it is grounded in economics.

Yet, from its inception and continuing to this day, this fuller range of economic theory and practice was and continues to be intentionally, and perhaps strategically, omitted from the dominant law and economics approach in favor of a concentration largely limited to neoclassical economics.¹¹ How this limited view of economics could ever be considered **[*180]** as an adequate, comprehensive, balanced, and an ethical, positive, and normative foundation for informing and guiding law students, practitioners, teachers, and scholars regarding their understanding of law-related economic issues has never, to my knowledge, been addressed by the advocates of law and neoclassical economics.

Because of its reliance on the assumed existence of "efficient markets," most neoclassical economic analysis is based on a set of simplifying assumptions, which are used to analyze the most efficient private and public choices regarding the allocation of resources according to various preferences under specified conditions.¹² These assumptions include the following:

1. People behave rationally;
2. People act only in self-interest;
3. People are fully informed;
4. Prices are determined without collusion by supply and demand;
5. All costs of production are reflected prices (i.e., there are no "externalities");
6. There are no transactions costs (including taxes);
7. There are no barriers to market entry or exit;
8. Income distribution is according to productivity;
9. Initial distribution of wealth preferences, skills, tastes, and technology are exogenous (taken as externally given);
10. Factors such as race, gender, class, and nature can be ignored or encapsulated within the market;
11. Economic decisions are made "at the margin" by evaluating the costs and benefits of an additional unit of one alternative compared to another (including the alternative of doing nothing);
- [*181]** 12. Markets tend or gravitate toward a stable, efficient equilibrium; and
13. The best starting point for economic analysis is one that accepts as essentially factually accurate, or approximately factually accurate, the existence of conditions necessary for perfect competition, including no barriers to market entry, perfect knowledge, and zero transactions costs.¹³

Based on these assumptions, neoclassical economic analysis examines the anticipated costs and benefits that result from mutually exclusive choices of behavior (based on individual preferences) regarding one additional unit of any production or consumption compared to additional unit costs and benefits of other alternatives (including the choice of doing nothing). Neoclassical analysis then goes on to "demonstrate" that the unfettered exercise of individual choice in the production and consumption of goods and services will result in the optimally efficient allocation of resources according to the preferences of market participants. Under such conditions, promoters of law and neoclassical economics claim that societal wealth is maximized by the efficient allocation of resources.

Neoclassical economics, with its marginal analysis, is not in itself objectionable to the interests of poor and working people. To the contrary, neoclassical economic analysis can be a very helpful tool when applied properly. Indeed, included among the growing number of socio-economists are many neoclassical economists.¹⁴ It is not the tool, but its abuse that raises factual, normative, and legal concerns. As with any tool, neoclassical economics can be used beneficially or abused. Nevertheless, in this analysis of how wealth is maximized, although ostensibly every individual's preferences are respected, the preferences of the wealthy count much more than the preferences of the poor. And under the assumptions set forth above, although the unfettered exercise of individual preferences may sometimes produce the greatest good, the determination of what is good and the distribution of that good in most, if not all, economies is highly uneven and [*182] leaves the preferences of some abundantly fulfilled and the preferences of others entirely frustrated.

However, as explained more fully below, the maximization of efficiency is *not* synonymous with the maximization of wealth; and the systemic abuse of neoclassical economics is perhaps most clearly problematic when people (who do or should know better) advance its limited and specialized claim of wealth maximization (under the thirteen conditions specified above) as a pervasive conceptual framework or paradigm for achieving and understanding the overall societal wealth maximization.¹⁵ Teaching, scholarship, and policy analysis that wrongly equates the maximization of efficiency with wealth maximization is a grievous error. It misuses the efficiency analysis of neoclassical economics--a highly valuable conceptual tool when properly applied--to support the dubious wealth maximizing claims made by advocates of "the neoclassical economic paradigm." The neoclassical economic paradigm is a pervasive way of viewing many aspects of society and institutions, including markets, property rights, professional ethics, personal morality, and the role of government. This paradigm's abuse has caused great harm to education and society in general, and to the interests of poor and working people in particular.

Neoclassical analysis that wrongly equates the maximization of efficiency with the maximization of wealth is particularly pronounced in legal education under the rubric of "law and economics."¹⁶ For reasons suggested above and explained more fully below, this abuse of neoclassical principles (although by no means confined to legal education) works to the serious disadvantage of poor and working people; and the economic harm done by this abuse cannot be avoided or undone by ignoring the neoclassical paradigm, ridiculing its unrealistic assumptions and lack of empirical rigor, or even by "beating those who advance it at their own game." What is needed to remedy the harm is one or more effective alternative methodologies that provide sound positive and normative [*183] analysis of law-related economic issues that preserve the benefits of neoclassical analysis when properly applied and enrich it with a broader and more rigorous understanding. To this end, as will be more fully explained, socio-economists seek "to examine the assumptions of the neoclassical paradigm, develop a rigorous understanding of its limitations, improve upon its application, and develop alternative, perhaps complementary, approaches that are predictive, exemplary, and morally sound."¹⁷

B. Problematic Foundational Propositions of Law and Neoclassical Economics that Give Rise to the Abuse of Neoclassical Economics

One does not need a PhD in economics or even a beginner's mastery of its basic principles to accurately identify and challenge the misapplication of neoclassical economics. Although complicated in its detail, the widespread misapplication of the law and neoclassical economics approach has, at its foundation, only a relatively few erroneous economic principles. Some of the most important erroneous propositions are set forth below and discussed more fully in the paragraphs that follow:

1. When efficiency is maximized, societal wealth is therefore also maximized;
2. The maximization of efficiency has meaning independent of the distribution of wealth;
3. The best starting point for economic analysis is one that assumes markets are operating at or near perfect efficiency; and

4. The maximization of total societal wealth derived from maximizing efficiency is a distinct value to be weighed and judged along with other values when formulating social policy.

Each of these erroneous propositions is discussed more fully below.

[*184] 1. When Efficiency Is Maximized, Societal Wealth Is Also Maximized

As noted in Part II-A above, one problematic deficiency with the law and neoclassical economics approach is its erroneous claim that the maximization of efficiency is synonymous with the maximization of wealth. This false proposition represents perhaps the most serious, but least understood, confusion that prevails among law students, law graduates, and the general public regarding economic theory and government policy. Efficiency can be considered synonymous with wealth maximization only under highly conditional circumstances that do not prevail in the real world. This erroneous proposition carries with it great power of persuasion because it feeds into one of the great ethics systems commonly known as utilitarianism--an approach that roughly equates morality, goodness, and justice with the greatest good for the greatest number. It is the widespread confusion of efficiency maximization with wealth maximization that provides the foundation for the frequently false wealth-maximizing claims of the neoclassical paradigm, which then justifies tax benefits that flow primarily to well-capitalized people and the widely accepted false dichotomies of "wealth maximization vs. distributional justice" and "efficiency vs. other values."

On the strength of this false equation of efficiency and wealth maximization, proponents of the law and neoclassical economics approach argue that by establishing and enforcing legal rules and rights (including market rules, liability rules, property rights, and contract rights) that maximize microeconomic efficiency, judges, legislatures, and executive agencies will thereby maximize societal wealth. This false claim provides the theoretical foundation for right-wing ideology, laissez-faire policies, and the notion that all regulation presumptively compromises or suppresses wealth maximization by promoting a less efficient allocation of resources.

This claim is evident, for example, in the approach set forth in Judge Posner's book, *Economic Analysis of Law*.ⁿ¹⁸ In advancing his neoclassical approach to the analysis of law, Judge Posner states, "What Adam Smith [*185] referred to as a nation's wealth, what this book refers to as the efficiency ethic, and what a layman might call the size of the pie, has always been an important social value."ⁿ¹⁹ Judge Posner compounds his error by declaring that the connection between economic efficiency and economic growth is uncontroversial.ⁿ²⁰

Although few American law students and law school graduates who have had exposure to law and neoclassical economics would recognize anything inaccurate about Judge Posner's statement, in one crucial respect, it is dead wrong as a matter of good economics. Judge Posner's serious error stems from the fact that Adam Smith's usage of "wealth" involved his attempt to explain scientifically how nations accumulate wealth over time and how some nations' economies grow larger while the economies of other nations do not.ⁿ²¹ Adam Smith was thus attempting to develop a theory of growth, and his *Wealth of Nations* did indeed lay the foundation for modern economics.ⁿ²² For Smith, economic growth over time did indeed determine what the common person would consider a "size of the pie." In this respect, Judge Posner's statement is correct. However, Judge Posner is incorrect when he equates Smith's approach to wealth maximization resulting from economic growth with his (Judge Posner's) efficiency ethic.ⁿ²³ Judge Posner confuses Smith's classical theory of growth leading to wealth maximization with the neoclassical theory of efficiency, which was notably advanced in the English-speaking world by Alfred Marshall.

As a matter of positive economics, however, efficiency and growth are quite distinct concepts. Neoclassical efficiency is not a general theory of growth or wealth maximization, as advanced by Adam Smith. In a shrinking, dying economy, every transaction might be neoclassically efficient, and various conceptions of efficiency (whether as defined by Pareto, Kaldor-Hicks, or others) could be, nevertheless, invariably satisfied.ⁿ²⁴ In fact, neoclassical efficiency, even when positively related to growth and wealth maximization, is only one component of a much more [*186] complicated dynamic process that requires a broader approach to economics along with other disciplines to comprehend.

Since the dawn of the industrial revolution, and increasingly so ever since, technology brings forth vast increases in productive capacity that are not primarily the result of the gains promised by marginal efficiency. For example, the great gains in wealth experienced in the U.S. since the 1850s are not continuous increments driven by marginal prices with causes rooted in constant technology and short time frames, which are the domain of neoclassical economics. Rather, these are discontinuous, sometimes explosively large changes in the productive capacity and the distribution of demand with causes rooted in technological progress, capital investment, and wealth distribution subject to limited competition, aided by selective government allocation and protection of property rights.

Major breakthroughs in productive capacity--occasioning great increases in wealth--are not primarily the result of efficiency gains at the margin. In the corporate context, for example, major corporations flourish or fail in the surplus generated *long before* market prices of their factor inputs and products reach an efficient equilibrium. In this context, corporate wealth maximization requires maximizing both normal profits (those earned in perfectly competitive markets) and economic profits (those above normal profits) earned in the context of substantial technological advances and other conditions of imperfect efficiency.ⁿ²⁵

The major elements in economic growth observed in market economies experiencing substantial growth occur when relevant markets are far from achieving perfect efficiency and when prices are far from the theoretical equilibrium.ⁿ²⁶ This is not to say that efficiency is not an important consideration in wealth-maximizing analysis, but it does not play the unambiguously positive and comprehensive role in wealth maximization that law and neoclassical economics ascribes to it.

Thus, although there is no doubt that the immense growth evidenced by technologically advanced countries has occurred under conditions far [*187] removed from the thirteen conditions set forth above which neoclassical efficiency depends upon, the principles of neoclassical efficiency are nevertheless widely and loosely advanced by Judge Posner and others who pass off law and neoclassical economics as the sole theory of law and economics and as a de facto theory of causation regarding growth and wealth maximization.ⁿ²⁷ Such analysis confuses marginal gains with wealth maximization and ignores the effect of the distribution of wealth, opportunities, risks, and uncertainties that can greatly affect wealth maximization and distribution over time in ways not comprehended by marginal efficiency analysis.

For reasons set forth in Parts II-B-2, II-B-3, and II-B-4, this misapplication of neoclassical economic efficiency theory is highly prejudicial to the interests of poor and working people and has been widely used (whether consciously or not) as an instrument of oppression by many who formulate and implement law-related economic policy. For present purposes, however, it is important to understand that the assumption that maximizing efficiency necessarily or probably maximizes wealth is factually wrong as a matter of sound economics, and should therefore be regarded as wrong by any school of thought that operates under the label of law and economics.

2. The Maximization of Efficiency Has Meaning Independent of the Distribution of Wealth

Another major misrepresentation that results from passing off neoclassical economics as the sole theory of economics is the false notion that efficiency maximization has rigorous meaning independent of distribution in theory and in fact.ⁿ²⁸ In other words, efficiency is dependent on distribution. The supposed wealth-enhancing allocation of benefits in efficient markets assumes that prices will lead to the optimal allocation of resources, labor, production, distribution, and consumption. As a positive matter of economics, however, the same logic that holds that prices [*188] determine distribution also holds that distribution determines prices. This is a fact that receives relatively little emphasis among the advocates of law and neoclassical economics. No standard of efficiency is, or can be, neutral in distribution. Even when transactional costs are zero, externalities are negligible or nonexistent, and information is perfect, the assignment of property rights nevertheless affects prices and the allocation of resources. The fact that efficiency is dependent on distribution belies the notion that there is a single, determinable, wealth-maximizing standard of efficiency (independent of distribution), which can guide either economic policy or legal decision making. In economic theory and fact, there is no single paramount optimal efficiency, but rather, many distribution-dependent relative efficiencies. Thus, because efficiency is dependent on distribution, the notion that by establishing and enforcing legal rules and rights so as to maximize economic efficiency, or that by structuring legal rules to mimic market participants and societal wealth will be maximized by negotiations, judges, legislatures, and executive agencies, is wrong as a matter of sound economics. Considerations of efficiency under the thirteen assumed conditions set forth above do not determine how rights should be distributed. Rather, the distribution of rights determines what distribution-dependent efficiencies result under those hypothetical conditions.ⁿ²⁹

However, as commonly practiced, law and neoclassical economics accepts without question the existing distribution of wealth, and it measures efficiency by reference to that distribution and subsequent distributions derived from it. As Judge Posner candidly declares:

[T]he efficiency ethic takes the existing distribution of income and wealth and the underlying human qualities that generate that distribution as given, and within very broad limits (what limits?) is uncritical of the changes in that distribution that are brought about by efficient transactions between persons unequally endowed with the world's tangible and intangible goods.ⁿ³⁰

[*189] This is a wonderful approach for the rich, whose preferences have great potency, but it is not so wonderful for poor and working people, whose preferences count for much less. It is not surprising that there are many well-funded centers for law and neoclassical economics at well-endowed law schools that employ an analysis that considers distribution essentially irrelevant for the purposes of understanding wealth maximization. In contrast, there are relatively few centers for economic approaches that regard distribution not only as an important normative issue, but also an important positive issue affecting the size of the pie in addition to the size and distribution of the slices.ⁿ³¹

3. The Best Starting Point for Economic Analysis Is One that Assumes Markets Are Operating At or Near Perfect Efficiency

Like neoclassical economics, on which it heavily relies, law and neoclassical economics assumes that markets are operating at perfect or near-perfect efficiency. Yet, according to *The New Palgrave: A Dictionary of Economics*, a widely accepted economic authority, "a large volume of work . . . suggests that [the neoclassical assumption of] perfect competition corresponds to an extremely special, limiting case of a more general theory of markets and that no important market fully satisfies the conditions of perfect competition and that most would not appear even to come close."ⁿ³²

The false assumption that perfect, or near-perfect, market efficiency is the best starting point for law and economic analysis, disadvantages the poor and working people in a number of ways. It implies that:

1. Efficiency is the primary cause of growth;
2. Prices are fair, and people wealthy enough to be owners of productive capital enterprises are restrained by competition from charging exorbitant prices. Employees are paid competitive wages, and consumers are getting the most for their money;
- [*190] 3. The economy is operating with little or no unutilized capacity (so that there is no way of improving the economic condition of one person without redistributing from another);
4. There are no barriers to becoming a producer and that all unemployment is voluntary;
5. All desired private-party transactions (such as those between employer and employee and those between producer and consumer) occur voluntarily; and,
6. Distributions of wealth different from the one generated by the operation of the supposedly efficient or nearly efficient market economy will not positively affect the size of the economic output and rather might more likely reduce it.

Conversely, if markets are *not* operating at perfect or near perfect efficiency, all of these implications are false, and the contrary implications carry with them substantial truth. For example, when the economy is operating with substantial unutilized capacity, (which, in the view of many socio-economists, is almost always the unacknowledged reality), this untapped capacity could be profitably employed (without redistribution) to provide food, clothing, shelter, healthcare, and other necessities that poor and working people lack.

4. Maximizing the Total Societal Wealth as a Result of Maximizing Efficiency Is a Value to Be Weighed Separately Against Other Competing Values

Having persuaded an alarming number of law teachers (particularly many at the twenty-five or so top ten American law schools) that the synthesis of the disciplines of law and economics provides a singular analysis that properly assumes that (1) the best starting point for legal analysis is one that counter-factually assumes market efficiency, (2) the maximization of efficiency has meaning independent of distribution, and (3) the maximization of efficiency is essentially synonymous with the maximization of wealth, advocates of the law and neoclassical economics [*191] approach argue that efficiency is a separate value to be weighed along with other values (when in fact any measure of efficiency is inextricably connected with the promotion of other values). Moreover, taking the false posture of making a concession, some advocates of law and neoclassical economics readily agree that efficiency may be compromised by socially acceptable (e.g., democratic) means to serve other competing values, such as concerns for the needs of poor and working people that are not met with the operation of the assumed efficient market.

This approach is seriously misleading because it ignores the facts that (1) maximizing efficiency does not necessarily or even probably maximize total societal wealth, (2) no measure of efficiency is independent of distribution, and (3) in the real-world inefficient markets, private, individual, group, organization, and government promotion of other values may increase total societal wealth by altering the distribution of wealth, irrespective of measures of efficiency. In other words, the widely accepted choice between (1) wealth maximization (and its false proxy efficiency maximization), and (2) other values is a false dichotomy. And the wide acceptance of this false dichotomy proves to be seductively pernicious because (1) it falsely implies that the pursuit of values other than efficiency compromises efficiency (which is taken as synonymous with total societal wealth), and (2) it lulls generations of the critics of law and neoclassical economics into fruitless, no-win attacks on points of dispute that obscure, rather than highlight, the critical interests and needs of poor and working people.

Some of the critics have taken up the law and neoclassical economics invitation by explicitly or implicitly accepting their false wealth-maximizing claims and arguing that other values are more important. By conceding the validity of the wealth-maximizing claims of efficiency analysis of law and neoclassical economics, the critics are betraying the interests of poor and working people, revealing exceptionally poor lawyering skills. To those critics, advocates for poor and working people might offer the adage given to every law student: don't merely argue values [*192] if you can first defeat your opponents on the facts. And among the economic facts that support the interests of poor and working people is the fact that distribution is important not only normatively, but also positively. Distributional issues concern not only how the pie is sliced and distributed, but also what kind of pie is made, how big it is, who is employed in the baking, and who participates in the ownership and profits of the bakery.

Other critics of law and neoclassical economics have responded by wrongly conceding that maximizing efficiency does indeed maximize societal wealth, and then arguing that the measurements of wealth are inaccurate, biased, or not sufficiently inclusive. The upshot of this approach is to struggle to improve the measurements or include additional considerations, but to still leave poor and working people last in line after the more privileged market participants have gotten the best of the so-called voluntary transactions.

Another group of critics of law and neoclassical economics have struggled mightily to beat the law and neoclassical economics proponents at their own deceptive game by showing with extremely sophisticated analysis that the opposite of law and economics rules actually promote more efficiency (and presumably, therefore, more wealth creation). These scholars sometimes (1) look at transactions costs, (2) invoke more sophisticated approaches to efficiency analysis (such as drawing upon the theory of second best),ⁿ³³ and/or (3) draw proof from behavioral psychology, sociology, or other disciplines and considerations to prove more efficient alternatives to laissez-faire ideology. These scholars occasionally win some battles (at least on paper), but they are left with the false notions that increasing neoclassical efficiency is the primary cause of economic growth and that there are no serious positive issues raised by excluding distributional issues from the analysis of wealth maximization. Indeed, it sometimes seems that proponents of the law and neoclassical economics approach will take up such "help the poor" battles to enhance the perceived power, value, and legitimacy of the law and neoclassical economics [*193] approach by showing that it can be used to help the poor and working people when its overwhelming net effect on law and economic analysis is to betray their interests.

Virtually all of these critics, like their law and neoclassical economics opponents, bow to the "God of Efficiency" as the sole or primary engine of growth, when at best it is the tail wagging the dog.

To better serve the interests of poor and working people, I argue that the more effective, more scientific, more value conscious, more ethical, more holistic, more lawyerly approaches, and the approaches more consistent with good economics, are the socio-economic and binary approaches, which should replace the flawed law and neoclassical economic approach. These approaches are discussed in Parts III and IV below.

III. SOCIO-ECONOMICS AS A MEANS OF BETTER SERVING THE INTERESTS OF POOR AND WORKING PEOPLE

The purposes of this part are to convince readers that compared to the law and neoclassical approach, the socio-economic approach to law-related economic issues is a superior starting point for the legal analysis because it provides (1) a more rigorous and lawyerly approach, and (2) an approach that better serves the interests of poor and working people. If the socio-economic approach can be convincingly shown to be superior to the law and neoclassical economic approach (which is inaccurately but widely understood and advanced in teaching and scholarship as the "law and neoclassical approach"), and (better yet) if the socio-economic approach eventually replaces the law and neoclassical economic approach as the generally preferred foundational starting point for analyzing law-related economic issues, then

legal education and the interests of poor and working people would be greatly enhanced. If such a transformation were to occur, it would by no means eliminate neoclassical analysis from the approaches law teachers and lawyers might use because socio-economics by no means objects to such analysis when the proper foundation for its application is [*194] laid. But the neoclassical approach would thereby no longer be the dominant foundational starting point for the analysis of law-related economic issues. My reason for writing this article and publishing it in this journal rests in part on my belief that critical scholars can be instrumental in bringing about this beneficial transformation.

In urging that this transformation occur, I readily concede that legal education would also be enhanced if the dominant approach to law and economics adequately recognized one or more of the other minority approaches to law and economics mentioned above, such as institutional, behavioral, and feminist economics. Nevertheless, as explained more fully below, as a rigorous, positive, and normative approach to law-related economic issues, I believe that the socio-economics approach offers advantages to legal education that the mere broadening of law and economics does not offer.

A. Background

Although the term socio-economics has been used in many ways for over a century, as used in this article, it has a precise meaning: by way of overview, socio-economics is best understood as a broad, interdisciplinary approach grounded in the scientific method and moral philosophy that draws upon all disciplines relevant to the understanding of economic phenomena. It was first advanced in legal education in 1996 in a petition drafted by the author that was signed by over 120 law teachers from over fifty American law schools to establish the Section on Socio-Economics of the Association of American Law Schools.ⁿ³⁴ Since then it has been explicated in a number of articles and developed and applied in several law review symposia.ⁿ³⁵ A definitive description also appears in the *Encyclopedia of Law and Society*.ⁿ³⁶

On the most general level, in addressing the interests of poor and working people, the superiority of the socio-economic approach as a positive and normative alternative to the law and neoclassical economics approach to [*195] law-related economic issues is at least three-fold. First, it corrects a number of factual deficiencies in the law and neoclassical economics approach (including all those identified in Part II above) that result either from the way that approach is applied or from the fact that it is not supplemented with other schools of thought and other disciplines necessary to achieve an accurate understanding of law-related economic issues. Second, it properly identifies and brings to the surface of analysis important normative issues that the law and neoclassical economics approach, as widely practiced, tends to neglect or obscure.ⁿ³⁷ Third, it provides a constitution and a set of rules for fair analysis and advocacy in addressing law-related economic issues that is in harmony with holistic legal analysis and professional ethics.ⁿ³⁸ These points are developed more fully below.

Because socio-economics analysis proceeds with a willingness to suspend the assumptions set forth above that are relied upon for neoclassical analysis, it adopts an analytical starting point regarding law-related economic issues that is more consistent with a lawyerly and scientific approach. A hallmark of legal and scientific analysis is the willingness to question basic assumptions rather than take them for granted and to suspend them in favor of other, sometimes conflicting, assumptions to explore their implications with an open mind.

However, socio-economics does more than question and suspend underlying assumptions taken as truth by advocates of the neoclassical paradigm. Rather, based on principles of natural and moral philosophy relied upon by Adam Smith,ⁿ³⁹ and drawing upon all relevant disciplines, "socio-economics is a positive and normative approach that aspires to present a factually rigorous, holistic understanding of economic behavior that is both paradigm-conscious and value-conscious, yet at the same time, largely, though not entirely, paradigm- and value-neutral."ⁿ⁴⁰

[*196] B. Positive Aspects of Socio-Economics

The positive aspects of socio-economics are grounded in the scientific method rather than any particular discipline within the social or natural sciences. The paradigm consciousness of socio-economics recognizes that the determination of facts depends on systemic rules (i.e., paradigms of analysis) for determining them.ⁿ⁴¹ In socio-economics, the definitions, assumptions, logic, and applicability of paradigms are not taken for granted but are open to examination. It is in requiring a proper foundation before applying a paradigm (or a rule or statute) in context that vests socio-economics and legal decision making with a high degree of paradigm-neutrality. Paradigm-neutrality reflects a willingness to examine conflicting paradigms from a mutually agreed frame of reference. Complete paradigm-neutrality would start with no foundational analytical principles except those agreed upon by the researchers. Thus, the paradigm-neutrality of socio-economics is subject to limitation. A commitment to logical coherence, inductive and deductive reasoning, empirical

evidence, and the scientific method--i.e., a consideration of the extent to which particular paradigms are (1) based on reasonable, workable, testable assumptions; (2) internally consistent; and (3) useful in describing past events and predicting and influencing future events--as well as paradigm- and value-consciousness, certainly does assume a basic approach to understanding. ⁿ⁴² Socio-economics is therefore not entirely paradigm-neutral. However, these foundational principles are very broad and inclusive. Apart from paradigm consciousness and value consciousness, these principles are shared by all of the natural and social sciences, the positive realm of philosophy, as well as the "fact" side of the legal analysis of "facts and values."

Being largely paradigm-neutral, socio-economics does not require the adoption of any particular school of economic thought. Whether neoclassical economics or another school of economics, or psychology, biology, political science, or some other expertise, or one or more of the sometimes conflicting schools of thought within an expertise are useful, will [*197] depend on context. Only in limited contexts will a single discipline or school of thought tell the whole story, and neither law nor socio-economics is foundationally beholden to any one discipline. Thus, by virtue of its large degree of paradigm-neutrality, socio-economics does not exclude the positive analysis of any other discipline that might provide important insights regarding the analysis of law-related economic issues.

Although it might be considered a new paradigm, socio-economics can also be "understood as a principled methodology, quite consistent with legal methodology, that is well suited to compare, critique, and employ different paradigms in particular contexts and for particular purposes." ⁿ⁴³ As defined, socio-economics is therefore in harmony with legal decision making in that it requires judgment to be based on general rules applied to particular circumstances in relevant context by way of a process that is due. Thus, like legal decision making, socio-economic analysis requires a proper foundation upon which to employ a particular discipline in specific contexts while disregarding alternative approaches that lead to different conclusions.

Moreover, because it is an interdisciplinary approach founded on the scientific method, socio-economics is not burdened by the prejudicial credentialism, which sometimes hinders the appreciation of important insights that are based on analytical approaches from outside the borders of a particular discipline. Thus, one need not be an economist to be a socio-economist. Like a competent lawyer, the competent socio-economist can competently rely on the expertise of other professionals. Therefore, people from a broad spectrum of disciplines and economic persuasions can be socio-economists. Nevertheless, in a positive sense, good socio-economics requires "good economics," just as it requires "good logic" and "good science."

Being largely paradigm and value neutral, socio-economics does not generally require specific conclusions regarding controversies, problems, or solutions. Therefore, socio-economists may or may not agree on the comparison, critique, or employment of one or more paradigms within a [*198] particular context; but with a socio-economic foundation, the substance of the agreements and disagreements that unite and divide them are better understood. Thus, the socio-economic approach provides an inclusive, intellectual foundation on which a diverse array of disciplines, and schools of thought within disciplines, can contribute to understanding, and on which a broad spectrum of people can beneficially participate with mutual respect for their disparate methodologies.

C. The Normative Aspects of Socio-Economics

The foregoing discussion of the positive aspects of socio-economics includes several references to "good" as used in a "positive" or "factual" sense. For example, given the widely accepted "paradigm" of arithmetic, the assertion that "two plus two equals four" is "factually," "good arithmetic;" whereas "two plus two equals five" is "bad arithmetic." In a different mathematical system, the opposite might be true. These judgments are factual, not normative. There may or may not be something normatively good or bad about these statements; socio-economics holds that practitioners of its methodology should be conscious of normative aspects of the positive paradigms they employ. Thus socio-economists do not suggest that their approach is entirely value neutral, or "purely scientific."

Moreover, socio-economics reflects a normative commitment to do good research that does good: research that will make a positive difference in the world. ⁿ⁴⁴ Like the good lawyer, the good socio-economist must distinguish between the important issues and those that are less important, and devote time and attention accordingly. But this commitment to focus on the good and important does not require specific agreement as to what is good and important and what research will do important good. Such considerations are left to the individual conscience. Thus, socio-economics is said to be both value-conscious and yet largely value neutral. ⁿ⁴⁵ Beyond its commitment to the good and the important, socio-economics is value-conscious in several additional respects. It requires a recognition that values [*199] (1) are

implicit in paradigms, (2) affect economic behavior, and (3) may affect behavior in ways that frequently cannot be reduced to discreet variables. ⁿ⁴⁶

D. Socio-Economics as it Relates to Efficiency, Wealth Distribution, and Growth

Notwithstanding the fact that socio-economics is largely paradigm neutral, implicit in the socio-economic approach is the proposition that the distribution of wealth, opportunities, and risks can matter significantly both normatively and positively in terms of efficiency and wealth maximization. "Consequently, in many important contexts, (1) distributional considerations must not be excluded from the positive aspects of economic analysis, (2) distributional issues cannot be treated as purely exogenous factors, and (3) distribution cannot be assumed to be determined by factors of marginal productivity." ⁿ⁴⁷ As in law, in socio-economics distributional issues are inherent in the positive as well as the normative analysis.

According to the socio-economic approach, efficiency "maximization cannot be understood entirely or even primarily in terms of marginal efficiency analysis without reference to the socio-economic context, including social institutions, changing technology, nature, race, class, gender, and the distribution of wealth, power, opportunities, and risks along with their effects over time." ⁿ⁴⁸ Moreover, although agreeing with neoclassical economics that prices affect distribution, socio-economists give equal representation to the fact that distribution also affects prices. ⁿ⁴⁹ Therefore, contrary to the one-sided neoclassical approach that prevails in much of the law- and neoclassical-economics literature and teaching, socio-economics holds that "there is no single well-defined goal of optimal efficiency at any point in time to guide legal decision making that is independent of distribution." ⁿ⁵⁰

More importantly, socio-economists recognize (1) that the neoclassical approach to efficiency is not a general theory of growth and wealth [*200] maximization (as it is falsely advanced by many who espouse principles of law and neoclassical economics in many educational, political, and social contexts), and (2) that wealth maximization cannot be understood entirely or even primarily in terms of efficiency maximization. ⁿ⁵¹ The accumulating wealth of nations (the focus of Adam Smith's inquiry) is not synonymous with the "efficiency" that is advanced as a proxy for wealth maximization in the law- and neoclassical-economics literature.

E. Socio-Economics in Legal Education

Thus, socio-economics offers a specific, lawyerly, foundational approach to rules of intellectual rigor, honesty, and fair play related to economic issues of fact and value. Until its formulation, adoption, and growing acceptance, such a systemic approach has been lacking within legal education. Trenchant criticism regarding the harms and shortcomings of the law and economic approach from critical scholars, feminists, and others have been ably advanced and well-received, and they will find a welcome home resting on the socio-economic foundation. But until the emergence of socio-economics as a school of thought, within the realm of legal analysis explicitly related to law-related economic issues, such critiques will not be supported by a comprehensive foundation that offers not only an explicit value-consciousness and commitment to enhancing justice grounded in moral philosophy, but also a solid foundation of economic principles based on the scientific method. The indispensable need for a proper foundation for the analysis of law-related economic issues is, therefore, an essential premise of socio-economics.

Although some of the benefits of adopting the socio-economic approach can be derived from merely broadening the dominant school of law and economics to include other schools of economic thought, advocates for poor and working people (indeed for all people and institutions) need a more rigorous and comprehensive approach. In this regard, there is an important congruence between the socio-economic approach and good lawyering. [*201] Like the good socio-economists, the good lawyer is not beholden to any one discipline or school of thought. Both methodologies are inherently inclusive of all relevant information. In harmony with socio-economics, professional ethics require good lawyers to draw on all relevant disciplines (both positive and normative) when serving their clients. Addressing law-related economic issues cannot be limited to law and economics but requires an integration of all relevant positive and normative understanding.

Because of its broad and inclusive approach, socio-economics might be characterized in conversations as a "big tent." The inclusive spirit in which this visual metaphor is offered is welcome, but in truth it is somewhat misleading. Lawyers do not make arguments and introduce supporting evidence under a big tent. The law requires a proper foundation; and that is what socio-economics provides with respect to law-related economic issues. Based on the foregoing, I submit that legal education and the interests of poor and working people would be enhanced if the socio-economic approach were to become as widely understood and advanced in teaching and scholarship as the law and neoclassical ap-

proach, and (better yet) if the socio-economic approach eventually replaces the law and neoclassical approach as the generally preferred foundational starting point for analyzing law-related economic issues. ⁿ⁵²

Like legal realism, critical legal studies, Critical Race Theory, feminism, and law and economics, socio-economics is a distinct school of thought. Unlike these other schools, which have long been recognized in books and scholarship on jurisprudence, socio-economics is just beginning to receive recognition in jurisprudence. ⁿ⁵³ Nevertheless, its recognition and influence are growing. A number of scholars identified with the critical schools are authors of books and scholarship on jurisprudence. It is my hope that they will include socio-economics as a school of thought worthy of mention in their books, scholarship, and teaching, as for example, Professor's Christie and Martin have done. ⁿ⁵⁴ As socio-economics becomes more widely appreciated and accepted as an alternative approach to the analysis of law-related [*202] issues, the interests of poor and working people will become progressively better served, and the goals of the LatCrit movement will be more fully realized. Critical scholars would better serve their goals by advancing socio-economics as the proper foundational starting point for the analysis of law-related economic issues rather than the approach characterized by law and neoclassical economics. ⁿ⁵⁵

IV. BINARY ECONOMICS AS A MEANS OF BETTER SERVING THE INTERESTS OF POOR AND WORKING PEOPLE

One inclusive approach to economic theory that is not yet widely understood, but that is receiving increasing attention among socio-economists and other thoughtful scholars is binary economics. ⁿ⁵⁶ Like the broader field of socio-economics, binary economics holds that distribution affects economic outcomes both normatively *and* positively. From the perspective of serving the interests of poor and working people, it is the positive impact that distribution has on both the magnitude and composition of economic production and consumption that most significantly distinguishes both socio-economics and binary economics from the neoclassical approach.

However, binary economics goes further than the more general socio-economic approach, because it focuses on one distributional issue that is ignored by virtually all other schools of economic thought (including the ones noted in Part II above), namely, the distribution of capital acquisition and ownership and its crucial relation to wealth maximization, economic prosperity, and justice for all people. To the extent that they are concerned with the distribution of income, the other economic approaches place virtually their entire emphasis on the distribution of jobs, wages, education, and welfare to assist poor and working people; whereas, binary economics addresses the distribution of income by revealing an additional legitimate interest of poor and working people which places great emphasis on [*203] enabling all people (not merely well-capitalized people) to acquire capital with the earnings of capital.

In theory, although all people in a market economy (either individually or via agents) are able to acquire capital with the earnings of capital, reliable empirical data reveals that as a practical matter, the major determinant in the ability of individuals to acquire capital with the earnings of capital is the existing distribution of capital ownership. ⁿ⁵⁷ Binary economic analysis reveals (1) that the same institutions that enable well-capitalized people to acquire capital with the earnings of capital can be opened to all people, and (2) as capital acquisition with the earnings of capital is increasingly made available to poor and working people, both their individual wealth and total societal wealth increases. With an opening of the market institutions, poor and working people will be able to earn not only by laboring, but increasingly by owning; and their earning capacity (enhanced by their ownership of productive capital) will promote the profitable employment of additional productive capacity and promote a growing economy that benefits all people.

The institutions that would be opened more democratically to all people are (1) the system of corporate finance, (2) the institution of fiduciary trusts, (3) capital-credit bank lending, (4) private capital-credit insurance and reinsurance, (5) government insurance and reinsurance, and (6) central bank (Federal Reserve) monetization. It should be noted that all of these institutions are presently functioning, and major corporations, fiduciaries, lenders, insurers, and the government heavily rely upon them; and there is no indication that this reliance will stop any time soon. In response to the global economic recession that began in 2008, the strengthening of these institutions was central to the government's efforts to promote economic recovery. However, without a binary economics understanding, these governmental actions will simply enable people to acquire capital with the earnings of capital roughly in proportion to their existing ownership, thereby exacerbating the unequal distribution of wealth and leaving poor [*204] and working people scrambling and competing among themselves for jobs (but generally not the best jobs) and welfare redistribution.

Before proceeding further, it should be noted that although binary economics has found a welcome home within socio-economics, because socio-economics is always open to new ways of understanding economic phenomena, binary economics, nevertheless, has validity independent of socio-economic methodology and should be of interest to all

economists, lawyers, and others concerned with matters of growth, efficiency, and distribution, whether or not they accept the socio-economic methodology. In an important sense, therefore, this article is in reality two articles combined as one.

A. Basic Premises of Binary Economics ⁿ⁵⁸

Binary economics can be distinguished from Adam Smith's classical economics and other economic schools by the following related propositions:

1. Labor and capital are equally fundamental independent or *binary* factors of (or inputs to) production.
2. Technology makes capital much more productive than labor.
3. The principle of binary growth: Capital has a strong, positive, *distributive* relationship to growth, such that the more broadly capital is acquired, the more it can be profitably employed to increase output.

As used in binary theory, capital includes land, tools, animals, machines, structures, patents, copyrights, and other intangibles--anything capable of being owned by another and producing wealth and therefore income. Capital does not include what is sometimes called "financial capital," which binary economics analyzes as a participation in the earnings of capital (i.e., a property right in capital). Capital also does not include "human capital," which binary economics analyzes as a function of labor.

[*205] As explained more fully below, each of these propositions runs contrary to Adam Smith's analysis. Although he did not use the word "technology," according to Smith, (1) labor is the fundamental source of production and growth, (2) technological advances in capital make labor more productive, and (3) the distribution of capital ownership has no fundamental, strong, positive relationship to economic growth.

B. Binary Growth

The most important contribution of binary economics to the interests of poor and working people is the principle of binary growth. The principle of binary growth is a potent *distributive* relationship between capital acquisition and growth. ⁿ⁵⁹ As a fundamental economic principle, it is unique to binary economics. ⁿ⁶⁰ It is not found in any writing in the economic literature or otherwise that is not traceable to the work of Louis Kelso, who originated the theory. Promoting the broader understanding of the principle of binary growth will serve the interests of poor and working people, because it reveals a win-win strategy of how to economically empower them. It reveals a wholly voluntary market means of enriching poor and working people and increasing growth and economic opportunity for all people without redistributing anything from existing owners.

This understanding reveals that major corporations in the U.S., and around the world, have a natural interest in expanding their share ownership in ways that will not only enrich their employees, their customers, and their neighbors (people who live and work near their facilities), but also substantially increases the value of their shares for existing shareholders (both individuals and institutional investors representing employees of private companies, governments, and others). ⁿ⁶¹ It also reveals how principles of binary economics can be used to promote ways to address past injustices by way of reparations. ⁿ⁶² A step-by-step description of how major corporations could enhance their profitability by broadening their ownership in a binary economy can be found in the reference cited below. ⁿ⁶³

[*206] One great benefit of the binary approach is that it clearly reveals that economic and personal empowerment derived from the ownership of productive capital (which is not realistically achievable in an industrial economy by most people with only labor earning power): (1) can be achieved by enabling them to acquire capital with the earnings of capital, and (2) this enabling empowerment of poor and working people will make the employment of more capital and labor more profitable for everyone. Thus, to serve the interests of poor and working people, it is not enough to ask them to consider the size of the pie without considering who gets to participate in the ownership of the bakery. The empowering issue of the distribution of capital acquisition is of crucial importance to poor and working people but is entirely obscured by the abuse of the neoclassical paradigm. ⁿ⁶⁴

The logic supporting the binary property/economic paradigm indicates that the voluntary operation of an ownership-broadening economy (which would gradually result from opening to all people the six institutions by which capital is presently acquired primarily with the earnings of capital) provides not only a broader distribution of wealth and in-

come, but also substantially more real growth than would a traditional economy. This logic is explained more fully by the following three propositions:

1. Because demand for capital investment is dependent on demand for consumer goods in a future period, a voluntary pattern of steadily broadening ownership promises more production-based consumer demand in future years and therefore more demand for the employment of labor and capital in earlier years.
2. A broader distribution of capital acquisition, ownership, and income strengthens the promise of capital to pay for itself out of its future earnings and makes profitable the employment of more (and increasingly more productive) capital.
3. If members of the poor and middle classes are enabled to compete with existing owners for the acquisition of corporate [*207] stock representing the capital requirements of companies worthy of prime credit, they would bring to the bargaining table a chip not possessed by existing owners: a pent up appetite for the necessities and simple luxuries of life that the rich have long enjoyed from capital income. After the acquisition debt obligations have been satisfied, the earnings of capital acquired by members of the poor and middle class will create more production-based consumer demand than if that capital had been acquired by the rich. In contrast, if acquired by the rich, most of the capital earnings would seek investment opportunities but in the context of weaker consumer demand.

C. Labor, Capital, Production and Growth: Conventional Productivity Compared with Binary Productiveness

In order to understand how the principle of binary growth differs theoretically from the foundational understanding of growth articulated by Adam Smith--and followed by virtually all other economists since--it is necessary to compare Smith's understanding of the role of labor and capital in the production of goods, services, and growth with the binary understanding. This in turn requires a comparison of the conventional "productivity" with binary "productiveness."

According to Adam Smith, the primary role of capital (which implicitly he regarded as embodying know-how or technology) is to increase labor productivity. ⁿ⁶⁵ Karl Marx, Alfred Marshall (widely credited for neoclassical economics), and J.M. Keynes did not disagree. Indeed, in his *General Theory*, Keynes distilled the economy to three fundamental, independent variables: time, money, and labor. Like Smith, Keynes treated capital as a dependent variable. ⁿ⁶⁶ In binary economics, labor and capital are equally fundamental and independent variables because both do work. ⁿ⁶⁷

According to the binary view of production, although labor and capital may cooperate (just as people may cooperate) to do work, each factor does its own work by providing its own productiveness, thereby earning its own [*208] income. To understand the binary approach, it is important to distinguish between productivity (which is the ratio of the output of all factors of production, divided by the input of one factor, usually labor) and productiveness (a special focus of binary economics, which retrospectively means work done and prospectively means productive capacity).

The independent productiveness of labor and capital can be illustrated by considering any sort of work. Consider, for example, the work of sawing boards and hauling sacks. A person can saw ten boards per hour with a handsaw, and one hundred boards per hour with a machine saw. According to conventional economic analysis, compared to working with the handsaw, with the machine saw the worker can saw ten times as many boards in the same time. Thus, the worker is said to have ten times the productivity as compared to working with the handsaw. However, when sawing each board with the help of the machine saw, the worker is doing much less work. Consequently, per unit of output, the labor contribution to the production of sawed boards has decreased. From a binary perspective, the worker is contributing no more than ten percent of the productiveness that was required to work with the handsaw, and the machine saw is doing essentially all of the extra work.

The independent productiveness of capital is more clearly revealed in the work hauling sacks: (1) a person can haul one sack, one mile, in one hour, and is exhausted, (2) with a horse, ten sacks can be hauled four times as far (yielding a forty-fold increase in output), and (3) with a truck, five hundred sacks can be hauled forty times as far (yielding a twenty thousand-fold increase in output). According to the binary perspective, the horse and truck are doing essentially all of the extra work. ⁿ⁶⁸

D. The Six Powers of Capital

Based on its independent productiveness, capital has six powers important to production, distribution, and growth which are entirely obscured by the conventional economic paradigm. ^{m69} Capital can:

- [*209] 1. Replace labor (by doing what was formerly done by labor);
- 2. Vastly supplement the work of labor by doing the kind of work that humans can do;
- 3. Do work that labor alone can never do (e.g., automatic elevators lift hundreds of feet in seconds, airplanes fly, fruit trees make fruit--while all farmers can do is assist in the process);
- 4. Work without labor (as in the case of washing machines, automatic bank tellers, gasoline dispensers, vending machines, automated factories, and fruit-bearing trees);
- 5. Pay for itself out of its future earnings (the basic rule of business investment); and
- 6. Distribute income necessary to purchase its output.

Each of these powers, when actually reflected in production, contributes to growth (including mere labor replacement, which produces the same physical output, plus leisure for the owner of the capital), but only the first power directly involves the mere substitution of capital for labor. Thus, although many economists and policy advocates abuse the marginal efficiency theory of neoclassical economics by advancing it as the foundation for (or the primary component of) a general theory of wealth maximization and growth, the capital/labor substitution process is only one component of growth (operating *after* the creation of greatly increased productive capacity). From the binary perspective, as explained in Part IV-F, the wealth-enhancing contributions of market pricing and resource allocation are severely limited so long as the distribution of capital acquisition remains narrow.

E. The Independent Productiveness and Power of Labor and Capital

Some people object to the notion of "independent" capital productiveness and the notion that capital has six independent powers that contribute directly to growth in ways not caused by increasing human productivity. [*210] Their thinking is influenced by the almost universally shared economic approach, articulated by Adam Smith, that the primary role of capital is to increase labor productivity, and increasing labor productivity is the primary cause of per capita growth. These people observe that any work done by capital depends on antecedent or concurrent work of human beings (labor). For example, it takes the person to lead the horse; drive the truck; fly the airplane; invent, build, operate, and repair the machines and robots, etc. One problem with this objection is that, in this sense, nothing is independent and no person's labor is independent because no person exists without the antecedent work of others and the natural bounty that supported their ancestors. So we might as well eliminate "independent" from the English language because nothing is independent. There is another sense in which the work of capital and labor is not independent, because they each have value relative to one another, and markets exist wherein market participants can express how they value one relative to the other. However, in this sense, no good and no factor of production are independent of other goods and factors in terms of their relative value. But the concept of independence does have significance in an economic sense that is explained more fully below.

The "independent" in "independent productiveness" merely requires recognition that both the human and the non-human factors do work independent of the increasing productivity of the other factor. Mathematically, this means treating labor and capital as *independent variables*. Compared to the conventional economic approach employed by both Adam Smith and J.M. Keynes, (which treats capital as a dependent variable and labor as the only independent), the binary approach treats capital and labor as independent (i.e., binary) productive variables.

Thus, with the binary approach, the concept of independent productiveness does *not* negate the fact that in many instances both capital and labor are generally needed to complete specific kinds of work, or the fact that labor is needed to conceive of, design, create, operate, maintain, [*211] store, and repair capital. But the work of conceiving, designing, creating, operating, maintaining, storing, and repairing capital is *not* the work of the capital conceived, designed, created, operated, maintained, stored, and repaired. Thus, although it takes a person to lead the horse, the work of leading is not the work of hauling. If, instead of leading a horse, the leader led ten people each carrying one sack, who would deny the independent work (productiveness) of each of the ten human haulers merely because someone is leading them? Likewise, while it takes a person to operate the handsaw and machine saw, and no boards would be sawed without the

worker, it is also true that no boards could be sawed without a saw. There is now automated machinery that can saw a great number of boards in a comparatively short period of time with virtually no human input.

Nor does the binary approach contradict the fact that capital and labor have market value relative to each other (and are in this sense not independent just as the value everything has a relation to the value of every other thing). However, the relative value of things depends on the distribution of capital acquisition which can only be comprehended if capital is treated as an independent variable, as explained in Part IV-F below.

F. Productiveness, Prices, Values, and Efficiency

A broader distribution of capital acquisition also affects price and value. As long as most people derive little or no income from capital acquisition, most consumer goods will be worth the work people are willing to do to acquire them. However, people can express value not only by the work they do, but also by the work they let their capital do. Compared to the person with no horse, the person who owns a horse finds many more sacks are worth hauling; and the economy of sack hauling will grow as horse (and truck) acquisition becomes more broadly distributed. In an economy in which the institutions that facilitate capital acquisition with the earnings of capital are opened more broadly, the value of goods is not limited to the [*212] work people are willing and able to do by way of their labor, but also includes the work they are willing and able to let their capital do.

Moreover, the willingness of laborers to work at a given wage depends on their competitive opportunity to acquire capital with their earnings and then receive its full net return. Accordingly, (1) the technical relationship used in the theory of marginal productivity that governs conventional understanding of the relative employment of capital and labor in production, and (2) the factor income shares derived from production are significantly dependent on the distribution of capital acquisition with the earnings of capital. From a conventional economic perspective--in terms of its impact on pricing, capital/labor substitution, employment, and factor income shares--the distribution of capital acquisition is either irrelevant or of only minor consequence.

G. Productiveness, the Distribution of Earning Capacity, and Growth

In their book *Economics Explained: Everything You Need to Know About How the Economy Works and Where Its Going*, Nobel Laureate Robert Heilbroner and Lester Thurow (then Chair of Economics at M.I.T.), present data from which they conclude that, between 1860 and 1980, production in the U.S. increased 600 percent per capita.ⁿ⁷⁰ And the economy has grown even more per capita since then. But were people really doing six times as much work in 1980 as they did in 1860? Are people really doing more than six times as much work today? Or is it capital that is doing ever more of the work per unit of production? These are questions that poor and working people and their advocates must ask and answer if their economic strategies are to conform to reality.

When analyzing how production and productive capacity have grown with advancing technology, conventional market economics interprets the role of capital as merely facilitative; capital increases human productivity, thereby allowing for a rise in output per unit of labor, higher wages, and the employment of more labor.ⁿ⁷¹ According to binary economics, however, in [*213] contributing to economic growth, capital does much more than increase the productivity of the people who work with it; increasingly, capital is doing more of the work. The economic imperative is generally to produce more with more productive capital and less labor. Although technological advance may be seen to concentrate higher productivity into fewer workers, as a general rule the primary effect of technological advancement (per unit of output and in the aggregate) is to make capital more productive than labor and thereby to replace and vastly supplement the productiveness of labor with ever greater capital productiveness.ⁿ⁷²

Moreover, because capital is independently productive, it works on both sides of the production-consumption economic equation by providing vastly increased (1) productive capacity and production, and (2) capacity to distribute income and leisure. According to binary economists, in a private property, market economy, it is the capacity of capital both to do more work and to distribute more income and leisure which explains how broadening capital ownership promotes greater employment of existing capacity, capital accumulation, and growth.ⁿ⁷³ Thus, from a binary perspective, growth is primarily the result of increasing capital productiveness and the distribution of its ownership rather than increasing labor productivity.

From a binary perspective, the recognition that capital productiveness is increasing relative to labor productiveness, so that capital is doing ever more of the work and has the capacity to distribute ever more income per capita, leads to several important insights that are important to poor and working people.

First, as capital both replaces and vastly supplements labor to increase economic output with relatively decreasing labor per unit of output, labor's relative claim on total output tends to decrease so that exclusive reliance on increased jobs and wages is an increasingly inadequate way to earn a living.

Second, as production becomes more capital intensive, most people will not be able to preserve and enhance their earning capacity relative to what [*214] an economy can produce unless they supplement their labor earning capacity with capital earning capacity.

In light of the fact that (1) the distribution of future earning capacity is an essential motivating ingredient for the creation of present productive capacity, and (2) the productive power of capital produces and distributes ever more income and leisure, indicates that the capital that buys itself for well-capitalized people can buy itself even more profitably if all people are included in the process of capital acquisition.

H. Choosing Which Law and Economic Theories to Teach

The essence of the adversary system is that there is always more than one way to look at things. One might say that the growth is caused by increasing labor productivity, by increasing capital productiveness, or by a combination of both. One might say that the ways to address the economic needs of poor and working people are jobs, welfare, and education; or one might say that capital acquisition with the earnings of capital is also very important and should not be excluded from the priorities. Which way of understanding is more helpful to the interests of poor and working people? Which way reveals more clearly what poor and working people need not only to survive but to flourish? Economists Heilbroner and Thurow marketed their book with the subtitle "*Everything You Need to Know About How the Economy Works and Where It's Going*," and they discuss extensively the problems of poverty and income distribution, but they make no reference to the economic importance or consequences of the distribution of capital acquisition with the earnings of capital.ⁿ⁷⁴ The same is true of all but a handful of economists throughout the world.

The conventional productivity view suggests that the solution to the need to earn enough to survive and raise a family is increased jobs and wages, and, if necessary, welfare. But although the privileged and some of the lucky may flourish, the binary view suggests that jobs, wages, and welfare will never distribute enough income to most poor and working people [*215] because the purpose of technological advance is to squeeze labor out of production, and that only the acquisition of capital can distribute the earning capacity and the leisure that was the promise of the industrial revolution. With the advent of increasingly productive capital, jobs are eliminated. The promise of other jobs created by technological advance will also dry up with yet more technological advance. In an economy characterized by accelerating technological advance, competing for earning capacity via labor alone is like competing with horses and trucks for hauling. The elite, along with some of the strongest and brightest, may flourish in such an economy, but most people will not. As production becomes ever more capital intensive, the way in which every person participates in production must also become capital intensive, not only by laboring, but increasingly by acquiring capital with the earnings of capital.

So what is the solution? Promote capital investment so that the benefits will trickle down, as the neoclassical paradigms on the right suggest? Press for increased jobs, wages, and welfare as those on the Keynesian-left suggest? Eliminate capitalism as Marx and others suggest? Or open to people as practical matter the right to acquire capital with the earnings of capital as the binary view suggests? Inasmuch as the neoclassical, Keynesian, and socialist approaches are widely taught and discussed in policy analysis, is there any good reason to exclude the binary alternative from virtually all economic and legal scholarship that address issues of economic efficiency, growth, distribution, poverty, and justice?

I. Binary Economics Reveals a Concrete Plan of Action for Poor and Working People

The binary approach is not just an academic theory sympathetic to poor and working people, rich in feel-good rhetoric but poor in practical application. It reveals a concrete strategy that could be practically employed, without redistribution, for the benefit of poor and working people. To help promote economic recovery following the global recession [*216] that began in 2008, this strategy is already being applied by private companies--with substantial aid from the government--to facilitate capital acquisition primarily for rich people and with relatively little benefit for poor and working people.ⁿ⁷⁵

The logic underlying the principle of binary growth (i.e., capital-ownership distribution-based growth) can be understood and implemented by considering the three thousand largest companies in the U.S., and then focusing on a subset comprised of prime credit-worthy companies. Most of these companies exhibit the frustrating essence of underutilized productive capacity. At diminishing unit costs, they can produce much more of the goods and services people need

and want. However, the consumer earning capacity to render more production profitable, even at diminishing unit costs, is lacking.

As noted above, presently, almost all new capital is acquired with the earnings of capital and much of it is acquired with borrowed money. The ownership of this corporate wealth is highly concentrated, so that approximately 1 percent of the people own 40-50 percent of the wealth and 10 percent own 90 percent of the wealth, leaving 90 percent of people owning little or none. Thus, capital returns its value at a rate reflective of its long-term (suppressed) earning capacity as it buys itself for a small minority of the population.

If the techniques presently used to enable existing owners to acquire capital using earnings of capital were opened competitively to all people, then in an economy with underutilized productive capacity the demand for capital investment would increase as its income is increasingly distributed to would-be consumers with unsatisfied needs and wants.

To acquire capital with the earnings of capital, well-capitalized people use (1) the pre-tax earnings of capital, (2) collateral, (3) capital acquisition credit, (4) market and insurance mechanisms to diversify and reduce risk, and (5) a monetary policy intended to protect private property. The same institutions and practices that work profitably for well-capitalized people [*217] can also work profitably for all people. In an economy operating at less than full capacity, if capital can competitively pay for its acquisition costs out of its future earnings for existing owners, it can do so even more profitably if all people are included in the acquisition process.

Accordingly, to enable all people and major, prime, credit corporations to capitalize on the potent distributive relationship between voluntary ownership-broadening capital acquisition and growth, a binary economy requires only modest reforms to open the market infrastructure governing corporate finance so that everyone is vested with competitive capital acquisition rights to acquire capital with the earnings of capital.

As shown in the General Theory Diagram below, structure of a binary economy can be modeled with six basic institutions: (1) Prime Credit-Worthy Corporations, (2) Capital Ownership-Broadening Trusts, (3) Banks, (4) Private Capital Credit Insurers, (5) the Capital Diffusion Reinsurance Corporation (the only new entity, modeled after the Federal Housing Administration), and (6) the Central Bank (Federal Reserve).

[*218] Figure 1: General Theory Diagram

In a binary economy, in addition to their usual means of acquiring capital assets (borrowing, retained earnings, and sale of shares), prime creditworthy corporations could raise the funds to acquire capital assets by selling special full-dividend common shares to a capital ownership-broadening trust for the benefit of employees, customers, neighbors, and others, paid for with a bank loan to the trust, insured by a private capital credit-insurer and government reinsurer, and discounted at a rate of 99.75 percent by the Federal Reserve (with 0.25 percent reflecting its estimated administrative cost). Once the capital acquisition loan repayment obligations are met, the [*219] full net capital earnings (net of reserves for depreciation, research, and development) would be paid to the binary owners to help them meet their needs and wants and to provide the basis for increased investment, employment, and production. ⁿ⁷⁶

According to binary theory, the more broadly capital is acquired in voluntary market transactions, the faster an economy, and large corporations within that economy, will grow. More broadly distributed capital acquisition will:

1. Distribute more consumer demand, thereby enhancing the market for goods and services;
2. Profitably employ more underutilized capacity (both capital and labor);
3. Increase capital investment;
4. Accelerate technological advance;
5. Provide additional financial capital for entrepreneurial enterprises;
6. Enhance employee productivity, consumer loyalty, and general goodwill among neighbors of participating companies and the general population;
7. Reduce the need for taxation, other forms of redistribution, and associated transactions costs;

8. Enhance general wealth of most major corporations, their shareholders, and the general population;
9. Broaden, deepen, and more fully democratize the institution of private property by opening its benefits to more people; and
10. Strengthen political democracy by opening capital acquisition with the earnings of capital to more people.ⁿ⁷⁷

Although government assistance to private companies, banks, capital credit insurers (such as AIG), and quasi-public capital credit insurers (such as [*220] as Fannie Mae and Freddie Mac), and generous federal reserve monetization to extend competitive capital acquisition rights more broadly to include poor and working people may be seen as politically impractical, it is essentially what is now being done for the capital acquisition rights of richer people. The most significant difference is that poor and working people are being unnecessarily excluded; and tragically, they and most of their advocates do not understand that their exclusion is thwarting economic recovery and that their inclusion would aid it.

Unfortunately, at present, the vast majority of lawyers, law teachers, and law students committed to the interests of poor and working people seem wholly unaware that the right to acquire capital with the earnings of capital might be the subject of advocacy. Although the concepts underlying binary economics were first published over fifty years ago, generations of students of law, economics, and other relevant disciplines continue to graduate with no exposure to those concepts. Reform of the curriculum in law, economics, and other disciplines within colleges, universities, business schools, and law schools is therefore a matter of urgent concern. Critical scholars could do a great deal to correct this deficiency in education.

V. LEARNING, TEACHING, EMPLOYING, AND PROMOTING SOCIO-ECONOMICS AND BINARY ECONOMICS

So, what can LatCrit scholars who are seriously committed to the welfare of poor and working people do to assist them in achieving greater economic understanding and empowerment? One answer is to learn, teach, employ, and promote socio-economics and binary economics.

By learning, teaching, employing, and promoting the principles of socio-economics as a foundationally holistic, value-conscious, factually accurate method of analyzing law-related economic issues and by teaching it to others and promoting its acceptance ever more broadly in legal education, LatCrit scholars can better serve the interests of poor and working people by hastening the time when socio-economics entirely supplants the [*221] prevailing law and neo-classical economics approach to such issues. As noted above, the widespread acceptance of the socio-economic approach will not eliminate the useful application of neoclassical economics when the proper foundation is laid for its application, but it will prevent its application in contexts where it should not be applied. The widespread acceptance of the socio-economic approach will also facilitate the proper application of other schools of economics and other disciplines as necessary to competently represent clients.

By learning, teaching, employing, and promoting the broader acceptance of binary economics among legal educators, LatCrit scholars can better serve the interests of poor and working people by helping them and their advocates to identify and secure a crucial property right that they need to flourish in a market economy. Promoting their widespread understanding of binary economics will hasten the time when the institutions of corporate finance, banking, insurance, government loans and guaranties, and monetary policy (the very institutions presently relied upon by well-capitalized people to acquire capital with the earnings of capital) can be practically opened to poor and working people. With that opening, the right to acquire capital with the earnings of capital can be more broadly extended to them and a more level and competitive economic playing field can be established, and the prospects for greater and more broadly distributed earning capacity, prosperity, and leisure can be reasonably expected and realized by all.

Legal Topics:

For related research and practice materials, see the following legal topics:
 Computer & Internet Law Taxation Federal Tax Education Law Faculty & Staff Personnel Actions Promotions

FOOTNOTES:

n1 "Law and economics" has many definitions depending on the school of thought. Black's Law Dictionary defines "law and economics" as the "discipline advocating the economic analysis of the law, whereby legal rules are subjected to a cost-benefit analysis to determine whether a change from one legal rule to another will increase or decrease allocative efficiency and social wealth. Originally developed as an approach to antitrust policy, law and economics is today used by its proponents to explain and interpret a variety of legal subjects." BLACK'S LAW DICTIONARY 901 (8th ed. 2004).

n2 Binary economics is an approach to economics that holds: (1) capital and labor both do work, (2) technology makes capital much more productive than labor, and (3) the financial institutions that presently facilitate capital acquisition with the earnings of capital primarily for well-capitalized people can be opened to all people in ways that will (a) substantially increase the earning capacity of poor and working people and (b) promote sustainable economic growth without taking anything from existing owners.

n3 A. Allan Schmid, *Institutional Law and Economics*, 1 EUR. J. L. & ECON. 33 (1994).

n4 Cass R. Sunstein, *Behavioral Law and Economics: A Progress Report*, 1 AM. L. ECON. REV. 115 (1999); Christine Jolls, Cass R. Sunstein, & Richard H. Thaler, *Behavioral Approach to Law & Economics*, in BEHAVIORAL LAW & ECONOMICS 13, 13 (Cass R. Sunstein ed., 2000).

n5 EIRIK G. FURUBOTN & RUDOLF RICHTER, INSTITUTIONS AND ECONOMIC THEORY: THE CONTRIBUTION OF THE NEW INSTITUTIONAL ECONOMICS xiii (1998).

n6 Gillian K. Hadfield, *Feminism, Fairness, and Welfare: An Invitation to Feminist Law and Economics*, 1 ANN. REV. L. & SOC. SCI. 285, 301 (2005).

n7 See DUNCAN KENNEDY, LEFT WING LAW AND ECONOMICS ESSAYS (1995); Duncan Kennedy & Frank Michelman, *Are Property and Contract Efficient?*, 8 HOFSTRA L. REV. 711 (1979-1980).

n8 See BARBARA H. FRIED, THE PROGRESSIVE ASSAULT ON LAISSEZ FAIRE: ROBERT HALE AND THE FIRST LAW AND ECONOMICS MOVEMENT (1998).

n9 See Herbert Hovenkamp, *The First Great Law and Economics Movement*, 42 STAN. L. REV. 993 (1990).

n10 Symposium, *Teaching Law and Socioeconomics*, 41 SAN DIEGO L. REV. 1 (2004).

n11 Professor James Hackney was perhaps the first to observe in print that "law and neoclassical economics," as widely and generally practiced, is in reality. James R. Hackney, Jr., *Law and Neoclassical Economics: Science, Politics, and the Reconfiguration of American Tort Law Theory*, 15 L. & HIST. REV. 275, 275-77 (1997).

n12 Cf. DANIEL H. COLE & PETER GROSSMAN, *PRINCIPLES OF LAW AND ECONOMICS* 13 (2005); JEFFREY L. HARRISON, *LAW AND ECONOMICS: CASES, MATERIALS, AND BEHAVIORAL PERSPECTIVES* 25 (2002); STEVE KEEN, *DEBUNKING ECONOMICS: THE NAKED EMPEROR OF THE SOCIAL SCIENCES* 87 (2002).

n13 COLE & GROSSMAN, *supra* note 12; HARRISON, *supra* note 12; KEEN, *supra* note 12. In contrast, socio-economics is willing to suspend all of these assumptions and consider analyses based on other assumptions and paradigms of thought.

n14 *E.g.*, Richard Hattwick, the founding editor of *The Journal of Socio-Economics* and a prominent socio-economist.

n15 See THOMAS S. KUHN, *THE STRUCTURE OF SCIENTIFIC REVOLUTIONS* 43-51 (2nd ed. 1970) (discussing paradigm creation and shifts).

n16 "Law and Neoclassical Economics" is often referred to in literature as "the Chicago School." See, *e.g.*, COLE & GROSSMAN, *supra* note 12, at 59-60. I decline to do so because, although it conveys to readers the notion that it is only one school within the law and economics movement, such an appellation (1) obscures its narrowness and limited application in theory, and (2) psychologically detracts from the reality that it is overwhelmingly the dominant school of law and economics and the one that almost invariably comes to mind by both its advocates and most of its critics. In practical effect on legal education it is not merely *one of many* schools of economics, it is *the* school of law and economics.

n17 See *infra* note 34.

n18 RICHARD A. POSNER, *ECONOMIC ANALYSIS OF LAW* (6th ed. 2003) (using an efficiency ethic of neoclassical economic principles as the basis for the seminal text on law and neoclassical economics).

n19 *Id.* at 252. Judge Posner offers no theory for the relationship between economic principles and wealth maximization growth other than those neoclassical principles based on allocative efficiency. In many contexts, Judge Posner equates efficiency with wealth maximization. For example, in discussing the moral content of the common law, Judge Posner declares, "Efficiency or wealth maximization is an important thread in the ethical tapestry [of the common law], but it is not the only one." *Id.* at 265. This false impression is promoted by many others. For example, other economists have argued that "what is socially optimal under any measure of social welfare is for the net amount of pie produced to be as large as possible--this is efficiency--and then for the pie to be sliced up and distributed in a way that is best according to the particular measure of social welfare under consideration." HOWELL E. JACKSON ET AL., *ANALYTICAL METHODS FOR LAWYERS* 369 (2003).

n20 POSNER, *supra* note 18, at 253. Judge Posner also states the following:

The rate of economic growth is the rate at which the output of a society increases. Since growth is fostered by using resources [more] efficiently, there is a sense, but a rather uncontroversial one, in which the common law, insofar as it... [is] shaped by a concern with efficiency, may be said to have fostered growth.

Id.

n21 ADAM SMITH, *AN INQUIRY INTO THE NATURE AND CAUSES OF THE WEALTH OF NATIONS*, at lix-lxii (Mod. Libr. Ed., Random House, Inc., 1994) (1776).

n22 ROBERT HEILBRONE & LESTER THUROW, *ECONOMICS EXPLAINED* 26-27 (Simon & Schuster 1998) (1982).

n23 Robert Ashford, *Socioeconomics and Professional Responsibilities in Teaching Law-Related Economic Issues*, 41 SAN DIEGO L. REV. 133, 150 (2004).

n24 See HARRISON, *supra* note 12, at 50-51, 59-60 (discussing the concepts of Pareto and Kaldor-Hicks efficiency).

n25 Ashford, *supra* note 23, at 151.

n26 *Id.*

n27 See POSNER, *supra* note 18, at 252; JACKSON, *supra* note 19, at 369.

n28 JACKSON, *supra* note 19, at 369.

n29 Warren J. Samuels, *Maximization of Wealth as Justice: An Essay on Posnerian Law and Economics as Policy Analysis*, 60 TEX. L. REV. 147, 153-54 (1981-1982) (reviewing RICHARD A. POSNER, *THE ECONOMICS OF JUSTICE* (1981)) ("[T]here is no unique wealth maximizing result, only results specific to the rights structure that supports the existing distribution of wealth."); WARREN J. SAMUELS & A. ALLAN SCHMID, *LAW AND ECONOMICS: AN INSTITUTIONAL PERSPECTIVE* 2 (1981) ("[T]he concept of efficiency as separate from distribution is false."); Schmid, *supra* note 3, at 37.

n30 RICHARD A. POSNER, *ECONOMIC ANALYSIS OF LAW* 241 (3d ed. 1986).

n31 *See Id.* at 252; JACKSON, *supra* note 19.

n32 3 THE NEW PALGRAVE: A DICTIONARY OF ECONOMICS 837-38 (John Eatwell et al. eds., 1987).

n33 *See generally* RICHARD J. MARKOVITS, TRUTH OR ECONOMICS: ON THE DEFINITION, PREDICTION, AND RELEVANCE OF ECONOMIC EFFICIENCY (2008).

n34 With minor amendment, the definition reads as follows:

Drawing upon economics, sociology, political science, psychology, anthropology, biology and other social and natural sciences, philosophy, history, law, management, and other disciplines, socio-economics [1] regards competitive behavior as a subset of human behavior within a societal and natural context that both enables and constrains competition and cooperation[;] [2] [r]ather than assume that the individual pursuit of self-interest automatically or generally tends toward an optimal allocation of resources, . . . assumes that societal sources of order are necessary for people and markets to function efficiently[; and] . . . [3] seeks to advance a more encompassing interdisciplinary understanding of economic behavior open to the assumption that individual choices are shaped not only by notions of rationality [and self interest] but also by emotions, social bonds, beliefs, expectations, and a sense of morality.

Socio-economics is . . . dedicated to the empirical, reality testing approach to knowledge. It respects both inductive and deductive reasoning. But it also openly recognizes the policy relevance of teaching and research and seeks to be self-aware of its normative implications rather than maintaining the mantle of an exclusively positive science. Although it sees questions of value inextricably connected with individual and group economic choices, socio-economics does not entail a commitment to any one paradigm or ideological position, but is open to a range of thinking that treats economic behavior as involving the whole person and all facets of society within a continually evolving natural context.

Unique among interdisciplinary approaches, however, socio-economics recognizes the pervasive and powerful influence of the neoclassical paradigm on [contemporary] thought. Recognizing that people first adopt paradigms of thought and then perform their inductive, deductive, and empirical analyses, socio-economists seek to examine the assumptions of the neoclassical paradigm, develop a rigorous understanding of its limitations, improve upon its application, and develop alternative, perhaps complementary, approaches that are predictive, exemplary, and morally sound."

Robert Ashford, *What Is Socio-Economics?*, AALS SEC. ON SOCIO-ECON. NEWSL., Dec. 2002, at 6, *available at* <http://www.journaloflawandsocioeconomics.com>.

n35 *See generally*, Robert Ashford, *Socio-Economics: What Is Its Place in Law Practice?*, 1997 WIS. L. REV. 611 (stating and explicating the definition of socio-economics and its relation to law practice) [hereinafter Ashford, *Practice*]; Jeffrey L. Harrison, *Law and Socio-Economics*, 49 J. L. EDUC. 224 (1999); Robert Ashford, *The Socio-Economic Foundation of Corporate Law and Corporate Social Responsibility*, 76 TUL. L. REV. 1187 (2002); Symposium, *supra* note 10.

n36 3 ENCYCLOPEDIA OF LAW AND SOCIETY 1405-07 (2007); to underscore the harmony between socio-economics and economics as properly applied, it might be noted that by tradition, every other year the Chair of the AALS Section on Socio-Economics holds a PhD in economics.

n37 Robert Ashford, *What is Socioeconomics?*, 41 San Diego L. Rev. 5, 10 (2004).

n38 *Id.* at 7-10.

n39 Judge Guido Calabresi, 2007-2008 Co-Chair of the AALS Section on Socio-Economics, Welcoming Remarks to the 2008 Annual Meeting of the AALS Section on Socio-Economics (Jan. 3, 2008) (*available at* <http://www.journaloflawandsocioeconomics.com/GuidoCalabresiWelcomingRemarks080103.pdf>) ("Adam Smith was a socio-economist").

n40 Ashford, *supra* note 37, at 7 (internal citations omitted). Yet the paradigm neutrality of socio-economics is subject to limitation. A commitment to logical coherence, inductive and deductive reasoning, empirical evidence, and the scientific method, as well as paradigm- and value-consciousness, does assume a basic approach to understanding. *Id.* at 8.

n41 KUHN, *supra* note 15.

n42 Ashford, *supra* note 37, at 8.

n43 *Id.*

n44 ENCYCLOPEDIA OF LAW AND SOCIETY, *supra* note 36, at 1406.

n45 Ashford, *supra* note 37, at 7.

n46 *See id.* at 7 n.4.

n47 *Id.* at 8-9.

n48 *Id.* at 9.

n49 *Id.*

n50 *Id.*

n51 *Id.*; Ashford, *supra* note 23, at 150-52.

n52 Ashford, *supra* note 35, at 613.

n53 GEORGE C. CHRISTIE & PATRICK H. MARTIN, JURISPRUDENCE 1212 (3d. ed. 2008)

n54 *Id.*

n55 For arguments suggesting that (in light of considerations of the duties of competence, providing holistic advice, ascertaining the facts, consulting with all relevant disciplines, and improving the law) the socio-economic approach to law-related economic issues is more rigorous and more in harmony with lawyers' professional ethics than the law and neoclassical economic approach, *see* Ashford, *Practice, supra* note 35, at 613.

n56 1 ENCYCLOPEDIA OF LAW AND SOCIETY, 123-27 (2007). Binary economics was first advanced by corporate finance attorney, investment banker, and philosopher Louis Kelso. *See* LOUIS O. KELSO & MORTIMER J. ADLER, THE CAPITALIST MANIFESTO (1958); LOUIS O. KELSO & MORTIMER J. ADLER, THE NEW CAPITALISTS (1961); LOUIS O. KELSO & PATRICIA HETTER, TWO FACTOR THEORY: THE ECONOMICS OF REALITY (1967); LOUIS O. KELSO & PATRICIA HETTER KELSO, DEMOCRACY AND ECONOMIC POWER: EXTENDING THE ESOP REVOLUTION THROUGH BINARY ECONOMICS (1991). The authoritative and most complete source of writings by Louis Kelso can be found on the web site of The Kelso Institute, <http://www.kelsoinstitute.org> (last visited Oct. 19, 2009).

n57 Despite years of expressed concern, the ownership of wealth in the U.S. is highly concentrated, so that approximately 1 percent of the people own 50 percent of the wealth and 10 percent own 90 percent of the wealth, leaving 90 percent people owning little or none. EDWARD N. WOLFF, TOP HEAVY: A STUDY OF INCREASING INEQUALITY IN AMERICA 10-13 (1995); Edward N. Wolff, *How the Pie is Sliced: America's Growing Concentration of Wealth*, THE AM. PROSPECT, Summer 1995, at 58.

n58 For a fuller explication of binary economics by the author, *see* ROBERT ASHFORD & RODNEY SHAKESPEARE, BINARY ECONOMICS: THE NEW PARADIGM (1999); Robert Ashford, *The Binary Economics of Louis Kelso: The Promise of Universal Capitalism*, 22 RUTGERS L.J. 3 (1990) [hereinafter Ashford, *Binary Economics*]; Robert Ashford, *Louis Kelso's Binary Economy*, 25 J. SOCIO-ECON. 1 (1996) [hereinafter Ashford, *Kelso's Binary*]; Robert Ashford, *A New Market Paradigm for Sustainable Growth: Financing Broader Capital Ownership with Louis Kelso's Binary Economics*, 14 PRACTICE: THE FLETCHER J. DEV. STUD. 14, 25 (1998) [hereinafter Ashford, *New Market*]; Robert Ashford, *Memo On Binary Economics to Attorneys for People of Color and Women Re: What Else Can Public Corporations Do For Your Clients?*, 79 ST. JOHN'S L. REV. 1221 (2005) [hereinafter Ashford, *Public Corporations*]; Robert Ashford & Demetri Kantarelis, *Capital Democratization*, 37 J. SOCIO-ECON. 1624 (2008).

n59 Ashford, *Binary Economics*, *supra* note 58, at 45; Ashford, *Kelso's Binary*, *supra* note 58, at 4; ASHFORD & SHAKESPEARE, *supra* note 58, at 37-41, 273-306, 320-25; Ashford, *Public Corporations*, *supra* note 58, at 1242-43, 1246-48.

n60 Robert Ashford, *Broadening the Right to Acquire Capital with the Earnings of Capital: The Missing Link to Sustainable Economic Recovery and Growth*, 38 FORUM FOR SOC.-ECON. (2009).

n61 See Ashford, *Public Corporations*, *supra* note 58, at 1227; Robert Ashford, *Binary Economics, Fiduciary Duties and Corporate Social Responsibility: Comprehending Corporate Wealth Maximization for Stockholders, Stakeholders, and Society*, 76 TUL. L. REV. 1531 (2002) [hereinafter Ashford, *Comprehending Corporate Wealth*].

n62 See Anthony Cook, *King and the Beloved Community: A Communitarian Defense of Black Reparations*, 68 GEO. WASH. L. REV. 959, 1003 (2001).

n63 ASHFORD & SHAKESPEARE, *supra* note 58, at 233-72.

n64 Geoffrey D. Korff, *Reviving the Forgotten American Dream*, 112 PENN ST. L. REV. 417 (2008).

n65 SMITH, *supra* note 21, at 373-74.

The annual produce of the land and labour of any nation can be increased in its value *by no other means*, but by increasing either the number of its productive labourers, or the productive powers of those labourers who had before been employed. The number of its productive labourers, it is evident, can never be much increased, but in consequence of an increase of capital, or of the funds destined for maintaining them. The productive powers of the same number of labourers cannot be increased, but in consequence of either some addition and improvements to those machines and instruments which facilitate and abridge labor; or of a more proper division and distribution of employment. . . . It is by means of an additional capital *only*, that the undertaker of any work can provide his workmen with better machinery, or make a more proper distribution of employment among them. (emphasis added)

n66 John Maynard Keynes, *The General Theory of Employment Interest and Money* 213-14 (1928).

It is preferable to regard labour, including, of course, the personal services of the entrepreneur and his assistants, as the sole factor of production, operating in given environment of technique, natural resources, capital equipment and effective demand. This partly explains why we have been able to take the unit of labour as the sole physical unit which we require in our economic system, apart from units of money and time.

n67 Ashford, *Public Corporations*, *supra* note 58, at 1228-29.

n68 *Id.*

n69 *Id.* at 1229.

n70 HEILBRONE & THUROW, *supra* note 22, at 58-62.

n71 SMITH, *supra* note 21.

n72 Ashford, *Public Corporations*, *supra* note 58, at 1230.

n73 *Id.* at 1230-31.

n74 HEILBRONE & THUROW, *supra* note 22, at 58-62.

n75 Ashford, *Comprehending Corporate Wealth*, *supra* note 61.

n76 *See supra* note 65.

n77 *See* Ashford, *Comprehending Corporate Wealth*, *supra* note 61, at 1539. The importance of widespread ownership to democracy received special attention in KELSO & KELSO, *supra* note 56. Many binary economists believe that the vast majority of people are denied equal protection because they are substantially excluded from government-provided legal protections by which capital markets function to enable well-capitalized people to acquire capital with the earnings of capital. *See* Ashford, *Binary Economics*, *supra* note 58, at 99-101; Ashford, *Comprehending Corporate Wealth*, *supra* note 61, at 1571-73.