LexisNexis Summary:

... They devise instruments of change, some of which take the form of ideal societies --utopias. ... Holling distinguishes between two features: stability and resilience. ... It is the central thesis of this paper that, with few exceptions, utopians from Plato onwards have had stability rather than resilience as their guiding principle precisely because the paradigm of justice which informs the best known utopias is derived from the fixed and unchanging nature of the Platonic eidos. ... Plato's Republic promotes an ideal of stability, rather than resilience. ... A social system whose ideal is resilience, not stability, would be an open society which encouraged cultural diversity and allowed its citizens freedom of movement and expression. ... Part IV examines a contrasting model based on the notion of resilience, and Part V explores the roles jurisdictional redundancy and legal narrative play in fostering a resilient social system. ... Following Plato's Republic, most utopias advocate minimal coupling either (i) among the classes or (ii) between the state and its environment: hence there is no metastability. ... More important with respect to norm articulation and systemic resilience, however, is what happens when redundancy yields nonconfirmation -- the reversal of an established norm. ...
Far from being an anomaly to be eradicated, the redundancy in the American judicial system provides the society with much needed "context-sensitive" information. As such, jurisdictional redundancy is a major source of resilience and renewal.

TEXT:

[*1746] 1. Introduction: Platonic Eidos and the Form of Justice

Whenever the civilized world is faced with social change and discontent, scholars seek new solutions to problematic political conditions. They devise instruments of change, some of which take the form of ideal societies -- utopias. One need only recall Robert Owen's experiment in New Harmony, Indiana, to be reminded that utopias often have practical consequences as people attempt to implement them. In Austria and Germany several attempts were made to put Theodor Hertzka's Freeland into practice. Although utopias usually fail, the wide acceptance of free public education and religious toleration demonstrates the influence and significance of utopian literature.

One striking feature of utopian literature is that utopias are often characterized by communal living arrangements under totalitarian (albeit enlightened) rulers -- the individual is subordinated to the state. Many advocate the abolition of private property and money, as well as the general leveling of class and economic distinctions in the hope of achieving a state of perfect stasis. The concept of an "ideal" or "perfect" society can be etymologically traced to the Platonic eidos. The perfect is the unchanging and fixed. Static equilibrium is therefore the ideal because in a perfect society, change is always away from perfection and thus for the worse. Such utopias aim to be "fail-safe." As a result they are characteristically closed, rigid structures with little room for social or personal change and growth. These societal structures can be compared to classical equilibrium thermodynamics in physics, in which "fluctuations play only a minor role."

Other scientific models have been developed which do not equate order with equilibrium. These include the theory of dissipative structures created under non-equilibrium conditions, for which Ilya Prigogine was awarded the Nobel Prize in Chemistry in 1977. Prigogine's theory relies on the insight that "nonequilibrium may be a source of order." Dissipative structures depend on autocatalytic processes whose non-linearity leads via instability to irreversibility. Autocatalytic processes reinforce fluctuations, thus driving the system farther and farther from equilibrium until it reaches a threshold of instability. At this point, any minuscule perturbation can drive the system into a new, metastable structure characterized by increased rates of external entropy production. At such bifurcation points, the system either reorganizes at a higher level of complexity or dies. Through non-linear processes, a spontaneous formation of self-organization -- a metastable level of order -- can thus develop in open systems far from equilibrium. Such an autopoietic (self-organizing) system maintains its overall identity despite the constant turnover of its components. The result is a resilience characterizing the system as a whole, which allows it to absorb perturbations and mini-failures. This resilience protects the system from dissolution and simultaneously enables it to evolve to increasingly higher levels of complexity. Dissipative structures, like all complex dynamical systems, can therefore be said to be "safe-fail" in the sense that their failures are safe ones which not only do not threaten the system as a whole, but in fact contribute to their metastability and evolution.

Similarly, the insights of the ecobiologist C.S. Holling concerning characteristics of ecological systems can also be applied to social systems. Holling distinguishes between two features: stability and resilience. Stability represents "the ability of the system to return to an equilibrium state after a temporary disturbance; . . . the less it fluctuates, the more stable it [will] be." Resilience represents the ability of the system to mutate and evolve when disturbed by the environment.

It is the central thesis of this paper that, with few exceptions, utopians from Plato onwards have had stability rather than resilience as their guiding principle precisely because the paradigm of justice which informs the best known utopias is derived from the fixed and unchanging nature of the Platonic eidos. Plato's political philosophy must be examined in the light of its metaphysics, which is based on the Ideas. These Platonic forms serve the following functions:

1. They serve as the stable and eternal model or original according to which sensible things are patterned.

2. Their stability and permanence explain how knowledge rather than opinion is possible: knowledge is possible because man can cognize that essence in virtue of which an object is that (kind of) object and not another.

3. It is also because of these stable, eternal, and unchanging Forms that objects of one kind can be explained as "the same": they all "partake" of a particular Form.
Plato's *Republic* promotes an ideal of stability, rather than resilience. If high stability consists of low "fluctuation around specific states" with fluctuation being a form of change, an ideal of high stability necessarily leads Plato to minimize any potential for fluctuation in his society. Hence the emphasis on censorship, segregation of the classes, elimination of trade, etc., each of which responds to a threat which might impair stability by allowing the possibility of change. Maximizing stability thus becomes Plato's paramount concern, which he seeks to guarantee "solely through the ruling class itself, and more especially, in its unity and strength." 

A social system whose ideal is resilience, not stability, would be an open society which encouraged cultural diversity and allowed its citizens freedom of movement and expression. Its social institutions would provide cybernetic loops enabling the society to manage itself. Rather than [*1749*] suppressing sources of non-equilibrium and disorder, such a social system would be "error-friendly" and therefore resilient. 

This essay applies to the law insights from Holling's ecological claims and Prigogine's theory of dissipative structures. Part II of the essay examines the roles homogeneity, isolation, coupling, and a system's "initial conditions" play in securing the ideal of stability in Platonic utopias. Part III describes the additions modernity supplied to the Platonic concept of justice, particularly through legal formalism. Part IV examines a contrasting model based on the notion of resilience, and Part V explores the roles jurisdictional redundancy and legal narrative play in fostering a resilient social system. In interdisciplinary work language can frequently become problematic because words have different meanings in different fields. I intend to take only the conceptual bases -- not their mathematical formulations -- of these fields and adapt them to my purposes.

II. Securing Stability in Platonic Utopias

A. Homogeneity

Platonic utopias attempt to foster stability by maintaining homogeneity. An examination of this attempt is informed by contemporary ecology.

The study of ecosystems reveals a correlation between a system's relative stability or resilience and its spatial and temporal homogeneity or heterogeneity. The more diverse the subsystems, the more resilient the overall system. Resilience corresponds to a system's ability to absorb perturbations and evolve into a metastable level of organization characterized by renewed entropy production. Whereas the degree of fluctuation around specific states is a function of stability, survival and extinction are functions of resilience. A system which is very resilient can have a very low stability -- that is, it may fluctuate greatly but survive. Conversely, a system with high stability may lack resilience such that any change or disturbance simply destroys the system.

[*1750*] A system with high spatial homogeneity is confined to a narrow, uniform locale. Such a system tends to be self-contained and isolated. In a temporally homogeneous system, the structure of the organism is the same over time. A heterogeneous system, by contrast, is exemplified in a caterpillar's cycle of development from vermin to butterfly. What we learn from ecosystems is that "[t]he more homogeneous the environment in space and time, the more likely is the system to have low fluctuations and low resilience." 

The Great Lakes' ecosystem, with its high degree of homogeneity and self-containment, exhibits high stability; its low resilience, however, is evidenced by its extreme sensitivity to human perturbation and pollution. In contrast to this relatively closed system, most open systems exhibit low stability but high resilience, because of their variability and diversity. Pests, for example, display an unusual degree of adaptability through mutations when threatened by pesticides. Resilience, then, is a form of metastability -- an ability to weather severe fluctuations and to evolve despite dramatic alterations in specific organization. According to Holling, evolution selects for resilience, not stability.

In his critique of closed societies, Karl Popper notes that if the starting point -- the original model -- is already perfect, "then change can only be a movement that leads away from the perfect and the good; it must be directed towards the imperfect and the evil, towards corruption." If all change is evil, political organization must be structured to prevent or at least minimize it. Platonic utopias, therefore, are designed to exclude any potential for change. Temporal homogeneity is one of Plato's paramount goals. Popper suggests that Plato should have recognized that spatial homogeneity is one means of ensuring temporal homogeneity. Popper proposes that a progressivist Plato would seek to avoid class struggle, the primary source of change, by establishing a classless, egalitarian society. Whether the approach is Marxist or Platonic, however, the underlying goal of stability remains clear.

The important point for our purposes is that the *Republic's* ideal aristocracy is unable to accommodate any disturbance, however minor. Once its stability is pierced, the structure cannot return to equilibrium. [*1751*] Temporal heter-
ogeny sets in. The aristocracy's lack of resilience effectively results in its extinction. In Holling's terms, once the state is unable "to maintain the same relationships between populations or state variables," it degenerates into a tyranny. This process continues through each stage in Plato's well-known account of the state's deterioration: timocracy becomes oligarchy, which in turn becomes democracy, which ultimately decays into tyranny. At each stage the fluctuations to which the society is subjected cannot be damped and so the state is driven over the threshold of instability into a different structure, which makes it for Plato ex hypothesi a different state.

These concerns are not confined to Plato's writings. Homogeneity -- spatial and temporal -- is an ideal ubiquitous in utopian literature. The fifty-four cities in Thomas More's satire Utopia are uniform in language, customs, and institutions. The cities share the same design, with deviations allowed only because of the natural terrain. The cities even fit deviations allowed only because of the natural terrain. The cities even fit within prescribed distances from each other. Numerous utopian authors, including More, have sought to ensure homogeneity through communal living arrangements. Also characteristic of the general leveling tone is the abolition of private property and even money itself found not only in Plato, More, Owen and Bellamy (this last allowed some income), but also in the Abbe Morelly's Code de la Nature. Evocative of Mao's plan to create a homogeneous society without class distinctions, More allows only one style of clothing, with all wool cloaks being "the same colour -- the natural colour of wool."

More's advocacy of religious toleration seems at first to encourage diversity. This impression proves superficial, for we are told that the Supreme Being in which all Utopians believe is the same Being for all religions even though their conceptions may differ radically. Followers attend the same interdenominational churches, which are large and beautiful, but fairly dark, as the utopian priests "think that too much light tends to distract one's attention, whereas a sort of twilight helps one to collect one's thoughts, and intensifies religious feelings." This metaphor of light and darkness illustrates More's attempt to restrict input to his society. All Utopians, under penalty of severe and careful restrictions, must believe in an immortal soul and in the punishment and reward of vice and virtue in the afterlife. Anyone who deviates from these beliefs is ostracized, although no other punishment is inflicted upon him, and he is not allowed to air his views publicly to the common people.

Nevertheless, almost by definition, homogeneity is never total in utopias. No homogeneous system can qualify as a "complex system," in part because a collection of parts organized completely homogeneously is not a system at all, but an aggregate. Because these parts are not defined in terms of their interrelationships, they are distinguishable only numerically.

Societies cannot be aggregates. A society or system, even a primitive one, involves levels of organization; the components are defined in terms of the relationships they maintain to one another, and they are individuated as such: elders, soldiers, and so forth. Thus, even Plato's Republic has three classes: guardians, auxiliaries, and merchants. More postulates the existence of elders and other special classes in his utopia. But if components are defined in terms of their interrelationships, then the goal of stability is in principle impossible: these interrelationships constitute a kind of circular causality between parts and whole in which in turn changes the interrelationships and thus the "role" of the components.

[\*1752] B. Coupling

Platonic utopias also attempt to provide stability by minimizing connections between the society and external forces. Again Prigogine's theory proves helpful in critiquing classical utopias.

According to the chemical theory of dissipative structures, the metastability of a highly complex system depends in part on the amount of coupling, both of the system with the outside world (degree of isolation), and among the subsystems. Dissipative structures are open systems, with flexibly coupled subsystems. "Too loose coupling [means] that fluctuations (innovations) emanating from one system would not reach others; too close coupling [means] that the environment can quickly damp out any fluctuation." Even chemical theories of reality, then, underscore the need for flexibility and subtlety. Just as too much focus on either objectivity or subjectivity will yield intellectual stagnation, both too close and too loose coupling will endanger a system. Isolation is one way to minimize coupling between the system and its environment.

One of the hallmarks of a society designed according to a model of stability is its isolation. More's spokesman in Utopia tells us that although Utopians are not completely isolated from the rest of the world (they lend their legislators to other countries and engage in minimal commerce and warfare with neighboring states), the entrance to the one large bay is made dangerous by shallows and rocks, and its channels are known only to the Utopians themselves in order to discourage strangers from approaching. Intercourse with other societies is virtually nonexistent. Only in cer-
tain circumstances are Utopians permitted to travel, and foreign visitors are uncommon. The Utopians choose to deliver their exports, rather than allow the recipients to "come fetch [1754] them." This same goal of geographical isolation, discouraging trade, immigration, and emigration, appears in most utopian writings.

Lack of interaction among the subsystems is another way to minimize the amount of coupling. Contact with others in More's utopia is strongly discouraged. Anyone discovered outside his territory on his own authority is punished severely. Indeed, walking "within the territory of [one's] own city" is allowed only after permission is obtained. Similarly, in Plato's Republic the classes are rigidly segregated. Plato defines justice as each class going about its own business, whereas the meddling and interchange between the classes constitutes injustice. Members of each class must not "have what belongs to others, nor be deprived of what belongs to [them]." This segregation provides the state with its stability by eliminating intercourse among the classes. Utopian authors seem implicitly to recognize that stability necessitates minimal (ideally no) interrelationships among parts, between parts and whole, or between system and environment.

Following Plato's Republic, most utopians advocate minimal coupling either (i) among the classes or (ii) between the state and its environment: hence there is no metastability. When this ideal separation breaks down, degeneration follows. Plato, unlike other utopians, seems to have realized that the eternity and immutability of the Forms required by his metaphysics carried with them as a necessary concomitant very low resilience and therefore predictable decay.

Plato's advocacy of a closed society anticipates by many centuries science's nearly exclusive interest in closed systems. This scientific emphasis was due, in part, to the fact that nonlinear differential equations do not generally have analytic solutions. For both Plato and his conceptual heirs Descartes and Newton, it was easier to ignore feedback loops by simply claiming contextual issues constituted "background noise." Assumptions of linearity make everything more tractable. But closed, linear systems cannot renew themselves. Instead, they move inexorably towards thermodynamic equilibrium, a heat death from which the system never recovers. Similarly, uniformly organized societies would be unable to create new information and would therefore succumb to any perturbation. It is probably unfair to ask that Plato (or Mao?) have recognized stagnation as the price of stability; what he and his followers did fully recognize, however, is that an open society cannot maintain stability for very long.

C. Initial Conditions

In discussing different world views, Holling accurately captures the attitude of the utopian authors. Intent on designing an optimal system, they aim for one "in which fluctuations [are] minimized and explicit efforts [are] made to minimize the probability of failure -- in short a fail-safe strategy." Such a strategy, claims Holling, can work only for a system large enough to absorb fluctuations/innovations and still retain its identity. Further, the system must be so completely known that it "can be designed to give complete assurance that [this] stability region will not contract." In this case, "the goal of safety would be achieved by maximizing the distance from the static and invariant stability boundary." In other words, huge quantities of information (so precise and comprehensive as to be unattainable in fact) would be needed to design a society in such a way as to ensure that it remain indefinitely stable.

Chaos Theory, a branch of non-linear dynamical systems theory, has something to teach social theorists in this connection. In classical systems, minor errors in the specification of initial conditions will result in minor errors of prediction. Chaotic systems, however, are exquisitely sensitive to initial conditions: two points in a complex dynamical system, initially close together, will diverge dramatically after only a few iterations. This sensitivity to initial conditions makes dynamic systems de facto unpredictable, because infinite knowledge would be required to specify the initial conditions precisely. If societies are complex dynamical systems instead of closed, linear systems approaching thermodynamic equilibrium, attempts by futurists to pinpoint future social states are in principle misguided.

Since we cannot possess complete knowledge of social systems, social theorists must recognize that a fail-safe strategy is unworkable. There are hints of this even in Plato's epistemology. According to Plato, knowledge is possible only of eternal and immutable, non-sensible essences. Of anything sensible we can possess merely opinion. Since actual states necessarily possess such a sensible element, Plato recognizes their vulnerability to change -- which can only be degenerative, away from the eternal ideal. Plato thereby implicitly acknowledges that even the highest level of cognition of actual states can never be knowledge but only opinion. Thus, any actual utopia will inevitably be imperfect.

It must be emphasized that the problem is not just the epistemological one of the de facto impossibility of obtaining infinite information about a social system -- although that is a part of it. The problem in attempting to design a fail-safe
system, as suggested earlier, lies in both the inevitable openness of all social systems and the coupling of (1) the subsystems to each other, (2) the subsystems to the overall system, and (3) the system to the environment.

III. Modernity and Legal Formalism

The seventeenth century's newfound rationalism ensured the hegemony of Platonic thinking. Stephen Toulmin's excellent analysis of "the hidden agenda of modernity" summarizes the changes in world view from that of the Aristotelian influence present in Scholastic thought. I quote extensively from Toulmin.

Following Aristotle and the Scholastics, Renaissance scholars found "Rhetoric and Logic [to be] . . . complementary disciplines. Reflecting on the detailed nature and circumstances of concrete human actions--considering their morality as 'cases'--also shared top billing with abstract issues of ethical theory: in their eyes, casuistry and formal ethics were likewise complementary." Because of their circumstantial nature, "[a]ll problems in the practice of law . . . are timely."

Jurisprudence [*1757] reveals "the significance of local diversity, the relevance of particularity, and the rhetorical power of oral reasoning." Legal problems, therefore, "are decided, in Aristotle's phrase, pros ton kairon, 'as the occasion requires.'"

For Descartes and his followers, on the other hand, "timely questions were no concern of philosophy." On the contrary, "'rationality' [became limited] to theoretical arguments that achieve a quasi-geometrical certainty," thereby by definition leaving law outside the realm of reason. Since the seventeenth century, philosophy has concentrated on abstract, timeless methods of deriving general solutions to universal problems. [And it] has ignored the particular, concrete, timely and local details of everyday human affairs: instead, it has shifted to a higher, stratospheric plane, on which nature and ethics conform to abstract, timeless, general and universal theories.

A corresponding theory of justification-explanation emerged: an explanation consists of a (universal) covering law, together with initial condition statements. To explain is to deduce the explanandum from this set of explanantia; prediction is thus a necessary concomitant of explanation.

Aristotle should not be considered the polar opposite of Descartes--or of Plato. If he were, Aristotle would be honoring Plato's claims in the breach, much like, as Steven Winter notes, both the critical legal studies movement and mainstream theorists presuppose the subject-object opposition. Martha Nussbaum suggests that Aristotle represents "a balanced combination" of the elements Plato stressed and cultivated with the elements he "avoids and shuns."

Modernity's insistence on deduction as the only legitimizing process finds its counterpart in law in the traditional objectivist or formalist approach, according to which law is constituted by a set of ideals and principles that are applied to specific cases in the process of adjudication. Legal formalism is the consequence of admitting into the realm of reason only phenomena devoid of particularity, local diversity, and other indicia [*1758] of complicated human experience. To have acknowledged the ineliminability of these all-too-human features would have excluded law itself from the realm of reason. Winter notes that Dean Christopher Langdell "espoused the purely logical or conceptual approach to law as a 'science' that could be deduced from a few basic principles manifested in legal doctrines contained in appellate decisions . . . [and] recommended systematization of a mass of decisional material into properly classified doctrines and basic principles."

In cases like *Lochner* [*14*] and *Coppage*, Winter asserts, "the Court not only began with a principle from which to deduce its conclusions, but also assumed that the meanings of 'freedom' and 'contract' remain constant across changing circumstances." 

Similarly, Lon Fuller's famous essay *The Forms and Limits of Adjudication* [*15*] argues that adjudication gives "formal and institutional expression to . . . reasoned argument in human affairs" because it is committed to the strict application of principle and reason by "offering proofs and reasoned arguments." Formalism requires that "(1) the principles must accurately correspond to our social world, and (2) there must be a logical, propositional trajectory from principle to concrete application." The first requirement presupposes "notions of truth as correspondence, of knowledge as discovery of essence, of morality as obedience to principle." Mind functions as a "mirror of nature," discovering concepts and natural kinds, rules, and principles whose semantics map reality. In no way were the embodied, cultural, or imaginative aspects of human beings thought to taint principles thus discovered. In Law, as in Newtonian science, observation was not supposed to affect, much less determine, the observed. For at least those cases which specify the initial conditions, what the law "is," the application of principles to specific cases can be a matter of logical deduction. The second requirement [*1759] embodies the deductive-nomological approach to explanation.
The need to be able to specify accurate initial conditions appears in social theory as a concern with "state of nature" approaches: determining what humans were like prior to the institution of a society would provide us with essential human attributes which could be assumed to carry over across contexts. In this view context becomes, like friction in mechanics, a contaminant, background noise against which the legal theorist must abstract essential, core concepts which hold across varying contexts.

Legal thinkers thus appealed to "natural law" in their attempts to formulate social first principles that were acontextual truths. H.L.A. Hart characterizes legal objectivism as an approach which linguistically attempts to identify "certain features . . . as always necessary and always sufficient conditions for the use in all contexts of the word. . . ." Winter quotes Rorty as holding that the task of legal theorists, then, like that of metaphysicians of old, is a sort of "theory-construction" that aims at a convergence of theories. The content of this limit approximates the Platonic eidos of Justice: a normative reality that is eternal, stable and unchanging. Hence "the dominant methodology of legal reasoning [is one which abstracts] meaning from context and [reduces] it to principles or rules." Deduction, in law as in science, becomes a matter of unpacking increasingly more precise applications always already there, folded into the universal, basic principles. Until these more precise applications are formulated, however, a legal version of what the theory of [*1760] epistemological reduction calls "bridge laws" is needed. These are laws which enable us to translate from one system to another: in Felix Cohen's words "a body of learning from which we can predict that what looks like a straight story or a straight sale from one standpoint will look like a crooked story or a crooked sale from another." If this cannot be done, the deductive-nomological methodology implicit in legal formalism cannot be carried out.

But according to a social theory based on the dynamical systems theory discussed earlier, the principles by which societies organize themselves articulate the boundary conditions that determine the behavior of and interrelationships among the system's components. While the environment is stable these structuring schemata operate silently, much like a properly functioning channel of communication. In other words, when things don't change much, it is possible in the short term to pretend that context and time don't matter. One can afford to assume that no causal relationships exist either between the system and its environment, the system and its subsystems, or among the subsystems. During stable times, then, the pretense of objectivism is perceived not as pretense, but as eternal truth.

Robert Cover refers to this process of making transparent the cultural commitment that is the true source of jurisgenesis as its "objectification." But timeless, contextless principles are illusory because (1) the relationship between societies and their environment does contain causal relationships, and (2) the environment will eventually change. As legal realists emphasized, the timely and particular cannot be ignored.

When changes occur quickly, the pretense of objectivism is exposed. The fatal temptation, however, to which both legal realism and philosophical relativism succumb, is to assume that the only alternative to objectivism is mere subjectivism. The remainder of this essay proceeds from the viewpoint of a third alternative: that truth and meaning are "known only through the praxis that creates it," an activity that both shapes and is shaped by the culture in which it is embedded. As the [*1761] environment changes and becomes more complex, the principles according to which the system is structured fail to accurately map the context. As mentioned earlier, far from equilibrium a threshold is reached, and the society must reorganize and renew itself by producing richer (more information-laden) principles that can correctly articulate the complexity of the environment. Only systems "rich in disorder and surprise" can do so. Those that cannot die out.

IV. A Safe-Fail Utopia

A. Process, Not End State

As an alternative to the traditional "utopian end state of other static theories of utopias," Robert Nozick proposes a notion of a utopian process. Beginning with the assumption that since people are different there can be no single detailed plan ideal for each, he suggests that a true utopia would then be a meta-utopia, a "framework for utopias." This process-oriented utopia would entail the specification of an environment in which individuals would be able to "pursue and attempt to realize" their more specific versions of utopias and would be able to "leave or slightly modify the ones they don't like (find defective)." Thus, specific experimental communities will emerge and evolve; some will flourish and reproduce; others will split or struggle along, and still others will be abandoned. All the while, the meta-utopian framework will continue in effect. While Nozick nowhere refers to "resilience," that is his ideal, for by designing a state whose overriding principle is its ability to accommodate change (i.e., survive fluctuations), the overall viability of the society is assured. Nozick claims that his proposals for a "minimal state" would constitute such a
meta-utopian framework. Nevertheless, our discussion above of the need for an appropriate level of coupling among the subsystems would seem to counsel more than a bare libertarian system. Under this view, the most enduring society would not be the classically utopian, "ideally" perfect society. Social and legal theory would assume that all societies will inevitably be subjected to perturbations and, to that extent, "fail" by departing from their original design. A more desirable society would absorb these perturbations and evolve, thereby making its failures "safe." Safe-fail societies (1) are spatially and temporally heterogeneous, (2) contain flexibly coupled subsystems (institutions, for example), and (3) are flexibly coupled to their environments. These traits make them open, engaged, and dynamic societies which are characterized by resilience, not stability.

B. Safe-Fail = Error-Friendly

According to Holling, if the notion of resilience applies to society at all, it counsels a safe-fail strategy "that optimizes a cost of failure and even assures that there are periodic 'minifailures' to prevent evolution of inflexibility." The goal of this sort of society, then, would be to ensure its own survival: a form of metastability which cannot be achieved without disorder at the level of the subsystems. This implies that societies should be flexibly organized. Disorder and surprise should be recognized as a means of renewal. Such a "dynamic balance" can defuse fluctuations and thereby achieve "a metaregime of balanced transformations, more or less in permanence.

Milan Zeleny and Norbert Pierre suggest that the role of social manager is, accordingly, to stimulate the growth of a network of decision processes, systems, programs, and rules, that is to say, an organization which may be considered effective in attaining institutional objectives. Since one of these objectives is the continuous self-renewal of the autonomous dynamic unity of the organization, the network of decision processes must produce components capable of recursively generating the same network through their interaction. In this sense, a manager is the catalyst rather than the designer of an organization.

One need only think of Plato's Guardians to realize that utopian leaders have traditionally been conceptualized as designers.

C. Diversity

Since "the more uncertain an environment potentially could be, the more would biological systems have diversified to dissipate that information," it follows that where there is no uncertainty there is no need for diversification. Diversity, versatility, variability, and variety all "represent (or, as reflected in object system behavior, measure) environmental uncertainties" and correlate positively with resilience. Thus, social diversity is not something to be lamented; on the contrary, spatial and temporal heterogeneity should be encouraged so as to ensure metastability -- the system's ability to process increasingly complex environmental information. In other words, the meta-utopian ideal is a stew rather than a melting pot. In such a society, religious and racial differences would be encouraged, along with the local disorder they entail. Legal structures such as elections and constitutional amendments that anticipate and thereby enable the system to absorb perturbing changes would be incorporated.

If the homologous dynamics of a dissipative structure rather than the structure's individual components preserve its identity, a society patterned in a similar fashion would emphasize resilience and the prevention of inflexible structures rather than caudillismo (the proverbial man on the white horse). The overriding concern of legislative bodies in such a society would be to ensure an optimum amount of coupling both among the subsystems and between the society and the rest of the world. An example reflecting such goals can be found in the discussion on "factions" in the Federalist Papers. Current public discussions about the appropriate relationships between the military and industrial complexes, or between Church and State, also reflect this concern. Both a caste system like India's and total laissez-faire economic arrangements would be rejected as examples of too loose coupling. Rigid trade protectionism or efforts to minimize cultural interaction on the grounds that such contacts amount to "cultural imperialism" would similarly be interpreted as attempts to institute spatial homogeneity and on this account would be rejected as too close coupling. An appropriate level of free trade, on the other hand, would be encouraged. A spatial and temporal heterogeneity promoted by both easy individual career changes as well as vigorous mobility among classes would be the desired norm.

D. Crisis Management

For a society that optimizes the cost of failure by ensuring periodic minifailures, crisis management may not be the bane it is usually claimed to be. Periodic upheavals such as those experienced by the United States in the 1960s might
even ensure the renewal of the society's metastability. The danger of such minfailures lies in the temptation to eliminate disorder altogether by imposing a rigid controlling structure. Indeed, it is pertinent to the main thesis of this paper that most utopian literature, from Plato onward, has been written during periods of political crisis.

The achievement of metastability implies welcome of the inevitability of change. Changes will occur as alterations of the existing relationships among the subsystems -- changes in the micro-order. The attempt to preserve the micro-order from any change would only guarantee the disintegration of the overall system. I do not mean to imply that all resilient systems are *eo ipso* good. Resilience is suggested only as a necessary condition for evolution and survival -- a condition for the most part lacking in utopian literature. One would have to thoroughly examine other characteristics incorporated into the overall dynamics of the social system before evaluating the system. The important point, however, is that it is at the level of overall dynamics that a society should be evaluated. In our dealings with social structures we must realize that there are three levels involved: the subsystems, the overall system, and the context or environment. One needs to be very clear at what level instability, disequilibrium, and change are desirable, and at what level the dynamics should persist unchanged.

V. Redundancy and Legal Narratives

In legal theory the move away from formalism began with the legal realists' emphasis on the need to recognize the particularity of meaning and appeal to empirical facts when discussing issues of law. Karl Llewellyn's call for "situation sense"  and Felix Cohen's critique of formalism [*1765] as "transcendental nonsense" [*140] are illustrative of this change. Contemporary debate on the role of narrative in law likewise implicitly acknowledges the significance and ineliminability of rhetoric, context-embeddedness, concreteness, particularity, timeliness, and historicity in law. In other words, both the early legal realism and current Law and Literature movements announce the death of Modernity and the Platonic ideal. [*142] This section examines the role of jurisdictional redundancy in promoting situation sense.

"Redundancy, or information density, is a measure of all the constraints placed upon a sequence which makes possible error detection and correction." [*141] Any system that builds -- in redundancy to improve reliability, therefore, implicitly acknowledges the inevitability of failure and error -- and the consequent need for (and value of) resilience.

Two forms of redundancy exist. Lila Gatlin characterizes them as *context-free* and *context-sensitive*. The former depends on deviation from *equiprobability*, that is, on the likelihood of a phenomenon's occurrence. Repetition provides a message with context-free redundancy to improve the accuracy of its transmission. The simpler the repetitive sequence, the more reliable message transmission will be. The price paid to combat error using this form of redundancy, however, is high: potential message variety is limited dramatically. A system relying exclusively on context-free redundancy might achieve a high degree of stability, but by limiting information fail miserably with respect to resilience. The much more efficient context-sensitive redundancy, on the other hand, consists in divergence from independence. [*146] It can be achieved by any ordering process such as that "brought about by the constraints of a language or any organized information storage process." [*145] Syntax and the Dewey Decimal System are examples of constraints that provide context-sensitive redundancy. The potential for message variety using this form of redundancy is unlimited and inexpensive. A system relying on context-sensitive information has devised for itself a source of disorder and surprise -- that is, a rich source of information. Such a system has the capacity for resilience. [*146] Gatlin argues that the explosion of information [*1766] achieved by vertebrates is the result of a crucial two-step innovation: vertebrates (1) stabilized and kept context-free redundancy fairly constant, then (2) allowed context-sensitive redundancy (via the language of DNA) to increase. [*147]

A similar dynamic is at work in the United States' judicial system. Adjudication, Cover notes, entails both dispute resolution and norm articulation. "[T]he Constitution's due process clause[requirement] that dispute resolution be accompanied by reasons . . . together with even a weak consistency requirement . . . will necessarily entail the articulation of general norms." [*146] Cover is primarily concerned with the role of jurisdictional redundancy, [*146] usually considered a malformed anomaly, in norm articulation. Cover appreciates that jurisdictional redundancy is not only a product of institutional evolution, [*109] but also a force promoting system reliability. [*151] Although Cover notes the parallel functions of redundancy in law and information systems, [*152] he does not explicitly distinguish between the context-free and context-sensitive versions, or their implications.

The arena of dispute resolution garners its stability from the "weak consistency" contributed by a fairly constant system of precedent. The precedent stream functions as context-free redundancy. [*155] Blind adherence to precedent, however, is not enough. A system that required unvarying adherence to previous decisions might achieve a fair amount of stability in the short term, but would have nothing new to say in the end. Martha Minow chastises precedential rea-
soning for *typically* using encrusted analogies which "telesc[ope] the creative potential of a search for surprising similarities into a narrow focus on prior rulings that could 'control' the instant case." n154 Despite the truth of Minow's criticism, the flexibility that the common-law tradition of precedent makes possible, at [*1767] least in principle, is for that very reason superior to the codified -- and therefore more orderly and stable -- legal system of the Napoleonic tradition. n155

The role of redundancy in norm articulation is not as clear as its role in dispute resolution. n156 It is my claim that norm articulation -- and the institutional evolution which such articulation achieves -- is a function of the sensitivity to context present in jurisdictional redundancy, particularly those versions which Cover calls strategic choice and diachronic or sequential redundancy. The ambiguity and indeterminacy of all narratives, including legal ones, are also significant in norm articulation, as current theoreticians are discovering. n157 The remainder of this Article will be devoted to an examination of jurisdictional redundancy and the role of narrative in law.

Cover identifies three types of redundancy in the American court system:

1. synchronic redundancy: allowing "more than one forum to be invoked simultaneously;" n158

2. strategic choice redundancy: the ability "to choose the most favorable from among two or more forums in terms of expected return;" n159 and

3. diachronic or sequential redundancy: permitting "recourse to the courts of another system after one system has adjudicated and reached a result." n160

Although widespread in the American court system, synchronic redundancy is frequently unrealized, Cover argues, because of its costliness: n161 "[m]ost clear cases of synchronic redundancy ultimately abort." n162 It seems obvious that this costliness is due to the potential of synchronic redundancy to subvert precedent and therefore the consistency and stability of dispute resolution. But, while precedent and procedural [*1768] redundancy have supplied the judicial system with a constant supply of context-free redundancy, context-sensitive redundancy has expanded dramatically through both strategic choice and diachronic redundancy, on the one hand, and narrative on the other. As with the vertebrates, n163 this formula has allowed an explosion of information. In the United States legal system, this is expressed as norm articulation that provides its unique resilience.

If context-sensitive redundancy is achieved by means of any "ordering process," n164 the pervasiveness of strategic choice in the American structure of courts offers a type of redundancy that serves as a clear source of disorder and surprise while at the same time improving "error detection and correction" and thus promoting reliability. n165 It achieves the latter because being limited to only one source for norm articulation is like relying only on context-free redundancy: the cost would be high because errors would be suffered widely. The disorder contributes to norm articulation by expanding the variety of norms that can be expressed. Strategic choice becomes a source of system renewal when it results in the articulation of new norms. This occurs when new information is generated as a consequence of the uncertainty and ambiguity present in the "variations in interpretation" n166 possible depending on whether a state or federal forum is chosen. n167 These forums then reflect their particular contexts.

A new norm, confirmed *diachronically*, is thereby reinforced. n168 At the same time, the iterative process reduces the likelihood that the newly articulated norm is a just a local aberration, n169 such as background noise. Cover quotes Cardozo in this connection as holding that by this process "the accidental and the transitory will yield the essential and the permanent." n170 Despite the modern and formalist spirit permeating this sentence, it is clear that a form of context-free redundancy is at work. Diachronic redundancy also allows norms to be tested over a limited domain without risking nationwide losses. n171 The United States offers one example. In many situations, Congress or the Supreme Court could announce a uniform federal rule. Instead, a great deal of legislative autonomy [*1769] is left to the states to experiment. This results in a proliferation of norm-generating centers. n172 Moreover, where claimants have access to more than one forum there is an implicit "recognition of the truly open, tentative and transitional status of norms." n173

More important with respect to norm articulation and systemic resilience, however, is what happens when redundancy yields nonconfirmation -- the reversal of an established norm. One obvious consequence of this is that jurisdictional redundancy allows change to occur in different ways and at different places, n174 that is, without a top-down imposition of pattern. n175 Totalizing control is lessened, and distributed control augmented, where nonconfirmatory diachronic verdicts occur. For example, fifty-one legislative authorities and several hundred judicial authorities pronounce upon conduct crossing jurisdictional lines. The ensuing jurisdictional conflict may yield confusion among them; thus, non-confirmation results. n176
Diachronic non-confirmatory decisions accelerate norm articulation. Every episteme has its conceptual frame, embodying those "views so settled that they are not thought to be views," which provide the contextual background that specifies meaning. H.L.A. Hart refers to this frame when he notes that the "core of settled meaning" of some general words such as "vehicle" is intimately connected to the similarity of context in which they recur. Since legal contexts vary, "deductive reasoning, which for generations has been cherished as the very perfection of human reasoning, cannot serve as a model for what judges, or indeed anyone, should do."

[*1770] Just as phenotypes are genotypes as decoded by the environment, meaning emerges when a string of linguistic symbols is decoded by shared experience. But de novo interpretations of words and phrases do not exist: there is always a body of pre-existing meaning to come to terms with. Hans-Georg Gadamer speaks of prejudices, Artigiani of "cognitive maps." Linguistically and socially, this sedimentation of meaning provides the ground for the context-free redundancy of precedent. Quite simply, in similar situations we reiterate previously learned messages. Indeed, this process is not even thought of as interpretation. That sedimented meaning may reinforce "views that go without saying" is merely evidence that channels of communication sometimes operate silently.

Because of the process of degeneracy in neuronal organization, even during stable times the match between the individual's perception of reality and the environment is never exact. During changing times, the gap quickly grows wider between the sedimented meaning and the changing environment that meaning allegedly maps. Far from the equilibrium point, the "views that go without saying" are no longer communicated silently: the differences between what the views represent and what they mean in the current context become salient and begin to call attention to themselves. When this occurs, the pretense of objectivist is exposed and the previously silent frame and context themselves become the transmitted message, thereby expanding the boundary conditions and allowing new messages with broader contexts to be mapped. In terms of dissipative systems theory, when a critical threshold is reached, dynamical systems may evolve through phase changes which redraw the boundary conditions and thereby redefine the relationships among, and therefore the meaning of, the subsystems.

Norm articulation of landmark rulings functions analogously to dynamical social systems. Depending on whether state or federal forums are chosen, variations of interpretations occur. As this process iterates, the semantic gap becomes wider until eventually the process of concrete puzzle solving produces an anomaly, as happened in Brown v. Board of Education. Ultimately, nonconfirmation takes place, exposing and overturning the sociopolitical context of each jurisdiction by allowing the context to become the message and not simply the frame that goes without saying. This dynamic can be consciously applied. Witness the litigation strategy that led to Brown, in which "the advocates slowly expose[d] the courts to ever greater accretions of experience that [did] not fit the reigning legal paradigm until, ultimately, the courts [were] led to reformulate the available models to fit the experiences they had previously ignored."

[*1771] Jurisdictional redundancy can drive the system far from equilibrium and expose the conceptual background each interpretation reflects -- the scripture that underpins every decalogue. New interpretations can then emerge; that is, a new scripture can be written, embodied in newly articulated norms.

This process is possible only because of redundancy's Janus-faced nature. For example, "Weaver suggests that a 'noisy' message will be more surprising and hence will convey more information," while Shannon argues that maximum information is conveyed by minimizing noise. It seems plausible to hypothesize that the context-free redundancy provided by precedent is akin to Shannon's concept of information in that both fill "the basic human need to simplify and to make our world familiar and unsurprising." Similarly, Cover speaks approvingly of the "jurispathic" function of the courts that arises from "the need to suppress law, to choose between two or more laws" as at least acknowledging the "nomos integrity of each . . . community of interpretation." But since contexts are not always commensurable and the nomos of one community can and often does sound like noise to another, Cover ultimately agrees with Shannon that noise should be minimized.

The ordering process of jurisdictional redundancy, on the other hand, is more Weaverian in that even the minimal constraints of jurisdictional redundancy's ordering process allow meaning to be reinterpreted depending on variations in context. Diachronic redundancy in particular is able both to increase reliability, that is, reduce error and surprise, and, at the same time, create the potential for an information explosion. Cover disagrees with those who claim that the jurispathic function of courts is due to "unclear law," rather than "too much law." He suggests instead that stating "the problem as one of unclear law or difference of opinion about the law seems to presuppose" the possibility of a privileged hermeneutic method. Jurisdictional redundancy highlights the impossibility of such a method, and therefore shows that there is no such thing as the law.
The coupling characteristic of complex systems is a rich source of a necessary condition for resilience: information. As previously described, very loose coupling prevents innovations which appear in one subsystem from being picked up by another. Cover's point that synchronic redundancy aborts because forums adjust for the judgments of others illustrates the flow of information characteristic of redundant systems. Coupling that is too tight, such as rigid hierarchical decision making, damps any potential information coming in from the environment. If coupling is either too tight or too loose, the system fails to be responsive to changes in the environment, thus losing resilience and becoming senescent. The more complex a system, therefore, the more important the communication links among subsystems and between the system and its environment.

Jurisdictional redundancy seems to embody coupling that is "just right." Forum shoppers "become the carriers that polinate [sic] one system of courts with the information about another system's experience." In effect forum shoppers force courts to circumvent modernity's emphasis on abstract deduction and focus instead on more concrete problems such as potentially conflicting outcomes in other jurisdictions.

Strategic choice promotes decentralized decision making that is uniquely sensitive to the environment. When a number of decision centers exist, quick production of context-sensitive information reflecting "simultaneous, interactive effects of decision and environment" becomes possible. Since the results of these effects are a function of time, the rules that govern the coordination of decisions are not "substance-neutral emenations [sic] of formal structures"; rather, they exhibit a distributed control mechanism that is sensitive to salient social conflicts. Cover notes that the labor reform of the 1920s and 1930s and the civil rights reform of the 1960s and 1970s were largely results of easy access to the federal courts.

Jurisdictional redundancy is sensitive to particularity, concreteness, and timeliness, and thus responds to Karl Llewellyn's call for "situation sense." Unlike Aristotle, both Plato and the utopias he inspired, as well as Modernists like Descartes and the legal formalism they spawned, are examples of what happens when thinkers not only lack situation sense but believe contextless universal principles are there waiting to be discovered and implemented. More than just contextualism, situation sense is experientially based, not "eternal nor changeless, nor everywhere the same." That is, from appealing to an abstract formal rule, situation sense reflects both the dynamic, particular nature of experience and the value-laden process by which humans categorize experience. Serving in this latter capacity, situation sense articulates the frame, the cognitive map, the prejudices in terms of which meaning is decoded. Llewellyn's advice: "see it fresh" counsels of the need to avoid formalism, the need to give the particular and timely their due. "See it whole" emphasizes the need to appreciate the framework in which the problem is formulated and constituted.

It seems clear that the twentieth century's rediscovery of context and time is also the driving force behind the "narrative turn" in legal theory. For example, Cover argues that the law's prescriptions are located in a narrative discourse that gives it meaning. "For every constitution there is an epic, for each dialogue a scripture." Jurisgenesis, Cover argues, takes place primarily through a narrative. By contrast, Winter disagrees with the "law as narrative" metaphor, claiming that only shared social experience carries the persuasive force that creates meaning. Sedimented meaning, the semantic version of deviation from equiprobability, reflects a shared social experience. What gives narrative its significance, according to Winter, is its transformative potential, which inheres in (1) the empathetic potential of concrete imagery, and (2) the ambiguity and indeterminacy of narrative's natural language.

From either point of view, it is clear that abstract reasoning lacks the potential to make someone look at an issue from a different perspective, that is, to decode it from within a different context. Martha Minow has persuasively argued this point. Minow quotes Audre Lord in support of her claim that we can change perspective only if we are made to "[s]ee whose face [difference] wears." To encourage this change of perspective, Minow argues, "the Court can, and should, seek out alternative views in amicus briefs [such as] the autobiographical accounts of men and women who believed their lives had been changed by the availability of legalized abortion." She also espouses "the use of vivid, factual detail," like that used in "the famous 'Brandeis brief' in Muller v. Oregon," as a way to break out of "formalist categories." She also cites J. Grimshaw's claim that "[c]oncreteness requires that one experience or vividly imagine such consequences, either to oneself or to others, and judge on the basis of that awareness." Using fresh analogies enables judges to sympathize, if not quite identify, with different contexts and experiences. If grounded in the particular and concrete, unfamiliar analogies allow us to see similarities in things traditionally conceived of as different. Unexpected analogies, particularly those making connections across contexts, "scrape off barnacles of thought" and "challenge views so settled that they are not thought to be views."

In each of these cases the aim of using concrete imagery and fresh analogies is to induce judges to recognize that criteria used to identify 'similar' and 'different' reflect the particular shared experience from which they are formulated.
In other words, the aim is to bring the "background" of a forum -- its context -- to the fore and make it the issue being explored. This will, in effect, self-consciously accelerate the dynamic evolutionary process described above.

The polysemy inherent in narrative makes it a far more suitable vehicle for norm articulation than abstract principles; it allows prescriptive texts to change their meaning so as to better map changed social understanding. There is sufficient ambiguity in any narrative to allow for the reinterpretation necessary for resilience. \[n225\]

Narratives are systematic and structured, but their semantics are not fixed. "The same concepts, rearranged, exchange, contradict, or invert their values, and their functions, until the resources of this new combinatorics are dissipated or simply exhausted." \[n226\] The indeterminacy of the natural language in narrative is not absolute because polysemy is due not to individual subjectivity but to different social experiences. \[n226\] The ambiguity of language, then, is due not to radical incoherence but to a multiplicity of coherent systems. \[n228\] Words cannot mean anything to anybody because their already sedimented meaning embodies time, context, and history. \[n229\] Despite sedimentation, that is, there is a \[[*1776]\] lack of a one to one "correspondence between content of narrative and a real world referent" \[n231\] that gives flexibility to the stories we tell about ourselves.

Having only one source of norm articulation would conceal the ambiguity and difference of meaning so essential to the generation of information that norm articulation represents. Because of the due process requirement that judges give reasons backing up their verdicts, \[n232\] jurisdictional redundancy, in particular diachronic redundancy, highlights the ambiguity of meaning that reflects the different contexts from which that meaning is decoded. Reinterpretation, and therefore systemic resilience, thus becomes possible.

It has been my claim that, enthralled by the Platonic eidos, most social theorists have viewed stasis as an ideal goal. Such societies' inability to renew themselves guarantees their ultimate degeneration and extinction. Considerations drawn from the theory of dissipative structures, in particular their openness and circular causality, suggest that disorderly, redundant systems are much more desirable. Their context-sensitivity enables them to renew themselves and achieve a metastable resilience that is safe-fail.

Recent developments in the philosophy of science, and considerations drawn from features characterizing complex dynamical systems such as dissipative structures, in particular their openness and coupling, as well as their capacity to process information, all suggest that the ideals of absolute Objectivity and Truth -- and perfect Societies -- are unattainable because the model of Reason from which they issue ignores the realm of the particular, the contextual, and the temporal. Once these are incorporated into a broader notion of reason, one can begin to understand reason dynamically and so an alternative to the objective-subjective dichotomy opens up. \[n233\] One comes to appreciate that the concept of truth makes sense only within the cultural milieu which gives it meaning, that \[[*1777]\] culture, history, and tradition serve as the contextual framework in terms of which events and phenomena are interpreted as meaningful.

During quiescent periods legal precedent fulfills the function of "stabilizing contexts." For a society to evolve and survive, however, it must also be capable of reinterpreting sedimented meaning, thereby creating new meaning which better maps a changed environment. It has been my claim that the procedural redundancy of the United States' judicial system provides the context-sensitive information that in turn gives the system the resilience which this newly reinterpreted meaning allows.

It almost seems that, despite the vagaries of legal scholarship, ranging from legal formalism to the CLS movement via legal realism -- all of which adhere to the Platonic ideal and Modernity's model of reason even as they reject them -- and despite the widespread belief from all camps that jurisdictional redundancy is an anomaly devoutly to be shunned -- a belief which is a consequence of adopting the objective-subjective dichotomy and which this dichotomy could almost have predicted -- the American legal system's stubborn retention of the anomaly betrays the society's de facto repudiation of the Platonic ideal and the society's commitment to a safe-fail system. Indeed, the creation of meaning through narrative that jurisdictional redundancy affords is perhaps a main reason for the resilience and adaptability of the United States' legal system.

Legal Topics:

For related research and practice materials, see the following legal topics:
International Trade LawGeneral OverviewTrademark LawLikelihood of ConfusionNoncompeting ProductsParodies & Satires

FOOTNOTES:


n3  See H. ROSS, UTOPIAS OLD AND NEW 159 (1973).

n4  See A. BESTOR, supra note 1, at 141-59 (discussing the importance of universal education in achieving the social objectives of Utopianism, particularly the views of Robert Owen and William Maclure); id. at 168-70 (describing the nonsectarian nature of Owen's schools and religious freedom in his communities).

n5  See, e.g., E. BELLAMY, LOOKING BACKWARD 2000-1887, at 76 (1887); T. MORE, UTOPIA 13, 64 (P. Turner trans. 1965); THE REPUBLIC OF PLATO 16 (bk. I, 338d-339e) (A. Bloom trans. 1968); B.F. SKINNER, WALDEN TWO 23, 55 (1948); see also H. ROSS, supra note 3, at 52 (discussing communal living in The Republic).

n6  See, e.g., E. BELLAMY, supra note 5, at 66; T. MORE, supra note 5, at 86-87, 128; THE REPUBLIC OF PLATO, supra note 5, at 95-96 (bk. III, 416d-417a); B.F. SKINNER, supra note 5, at 51-52, 65.

n7  See, e.g., E BELLAMY, supra note 5, at 72; T. MORE, supra note 5, at 64; B.F. SKINNER, supra note 5, at 57-59.


n9  See Holling, Resilience and Stability of Ecosystems, in EVOLUTION AND CONSCIOUSNESS: HUMAN SYSTEMS IN TRANSITION 73, 89-90 (E. Jantsch & C. Waddington eds. 1976) [hereinafter EVOLUTION AND CONSCIOUSNESS]. As used by Holling, the phrase "fail-safe" is synonymous with "fail-proof."

n10 Prigogine, Order through Fluctuation: Self-Organization and Social System, in EVOLUTION AND CONSCIOUSNESS, supra note 9, at 93, 93.

n11 I. PRIGOGINE, FROM BEING TO BECOMING: TIME AND COMPLEXITY IN THE PHYSICAL SCIENCES 81 (1980); see also I. PRIGOGINE & I. STENGERS, ORDER OUT OF CHAOS 287 (1984) (noting that the concepts of order and disorder are both more complicated than originally thought).

n12 See Prigogine, supra note 10, at 123-24 (noting that "[i]f the perturbation exceeds [the] power of integration, the social system is destroyed or gives way to a new organization").

n13 See Pierre & Zeleny, Simulation of Self-Renewing Systems, in EVOLUTION AND CONSCIOUSNESS, supra note 9, at 150-51.
n14  See Prigogine, supra note 10, at 121 (explaining that above a critical level of fluctuations the average is caused to shift to a higher level of complexity).

n15  See Holling, supra note 9, at 81.

n16  See id.

n17  See 1 K. POPPER, supra note 8, at 35.  For a brief explanation of Plato's belief in unchanging, eternal Ideas or Forms, see id. at 25-27.

n18  See id. at 25-30.

n19  Holling, supra note 9, at 83.

n20  See THE REPUBLIC OF PLATO, supra note 5, at 99 (bk. IV, 422a) (observing, via Socrates, that wealth and poverty are to be avoided in the ideal city because each contributes to innovation); see also infra text accompanying note 36.

n21  See THE REPUBLIC OF PLATO, supra note 5, at 63-80 (bk. III, 396a-401d).

n22  See id. at 113 (bk. IV, 434b).

n23  See id. at 48 (bk. II, 371b-d).

n24  1 K. POPPER, supra note 8, at 49.  For further analysis of Plato's political program, see id. at 86-87.

n25  See infra notes 120-38 and accompanying text; Jantsch, Evolution: Self-Realization through Self-Transcendence, in EVOLUTION AND CONSCIOUSNESS, supra note 9, at 56-58; cf. 1 K. POPPER, supra note 8, at 171-75 (contrasting the nature of a closed society with that of an open one).

n26  Since systems are characterized by levels of organization, strictly speaking only aggregates (not systems) can be completely homogeneous.  See infra notes 50-53 and accompanying text.

n27  See Holling, supra note 9, at 83.

n28  Prigogine, supra note 10, at 125 (observing that "the increase of entropy production in turn renders possible the appearance of new instabilities"); see also Jantsch, supra note 25, at 60 (defining entropy production as an energy exchange with the environment).

n29  See Holling, supra note 9, at 83.
n30 Id.

n31 Id. at 78-79.

n32 Id. at 83-84.

n33 See Jantsch, supra note 25, at 66.

n34 See Holling, supra note 9, at 83-84 (explaining that the strategy of evolution is persistence through flexibility and describing the balance between resilience and stability).

n35 1 K. POPPER, supra note 8, at 36.

n36 See id. at 86.

n37 See id. at 46.

n38 Holling, supra note 9, at 81.

n39 See THE REPUBLIC OF PLATO, supra note 5, at 255-61 (bk. IX, 574d-580b); 1 K. POPPER, supra note 8, at 40-44.

n40 See T. MORE, supra note 5, at 70.

n41 Citizens of Utopias typically eat in a communal dining hall at a fixed hour. See, e.g., E. BELLAMY, supra note 5, at 116; A. BESTOR, supra note 1, at 168; T. MORE, supra note 5, at 68; B.F. SKINNER, supra note 5, at 46-50.

n42 See supra note 6 and accompanying text.

n43 M. MORELLY, CODE DE LA NATURE 87-88 (E. Dolleans rev. ed. 1910) (1755) (insisting that essential goods and basic amenities should be warehoused and distributed to citizens in proportion to their numbers and needs, but never sold); see also R. ROSE, GRACCHUS BABEUF: THE FIRST REVOLUTIONARY COMMUNIST 331 (1978) (explaining that Francois "Gracchus" Babeuf advocated the abolition of private property).

n44 See T. MORE, supra note 5, at 78. A similar feature appears in Etienne Cabet's Voyage en Icare 151 (F. Rude rev. ed. 1952) (1855) (observing that the Icariens all must wear uniforms).
n45 See T. MORE, supra note 5, at 120-22.

n46 See id. at 125.

n47 Id.

n48 Id. at 120 (explaining that anyone believing that the soul dies with the body forfeits "his right to be classed as a human being," since he has thereby degraded his immortal soul to the level of an animal's body).

n49 Id. (reasoning that one not believing in the afterlife will have no teleological hopes nor fear of divine punishment after his death and, lacking such fear and hope, will pursue only his own selfish ends; such a one is not permitted to hold any public appointment, nor to defend his beliefs in public).


n51 THE REPUBLIC OF PLATO, supra note 5, at 113 (bk. IV, 434c).

n52 T. MORE, supra note 5, at 74, 78 (explaining that Utopia has two senior classes, "Stywards" or District Controllers, and "Bencheaters" or Senior District Controllers).

n53 For an extended examination of this kind of causality, see Roque, Self-Organization: Kan's Concept of Teleology and Modern Chemistry, 1985 REV. OF METAPHYSICS 107.

n54 Coupling can be characterized as "the joining of systems." Jantsch, supra note 25, at 67. An open system engages in a great deal of this "exchanging matter and energy with the outside environment." Prigogine, supra note 10, at 95.

n55 See Prigogine, supra note 10, at 123-24.

n56 Jantsch, supra note 25, at 67.


n58 See Prigogine, supra note 10, at 95 (explaining that in classical thermodynamics "equilibrium structures" -- e.g., ordinary crystals-- persist only in isolated or closed systems, which do not exchange matter and energy with the outside environment); Jantsch, supra note 25, at 38 (explaining that engineering systems paradigms illustrate that a structural state may be preserved through the creation and maintenance of "static system boundaries").

n60  See T. More, supra note 5, at 25.

n61  See id. at 101, 109.

n62  See id. at 69.

n63  See id. at 83-84.

n64  See id. at 101.

n65  See id. at 101.

n66  See Klein, L’Urbanisme utopique de Filarete a Valentin Andreae, in LES UTOPIES A LA RENAISSANCE 209, 212-13 (Presses Universitaires de Bruxelles 1963) (explaining that the preeminent geographic characteristic of utopias is their isolation); see, e.g., Brucioli, Dialogi, Folio 36r, Fol. 57v (Venice 1526) (describing the walls, moats, ditches, and desolate terrain isolating the utopian city); Zuccolo, Dialoghi 168 (Venice 1625) (recounting that the utopian denizens consider foreigners to be a corrupting influence upon the city’s good customs); Vairasse, Histoire des Scyarambles (Paris 1675) (explaining that a citizen sent on an embassy by his utopian city must leave behind three of his children as hostages to secure his return).

n67  See T. MORE, supra note 5, at 84.

n68  Id.

n69  See THE REPUBLIC OF PLATO, supra note 5, at 113 (bk. IV, 434b-c).

n70  See id. at 111-12 (bk. IV, 433a-e).

n71  See id. at 113 (bk. IV, 434b-c).

n72  Id. at 112 (bk. IV, 433e).

n73  But see supra note 37 (suggesting that this segregation promotes class warfare).

n74  See Mumford, Utopia, the City and the Machine, in UTOPIAS AND UTOPIAN THOUGHT 7-9 (F. Manuel ed. 1966).
n75  See infra note 147 and accompanying text.

n76  Holling, supra note 9, at 89.

n77  Id. at 90. Holling defines "stability regions" as those sets of conditions in which a given point of equilibrium serves as the norm. When the set of circumstances changes so drastically or so quickly that the former point of equilibrium is no longer the norm, then a new stability region is defined. Id. at 87-89.

n78  See I. PRIGOGINE, supra note 11, at 20; I. PRIGOGINE & I. STENGERS, supra note 11, at 58-62, 73-74.

n79  See Holling, supra note 9, at 90.

n80  PLATO, THE TIMAEUS 40 (H. Lee trans. 1965) (stating that "sensible things are objects of opinion"); see 1 K. POPPER, supra note 8, at 29-30.

n81  See supra text accompanying note 36.


n83  Id. at 27.

n84  Id. at 33.

n85  Id. at 34.

n86  Id. at 33.

n87  Id. at 34.

n88  Id. at 20.

n89  Id. at 34-35.


n93  Winter, supra note 91, at 1441, 1455; see also Schlag, The Problem of the Subject, 69 TEXAS L. REV. 1627, 1657 (1991) (noting the Langdellian tendency to reduce law to "a series of object-like features").


n95  Coppage v. Kansas, 236 U.S. 1 (1915).

n96  Winter, supra note 91, at 1459.


n98  Id. at 366.

n99  Id. at 369.

n100  Winter, Transcendental Nonsense, Metaphoric Reasoning, and the Cognitive Stakes for Law, 137 U. PA. L. REV. 1105, 1110 (1989). The first requirement is that principles not only be value-free in their mirroring of the world, but that they also be "objective," i.e., out there, not of our doing. The second is a formalist requirement of deductive entailment.

n101  R. RORTY, Pragmatism, Relativism, and Irrationalism, in CONSEQUENCES OF PRAGMATISM 160, 172 (1982). The correlation to Platonic ideals should be obvious.


n103  Cf. Winter, supra note 100, at 1172 (arguing that although some contextual problems may exist, "[t]here must be a cord of settled meaning" (quoting Hart Positivism and the Separation of Law and Morals, 71 HARV. L. REV. 593, 607 (1958))).

n104  See supra notes 76-81 and accompanying text for a discussion of initial conditions in scientific theory.

n105  See, e.g., J. ROUSSEAU, THE SOCIAL CONTRACT 49-62 (Cranston ed. 1968) (examining man in the state of nature before the establishment of civil society).
n106  Cf. 1 C. LANGDELL, A SELECTION OF CASES ON THE LAW OF CONTRACTS vi (2d ed. 1879) (arguing that, because "[l]aw, considered as a science, consists of certain principles or doctrines," gleaned from certain representative cases, mastery of the law requires the ability to apply those principles or doctrines consistently to any case).

n107  My thanks to Paul Wohlmuth for this observation.

n108  Hart, supra note 103, at 611. Timelessness and contextlessness -- sure signs of truth -- also make an appearance in axiology in general and ethical theory in particular. Even though Kant's distinction between noumena and phenomena signals the first crack in the epistemological mirror, his Categorical Imperative ("So act that thy maxim can become a universal law."), is prized precisely because it is devoid of concreteness. I KANT, THE FUNDAMENTAL PRINCIPLES OF THE METAPHYSICS OF ETHICS 21 (T. Abbot ed. 1926). Universalizability thereby becomes the essential feature of "the moral point of view." K. BAIER, THE MORAL POINT OF VIEW: A RATIONAL BASIS OF ETHICS vi-vi (1958) (arguing that moral judgments are statements of universally applicable "natural facts").

n109  Winter, supra note 100, at 1124 (referring to R. RORTY, CONTINGENCY, IRONY, AND SOLIDARITY 77 (1989)).

n110  Id. at 1228.


n112  Holling, supra note 9, at 89 (stating that, given a particular system, changes in the parameters of that system over time will necessarily affect the behavior of the components of that system).

n114  Cover, supra note 59, at 45.


n116  Winter, supra note 57, at 1601 (quoting M MERLEAU-PONTY, SIGNS 96 McCleary trans. 1964) (emphasis deleted)).

n117  See generally S. FISH, IS THERE A TEXT IN THIS CLASS? THE AUTHORITY OF INTERPRETIVE COMMUNITIES 343-57 (1980) (arguing that "[t]he discovery of the 'real point' is always what is claimed whenever a new interpretation is advanced, but the claim makes sense only in relation to [points] that had previously been considered the real one").

n118  See supra notes 54-74 and accompanying text.


n120  R. NOZICK, ANARCHY STATE AND UTOPIA 332 (1974).
n121  Id. at 312.

n122  Id.

n123  Id. at 316.

n124  Id.

n125  See supra note 25 and accompanying text.

n126  R. NORICK, supra note 120, at 26, 333 (describing the functions of the minimal state as a framework for utopia).

n127  See supra notes 54-74 and accompanying text.


n129  See Holling, supra note 9, at 90.

n130  Id.

n131  Jantsch, supra note 25, at 67.

n132  Pierre & Zeleny, supra note 13, at 161.

n133  Salthe, Sketch of a Logical Demonstration That the Global Information Capacity of a Macroscopic System Must Behave Entropically When Viewed Internally, 1990 J. IDEAS 54, 55.

n134  Id.

n135  See Jantsch, supra note 25, at 66.

n137 Recall calls for "law and order" in the late 1960s, for example.

n138 See supra text accompanying note 75.

n139 See K. LLEWELLYN, THE COMMON LAW TRADITION: DECIDING APPEALS 60, 121-57 (1960) ("Situation-Sense will serve well enough to indicate the type-facts in their context and at the same time in their pressure for a satisfying working result, coupled with whatever the judge or court brings and adds to the evidence, in the way of knowledge and experience and values to see with and to judge with.").


n141 See e.g., R POSNER, LAW AND LITERATURE: A MISUNDERSTOOD RELATION 9 (1988) (observing that legal texts, like literary texts, may be highly rhetorical).

n142 Legal realism, however, failed to recognize that it could not "escape the reflexive power of its own analysis." Winter, supra note 57, at 1616.

n143 L. GATLIN, INFORMATION THEORY AND THE LIVING SYSTEM 94 (1972).

n144 Id. at 87-94.

n145 Id. at 27.

n146 See Cover, Uses of Jurisdictional Redundancy: Interest, Ideology, and Innovation, 22 WM. & MARY L. REV. 639, 652-53 (1981) (arguing that redundancy within the trial process combines with the deductive powers of the factfinder to create an "accurate and truthful account of the event").

n147 L. GATLIN, supra note 143, at 99.

n148 Cover, supra note 146, at 643.

n149 That is, the various "concurrences" generated by the great multiplicity and overlapping of forums in the American judicial system. See id. at 640.

n150 See id. at 642.
n151 See id. at 649.

n152 See id.

n153 The American judicial system also provides context-free redundancy through the rules of procedure. Thus in the pretrial period the rules provide for depositions, interrogatories, and document production, although there may be substantial overlap in the ground covered. In trial, multiple witnesses and exhibits may present similar information in slightly different ways. Such redundancy serves an important error-correcting function. See id. at 653.


n155 I am indebted to J. Diaz-Asper for this observation.

n156 See Cover, supra note 146, at 645.

n157 For example, Stanley Fish comments:

[I]f there is no public way of setting marks that stand firm against interpretive manipulation, the rule of law -- of perfectly explicit and impersonal utterances -- is replaced by the rule of persuasion, the rule of "the litigant having at the time being the greater power of persuading the trier of fact."


n158 Cover, supra note 146, at 646.

n159 Id. at 647.

n160 Id. at 648.

n161 Id. at 646.

n162 Id. at 647.

n163 See supra note 147 and accompanying text.

n164 See supra note 143.

n165 See Cover, supra note 146, at 654.
n166 Id. at 646-47.

n167 Id.

n168 See id. at 675.

n169 See id. (arguing that when several legislative authorities articulate the same norm, it reduces the likelihood that the result is due to local error, prejudice, ideology, or interest).

n170 Id. at 644 (quoting B. CARDOZO, THE NATURE OF THE JUDICIAL PROCESS 35 (1921)).

n171 Id. at 673.

n172 Id.

n173 Id. at 680.

n174 Id. at 676.

n175 According to Henri Atlan, the superiority of organic decision-making systems over artificial systems stems from their ability to grasp without insisting on finality by accepting the existence of uncertainty and randomness. Atlan, Natural Complexity and Self-Creation of Meaning, in THE SCIENCE AND PRAXIS OF COMPLEXITY 173, 185-88 (1985). In the case of context-free procedural redundancy, agreement among witnesses indicates reliability, whereas contradiction between witnesses inserts an element of difference -- that is, noisy disorder and uncertainty -- that can generate valuable information. Cover, supra note 146, at 654.

Whether the "distributed control" exerted via the proliferation of norm-generating centers constitutes a "distributed agent" is a question that raises interesting issues with respect to Schlag's critique of the "problem of the subject." See Schlag, supra note 93; Schlag, "Le Hors de Texte, C'est Moi": The Politics of Form and the Domestication of Deconstruction, 11 CARDOZO L. REV. 1631 (1990); see also infra notes 204-05 and accompanying text.

n176 Cover, supra note 146, at 673-74.

n177 Minow, supra note 154, at 87.

n178 Hart, supra note 103, at 607; see also Winter, An Upside/Down View of the Countermajoritarian Difficulty, 69 TEXAS L. REV. 1881, 1911-13 (1991) (comparing Native American and European concepts of "religion" and the "sacred").

n179 Id. at 607-08.
n180 Jeremy Campbell tells the story of the daughter of Myron Tribus, of MIT, who, while traveling in Europe sent her parents a cable that read "PLEASE SEND ME FIFTY DOLLARS AMERICAN EXPRESS NICE LETTER OF EXPLANATION FOLLOWS LOVE LOU." Mrs. Tribus interpreted the message as a request that money be sent to Paris. For Tribus, who had prior information that there are three American Express offices in Paris, "[the city of] 'Nice' was more probable than [the adjective] 'nice' in the context of the whole message." J. CAMPBELL, GRAMMATICAL MAN 65 (1982). I would like to thank Robert Artigiani for bringing this item to my attention.


n182 Artigiani, supra note 50, at 105.

n183 Winter, supra note 91, at 1452.

n184 See Cover, supra note 59, at 14 (arguing that the source and meaning of what must be done require no explanation); Winter, supra note 91, at 1497 (arguing that social interaction molds an individual's beliefs and assumptions, subconsciously laying the foundation for that individual's interpretation of the world).

n185 G. EDELMAN, NEURAL DARWINISM 6 (1988) (defining degeneracy as the presence within a given neural region of a significant number of functionally equivalent but nonidentical variants of neural structures).

n186 See id. at 108-09 (postulating that the brain creates a two-dimensional sheet that it uses to translate, sample, and preserve portions of the external scene in time and space).


n188 See Winter, supra note 91, at 1469-71.


n191 Cover, supra note 59, at 34.

n192 L. GATLIN, supra note 143, at 55.

n193 Id. at 56.
n194 Minow, supra note 154, at 57.

n195 Cover, supra note 59, at 40.

n196 Id. at 42.

n197 See Cover, supra note 59, at 60-68.

n198 See Cover, supra note 146, at 677-78.

n199 Cover, supra note 59, at 40.

n200 Id.

n201 Cover, supra note 146, at 647.


n203 Cover, supra note 146, at 678.

n204 Id.

n205 Id. at 681.

n206 Id.

n207 See K. LLEWELLYN, supra note 139, at 121-57, 268-85.

n208 Id. at 122.

n209 See supra note 182.

n210 See supra note 181.
n211 Winter, supra note 190, at 2266 (quoting W. TWINING, KARL LLEWELLYN AND THE REALIST MOVEMENT 369 (1973)).

n212 Cover, supra note 59, at 42.

n213 Id. at 4.

n214 See id. at 11.

n215 Winter, supra note 91, at 1486-88.

n216 See Winter, supra note 190, at 2276 (“The transformative potential of narrative inheres in the cognitive power of concrete imagery and the emphatic potential of the imagination.”). The extent to which narrative is transformative is the main topic discussed by Delgado & Stefancic, supra note 157.

n217 See Winter, supra note 190, at 2252-53 (“[N]ondeterminacy of meaning is a by-product of the very process of communication [in that] the reader remains free to invoke [interpretations] not intended by or not shared with the author and, therefore, to construct alternative meanings.”).

n218 Cf. M. NUSSBAUM, LOVE’S KNOWLEDGE (1990) (arguing that the narrative form of the novel is uniquely able to express contextual, contingent truths).

n219 Minow, supra note 154, at 79 (quoting Lord, The Master’s Tools Will Never Dismantle the Master’s House, in THIS BRIDGE CALLED MY BOOK: WRITINGS BY RADICAL WOMEN OF COLOR 98 (C. Moraga & G. Anzaldúa eds. 1981)).

n220 Id. at 88.

n221 Id. at 89.

n222 Id. at 89 n.377.

n223 Id. at 87. Of course, Delgado and Stefancic seriously question whether narrative actually effects these changes. Delgado & Stefancic, supra note 157, at 1959-60.

n224 Cf. Winter, supra note 190, at 2228, 2244-55.
A better appreciation of the semiotics of language and in particular the disambiguation of meaning by context should lay to rest once and for all the claim that "strict interpretation" is even possible. Cf. Coombe, *Objects of Property and Subjects of Politics: Intellectual Property Laws and Democratic Dialogue*, 69 Texas L. Rev. 1853, 1866 (1991) (noting that intellectual property law's attempts at "freezing the connotations of signs and symbols" have political implications). See generally text accompanying notes 177-84; U. ECO, *THE LIMITS OF INTERPRETATION* (1990); Paul, supra note 113.

See Winter, supra note 190, at 2231-32; supra notes 93 & 190 and accompanying text.


See Winter, supra note 190, at 2253-55 (observing that a "slight divergence in culture between narrator and audience can sometimes make miscommunication inevitable" and that, because narrative is constructed relative to one's social and cultural understandings, "meaning and communication are vulnerable to cross-cultural distortion").

Cover, supra note 59, at 17 n.45.

See generally S. FISH, supra note 117; cf. U. ECO, supra note 225 (espousing the idea that texts embody the boundary conditions that limit but do not determine plausible interpretations). Cover does not seem to recognize these constraints and considers narrative to be "radically uncontrolled." Cover, supra note 59, at 17.

Winter, supra note 190, at 2252.

See Goldberg v. Kelly, 397 U.S. 254, 271 (1970) (holding that due process requires an administrative decision maker to "state the reasons for his determination and indicate the evidence he relied on"); see also J. NOWAK, R. ROTUNDA & J. YOUNG, *CONSTITUTIONAL LAW* 484 (3d ed. 1986) (saying that an individual has a fundamental right to know the reasons behind a court's decision when that individual is deprived of life, liberty, or property).

A discussion of "What constitutes reason?" or "what constitutes rationality" is beyond the purview of this Article. But the difference in style between, for example, Schlag and Winter's writing, on the one hand, and traditional legal scholarship, on the other, can be taken as an indication that a broader concept of reason is at work in the former. The relationship between writing styles and the understanding of both "reason" and the "objective-subjective dichotomy" is not accidental.