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**The Production of Law: Towards a Capital Law Theory**

by

Christopher R. Sauerwein

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Submitted to the

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**The Production of Law: Towards a Capital Law Theory**

Christopher R. Sauerwein

**Abstract**

Economists often treat law as a homogenous variable in the background of economic models. It is often assumed that only the state produces law in the form of a statute. Moreover, the methodology used to ascertain the appropriate law scientifically is inadequately dealt with in law and economics literature if it is addressed at all. This paper examines law production and demonstrates that just as firms produce most of the capital and consumer goods, they also produce most law in society as discrete heterogeneous units. The current conception of law as a set of “rules” that are widely enforced is challenged, and it is shown that law is a factor of production produced and bundled with other goods at each stage of production. With few exceptions, all law that is significant for economic analysis is contractually produced. Contracts are best seen as not mere legal “promises to do something” but are transfers and licenses of private property. The transaction costs involved with creating and enforcing law as incomplete contracts are central problems the entrepreneur faces when coordinating factors. The nature of the firm is reexamined as not only a possible governance structure but as the primary governance structure in society. The limits of vertical integration of law production within the firm are examined, and it is shown that vertical integration of governance is limited by the ability of the firm to engage in economic calculation. It is shown that external markets for governance can never be eliminated without severe discoordination. This paper analyzes current utility and welfare, transaction cost, and incomplete contract approaches to law and economics and other topics related to governance structures like clubs, constitutions, and the state. This paper provides a rigorous methodology for scientific analysis of law and economics literature and adheres strictly to value-free analysis, even when the literature deviates from this standard.

**Dedication and Acknowledgements**

This paper is dedicated to my brother, Brian.

I want to thank my family for their support as I pursued my formal economics training, including the research and writing of this paper: My wife Erin and children Vera, Liam, Kaylie, and Hannah, and my parents Albert and Victoria. Thank you all from the bottom of my heart for allowing me to take time away from you to complete my degree, especially this paper.

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**TABLE OF CONTENTS**

[The Production of Law 4](#_Toc70709781)

[Research Problem 14](#_Toc70709782)

[Review of Literature 16](#_Toc70709783)

[Methodology 48](#_Toc70709784)

[Analysis 79](#_Toc70709785)

[Conclusions and Recommendations 124](#_Toc70709786)

[References 136](#_Toc70709787)

**tables and figures**

[**Table 1 10**](#_Toc70709889)

[**Figure 1 23**](https://d.docs.live.net/dff0c5d4c01e9ce0/School/Economics/Thesis/Thesis%20Document/Thesis/Trim/The%20Production%20of%20Law%5EJ%20a%20Thesis%5EJ%20by%20Christopher%20Sauerwein.docx#_Toc70709939)

[**Figure 2 43**](https://d.docs.live.net/dff0c5d4c01e9ce0/School/Economics/Thesis/Thesis%20Document/Thesis/Trim/The%20Production%20of%20Law%5EJ%20a%20Thesis%5EJ%20by%20Christopher%20Sauerwein.docx#_Toc70709940)

[**Figure 3 46**](#_Toc70709941)

[**Figure 4 62**](#_Toc70709942)

**The Production of Law**

 All human action requires the employment of scarce means such as the human body, time, original factors of production such as land, capital goods, and consumer goods to achieve some desired end. To achieve an end, human actors use scarce means to exchange a possible future state of affairs (which is undesirable) for a possible future situation that is more desirable. Thus, all human action, even solitary action, is a form of exchange (Rothbard M. N., 2009). To put these resources to productive use in attaining the actor’s ends, the actor must first possess or control the means (a scarce resource.) The exclusive control of scarce means by an individual or a group of individuals is called “ownership,” and only scarce physical resources are ownable, which are called “property.”

 The ways by which people come to own resources are logically constrained to two main categories: 1) using physical violence against another person (coercively), or 2) non-violently (i.e., non-coercively and voluntarily). Non-coercive ways of coming to own a resource are:

1. self-ownership of one’s body.
2. original appropriation of resources from the state of nature (or as a gift from someone else who first appropriated a nature-given resource,
3. constructing a capital or consumer good from nature-given resources (or receiving such a gift from someone else who likewise constructed the good
4. exchanging some factor for another.

These all reduce, as Rothbard notes, to three methods of the non-coercive mode: self-ownership, the original appropriation of nature-given factors, and production (which includes the exchange of factors such as labor, capital goods, and consumer goods.) (Rothbard M. N., 2009)

 The second category of action, coercion, is logically divided into two modes: initiatory physical violence called “aggression” and non-initiatory physical violence called “defense,” or the threat thereof. Only scarce physical resources are ownable as property, and all property is both rivalrous and excludable. There are specific logical rules that must be adhered to if resources are to be used and if the user’s goal is to remain in the non-violent mode of human action. Only the owner of a resource may determine the proper use of a resource while operating within the non-violent mode of human action. Any other rule (e.g., a rule of coerced “exchange”) necessitates operating in the coercive mode of human action and rules out operating within the non-coercive mode entirely, forming a hegemonic relationship that hampers voluntary exchange (Rothbard M. N., 2009).

 Specific rules can assist human actors in economizing physical violence by comparing the costs and benefits of voluntary exchange vs. coercion. Ownership rules can be mistakenly (or deliberately) designed in such a way that precludes the possibility of operating within the voluntary mode of action. The various property-relation rules determine the modes in which exchange occurs. The prevailing pattern of exchange resulting from these rules is called “society,” and the pattern of interpersonal relationships is called the “market (Rothbard M. N., 2009). A society formed on the market, unhampered by coercion, is a “free market,” where actors follow rules which lead to voluntary exchange (in contrast with hegemonic “exchanges”). Contracts are transfers of titles and licenses of property use. An agreement to voluntarily make an exchange is a contract, and society adhering to contractual relationships on a free market is called a contractual society. Conversely, the rules of a society can be entirely hegemonic, whereby unilateral transfers replace contracts and relationships resemble slave-owner arrangements. Alternatively, a third possibility, society can be a mixture of hegemonic and contractual exchanges. (Rothbard M. N., 2009).

Rules that individuals or groups of individuals generally enforce through government or some other social institution via some penalty or punishment mechanism are commonly called “laws.” Where economics has commonly treated law as a set of rules, this paper demonstrates how law itself is a factor of production. Law enforcement is a complementary factor of law production that is discrete but intertwined with law itself; law and law enforcement are used interchangeably here except where distinctions are necessary to make. The penalty of not following the law, or breaking a contract, serves to raise the party’s personal cost and can serve in either the capacity of ex-ante (preventing law-breaking) or ex-post (responding to law-breaking). As indicated above, law can economize exchange when produced contractually, and operating under the coercive mode of interpersonal action tends to be more costly than adhering to contractual exchange.

 Thus, it is possible to see the general principle that ex-post enforcement of law (i.e., responding to an already broken contract) tends to be more costly than ex-ante enforcement, helps prevent coercive disequilibria from occurring in the first place. However, as demonstrated below, neither ex-post nor ex-ante enforcement is costless. Similarly, most contracts are rarely complete and are not a costless law to design or enforce.

 Law can be produced in either production mode: contractually or coercively. Likewise, enforcement mechanisms can also be produced either contractually or coercively. Taken together, the factors “law” and “law enforcement” make up a good called “governance,” although the terms “law” and “governance” can typically be used synonymously without much difficulty. A government is commonly defined as an institution that produces some combination of law, arbitration, and enforcement; a government is a producer of governance. However, it cannot be overstated that governance can be produced in either the contractual or coercive modes of production and is not always necessarily associated with a central legal institution.

 In addition to the coercive and contractual distinctions drawn between the modes of governance production above, another distinction must also be drawn between the possible structural arrangements of law production: “legal-centralism” vs. “private governance” (with a lower-case p.) In its colloquial sense, the term “governance” refers to what Oliver Williamson and Ed Stringham call “legal-centralism” (Stringham E. P., 2015). Legal-centralism denotes governance that relies on the ex-post enforcement that a particular central organization carries out. Legal-centralist approaches tend to respond *after* law is broken rather than focusing on *prevention*. Commonly associated with legal centralism are lawyers, regulatory agencies, police, judges, security, courts, arbitration services, and investigation service (Stringham, 2015), all of which can be produced either contractually or coercively. Legal centralism exists in both public (i.e., state) and non-public institutions (e.g., private security firms and private arbitration firms.)

 States are governments that are public monopoly providers of governance that operate entirely in the coercive mode of production and never contractually. State governments can only operate through particular legal-central agencies. This coercive government monopoly is public government. In contrast, Private governance is produced entirely on the free market, unhampered by coercive action. It can be either legal-centralist (i.e., produced by a particular firm) or “private” (lower-case p) (i.e., the law is produced organically through a variety of contractual arrangements and not by a central firm.) An example of private legal-centralism in action is a private security firm that apprehends a thief in a store.

 Some confusion may arise here with the terms “private government” vs. “private governance,” and for a good reason. The distinction is subtle and an unfortunate outcome of the different uses of these terms in the literature. An attempt to clarify the terms is made here. However, the distinctions are relatively unimportant at this juncture. “Private government” is a narrower term sometimes referring to private legal-centralism and tends to be ex-post enforcement. Examples of private government (private legal-centralism) could include private security guards, private inspectors, bounty hunters, and private arbitrators that are all non-public employees. These are all privately produced and legal-centralism. For example, a private security guard is a form of private legal-centralism because they work for a central law-enforcement enterprise.

 In contrast, and most confusingly, is the term “private *governance,”* used in the literature in both a broad sense and a narrow sense (but more often the narrow one.) In the broad sense of the term, private governance can refer to any private law or private governance whatsoever; it can refer to the centralized variety mentioned above or a “decentralized” version. In this broad sense, private governance can refer to all types of private law production and enforcement. However, as shown below, responding to law-breaking ex-post tends to be higher cost and less effective than ex-ante prevention for two reasons 1) sometimes relies more heavily on coercion, 2) preventing law-breaking ex-ante tends to be more efficient than trying to “fix” the outcomes of broken law ex-post. Thus, private firms tend to prefer ex-ante legal mechanisms because they tend to be both remarkably effective and sometimes wholly invisible (the invisible hand of Adam Smith.) This invisible characteristic can be said to be a very “private matter” and can often be hidden from the naked eye.

 Stringham provides an example of this invisible, decentralized law enforcement mechanism by showing how eBay ensures almost total compliance with the rules of its website and assures virtually no fraudulent activity ever occurs. eBay does this without sending police and investigators to retrieve property fraudulently acquired through its site; instead, it uses this invisible hand that is baked into the very structure of their company and relies on the private incentives of each player. Private firms prefer this type of “decentralized,” hidden, and “private” governing mechanisms because centralized mechanisms like security guards or bouncers tend to rely on comparatively more expensive (i.e., coercive) means. (Stringham E. P., 2015)

 It seems that because private producers tend to prefer this decentralized and invisible governance, that economists like Stringham tend to use the term “private governance” almost exclusively in the narrower sense of “decentralized” and invisible. Unfortunately, the term is also sometimes universally applied to all private governing functions in a broad sense which confuses matters. This approach is appropriate (albeit confusing) because even private legal centralism like security guards prefers less physical violence due to the same cost incentives.

 Thus, this paper (although not made in the literature) makes the distinction between the commonly used term legal-centralism and “legal-decentralism” here to make the explanatory distinction, but throughout the rest of this text, the broad sense of Private Governance is capitalized, and the narrow is in lower case. (See Table 1) No distinction between private “central” or “decentral” law is usually necessary to make, and the convention of Ed Stringham to refer to “private governance” in the narrow sense but apply it broadly is not problematic; all privately-produced governance of any sort (as shown below) tends to be more subtle and “invisible” than public governance.

|  |  |  |
| --- | --- | --- |
|  | Private Governance (upper-case, used in the broad sense) | Public Governance |
| Legal-Centralism(Generally ex-post enforcement) | Central private providers like private security companies and private investigators. | Cartelized or monopolized producers of governance, called “the state” (also called “authoritarian governance” by Bruce Benson) |
| Legal-Decentralism(Generally ex-ante prevention) | “private governance” (lower-case, used in the narrow sense by Stringham and Williamson) |  |

Table

 The question naturally arises of which method of producing law is optimal and how this can be demonstrated scientifically. As mentioned above, property is a claim of ownership (i.e., exclusive control) of physical resources (e.g., the human body, nature-given resources, capital goods, and consumer goods). Ownership is required for all human action to occur. Driven by the law of marginal utility, the use of these resources is economized. Law can help economize resource use if applied one way or prevent economization if used in another way. Under the voluntary (i.e., contractual) mode exchange, economization is made possible by the economic calculation done by the entrepreneur using information communicated in the form of prevailing exchange ratios (prices) that arise on the free market.

 Thus, economic calculation, comparing costs of input factors to prices of outputs, allows entrepreneurs (and society) to coordinate resources in a way that best achieves their goals or maximizes utility. Economic calculation allows entrepreneurs or firms to determine and meet consumer demand and direct their production efforts via markets. While economic calculation is imperfect, there exists no better way for businesses to satisfy consumer demands. Firms can obtain factors by purchasing them on the external spot market by entering an “arms-length” contract with another firm that routinely provides the factor or produces the good internally. Firms can also merge with other firms through acquisitions. These various alternatives as they relate to the production of law will be further explored in the analysis.

 Where the firm (directed by its owner) engages in economic calculation to direct capital allocation, state providers cannot engage in such calculation. The only possible alternative to economic calculations in allocating resources is political planning and bureaucratic management; there are no other possible alternatives (Mises, 2007). These two possible modes of directing capital apply to the production of governance itself.

 The alternative to the economic calculation method of producing private law is the “political” means by which public governance is produced. The political means of producing law relies on decision-makers who have some degree of ultimate authority or have some final decision-making power over certain governmental matters. Their positional authority within society is non-contractual by nature, and their position in “office” makes them an “official,” they have a quality of “officialness” in the eyes of the public. (Mises, Bureaucracy, 2007) Commonly associated with the public official today are presidents, governors, mayors, judges, sheriffs, council members, legislators, and judges. Typically, these are elected figureheads, heads of state, lawmakers, final arbitrators, and supervisors of the managers below them who carry out the inner workings of the officials’ statutes and decrees.

 How these officials legally come to the office is a matter of public law and varies from jurisdiction to jurisdiction. Moreover, voting and appointment are not the only means by which officials can come to oversee a public government; they can also take charge through coercive acts of conquest, sedition, or some other “illegal” means. The official who takes charge of an office or otherwise completely abuses their position through illegal means is often called a “dictator” or “ruler” in contrast with the “official” who comes into office through political means. Thus, there are two possible modes of coming to hold a position of decision-making in the non-contractual government: the political means and the military means. Both can be subjected to economic analysis, which can help explain the incentives, costs, and benefits of official decision-makers and caretakers over the property they control.

 It is essential to realize that, except in certain ancient monarchies, officials do not control the capital value of the resources they manage, although they do control at least in part the resources themselves; they are partial owners of the resources. Officials have de facto ownership of all resources within their jurisdiction. This distinction becomes apparent below, as does the importance of this fact. Some medieval monarchs possessed de jure ownership of all resources in their realm; they owned and controlled both the capital *and* the capital value of the resources in their kingdom. This fact becomes important when discussing property rights and law production.

 Regardless of how politicians or rulers come into their office, they do not manage the entirety of the governing body themselves; not all parts of the public government are elected politicians. Instead, the inner workings of the office or agency, the day-to-day operations, are conducted through a hierarchical group of managers called a “bureaucracy.” The word bureaucracy itself is typically used in a pejorative sense but is the most technically correct word to describe the managerial function which it performs. A bureaucracy follows specific regulations and guidance, a subset of the law set forth by the officials (and sometimes the public by vote) (Mises L. v., Bureaucracy, 2007). Thus, for example, a sheriff and mayor of a town might be elected, but the deputies enforcing the law are managed bureaucratically.

 As Musgrave and Samuelson observed, the political means of producing goods and services cannot use economic calculation to determine the quantity and quality it should produce (Tiebout, 1956). This inability arises because there are no input costs to compare to output prices, and the incentive structure of non-owners changes significantly when economization is not a factor in decision-making. The production of law is no different. Law can be produced via economic calculation or politically. The political alternative to economic calculation includes unique factors and incentives that affect the decisions of political and bureaucratic managers.

 As has been made clear above, law can take many different forms. Law can be written or unwritten, contractual, coercive, centralized, or private. However, in modern public governance, law is typically written. The rules governing its most basic functions, the rules detailing the process for political elections, and the general limits of the authority and power of officials and their bureaucratic agencies are typically spelled out in a central, foundational legal document called a “constitution.” The constitution is sometimes called a contract; it is sometimes analogized with Rousseau’s social contract and can be enforced, broken, or modified like any other contract. The constitution of the public government has corollaries in private governance as well.

 For example, James Buchanan popularized clubs as a form of governance structure that typically entails some agreed-upon terms of membership, a contract. The differences between the public and private constitutions are explored later. Like the possible mixture of coercive and contractual “exchange” in society mentioned above, a mixture of private and public “contracts” and “constitutions” is frequently the case in modern society. Law today is typically a combination of Private and public Governance (in the broad sense,) but as will be shown, almost all law is privately produced. Public law tends to be more visible than private law, but almost all law in society is privately produced, nonetheless.

# Research Problem

 It remains unclear what economics can correctly say about law production, and conversely, what legal theory can say about the use of economic theory to direct law production. While it is clear that governance is typically a mixture between private and public providers, it remains less clear why this is so, what the optimal combination is, and what methodology can best be used to study this fact. The role that clubs and firms play in governance must be further explored, particularly how to optimize contract and constitution formation. The ways public providers determine the public demand for security services (e.g., police) appears nebulous and unscientific. Likewise, the exact nature and limits to which a firm can vertically integrate governance are unclear. The propositions put forth by economists, like any other proposition, are bound by the constraints of logic and are either true or not true. Determining the truth-value of such claims seems particularly important for determining the proper use of physical violence in society and creating laws. The methodology that is used to determine the truth claims must also come under scrutiny. In this paper, the primary problem is how law can be optimally produced and how this can be determined in a value-free manner. In pursuit of this primary question, the following sub-questions are essential to address:

1. What can economics say about law production while remaining scientific and value-free, and by what method can this be proven?
2. How can private and public law producers scientifically determine the appropriate production mode of laws, contracts, and constitutions and the utility consumers have in them?
3. Because contracts are usually incomplete, what does the literature on incomplete contracts have to say about the production of private governance and on constitution production specifically?
4. Can it be said that markets fail to provide governance, and if so, can it be said scientifically that the state should provide it instead? What are the limits of state-provision of law, and what are the limits of the private production of law?
5. What factors determine if a firm will:
	1. Use decentralized (private) or centralized legal methods?
	2. Purchase governance on the spot market, contract the service out at “arms-length,” or merge with another provider as a single firm?
	3. Create a club, institute a constitution or bundle governance with other goods?
6. How would producing law exclusively in the contractual (non-coercive) mode of production affect society and the economy?

 Leaving these questions unanswered leaves economists, philosophers, legal theorists, ethicists, judges, legislatures, and most of all, the public, all groping in the dark for the tools to obtain economic efficiency, peace, authentic justice, sound economic policy, and social well-being. Answering these questions incorrectly or leaving them unaddressed -questions surrounding the most integral part of all social interactions- could mean life or death on a mass scale, impoverishment, social unrest and revolt, and overall misery and chaos. The scientific community has a duty and responsibility to society to think clearly on such matters and articulate them so that everyone, including non-scientists, understands.

Research Objective

 In answering the above question of how law is to be optimally produced and how this can be determined, this paper consolidates the literature on the topic and provides a single coherent framework from which the social-scientific community can work. The research objective of this paper is simple:

* Review the relevant literature on the topic.
* Clarify the appropriate methodology for analyzing the topic.
* Gain an appreciation for the significance topic and its importance throughout history.
* Provide analysis and demonstrate the proper conclusions.
* Provide policy prescriptions and research recommendations based on the conclusions and explore the likely outcomes if the prescribed changes were made.

# Review of Literature

 The economic analysis of law has roots in a wide array of economic subfields spanning much of the entire history of economic scholarship. As economists studied the causal relationships of human action, they began comparing the various possible outcomes of actions and asking which was “better” or “worse,” and wondered how such questions might be answered scientifically. Measuring and comparing the levels of personal satisfaction of economic outcomes has long been a topic of study and debate among economists, as has been the “proper” scope of economic science. The natural extension of the satisfaction of the individual is social satisfaction with particular outcomes of economic activity. Thus, in studying the outcomes of economic activity, economists considered the difference between the theoretical outcomes with actual outcomes and applied the questions of personal and social satisfaction to the differences.

 The subsequent natural outgrowth of such discussion is to attempt to “close the gap” between the theoretical ideal economic outcomes and actual outcomes and establish the economist’s role in the matter. One such tool that was available to alter the outcomes of economic activity and shape social welfare was law via the state. As economic literature progressed, the debate heated up not only among economists but among philosophers, legal theorists, politicians, and the public. The debate walked a fine line between technical economics, normative ethics, and legal theory, and personal opinion.

Utility and Welfare Economics, Market Failure, and Public Goods

 For most of its history, economics has almost unanimously been considered, like all other fields of scientific inquiry, a value-free (wertfrei) science. This fact is usually iterated in the first chapter of most introductory economics textbooks. The value-free nature of economics means that answers to normative questions (ethical dilemmas) about what should or should not occur, questions about “good” or “bad” are not questions for the economist to answer. With this in mind, economists have engaged in so-called normative economics while attempting to remain value-free over the past few centuries.

 The intersection of law with economics, and the origination of the application of economics to politics and public policy, primarily originates with the utility and welfare economics subfields of study. Famous scholars of the old welfare school included such prominent economists as Arthur Pigou and Alfred Marshall, who built upon the utilitarian ideas of Jeremy Bentham, who constructed schemes of comparing cardinal utility. As James Buchanan notes, *“*Economic theory, as we know it, was developed largely by utilitarians.” (Positive Economics, Welfare Economics, and Political Economy, 1959, p. 124)

 Buchanan notes the continuation of the new welfare economic approach in the Kaldor-Hicks “compensation principle” and distinguishing between actual and potential welfare increases. Paul Samuelson, Buchannan says, popularized the idea of a “social welfare function” where, according to Samuelson, “the foundation is laid for the ‘economics of the good society.’" (Positive Economics, Welfare Economics, and Political Economy, 1959, p. 125)

 Buchanan also introduces a second primary concern of welfare economists: "externality" and spill-over effects. He discusses the possibility of the impartial economist creating a compensatory policy and notes that "changes in law" are the focus of compensation, and "thus, the scope for political economy…) (Positive Economics, Welfare Economics, and Political Economy, 1959, p. 131) He concludes that the purely positive economic approach is overly restrictive and claims that subjectivity is introduced by making "recommendations rather than hypotheses." (1959, p. 137)

 The natural outgrowth of welfare economics and Pareto-efficiency, as Marciano & Medema document (Market Failure in Context: Introduction, 2015), was the concept of "market failure." The neo-classical conception of market failure includes monopoly, public goods, externalities, information asymmetry, and the business cycle, to name a few.

 Marciano & Medema cast Charles Tiebout as a sort of intermediary between Buchannan and Samuelson. In his 1956 paper A Pure Theory of Local Expenditures, Tiebout hypothesized how local governments could determine the demand for governmental goods based upon their choice to move in or out of geographical, legal jurisdictions. The Tiebout model served as somewhat of a precursor and alternative to Buchanan's approach in his 1965 paper *An Economic Theory of Clubs.*

 Marciano and Medema explore the Coase theorem, a founding step in the law and economics tradition. Coase's 1960 paper titled *The Problem of Social Cost* took on an overtly legal tone as it looked at the economic solution to legal disputes and adopted a very different approach from the Pigovian solution of imposing taxes or fees on the offending party. Coase looks at the problem in terms of social cost; the solution lies in who has the highest use-value of a disputed resource. The implication is that in a world where transaction costs were not a factor, the disputing parties tend to strive for welfare-maximizing outcomes and change property claims based upon higher use-value, regardless of the initial ruling on property claims by a court (Coase, 1989).

 In his paper *Toward a Reconstruction of Utility and Welfare Economics,* Murray Rothbard conveys the foundational principle which was up to that point scarcely dealt with in economics: "demonstrated preference" and the logical implication actual decisions have on the truth-value of statements regarding preferences. The preference of an individual is undeniably revealed through action, given any possible alternatives. The actor reveals a preference on their value scale at the margin when an action is performed. He points out that "all utilities are marginal" and that "total utility" is not a valid concept (Toward a Reconstruction of Utility and Welfare Economics, 1956, p. 12). To claim otherwise is to regress to the cardinal utility of the old welfare economists.

 Hicks and others, Rothbard says, rejected the old cardinal approach of utility and instead developed and adopted a concept of "indifference." The logically undeniable concept of revealed preference Rothbard says implies "the entire indifference-class concept, along with the complicated superstructure erected upon it, must fall to the ground" (Toward a Reconstruction of Utility and Welfare Economics, 1956, p. 14). The problem with indifference arises because of "psychologizing" (separating action from hypothetical value scales), which is one of two errors Rothbard identifies. The other error is "behaviorism," which he says is the attempt to remove subjectivism entirely as if the person responds to stimuli mechanistically. Rothbard claimed that Pareto suffered from both errors. Indifference, Rothbard points out, cannot be "demonstrated by action" because an action is the very opposite of indifference (Toward a Reconstruction of Utility and Welfare Economics, 1956, p. 14).

 In his reconstruction, Rothbard reminds the reader of the old welfare economists who suggested that the redistribution of money from a rich person to a person living in poverty would increase social welfare. This redistribution, claimed Rothbard, was nothing less than "Benthamite utilitarian ethics, brought to fruition by Edgeworth and Pigou" (Toward a Reconstruction of Utility and Welfare Economics, 1956, p. 22). Lionel Robbin's exposition *Interpersonal Comparisons of Utility*, Rothbard says, exposed that such interpersonal comparisons of utility necessarily involve ethical claims. Likewise, Rothbard dispenses with the Kaldor-Hicks compensation principle by observing that it would require comparing "*actual* social states" (emphasis in the original), meaning hypothetical scenarios cannot be used in the place of observed actions. Moreover, Rothbard writes, it would require that the compensation actually occur, and it must be shown that the compensations would instead increase utility. Finally, without an actor choosing among alternatives, the compensation principle suffers from the same lack of demonstrated preference mentioned above.

 Rothbard salvages what little remained of his explosion of welfare economics (old, new, compensation principle, social welfare functions, and all) and suggests that not all is lost. His reconstruction shows how only after the demonstrated preference of voluntary exchange can it be said that welfare has increased. Rothbard then turns to the non-voluntary nature of the state and coercively produced law, which is particularly important for this paper. He concludes that no coerced exchange can ever increase social welfare, even by legal coercion. He concludes that only strict adherence to the scientific rigors of the iron-clad Pareto-Robbins unanimity rule and the irrefutable concept of demonstrated preference can enable the economist to conclude that the voluntary exchanges on the free market *always* increase social welfare, and coercive exchanges (through legal coercion for instance,) *never* do. These claims are all made while remaining truly wertfrei; no ethical claim is made whatever.

 The question raised after considering Rothbard’s reconstruction of the "envious bystander," however, remains insufficiently defended. The question remains how only voluntary actions can increase welfare; could it not be argued that a third-party observer is unhappy with some exchange and experiences diminishing welfare as a bystander to an exchange? What about the sadist who experiences an increase in utility by attacking another? Why is the voluntary exchange counted for welfare improvement but not the welfare of the sadist? This question does not seem to be addressed formally by Rothbard. Other economists have informally discussed the issue of the envious bystander.

Law and Economics, Public Choice

 Ronald Coase was among the originating economists of the so-called Law and Economics sub-field of economics. Coase's works like *The Problem of Social Cost* and *The Lighthouse in Economics* (1989) serve as examples of this pioneering work. Other scholars from outside the field of economics apply the concepts developed by Coase, like Gary Becker and Richard Posner, a United States Judge for the Seventh Circuit Court of Appeals, who remains a towering figure in the Law and Economics Field. In a seminal paper in the Columbia Law Review (An Economic Theory of the Criminal Law, 1985), Posner notes that virtually no economic analysis on criminal law has been undertaken with a couple of notable exceptions of Gary Becker in (Crime and Punishment: An Economic Approach, 1968), and George Stigler in *The Optimum Enforcement of Laws*.

 Gary Becker put forth perhaps the first formal mathematical model of the cost/benefit approach to crime and punishment. Becker's model includes the diminishing marginal returns a criminal sees for continued rule-breaking, the cost of rule enforcement, "supply of offenses" as a function of the number of offenses committed in a period, the probability of conviction for each offense, and the punishment to be given if caught for each offense. He determines that both punishment and crime's social cost should be factored into criminals' sentences, which forms a total social loss function in his model. The result is a cost revenue curve (see Figure 1) of punishment and offenses, where punishment is couched in terms of optimality (Crime and Punishment: An Economic Approach, 1968, p. 182).

 Of particular interest is Becker's conflation of "price" with "value" and the claim that offenders pay their debt to the rest of society when the state fines them, a fine determined by his given equation for optimal amounts based on "marginal harm" and "optimal number of offenses." (Richard Posner, in his treatise on law and economics, addresses this in more detail (Posner R. , 1986)). Becker goes on to say that, as Bentham says, "The evil of the punishment must be made to exceed the advantage of the offense (Bentham, 1931, first rule)" and then problematically says the victims are "society and not just the persons actually harmed." (Posner R. , 1986, p. 192). The importance of this claim is shown in the analysis section below, but here Buchanan's claim about the utilitarian origins of economics is underscored.

Figure

Becker's notions of "fairness as it relates to the equating of fines

with prison time are equally problematic. Becker says US criminal trials strive

to achieve the goals of simultaneous "deterrence, compensation and vengeance," which he says are "somewhat" contradictory. He claims that adopting the "punishment by fine" approach would alter legal proceedings to ascertain the social harm. This approach would modify modern criminal law (where crimes are currently defined as "criminal" by their type), to instead define criminal actions by mere virtue of any "uncompensated "harm" to others." This change would mean that all civil infractions would be classified as torts. (Becker, 1968, p. 198). In other words, allowing one's vehicle registration to lapse would be considered a criminal offense that harmed another individual by some amount to be determined by the court; Becker does not give the unit of measurement through which this value is expressed. He concludes that he hopes to resurrect Bentham's utilitarian "economic" approach to law.

 Posner summarizes his theory in three propositions:

1. Criminal law in a capitalist society prevents the bypassing of voluntary market exchange where a voluntary exchange is cheaper than forced exchange.
2. Tort law is limited in its ability as a deterrent; optimal damages often exceed the offender's ability to fund public enforcement, and "nonmonetary sanctions such as imprisonment are required (Posner R. A., 1985, p. 1195).
3. The sanctions mentioned above are costly, and failed criminal attempts ought to be punished along with successful ones to "economize on costlier punishments for completed crimes." This threat of punishment, he argues, lowers the likelihood that crimes will be attempted. He claims that most criminal law doctrines implicitly strive towards efficiency, even without economic considerations. (Posner R. A., 1985)

 In an interesting and revealing train of thought, Judge Posner briefly examines other torts in terms other than purely coercive transfers (such as theft and murder), including examples like tax evasion, dealing illegal drugs, prostitution, bribery, and thwarting law enforcement by fleeing a crime scene. He notes that some of these actions like prostitution and drug dealing present "difficulties" for the positive economist because they seem to increase efficiency unless one considers the effects on third-party bystanders.

 Posner notes that crimes of violence like rape and murder cannot be assigned a monetary value but claims "common law does, of course, make such estimates," but no other qualification is made to the validity or justification of such "estimates” (Posner R. A., 1985, p. 1202). He, like Becker, seems to assume the state receives such fines as a sort of "social" compensation and acts as a deterrence; virtually no consideration for compensating the victim is given. Posner also pays homage to Jeremy Bentham at the end of his theoretical work. Other authors, however, question such claims and admit such failures exist but still recognize the state can also fail; they do not advocate for the coercive provision of law production and enforcement as a “solution.”

 Perhaps one of the most valuable applications of the public choice school, which is indispensable to the discussion on the production of law, is *The Enterprise of Law* by Bruce Benson (2011). Benson provides a historical exploration of law production -from ancient Europe forward- and he documents the transition of law from more voluntarily produced law to coercively produced law. The focus of law producers through this historical journey moves from a focus on restitution for victim's loss to compensating "society," the "crown," and the "state" for their "social loss." Finally, he begins the task of proposing a system of privately produced law that harkens back to the ancient methods of law production, which tended to be lower cost and voluntarily produced.

 Likewise, *Law's Order* by David Friedman (2000) incorporates public choice and law and economics theory and heavily relies on the transaction cost works of Ronald Coase, Gary Becker, and Richard Posner mentioned above. Unlike Becker and Judge Posner, Friedman draws quite different conclusions, including the idea that the state is unnecessary to provide law. Instead, Friedman suggests that market failure is a real phenomenon and that the state cannot improve matters any further, and that law is best provided voluntarily on the market. Both Friedman and Benson tend to focus on ex-post enforcement and legal centralism, albeit privately produced.

 In *Private Governance,* Ed Stringham takes an utterly new approach to the topics previously introduced and moves past the ex-post legal centralism of either the public or private variety, and opens the reader's eyes to an ever-present, but rarely discussed, world of "private governance" in the narrow sense above. Stringham shows how a staggering amount of law is simply a baked-in structural feature of the market. (Stringham E. P., 2015)

 Law, Stringham argues, is typically bundled with other goods and services in a preventative approach to enforcing rules. This ex-ante prevention occurs because of the low cost and its naturally efficient nature. He cites the governance of financial markets, which is done almost entirely privately and efficiently governs the largest and most complex financial transactions in human history on a momentary basis. A system where federal agents respond to a crime ex-post, take a report, hunt down the criminal, hold a trial, and hopefully repay some damages seems to be a much more inefficient system than the instantaneous enforcement mechanisms that currently rule the financial market. Without the market's ex-ante private governance, the financial markets of today would undoubtedly collapse. Financial markets do not function *because of* US statutory law and SEC regulations, but despite them, he says.

 Still, Stringham says, ex-post enforcement and arbitration are necessary and make economic sense, which is why companies still use them. One way of providing private governance (ex-ante and ex-post) is to bundle it with other goods, especially real estate. One way to view such bundling is to view goods not as only either public or private goods but as "clubs," as James Buchanan (who was Stringham’s professor) suggested (Stringham E. P., 2015, p. 23).

 The question remains, should a company provide governance internally and bundle it, should it merge with a security producer as a single firm, should it contract the service out, or should it rely on the state? Stringham discusses these questions to a degree, but more literature must first be introduced to pave the way for a satisfactory answer.

 One critique of law and economics, titled *Against Standard Law & Economics: Austrians and Legal Philosophers on Board*, points out that Posner views economics as a method to determine and then mimic the properties already created on the market brought about by profit-and-loss forces. Posner suggests that judges should "manipulate the limits of property rights to get an optimal-efficient-level of economic output” (Hoppe H.-H. , Property, Freedom, and Society: Essays in Honor of Hans-Hermann Hoppe, 2009, p. 123). Posner says in his treatise (on p. 42 of *Economic Analysis of Law*) it is "acknowledged that "wealth maximization," in fact, is the same as the well-known Kaldor-Hicks Efficiency" (2009, p. 124). Authors Martin Fronek and Joseph Šíma show how the Kaldor-Hicks efficiency, relying on the mere possibility of compensating losers and not the actual compensation of such, depends solely on *prices* to establish wealth maximization. The "un-fixedness" implies that a judge's calculation used to allocate property rights means that price changes must be constantly evaluated and judicial allocations updated based on constant price variability, they say. They solidify the point:

Ronald Dworkin, the most cited legal philosopher of our times, eloquently summarizes the position of Posner and others: "They concede . . . or rather insist, that information about what parties would have done in market transaction can be obtained in the absence of the transaction, and that such information can be sufficiently reliable to act on." (Property, Freedom, and Society: Essays in Honor of Hans-Hermann Hoppe, 2009, p. 127)

The impossibility of ex-ante determination of allocations that could only result from ex-post observation is also mentioned by Fronek and Šíma, who point to Hoppe's and Benjamin Zipursky's criticisms on the matter for support.

 Some resulting outcomes of strict adherence to a Posnerian approach would highly favor wealthy parties in a dispute at the expense of the less wealthy. The redistribution effect is acknowledged by Posner himself, Fronek and Šíma point out. "A less welcome implication of the wealth-maximization approach is that people who are very poor . . . count only if they are part of the utility function of somebody who has wealth" (Hoppe H.-H. , 2009, p. 130). They say that other legal scholars object that it cannot be automatically assumed that property rights if randomly assigned (as Posner suggests they should be), would be repurchased. They say that Posner's foundation, as he freely admits, is not a firm one; he says pragmatism is more important than theoretical soundness. Two final quotes from their article convey the objections legal theorists and economists have with Judge Posner's widely accepted approach:

Soundness of theoretical arguments is not to be any more decisive because, as Posner claims,

"in my view the ultimate criterion should be pragmatic; we should not worry whether cost-benefit analysis is well grounded in any theory of value. We should ask how well it serves whatever goals we have."

The Kaldor-Hicks concept of efficiency, the concept that was the cornerstone of the Chicago approach to Law & Economics, has been abandoned, and nothing has been put in its place. As Posner put it:

"I do not want to stake my all on a defense of the KaldorHicks concept of efficiency. For me the ultimate test of cost-benefit analysis employing that concept is a pragmatic one: whether its use improves the performance of government in any sense of improvement that the observer thinks appropriate." (Hoppe H.-H. , 2009, pp. 132-133)

**Constitutions and Clubs**

 In their seminal book The *Calculus of Consent: Logical Foundations of Constitutional Democracy*, Buchanan and Tullock provide a detailed analysis of the inner workings of constitutional democracy. Notable is their adoption of a unanimity rule (Rothbard's Reconstruction of Utility and Welfare briefly discusses their rule) and the idea of a "voluntary constitution" to avoid an infinite regress of the problem of creating meta-rules (i.e., rules created to create rules created to create rules….)

 Buchannan and Tullock suggest that the state is an institution of producing law voluntarily, as it involves collective action:

At base, political or collective action under the individualistic view of the State is much the same. Two or more individuals find it mutually advantageous to join forces to accomplish certain common purposes. In a very real sense, they "exchange" inputs in the securing of the commonly shared output. (Buchanan & Tullock, 1999, p. 18)

 Stringham notes that where the traditional position views economic goods as either public or private, other ways to view produced goods are possible besides these two alternatives. As alluded to in Stringham's work, the third type of good is the "club" good, neither public nor private, originated and popularized by James Buchanan in his 1965 paper (An Economic Theory of Clubs, 1965).

 Buchanan challenges Samuelson's neo-classical conception of a public-vs-private-goods dichotomy by observing a more intermediate good which possesses some "publicness" characteristics of the good (the analytical unit sharing the good is larger than the individual or family) but is less than the "infinite" use of a "public good." Their club theory applies only where exclusion of users is possible and is a sort of theory of "optimal exclusion, as well as one of inclusion." (p. 13).

 The Buchanan-Tullock theory of constitutions and the Buchanan theory of clubs, notes Peter Leeson, have seemingly and surprisingly never been brought together. He aimed to do just that, he says in his 2011 paper *Government, Clubs, and Constitutions*. Leeson argues that "residual claimants on revenues generated through constitutional compliance" are highly competitive and allow consumers to sort their behavior based on their "governance needs." (p. 301) Such features make constitutional contracts "self-enforcing," a feature lacking from state-provision of government. He says efforts to increase the "clubness" of publicly provided government like federalism and democracy help improve effectiveness, but "constitutional effectiveness remains superior in the system of clubs."

 Leeson shows how Buchanan draws on Hobbes’s "state of nature" and the alleged social contract due to the self-interest of humans seeking to lower cost because of violence. The contract, Buchanan says, is a "constitution," the party able to enforce the contract has a monopoly called "government." Buchanan, Leeson says, argues a system of "governments thus arise from the state of nature." Leeson, on the other hand, argues that a "system of clubs" arises instead. Leeson brings forward the concept of contract as governance, as well as the idea of bundling security with other goods, each contract creating a "club." Leeson points out the difference between his version of contractual constitutions and Buchanan's constitution, which is that Buchanan presumes that everyone joins the same club

 The question Leeson asks is, although its apparent that both clubs and governments enforce rules upon and between their members, what enforces contracts "between them and their customers or citizens?" (Government, Clubs, and Constitutions, 2011, p. 303) He suggests that constitutional contracts, unlike traditional contracts, must be self-enforcing because otherwise, "who guards the guardians?" He shows that club contracts tend to be self-enforcing, while government (i.e., state) "contracts" (i.e., the social contract) do not.

 Leeson shows three characteristics that are present in club contracts that are either weak or absent from government constitutions:

1. Club suppliers of governance are "residual claimants on revenues they generate through constitutional compliance." (Government, Clubs, and Constitutions, 2011, p. 303) The state constitution and public goods funded coercively via taxation, Leeson argues, incentivize governments to violate rather than follow the constitutional "agreement."
2. Competitiveness is enumerated as the second mechanism, which allows for the self-enforcing nature of club contracts and weakens the self-enforcement of government constitutions.
3. The assortive nature of clubs on the market creates a "poly-ness" of a choice of the club variety, limited only by traditional economic factors and the imagination of entrepreneurs. Network costs are one of the primary economic factors that put an upward bound on dissatisfied customers starting new clubs when faced with the slightest degree of dissatisfaction.

 Leeson takes on three types of ways that are typically employed to "enhance government's club-ness": "federalism,” "democracy," and "limited scope." He handles the limits of each, including the shortcomings of the Tiebout model. Federalism is limited by the number of sub-clubs it permits; a club system will always have a higher ability to self-enforce its contracts. If federalism, Leeson says, gave no limit to who or what could become a competing club, it would cease to be a monopoly, and a system of clubs would emerge. Second, the federalist contract (the central government's constitution) is not self-enforcing (or is only weakly so,) and there is little incentive for it to follow its own "agreement."

 Democracy is limited most strongly by "the logic of special interest groups" as elaborated on in the Public Choice Literature (Government, Clubs, and Constitutions, 2011, p. 303). Leeson says the problem with this is the lack of self-enforceability; the government can disregard this part of the constitution.

Economic Calculation and Contractual Constitutions

 In a similar approach to Leeson,Boudreaux and Holcombe examine the same Buchanan-Tullock theory of constitutions and Buchanan's theory of clubs and ask how the contracts of such arrangements form governing institutions and how rules are to be best economized (Government by Contract, 1989). They show how restrictive covenants frequently serve as a form of government, and they work with the example of a real-estate developer who incorporates governance and security into the final product, which increases its value significantly for the final consumer.

 The high costs of decision-making, especially under the Buchanan-Tullock unanimity rule, are a significant factor in how constitutions and particular rules are formed. They see the developer as a mechanism to lower the cost by offering a "take-it-or-leave-it" (not a term they use) contract, eliminating the costly haggling over constitutional rules. A role for the entrepreneur then is to "draw up a constitution to form a club and then sell shares in the club (Bourdreaux & Holcombe, 1989, p. 272).

 Boudreaux and Holcombe show how the entrepreneur lowers or eliminates bargaining costs of deciding on specific constitutional content by creating the constitution before consumers ever enter the picture. The cost of unfavorable constitutions is borne by the entrepreneur when consumers avoid the entire contract altogether, but this is easily accounted for as any other good or service is through profit and loss. They remind the reader that consumers' choice to purchase real estate and its constitutional contract (or abstain) is like the Tiebout model mentioned above. However, the primary difference is that Tiebout competition only considers the post-constitutional phase of production and leaves out the entrepreneurial process of the initial formation of efficient constitutional rules and combinations with other goods and services.

 Boudreaux and Holcombe make the critical point that the Buchanan-Tullock concept of efficient constitutional rules resulting from "unanimous agreement" is virtually impossible and relies on the nebulous concept of "conceptual agreement" as a means of saying a social contract exists. Thus, Boudreaux and Holcombe argue, the Buchanan-Tullock model of the optimal constitution remains a "matter of speculation." (Government by Contract, 1989, p. 275). The contractual government formed by entrepreneurs is the closest thing to a social contract to be found, they argue. The concept of the entrepreneur comparing costs to benefits, comparing input costs to output costs, and ascertaining the satisfaction and levels of demand for governance leads the discussion to the economic calculation of providing governance.

 In his doctoral dissertation (The Political Economy of Policing, 2020), Tate Fegley provides an analysis of policing that is essential; this dissertation, in part, prompted some of the questions that lead to the creation of this thesis[[1]](#footnote-1). Fegley introduces the three eras of policing in the US; each brought about in response to public dissatisfaction with the initial conditions: the Political Era, Professional Era, and the modern era of "community-oriented policing," or COP for short. COP became prominent in legal scholarship, police theory, political offices, and the public discourse beginning in the late 1970s and early 1980s. COP is based upon the notion that police officers ought to serve the public and be accountable to the very people who employ them for their service. Fegley notes that this is a unique development in publicly provided law enforcement.

 Fegley observes that the idea of consumer demand opens policing up to economic scrutiny; he does precisely this in his analysis. The question of how consumer satisfaction with and demand for police service is ascertained and measured -in order to meet this demand on the supply side- is central to Fegley’s paper. The lack of the possibility of economic calculation, Fegley says, is *the* problem with not only the COP model but any other possible model of public policing, which must necessarily be managed bureaucratically. Political solutions cannot overcome the economic calculation problem. He says his paper “contributes to three strands of literature.” (The Political Economy of Policing, 2020, p. 33):

1. Evaluating police performance and the appropriate metrics used to do so.
2. The “epistemic properties of institutional arrangements and their relationship to governance” (p. 34).
3. The “constitutional enforcement under different institutional arrangements” (p. 34) The matter of choosing optimal rules, as introduced above, is a focal point of the

The Firm as a Governance Structure

 There are only a few ways firms can obtain complimentary goods to further their production. Firms can purchase on the spot market, contract production out by another company, or obtain the ability to produce the complementary factor on their own, perhaps by merging with another firm already in the business of producing the factor. This point is made in Oliver Williamson’s book (Markets and Hierarchies: Analysis and Antitrust Implications, 1975). On the matter of firms, Oliver Hart provides an excellent summary of the three main branches of thought detailing them. First, Hart says, is the neo-classical branch which he says primarily treats the firm as a “black-box” where managers grope to find average and marginal costs and subsequently ascertains particular quantities for their output. Second, Hart seems to imply a quantitative approach to production and microanalysis in the neo-classical framework.

 Hart says the neo-classical approach omits all analysis of the internal workings and structure of the firm and provides no way to define the boundaries of these market structures. In a fascinating point, Hart points out that Coase says that using this approach of ignoring the internal concerns of the firm, one may as well conclude that every business should merge into a single global firm, or that perhaps there is already one single firm with each company a subsidiary (Firms, Contracts, and Financial Structure, 1995, p. 17).

 The second strain of literature on the firm Hart says is the “principal-agent” approach which primarily concerns itself with the relationship between the mismatched incentives between a principal and an agent acting on their behalf. The principal-agent view sees the mismatched incentives as problems when enforcing contractual concerns of the “quality” of a product. Hart complains that the principal-agent view also fails to provide a way to determine the boundaries of a firm. A common shortcoming of the principal-agent relationship, Hart says, is information asymmetry. However, he argues that this does not explain why monitoring an employee's performance is more manageable than monitoring the performance of a different firm. A second shortfall of the principal-agent approach is that while it is true that profit sharing is only possible within a firm and not between firms, the principal-agent approach does not explain why this is so, current legal restrictions aside. ( (Firms, Contracts, and Financial Structure, 1995, p. 17)

 The third strand of literature of the firm discussed in *Firms, Contracts, and Financial Structure* is the infamous transaction cost approach of Ronald Coase (referenced above) and further elaborated upon by Oliver Williamson. This approach has been famously built upon by the previously mentioned Oliver Hart. Hart notes that the transaction cost approach adds a missing component to principal-agent theory, namely the costs of writing contracts, although some transaction cost is factored in because the agent’s effort is observable by the agent and not the principal. This monitoring cost must be accounted for in contracting costs which is infinite in these terms. However, the principal-agent theory assumes that variables observable by both contracts are costless; this is not true when writing contracts. Without the ability to observe private variables such as the “effort” of the agent, writing optimal contracts is impossible; the contracts will not be first-best.

 Williamson provides some clarification in comparing agent theory (AT) and transaction-cost (TCE): AT uses the terms “moral hazard” and “agency costs,” which he says are the same matter as “opportunism,” which is one of the two central concerns of TCE. The second concern, which is more fundamental, is that of “bounded rationality,” leading to incomplete contracts. This terminological clarification is welcome; Williamson says that there was no central place where the two theories and terms had been formally compared at the time of his writing (The Mechanisms of Governance, 1996, p. 17).

 Hart says that a hypothetical “comprehensive” contract would include all possible contingencies. (Hart, Firms, Contracts, and Financial Structure, 1995, p. 22). He offers an analogy of what such a comprehensive contract would imply. The comprehensive contract would mean that each party would see all possible contingent outcomes and include all of them in the contract, ruling out all needs for any renegotiation. However, contracts are not comprehensive in this sense, he continues.

 Hart lists three reasons (which are absent from principal-agent theory) that contracts are not comprehensive and remain incomplete:

1. People cannot imagine a plan for all possible contingencies; this is bounded rationality.
2. Even if individual plans could be formed, it is hard to negotiate these plans because of the limits of language, among other things.
3. Written plans are problematic for arbitrators and other third parties to decipher.

 A critical reading of this above “problem,” while perhaps productive for microanalysis, is simply a continuation of the ever-present entrepreneurial problem in the Misesian sense of uncertainty bearing (Mises L. v., Human Action, 2008) or in the Kirznerian sense of forecasting future conditions (Competition and Entrepreneurship, 1973) and the alert entrepreneur who vigilantly seeks to find unmet needs and arbitrage opportunities on the market, in a word: competition. This competitive “problem” is no problem at all and no market failure, as Hart seems to imply tacitly; it is the very impetus of all economic activity. Regardless, it is reasonable to conclude that most contracts cannot be complete for the given reasons.

 Hart says expensive haggling over contract revision and the inability to reach an agreement in as far as parties possess asymmetric information are some of the costs associated with incomplete contracts. Hart says that the question then arises as to why two partners would remain contractually bound if the cost of renegotiation is high. He says the leading theory is ex-ante relationship-specific investments contingent upon the firms remaining contractually bound together. He says the third cost of contractual incompleteness arises: parties may avoid entering such a relationship-specific investment altogether; they avoid the first-best scenario. The concern of each company could be that relationship-specific investment will amount to whichever party is more skilled in the renegotiation process and could be used by the other party to “hold up” the renegotiation in the event of a dispute surrounding the quality of a product as a prime example. This problem is termed the “hold-up” problem and could lead each party to make only non-relationship-specific investments to avoid it, leading to inefficiencies. (Firms, Contracts, and Financial Structure, 1995, pp. 23-26)

 The next concern in the train of thought, Hart says, is how such costs change if the two companies vertically merged into one single firm. The transaction cost approach, he says, indicates that the hold-up and haggling issues are reduced or eliminated, but little explanation for *why* is given in the other literature. Hart says that just as it is inappropriate to assume that under a principal-agent approach, the information relationship automatically changes, it is likewise unwarranted to assume “agents automatically become less opportunistic” simply by merging into one firm (Firms, Contracts, and Financial Structure, 1995, pp. 27-28). The transaction cost approach can not answer why reduced haggling and hold-up concerns occur under a merger into a single firm, and thus, Hart’s “property rights approach” is the answer he says (he credits Grossman and Moore as well.)

 In the event of an acquisition or merger, the key to understanding the economic factors at play, Hart argues, is to consider the property rights of each party. To use his example: consider business A acquires business B. A receives all of B’s non-human assets. This, Hart argues, is a source of (non-market) “power.” (The “non-market” signifier is not his nomenclature, but it may be helpful to distinguish this inter-firm power from intra-firm power discussed in a neo-classical approach.) In a dispute over a change in production quality between A and B, where B produces some widget needed in A’s production of a good, the two separate companies will encounter the costs and problems mentioned above. Who should decide how the change in quality should be resolved? The property rights approach Hart suggests proposes that whoever owns the physical assets being used in production will determine this answer; independent businesses will experience high costs, where a merged firm will see lowered costs as one party retains residual control rights over the assets.

 In the above scenario, separate companies A and B could withdraw the use of their assets from production altogether in the event of a dispute over quality improvements. However, Hart argues, if the two firms merge -assume A acquires B- A will retain residual control rights and make the decision; B can only threaten to withdraw the use of laborers but cannot threaten the withdrawal of their physical assets. This type of change in residual control rights alters the relationship-specific incentives each party is willing to make. Hart and other economists have developed sophisticated and extraordinarily complex formal mathematical models of the property rights approach that are neither possible nor necessary to explore in this paper; for now, this basic description of the property rights model will suffice. (For a simplified yet thorough formal model, see chapter 2 of Hart’s work being currently reviewed here.) Hart summarizes his general point:

the benefit of integration is that the acquiring firm's incentive to make relationship-specific investments increases since, given that it has more residual control rights, it will receive a greater fraction of the *ex post* surplus created by such investments. On the other hand, the cost of integration is that the acquired firm's incentive to make relationship-specific investments decreases since, given that it has fewer residual control rights, it will receive a smaller fraction of the incremental *ex post* surplus created by its own investments. (Firms, Contracts, and Financial Structure, 1995, p. 33)

Hart makes another critical distinction between “residual control rights” and “residual income rights.” These two “rights,” as well as the related matter of legal vs. practical “authority” (Hart suggests Aghion and Tirole’s 1995 work *Formal and Real Authority in Organizations* for more detail on this topic. He also notes that similar distinctions have been made in the sociology and organization behavior literature, particularly Max Weber’s 1968 classic *Economy and Society.*) This distinction is of particular interest for the following analysis of residual income rights vs. residual control rights related to law production within voluntary and coercive modes of exchange and production. It has already been pointed out that Hans-Hermann Hoppe has made a similar distinction with Hart, who says: “residual income and residual control do not have to be bundled together on a one-to-one basis” (Firms, Contracts, and Financial Structure, 1995, p. 64). Regarding incomplete contracts, property rights, and governance, Hart (in conjunction with Schleifer and Vishny) makes strides in this direction discussed next.[[2]](#footnote-2)

 In the transaction cost literature introduced above, private firms are seen as forms of governance. One work generally detailing this is Williamson’s (The Mechanisms of Governance, 1996), wherein it is sketched the primary ways by which governance unfolds voluntarily to create order in economic situations within the transaction-cost framework. In this work and his 2002 paper (The Theory of the Firm as Governance Structure: From Choice to Contract), Williamson relies on bounded rationality and opportunism as the focal points of his analysis. He suggests that hierarchy (also called internalization or “vertical integration”) is an alternative to market transactions, which rely on the price system. He distinguishes the Hayekian market form of organization from the Barnardian hierarchy form of organizational theory (referring to Chester Barnard and his works, such as the classic *The Functions of the Executive*). He says that incomplete contracting “implicates both ex-ante incentive alignment and ex-post administration (which is what governance is (The Mechanisms of Governance, 1996, p. 26). Williamson also explores Bernard’s conception of authority. Of particular interest is Williamson’s conception of the cost of governance of (M) markets, (H) hierarchies (firms,) and (X) hybrids of markets and hierarchies, as functions of contractual asset specificity (see Figure 2). This model and asset specificity seem to speak to the property rights approach. (The Mechanisms of Governance, 1996, p. 108)

 In a furthering of Williamson’s discussion on the transactional view of governance and incomplete contracts is *The Economics Of Governance,* where he takes his familiar stance that a firm is not a mere “production function” (which he points out is a technological construction) and illustrates how it is a form of governance in and of itself (which is an organizational construction.”) (The Economics of Governance, 2005, p. 4).



Figure

 Williamson shows that economic governance (as he sees it) is made up of three governance structures:

1. “Classical markets (simple spot-market exchange)”
2. “Hybrid contracting (of a long-term kind)”
3. “hierarchies (firms, bureaus)” (The Economics of Governance, 2005, p. 7)

The exciting feature of his framework is that he views the hybrid of hierarchies and markets in their unique class. Additionally, Williamson broaches the idea of bureaucracy here (and in other works) and points out that it is a little-understood structure. Williamson points out that neo-Marxian economist Oskar Lange (who famously advocated for so-called “market socialism”) correctly called bureaucracy “the real danger of socialism” but, like other economists, set aside the issue of bureaucratic management “over the next 50 years until the economies in Eastern Europe and the former Soviet Union collapsed” (1996, p. 100).

 In his indispensable book on the topic, Peter Klein (a former student of Williamson who chaired Klein’s Ph.D. dissertation committee) discusses this exact bureaucratic problem that arises under a socialist commonwealth (including the opposing literature of Lange and the “market-socialists” and Mises.) Klein shows how Rothbard provides the missing link in the current literature on the firm's size: economic calculation. As a firm grows, it must still wrestle with the problem of allocating resources and directing production and can either a) refer to external market prices of a good it produces internally to use as a transfer price or b) adopt a cost-plus approach where divisions of the firm “buy” and “sell” internally. Klein points out Rothbard’s insight and harsh criticism of such an approach and indicates that, at the very least, such pricing schemes contain less useful information than actually exchanging on the market. Thus, according to Klein, the limit to firm size in the Rothbardian and Misesian sense is economic calculation which puts an “upper bound” on firm size. Klein also notes that Rothbard (writing specifically in a 1976 paper) was one of the earliest economists to adopt and integrate Coase’s work, around the same period as Alchain and Demsetz (with *Production, Information, Costs, and Economic Organization,* in 1972, and Williamson (with *Markets and Hierarchies in 1975.)* (The Capitalist and the Entrepreneur, 2010)

 Klein also notes other Austrian thinkers’ dissent on the matter. See (Boudreaux & Holcombe, 1989). Klein says Boudreaux and Holcombe argue that the Coasian (and thus Rothbardian) view of the firm excessively relies on static equilibrium and takes firm inputs and outputs as givens. They contend, Klein says, that Frank Knight’s approach more closely resembles reality in that it views the firm in the role of the entrepreneur. Klein says that they “paint with too broad a brush.” There are two Coasian traditions: the “nexus-of-contracts branch associated with Alchain and Demsetz (1972,)” which focuses on the ex-ante internal policing of slacking workers, and the transaction cost tradition developed by Williamson, which focuses on governance and asset-specificity. The Boudreaux-Holcombe criticism may apply to the former (which may have more practical applications), Klein argues, but not to the latter, and points out they are not mutually exclusive. (Klein, 2010)

 Williamson’s construction of the firm views it as a “court” wherein internal contracts among members are sorted out, without the need for external arbitration or judges. The general format of this internal contract Williamson says is implicit forbearance in that the goal is to resolve disputes quickly and efficiently. Here, he comes to the property rights concerns that help explain why two enterprises may join into one; doing so helps alleviate some transaction costs that arise from bilateral dependency hazards.

 Figure 3 shows the logic of Williamson’s model of governance structures as a function of specialized equipment (asset specificity magnitude denoted by k) and safeguards on specific investments (the magnitude of which are denoted by s.) Each node shows the governance structure that forms as asset specificity and risk exposure combinations change. Thus, he implies a preference hierarchy that tends to unfold where internalization is a “last resort”; “try markets, try hybrids, and have recourse to the firm only when all else fails.” (The Economics of Governance, 2005, p. 12). He indicates that a contractual risk premium is assessed and decreases with each node's progression with the increased security each stage offers. Williamson also says that substituting asset specificity hazards (k) for “property rights hazards” (denoted as r, resulting from poorly defined or poorly enforced property rights within society) would result in the same diagram, except for node D. This lack of stable property rights effectively pins actors at node B where risks must be managed contractually.



Figure

 Thus, it can be seen why Williamson said, “A fundamental tenet of this approach is that the supply of a good or service and its governance need be examined simultaneously” (The Economics of Governance, 2005, p. 171) and “there is no question but that the study of lawlessness usefully expands the reach of the economics of governance.” (2005, p. 15).

 Williamson explores the implications of a scenario where states are unable or unwilling to enforce contract laws (weakened property rights represented by replacing r with k in Figure 3). He reminds the reader that even where rules are “well-developed” (he gives the US as an example) or where it is lacking (like in Vietnam, he says), states are inherently limited in their knowledge and enforcement abilities. He argues that “private ordering” still is an essential function of law production, even under the state. Ed Stringham takes this a step further in Private Governance and shows that the state (even the least corrupt and most efficient) is all but inept in effectively dealing with enforcement and prevention, especially in financial markets. (2015) It begs the question then, in a world where property rights are not structurally weakened, would internalization be more or less likely of a governance structure than market transactions, and would production costs be affected as a result of improved investment security and lowered risk exposure?

 In the paper *The Proper Scope Of Government: Theory And An Application To Prisons*, they examine whether or not a service should be provided internally by a government (specifically a state) or if it should be contracted out[[3]](#footnote-3) (Hart, Shleifer, & Vishny, The Proper Scope of Government: Theory and an Application to Prisons, 1997). The authors claim to have “developed a theory of government ownership and contracting that may throw light on the cost and quality of service under alternative provision modes.” (p. 1127). They call their theory “normative” and say it is not the first to do so. After their analysis, they then provide an application of their work, in which a municipality could ostensibly determine the optimal choice between providing a prison publicly (politically/bureaucratically) or contractually, given the costs and benefits in the framework of Hart et al. They focus on the now-familiar incomplete contract and residual rights of control framework.

 Essentially, Hart et al. argue that under an incomplete contract, a contractor is more incentivized to innovate in quality improvement and cost reduction than a public employee. However, the incentive to reduce costs could adversely affect quality which cannot be precisely contracted (The Proper Scope of Government: Theory and an Application to Prisons, 1997, p. 1127). They briefly address (more like dismiss) “traditional” concerns and objections that privatization will lower cost and improve quality while making a service public that should not be public will be detrimental to this effect. They seem to disregard these concerns and imply that their framework can supplant existing sound economic theory. Their theory assumes that government “represents society,” and consumers cannot obtain the service on the market because it is a “public good.” One might ask what the difference in property relations of an actual firm and those of their hypothetical government with their assumptions are; there seems to be little if any meaningful distinguishing factors.

# Methodology

 The literature review reveals many theoretical gaps, differences in methodology (particularly the lack of a stated or coherent one,) and countless logical fallacies. This paper avoids such pitfalls by clarifying the methodology employed for the subsequent analysis and exposes some of the problems discovered during the literature review in the analysis. The importance of the methodological differences cannot be overstated. This section introduces the limits of language and the epistemological concerns of the claims that pervade the literature on law and economics.

 Unfamiliarity with such topics as epistemology cannot pass as intellectual permission to ignore them. This is not to say that economists must master all other social sciences, but a familiarity with some of them is essential. Moreover, if there are objections to methodological foundations and epistemological errors, they must be refuted, not ignored.

**Language Games and Propositions** The reader may notice that this paper uses a series of propositions that assert truth claims about the real world. An especially keen reader may also notice that the tool used to convey these propositions is “language.” This paper relies on written language; language can be either written, spoken, or, in some cases, physically expressed by signing. All propositions, including those in economics and law, are all conveyed using language.

 Such claims have limits about what can and cannot be asserted as true. These limits can be understood using logic. The economist, especially the modern one, might naturally wonder about mathematical claims. As Wittgenstein trenchantly observed, mathematics is a type of logic and is also bound by the same logical limits. He then asked what language is and realized language is also a sort of logic. Not everything can be expressed using language, however. There are logical limits to what can and cannot be expressed using language. When people communicate, they engage in “language games” where ideas are transmitted back and forth in a commonly understood way. Most philosophers have tried to make claims using language that are beyond the logical limits of language to make. To quote Wittgenstein on the relationship with philosophy and language: “Philosophy is a struggle against the bewitchment of our understanding by the resources of our language.” (Wittgenstein, 2009, p. 52e)

 The limits of language do not imply a limit to what can be known, felt, or experienced in life; on the contrary, some of the most meaningful human experiences cannot be fully expressed using language. However, this inability to express certain concepts need not invalidate them as “unreal.” Nevertheless, if economists say anything meaningful about reality, they can only do so through language and are fully bound by its logical limits. Furthermore, in using language, the economist and the reader alike *act;* using language requires action.

**Epistemology of Economic Science**

It is fashionable today to consider all science, including economics, to be empirical. Economics is sometimes considered no different than the physical sciences such as physics or chemistry and often tries to employ the same methodology of the physical sciences to the social sciences. This classification is entirely inappropriate and leads to contradicting propositions and leads to endless debate about economic propositions that attempt to say things about the world that go beyond the limits of language to say. It seems to be a reasonable position to demand economists only to make claims that can be expressed using language and not move beyond its logical limits.

 Economists must also know how truth claims can be proven or disproven. As Hans-Hermann Hoppe asks, do economists believe that theoretical economic concepts like the law of marginal utility or the law of returns must be considered permanently unknowable and relegate themselves to forever testing it as a hypothesis by constant experimentation and observation? Of course not. Economists do not think this, and for a good reason (Hoppe H.-H. , Economic Science and the Austrian Method, 2007). Epistemology provides the economist with a method of determining which theoretical principles do not rely on testing or observation.

 Hoppe further points out that economics should be based on foundational principles that do not require observation or testing is an old one that can be seen in quotes from Jean Baptiste Say, Nassau Senior, and John E. Cairnes. Moreover, long before these classical economists, mathematics and geometry relied on such fundamental axioms as well. (He notes that no one suggests that the Pythagorean theorem must be tested or observed to be proven) (Economic Science and the Austrian Method, 2007). Mises’s contributions to economics and epistemology are undeniable (both literally and figuratively) and paralleled mainstream economists whose “orthodox” views were nearly identical to Mise’s, although less formal and employing different terminology. Hoppe notes Mises’s orthodoxy can be found in books like Lionel Robbins *The Nature and Significance of Economic Science* (2007). How, then, can such fundamental principles be proven, if not by testing or observation?

***Types of Propositions***

 As Mises formalized an answer to most economists' widely held suspicion until (and well after) his time. He considered certain parts of the works of Immanuel Kant, who discusses four possible categories of propositions are classified by how their truth-value can be ascertained. (Kant, 1998) Briefly described[[4]](#footnote-4): the first two category distinctions are “a priori” vs. “a posteriori,” and the second two distinctions are “synthetic” vs. “analytic.” Roughly speaking:

* a posteriori claim requires observation to determine the truth-value (e.g., “the grass is green” is an a posteriori claim that would need to be observationally confirmed or denied.)
* The truth-value of a priori claims can be determined merely by understanding it; observation is unnecessary (e.g., “triangles have three sides” and “2+2=4” are popular a priori examples that do not require experience to confirm. A priori claims are purely deductive.
* Analytic statements are those whose predicate concept is contained within its subject. (e.g., “bachelors are unmarried men” is a statement that is true by the mere virtue of its definition of the constituent parts of the statement; the definition of a “bachelor” is “unmarried man.”)
* Synthetic propositions are those whose truth-value must be ascertained via experience. (e.g., “all creatures with hearts have kidneys” is a claim that “synthesizes” a new claim of the concepts of “hearts” and “kidneys.” The relation of each concept depends upon the relationship of these terms in the world.

The four different combinations of these categories then are:

* Analytic a priori (e.g., “All bachelors are unmarried men.” These claims are universal and definitionally true.
* Synthetic a priori (Kant argues mathematics and geometry serve as examples: “2+2=4” and the Pythagorean theorem.)
* Analytic a posteriori (Kant rules this out as a contradiction and thus an impossibility)
* Synthetic a posteriori (e.g., “Bachelors are unhappy.” Which can only be ascertained by observation and experience. These claims are not universally true.)

 Some economists writing after Mises have insisted that Mises central axiom and methodology called “Praxeology” (explained below) was of the specific “synthetic a priori” variety, yet Mises himself made no distinction and went as far to say:

Praxeology is a priori. All its theorems are products of deductive reasoning that starts from the category of action. The questions whether the judgments of praxeology are to be called analytic or synthetic and whether or not its procedure is to be qualified as "merely" tautological are of verbal interest only. (The Ultimate Foundation of Economic Science, 2006, p. 44)

Similarly, Rothbard said:

Now the crucial question arises: how have we obtained the truth of this axiom? Is our knowledge a priori or empirical, “synthetic” or “analytic”? In a sense, such questions are a waste of time, because the all-important fact is that the axiom is self-evidently true, self-evident to a far greater and broader extent than the other postulates. (Economic Controversies, 2011, p. 108).

Sorting out the synthetic and analytic nature of Praxeology is unnecessary here. The upshot is that Mises realized that epistemology “indirectly rests on our reflective knowledge of action, and can thereby claim to state something a priori true about reality but that economics does so too and does so in a much more direct way” (Hoppe H.-H. , Economic Science and the Austrian Method, 2007, p. 22). Thus, what is essential is the a priori nature of Mises’s Praxeological method and the central axiom on which it rests.

 Mises formulated this foundational axiom: the “action axiom,” or the “axiom of action.” The axiom asserts that “humans act.” It should now be apparent the a priori nature of this axiom; no observation is needed to prove its truth-value; only reason is needed. The action axiom and the logical implications that follow require mere reason to prove, not observation. There are logical constraints about what can be determined about human action and described using language. Mises classified human action in two categories “history” and “praxeology.” The latter category is what is under consideration now. Various sub-categories of praxeological science have been developed, but the most developed is economics.

 Praxeology is the study of the logic of human action and is a purely deductive science like mathematics and pure logic, rather than an inductive science like physics. Praxeology relies on the logical implications of axiomatic claims; further claims can subsequently be deduced from the axioms. A simple example of such a deductive claim that is a priori true: suppose a consumer eats a cake now, the exact cake cannot be consumed a second time at a later point; the cake is destroyed during the first consumption and saying it could be re-consumed later is a contradiction that requires no observation to prove.

 The logical implication of action is that humans must employ scarce means, such as using their bodies and standing room, to achieve some desired end. (Hoppe H.-H. , The Economics and Ethics of Private Property, 2006) Denial of this a priori claim would be impossible because to do so would require one to act by employing their body (on some section of the ground) to speak or write in a language; attempting to deny this axiom results in a performative contradiction. (Mises L. v., Human Action, 2008) The logical implications of this axiom are that to act, one must use scarce resources and decide which ends are to be pursued first. Should the body be used to run a marathon or be used to formulate an economic proposition? In deciding, praxeological laws like the law of cost, time preference (from which interest rates are derived, “marginal utility, the Ricardian law of association, the law of price controls” unfold as undeniable consequences that do not require testing (Hoppe H.-H. , Economic Science and the Austrian Method, 2007, p. 25). Any attempt to deny a principle such as marginal utility would necessitate using one’s resources to prioritize making such an argument.

 One of the most critical implications of praxeological reasoning is that it necessitates the purposeful action of a valuing human working to achieve some desired ends; human action occurs in an ends-means framework. Humans exchange one situation for another. A specific resource (means) is used to alter some foreseeable future state of affairs that is less desirable than a state of affairs the actor thinks might exist if the action is taken (ends.) This ends-means framework is essential for analyzing the topic at hand, not only for economics but for normative claims and law production.

 Thus, assuming no error in logic is made, Hoppe says, economic theorizing must yield valid results without any need to resort to empirical testing. He pointedly says: “To think, as empiricism does, that these propositions require continual empirical testing for their validation is absurd and a sign of outright intellectual confusion.” (Hoppe H.-H. , The Economics and Ethics of Private Property, 2006, p. 279) But, these arguments have not slowed many social scientists who insist on an empirical approach to economics and law.

**Empiricism in the Social Sciences**

It may be tempting for some economists to brush off the above methodological considerations of rationalism and perhaps adopt a more “scientific” approach to the “scientific method.” The first problem with this approach is that it does not address the arguments put forth. Second, science and philosophy are not alternatives; choosing an empirical “scientific method” as the economic methodology simply adopts the logical positivism philosophy without justification.

 The three primary tenants of empiricism are, according to Hoppe:

1. All knowledge about reality must be verifiable or falsifiable through experience. Said another way, nothing about reality can be known a priori (which rules out praxeology entirely), and all a priori claims are analytical and mere tautological symbols, emotion, or gibberish.
2. Explanations of real phenomenon must be formulated in the format “if A then B” or in the case of qualitative measurements, “an increase or decrease in A will result in an increase or decrease of B.” Moreover, nothing about these claims can ever definitively prove the hypothesis. Confirmation can only be classified as evidence, and falsification can indicate either an incorrect theoretical concept or a missed variable.
3. The two previous claims apply to all fields of knowledge.

The three propositions above are claims about the world, and if the empiricist tenants are correct, they too must be classified as knowledge and subjected to their exact standards. In what does a self-referential application to the claim of empiricism result? If the central empiricist tenant is correct, it can never be known for sure, and the entire philosophy collapses! (Hoppe H.-H. , The Economics and Ethics of Private Property, 2006)

 No more can be devoted to empiricism here, but the critical point is that it is utterly inappropriate for forming theoretical claims about the social sciences. Adopting such a philosophy would imply that nothing about positive or normative claims can ever be determined for sure; constant testing would be required to learn anything about economics or ethics. The logical gap here is less problematic when testing a new alloy or performing a chemistry experiment than in social science. However, when it comes to social sciences like economics and legal theory, this is problematic for two reasons:

* 1. there are no constants in human action[[5]](#footnote-5) (physics can determine constants and thus more appropriately employ empiricism.)
	2. The results of experimenting to determine the truth claims of economic and ethical propositions (required for law and economics) immediately lead to contradictions, not to mention the possibility of widespread suffering, impoverishment, and death.

 The questions arise “what methodology *should* the social scientist employ?” Furthermore, because economics, legal theorists, and ethicists are all social scientists, and especially because Law and Economics is an actual field of applied “normative economics,” the question has a double implication of what law *should* be. Can such normative claims be derived from economic theory and implemented via law, as theorists like Judge Posner himself have done when ruling on real-world legal cases with real-world punishments?

The Epistemology of Normative Claims

 The epistemology of social science (economics in particular) was introduced above. Epistemology provides the economist the assurance that their theoretical claims are *true* (a handy thing to know.) As mentioned above, praxeology (as described by Mises) is the theoretical framework from which the truth claims about all human action is concerned. Mises and his fellow economists focused on the praxeological sub-field of economics, but other subfields have developed. The epistemology of ethics and *legal theory* is also examined because the literature at hand forced the discussion into the realm of *normative propositions.*

Normative vs. Positive Claims

As discussed in the previous section, there is a difference between the purely value-free positive claims of economists and normative claims. Positive analysis is conducted by a series of claims that make no value judgments, involve no emotions, and make no ethical or moral claims. The positive economic analysis only describes the causal relationships of human action and its logical limits of what can be said within the limits of language. This is not to say that human action and all causal relationships *can* be described by language, but only certain things and relationships can be conveyed through language intersubjectively. This is also not to say that normative claims cannot be stated in a scientific and value-free way; they too can be, as will be shown below. A slight digression is first necessary to explore the things that cannot be described by language; this is necessary to allow for a full appreciation of the limits of language as the topic of the scientific analysis of normative claims is examined afterward.

 **Objective Reality and Epistemological Dualism.** It has been stated above that propositions can be made within the logical limits of language. To reiterate, this does not mean that nothing in the human experience can ever transcend language. However, the simple fact is that the things that transcend language (the experiences, thoughts, or facts that exceed the logical limits of language) cannot be expressed *entirely* using language. Before proceeding to the final examples, consider Figure 4, which depicts a Wittgenstein-inspired conceptual art piece titled *One in Three Chairs* (Kosuth). This photo provides a visual representation of the limits of language; “chair” is represented in three ways: in the picture, in “reality,” and in its teleological description communicated through language. Does the word (or even the full description) “equal” the entirety of “chair?” There is some quality about the physical chair that any description could not fully convey. How much more true is this in more scientific and complex concepts than the word “chair?”

The limits of language are a crucial aspect of law and economics. A series of examples serve to demonstrate this critical point fully[[6]](#footnote-6):

* The actual feeling of love a parent feels about their child or the feelings a person feels about their spouse cannot fully be expressed using language. The parent can write poems, songs, give hugs, give descriptions, and otherwise attempt to convey affection. However, these are only “shadows” of the true subjectively experienced feeling of love. Moreover, even then, is the *feeling* of love the parent feels the *entirety* of love? Such a question far exceeds the limits of language the experience or concept of love cannot be proven a priori.
* The truth-claim “it is immoral to paint houses blue” or said another way “houses should never be painted blue” said different still “coercion should be used to stop people from painting houses blue.” Can these statements be *proven* scientifically or said without contradiction using language? This type of claim is unique from any other claims discussed thus far: it is a normative statement about what action *should* or *should not* be performed by a person. This is a “normative,” “moral,” or “ethical” proposition, but it is a proposition nonetheless, and all propositions are expressed through language and therefore subject to its logical limits. Furthermore, it is an expression of human action and thus a praxeological matter. Like any of the propositions mentioned above, this proposition may be either true or false but is impossible to assert or prove within the logical confines of language.
* A person makes the truth claim that “murder should not occur” or said another way, “violence may be used to prevent a murder.” Likewise, the proposition “you should not steal” serves as another example. These are normative propositions like the previous example of painting a house blue. Are these claims true or not true? Can these propositions be stated within the logical bounds of language? Perhaps surprisingly, these claims are *true* and *can* be praxeologically proven and stated within the logical limits of language. The question is, what makes these last claims different from the former claims?

 From the above propositions, what immediately stands out is threefold 1) what can be said about reality using language has limits 2) certain propositions can be proven using language, and some cannot 3) both normative and positive propositions used in scientific analysis are possible. However, to ensure only true propositions are accepted, special attention to epistemology must be considered.

The conclusion to be drawn from the discussion above is one of “epistemological dualism[[7]](#footnote-7).” For scientific analysis, which necessarily relies on propositions and arguments that must only be “true” and cannot be “not true,” only truth claims that can be proven within the limits of language can be accepted by the economist and the legal theorist.



Figure

 Anything that is beyond the limits of language, no matter how real or powerful of an experience, cannot be stated with scientific certainty and must be either omitted from scientific analysis or at the very least it must be clearly indicated by the social scientist that such a proposition is making a claim that is not provable nor disprovable using language. Epistemological dualism is the only possible approach when discussing the next topic in a scientific context: normative ethics.

 The claims that are beyond language are called “metaphysical” claims. Metaphysical propositions can include theological claims, feelings, and claims about morality. Epistemological dualism separates metaphysical claims about “ultimate” or “objective” reality, which cannot be intersubjectively expressed or proven (no matter their “objective” truth-value outside of language), and those (non-metaphysical) truth claims about reality that can be intersubjectively expressed and proven using language. Ethical propositions also have the same distinctions that can be made: those that can be said with scientific certainty within the limits of language and those that cannot.

 ***Normative Propositions.*** Normative or ethical propositions (used synonymously here) are truth claims about what a person (or group of people) “should” or “should not” do. For the social scientist, it is essential to be able to recognize the difference between metaphysical claims about morality (synthetic a priori claims, which cannot be proven (or falsified) and cannot be stated within the limits of language) and those normative claims about morality which *can* be proven and stated using language without contradiction. Normative claims can include any claim about what should or should not happen; they are claims about what people should or should not do in society.

 Law focuses on ex-ante or ex-post enforcement mechanisms and can either include normative claims about the use of violence or those not about violence. What is essential for the discussion at hand are claims about “normative ethics.” Suggestions about employing a particular means to achieve a specific economic outcome (e.g., “you should use this tractor to speed up the harvesting process”) is not an ethical claim, and such types of claims will be set aside for the time being. Ethical or moral claims are now considered because they are the underpinnings of non-contradictory law in the ex-post legal-centralism sense, which relies on normative claims to enforce.

 It is helpful to make a semantic distinction (although perhaps not strictly conventional) between “ethics” and “morality.” Generally, in normative ethics, these terms are used synonymously. For this paper, all normative claims about morality are divided into two groups and named differently to distinguish between them easily. All normative propositions about ethics are “ethical” claims. The term “ethical” is a broad category that can describe those claims that can and cannot be expressed within the limits of language; it can refer to metaphysical or non-metaphysical claims. For this paper, let the word “moral” only refer to metaphysical claims, the normative propositions that are beyond the limits of language (e.g., “yelling is wrong,” “you should not paint houses blue,” or “it is okay to kill people if the devil tells you to.” These metaphysical moral claims might be true, but they are simply beyond the limits of language to express without contradiction and will be likewise discarded from consideration as valid norms from which to study or create laws. Next, let the word “ethical,” which is ordinarily a broad category for all ethical norms, only refer to the a priori true normative propositions. These ethical claims can be expressed using language without contradiction (e.g., “we should not murder,” “you may not take my television without my permission,” and “I should be permitted to take back my T.V. after you have stolen it.”)

Normative ethics, as used here, are those ethical propositions that can be derived from the same value-free praxeological methodology used to study positive economics. Some normative propositions could be made in both categories, depending upon the language game being played.

 ***Hume’s Law and Universalizability.*** Like any other truth claim, ethical propositions must avoid logical fallacies and contradictions (such as the empiricist approach above) in ethics or economic methodology if they are considered true and scientific. Among the most primary and well-known fallacies in dealing with ethical propositions is Hume’s Law, which succinctly stated that it is impossible to derive an “ought” conclusion from an “is” claim. Said another way, the ought/is fallacy exposes a gap in logical reasoning when drawing a moral conclusion from a series of facts about the world; the argument is not “valid.” Take, for example, the following premises and conclusions:

1. “People breathe air.”
2. “People eat food.”

CONCLUSION: “Therefore, houses should not be painted blue.”

In the above example, the ought conclusion clearly cannot logically follow from the first two stated facts about the world. For a final example:

1. “People breathe air.”
2. “People eat food.”

CONCLUSION: “Therefore, it is wrong to murder people.”

In the second example, the ought conclusion “it is wrong to murder people” does not logically follow from the stated facts about the world. The conclusion may be correct (it is, as will be shown,) but the argument is not logically valid. The methodology employed in the current work, the correct methodology for scientific analysis of normative claims and law, avoids the ought-is fallacy by adopting a praxeological ends-means framework.

 The second widely accepted and well-known concept that must be introduced before presenting the epistemology used in the scientific evaluation of ethical claims and law-making is the universalizability principle of the Kantian Categorical Imperative. The universalizability of ethical rules is logically required, although not sufficient when formulating ethical propositions. This rule shows that when a specific action is performed or an ethical claim is made about a particular action, it cannot logically apply to some people but not to others. Such laws or ethical propositions will result in contradictions and undermine the very point of having rules, as will be seen next. Not all things that can be universalizable are ethical in the strict scientific sense. For example, a rule that says “people must paint their house blue” would always require that without ceasing, people must always be painting houses blue but stopping to sleep is an unethical rule and equally undermines the logic of ethical propositions. (Hoppe H.-H. , The Economics and Ethics of Private Property, 2006) Universalization is required but not sufficient when formulating scientific normative-ethical propositions.

Argumentation Ethics: The Epistemological Foundation for Normative Methodology

As developed by Mises, Praxeology is the study of the logic of human action. Praxeology is the epistemological justification for all non-contradictory positive (descriptive) claims about economics. The Action Axiom is the fundamental axiom from which the study of human action is derived. All praxeological discourse must occur through language and discourse, which is a form of action—denying the claim that humans act or use language is a performative contradiction and, of course, totally absurd. In all action, humans act purposively; that is, human action is always done to achieve specific purposes.

 The purpose or goal a human seeks to achieve is called the “end.” In purposive acting to achieve some desired future state of affairs, humans must employ some scarce resource or a combination of resources. The scarce resources used in human action are called the “means.” (Mises L. v., Human Action, 2008) Economics describes the logical consequences and limitations of acting humans as they employ scarce means to achieve the desired end. Economics cannot describe what a goal “should be” or which end should be pursued. The means employed are necessarily scarce and rivalrous, and it is on this fact that the economist and the legal theorist must both focus.

 The means used to act always involves using some scarce resource of both the physical and non-physical types. Time is an example of a non-physical scarce resource. Acting also necessarily requires physical resources that are both scarce and rivalrous. Scarcity and rivalrousness should be familiar concepts to the economist: “scarcity” refers to the fact that the resource has a finite supply, and “rivalrous” refers to the fact that the resource can only be employed by one person, for one purpose, at the exclusion of all other users. Any attempt to deny these a priori facts would result in performative contradictions; the theorist would have to use a certain amount of time, the use of scarce and rivalrous physical resources like their body, and even standing room to utter the contradictory claim. (Hoppe H.-H. , The Economics and Ethics of Private Property, 2006)

 As mentioned in the introduction, human action must logically include the possibility that exclusive ownership of resources is possible; property ownership arises from human action. It is a matter of fact that even under the most hegemonic society imaginable, it is logically impossible to eliminate ownership; ownership can only be transferred from one owner to another in such extreme cases. (Rothbard M. N., Man Economy and State with Power and Market: the Scholar's Edition 2nd ed., 2009). It might be immediately apparent that only physical resources are rivalrous and ownable; time is not rivalrous, for example, and cannot be owned. If person A uses an hour, this does not exclude the possibility that person B can use the same hour. Thus, it is impossible to exclusively control non-physical means; only scarce physical resources are ownable. The ownership of scarce resources is the focus of legal theory and ethics (in the narrow scientific sense) that must now be formally addressed.

 Coming to the independent realization of the possibility of an a priori economic methodology, Professor Hans-Hermann Hoppe also wondered about the possibility of an a priori ethic as well. Hoppe’s professor was the now-famous Jürgen Habermas of the Frankfort School of philosophy, who had developed a type of ethics called “Discourse Ethics,” which was like the a priori approach that Hoppe would ultimately develop. However, Hoppe was disappointed to discover errors in Habermas’s Discourse Ethics. Hoppe was surprised to discover that Austrian Economist Ludwig von Mises had already developed a fully worked-out epistemological system of a priori economic analysis and moved to the United States from his prestigious position to study with Mises’s student, Professor Murray Rothbard.

 Rothbard, like Mises, relied on a “natural rights” ethic whose roots can be traced back to ancient Greek and Roman philosophy and was discussed extensively by classical liberals like John Locke and Kant. Hoppe was drawn to the razor-sharp logical and deductive approach to the economics of Mises and Rothbard but noticed their ethical methodology was not entirely rigorous. Hoppe found that parts of Discourse Ethics from Habermas could help support Rothbard’s legal theory. Hoppe developed a purely deductive, value-free, and consistent ethical system founded in the same Praxeology of Mises. His system has been called by others “Argumentation Ethics.” Argumentation Ethics serves the social scientist in allowing for the possibility to distinguish between true normative claims and claims that are untrue (as far as they can be stated using language.) Nothing even approaching the level of epistemological rigor seems to have entered the thought process of legal theorists and economists such as Becker and Posner in their abortive attempts to synthesize economics and law.

 Since Hoppe’s ethical foundations were laid, legal theorists like Stephan Kinsella have begun constructing a foundation for a legal theory to be built on the firm epistemological ground of Argumentation Ethics. The following is a brief sketch of argumentation ethics. Hoppe has explained his theory somewhat sporadically throughout his writings and lectures, and the following synopsis was derived from the relevant sources. Criticisms and debates have been leveled by other theorists and have all been adequately addressed by Kinsella and other theorists, including Hoppe himself. None of the current objections are worth re-capitulating or hashing out here and are unimportant for the current work.[[8]](#footnote-8)

 In the discussion above on the use and ownership of property, it is pointed out that it is logically impossible to avoid deciding who is permitted to own and use resources. The ownership and use of property are the concern of ethics, and the scientific approach to answering this question can be made in the a priori method of praxeology. The action axiom of Mises states that all humans act.

 A particular type of action is argumentation which employs scarce means to put forth a series of propositions in some language form, and it is only through the course of an argument that all propositional truth claims can ever be expressed. Thus, Hoppe formulated the “argumentation axiom,” which serves as a corollary to the action axiom. The argumentation axiom states: “humans argue.” An attempt to refute this axiomatic claim results in a performative contradiction; an argument must be put forth that states “humans do not argue,” which is, as stated, an evident argument and is contradictory. Thus, the argumentation axiom is a priori true and requires no testing (it is not an a posteriori claim) to prove its validity and is not a metaphysical claim beyond the limits of language. It is a fact of argumentation and its logical implications that the proper use of resources can be justifiably argued and proven scientifically. (Hoppe H.-H. , A Theory of Socialism and Capitalism, 2016)

 Argumentation does not, so to speak, consist of mere “free-floating propositions” (Hoppe H.-H. , A Theory of Socialism and Capitalism, 2016, p. 155), but rather, are purposive actions. Argumentation is a goal-oriented action in which the actor employs scarce means (like the arguer’s body and vocal cords) to achieve a desired end of convincing the opponent to accept the arguer’s proposition is “true,” Hoppe says. A critical point that Hoppe makes is that during an argumentation, *no physical violence is used*; it is a peaceful (i.e., non-physically violent) action that is used to resolve a disagreement. Argumentation is the only alternative to violent “resolutions” of disputes. Another crucial insight is that to argue, the logical prerequisites of doing so are that a) each participant is permitted exclusive and autonomous control over their own body, and b) each participant is granted the exclusive use of all previously owned property, including their physical bodies. Attempting to deny these requisite conditions would also result in a performative contradiction because the very act of their argument they are a) retaining control over their own bodies and resources and b) not depriving their opponent of the exclusive use of their own body or previously owned resources. In arguing, Hoppe says, both parties also implicitly and undeniably admit that they prefer non-violence and that there is a correct position to be determined (i.e., truth “exists, and can be agreed upon.”). Therefore, it is logically impossible to *argue* that one prefers a violent resolution rather than a peaceful one (2016); it is demonstrably not true, as their demonstrated preference for argumentation shows.

 Thus emerges the implicit social goal revealed through the demonstrated preference of argumentation: social peace is preferable to physical violence; no argument to the contrary can be correctly stated within the limits of language. This is not to say violence never occurs because of argumentation, of course. Stated another way, *if* the goal is non-violence (as arguing people implicitly admit is the case), specific rules or norms cannot achieve these goals. Likewise, certain norms *must* be in place if non-violence is to be maintained. Employing violent attacks and murder, for example, cannot achieve the goal of peace and cooperation. Thus, the praxeological ends-means framework reemerges as a praxeological method of determining social norms.

 The ends-means framework can be stated in “if-then” statements about ethics that allow Hoppe to avoid the classic pitfall of Hume’s law. The if-then statement avoids the ought-is trap. For example, “*if* the goal is non-violent resolution to a dispute, *then* argumentation must be used instead” is a true and scientific statement, where “people dislike violence, therefore flogging should not be used” is a metaphysical claim that cannot be said to be valid using language. The critical point here is that certain norms *must* logically be true if the implicit goal of non-violence is the end sought.

 Included in the logical implications of Argumentation Ethics happens to be the Lockean homesteading principle championed by Rothbard. For example, *if* the goal is peace, *then* only the original homesteader of a resource *should* have exclusive control (i.e., own) a contested resource. This can be seen by reasoning out what happens if a different rule besides the first-comer rule is instituted. If a social norm that says a second or third comer should own a resource is instituted, a contradiction is encountered because the person making the claim uses their previously owned resources to make the argument.

 Because of the rivalrous nature of physical resources, a contested resource cannot be consumed by a first comer/homesteader *and* simultaneously consumed by a second comer; this would *cause* physical clashing as a rule rather than avoid it. Avoiding physical clashing over scarce resources is the entire purpose (end) of normative ethics in the first place; a claim to the contrary results in absurdity. Furthermore, another absurdity arises if a second-comer rule exists; the first comer cannot appropriate a resource from the state of nature without permission from the “proper owner” (i.e., the second comer) and would need to relinquish the resource to the “proper owner.” The second comer, taking “original” possession instead of the first comer, would become the de-facto first owner and would need to yield their claim to the “proper owner,”: the third comer. Thus, the Lockean homesteading principle is scientifically justified. Only the first comer to a homesteaded resource *should* own it if the goal of non-violence is the end sought. As mentioned in the introduction, ownership can be scientifically justified as an appropriation of a resource from the state of nature by an original owner, gift, contractual exchange, or restitution for a previous unjustifiable act (restitution for a tort,) which will be examined below. The justification for the universalizability of Kant’s Categorical Imperative and Hume’s law can now be seen.

 It is perhaps helpful to remind the reader that the human body is unique in how its owner came to possess it; the body was not “originally appropriated” from the state of nature. Thus, the body is inalienable, and the ownership rights of it cannot be transferred to another person as any other physical resource can be. This logical inalienability explicitly rules out all possibility of slavery or indentured servitude “contracts” as scientifically justifiable (Kinsella S. , 1999); only non-body, physical resources can be exchanged contractually.

 What of the cases where argumentation is not used and violence is employed instead? What if someone demonstrates a preference for physical violence instead of argumentation? Take the case of a serial killer. Hoppe argues that dealing with such a maniacal actor involves no ethical dilemma but is instead a “technical problem” to be dealt with as if the serial killer (who pursues death and avoids argumentative resolutions) wild animal, a rock, or a mosquito (Hoppe H.-H. , 2016). The next logical step in the discussion is that of the details of a legal theory built upon the praxeological epistemology of Argumentation Ethics. Issues like crime, punishment, ownership, contracts, and restitution have been addressed by legal theorist Stephan Kinsell who builds an equally compelling, scientific, and undeniably true legal theory upon Hoppe’s and Mises’s foundation.

Estoppel

 As a legal theorist, Stephan Kinsella has developed the foundations of a detailed legal system that is logically sound and scientifically justifiable. As is seen in the next section, this system closely resembles certain aspects of law as it has existed throughout history, especially in the ancient world. Kinsella’s legal theory focuses on the ex-post enforcement of law and focuses on the concerns of the legal-centralist variety in that he refers to things like judges, juries, and courts that are all centrally provided (even if privately.) This is not to say that Kinsella’s theory is in any way at odds with the ex-ante private governance mechanisms; in fact, his approach could provide some ex-ante enforcement via deterrence effects and implications in contracts. The economic possibility that all legal centralism could be replaced by ex-ante private governance is among the significant contributions of the current work and is explored in the analysis section. At this juncture, if someone were to break a rule or a dispute arose, there must be a method to deal with such disputes ex-post.

 Kinsella’s legal theory is called “estoppel.” He notices that consistency is requisite for argumentation to occur and places this as the cornerstone of his theory (Kinsella N. S., Estoppel: A New Justification for Individual Rights, 1992). The word estoppel is a well-known legal term that essentially means to bar an argument or allegation from being heard because of some previous act that contradicts the spoken claim. For example, suppose a convicted murderer objects to a death sentence issued by a judge. If the murderer objects to the execution sentence, the murderer makes two contradictory claims:

1. “killing without permission is *bad* and should not be permitted.”
2. “killing without permission is *good* and should be permitted.”

The first claim is a verbal claim made in court when the murderer objects. The second is an implicit claim made during the tort of murder. The claims are contradictory, and one of them must be dropped. The second claim is an action and cannot be undone or “dropped” from the argument because it is irrevocable, and thus the first claim is dropped. The second claim stands “killing without permission is good and should be permitted” and is the claim that the judge will hear. Said another way, the murderer is “*estopped* from being heard to say” that the judge should not issue a death sentence because it is wrong. The judge will not hear the contradictory claims and rules on the remaining claim made by the tortfeasor.

 A full exploration of Kinsella’s Estoppel, while fascinating and essential, cannot possibly be undertaken here. Instead, a few generalizations about the theory must suffice, but it should be clear that these claims rest on the same deductive epistemology described above and are equally sound and scientific. Some of these logical implications of Estoppel may be intuitive, and some might seem somewhat alien, but even the “strangest” conclusions all have historical precedence and empirical examples of them being employed successfully. Some important implications of Kinsellian Estoppel and Hoppean Argumentation Ethics:

* Physical violence can *only* logically result from a dispute over the use of a scarce *physical* resource. It may be objected that there are exceptions such as a religious war or dispute, which is a dispute over ideology. This is not a valid objection and is simply not true; the dispute, in this case, would be over the “proper” use of physical resources like the physical body or land of the religious adherents. Physical violence is always and only about a dispute over a physical resource.
* Acts of aggression (defined as the initiation of physical violence against another person's property or body) are unethical. Arguing otherwise would violate the universalizability principle and lead an opponent to conclude that their aggression must also be justified.
* Only laws prohibiting aggression are scientifically justifiable and correct.
* Laws prohibiting voluntary action are scientifically incorrect and unjustifiable.
* Non-physical resources such as time, ideas, feelings, concepts, designs, or movements cannot be owned. To make an ownership claim on an idea is impossible and is instead a claim on the scarce resources previously owned by another. This rules out all scientific justification for intellectual property (IP). The reader may recoil in horror at such a claim but should be reminded that the monopoly privilege of IP, copyright, and patents have a long history of heated dispute and have been by no means universally accepted by scholars or economists throughout history. As a simple example, a patent on a design on a particular wooden chair does not claim to own the “design” or the “idea” itself; this is impossible as described above. Ideas and designs cannot be owned because they are not rivalrous or scarce; person A using an idea does not exclude person B from using the same idea. What is in dispute is the resources that are previously owned. In seeking a chair design patent, person A is not making an ownership claim on the idea but is making a de-facto ownership claim on not only the wood owned by B but is making a de-facto ownership claim on all wood owned in the entire world by all of humanity (or at the very least within the legal jurisdiction!) (Kinsella N. S., Against Intellectual Property, 2008). Any claim to the contrary is unscientific and cannot be said with certainty within the limits of language.
* Only aggressive actions (torts as defined above) can be responded to or “punished.” Non-aggressive actions cannot logically be punished without contradiction. (Kinsella N. S., Punishment and Proportionality: The Estoppel Approach, 1996)
* The response to a tort (punishment) must be proportional (or less) in its level of severity of violence. (e.g., the tort of stealing a candy bar cannot justify the punishment of execution; execution is disproportionate and exceeds the tort.) Thus, the legal concept of “reciprocity” arises. Likewise, interfering or stopping a tort is logically justifiable using proportionate coercive force. (1996)
* Punishment serves as restitution for the victim of a previous tort, and it is only the victim (or their kin) who may decide the appropriate punishment. A judge or arbitration authority can determine the proportionality of the sentence. Torts harm a specific victim or victim. This is in stark contrast to a “crime,” which presumes “society” or the “state” as a victim.
* The burden of proof is on the convicted person to demonstrate that a particular sentence is too severe or exceeds the proportional limits. It is up to the *convicted* party (and not the victim whom the crime has already burdened) to prove. (1996)
* There will be an economic tendency for victims to prefer non-violent and economic restitution in place of physical punishment in many cases.
* Contracts are *not* mere promises to “do something.” Contracts (properly understood) are *always* title transfers of exchanged resources. This applies no matter how complex a future contract may be. [[9]](#footnote-9)

 The above methodology sketches a detailed and rigorous epistemological framework from which positive and normative scientific analysis can be conducted in the law and economics, clubs and constitutions, market governance, and incomplete contract literature introduced above. The above methodology section provides only a brief introduction to the requisite concepts and shows the level of logical scrutiny required to arrive at correct propositions (non-contradictory or within the limits of language to say correctly.) The key concept in this methodology is the scientific and value-free nature by which economic and ethical/jurisprudential propositions can be evaluated.

 While some authors reviewed in the literature above admirably remain value-free in much of their work, most of them seem to disregard the value-free approach in at least occasional yet critical positions that tends to undermine their conclusions and prescriptions. Doing so takes their work outside the realm of scientific analysis and into the world of metaphysics, personal feelings, and even absurdity. It seems that most of the authors introduced in the literature review do not have any epistemological concerns whatever; their justification for their claims is rarely, if ever, given. Perhaps it is the case that many of these authors take for granted the epistemological writings of former economists and presume their work stands on this existing epistemology. However, much of the existing epistemology is implicitly praxeological (purely deductive), as authors like Williamson, Tullock, and Buchanan, seem to adhere to loosely. However, their adherence is not strict, and they move in and out of sound truth claims at will without scientific justification for doing so. Other authors like Posner and Becker do not appear to attempt even this level of epistemological consistency. What is the epistemological justification for their claims and suggesting applying these claims to real law, with actual coercion, to real people? The accused want to know.

 These authors seem to not only rely on faulty positive economic analysis (built by economists who likewise seem to be unaware of logical limits of what they could claim as true) and apply these faulty “principles” as normative imperatives. Such leaps do not pass even the most elementary logical tests (e.g., Hume’s law,) and in many cases, are not only faulty and unscientific but amount to nothing more than unprovable, metaphysical claims at best, and often might as well be pure gibberish. If economists and legal scholars have tried to ignore epistemology altogether, this is a non-starter, as has been thoroughly described above.

 A claim that “it is unnecessary to prove any claim to be logically sound” is self-defeating and would a) require the use of logic to prove its claim self-referentially, and b) if taken at face value, would mean truth cannot be ascertained, which is itself a truth claim and could be disregarded. A single example will serve to demonstrate the difficulty of the theories of theorists such as Posner. In a dispute over the use of a rape victim’s body, a law and economics approach might theoretically suggest the party with the higher use-value (perhaps the rapist) should be awarded ownership, where the methodology mentioned above would simply award the use of the disputed resource (the victim’s body in this case) to whoever owned it first (i.e., the victim.) Considering Hume’s law (not to mention the difficulties of intersubjective utility comparisons), the approach is wholly fallacious. It is hard to imagine that any modern legal theorist would suggest such an absurd outcome, except, of course, when they do (in antitrust cases, for example).

 The precise difficulties with these economic theories will be analyzed next using the methodology described above. A brief historical background is given first, which will show the evolving approaches to jurisprudence throughout history and show the effect private property claims have on economic factors. Williamson’s suggestion of inter-field study has been taken to heart in this paper and has proven to be essential to reconcile the fields of law and economics.

# Analysis

 The analysis section is given in two parts: The Historical Development and the Technical Analysis. Historical development is essential and shows the evolution of law throughout history. This is important for several reasons, but primarily 1) it serves as empirical support for theoretical claims, which is not necessary but often helpful 2) illustrates how theory, when applied or formulated poorly, changes the legal structure 3) provides empirical grounds to dismiss specific objections immediately. The historical development provides a sketch from ancient to modern history and focuses on the changes in the property-relations of the decision-makers, the way victimhood was viewed, and the format of the legal structure.

**Historical Development**

 Before the innovations of language and communication, humans are suspected of having relied on instinct for survival. However, with such advancements, humans came to survive primarily as nomadic hunter-gatherers living in groups ranging from 10-30 in size and mating with a gene pool ranging from 150 to 500. Hunter-gatherer societies subsisted in a hand-to-mouth condition and did not add anything to nature-given resources; they only consumed resources. (Hoppe H.-H. , A Short History of Man: Progress and Decline, 2015)

 Hunter-gatherers could respond to the Malthusian problem by fighting, migrating, or innovating with new technology and social organization methods. Both fighting and migration came with high costs and limits, and both seemed to have been used by early humans almost exclusively. As humans moved further and further avoiding conflict and Malthusian limitations, unique languages and ethnic groups became more pronounced. Eventually, further evidence suggests, land as a factor of production became increasingly fixed; migration and innovation became the only two options for early humans as land became increasingly occupied. (Hoppe H.-H. , 2015)

 In addition to the violent human interactions of early humans, cooperative action existed as well; biological motives promoted sexual reproduction and parental nurturing, and economic incentives like the division of labor within family units based upon physical advantages of each person. In addition to the inter-group cooperation described, Hoppe says technical innovation affected the Malthusian conditions but alone did not solve the problem. The invention of the bow and arrow, for example, could increase meat consumption in the short run, but in the long run, mammal populations would be decimated or even hunted to extinction has Hoppe indicates the literature on the topic says occurred in the Americas and Australia landmasses. Thus, technical innovation alone could not solve the Malthusian problem but worsened it without changing population or land availability. (Hoppe H.-H. , A Short History of Man: Progress and Decline, 2015)

 As Mises termed it, the Malthusian Law of Population, population, and land size was gradually overcome during the Neolithic Revolution with varying results over time. Hoppe says the recognition of ground-land and personal articles as personal and communal property, the emergence of the family unit, and technological advances in the agricultural ability to *add* to nature-given resources through saving and investment were the primary means by which humanity moved past their prehistoric Malthusian conditions. (Hoppe H.-H. , A Short History of Man: Progress and Decline, 2015)

 Only through capital investment and saving was it possible for humanity to lift itself out of the Malthusian condition. For this to occur, social order was established to permit the division of labor to flourish. Families limited population growth as humans became increasingly monogamous, which subsequently led to the homesteading of private (rather than communal) sections of land. This land ownership facilitated increased capacity for horticultural and agricultural techniques to develop under the comparatively more secure and predictable conditions. Hoppe points to evidence that the human population exploded from less than 5,000 before the Neolithic Revolution to over 4 million at its beginning and points to surpassing 170 million with the Christian revolution and 720 million at the don of the industrial revolution. Since the industrial age, the number of agricultural employments has gone from 80-90% to less than 5%. (Hoppe H.-H. , A Short History of Man: Progress and Decline, 2015) Although crude and stylized, the above history shows both economic theory and empirical evidence suggest that without property rights and some system of social norms and rules, the division of labor, saving and capital investment, and exchange could never have improved the standards of living witnessed in either the ancient world or modern-day. Also visible is the interrelation of the production of goods with the production of governance, as suggested by Williamson. Without law to establish property rights, humanity would have never left the stone ages and likely died out. The development of this customary rulemaking and its effect on society is the next topic to be examined.

 As Bruce Benson notes, “the enterprise of law” has taken on a wider variety of forms across cultures and history. However, some similarities stand out which are worth exploring. Like the scholars he cites, Benson categorizes law into two main categories “customary law” and “authoritarian law.” The former is approximately described as a bottom-up evolutionary development of law that spontaneously arises and evolves as disputes are continuously sorted out. Authoritarian law, Benson says, is provided in a top-down manner where law is issued, decreed, or legislated from some authority and enforced in society. (The Enterprise of Law: Justice Without the State, 2011) It is worth noting the similarities of the distinction made by Benson and the distinctions of private vs. public governance made in the introduction of the current work. Benson’s terminology will be primarily relied on in the historical development. However, it should be noted from the outset that “customary law” and “private governance” share significant characteristics and may be used somewhat synonymously, as can “public governance” and “authoritarian law.” Customary and authoritarian serve primarily as broad historical categories.

***Customary Law***

 Customary law is concerned with the concept of a “tort” (Benson, 2011) which is wrongdoing that harms a particular individual. Customary law is an ancient concept that functions today as well as in antiquity. Throughout history, various categories and cross-sections of people groups have joined together to provide common law. When a tort occurs, a specific victim or victims in a group can be identified, as can the disputed property. As Benson also notes, because no state apparatus autonomously enforces the law under customary law, the victim must bring the accused to trial, which creates economic incentives to form social groups with whom can be shared the cost and burden of jurisprudence. Thus, various groups ranging from the prehistoric familial unit, religious groups, groups based upon geographical location, commercial interests, and various contractual arrangements in general. (Benson, 2011) Customary law, although never perfect, tended to be highly efficient in economic terms and highly ethical in normative terms.

 **Medieval Customary Law.** Unlike the authoritarian law that became increasingly popular with monopolized law production and enforcement which relies on a central lawmaker, ancient customary law relied on trusted nobility for arbitration services. Hoppe points out that according to many historical works, including Fritz Kern’s 1914 classic *Kingship and Law in the Middle Ages,* kings and other nobility during specific early periods in Europe were a far cry from a dictator depicted in Hollywood and textbooks; this dictatorial type of king did eventually become commonplace, but it was not always the case. Kings originally served as judges who were voluntarily sought out and initially had no special privileges not enjoyed by society. Coercive property redistribution was virtually unheard of in many localities, and kingship was established not by birthright during early medieval times but as chosen by the community. (A Short History of Man: Progress and Decline, 2015)

 As nobles arbitrated cases, customary law was naturally adopted and served to help resolve disputes and seek restitution for torts. A distinguishing feature of customary law is that the victim was compensated and not the king, the state, or “society” for a tort. Monetary compensation and ostracism were generally preferred as sentences because violence and imprisonment tended to be more costly. Hoppe says that, of course, the feudal system was imperfect and flawed, most notably by the institution of serfdom, but still conveys the simple facts that the legal system tended towards a natural order characterized by:

* Everyone was equal under *one* law, including kings.
* There was no true law-making power, only discovery and arbitration.
* There was no legal monopoly on judgeship or arbitration services; corrupt judges and kings were simply ignored in favor of more reputable nobility.

The leap to the king as a monopoly provider, owner, and ultimate owner brought with it significant social and legal consequences, but during this period, customary law faced no such problems.

 Constant warring increased the need for military leaders, and much of the customary and common law system was shattered by military attacks (notably from the Vikings.) Subsequently, power was increasingly centralized. Ealdormen and nobles were replaced by appointed sheriffs who managed several shires instead of just one. War and the concentration of authority also allowed for involuntary property redistribution to occur systematically. The external threats, not the internal need for law production, led to the centralization of kingship power and authority. The Anglo-Saxon kings eventually came to view law as a method of generating revenue, and the “king’s peace” replaced the victim’s loss of property as the primary legal concern. Restitution became owed to the king rather than the victim; this marked the arrival of “criminal” law. Earls and sheriffs were paid from the tax (writ) revenue to enforce the king’s criminal law, giving the king a more effective mechanism to tax and rule than the nobles who were sought out by the people under the older legal tradition. (Benson, 2011)

 As commerce and the exchange of agricultural goods expanded, “commercial” law arose as an effective method of sorting out disputes that spanned different geographical areas and different legal traditions. The “law merchant” was considered a “dealer of law” hired to arbitrate commercial trade disputes. Customary law and private adjudication prevailed in commerce, which ultimately developed into “commerce law.”

 Commerce law was not a statutory code written by a central authority but was instead formed spontaneously as specially written trade instruments called “contract law,” which was seen as creating law itself. The economic goodwill of the law merchant allowed them to be sought out voluntarily for adjudication and governance. With the private arbitration and the reliability of commercial contract instruments, such contracts began to be exchanged as credit instruments; they were traded as money. (Benson, 2011)

 It was not until English kings gained more political power and became monopoly providers that law production became more centralized and decreed instead of discovered. Things, of course, changed throughout the legal world, and beginning in continental Europe, statutes, legislation, decrees, and constitutions began to replace custom. Hoppe sums up the centralization of authority and the complete change in governance and law:

from the beginnings of a natural, aristocratic social order as it was approached, for instance, although still riddled with many imperfections, during the early European Middle Ages of feudal kings and lords, to and through its successive displacement by first absolute and then constitutional kings and classic monarchies, which took historic stage from about the seventeenth century on until the early twentieth century, and lastly to and through the successive displacement and final replacement of classic monarchies by democracies (parliamentary republics or monarchies), beginning with the French Revolution and coming into full swing with the end of World War I, since 1918. (A Short History of Man: Progress and Decline, 2015, p. 106)

**The Rise of Authoritarian Law.** The rise of authoritarian law and the replacement of the customary and comparatively more private law resulted from several historical factors that can be analyzed using economic theory. The development of the modern democratic state can be traced back to the classic monarchies and constitutional kings, preceded by the early European Middle Ages of feudal kings. (Hoppe H.-H. , A Short History of Man: Progress and Decline, 2015)

 The legal system was transformed from a system where property was protected or restored to victims by kings to one where the king would extract resources for his personal gain and the gain of his managers. This unilateral transfer of property by the monarchical rulers was only made possible by authoritarian law; it could not be possible under a system of private, customary law. The recipients of unilaterally transferred property would eventually come to include the public with the rise of constitutional and total monarchies and, ultimately, democracy. The result of the constitutional monarchy and ultimately democracy was the replacement of private property with that of “fiat” property; the property of the royal subjects was de facto owned by the king. This point will become more critical in the analysis section. (Hoppe H.-H. , The Economics and Ethics of Private Property, 2006)

The new political egalitarianism sentiment of “equality before the law” did not criticize the institutionalized legal monopoly but merely sought to direct its operations themselves, with the hope of “becoming king” themselves. (Hoppe H.-H. , A Short History of Man: Progress and Decline, 2015) Of course, this new constitutional monopoly was not a self-enforcing contract and suffered from severe economic deficiencies. By the end of Edward’s reign, juries, lawyers, and other recognizable state functions were instituted. (Benson, 2011) Victims lost almost all restitution rights for torts and had to be compelled coercively by the crown to comply with the monopolized legal services.

 Modern legal terms and concepts took form due to the warped economic landscape during this transition. Lawyers arose as a new profession, plea-bargaining further destroyed restitution and just outcomes for the accused, and a slew of other modern legal concepts sprang into existence. Some of the new legal structure which survives today came from elements of the English common law, Roman civil law, and statutory law of constitutional monarchies.

 **The New Frontier.** The customary law of old did not disappear entirely, however. Remnants of it spontaneously reemerged in various forms, especially in the new world. Colonial America for a time had extraordinarily little state governance, if any, and legal disputes were handled similarly to those in medieval Europe. On the American frontier, virtually no authoritarian legal structure existed for a significant period. On the frontier, customary law and contractual arrangements made for a relatively peaceful existence, contrary to Hollywood’s depiction of the “wild” west (Anderson, Terry, L.; Hill, Peter, J., 2004).

 In San Francisco during the gold rush, the Patrol Special Police was relied upon to fix corruption in the public government and police departments. The Patrol Special Police is a private police force that still operates today and is still preferred by many over the San Francisco public police department (Stringham E. , 2009). During the late 19th century, the San Francisco public took matters into their own hands and hired private protection from their state and local public government, and settled private disputes. (Stringham E. P., 2015) These serve as a mere few well-documented examples of private governance (in the broader sense) and customary law prevailing despite or in the absence of state law.

 **Historical Conclusion.** Throughout this transition of law production from customary to authoritarian, from private to public, and from commercial contract to statute, the cost of legal services rose, and the quality of law fell. The focus shifted from restitution for victims to fines paid to the crown and ultimately fines paid to the state for “crimes” against society. (Benson, 2011) The property rights and legal claims to resources had changed dramatically.

 However, kings owned the capital stock of everything in their kingdom; the king was the de jure owner of all property *and* controlled its value. In economic terms, this means the king made economic decisions that economized public property as if it were his own. Kings could sell anything they owned and personally receive its total value. The exploitation of a king tended to be future-oriented, and “his exploitation will be comparatively moderate and calculating.” (A Short History of Man: Progress and Decline, 2015, p. 119)

 In contrast, “caretakers” (official state figureheads of democratic states which arose out of constitutional monarchies) are de-facto owners of the property in their jurisdiction but *do not* own its total stock and capital value of all assets; they cannot sell public or private assets and receive personal gain from their value. Therefore, political caretakers do not economize their decisions when considering foreign wars and domestic exploitation. While kings tended to be long-term-oriented, democratic caretakers and managers tend to be comparatively short-cited and exhibit considerably higher time preferences. Capital under a monarchy tends to be preserved, and capital under a social democracy will consume. (A Short History of Man: Progress and Decline, 2015, p. 119)

 Results of the short-sided tendencies of public caretakers include the difference in the ability to wage war. While countless wars between monarchies in history were bloody and expensive, they were almost always territorial disputes. Their cost was personally borne by the monarch and was comparatively short-lived due to the economic restrictions of funding military operations under the legal system. In contrast, wars of social democracies tend to be total wars (e.g., World Wars I and II) and are usually ideologically motivated. The old monarchical wars tended to be conflicts between the royal families of opposing kingdoms, but the subjects were not often identified as the “enemy.” In modern democratic wars, the public is frequently considered “the enemy” as “society” and “government” become synonymous. Civilians are routinely targeted in democratic wars and rarely were in monarchical disputes over territory.

 Constitutional democracy worsened the conditions of the constitutional monarchy in terms of social impoverishment, increased legal uncertainty, and short-sidedness. The suggestion that material well-being and living standards improved *because* of the advent of social democracy is no more accurate than the claim that the invention of the bow-and-arrow cured the Malthusian trap. The standard of living increased as a steady capital investment process and saving that was worsened, not bettered, because of the deteriorating legal structure and changing of law production from private to public. (Hoppe H.-H. , A Short History of Man: Progress and Decline, 2015)

**Technical Analysis**

 Most of the difficulties within the literature are methodological, especially when it comes to normative vs. positive propositions and the use of statutory law to “correct” theoretical market failures. Other problems are technical-economic problems that provide exciting new insights into the topic of private governance, especially concerning contract law, the nature of the firm as a governance structure, clubs as governance structures, and the creation of private constitutions (and the implications of incomplete contract theory on constitution formation). Not yet central enough to the discussion is that the economist can view the law as a factor of production and the entrepreneur and firm as primary governance structures in society. Many of the implicit answers to these issues (particularly the methodological questions) were answered above.

 Many of the problems discovered in the literature review derive from a fundamental misunderstanding of the most rudimentary economic concepts and methodological problems. Becker and Posner appear to disregard sound economic theoretical concepts, including utility and welfare, blatantly*.* They insist on correcting “market failure” with state-provided law. They have missed the mark as economists and legal theorists in their abortive attempts to ignore Hume’s law and the Categorical Imperative (two elementary concepts legal theorists must undoubtedly wrestle with.) There is no excuse for this normative failing, particularly in Posner, who has operated as a US Federal judge and instituting his theories is nothing short of legal malpractice.

***The Failure of “Market Failure”***

 Economics is a value-free science and it is impermissible to accept faulty claims as sound theory. Moreover, it is perhaps even more egregious to apply actual legal violence to enforce faulty economic arguments on the public, especially when it also commits elementary logical fallacies of normative reasoning. Both Richard Posner and Gary Becker build their theories on the utilitarian arguments that date back farther than even classical utilitarian legal philosophers and economists like Thomas Hobbes, David Hume, Jeremy Bentham, and John Stewart Mill.

 The difficulty of such utilitarianism is the reliance on interpersonal comparisons of utility. Lionel Robbins questions the validity of interpersonal comparisons of utility and points to similar consideration in the writings of William Stanley Jevons: " I see no means," Jevons had said, " whereby such comparison can be accomplished. Every mind is inscrutable to every other mind and no common denominator of feeling is possible.” (Comparisons of Utility: A Comment, 1938, p. 637) Lionel Robbins questioned the scientific validity of interpersonal comparisons of utility upon which Benthamite Utilitarianism rested. Robbins continued:

All economists recognized that their prescriptions regarding policy were conditional upon the acceptance of norms lying outside economics. All that I was doing was only to recognise [sic] that, in a field of generalisations [sic] hitherto thought to involve no normative elements, there were in fact such elements concealed…. But it did seem to me that great harm had been done by their intrusion into spheres where they were completely irrelevant. It might be necessary to discuss the political philosophy underlying the prescriptions of the theory of public finance. (1938, pp. 638-639)

 Marginal utility, Robbins understood, was an ordinal matter for the individual to decide and not a cardinal matter shared between people or measured by scientists. The difficulty, Robbins reasoned, is that there is no universal unit with which utility can be expressed. Recreating a stylized diagram used by Walter Block[[10]](#footnote-10), Figure 8 shows the neoclassical conception of utility and redistribution of 1,000 units of wealth redistributed from a wealthy person to a less wealthy person. Suppose a businessperson is an upper-middle-class worker, and the “less-wealthy” person is a religious monk who despises material wealth. The curve clearly shows that the 1,000 units satisfy the less wealthy person more than the wealthier person. This fact alone, as Robbins realized, is impossible. To then argue that income “should” be redistributed violates Hume’s law and the firstcomer principle introduced in the methodology section.

 There is no reason an equally valid conception could not be drawn within the neo-classical framework with two utility functions: wealthier and one for the less wealthy. Figure 9 shows a different picture altogether. Here, the opposite is true. The rich person enjoys 1,000 units of wealth more than the less-wealthy person. These two functions cannot be determined scientifically, summed, or compared.

 Furthermore, no argument to justify redistribution can be derived from this. This type of interpersonal comparison of utility is generally rejected today by economists. However, Posner and Becker were aware of the problems with this treatment of utility but still proceeded with abortive attempts to employ these very same concepts.

 The anachronistic application of interpersonal utility comparisons can be seen in flagrant use of the concepts “marginal harm” (H,) net damage (D,) “social value of the gain to offenders” (G,) (where O equals the activity level from the external diseconomies of the act) for example by Gary Becker, which is causally included in the function:

$D\left(O\right)=H\left(0\right)-G(O)$ (Becker, 1968, p. 173)

 Becker does not explain the units in which damage, harm, or social value are measured; these are purely hypothetical constructions with no real basis whatever. Becker continues to construct his entire formal model upon similar baseless assumptions. Likewise, Becker’s function seen in Figure 1 relies on the cost and benefits of offenses; there is no way this can *literally* be done and amounts to utter futility. It appears that Becker falls prey to both the “psychologizing” and the “behaviorism” errors exposed in Rothbard’s *Towards a* ***Reconstruction of Utility and Welfare Economics*.**

 Becker explicitly suffers, as Rothbard warned, of deriving *marginal* *utility* from “some postulated psychological law of satiety of wants.” Rothbard corrects the error made by Becker by reminding that it is not on hypothetical psychological states that marginal utility rests, but rather “on the praxeological truth that the first units of a goodwill be allocated to the most valuable uses, the next units to the next-most valuable uses, and so on.” (Comparisons of Utility: A Comment, 1938)

 On the other hand, behaviorism attempts to derive utility from where no action was taken. Becker would need to examine a specific legal case before deriving his function. Said another way, Becker’s function would need to be reconstructed not once for all humanity but in every legal case ever brought before a judge. Here the impossible task of measuring and comparing utility is also assumed. Moreover, Becker must construct a new model for each person, but for each person at every instance of time. Rothbard further reminds the economist that “consistency” of utility at a particular moment (if A>B, and B>C, then A>C) is unequivocally not the same thing as “constancy” (A is *always* greater than B and C, for all periods in time).[[11]](#footnote-11)

Figure 8

Figure 9

 It might also be asked of Becker, “so what?” Even if it is true that a criminal’s utility is less than society’s, it does not logically follow that any legal action should be taken. This suffers from the fallacy of Hume’s law; an “ought” cannot be derived from an “is.” There is no scientific justification for using legal coercion to alter the current situation. The only way to justify restitution is by using the first-comer principle discussed above and allowing the victim, not “society” or a marginal utility curve, to determine the proper restitution level. To Becker’s credit, he does not seem to advocate for carrying out legal proceedings in this manner overtly. Richard Posner acknowledges the problems and then simply ignores them.

 Posner acknowledges the impossibility of intersubjective utility comparisons:

“Since the shape and height of people’s marginal utility curves are unknown, and probably unknowable, the possibility that wealthier people’s marginal utility curves are on average higher than poorer people’s cannot be negated.” (Economic Analysis of Law, 1986, p. 436)

However, he adopted the Kaldor-Hicks Compensation principle and adhered to this efficiency conception as a pseudo-ethical standard to which the judge can sometimes, albeit imperfectly, refer to when setting policy. No discussion of Hume’s law, epistemology, or language limits seems to enter his thought process remotely. Rothbard’s reconstruction of utility and welfare clearly shows how the Kaldor-Hicks Compensation does not have any real situation or revealed preferences to use in its calculus and must be rejected as a valid basis creating law.

 Posner suggests that the common law is roughly understood to be synonymous with “laissez-faire,” which ostensibly strives toward approximating “efficient” legal outcomes. He says, “Statutory or constitutional as distinct from common law fields are less likely to promote efficiency” (Economic Analysis of Law, 1986, p. 21). He goes on to say:

The choice is rarely between a free market and public regulation. It is between two methods of public control — the common law system of privately enforced rights and the administrative system of direct public control — and should depend upon a weighing of their strengths and weaknesses in particular contexts. (Economic Analysis of Law, 1986, p. 343)

 Posner proposes that producing law in the coercive mode of production is permissible on economic grounds. He defends the position that market failure occurs and is problematic and advocates for antitrust law, the formation of which relies on the same faulty reasoning exploded above. And, like Becker, there is no concern for Hume’s law and the elementary logical fallacy being committed; even if markets fail, what is to justify “fixing them” using legal coercion. The strict deductive reasoning of the justification of the Lockean homesteading rule, the question “who had it first” is not a primary concern for Judge Posner. Moreover, as Tullock points out, the state is not automatically a silver bullet economist assume it to be; it suffers from its failings which are also worse than the alleged failure of markets. Stringham calls this the *deus ex machina* approach of solving life’s problems perfectly simply by evoking the state with no discussion of its shortcomings. (Stringham E. P., 2015) The *nirvana fallacy* popularized by Harold Demsetz, among others, similarly describes a situation of conceptual realism; the real world does not conform to theory and must therefore be wrong (and by implication fixed.)

 Market failure is alleged to arrive because of either nonexistent markets or market power. There are countless types of market failure being added to the quickly growing list that need not be explored here, but most commonly, monopoly, public goods, externalities, asymmetric information, and business cycles are included (Harvey S. Rosen; Ted Gayer, 2014). Monopoly is dealt with by Posner with antitrust law (which can only be produced coercively) to redistribute surplus value from the monopolist, facing a downward-sloping demand curve, who has restricted output and “harmed” the consumer.

 Considering Rothbard’s reconstruction, this is fallacious and relies on interpersonal comparisons of utility: the utility of the consumers who would hypothetically receive an increased utility due to higher output and lower prices is alleged to be greater than the disutility the producer experiences in producing more. Moreover, as Rothbard points out, there is a difference between “monopoly” and “monopoly pricing.” The charge of the monopoly price is equally fallacious as the market-clearing price cannot be compared with a theoretical monopoly price; the alleged monopoly price *is* the market-clearing price. Furthermore, it is only under the coercive mode of production. Rothbard shows that it can logically be said that monopoly power exists. (Rothbard M. N., Man Economy and State with Power and Market: the Scholar's Edition 2nd ed., 2009)

 Even if Rothbard’s positive analysis of monopoly is rejected, it still is not possible to reason that monopoly prices are “bad” without stepping outside the value-free role of the economist. It necessitates an entirely unscientific normative claim to be made and an interpersonal comparison of utility. Finally, an economist like Judge Posner, who suggests the use of antitrust legislation, makes a further implicit normative claim that something (namely whatever the legislature and judge decide) “should” be done to disrupt the lousy monopolist. Not to mention that the state provider of law is by every definition the very monopoly anti-trust ostensibly works to prevent.

 The nonexistence of a market for law on the private market is demonstrably false, and it could not possibly be argued that law would suffer from this issue. The charge that law production will suffer from public good market failure and will not arise on the market is, like Coase’s lighthouse discovery, fallacious because law is both excludable and rivalrous. On both theoretical and empirical grounds, it cannot be said that voluntary law production will not arise on the market. As will be demonstrated, law is a factor of production that permeates the capital structure. This leaves the other type of possible market failure of “market power.” However, a concern that a law producer could gain market power cannot be overcome by coercively producing law through the democratic state; public governance *is* monopoly-provided law. It is then contradictory to argue that legal monopoly could prevent a legal monopoly from arising. Finally, even if law markets fail, it cannot be scientifically determined that society is made worse off.

 Only voluntary exchanges improve social utility. Two actors were made better off through demonstrated preferences, and no one was made worse off. A coercive act, by definition, makes at least one person worse off and is not Pareto superior. What can be said about the types of “victimless crimes” and civil infractions that Becker and Posner suggest enforcing? Becker argued above that crimes should be defined not by their type as they traditionally are, but instead by their “uncompensated harm” caused to others, which would effectively make all civil infractions “torts” or crimes against “society.” This conception of social harm is not unlike the monarchs who claimed torts between two individuals somehow harmed the crown and increased the number of victimless crimes used by the monarch to justify property redistribution through taxation. How is social “harm” to be determined here?

 As described above, Becker fell prey to the psychologizing error described by Rothbard. Only the physical characteristics of physical property can be “harmed” (in a legal sense) and can be scientifically proven using language. However, the question of why this is the case may still not be entirely clear. Why is it that only the utility gained by those exchanging voluntarily “count” and the utility lost by a bystander who is unhappy about the exchange does not “count?” This, as Guido Hulsmann notes, was something Rothbard did not explain and is the single missing piece of the utility puzzle.[[12]](#footnote-12)

 Hulsmann’s explicit connection of Argumentation Ethics with Rothbard’s reconstruction of utility and welfare seems to have been only informally dealt with by Hulsmann alone, yet is a critical insight. Neither Rothbard nor Pareto explained the reliance on respect for property rights as an underlying condition of Pareto superiority. (Hulsmann says Pareto himself acknowledges this fact in the mathematical Appendix of his *Manual of Political Economy*.) (Hulsmann G. J., 2005)

 Why would the disutility of the envious bystander not count? The answer has been implicitly given above. It is the logic of argumentation that renders the legal defense of the envious bystander contradictory. For instance, the victimless crime of A selling an illegal substance to B might upset person C (the envious bystander). However, assuming the exchange does not occur on C’s land or using his property, it cannot be scientifically proven that his utility even decreased without interpersonal utility comparisons.

Moreover, C’s argument that legal coercion should be used to stop or punish the voluntary exchange between A and B falls into argumentative contradiction and is likewise unscientific.

 Thus, all victimless crimes cannot be scientifically justifiable as Posner and Becker have abortively tried to do. All attempts by the law and economics field to create laws based on higher use-value fail. It is only the first-comer principle and property rights considerations that can be considered as a scientific criterion. This argument further rules out the coercive mode of producing or exchanging as scientifically justifiable altogether. Therefore, public law production and coercive contracts (like the “social contract”) can never logically be Pareto superior and must be entirely rejected by economists and legal theorists because they are value-free in their capacity as scientists.

 It was stated above that only when a voluntary exchange occurs can it be scientifically established that social welfare is improved. Put simply: a voluntary exchange is a Pareto superior move. However, what if the exchange makes the actors worse off than expected? Is the move no longer Pareto Superior? The answer to this question, again, has already been implicitly given above. An actor's psychic dissatisfaction after an exchange that the actor had initially been believed would result in a significant improvement cannot be scientifically proven with apodictic certainty. No claim that the actor was somehow “wronged” can in any way be proven either; where no coercion or deception was used, the exchange was simply a mistake.

 In market failure terms, an information asymmetry might be said to have caused such an exchange; the case of purchasing a “lemon” vehicle is a classic example. Not only is this not something that can be justifiably “fixed” using legal coercion, but this also is not a market failure at all. The entire foundation of all economic activity rests on asymmetric information; the logical conclusion of preventing such unfortunate psychic losses would mean that equilibrium had been achieved and all economic activity would cease. Instead, the dissatisfied actor now has the renewed task of finding a new way to satisfy their needs once again in the same way that the first exchange attempted to do. Exchange does not settle all satisfaction for all eternity; action is pursued repeatedly, constantly tending towards an equilibrium but never achieving it.

 The exchange then is only Pareto superior *ex-ante*. The ex-post dissatisfaction of today is no different from the ex-post dissatisfaction that caused the original exchange to occur in the first place (and, likewise, for the exchange before that one.) Social utility improves only ex-post when a voluntary exchange occurs, and any ex-post dissatisfaction is merely the renewal of the entrepreneurial task to notice the dissatisfaction caused by previous dissatisfaction and act again.

 The entrepreneur's task is to bear future uncertainty of investing in order to work to please the dissatisfied consumer ex-ante with yet another Pareto superior exchange. The specific way the entrepreneur and the capitalist achieve this can occur via economic calculation on the market through contractual exchanges. In addition to contractual spot market transactions, the entrepreneur can also vertically integrate production into a single firm. The production of law and “constitutions” can be produced in the same methods on the spot market by vertical integration; the firm itself represents a form of governance, as Williamson showed. A positive analysis of the contractual provision of law, especially related to the production of constitutions and clubs, is examined next.

***Positive Analysis.***

 Above, the scientific “normative-economic” justifications for the appropriation, contractual use and transfer, and restitution of property are set on their proper course. The faulty arguments of law and economics were thoroughly debunked. Law and governance can now be seen to be justifiably provided only voluntarily using contracts. Due to the rivalrous and scarce nature of property required for all human action, the explanation for the consumer demand for law and governance was also established as a necessary factor of all voluntary exchange and production in varying degrees. Next, the scientific “positive-economic” description of the contractual provision of law and governance on the market, in the firm, and the club is explored in the face of uncertain future market conditions.

 **Law as Contract.** It was stated above that property is a permanent feature of acting humans; no effort to abolish the institution of property could ever succeed; ownership can only be transferred to another user but never abolished altogether. The positive considerations of exchange of property must next be examined as it pertains to law production. Property can be appropriated from the state of nature as described above and used by its original owner, but it can also be justifiably transferred to and used by other owners. The conditions detailing the transfer of property are called a “contract.” At this juncture, it is crucial to reintroduce the Rothbard-Evers Title Transfer Theory of Contract (TTTC), which Kinsella has formalized. TTTC clarifies the economic and normative confusions and contradictions that naturally arise when contracts are viewed as “promises to do something.”

Instead, Kinsella points to the insight of Rothbard and Evers:

a binding contract should be considered as one or more transfers of title to (alienable) property, usually title transfers exchanged for each other. A contract should have nothing to do with promises, which at most serve as evidence of a transfer of title. A contract is nothing more than a way to give something you own to another person. (Kinsella N. S., 2003, p. 21)

 As mentioned above, Lukasz and Fegley, in their "working paper,” seemingly misunderstand the implications and claims of TTTC. The difficulties with the paper cannot be fully explored here, but they center around the considerations of the unenforceability of specific performance of contracts when treated as “promises.” The fact of the matter is that even if contracts were granted to be “promises,” they still require property license and transfer to execute and enforce.

 Under the Title Transfer Theory of Contracts, contracts can still take on the desired functionality that “promises” serve, namely, transfer or license of property in the future. (most contracts tend to be future contracts.) Before even the medieval Law Merchants, contracts have served as law created ad-hoc. Contracts detail the terms under which the transfer of title is triggered. E.g., “when Gary’s couch is moved from house A to house B this Saturday by John, the title of $35 is hereby transferred from Gary to John” is a perfectly acceptable contract. This is not a promise to move the couch, but a transfer of title. The question of uncertainty arises with the ex-ante formation of the contract. Gary might ask, “what happens if John does not move my couch?” If John does not show up to move the couch on Saturday, he incurs no justifiable penalty, and Gary receives no justifiable damages. The promise was not the contract; the title transfer was the contract, and the transfer conditions were simply never met.

 Now suppose, however, that the condition of the title transfer included a clause that reads “if John does not move the couch on the allotted day, the title of $100 will be transferred from John to Gary.” Such a clause provides Gary more certainty that John will move the couch but is still not a promise. So now, if John does not show up to move the couch, he will justifiably be required to pay Gary because the conditions of the title transfer were met. However, what if John now refuses to pay the $100?

 Now the contract has been “breached,” and John’s refusal to pay can justifiably be responded to by legal restitution (assuming the enforcement agency holds a logically sound commitment to property rights.) Why is the second case legally binding in scientific terms and the first one a mere “broken promise?” Indeed not all broken promises are justifiably enforceable. After the conditions were met, the *title* of John’s $100 was transferred to Gary, and John’s refusal to *physically* give it to him was the theft of Gary’s money. The contract conditions were met, and the $100 became Gary's property; John kept Gary’s property. Here, the contract created law. The uncertainty of future economic conditions as described here and the contractual management of uncertainty is central to the problem of this thesis.

 Similarly, a variety of different contractual arrangements can be employed to protect the owners' property from torts. The neighbors could enter into a restrictive covenant like a homeowner’s association or hire a security service like the San Francisco PSP. In either case, contracts are used to create and enforce law. The contracts mentioned above were future-oriented and conditional. The contract terms, as most are, are incomplete contracts in that all possible future conditions cannot be predicted and accounted for ex-ante. The uncertainty cost of dealing with future conditions plays a significant role in using and coordinating resources to optimize security. The only real question at hand, the primary problem of economic production of all goods, including law, is the coordination of resources in the face of an uncertain future. It is the current and future owners of property who create law.

 **Uncertainty, Entrepreneurship, and Economic Calculation.** The primary praxeological implications of human action include the passing of time, causality, and future uncertainty. The actor must know how to employ some scarce resources to change future conditions in a preferable way. In addition to physical resources and time, another factor must be used in acting: knowledge. This knowledge can include technical knowledge about building capital goods, information about the demands of others, and the ability to rationally coordinate information and resources in a way that best achieves the desired ends. Lack of knowledge is a problem that must be overcome in all actions. The ability to forecast the future and employ capital in the face of uncertain conditions in a way that satisfies the demands of others is called “entrepreneurship.”

 **The Entrepreneur.** Mises, Klein notes, placed a unique emphasis on the role the entrepreneur plays: uncertainty-bearing. (The Capitalist and the Entrepreneur, 2010) As Rothbard notes, everyone, including laborers bear some degree of uncertainty and are therefore “entrepreneurial.” However, the specific case of risking personal capital in bearing uncertainty for future gain he calls the “capitalist-entrepreneur” in the Misesian sense (referred in the remainder of the current paper in the narrower sense as an “entrepreneur.”) (Klein, 2010, p. 30) One of the critical points that cannot be overemphasized is that the entrepreneur *owns* the capital being creatively used.

 The entrepreneur alone has the property right in the capital and is the ultimate decision-maker of coordinating factors (Yu, 1999). The entrepreneur alone possesses a unique approach to innovative uses for the capital that cannot be transferred to another and bears the uncertainty of gaining or losing capital. The entrepreneur alone bears this risk of uncertainty of successfully coordinating factors to be useful to the next consumer. (Rothbard M. N., Man Economy and State with Power and Market: the Scholar's Edition 2nd ed., 2009) The uncertainty includes a wide array of risks surrounding various operations of the firm, including contractual arrangements.

 The entrepreneur must decide how to best deal with enforcing contracts in the face of uncertainty, not only for the entrepreneur’s good but also for the consumer for whom they are producing. In order to successfully bear uncertainty, the entrepreneur must include governance in the decision-making process. The entrepreneur must consider the cost of creating and enforcing contracts for the exchange of goods and labor, even if the state is already providing governance.

**The Firm.** Together, the entrepreneur and their capital, managers, and laborers make up a business “firm.” As described above, Ronald Coase challenged the neoclassical conception of the firm as a mere production function (i.e., “black box”) and instead viewed it in terms of contract costs. Mises and Rothbard gave two crucial insights about the nature of the firm. The first insight, as Klein notes, is that of the entrepreneur introduced above, and the second is “economic calculation.” (Klein, 2010). Williamson suggested that the firm could be viewed as a governance structure, and the insights of Mises and Rothbard are combined in the current work to provide some needed foundation to the capital structure of law production.

 Although perhaps not entirely a unique contribution, the current paper suggests that among the factors of production, *law* should not be treated by economists as a homogenous background variable but rather as discrete units of *factors of production* which must be factored into the decision-making of *property* owners at nearly every stage of production and is always dealt with contractually. This view of law and the firm allows for analysis of the problems at hand. Capital goods and consumer goods are not merely homogenous goods themselves but are instead discrete goods sold at unique places and times. A bottle of water sold on the market is not merely water but is “bottle-of-water-in-desert” or “bottle-of-water-in-restaurant;” the two are different goods. The goods exchanged on the market are bundled with the contractual agreements and legal structure contractually produced by entrepreneurs, firms, employees, and consumers.

 Likewise, an item sold in a dangerous part of town is not the same if sold in a safe part of town. Similarly, a salary received at a safe factory is different from the same salary at the same factory that allows malfeasance among its workers. This addition of the law factor of production changes how capital is structured and coordinated and has associated costs. The way the entrepreneur accomplishes this is, and the limits to which it can be done internally are among the most exciting and significant steps in viewing the production of law from the capital structure perspective. The primary tool used by the entrepreneur to coordinate factors (including law) throughout the capital structure is economic calculation.

 **The Economic Calculation Problem.** The public provision of goods is limited by one crucial factor: the lack of the ability for the official to engage in economic calculation. Mises showed that the economic calculation problem is the fatal flaw in a socialist commonwealth (or any centrally planned economy) and that economic calculation cannot logically be mimicked or recreated in any other fashion (as the Tiebout attempted to do, for example.) (Mises L. v., 1981). Democratic officials cannot calculate and plan the private economy because they have no output price to compare to input costs because taxes (which are coercively obtained) are used to fund public operations. As Tate Fegley has shown, the COP model of policing, in its noble effort to meet public demand for security and police accountability, is stymied at every step of the central-planners way. (Fegley, 2020) No political “solution” of providing police or any other government services can ever solve the fundamental economic problem of coordination. It is only economic calculation done by the owners of capital that can efficiently allocate their capital; the state can never achieve this efficiency in directing its resources. Included in the cost of factors needed for calculation and coordination, the entrepreneur must factor the cost of governance. This cost can include creating and enforcing contracts and affects the decision to purchase physical factors on the external market or produce a factor internally. These costs determine in part the size and limits of a firm.

 ***Limits of the Firm and the Equilibrium of Internal and External Governance.*** The transaction cost literature sees the firm as determined by the entrepreneur comparing relative external and internal costs. Rothbard pointed out, says Klein notes, that a single global firm could never produce all goods without suffering from severe economic discoordination. Likewise, it is impossible for a large firm to vertically integrate all production of a single good entirely, thereby eliminating it from the external market, because the economic calculation problem would arise. To coordinate capital use between divisions within the firm, the entrepreneur must either use external market price information or cost-plus and bargaining methods to “buy and sell” between divisions.

 Klein points out that the entrepreneur needs the prices for all goods to calculate, not just the prices of consumer goods; it needs all input *factor* prices. Klein notes Rothbard’s emphasis that, in the case of the total elimination of an external market, these transfer prices would amount to “meaningless symbols.” (The Capitalist and the Entrepreneur, 2010, p. 14) As the firm approaches total vertical integration and begins eliminating an external market, the cost of “incalculability” resulting from internal production will have long exceeded any benefit from eliminating the hold-up problem. As Klein puts it, “Usually, however, the costs from the loss of calculation will likely exceed the cost of external governance.” (The Capitalist and the Entrepreneur, 2010, p. 34)

 The critical contribution Rothbard makes, Klein says, is that the economic calculation problem puts an “upper bound” on the size of the firm. (The Capitalist and the Entrepreneur, 2010) The critical component for the concept of law production is that law and governance are not only a feature of internal and external markets, but they are a factor which itself must also be invested in, mixed with other goods and services, and accounted for in accounting.

 **The Firm as a Governance Structure and The Importance of this Paper.** While perhaps alluded to by other authors, the suggestion put forth in this paper is that firms can never fully internalize the production of law without severe discoordination; some external market for law must always exist. Moreover, law production and enforcement are factors of production which are almost always produced through contracts. This applies to the legal-centralist approaches of responding to torts and contract enforcement (within the firm, between entrepreneurs, or through arms-length contracts.) Furthermore, firms are not merely potential structures for creating governance; firms are among the primary producers of law in all the economy and society at large. Firms produce law either internally or obtain law produced by other firms through contracts.

 Most law and law enforcement rely on contracts, with few exceptions of various forms of solitary law or self-governance and the public provision of law through the state. Self-governance such as self-defense can undoubtedly be considered law; however, no contractual transaction occurs in defending from an attacker. However, many goods used to improve self-governance, like using security cameras or pepper spray, are primarily produced by firms and contractually obtained. Thus, even many acts of self-governance rely on some previous contractual exchange. However, all other law production that is economically significant is produced by firms. The state monopoly production is set aside for the time being.

 In viewing law as a factor of production, it is crucial to consider the production of law in both the legal-centralist and private governance (in the narrow sense) modes of production. Firms use varying mixtures of both modes and various methods of governance that have been developed in the past through prior capital investment. For example, innovation in law production requires additional capital investment by the entrepreneur in order to see an increase in later returns, hopefully. This firm's governance can include a wide array of contracts, capital goods, and “baked-in” methods and techniques that improve the security experience of laborers, entrepreneurs, interfacing firms, and the next consumers in the production-consumption chain.

 Private governance of firms includes all ex-ante and ex-post contract issues, physical security of assets and people (e.g., security cameras and guards), and internal conflict resolution and contract arbitration (e.g., human resources and management methodology.) Thus, the firm can produce private governance as well as legal-centralist law in its production process. While firms can produce much of this law factor to be bundled with other goods, they can also rely on external law producers who produce law de jure.

 De jure law producers deal with many of the same production concerns described above by those firms producing law only to be bundled with other goods and must also deal with the production of law de jure. Where non-law firms bundle law with their produced goods, de jure law producing firms bundle other goods with their primary good: law. For example, an arbitration company may produce de jure law in the form of case law, legal theory, and legal precedent and bundle an air-conditioned office with its service.

 The de jure law firm can produce various goods and services, including arbitration, security and police, and bailment services, including banking. In the pursuit of private de jure law production, firms can adopt various theoretical legal traditions like the customary, common law, and estoppel approaches. These traditions, in part, shape the content of the law as jurists invest time and resources reviewing and ruling on new cases. As new cases are heard, new precedents are set, and future similar cases require less effort because of the investment. Additionally, as de jure law producers become increasingly efficient, tort rates will be lower over time as a function of efficiency, requiring less capital investment. Finally, the contractual relationships between various de jure law producers improve with each new capital investment and innovation. For example, a security company may not arrest small children who steal candy bars because the courts have deemed it unjustifiable to do so. As a result, the security company can better focus on more urgent market needs, for example, protecting neighborhoods, schools, and banks at night.

 In the production of non-legal goods (which have law bundled as a factor of production) and in the production of de jure legal goods, firms can obtain law on the market, produce it internally, or engage in arm’s length contracts for the service or product. Thus, for example, an arbitration company may enter one arm’s-length contract with an HVAC company to service its air-conditioner and another with a security service for the safety of their clients. Alternatively, the arbitration firm may instead vertically integrate security and produce it internally with its own employees.

 It should be noted that vertical integration does not eliminate contract law but instead transfers the governance of contracts internally except where third-party enforcement is used for arbitration. The vertical integration of the firm replaces external spot contracts or arm’s-length contracts between entrepreneurs with internal labor contracts between entrepreneurs and laborers. In the latter case, the property rights and ultimate decisions lie with the entrepreneur. Any of the firm’s contracts or torts can either be enforced and governed internally or externally, but governance (i.e., contract formation, contract enforcement, and tort enforcement) can never entirely be eliminated from the external market. Economic calculation places an upper bound on vertical integration of law production and would eventually cause firms to suffer from discoordination as it does in a hypothetical global firm, a socialist commonwealth, and the state. However, what causes law producers to tend to honor contracts and keep “the law” rather than break it where the state tends to break it?

 The private “constitution” introduced above by Leeson demonstrated that private contracts tend to be self-enforcing because the value of governance as a factor is imputed backward through the structure of production by the consumer. The final consumer expects a safe shopping experience on the car lot and expects that the car’s title transfers when it is supposed to. For this car (which includes its physical and contractual security), the entrepreneur must calculate the costs of input factors and the price of outputs and innovate new ways to ensure the demanded car (including physical security and contractual security) is provided. The consumer is not just buying “car,” but rather “car-on-time-with-safeguards-from-torts.” Likewise, the car manufacturer must include the same reliable self-enforcing contract as a factor of production because the ultimate consumer (i.e., the buyer via the dealer) cannot purchase the car if this factor is not included in the transfer to the dealership.

The value of law is imputed up the supply chain to the holders of original factors: labor and land. Land as an inanimate “object” and does not value, however.

 Ultimately, the laborer (who also consumes) produces all authentic non-solitary law, using capital owned and directed by the entrepreneur, to satisfy the consumer. It is ultimately the consumer’s demands that determine the content of law in society, except where the state coercively provides services against the consumer's will. Low-quality law will be discarded to the degree that it ultimately reduces the satisfaction of the final consumer. Yu writes about the value of capital goods: “Capital goods with no such function will be discarded” (Yu, p. 33). In their commitment to justice, the de jure law producer (e.g., a judge) is also a significant molding force of legal precedents, much like the medical community’s dedication to the Hippocratic oath directs its methods. While consumer demand may not determine the exact recipe used to construct a medicine or the complex logic used in a legal precedent, the final products that displease the consumer cannot survive on the market; it is only the state’s coercive mode of production that can achieve this. Thus, what is viewed as medical and legal malpractice by the aggregate consumer demands will eventually not be produced.

 To the degree to which law is provided publicly, a discoordination of private law occurs as the actual cost of factor inputs is hidden from the entrepreneur who owns and allocates the capital in society. This interference slows capital accumulation and develops more roundabout methods of producing law (and thereby all other goods.) Thus, the final consumer is harmed and is overall less satisfied than otherwise had the monopoly producer (i.e., the state) not produced as much inadequate law, or no law at all. Laborers are all consumers. All market participants, including entrepreneurs and laborers, and consumers (synonymous here), are all harmed by public law wherever it prevents voluntary action and private law production. Thus, public law is not Pareto optimal and lowers social utility.

 The invisible hand of Stringham’s private governance within society is best viewed in the capital structure. Despite the current public provision of statutory “law,” most governance (i.e., law production and enforcement) is by far done primarily through contractual agreements between property owners. If this were not the case -if all governance were provided by a single monopolistic producer (i.e., the state), it would be nothing short of a total societal collapse; no contract could ever be enforced privately. No exchange could ever occur unless directly sanctioned and arranged by the state! Nevertheless, even under the most despotic regimes in history, some private governance persisted, if only between family members and households.

 To say that the state should produce law is a matter that can now fully be put to rest. It cannot be scientifically stated (i.e., within the limits of language) that law must and should only be produced publicly. Positive and normative arguments for state provision of law are wholly fallacious and unscientific. However, to say that *only* the state can produce law is a fallacy so absurd, it is beyond comprehension. The argument reductio ad absurdum would create such economic discoordination that humanity would be plunged back into Malthusian conditions, and most would die.

 ***Internal and External Firm Governance.*** A primary obstacle is that all firm operations beyond a one-person scale mean that the entrepreneur must hire out the management and production roles. In doing so, principal-agent concerns arise, and various incentive-based employment contracts are typically used to overcome some of this difficulty. As Klein summarizes, this can include performance-based incentives like stock options, adopting the M-form structure described by (Williamson O. E., 1975), or by creating competition for management positions. In addition to corporate governance, which deals primarily with the coordination of the entrepreneur’s property by the hired laborer in a way that the entrepreneur approves of, more traditional forms of governance can also be provided internally as mentioned above (e.g., human resources, loss prevention, internal investigation, security cameras, internal security, and legal consultation.) Internal governance can then be taken in the regulatory sense of how the entrepreneur’s capital is used in the capital-agent sense, including organizational matters like contractually incentivizing and monitoring costs of preventing discretionary manager behavior. Finally, firm governance can also be taken in the more traditional legal-centralist sense of physical security of the property of the entrepreneur, the laborers, and customers.

Likewise, external governance can include:

* The governance by traditional external legal-centralism by third-party firms providing arbitration, investigation, and enforcement. The law merchant and modern-day private arbitration services serve as examples. Additionally, private police like the Patrol Special Police can be called upon in a tort case.
* Contracting with other firms either on the spot market or in arms-length contracts. The vast existing literature on this topic should be reexamined in light of viewing law as a capital good.
* As Klein notes, the mismanagement of firms could create a “market for managers” and the possibility of takeovers. (The Capitalist and the Entrepreneur, 2010)
* Perhaps most significantly, financial markets. (Hulsmann J. G., The Ethics of Money Production, 2008) (Hulsmann J. G., Financial Markets and the Production of Law, 2014) Hulsmann brilliantly introduces the study of the effect that fiat financial claims (FFCs) and fiat financial obligations (FFOs) have on financial markets relied upon for the coordination of money capital. These coercive financial claims and obligations created by the state have profound consequences on financial markets, which need further study in light of the contributions of the current paper.

 ***Personal and National Security and the Law Firm.*** The inner workings and the details of private legal centralism have been dealt with at length by many economists. Moreover, many economists, most notably Murray Rothbard, Hans-Hermann Hoppe, David Friedman, Bruce Benson, James Buchanan, Ed Stringham, Gordon Tullock, Gustave de Molinari, and legal theorists and philosophers including Stephan Kinsella and Randy Barnett, have provided significant insight into the positive, normative, and historical framework of how such institutions have functioned in the past, how they function today, and how they could function without a coercive monopoly provider of law (i.e., the state) in the future. In short, these institutions can and do provide traditional ex-post as well as ex-ante governance services, including investigation, arbitration, policing, security, and “national security,” including private military and espionage services in defense against other state governments.

These economists have described many examples of resolving disputes between private law firms without any costly physical waring or clashing precisely because the consumer will not allow it. Such objections can easily rest with a mere glance at the technical-economic literature on the topic. In addition, these economists have included insurance as a model for the market of central governance.

 As in all other contracts (which are a form of law), exchange has the unique characteristic of “incompleteness” described by economists such as Hart (Hart, Shleifer, & Vishny, The Proper Scope of Government: Theory and an Application to Prisons, 1997). Transaction costs, the hold-up problem, principal-agent issues, and incomplete contracts are all costs that must be factored into contract formation by all consumers-consumers and capitalist entrepreneurs, and the existing literature serves as valuable tools for analyzing such costs. However, the literature should be reevaluated based on the current suggestions being offered. These costs must be factored into the calculation of the private law firm when coordinating factors.

 **Clubs and Constitutions as Firms and Contracts.** Economists like James Buchanan and Gordon Tullock have provided many interesting deductive methods to analyze constitutional democracy and clubs. However, Boudreaux and Holcombe note that economists like Buchanan and Tullock do not explain how to optimize “rules” but instead rely on “unanimous consent” (Government by Contract, 1989). Such unanimous consent is cost-prohibitive and could never be obtained. Furthermore, Buchanan and Tullock do not focus on the property rights of the decision-makers, or at least it is a background concern in their model. Boudreaux and Holcombe bring this concern into focus in *Government by Contract*. However, Boudreaux and Holcombe do not distinguish between a constitution and an ordinary contract with sufficient clarification in terms.

 A private constitution is best viewed as a contract between private owners who own joint property (like a pool, hallway, or other common areas in an apartment complex.) (Buchanan and Tullock describe this jointly owned property as “club” goods.) Buchanan and Tullock present club goods as intermediaries between private and public goods. Such distinction is arbitrary in its exact scope and provides little valuable insight. However, there is not much harm in using the “club” term as long as it is understood as simply “jointly-owned” goods, but the class of “clubs” is otherwise unremarkable.

 Boudreaux and Holcombe explain that an entrepreneur can design contract terms to develop a housing complex itself. This development is clearly a capitalist-entrepreneur at work investing and coordinating capital upfront, including the factors of time, building materials, land, labor, and law (i.e., contract development) in hopes of a delayed increased return on the initial investment. Such an action, they correctly say, economizes the production of contract production. Private constitutions are simply a sub-type of contract (like restrictive covenants). Boudreaux and Holcombe show that the entrepreneur in their paper innovated the covenant contract by eliminating the bargaining costs associated with members struggling for unanimous agreement at the contract-formation stage, that is, the production stage.

 The entrepreneur invested time and coordinated market knowledge (which was communicated via prices) about preferred covenant contract terms in the law capital framework described above. As a result, the entrepreneur avoided bargaining costs and the need for unanimous consent, as Buchanan and Tullock suggested. Instead, the developer bore uncertainty cost and economized the contract terms to be bundled with the final good, namely “house-with-communal-playground-and-sound-contract-with-neighbors.” Unanimous consent in this scenario is implicitly given by purchase rather than by vote. This stands in stark contrast to the public constitution, which has no consent or economic calculation whatever, let alone unanimous consent. Not to mention the public constitution is not self-enforcing like the private contract is.

 Boudreaux and Holcombe are correct in their assertion of the economization process whereby entrepreneurs use economic calculation to develop “good” contract terms that future consumers will want. As they point out, the calculation is undertaken by comparing the cost of input factors (including law) to the sale price. However, they falter by referring to the governance as “democratic” and the jointly owned goods as “public goods.” The property rights in question are excludable to non-owners and are rivalrous. If the club terminology is intended here, this simply denotes jointly owned property, possibly managed contractually or internally.

 The developer did not develop a “democratic government to oversee and administer the process” of overseeing the communal assets like the playground. (Government by Contract, 1989, p. 267) Nor are the property owners “taxed;” they transfer the title of the allotted amount each time the contract terms trigger a transfer of title, nothing more. The alleged characteristics of constitutional governments are incorrect because they can tax or provide public goods. It is somewhat true that “constitutional governments” “have both constitutional and post-constitutional rules.” Considering the above, the term private “government” here is confusing and imprecise. The government, in this case, is the contract which details the conditions of which title transfers are triggered, or perhaps the contractual terms that detail security patrols and standards of conduct through private security contracts (either externally contracted or vertically integrated labor contracts.)

 Another difficulty arises in their analysis. Some goods involved in governance can literally be exchanged and used, but these must include the title transfers of physical goods like security cameras and firearms. However, governance also includes contracts (the actual title *transfer* or license of physical resources) and not the resource itself. Contracts themselves are not physically owned and cannot be exchanged. In the linguistic precision required for economic and legal theory, the contract is an *exchange* of titles; the contract is not the paper or hard drive on which the contract terms are recorded. In other words, a contract is not a “thing” that can be owned or exchanged as Boudreaux and Holcombe casually imply or, as Lukasz and Fegley might conclude, in viewing contracts as promises (or things to be exchanged.)

 This fact immediately raises the question of “selling” a bond or other debt instrument on the spot market. This confusion may, in part, have led Lukasz and Fegley (n.d.) to their unnecessary objection to Kinsella’s version of the Rothbard-Evers Title Transfer Theory of Contracts. Nevertheless, there is no difficulty here whatsoever. A corporate bond is typically a contract drawn up between the firm and a legitimate claimant on *future money.* The title to future money transfers when bonds are bought and sold, not the title to the paper on which the bond itself is written. No amount of derivatives complexity presents either a problem for or refutation of the TTTC.

 Economically, the bond can be said to be bought and sold metaphorically, but care must be used with this terminology in the law and economics analysis. When a bond is exchanged, it is the underlying future asset being exchanged, not a piece of paper per se. Lastly, even in the digital dollar or cryptocurrency realm where no physical asset exists, the contractual agreement of exchange involves updating the arrangement of physical magnetic hard drives on a server to reflect the specified ledger balance; no difficulty arises here either.

 At any rate, the constitution written by the housing developer that Boudreaux and Holcomb are referring to is not a physical good that is literally transferred in title. There is no title to a contract or constitution. The contract (i.e., the private constitution in this case) is the exchange of titles and does not have its own “title” to an underlying asset that can be exchanged. The constitution is a series of terms and descriptions of title transfers; “descriptions” are not ownable scarce resources any more than thoughts are. In this case, it is possible that the developer still developed the contract to be included with the sale of real estate. This contract must be agreed to by each new homeowner as they join, and presumably, the developer's claim is relinquished after some specified numbers of homes are sold or some other condition is met.

 If the developer created the contract that homeowners now live by, these new rules could quickly be adopted by any other new developer saving time and money. Innovation can occur through competition to innovate new and better rules. As ideas are shared, and innovation and capital investment in constitution contracts occur, consumers could conceivably enjoy ever more “club” (i.e., jointly owned goods.) Leeson takes a similar approach and follows the lead of Boudreaux and Holcombe. Leeson draws some similar conclusions to those here in this paper and Boudreaux and Holcombe’s framework. The difficulty arises in Leeson’s argument in that he does not specify who owns the club but strongly implies it is the Buchanan-Tullock conception of a club (Leeson, 2011). The fact that members communally use the good has little consequence on the “constitutional” contract, except at the organizational level.

 **The Proper Scope of Government Reimagined.** In (Hart, Shleifer, & Vishny, The Proper Scope of Government: Theory and an Application to Prisons, 1997) apply the property rights theory of transaction costs described by Hart and Moore (Hart & Moore, Property Rights and the Nature of the Firm, 1990). As indicated above, they created a formal model which enables them to treat the government (i.e., the state) ostensibly as a “firm” and determine the “optimal” arrangement to either provide a service internally (publicly) or to contract the service to a private provider. Although their formal model is undeniably elaborate, the model has little to offer the economist regarding policy prescription. A complete detailed exploration of the paper is neither possible here nor needed. Only a few things must be considered to show the problem in their reasoning and discard much of the argument.

 Hart and his colleagues spent considerable effort on the concerns of the incomplete contract, and much of it is helpful in technical analysis. As discussed above, the future is uncertain due to human action (setting aside the random concerns of natural phenomenon and acts of God.) Hart et al. have excelled in their emphasis on property rights consistent with much of the methodological issues raised above. Furthermore, much of their discussion is positive in that it describes in a value-free way the incentives faced by entrepreneurs in the decision of using arms-length contracts to acquire factors or vertical integration by merger. The ownership claim of the capital is the central focus of their analysis which is both admirable and significant. Hold-up problems in this context can be reasoned out deductively in many cases. However, the applications of their model to law production and the operations of the state are not as promising.

 In answering the question of who *should* make the decisions of capital allocation, Hart et al. are correct that it is the person who owns the asset. Unfortunately, they draw this conclusion not because of any rigorous epistemological reasoning but on efficiency grounds. The ends-means claim “if efficiency is preferred, X should be done” is a perfectly acceptable positive claim, and if there were no logical errors made in the deductive process, it might be true. However, as has been thoroughly explained above, it is impossible to derive a legal precedent for property rights arrangement from notions of economic efficiency. Likewise, most contracts that concern the economist are incomplete, but this does not mean that this should be viewed in any way as a market failure. These economists may not explicitly state the claim of market failure of incomplete contracts, but it must be established that contract incompleteness is a crucial feature of the market economy and ethical, legal theory.

 Legal scholar Randy Barnett makes the excellent case that if all information were knowable at the ex-ante contract formation stage, the contract would likely never be agreed to in the first place (The Sound of Silence: Default Rules and Contractual Consent, 1992). Barnett reasons that the parties who formed the contract likely did so for some possible gain that the other party did not recognize. This is consistent with basic praxeological economic theory in that trades only occur if each party values the other item more than the current one they have. In the Kirznerian sense, Barnett is also correct that the entrepreneur is always on the lookout for new arbitrage opportunities that others do not see.

 If all entrepreneurs disclosed all private information about the exchange to the other party, no exchange would ever occur. This would mean that the economy achieved equilibrium in all capital and consumer markets and that perfect information was available about all future needs; the evenly rotating economy (ERE) would be achieved. The equilibrium of the ERE is a crucial tool for economic analysis but is logically impossible to achieve. (Mises L. v., Human Action, 2008). Barnett concludes that withholding private information about the future value of a good being exchanged cannot be considered fraudulent either; only withholding information about the physical characteristics of the good can be considered fraud. In no sense can an incomplete contract be considered anything besides a fact of the nature of human action. It is a problem for the entrepreneur to overcome and for the economist to study; it is not a failure of the market and not justifiably preventable by law.

 In the case of the “contract” between the state and a contractor as described by Hart, Shleifer, and Vishny, they fall short of fully applying the logic of their theory and make contradictory assumptions. For instance, they assume that the state represents society. There is no basis in reality for such an assumption. Furthermore, the “contract” between the official caretaker and the entrepreneur cannot be said to be “efficient” or “inefficient” by any scientific standard. It is only through the revealed preferences that Pareto superiority exposes the utility of actors. The quality metrics used cannot be valid because there is no justification for saying society desires more or less cruel treatment of prisoners without economic calculation. The caretaker cannot determine the cost of obtaining taxes, and, thus, the official cannot determine the cost and benefit of contracting or publicly providing prison services.

 Furthermore, the public’s demand for prisons cannot be determined, which is merely taken as a given in the formal model provided. Hart, Shleifer, and Vishny disregard their primary analysis tool of property rights and assume the “government” owns the prisons *and the prisoners*! They are careful to call this residual control rights, but it should be noted that the caretaker and bureaucratic managers do not have de jure ownership of the jail in any scenario; they cannot sell it for personal gain like a king could. They also make the ironic assertion that human capital assets (i.e., people) are not directly controllable or ownable outside of a system of slavery, yet presume to do precisely this in their model assumptions. Although they seem to offer no serious suggestion to implement their vision into the government, *The Proper Scope of Government* fails in every respect to scientifically establish what the proper scope of government should be.

# Conclusions and Recommendations

**Overview**

Ownership of scarce resources is an undeniable and existential fact of all human action. The determination of the optimal allocation of property rights is foremost in the concerns of all economic activity and has been commented on by economists and legal theorists alike. Scholars' claims about property rights can only be considered scientific and true when adhering to an appropriate epistemological framework. Disregarding epistemological and methodological concerns has led to incorrect and unscientific conclusions throughout the law and economics literature. The method by which normative and positive propositions about law and economics can be evaluated in a value-free and scientific manner must be the primary concern of the law and economics scholar. Only after the appropriate methodological approach is clearly understood can theoretical and historical claims be critically evaluated and the correct conclusions about the production of law deduced.

 This paper provides a foundation for addressing the foremost concerns of law and economics. Specifically, this paper addressed the question of what can and cannot be said about law and economics in a scientific and value-free (wertfrei) way and how these claims can be proven. What can economics say about legal theory, and what can legal theory say about law? Among the most significant problems addressed was how consumer demand and the proper law production method be determined? Should law be produced publicly or privately (or some combination of the two?) All interpersonal exchange entails the use of a contract; contracts are the foundation of all economic activity. What can the literature on incomplete contracts say about the proper method of producing law privately and publicly?

 Of particular interest is the question of the determining factors of a firm when choosing to rely on either private governance in the narrow sense or private legal-centralism. Will the firm purchase governance on the spot market, use an arms-length contractual agreement, or merge with another law producer? Finally, how does producing law publicly vs. privately (in the broad sense) affect the economy and society?

**Summary**

 Law and economic analysis and conclusions are intertwined with and often stem directly from the literature on utility and welfare economics, normative ethics, logic and epistemology, history, market failure, and public choice. Unfortunately, in much of the literature, methodology is often not a primary concern and is best a background concern; the underlying ethic is Benthamite Utilitarianism. This fact has led economists and legal theorists to step out of their role as scientists and err by making inappropriate normative claims and intersubjective utility comparisons. As a result, economists and legal scholars are forced to explore concepts from outside their respective fields and confront the nature of “normative” and “positive” law and economic propositions.

 Some scholars have provided critical insights into the nature of the contract, the firm, and the entrepreneur. This literature provides the needed tools for positive analysis of both private and public law production. Unfortunately, theorists routinely persist in drawing incorrect normative conclusions (even implicitly) from positive analyses. Private governance structures such as the firm have been introduced and studied and provide a crucial framework for positive analysis of law production.

 In adopting a praxeological methodology, the positive and normative analyses are clarified, and one single coherent approach can now be used to study theoretical concepts and historical events. Theory and history can be constrained to only claims possible to say within the logical limits of language. The history of law production is immense and provides a historical backdrop and empirical support for the production of private law.

 Despite any claims to the contrary, law is demonstrably produced privately. This fact is based on empirical and theoretical evidence. Without private law, humanity would regress to Malthusian conditions and “the state of nature.” Private law appears in every exchange where it is not hampered by public law or organized crime. A praxeological basis for determining the correct ownership claims and the scientific determination of utility and welfare is available to economists and legal theorists. It is only voluntary exchange that can be scientifically justified except in restitution cases of previous torts. Only voluntary acts improve social welfare from a positive standpoint ex-ante.

 Due to the scientific restrictions on interpersonal comparisons of utility, market failure is a logical impossibility. Therefore, private law production cannot logically suffer from market failure. Even if it could be demonstrated that market failure was possible, it does not necessarily follow that the state can or should correct these deficiencies through the monopolistic production of law. Moreover, the state suffers from its own unique failings, which can be scientifically demonstrated based on standard Pareto analysis.

 The utility of coercive actors (and disutility of the envious bystander) does not “count” in scientific analysis of social welfare because logical fallacies and performative contradictions rule out the possibility of making such claims within the limits of language. Thus, the private provision of law is justifiable and a necessary factor of production throughout the economy. Authentic (i.e., scientific) law is produced entirely contractually.

 Humans justifiably acquire ownership and use of property only by original appropriation, exchange, gifts, license, tort, and restitution. Torts are scientifically unjustifiable and do not occur contractually; when torts are committed, the property is used unilaterally by the aggressor and with no consent from the victim. All voluntary contracts (i.e., transfers of title to property) are scientifically justifiable and are always voluntarily undertaken. Contracts, adequately understood, always detail the transfer or license of use of physical resources and are not “promises.” Only alienable physical scarce resources can logically be owned. Non-physical resources like time, feelings, ideas, and concepts are not rivalrous and cannot logically be owned as property.

 With few exceptions, contracts are how authentic law is created and enforced. The uncertainty caused by human action has significant implications for contract terms and the coordination of resources in providing law. The coordination of resources under uncertain conditions to create and enforce contracts and seek restitution for torts is the primary economic concern of the provision of law. Coordination of factors in production is made more difficult by the uncertainty of future events; the lack of perfect knowledge must be considered when employing resources. Public law hastens this uncertainty.

 The entrepreneur owns capital and, in the pursuit of earning a higher future return by satisfying the needs of some consumer down the production chain, must eventually hire managers and employees. The managers may have significant control over the entrepreneur's capital, but they do not own it and do not ultimately direct the use of capital in society. Thus, the entrepreneur must forgo returns and bear the uncertainty of payment until after employees and managers have been paid, time passes, and the subsequent consumer hopefully purchases the good. To succeed as an entrepreneur, they must innovate and combine factors to maximize the satisfaction of consumers. To determine how to optimize the coordination of factors, the entrepreneur must *calculate*.

 Economic calculation is the second important function of the entrepreneur. The entrepreneur carries out economic calculation by comparing the costs of *all* input factors to output prices. Input factors include land, labor, lower-order goods, time, knowledge, and law. The entrepreneur factors law into their calculation both as an outputted good and as an input cost. The firm interfaces with the capital structure of law when it contractually buys other factors on the spot market, creates arms-length contracts with other firms, vertically integrates production, creates labor contracts with employees, provides physical security for its employees and capital assets, and contractually sells its product to the next consumer.

 Furthermore, the enforcement of contractual law necessitates an added layer of contractual law that can likewise be either internally produced or contractually obtained externally. The entrepreneur coordinates factors, including law, and the combination of arranged factors changes how the consumer views the good. There are limits to how much law can be vertically integrated. The limit is economic calculation.

 Public caretakers do not own the capital they use and therefore bear no personal uncertainty. They also have no output prices because of taxation and cannot conduct any economic calculation. For this reason, a socialist commonwealth is unable to plan or produce security in its society effectively. The distributed knowledge in the economy can only ever be communicated through the information contained in prices, and to the degree to which prices are eliminated, the consumer's demand cannot be determined or met (Hayek, 1945). For this reason, public policing is met with constant dissatisfaction and disagreement over the coordination of factors.

 Similarly, a single worldwide firm can never produce all goods; it would suffer from the same inability to calculate. Likewise, no single good or factor can be fully integrated vertically and eliminated from the external market. Under such conditions, firms (and the economy as a whole) would suffer from increasing incalculability costs. Like any other factor, law has an upper bound placed upon its ability to be fully integrated due to technical and economic calculation reasons.

 Law production can never be fully integrated vertically; some external law markets must always exist. Entrepreneurs and consumers can choose various forms of law (internal or external) based on their perceived costs and benefits. Depending on the ownership relations within various political arrangements, economic calculation and coordination can be enhanced or hampered. The production of other goods that permeate society like money is also affected by law production. The social and cultural effects that stem from these economic outcomes of property ownership are among the most important topics of our age.

 An alternative to publicly produced law is the production of privately produced law, including legal-centralism and enforcement firms, which operate contractually to provide ex-post and ex-ante governance. Additionally, there exist unique cases of restrictive covenant contracts that have been called clubs and constitutions. These various configurations of contractual “constitutions” are helpful to study but are not necessarily a unique form of governance outside of the capital law approach described above. The ownership of physical resources must be the focal point of all economic analysis of production in a voluntary society, especially the production of law.

**Conclusions**

Only by adopting the praxeological method can anything be said about law and economics scientifically and in a value-free manner. This limitation exists because of logical limits of language and contradictions that arise when relying on any other methodology. The action and argumentation axioms provide the a priori foundation for the normative and positive study of law and economics. An attempt to refute this conclusion is a performative contradiction that requires both action and argumentation and must therefore be rejected. Economics can only provide a positive analysis of the ends and means chosen and the causal relationships in the production of law. Economics cannot offer any normative insights. However, the underlying legal structure of a society affects the economic landscape, and the production of law can be subjected to technical-economic analysis.

 The unification and common ground between law and economics are property use and utility and welfare. The answer to both normative and positive analysis must always begin with determining “who owns the physical resource.” It is private property rights that unify law and economics. Pareto superior moves can be said by economists to improve social welfare, but this insight can only be achieved by understanding the a priori nature of argumentation. With this connection between law and economics, the proper mode of producing law is only private production; public production of law is contradictory and cannot be supported scientifically. It is not scientifically justifiable to suggest that market failure is possible or that public legal intervention could or should be used to intervene. Public law is not Pareto superior and must be rejected as unscientific.

 It is only by the entrepreneur's economic calculation through the use of prices, which arise because of the subjective valuation of human actors, can the proper mode of law production be determined. All exchanges are performed through contracts that are correctly viewed as title transfers and never as mere “promises.” The incomplete nature of contracts is worth exploring in positive terms but remains otherwise unexplored in this paper. Incomplete contract theory cannot justify any conclusion about the “optimal way” the state provides services because to do so necessarily relies on intersubjective utility comparisons. Incomplete contracts may have more to say about clubs and contracts, which was also not fully explored in this paper. What does seem clear is that constitutions are best viewed as contracts and not as physical commodities. Likewise, clubs are best viewed as private property under joint-ownership arrangements. In either case, the focal point of further study of this area must be property rights and contracts. The questions must first be asked, “who owns what” and “who had it first?” The question can never be, “who might value it more?”

 Not only can law be produced privately, but almost all law is produced privately. To say otherwise is to limit the definition of law to an inaccurate scope and does not describe the real world. Law is not a homogenous background concern. Law is a primary factor of production. Perhaps the most critical conclusion drawn from the research is how law is to be viewed by the economist. Law must be viewed as a discrete heterogeneous factor of production that permeates the entire capital structure at every juncture. The value of law is imputed backward in the capital structure by the consumer goods either bundled with governance or governance consumed as a standalone good. Law is not costless to produce, and entrepreneurs must factor in the transaction costs and bear the upfront cost of future uncertainty of law production. By comparing all input factors to output costs, the entrepreneur coordinates factors of production and produces law and other goods in a way that most highly satisfies the next consumer. As the owner of capital, the entrepreneur ultimately directs the firm’s decisions and allocations, guided by the consumer's demands.

 Finally, the exciting discovery of viewing law as a factor of production which is created almost entirely in the form of contracts (with few exceptions of solitary governance,) and the firm as a primary governing structure of society, is that there is an upper bound that is placed on the firm’s ability to integrate law production vertically. Just as a single firm cannot produce all goods without suffering severe discoordination effects, likewise, no single factor in the economy can be totally vertically integrated and eliminated from the external market entirely. The ratio of external, internal, and arms-length contracting and the ratio of private governance in the narrow sense and private central-governance are all determined by economic calculation. With careful epistemological considerations described above, and the contribution of the current work, the leading transaction cost, property rights theory, and incomplete contract theories may further analyze the perceived costs and benefits of law production by the entrepreneur.

 Due to the economic calculation problem, an upper bound is placed on the ability of firms to fully vertically law production. Thus, the entrepreneur's decision regarding law ultimately relies on the perceived costs and benefits of integration, contracts, and purchasing, considering the tradeoff between limiting transaction costs, principal-agent issues, hold-up problems, and the ability to calculate input factors.

 The state permanently suffers from the economic calculation problem in providing all its services, including law. Discoordination on the law market will ensue to the degree to which the state produces and enforce “the” law. Law is the single most relevant good in the entire economy because it permeates and determines the ability to overcome the primary economic problem of coordination. The production of money is perhaps the second most crucial factor, and its production relies heavily on the legal structure. Money is present in every transaction outside of a barter system. Law determines the conditions of all transactions and production, and most importantly, the production of money. The production of law and money has widespread effects across the economy, society, and even the culture. It is only by proceeding from a solid foundation can social scientists study society. Law and economics, when approached with the praxeological method, provides this foundation.

 Recommendation and Suggestions for Future Research.

 In light of law as a factor of production, the focal point of property rights, the title transfer theory of contracts, the nature of the firm, and the limits of vertical integration due to economic calculation, a reevaluation of the current transaction cost literature is warranted. In particular, the firm as a governance structure and the organizational concerns of law production costs are needed. In addition, the effects of law production on financial markets and the culture are both in need of further research. Therefore, it is recommended that future research based on the current framework be directed towards:

1. The production of law and the relationship to financial markets.
2. The firm as a governance structure.
3. The cultural effects of law production.
4. The effects law production has on the production of money and the subsequent cultural effects.

 It is recommended that the economist and legal theorist become familiar with the methodological concerns above and apply the property rights approach, in conjunction with the capital theory of law, to the existing literature. It is suggested to study the implications this approach would have on financial markets, capital structure, and organizational structure. It should be asked what effects this theory would have on existing transaction cost analysis if any.

 Additionally, studying the effects the state provision of statutory law has on these areas could illuminate possible crowding-out effects of private law and help further explain the allocation decisions of the entrepreneur under current statute. Furthermore, and more abstract, the state's crowding-out effects on private military and espionage services and potential private provision and funding mechanisms of a free society against outside state threats needs further examination. Finally, this analysis could also provide a foundation for the use of violence in society and help reconstruct sociology and culture, which desperately needs a praxeological framework.

 The macroeconomic and monetary effects of money production resulting from implementing the above methodological approach are also needed, particularly the economic effects created by the interaction between a free society producing law privately and a coercive provider. Walter Block, Jeffery Herbener, and Lucas Englehardt provide an excellent starting point for studying international Cantillon effects due to fiat money vs. private money production. (Is the Virus of International Macroeconomic Interventionism Infections? An ABC Analysis, 2018) . While much has been said about the macroeconomy from a praxeological standpoint, confusion persists about private fractional reserve banking's ethical and legal status, even when employing the praxeological method. The approach described in this paper can be applied to the private bank and the private money producer as law-producing firms. Likewise, the contractual arrangements of the credit union and non-profit organizations could provide fruitful areas of study.

 In the legal realm, much work is needed by legal scholars to expand the implications of the above approach further. In particular, the title transfer theory of contracts can revolutionize how law is produced, managed, and enforced by private and legal-centralist firms. The relationship between instituting a scientific and value-free ethic within the legal structure would conceivably have widespread effects that would remove intellectual property monopoly privileges altogether. Likewise, cryptocurrency and modern digital fiat money such as the US dollar present a unique case because no underlying physical resource exists.

# References

Anderson, Terry, L.; Hill, Peter, J. (2004). *The Not So Wild, Wild West.* Stanford: Stanford University Press.

Barnett, R. E. (1992). The Sound of Silence: Default Rules and Contractual Consent. *Virginia Law Review*, 821-911.

Becker, G. S. (1968). Crime and Punishment: An Economic Approach. *Journal of Political Economy*, 169-217.

Benson, B. L. (2011). *The Enterprise of Law: Justice Without the State.* Oakland: Independent Institute.

Block, Walter, E; Englehardt, Lucas, M.; Herberner, Jeffery, M. (2018). Is the Virus of International Macroeconomic Interventionism Infections? An ABC Analysis. *Quarterly Journal of Austrian Economics 21, no. 4*, 339-374.

Boudreaux, D. J., & Holcombe, R. G. (1989). The Coasian and Knightian Theories of the Firm. *Managerial and Decision Economics*, 147-154.

Bourdreaux, D. J., & Holcombe, R. G. (1989, July). Government by Contract. *Public Finance Quartley*, 264-280.

Buchanan, J. M. (1959, October). Positive Economics, Welfare Economics, and Political Economy. *The Journal of Law and Economics*, 124-138.

Buchanan, J. M. (1965, February). An Economic Theory of Clubs. *Economica, 32*, 1-44. Retrieved from https://www.jstor.org/stable/2552442

Buchanan, J. M., & Tullock, G. (1999). *The Calculus of Consent: Logical Foundations of Constitutional Democracy.* Liberty Fund, Inc.

Coase, R. H. (1989). *The Firm, the Market, and the Law.* The University of Chicago Press.

Fegley, T. (2020). The Political Economy of Policing. *[Doctoral dissertation]*.

Friedman, D. D. (2000). *Law's Order: What Economics Has to do With Law and Why it Matters.* Princeton: Princeton University Press.

Hart, O. (1995). *Firms, Contracts, and Financial Structure.* Oxford University Press.

Hart, O., & Moore, J. (1990, Dec). Property Rights and the Nature of the Firm. *Journal of Political Economy*, 1119-1158.

Hart, O., Shleifer, A., & Vishny, R. W. (1997). The Proper Scope of Government: Theory and an Application to Prisons. *The Quarterly Journal of Economics*.

Harvey S. Rosen; Ted Gayer. (2014). *Public Finance 10th ed.* New York: McGraw-Hill.

Hayek, F. A. (1945). The Use of Knowledge in Society. *American Economic Review*, 519-530.

Hoppe, H.-H. (2006). *The Economics and Ethics of Private Property.* Ludwig von Mises Institute.

Hoppe, H.-H. (2007). *Economic Science and the Austrian Method.* Ludwig von Mises Institute.

Hoppe, H.-H. (2009). *Property, Freedom, and Society: Essays in Honor of Hans-Hermann Hoppe.* Ludwig von Mises Institute.

Hoppe, H.-H. (2015). *A Short History of Man: Progress and Decline.* Auburn: Ludwig von Mises Institute.

Hoppe, H.-H. (2016). *A Theory of Socialism and Capitalism.* Ludwig von Mises Institute.

Hoppe, H.-H. (2016, September). On the Ethics of Argumentation. Bodrum. Retrieved from http://propertyandfreedom.org/2016/10/hans-hermann-hoppe-on-the-ethics-of-argumentation-pfs-2016/

Hulsmann, G. J. (2005, September ). Welfare Economics.

Hulsmann, J. G. (2008). *The Ethics of Money Production.* Auburn: Ludwig von Mises Institute.

Hulsmann, J. G. (2014). *Financial Markets and the Production of Law.* Granem: Universitie d’Angers.

Kant, I. (1998). *Critique of Pure Reason.* Cambridge University Press.

Kinsella, N. S. (1992, Fall). Estoppel: A New Justification for Individual Rights. *Reason Papers 17*, p. 64.

Kinsella, N. S. (1996, Spring). Punishment and Proportionality: The Estoppel Approach. *Journal of Libertarian Studies*, pp. 63-64.

Kinsella, N. S. (2003). A Libertarian Theory of Contract-title Transfer, Binding Promises, and Inalienability. *Journal of Libertarian Studies Volume 17, no. 2*, 11-37.

Kinsella, N. S. (2008). *Against Intellectual Property.* Auburn: Ludwig von Mises Institute.

Kinsella, S. (1999). Inalienability and Punishment: a Reply to George Smith. *Journal of Libertarian Studies*, 79-93.

Kirzner, I. (1973). *Competition and Entrepreneurship.* The University of Chicago Press, Ltd.

Klein, P. G. (2010). *The Capitalist and the Entrepreneur.* Ludwig von Mises Institute.

Kosuth, J. (n.d.). One and Three Chairs. *Joseph Kosuth - Shifting art from "how" to "why".* Sean Kelly Gallery. Retrieved from https://magazine.artland.com/joseph-kosuth-shifting-art-from-how-to-why/

Leeson, P. T. (2011). Government, Clubs, and Constitutions. *Journal of Economic Behavior and Organization, 80*, 301-308.

Lukasz, D., & Fegley, T. (n.d.). Should Libertarians Reject the Title Transfer Theory of Contracts? *Working Paper*.

Marciano, A., & Medema, S. G. (2015). Market Failure in Context: Introduction. *History of Political Economy, 47*, 1-19.

Mises, L. v. (2006). *The Ultimate Foundation of Economic Science.* Ludwig von Mises Institute.

Mises, L. v. (2007). *Bureaucracy.* Indianapolis: Liberty Fund, Inc.

Mises, L. v. (2008). *Human Action.* Auburn: Ludwig von Mises Institute.

Posner, R. (1986). *Economic Analysis of Law.* Wolters Luwer.

Posner, R. A. (1985, October). An Economic Theory of the Criminal Law. 1193-1231.

Rey, G. (2020). *The Stanford Encyclopedia of Philosophy* . Retrieved from Stanford University: https://plato.stanford.edu/archives/win2020/entries/analytic-synthetic

Robbins, L. (1938). Comparisons of Utility: A Comment. *The Economic Journal*, 635-641.

Rothbard, M. (2011). *Economic Controversies.* Ludwig von Mises Institute.

Rothbard, M. N. (1956). *Toward a Reconstruction of Utility and Welfare Economics.*

Rothbard, M. N. (2009). *Man Economy and State with Power and Market: the Scholar's Edition 2nd ed.* Auburn: Ludwig von Mises Institute.

Russel, B. (2020). *Stanford University*. Retrieved from The Stanford Encyclopedia of Philosophy : https://plato.stanford.edu/archives/sum2020/entries/apriori/

Schmitz, P. W. (2001). The hold-up problem and incomplete contracts: A survey of recent topics in contract theory. *[Working Paper]*. Retrieved from https://ssrn.com/abstract=264969

Stringham, E. (2009, December 21). A report on the Patrol Special Police and community safety in San Fransisco. *Working Paper 74*.

Stringham, E. P. (2015). *Private Governance: Creating Order in Economic and Social Life.* New York: Oxford University Press.

Tiebout, C. M. (1956). A Pure Theory of Local Expenditures. *Journal of Political Economy*, 416-424. Retrieved from https://www.jstor.org/stable/1826343?seq=1&cid=pdf-reference

Williamson, O. (1996). *The Mechanisms of Governance.* Oxford University Press.

Williamson, O. E. (1975). *Markets and Hierarchies: Analysis and Antitrust Implications.* The Free Press.

Williamson, O. E. (2002). The Theory of the Firm as Governance Structure: From Choice to Contract. *Journal of Economic Perspectives, 16*, 171-195.

Williamson, O. E. (2005). The Economics of Governance. *The American Economic Review*, 1-18.

Wittgenstein, L. (2009). *Philisophical investigations.* Blackwell Publishing Ltd.

Yu, T. F.-L. (1999). Toward a Praxeological Theory of the Firm. *Review of Austrian Economics*, 25-41.

1. Tate generously provided some of the key literature during the early stages of research of the current work on the remaining gaps this paper aims to partially fill. Any potential errors in this work are solely those of the current author. [↑](#footnote-ref-1)
2. For a further exploration of incomplete contract literature, Schmitz provides an excellent survey “without any mathematical pyrotechnics.” (Schmitz, 2001, p. 3) Additionally, the following works were read to gain a requisite understanding of the transaction cost and incomplete contract literature mentioned above. These works are useful, but need not be reviewed here:

	* Willimson’s (Markets and Hierarchies: Analysis and Antitrust Implications, 1975)
	* (Hart & Moore, Property Rights and the Nature of the Firm, 1990)
	* Coase’s (The Firm, the Market, and the Law, 1989) [↑](#footnote-ref-2)
3. Many thanks to Tate Fegley for suggesting this paper shortly after the current author discovered it while reviewing the literature. Credit goes to Dr. Fegley for noticing the gap in research (mentioned in his dissertation introduced above). [↑](#footnote-ref-3)
4. While (Kant, 1998) is the source document for these distinctions, it is unnecessary for such a detailed description here. Stanford offers a reliable, online, and scholarly source for quick references which was consulted for the current paper. (Rey, 2020) (Russel, 2020) [↑](#footnote-ref-4)
5. From the above discussion, it may be tempting to argue that a priori truths are “constants of human action.” This is not the case, however; the truth claims about praxeology are logical constraints on human action (in the example of the cake, it cannot be eaten twice) but this says nothing about a constant in the action of deciding humans. The question of *if* the cake will be eaten can never result in a “constant” as can be derived in physics. The matter of if a cake will be eaten can only be determined as a matter of history after the event has passed. The matter of *why* a cake is or is not eaten is a matter of psychology. [↑](#footnote-ref-5)
6. Hopefully the reader can forgive a series of such metaphysical, spiritual, imprecise, and otherwise bizarre statements in an academic work such as this; they are necessary and of the upmost importance to the current work. [↑](#footnote-ref-6)
7. Austrian economists and legal theorists like Hans-Hermann Hoppe have proposed an epistemological dualism as well, but the intended meaning here is slightly different. Credit for the insight of epistemological dualism here goes to Thomas Chang. Again, all mistakes or inadvertent misrepresentations are purely my own. [↑](#footnote-ref-7)
8. The literature used for the following sketch of AE was the following: (Hoppe H.-H. , 2016), (Hoppe H.-H. , A Theory of Socialism and Capitalism, 2016) (Hoppe H.-H. , The Economics and Ethics of Private Property, 2006), (Kinsella N. S., Punishment and Proportionality: The Estoppel Approach, 1996), and (Kinsella N. S., Estoppel: A New Justification for Individual Rights, 1992). Additionally, the current author relied on previous “student papers” and prior research serving as notes when writing this “sketch” and parts of the analysis section..

For more sources on AE included critiques and responses, see Hoppe’s webpage on Argumentation Ethics: http://www.hanshoppe.com/publications/sel-topics/#arg-ethics [↑](#footnote-ref-8)
9. This point has been disputed in a working paper by (Lukasz & Fegley, n.d.) This Title Transfer Theory of Contract is credited (by Kinsella, Lukasz, and Fegley) as originating from Murray Rothbard and Williamson Evers. [↑](#footnote-ref-9)
10. This diagram has been used by Professor Block in various lectures. Hopefully the reader can forgive such a stylized drawing and informality here. The drawing is only meant to convey the possible differences in utilities in two different people and is useful to that end and this concept is supported by standard economic theory. [↑](#footnote-ref-10)
11. Rothbard notes that Mises points to similar errors made by Wicksteed and Robbins (Rothbard M. N., 1956, p. 6) (See Human Action pp. 102-103) [↑](#footnote-ref-11)
12. No published references of Hulsmann’s point here could be found; only in lecture format has this been discussed. Hopefully the reader can excuse the informal source cited. The source cited is for transparency purposes only and serves to only bring this important insight into light. [↑](#footnote-ref-12)