The Dao of Jurisprudence: The Art and Science of Optimal Justice

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Existence is beyond the power of words
To define:
Terms may be used
But none of them are absolute.¹

Introduction

The search for optimal results from complex systems is like dropping thousands of blindfolded parachutists into hilly terrain with the command of finding either the peak or valley.² They trudge along either uphill or downhill, feeling their way until the slope changes direction, at which point they assume they have reached the peak or valley. Until the parachutist removes his blindfold and all the parachutists are surveyed, it is impossible to determine how close the individual maximum or minimum is to the global maximum or minimum.

¹ Opening Line of The Dao. We do not often think of Lao Tzu, who lived some 5,000 years ago, as an expositor of post modernism, but this line captures the concept of the indeterminacy of language and the relativism of self and our relation to the universe as well as any modern writer does. LAO TZU, THE WAY OF LIFE 31 (Witter Bynner trans., Perigee Books 1972) (1944). The complete verse is one of my all time favorites, moving from post modernism, back to natural theories, and back to post modernism without the fatalism of existential or nihilistic thought:

Existence is beyond the power of words
To define:
Terms may be used
But none of them are absolute
In the beginning of heaven and earth there were no words,
Words came out of the womb of matter;
And whether a man dispassionately
Sees to the core of life
Or passionately
Sees the surface,
The core and the surface
Are essentially the same,
Words making them seem different
Only to express appearance.
If name be needed, wonder names them both:
From wonder into wonder
Existence Opens.

Id. at 31.
² This description is not original. A colleague first related it to me in 1985, and a couple years later I found it described in a paper on optimization techniques, but I cannot find the original reference now.
Jurisprudential philosophy informs how “the law” evolves towards utopian ideals in much the same way as the parachutists find the hilltop: through incremental critique of society’s institutions. Philosophers, critics and scholars tend to look at outcomes in particular valleys, feeling their way along in an evolutionary crawl towards a just society, prompted and defined by the various schools: natural law, realism, positivism, critical legal studies, feminism, critical race theory, gay legal studies, post modernism, and, or course the “Law and ___” genre (typified by the wealth maximizing principles of Law and Economics). The decisions of the U.S. Supreme Court in numerous “penumbra” cases and where split decisions involve divisive social issues, exemplify how different jurists search for optimality.

Is our system of justice optimal? In the end, specific cases are either won or lost, a binary outcome following the complex application of rules and procedures based on principled objectives and subject to numerous constraints. Jurisprudence passes judgment on the courts’ holdings: couldn’t society do better? Is “the law’ wrong because it reached the wrong answer according to a particular school of thought or as measured against a societal objective? By looking at legislation and court decisions in isolation without reference to the system design,

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3 See infra for examples from various schools of jurisprudence.
4 See e.g. Griswold v. Connecticut, 381 U.S. 479 (1965) (holding that the use of contraceptives by married couples involves a right of privacy which itself is “older than the Bill of Rights,” and is protected “within the zone of privacy created by several fundamental constitutional guarantees.” After discussing several prior cases which expanded the freedom of the press to embrace the right to educate one’s children based on freedom of inquiry and thought, the court said, “[t]he foregoing cases suggest that specific guarantees in the Bill of Rights have penumbras, formed by emanations from those guarantees that help give them life and substance.”)
5 See e.g. Michael H. v. Gerald D., 491 U.S. 110 (1989) (holding a father’s rights to use genetic evidence to be of lesser importance than the state’s rights to enforce evidentiary rules, especially when those rules support traditional notions of family, regardless of genetic paternity. The case highlighted Justice Scalia’s reliance on tradition and illustrates the challenge of choosing between conflicting objectives and consistently applying constraints. Scalia said, “Because such general traditions provide such imprecise guidance, they permit judges to dictate rather than discern the society’s views. The need, if arbitrary decision making is to be avoided, to adopt the most specific tradition as the point of reference…” To this reasoning Justice Brennan dissented, “[i]t is ironic that an approach so utterly dependent on tradition is so indifferent to our precedents . . . “liberty” and “property” are broad and majestic terms. They are among the “great constitutional concepts . . . purposely left to gather meaning from experience . . . [T]hey relate to the whole domain of social and economic fact, and the statesmen who founded this nation knew too well that only a stagnant society remains unchanged.”).
capability and yield, subsystem performance, and constraints, we cannot know if a better
decision was available, if the decision was optimal based on the constraints imposed. It is
difficult to improve a process or structure without understanding its yield capability.

The language of optimization permeates decisions while reflecting the complexity of
multiple goals and paths to a result: objectives, goals, balancing tests, and optimal outcomes like
individual rights and freedoms, fairness, truth, equality, efficiency, protection of privacy and
property rights, freedom of contract, etc.; process descriptions and rules like those of procedure
and evidence; and constraints or restraints like constitutional authority as the “supreme law of the
land,” balance of powers, legislative deference, and stare decisis. Jurisprudence is defined as
the science of the law. Defining the law as an instrument of society designed to influence,
govern and/or punish behavior, the heart of jurisprudence is decision making—decisions made
by individuals, legal persons, and institutions about their behavior, decisions by legislators and
regulators in drafting rules, decisions by law enforcement officials, parties, and officers of the
court about whether and how to proceed with a prosecution or civil case, and finally, decisions
by courts to solve cases before them.

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6 See e.g. WILLIAM COHEN, JONATHON D. VARAT, VIKRAM AMAR, CONSTITUTIONAL LAW: CASES AND MATERIALS
Among other things, Justice Chase said, “The purposes for which men enter into society will determine the nature
and terms of the social compact; and are the foundation of legislative power, they will decide the proper objects of
it: The nature, and ends of legislative power will limit the exercise of it. This fundamental principle flows from the
very nature of our Republican governments, that no man should be compelled to do what the laws do not require;
nor refrain from acts which the laws permit. There are acts which the federal, or state, Legislature cannot do,
without exceeding their authority. There are certain vital principles in our free Republican governments, which will
determine and overrule an apparent and flagrant abuse of legislative power; as to authorize manifest injustice by
positive law; or to take away the security for personal liberty, or private property, for the protection of government
which was established.” Justice Iredell responded, in part, “If on the other hand, the legislature of the union, or the
legislature of any member of the union, shall pass a law, within the general scope of constitutional power, the court
cannot pronounce it to be void, merely because it is, in their judgment, contrary to the principles of natural justice.
The ideas of natural justice are regulated by no fixed standard.”).
7 See infra Background Explanations for a fuller explanation of definitions used.
8 Id. This is my definition.
The study of optimal decision making is a science, based on systems modeling and a wide range of optimization techniques. It is only fitting that we inquire into the applicability of these techniques when we claim to practice the “science of the law.”

This paper seeks to understand the legal system’s performance against those broader measures by borrowing quantitative tools from the field of optimal decision theory as a basis for modeling “the law.”

The model is offered for its descriptive ability to frame legal decision making in the context of a system’s approach and as a means to assess the marginal impact of theories and concepts arising from jurisprudence scholars against broader social objectives such as justice, fairness, equality, and efficiency. Optimization science from a systems perspective looks at any system as it is, and attempts to compare its output against a theoretical optimal yield in order to understand and devise possible system improvements.

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9 See infra note 16.

10 Simple physical processes are typically characterized with linear quantitative models known as linear programming, where there is an objective function (i.e., maximize profit) subject to constraints such as size or location of facilities, temperature ranges, pollution restrictions, etc. Physical laws of nature constrain many processes, and the optimal yield of any human system is less than perfect, less than 100%. For example in power systems, Rankine power cycles used in modern thermal power plants can only achieve peak efficiencies of under 40% due to limitations in energy extraction; the theoretical maximum efficiency of a wind turbine is less than 58%. Another optimization example is my personal objective of maximizing my grade in this course where there is an algorithm that determines the outcome: the sum of weighted factors and scored results in this paper, the journal, and class participation. That outcome is subject to my constraints of time available for class preparation and for preparing this paper due to competing objectives of work, family, and attention to other courses, not to mention the limits of my own ability to understand the material. For a fuller explanation of the application of systems theory to the law, see e.g. Lynn M. LoPucki, The Systems Approach to Law, 82 Cornell Law R. 479 (1997) (“Systems analysis’ is a methodology developed in the fields of engineering, business information systems, and computer programming specifically to manage complexity. Instead of screening complexity out, the systems analyst attempts to accommodate as much complexity as possible. A comprehensive description of the system’s functioning is a precondition to the analysis. Abstraction is employed sparingly, and, in the kind of systems analysis that is advocated in this Article, every concept is operationalized, so that every proposition can be tested empirically. Systems analysis proceeds by identifying systems, discovering their goals or attributing goals to them, mapping their subsystems and the functions each performs, determining their internal structures, depicting them with attention paid to efficiency of presentation, and searching for internal inconsistencies. These methods generate analytical power by increasing the number of goals, elements, and circumstances that the analyst can take into account simultaneously. These methods also provide a language by which to express the kinds of relationships that are commonly encountered.”). Id. at 481. (“Systems analysis regards systems as goal-seeking. That is, systems analysis regards each system as having one or more purposes or functions.”). Id. at 485.
As we move from considering physical systems to more complex social systems, the methods of analysis become more complicated, involving multiple objectives, multiple variables, interlinked and dynamic processes. As a consequence, the level of sophistication of the models increases, relying on heuristic programming, dynamic programming, and genetic or evolutionary models to determine optimal operating parameters.\textsuperscript{11} An in depth review of these topics would be far a field; indeed constrained by time, space and ability, my modest objective is to postulate a model of the American system of jurisprudence and show how it might be used qualitatively to evaluate jurisprudential decision making against societal objectives for “the law”\textsuperscript{12} as the system of jurisprudence encounters reality.\textsuperscript{13} The paper begins by establishing some baseline definitions, and then devises a set of interlinked processes to describe the fundamental operation of the American legal system in the lexicon of dynamic and heuristic programming in order to illustrate how the system intersects with reality, exposing inherent system limitations on decision making, and providing a framework for understanding and advancing the various schools of jurisprudence. The model is simplistic and descriptive, not normative or prescriptive; however, I do hope it can lead to further research and incremental advances in jurisprudential philosophy.

**Background Explanations**

Terms are needed, although “none of them are absolute:”

- “The Law”: Throughout the course, I found it the height of irony that jurisprudence scholars, apparently lawyers or students of law, never defined “the law.” What does the term

\textsuperscript{11} See infra for definitions and explanations of these terms.

\textsuperscript{12} This language is purposely used to illustrate the classical formulation of the simplest form of optimization technique applied to say, making a pharmaceutical, whereby using linear programming, a single objective function (minimize cost) is subject to the constraints of both the physical process and the monetary restrictions on capital and operating budgets. My objective is to get the highest grade possible in Jurisprudence, subject to the constraints of time using the inherent limitations imposed by limitations in my ability and my writing process.

\textsuperscript{13} This intersection is what I term the “Dao of Jurisprudence.”
“the law,” mean? I define the law as an instrument of society designed to influence, govern, and/or punish behavior. Black’s Law Dictionary takes three columns, where one of the circular sentences defines law as “[t]hat which must be obeyed and followed by citizens subject to sanctions or legal consequences is a law.”

- Jurisprudence: Irony strikes again: “Jurisprudence has no established precise meaning. Indeed, it may be defined variously as the ‘science of the law,’ ‘the discovery of general principles that explain the shape of the legal world,’ or broadly, as anything theoretical about law.” I will use the “science of the law” description as a starting point.

- Optimization Theory: “A science that studies the best.”

- System: “Orderly combination or arrangement, as of particulars, parts, or elements into a whole; especially such combination according to some rational principle. Any methodic arrangement of parts.”

- Objective Function or Return Function: As I use the terms, these are the output goals which a system seeks to achieve. More formally, “objective function” is a term used in linear programming (the forerunner mathematical technique for solving a large class of optimization problems) to describe the economic output or return from a process for specified values of the control variables; where in dynamic programming (such as the model proposed below), the preferred term is “return function.”

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14 Class Readings Handout distributed on November 13, 2007, “Some Last Questions to Ponder: …7. In your view, what, above all else, is the law supposed to do?”
19 Supra note 17 at 6.
• Constraints: The ordinary understanding of constraints as restraints on freedom of action provides a workable definition for the model described below. However, quantitative techniques describe these as variables or functions of variables. A critical point to understand in any optimization problem is the degree to which constraints can be relaxed, or if a proposed solution allows slack in the constraints, meaning there is still freedom of movement before hitting the limit of that particular constraint.

• Optimization Technique: The general form of an optimization problem is to state an objective to optimize (maximize or minimize) a model (usually economic) with \( n \) independent variables, and \( m \) constraints.\(^{20}\) Quantitative decision models use a variety of mathematical techniques to “solve” this genre of problems, including dynamic programming.\(^{21}\) The proposed model borrows from this science to illustrate the value of understanding the law in optimization terms by modeling a dynamic, multi stage process with multiple objectives and a variety of constraints. The model is not proposed as a computer algorithm to “solve” cases or resolve conflicting principles as if the model can yield deterministic solutions based on mathematics, but only to illustrate how the output from interlinked process stages affect the yield of subsequent stages in the process, and thereby limit the output, yield, or return of the overall system.

• Dynamic Programming: An optimization technique which “uses a series of partial optimizations by taking advantage of the stage structure in the problem and is effective for resource allocation and optimization through time.”\(^{22}\)

\(^{20}\) Supra note 17, at 21.

\(^{21}\) See e.g. RALPH W. PIKE, OPTIMIZATION FOR ENGINEERING SYSTEMS 1 (Van Nostrand Reinhold Co. Inc. 1986).

\(^{22}\) Id. at 5.

Dynamic programming converts a large, complicated optimization problem into a series of interconnected smaller ones, each containing only a few variables. The result is a series of partial optimizations requiring a reduced effort to find the optimum, even though some of the variables may have to be enumerated throughout their range. Also, the previously discussed single and multivariable search methods are applicable to each of the partial optimization steps. Then, the
The Basic Model of Reality and the Law, Transformation and Mediation of Reality

As a starting point, consider how the figure below illustrates how reality intersects with “the law.”

“Reality” or in Lao Tzu’s words, “existence,” is mediated in multiple stages in order to convert it into language. This process is illustrated below. These graphical depictions can help elucidate many of the points raised by realists on the use of empirical science in the law, or post modernist when they point out a host of mediation issues such as the role of culture, the indeterminacy of language, and the contingency of self.

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23 Oliver Wendell Holmes, Jr. admonished against thinking the law could be worked out like a mathematical equation, but he also considered jurisprudence as “simply law in its most generalized part . . . [the means for which is] to follow the existing body of dogma into its highest generalizations by the help of jurisprudence; next to discover from history how it has come to be what it is; and, finally, so far as you can, to consider the ends which the several rules seek to accomplish, the reasons why those ends are desired, what is given up to gain them, and whether they are worth the price.” See supra note 16, at 170-171 (extracting from Oliver Wendell Holmes, Jr., The Path of the Law, 10 HARV. L. REV. 457 (1897).

24 See e.g. Naomi Mezey, Law as Culture, in CULTURAL ANALYSIS, CULTURAL STUDIES, AND THE LAW 37 (Austin Sarat and Jonathon Simon ed., 2003) (“Law, at first glance, appears easier to grasp if considered in opposition to culture—as the articulated rules and rights set forth in constitutions, statutes, judicial opinions, the formality of dispute resolution, and the foundation of social order. In most conceptions of culture, law is occasionally a component, but it is most often peripheral or irrelevant. Most visions of law include culture, if they include it all, as the unavoidable social context of an otherwise legal question—the element of irrationality or the basis of policy conflicts. When law and culture are thought of together, they are conceptualized as distinct realms of action and only marginally related to one another. For example, we tend to think of playing baseball or going to a baseball game as cultural acts with no significant legal implications. We also assume that a lawsuit challenging baseball’s exemption from antitrust laws is a legal act with few cultural implications. I think that both these assumptions are
Ultimately, “Facts” and “Evidentiary Conclusions” evolve into a form of mediated truth. This process transforms reality into something capable for “the law” to handle. It transforms “existence” into language. That language is interpreted and used by legislators, policy makers, regulators, jurists and jurors. It informs all legal analysis and decisions. The performance of the system at this stage predetermines the output potential of subsequent stages.

Wrong. Our understandings of the game and the lawsuit are impoverished when we fail to account for the ways in which the game is a product of culture—how the meaning of each is bound up in the other in the complex entanglement of law and culture.”). See also RICHARD RORTY, CONTINGENCY, IRONY, AND SOLIDARITY xvi (1993) (describing his ironist liberal utopia of human solidarity as one which recognizes the “‘contingency of language’—the fact there is no way to step outside the various vocabularies we have employed and find a metavocabulary which takes account of all possible vocabularies, all possible ways of judging and feeling. . . More important it would regard the realization of utopias, and the envisaging of still further utopias, as an endless process—an endless, proliferating realization of Freedom, rather than a convergence toward an already existing Truth.”). Rorty sounds to me like Lao Tzu, only less poetic.
Overall Systems Perspective

These mediated truths and influences are mapped by the system that forms the law:

This intersection between reality and “the law” opens up the question as to whether jurisprudence delivers against a series of objective functions or goals, as illustrated below:
Stages of “The Law”

Putting this into an overall system depiction of the stages of the law in a dynamic programming context provides a model through which to understand the various jurisprudential schools and explore the question of system optimality:

A Dynamic and Evolving Decision Model of the Interlinked Stages of “The Law”

Explanation of the Model

The figure above breaks “the law” into four distinct stages, each of which is an elaborate decision making process: stage 0 is the mediation of reality, stage 1 is the formation of law in the political and legislative process, stage 2 is the implementation of legislation through the regulatory and rulemaking process usually performed as an executive function, and finally, stage 3 is the adjudication process, where individual cases or controversies are resolved in a series of state and federal courts, ultimately in some cases leading to the U.S. Supreme Court. The process is interlinked and interdependent. The nuance of each stage could be captured in elaborate process and substantive descriptions, but that effort would be beyond the scope of this

25 This model is based on the U.S., variations would be required to describe the process in other countries and cultures. See, e.g., BRIAN K. LANDBSERG, LESLIE GIELOW JACOBS, GLOBAL ISSUES IN CONSTITUTIONAL LAW (West 2007).
paper. For present purposes, assuming the model roughly but accurately captures the essential elements of our legal processes, we can inquire into the performance against the objectives of the system and the sub stages, the separate and common constraints affecting decisions at each stage and level within the stage, and how the output of one stage places boundaries on the performance of subsequent stages.26

**Questions Raised by Key Elements of the Model**

*What is the optimal aim of the system?* The above model is an attempt to capture our American system of jurisprudence, premised on the U.S. Constitution. The Constitution had multiple objectives: to establish and define the role and function of government, to define the interaction between the federal and state governments, and to lay out several basic principles regarding individual liberty.27 As that document and its creators attempted to balance competing and multiple objectives, constrained in their efforts by their own limitations, time pressures and politics, it is commonly understood by Americans as the optimal symbol of democracy and legitimacy. For our purposes, we can still ask if it is the best we can do, and indeed many

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26 To understand the impact of a given stage and process on subsequent stages and overall performance imagine a power plant, with a fuel processing system, a boiler, a turbine, a generator, and an electrical substation. Our objective as a society is to optimize the transformation of the energy in the fuel into a form useful for people widely disbursed through the electricity grid, at a minimum cost, and with a minimum of impact on the environment. The plant is subject to countless constraints: air pollution limits, noise levels, hours of operation, community siting, access to water sources, etc. Each level of the system has efficiency implications for the overall transformation process: practical (cost constrained designs) efficiencies of boilers are in the 90% area, but a turbine’s ability to extract work energy from steam is in the upper 30% regime, generators and substations are each in the upper 90% ballpark; transmission systems vary based on numerous factors. Each of these stages needs to be optimized independently, but due to their interconnected nature, the best the overall system can perform is around 30%. Alternatively, consider the human body which needs air, food and water to exist. The extent to which the lungs and the digestive track fail to perform their functions, the performance of the heart and circulation system are affected, ultimately diminishing the performance of the brain and nervous system. Too much or too little at any stage affects the overall performance; limits exist at all levels.

27 See, e.g., NORMAN REDLICH, JOHN ATTANASIO, JOEL K. GOLDSMITH, UNDERSTANDING CONSTITUTIONAL LAW 4-5 (LexisNexis 3d ed., 2005) (Commenting on the enormous undertaking of the framers who sought to protect individual liberty while empowering the government to respond to public needs. Quoting James Madison from The Federalist No. 51, “If men were angels, no government would be necessary. If angels were to govern men, neither external nor internal controls on government would be necessary. In framing a government which is to be administered by men over men, the great difficulty lies in this: You must first enable the government to control the governed, and in the next place oblige it to control itself.”).
The importance of constraints in the American system of justice comes straight from the U.S. Constitution: “This Constitution, and the Laws of the United States which shall be made in pursuance thereof; and all treaties made, or which shall be made, under the Authority of the United States, shall be the supreme Law of the Land; and Judges in every state shall be bound thereby, any Thing in the Constitution or Laws of any State to the Contrary notwithstanding.”

Of course there are many and varied constraints at each stage and for each situation.

Who Decides? This question is a personal favorite because it often helps unravel the perspective, the biases, the interpretations, and the ascendancy of objectives.

How does the optimization of each Stage’s Performance Impact the Art of the Possible in Subsequent Stages? Should the stages be optimized, or should the system be optimized independently of the output from prior stages? In effect, does justice require judicial autonomy?

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28 U.S. Const. art. VI, cl. 2. But Cf. Id. at 6 (quoting Justice Brandeis in explaining the principle of stare decisis, wise in most cases, cannot correct legislative action in cases involving the Federal Constitution, so “[t]he Court bows to the lessons of experience and the force of better reasoning, recognizing that the process of trial and error, so fruitful in the physical sciences, is appropriate also in the judicial function.” The passage supports cases where “the Court abandons or overrules pernicious or anachronistic precedents or doctrines.”).
How do decisions in prior stages and the reaction of earlier stages to subsequent holdings affect the dynamic response and evolution of system performance?

Addressing the stages of the above model independently, and recognizing they are interlinked through the evolving state variable labeled “the law,” one can begin to see how variations in the return function (objective) and constraints at each stage affect not only the stage’s performance but also the performance of the integrated system. Through the dynamic process, over time, with feedback, and with society’s evolving views of morality to mediate reality, “the law” evolves dynamically. This evolution mirrors genetic evolution, and this trend is clearly seen in how U.S. Supreme Court cases evolve around the optimization of different principles through generations of cases. For instance, we can trace the evolution of the Supreme Court’s resolution of the inherent conflict between individual freedom to contract with a state’s rights to regulate economic behavior in a series of cases from *Lochner v. New York* \(^{29}\) “and its progeny” \(^{30}\) based on the primacy of freedom of contract to *Williamson v. Lee Optical of Oklahoma, Inc.* \(^{31}\) which signaled a new direction where liberty of contract was replaced by a rational basis test to determine the validity of statutes governing economic activity.

**Model Limitations**

Persons familiar with the quantitative techniques of optimization are likely to be dumbfounded by an attempt to apply them as I am proposing. It would be preposterous to attempt to quantitatively assess all the individual decisions which comprise the entire system of the law. Subtle and nuanced decisions with multiple and conflicting objectives, information

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\(^{29}\) *Lochner v. New York*, 198 U.S. 45 (1905) (holding in a divided opinion that interference with the freedom of parties to contract with each other violates the Constitution).

\(^{30}\) *See supra* note 6, at 333-346 (tracing a series of key decisions from *Lochner* to *Williamson* as they gradually moved in reasoning away from the primacy of freedom of contract towards rational basis).

\(^{31}\) *Williamson v. Lee Optical of Oklahoma, Inc.*, 348 U.S. 483 (1955) (rejecting the logic of *Lochner* and establishing the rational basis test).
limitations and other uncertainties and contingencies are no place for computer based analytical
decisions. For instance, Justice Learned Hand cautioned against being overly quantitative in *The
U.S. v. Carroll Towing*, when he devised the famous Hand formula for determining the threshold
of breach in negligence cases.\(^{32}\) The close reader will recognize that there is not a formula,
equation or variable anywhere in this construction and the model is in no way intended to replace
legal reasoning. I merely contend that there may be descriptive and normative benefits from
analyzing the legal system by modeling its performance as a system.

**Relationship of the Model to Jurisprudence Schools**

What follows is intended as a minor sampling of how some of the schools of
jurisprudence can be understood through the operation of the model, and how their reform
prescriptions might be implemented in an effort to enhance system performance against an
objective of optimal justice.

*Law and Economics*

Optimization models are at the heart of economics, but much of the “Law and
Economics” literature derives from Pareto Optimization and Efficient Market Theory.\(^{33}\) This
view of the relationship of economics to the structure of society’s institutions is understandable
in the context of our market economy and its influence over a variety of policy and personal
decisions, and as a reflection of the fact that inefficiency is inherently bad policy because it
involves waste which benefits no one. Nonetheless, efficient market theory is premised on a
series of underlying assumptions which were never derived in the context of prescribing legal
theories, and were never designed to address the inequities associated with initial distributions of
resources or other endowments. Thus, while Law and Economics derived from efficient market

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\(^{32}\) United States v. Carroll Towing Co., 159 F.2d 169 (2d Cir. 1947).

\(^{33}\) *Supra* note 16, at 303-304.
theories can provide some valuable insight to resolve a class of cases, it can never address questions of equity per se.34

Economic decisions are about choices at the margin. Modern economics has evolved beyond Pareto Optimization however, and the model serves to highlight a number of areas where economic theories have relevance to the law. For instance, “in social choice theory, Arrow’s Impossibility Theorem, or Arrow’s paradox demonstrates that no voting system can convert the ranked preferences of individuals into a community-wide ranking while also meeting a certain set of reasonable criteria with three or more discrete options to choose from. [The theorem says that] if the decision-making body has at least two members and at least three options to decide among, then it is impossible to design a social welfare function that satisfies all these conditions [non-dictatorship, universality, individual and societal value preference] at once.”35 This theory shows that in the formation stage of the law, an individual’s optimal value outcomes are unachievable.36 Other advances in economic theory could be infused to illuminate the interaction of decision theory with stages of the law, such as Game Theory37 and its institutional prescriptions known as Mechanism Theory. Mechanism Theory demonstrates that the formation stage of the law may never be able to yield an individual’s optimal choice, and we all have to settle for second best, or worse.38

34 The development of proofs in any text on Microeconomic Theory show that the price theory of value as the most efficient mechanism for trading in market economy clearly state that they do not address the initial allocations or endowments of the parties, and thus are not intended to address questions of equity. For centuries courts were divided between those of law and equity, primarily based on whether the remedy or relief could be monetized or required “equitable” relief. Equity is “[a] system of jurisprudence collateral to, and in some respects independent of, ‘law’; the object of which is to render the administration of justice more complete, by affording relief where the courts of law are incompetent to give it, or to give it with effect.” BLACK’S LAW DICTIONARY 484 (5th ed. 1979).
35 See http://en.wikipedia.org/wiki/Arrow’s_impossibility_theorem (citing to KENNETH ARROW, SOCIAL CHOICE AND INDIVIDUAL VALUES). Arrow won the Nobel Prize for this work.
36 Id.
37 See e.g. Roger B. Myerson, Game Theory: Analysis of Conflict (Harvard Univ. Press, 1991).
38 See e.g. Matthew O. Jackson, Mechanism Theory, (2003) available at http://www.stanford.edu/~jacksonm/mechtheo.pdf (“A theme that comes out of the literature is that it is often impossible to find mechanisms compatible with individual incentives that simultaneously result in efficient
Natural Law, Realism and Positivism

This model is an agnostic view, it cannot discover law (natural law), nor can it self-legimize (positivism). Inasmuch as it is pragmatic and captures the way things are, it is an expression of realism. Despite the fact that these areas are not the primary focus of the model, their operation and influence can all be mapped and identified, whether in formation, implementation, or adjudication. Proponents of these theories articulate the system objective and constraints in accordance with their views, and their reasoning itself affects the process of legal decision making at each stage. For instance, in *United States v. Virginia*, Justice Scalia used the word “tradition” numerous times in his dissent, showing how his formalistic tendencies constrain his decision process.40

Feminist Theory

[C]entral to feminist theory are the propositions that (1) socially, politically, economically, and legally, women have historically, and still are, subordinated, diminished, devalued, and ignored; (2) law is in many ways gendered, it is an exercise of power, and that it operates ‘to the detriment of women;’ and (3) it is unjust to maintain the patriarchy. Many feminist theories have thus undertaken the project of imagining—and realizing—a society without patriarchy, or reconstructing, in theory and practice a world of justice, in which, perhaps, everyone is treated ‘as though he or she were different.’41

Christine Littleton sees law as the “symbol and mechanism of male power.”42 She believes one possible answer is for women to have “equal resources, status, and access to social decisions (maximizing total welfare), the voluntary participation of the individuals, and balanced transfers (taxes and subsidies that always net out across individuals). Nevertheless, there are important settings where incentives and efficiency are compatible and in other settings a ‘second best’ analysis is still possible.”). *Id.* at 4. Myerson, author of *GAME THEORY: ANALYSIS OF CONFLICT* (*supra* note 37), won the Nobel Prize for his work in Mechanism Theory in 2007.

39 See *supra* note 23.
41 *Supra* note 16, at 543.
42 *Id.* (quoting Christine A. Littleton, *Reconstructing Sexual Equality*, 75 CAL. L. REV. 1279 (1987)).
decision making." She proposed a formulation to resolve this situation through a rule that if the law “contributes to the subordination of women or their domination by men, it violates equality. If it empowers women or contributes to the breakdown of male domination, it enhances equality.” Recast in terms of the above optimization model, this recommendation would call for the introduction of additional explicit constraints in the formulation and implementation stages of the law (stage one and stage two). The question to ask of the system optimization model is whether this would increase supposed system goals such as justice and equality for all.

Robin West argues for change at a more fundamental level, at the level of the values:

Women’s concept of value revolves not around the axis of autonomy, individuality, justice and rights, as does men’s, but instead around the axis of intimacy, nurturance, community, responsibility and care. For women, the creation of value, and the living of a good life, therefore depend upon relational, contextual, nurturant and affective responses to the needs of those who are dependent and weak, while for men the creation of value, depend upon the ability to respect the rights of independent co-equals, and the deductive, cognitive ability to infer from those rights rules for safe living. . . [T]he Rule of Law does not value intimacy—its official value is autonomy. . . The value women place on intimacy reflects our existential and material circumstance; women will act on that value whether it is compensated or not. But it is not. Nurturant, intimate labor is neither valued by liberal legalism nor compensated by the market economy.  

Acknowledging that West is challenging the very objectives and values we seek to maximize is to recognize that to address her criticisms would likely require more than incremental change. West questions the mediation process and values that interpret reality through the male biased filters, simultaneously proposing a realignment of the values against which we measure performance for the decision making system we call “the law.” Catharine MacKinnon’s fundamental criticisms also challenge both society’s process of transformation and

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43 Id. at 547.
44 Id. at 548.
45 Supra note 16 at 559-561 (quoting Robin West, Jurisprudence and Gender, 55 U. Chi. L. Rev. 1 (1988)).
mediation that become the input variable for all legal decision making and the system’s output objectives or values.\textsuperscript{46}

Meanwhile, Angela Harris suggests that multiple objectives, decision makers and interpretations are a form of “multiple consciousness” which is “‘never fixed, never attained once and for all’; “it is not a final outcome or a biological given, but a process, a constant contradictory state of becoming, in which both social institutions and individual wills are deeply implicated.” This “multiple consciousness” in legal discourse is a dynamic process “in which propositions are constantly put forth, challenged, and subverted.”\textsuperscript{47}

\textit{Critical Race Theory and Gay Legal Theory}

“You know, where you end up is merely a reflection of where you start. . . [Critical race theory (CRT)] is ‘uniquely situated’ by context and content to illuminate the struggle for justice.”\textsuperscript{48} Most CRT scholars contend the interests of white elites determine the fortunes of people of color, that race is socially constructed to achieve the ends of the majority, that racism responds dynamically to social forces, and that identities are actually not questions of black and white but are inherently more complex.\textsuperscript{49} Derrick Bell points out that during the formation stage of the Constitution, the framers ignored the moral implications of placing the objective of protecting property rights above racial justice.\textsuperscript{50} States later suppressed outspoken black reaction

\textsuperscript{46} “The deepest issues of sex inequality, in which the sexes are most constructed as socially different, are either excluded at the threshold or precluded from coverage once in.” \textit{Supra} note 16 at 567 (quoting Catherine A. MacKinnon, \textsc{towards a Feminist Theory of the State} (1989)).

\textsuperscript{47} This passage evokes the \textsc{Dao} and Lao Tzu at its core. As such, it is in unison with the essential premise of this paper, namely, that reality flows and intersects with the law at many levels; that this is essentially a dynamic and evolving process. \textit{Supra} note 16, at 576 (quoting Angela P. Harris, \textsc{Race and Essentialism in Feminist Legal Theory}, 41 STAN. L. REV.581 (1990)).

\textsuperscript{48} \textsc{Robert L. Hayman, Jr., Nancy Levit, Richard Delgado, Jurisprudence Classical and Contemporary: From Natural Law to Postmodernism} 615-616 (2d ed., West 2002).

\textsuperscript{49} \textit{Id.} at 618-619.

\textsuperscript{50} \textit{Id.} at 620-621 (extracting passages from Derrick Bell, \textsc{Forward: The Civil Rights Chronicles}, 99 \textsc{Harv. L. Rev.} 4 (1985)).
to white supremacy with Racial Toleration Laws.\textsuperscript{51} “The rest is almost too painful to tell. Whites perverted the law . . . Black enterprise was no match for the true basis of majoritarian democracy: white economic and military power. Nor were the courts of much help. Our best lawyers’ challenges to the Racial Toleration laws were to no avail.”\textsuperscript{52}

In terms of the model, when the Constitution was originally passed, the law placed property rights above human rights. There was nothing to constrain one group from optimizing its objectives at the expense of another group. Did we suffer from a system of law unguided by moral principle, or was our objective distorted? Did society’s mediation of reality need to evolve for us to view blacks as human, or was the law simply an instrument of society to impose a social order? Have we changed and evolved to the point where these problems have been corrected at their source, or is this enterprise “no match” for a determined and entrenched majority? Have the post Civil War Amendments and Civil Rights legislation corrected the systemic failures? Can we ever achieve true justice when we place the burden of correcting our inability to see racism for the insidious reality it is on the adjudication phase to correct injustices? If the adjudication stage can only address issues when cases mature into real controversies between parties with standing, where does that leave the state of “the law?” In short, where are the battle lines in this fight for social justice?

Charles Lawrence III recognized the linkages between stages of “the law” when he proposed judges use an impact test to determine the legitimacy of legislation when it affects equal protection. He pointed out that as courts “interpret constitutional values and principles,” it should not expect to discover one true meaning but instead should be empowered to create meaning by acknowledging that our “understanding of meaning may change.” Judges should

\textsuperscript{51} Id. at 624.
\textsuperscript{52} Id.
base constitutional decisions after making explicit their conflicting perspectives, thereby clarifying the values underpinning their choices. He argued:

While the positivist approach disguises value conflicts and legitimizes the status quo, to reject judicial review would default to the product of the legislative process where the will of the majority legitimizes the results and where normative concerns are more easily dismissed as beside the point. Blacks and other historically stigmatized and excluded groups have no small stake in the normative debate. While their version of shared values or fundamental principles—the victim’s perspective—may not sway at the moment, the courts become a legitimate forum for the persuasive articulation of that version. And once more the debate is made explicit, the hegemonic function of the law is diminished. This is not to say that the courts should become the exclusive or even the primary forum for normative debate, but rather that, by making the debate over fundamental principles explicitly political, one expands the arena for that debate.53

These and others’ viewpoints lead naturally to another battlefield in the debate over fundamental principles and equal protection when an entrenched and empowered majority passes discriminatory legislation as it optimizes its own sense of moral superiority, pandering to the majority base. Gay rights stand at the dynamic forefront in this evolutionary quest for justice as the court’s elaboration of fundamental principles has become grist for the political debate.54 A system perspective would recognize that there are limitations at the formation stage, as identified by Arrow and as further developed in Mechanism Theory.55

*Legal Process, Critical Legal Studies and Post Modernism*

Like the discussion above on Law and Economics, the use of the model to help understand and explain judicial reasoning is a quintessential expression of the legal process school of jurisprudence. Like the case for natural law, realism and positivism, the model can

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55 *Supra*, text and notes on Law and Economics, in particular Notes 37 and 38.
also elucidate aspects of critical legal studies, and as noted in several of the earlier footnotes, the model can highlight the interplay with post modernist issues of relativism, contingency of self, and the indeterminacy of language. Time and space constraints prevent further elucidation.

**Implications for Comparative Law and Directions for Further Study**

Modeling “the law” in a comparative sense could help illustrate the relative merits of common law versus civil law, allow an exposition of different civilizations’ perceptions of justice, such as Islamic principles of law versus the democratic approach to optimizing justice illustrated in the model above. Incremental improvements such as Constitutional Amendments could be modeled to gauge their probable impact based on the Amendment’s goal (i.e., effect on the return function). A well structured and accurate model might help illuminate the comparative impact of resolving cases on different principles, such as the use of impact versus intent in Equal Protection analysis.

**Conclusions**

Is our legal system just? Is it as just as it can be, or are there opportunities for structural or substantive improvements? The starting point is to understand what is. The system is what it is by virtue of our collective efforts and inputs; it is not ordained, we give the law its authority. The challenge to us all is whether we accept it, denigrate it, change it at the margins, or overhaul it? The Dao will flow regardless. In the final analysis changes and system improvements can only be gauged over time and against society’s own temporal perceptions of justice. This evolutionary quest for justice is best described like existence in the Dao: “From wonder into wonder, Existence opens.”

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56 Supra note 1.