Autopoiesis and the 'Relative Autonomy' of Law

Hugh Baxter

Boston University School of Law

Follow this and additional works at: https://scholarship.law.bu.edu/faculty_scholarship

Part of the Law Commons

Recommended Citation
Available at: https://scholarship.law.bu.edu/faculty_scholarship/531
ARTICLES

AUTOPOIESIS AND THE "RELATIVE AUTONOMY" OF LAW

Hugh Baxter*

ABSTRACT

Recent accounts of the relation between law and other social spheres have emphasized law's "relative autonomy." The intuition behind the "relative autonomy" formula is that law is neither wholly independent of, nor entirely reducible to, political, economic and other social processes. Sensible as this intuition is, however, the idea of "relative autonomy" by itself remains purely negative. It excludes two unpalatable extremes—pure formalism and pure instrumentalism—but it does not by itself characterize, in positive theoretical terms, the relation between law and other social discourses or practices.

This Article examines an attempt in recent German social thought to specify theoretically the relation between law and other social spheres. The theory examined—Niklas Luhmann's theory of "autopoiesis"—is, though familiar to Continental readers, not yet well-known to American legal academics. This Article presents autopoietic theory to the American legal audience, with particular attention to the way in which Luhmann reformulates the "relative autonomy" problematic. Throughout, the Article focuses on the connections between autopoietic theory and issues in American law and contemporary American legal theory. The Article's strategy is to criticize those aspects of autopoietic theory that deserve criticism, but at the same time, to show how

* Associate Professor, Boston University; A.B. 1980, Stanford University; Ph.D. 1985, Yale University; J.D. 1990, Stanford University. Thanks to Tamar Frankel, David Lyons, Robert Post, Edward Rubin, David Scipp, Michael Selmi, Reva Siegel, Katharine Silbaugh, Ken Simons, Manuel Utset, and Steven Winter for reading and commenting on a preliminary draft of this Article; thanks to Barbara Bosch for excellent research and help with translations; thanks also to Jack Beermann, Daniela Caruso, David Dana, Stan Fisher, Robert Gordon, Thomas Grey, Michael King, Pnina Lahav, Richard McAdams, Molly McCusic, Maureen O'Rourke, Mark Pettit, Gunther Teubner, and William Twining. Thanks, most of all, to Marina Leslie.
For Francis Tomasic.

1987
the theory might operate as a productive stimulus for American legal theorists.

INTRODUCTION: THE PROBLEM OF “RELATIVE AUTONOMY”... 1989

I. BACKGROUND: “OPEN SYSTEMS” THEORY.......................... 1997

II. CLOSURE AND OPENNESS: THE CONCEPTUAL BASIS FOR
Luhmann’s Auto Poietic “PARADIGM CHANGE”......... 2003

A. Operational (or Operative) Closure and System-
Specific Coding ................................................................. 2004

B. Cognitive Openness and “Programming”.............. 2009

C. Closure and Openness .................................................. 2013

III. THE LEGAL SYSTEM’S “INTERNAL” DIFFERENTIATION.... 2014

A. Forms of Differentiation .............................................. 2014

B. The Central Position of Courts ................................. 2017

1. Center, Periphery, and “Empire” ......................... 2018

2. The Legal Obligation to Decide Legal Questions .. 2021

3. Legal Argument .......................................................... 2025

C. The Legal “Periphery” ................................................ 2035

IV. STRUCTURAL COUPLING ............................................. 2036

A. The Concept of Structural Coupling ......................... 2037

B. Structural Coupling of Law and Politics .................... 2039

1. Law and Politics As Differentiated Systems .......... 2040

2. Forms of Structural Coupling Between Law and
Politics .............................................................................. 2042

C. Structural Coupling of Law and Economy .............. 2045

1. Property As Mechanism of Structural Coupling
(with Special Attention to “Takings” Law) .............. 2046

2. Contract As Mechanism of Structural Coupling
(with Special Attention to Remedies and the
UCC) .............................................................................. 2057

D. Coevolution and Structural Drift ......................... 2062

V. CRITIQUE AND REFORMULATION OF LUHMANN’S
AUTOPOIETIC THEORY ................................................... 2064

A. Autopoiesis and “Relative Autonomy”...................... 2064

B. Problems with the Idea of Binary Coding .............. 2067

C. System As Subject? ...................................................... 2072

D. Problems with the Notion of “Structural Coupling” .. 2075

E. Boundary Problems ..................................................... 2080

VI. CONCLUSION: AUTOPOIETIC THEORY AND AMERICAN
LEGAL SCHOLARSHIP ...................................................... 2083
INTRODUCTION: THE PROBLEM OF “RELATIVE AUTONOMY”

Robert Post has suggested what he calls “a new and stimulating” strategy for the interdisciplinary study of law: to “conceive the law as a relatively autonomous form of discourse.”1 By “relatively autonomous,” Post means that while law “establish[es] its own particular kind of cultural discourse,” it does so by drawing, in part, on the cultural resources of other social spheres.2 Law, for Post, is thus not “something apart” from the rest of society, but neither is it the mere “reflection or reproduction” of other, nonlegal spheres.3

Post acknowledges that understanding law in this way, as a relatively autonomous discourse, raises difficult questions that require explicit theorizing.⁴ Among the questions he identifies are the “boundary question” of the mechanisms by which law simultaneously distinguishes itself from and relates itself to other cultural spheres, the “legitimacy question” of how law, among other social discourses, maintains its “characteristic prestige and power,” and the “political question” of how to conceive responsible political action in a world where “meaning has been dissolved into faceless and impersonal systems of discourse.”5 These questions, and the associated problematic of law’s “relative autonomy,” are, according to Post, “driving some of the best and most innovative contemporary legal scholarship.”6

In one sense, Post’s proposal seems not so novel. As Post acknowledges, the question of law’s boundaries—the boundaries separating, for example, law and morality, law and politics, or law and economics—“evokes longstanding work in the theory of legal interpretation.”⁷ And despite its origins in Marxist debates over the relation between “base” and “superstructure,”⁸ and its conventional association with the critical legal studies movement,⁹ the

---

2 Id.
3 Id. at vii.
4 See id. at viii.
5 Id.
6 Id.
7 Id. at ix.
8 See, e.g., LOUIS ALTHUSSER, LENIN AND PHILOSOPHY 135-36 (Ben Brewster trans., 1971); LOUIS ALTHUSSER & ÉTIENNE BALIBAR, READING CAPITAL 99-100 (Ben Brewster trans., 1970).
formula of "relative autonomy" has entered mainstream scholarship as a convenient way to characterize law's relation to the various other social fields. Even those unfamiliar with the term "relative autonomy" will recognize the story line it marks out. Law, the story goes, is at least partially autonomous, in that its structure, content, and dynamics are not wholly determined by other social spheres. But law is only "relatively" rather than completely autonomous: other social spheres (especially politics and the economy) have influenced, and have in turn been influenced by, the development of the law. The "relative autonomy" formula thus acknowledges the obvious influences running, in both directions, between law and other social spheres. At the same time it recognizes that law must first be understood in its own terms, not the terms of some other field or discipline (such as politics or economics). Seen in this way, the "relative autonomy" formula seems to offer legal theory a way to negotiate between doctrinal formalism, on one side, and reductionist instrumentalism, on the other.

Still, Post's proposal is unusual and exemplary in at least one respect: its recognition that "relative autonomy" must be theorized, not simply invoked as a self-interpreting formula. As Post realizes, the phrase "relative autonomy," left unelaborated, remains purely negative. It suggests that law is neither wholly determined by some other sphere, such as politics or the economy, nor wholly self-determining and immune from "outside" influences. But in excluding only the extremes of formalism and in-


instrumentalism, the phrase "relative autonomy" characterizes neither the extent to which law is "relatively autonomous" nor the ways in which law maintains its (relative) autonomy. As Alan Hunt has put it: "relative autonomy is a concept in search of a theory."15

A theory that could give "relative autonomy" positive content needs to address a number of issues. First, as Post suggests, the theory must account for the "boundary" between law and not-law. What is it that makes a particular action or communication "legal" and another "nonlegal"? What are the "internal mechanisms" (in Post's phrase)16 that maintain or relocate this boundary and that reproduce or transform the legal system? What is the nature of the boundaries between law and other social spheres? Are they "porous" or "impervious"?17 How, in other words, should we understand the relations across boundaries and between different social spheres (between law and the economy, for example, or law and politics)?

Further, a theory that describes the field of law as "relatively autonomous" should investigate whether the various particular spheres of legal activity are equally so. Most claims for law's autonomy or relative autonomy have centered around the activity of judging and the development of legal doctrine.18 But what about other spheres of legal activity—for example, legislation, lawyerly practice and argument, legal education, legal scholarship, and everyday action raising claims to legal validity? A comprehensive account of law's relative autonomy must attend to the dif-

---

14 See Hutchinson & Monahan, supra note 9, at 222 n.97:
The notion of relative autonomy is so vague as to be of no real significance. Except for those rare few who adopt one of the extreme, almost nonsensical, views—that law is either completely autonomous from . . . or completely determined by material and social life—the notion of relative autonomy can accommodate all political and legal theorists . . . .

15 ALAN HUNT, EXPLORATIONS IN LAW AND SOCIETY 166 (1993); see also id. (stating that the notion of relative autonomy "is, at least in the formulations currently available to us, seriously flawed"); id. at 167 (asserting that without theoretical elaboration "the concept of relative autonomy cannot be taken as achieving more than pointing toward a desired type of analysis"); E.P. THOMPSON, THE POVERTY OF THEORY AND OTHER ESSAYS 97 (1978) ("[R]elative autonomy' is a helpful talisman against reductionism . . . but, without substantial addition, and substantive analysis, it remains as nothing more than a warning-notice.").

16 See Post, supra note 1, at viii.


18 See NIKLAS LUHMANN, DAS RECHT DER GESSELLSCHAFT 63 (1993) [hereinafter RECHT DER GESSELLSCHAFT].
ferences and interrelations among the legal system's particular spheres, not take one part of the system—judging and doctrinal development—for the whole.

Finally, and most fundamentally, the theory must specify what it means by "autonomy." The most common rendition of autonomy views it as a substantive concept, signifying a (relative) immunity from causal influence. On this view, law is autonomous to the extent it resists determination by other social spheres. But perhaps "autonomy" can be understood otherwise—as, for example, a methodological directive, instructing the theorist to proceed immanently, to trace legal phenomena in the first instance to structures, concepts, standards, and dynamics "internal" to the legal system rather than some other social sphere. On this latter view, law's autonomy would be fully consistent with the interdependencies among law and other social spheres.

In this Article, I examine a theoretical project that addresses these issues and rigorously theorizes the space toward which "relative autonomy" gestures. Although this project—the theory of "autopoietic" systems—has been highly influential in Europe for some time, only recently has it begun to draw attention in American legal-theoretical circles. The central notion of "autopoiesis"—a neologism that translates literally as "self-making," "self-creation," or "self-production"—originated during the 1970s in biological theory. Since the early 1980s, however, the German

---


20 See William Rehg, Translator's Introduction to JÜRGEN HABERMAS, BETWEEN FACTS AND NORMS: CONTRIBUTIONS TO A DISCOURSE THEORY OF LAW AND DEMOCRACY at ix, xx (William Rehg trans., 1996) (noting that Niklas Luhmann, the best-known exponent of autopoietic theory, "is one of the most influential social theorists in Germany today"); Eva M. Knodt, Foreword to NIKLAS LUHMANN, SOCIAL SYSTEMS at ix, x (John Bednarz, Jr. & Dirk Baecker trans., 1995) [hereinafter LUHMANN, SOCIAL SYSTEMS] ("Niklas Luhmann . . . in recent years has emerged as Germany's most prominent and controversial social theorist.").


sociologist and lawyer Niklas Luhmann has led a movement to incorporate the idea into sociological thought, and Luhmann, together with another German sociologist and lawyer, Gunther Teubner, has been particularly interested in the connections between autopoietic theory and the law. From the point of view of legal theory, this movement has culminated in the recent publication of Luhmann’s first book-length application of autopoietic theory to law, *Das Recht der Gesellschaft*.\(^\text{23}\) In this Article, I survey and criticize Luhmann’s theory of legal autopoiesis, focusing on whether Luhmann’s autopoietic theory of law successfully reformulates the “relative autonomy” problematic of legal theory.\(^\text{24}\)

In Luhmann’s analysis, modern societies are systems of communication that have become differentiated, through a process of social evolution, into various functional subsystems. Luhmann’s usual examples of these functional subsystems are politics, religion, science, education, economy, and art, as well as the legal system. The boundaries of these communicative systems are established by a “code,” or, system-defining distinction—for example, the legal system’s distinction between legal and illegal. Communication invoking the legal/illega]
closed." Autopoietic systems, including the legal system, operate recursively, producing their own elements self-referentially. For Luhmann, the legal system, as an autopoietic system of communication, is a recursive, self-referential, self-producing, self-reproducing, self-observing, and self-describing system—in senses of these terms that will be explained below.

While Luhmann expressly refuses the term "relative autonomy," his work can nonetheless be understood as an attempt to capture theoretically the intuition behind that enigmatic phrase. Despite his emphasis on "operative closure," Luhmann readily acknowledges that social subsystems, among them the legal system, are at the same time "cognitively open" and able to "observe" one another. He insists, further, that the legal system is connected—"structurally coupled"—to other social subsystems, particularly the economic and political systems. Luhmann’s account of the law’s simultaneous openness and closure, and its simultaneous distinction from and “coupling” to other systems, corresponds to the opposing impulses that the phrase “relative autonomy” expresses.

My account of Luhmann’s autopoietic theory of law takes the following form. Part I outlines the more familiar notions of “open systems theory” to which Luhmann’s autopoietic theory responds. Part II is an introduction to the basic concepts of general autopoietic theory. In Part III, I describe Luhmann’s more particularized account of the legal system as an autopoietic system, with special attention to the convergences with, and divergences from, more familiar American theories of law. I then turn, in Part IV, to the notion of “structural coupling” Luhmann uses to analyze the interdependencies between law and other social systems—interdependencies that, for other theorists, count as the “relative” part of “relative autonomy.” Part V is a critique and suggested transformation of the theory. In the conclusion, Part VI, I suggest connections between autopoietic theory and contemporary American legal scholarship.

As the reader has probably already discerned, Luhmann’s work is extraordinarily complex and difficult, drawing upon developments in a number of specialized fields, such as cognitive biol-

25 See, e.g., RECHT DER GESELLSCHAFT, supra note 18, at 64-66, 452 n.29, 494, 554 n.12 (“The common solution with the assistance of the ‘relative autonomy’ concept can be neither theoretically nor empirically satisfying, because it does not discriminate in any way.”); Niklas Luhmann, Closure and Openness: On Reality in the World of Law [hereinafter Closure and Openness], in AUTOPOIETIC LAW, supra note 19, at 335, 345.
26 See infra Part II.B.
27 See infra Part IV.
ogy, cybernetics, and information theory. Further, Luhmann acknowledges that his autopoietic theory belongs to the discipline of sociology, not legal theory, and thus it does not seem, at first, to speak directly to the concerns of most American legal theorists.

I try throughout this Article, however, to make Luhmann’s thought more accessible, by noting various points of connection to positions or debates in American law and legal theory. Some of these points of connection are relatively specific. In Part III, for example, I compare Luhmann’s notion that courts are “central” to the legal system with Dworkin’s apparently similar claims for courts’ centrality in “law’s empire.” In Part IV, I discuss ways in which autopoietic theory might illuminate the structure of regulatory-takings law. And in the concluding Part of this Article, I discuss convergences and divergences between autopoietic theory and two other contemporary approaches to legal theory—the “law and social norms” project and legal “postmodernism.”

More generally, I suggest that autopoietic theory addresses a central aspiration of postrealist law and legal theory: to increase law’s “openness” and responsiveness to the social world and to other, nonlegal discourses. Notwithstanding his insistence on legal “closure,” I argue, Luhmann emphasizes at the same time the possibilities and conditions of law’s “openness.” The notion of “structural coupling” is Luhmann’s way of analyzing the specific links between legal communication and other social spheres. To date, Luhmann has identified and discussed three such “structural couplings”: notions of “property” and “contract,” he says, link legal and economic communication, and the idea of the “constitution” links legal and political communication. Each of these couplings, on Luhmann’s account, has a double meaning: both a legal meaning and a distinct, but related, meaning in some other system of communication. In this way, legal communication may draw systematically upon insights in some other discourse while, at the same time, law retains its separate identity—that is, its “relative autonomy.”

This idea of structural coupling, I argue in Part V, suggests any number of analogous connections between law and other social spheres. “Negligence,” for example, has both legal and economic significance. Standard jury instructions define negligence as the failure to meet the legal standard of ordinary care set by that creature of the law, the “reasonably prudent person.” From an

---

28 See RECHT DER GESELLSCHAFT, supra note 18, at 31-33.
economic point of view, "negligence" means the failure to adopt cost-justified precautions. Increasingly, the economic meaning of negligence has informed legal interpretations, but notwithstanding the claims of some law and economics scholars, the two senses of "negligence" do not entirely coincide. Similarly, the meaning of "insanity" in criminal law discourse is informed by the meaning of "insanity" in medical or psychiatric discourse. Nonetheless, as the Supreme Court has recently stated, the legal meaning of "insanity" does not track in every respect the medical sense of that term. To take one final example, the idea of "scientific validity" both guides scientific communication and, within the legal system, helps establish the federal standard for admissibility of expert scientific testimony. Even in prescribing this legal link to scientific communication, however, the Supreme Court has noted the differences between science and law—differences that must qualify the way in which courts observe, and draw insight from, scientific communication.

29 See infra text accompanying notes 492-95.
30 In the Court's words:
[W]e have traditionally left to legislators the task of defining terms of a medical nature that have legal significance. As a consequence, the States have, over the years, developed numerous specialized terms to define mental health concepts. Often, those definitions do not fit precisely with the definitions employed by the medical community. The legal definitions of "insanity" and "competency," for example, vary substantially from their psychiatric counterparts. Legal definitions, ... which must "take into account such issues as individual responsibility ... and competency," need not mirror those advanced by the medical profession. Kansas v. Hendricks, 117 S. Ct. 2072, 2081 (1997) (quoting AMERICAN PSYCHIATRIC MANUAL OF MENTAL DISORDERS at xxiii, xxvii (4th ed. 1994)) (citations omitted).
31 In Daubert v. Merrell Dow Pharmaceuticals, Inc., 509 U.S. 579, 592-93 (1993), the Court explained:
Faced with a proffer of expert scientific testimony, ... the trial judge must determine at the outset ... whether the expert is proposing to testify to (1) scientific knowledge that (2) will assist the trier of fact to understand or determine a fact in issue. This entails a preliminary assessment of whether the reasoning or methodology underlying the testimony is scientifically valid and of whether that reasoning or methodology properly can be applied to the facts in issue.
32 The Court stated:
It is true that open debate is an essential part of both legal and scientific analyses. Yet there are important differences between the quest for truth in the courtroom and the quest for truth in the laboratory. Scientific conclusions are subject to perpetual revision. Law, on the other hand, must resolve disputes finally and quickly. The scientific project is advanced by broad and wide-ranging consideration of a multitude of hypotheses, for those that are incorrect will eventually be shown to be so, and that in itself is an advance. Conjectures that are probably wrong are of little use, however, in the project of reaching a quick, final, and binding legal judgment—often of great consequence—about a particular set of events in the past. We recognize that, in practice, a gatekeeping role for the judge, no matter how flexible, inevitably on occasion will prevent the jury
Each of these "couplings" helps to establish law's openness to the social world by linking legal communication to another social discourse. But these linkages do not fuse the two systems, nor do they result in the simple incorporation of one discourse into another. Legal "observation" of other communicative systems is always selective, Luhmann insists, and it remains subject to the conditions, procedures, standards, and criteria of the observing system.

One contribution of Luhmann's autopoietic theory, I think, is that it focuses our attention on the possibilities—but also the obstacles and difficulties—of increasing law's openness. The notion of "coupling" suggests an inquiry into the specific mechanisms, procedures, and practices that could link legal communication to other social discourses and to other social spheres. It suggests, also, attention to the incommensurability of social discourses, and it counsels some skepticism about what can be attained through realist and postrealist strategies of increasing law's openness and responsiveness to its environment.

I note in Part V, however, that Luhmann has not gone far in moving from general reflection on basic autopoietic concepts to the sort of specific inquiry that would most interest legal scholars. I suggest, also, that some of the central theses of autopoietic theory should be qualified or abandoned, and that the theory needs to be supplemented with insights drawn from other approaches. Legal scholars' "observation" of Luhmann's sociological theory cannot—on Luhmann's own premises—be a simple incorporation of autopoietic concepts directly into legal theory.

My strategy of interpretation is thus to criticize what deserves criticism, but to focus also on those aspects of Luhmann's work that can be useful. In my view, whether or not one decides to adopt Luhmann's categories and terminology in one's own work, Luhmann's autopoietic theory still can operate as a productive stimulus for legal theory.

I. BACKGROUND: "OPEN SYSTEMS" THEORY

Luhmann locates his account of the legal system in a more comprehensive social-theoretical framework, that of "social sys-
tems theory.” The basic distinction for any of the many varieties of social systems theory, including Luhmann’s autopoietic theory, is the distinction between a system and its environment. This fundamental distinction raises a number of fundamental questions. For example: How should we describe the system’s internal structure? What unifies the system as a system, differentiated from its environment? What is the nature of the boundary between a system and its environment? And how do we account for a system’s relations to its environment? Luhmann typically introduces his version of social systems theory by distinguishing its answers to these questions from those offered by earlier versions of systems theory.

The version of social systems theory probably best known to legal theorists—and Luhmann’s usual foil—is the “open systems” approach developed during the 1960s under the influence of advances in cybernetics and information theory. This generation of social systems theorists emphasized the permeability or porousness of the boundary between system and environment. Inputs to and outputs from the system regularly cross the system boundary in a relation of “exchange” or “interchange” between system and environment. Through this process the system receives “inputs” from its environment, processes them, and converts them into “outputs” fed back to the environment. In turn, information about the outputs’ effects on the environment and the system flows back into the system, completing the “feedback loop.”

David Easton’s influential analysis of the political system illustrates this feedback process. According to Easton, “wants” in

---

33 See, e.g., LUHMANN, SOCIAL SYSTEMS, supra note 20, at 16 (“There is agreement within the discipline today that the point of departure for all systems-theoretical analysis must be the difference between system and environment.”); id. at 176; NIKLAS LUHMANN, ECOLOGICAL COMMUNICATION 2 (John Bednarz, Jr. trans., 1989) [hereinafter ECOLOGICAL COMMUNICATION] (“Every problem of the system is ultimately reducible to the difference between system and environment.”); RECHT DER GESELLSCHAFT, supra note 18, at 26.


35 See, e.g., DAVID EASTON, A SYSTEMS ANALYSIS OF POLITICAL LIFE 25-26 (1965); WALTER BUCKLEY, SOCIOLOGY AND MODERN SYSTEMS THEORY 50 (1967).

36 See EASTON, supra note 35, at 29-32, 30 diag.1. This is the basic model. Matters get more complicated once one acknowledges that a system has more than one “feedback loop,” indeed, an indefinite number. See id. at 372-76, 374 diag.5.
the political environment press for entry into the political system. Some of these wants are expressed as political "demands," or, "wants that the [society's] members would wish to see implemented through political outputs of some sort." These demands are inputted into the system. The system's "gatekeeping" function excludes some demands early on; others are condensed and combined into "issues" for further processing; a few bypass the gatekeepers and the "issue" stage entirely. A small fraction of the demands that originally entered the political system survive in some form to the stage of system output—a decision, in the form of a statement or performance, that is fed back to the environment. The political system's output may well modify its environment; information about the output's effects feeds back into the system, completing the loop. In this way, for Easton, the political system stands in an open, adaptive relation to its constantly changing environment. The system may increase its adaptiveness by refining its gatekeeping mechanisms and improving its response to informational feedback.

The model becomes more complex, however, when we consider that a system's environment typically includes other organized systems. If, for example, we distinguish the political system as an organized system within society and describe its specific forms of demand- and information-processing, the same sort of analysis would seem to hold for the economic system as well. Sociological systems theorists of the 1960s and early 1970s typically acknowledged this point and subscribed to some version of sociological "functionalism," according to which modern societies (at least) are differentiated into a plurality of subsystems. Each such subsystem—the political system or the economic system, for example—is devoted to the performance of some particular social function.

---

37 See id. at 71-72.
38 Id. at 71.
39 See id. at 85-116.
40 See id. at 78, 87-88. "Gatekeepers" may be individuals or groups; they channel the flow of political demands through the system, or check that flow. See id. at 87-88.
41 See id. at 79, 140-49.
42 See id. at 78-79. As an example of a demand that bypassed the "gatekeepers," Easton mentions the demand to "bring the boys back home" at the end of World War II. Id. at 88.
43 See id. at 348-62.
44 See id. at 32 diag.2, 366-67.
45 See id. at 17-19, 345-47.
Because these subsystems form "intra-societal" environments for one another, the system/environment relation is in substantial measure a system/system relation—a relation between and among functional subsystems.48

But how are we to theorize the various relations among differentiated social subsystems? The most ambitious and probably most influential attempt was the "interchange paradigm" developed by Talcott Parsons, the dominant figure in American sociology between the 1950s and the mid-1970s. Parsons proposed the idea of "generalized media of interchange" as a way of explaining the relations within, and among, the social system's functional subsystems.49 Parsons identified four such media—money, power, influence, and "value-commitment"—and located them in the subsystems of economy, polity, "integrative," and "pattern maintenance" subsystems, respectively.50 He then set about charting the "interchange" relations among the four subsystems. Each such relation, Parsons maintained, is controlled by the two "media" proper to the related subsystems, and each involves a "double interchange" of input and output between the two systems.51 Thus, for example, with respect to the interchange between economy and polity, Parsons distinguished four boundary-crossing inputs and outputs, two mediated by money and two by power.52 The same sort of analysis holds, Parsons thought, for the other five relations between systems, yielding a sum total of twenty-four "media"-controlled system interchanges, relations to which Parsons duly assigned names.53

Parsons' justification for distinguishing four social subsystems was his famous "four-function paradigm," or "AGIL" schema. Any system of action, Parsons asserted, may be analyzed in terms of the functions of "adaptation" (A), "goal-attainment" (G), "integration" (I), and "pattern-maintenance and latent tension-

---

47 EASTON, supra note 35, at 21-22.
48 "Subsystem" is always a relative term, used to signal that the system under discussion is part of a larger system. Whether one speaks of "system" or "subsystem" depends upon the intended level of analysis.
49 For Parsons' overview of this project, see TALCOTT PARSONS, SOCIAL SYSTEMS AND THE EVOLUTION OF ACTION THEORY 43-48, 59-60, 204-69 (1977) [hereinafter PARSONS, SOCIAL SYSTEMS].
50 See TALCOTT PARSONS, On the Concept of Political Power, in SOCIOLOGICAL THEORY AND MODERN SOCIETY 297, 348 fig.1 (1967) [hereinafter PARSONS, Political Power].
51 See id. at 349.
52 See id. at 350 fig.1, 351.
53 See id. at 348 fig.1, 350 fig.2.
management” (L). The four social subsystems of economy, pol-

ty, integrative subsystem, and pattern-maintenance subsystem

correspond, Parsons claimed, to those four functions, respec-

tively. But if, as Parsons assumed, the four-function paradigm is

of wholly general application, then the same principles should op-

erate not just at the level of the social system, but at a higher level

of analysis as well: the level of the so-called “general action” sys-

tem. At this grander level, the social system takes its place along-

side the cultural, personality, and behavioral systems, each of

which fulfills one of the four functions. Each of these four sys-


tems, Parsons claimed, has its own generalized medium of com-

munication, and each is involved in the same sort of “double inter-

change” Parsons had analyzed at the level of the social system.

At this point, however, Parsons’ interchange paradigm begins

to take on a life of its own. If, as Parsons claims, the four-function

scheme applies to any system, then the number of levels at which

one may identify subsystems and media is unlimited. If we take

the four-function paradigm as a guide, any system one chooses

would be one of four subsystems at a higher level of analysis; so,

too, would be those higher level systems, and so on. Likewise,

any system one chooses to analyze could be subdivided further

into four subsystems; those four could be subdivided into four, and

so on. At some point, of course, the exercise becomes senseless.

---

54 See Parsons, Social Systems, supra note 49, at 43 & n.34; see also Talcott Parsons, Some Problems of General Theory in Sociology, in id. at 229, 236 [hereinafter Parsons, General Theory] (“[T]he four-function scheme is grounded in the essential nature of living systems at all levels of organization and evolutionary development, from the unicellular organism to the highest human civilization.”).

55 See Parsons, Political Power, supra note 50, at 348.


57 See Parsons, General Theory, supra note 54, at 243-49, 262-69.

58 See supra note 54.

59 In his last years, Parsons indeed carried the analysis beyond the level of the “general action system” to the more encompassing level of “the human condition.” See Talcott Parsons, A Paradigm of the Human Condition, in Action Theory and the Human Condition 352 (1978). Here the general action system takes its place alongside “physico-

chemical nature,” the “human organism,” and “ultimate structures.” Theorists influenced by Parsons have sought to extend the AGIL schema in different directions as well. See infra note 61.

60 As Luhmann has put it:

At every level of system-building there is a subsystem that displays the whole schema once again. . . . But how far can this process be repeated? Is there a point past which it gives out? Does it become senseless after the second repetition, like the process of reflection? And, especially, is this the proper way to represent the structure of functional differentiation? Does this theoretical
And even at the level of the social system, the project of mapping the various "media" and input/output interchanges seems, in large part, only the task of naming the various logical possibilities that Parsons' interchange paradigm creates.  

Further, entirely apart from the problems with the four-function paradigm, Parsons' conception of interchange as direct input and output between systems is difficult to reconcile with the premise of social differentiation. The various subsystems Parsons distinguishes are differentiated systems, each possessing a distinctive function, a distinctive medium of communication, and a distinctive "code" (a system-specific "value-principle" and "coordination standard"). But if these differentiated social subsystems operate according to a system-specific logic, with system-specific resources, then how can we describe interchange between systems as the direct "input" of one system's distinctive resources into another? And how can the interchange between systems be controlled by a "medium" proper to one system but not the other? If the two systems operate according to different standards and logics, we have no reason to assume that an "output" from one system will be in a form that another system can process as "input." Instead, an "output" from the political system, for example, will be processed as "input" by the economic system only to the extent it is economically relevant. Whether and how it is economically relevant will depend upon the standards and criteria of the economic system.

It seems apparent, then, that differentiated social systems are open to their environments only in a limited or qualified way. To the extent that the legal system, for example, operates according to its own standards and criteria, not those of some other social

---

61 Many of the essays collected in a two-volume Festschrift for Parsons are good examples. See, e.g., Thomas J. Fararo, Science As a Cultural System, in 1 EXPLORATIONS IN GENERAL THEORY IN SOCIAL SCIENCE 182 (Jan J. LouBer et al. eds., 1976) (applying the four-function paradigm to name 16 subsystems of the scientific system, four levels removed from Parsons' original level of the social system); Victor Meyer Lidz, Appendix to Charles W. Lidz & Victor Meyer Lidz, Piaget's Psychology of Intelligence and the Theory of Action, in id. at 195, 231-36 (naming generalized communications media for the "adaptive" subsystem of the general action system); Guy Rocher, Toward a Psychosociological Theory of Aspirations, in id. at 391, 404 (using the four-function paradigm to name 16 kinds of aspirations); Mark Gould, Systems Analysis, Macrosociology, and the Generalized Media of Social Action, in 2 id. at 470, 470-78, 476 (suggesting a "refined version of the interchange paradigm").

62 PARSONS, Political Power, supra note 50, at 353 fig.3.
sphere, it will remain only selectively attentive to the processes of other social systems. Luhmann's insight is to see this partial “closure” of the legal system (and other systems) as intertwined with its openness to the environment. In Luhmann's paradoxical slogan: a system's closure is a condition of its openness. Or to put it more straightforwardly: in order to understand the relations among different social spheres, such as law and the economy, one must first understand their “internal” operations. The language of input and output, however, is not designed to give such an account of a system's internal workings. Indeed, as Luhmann notes, it was developed precisely to sidestep that problem altogether.

For these reasons, Luhmann presents his autopoietic theory as a departure from more standard versions of systems theory. In Luhmann's work, the model of input and output gives way to an emphasis on systems' “internal” operations.

II. CLOSURE AND OPENNESS: THE CONCEPTUAL BASIS FOR LUHMANN'S AUTOPOIETIC “PARADIGM CHANGE”

Luhmann's first formal training in sociology was as Parsons' student and, as he admits, his work before turning to autopoietic theory employed the input/output model. In the body of Luhmann's work to be considered in this Article, however, the “accents” Luhmann places differ from those characteristic of the open systems model. He describes autopoietic systems not as open systems, but as simultaneously open and closed systems, with a


64 Luhmann observes that in early versions of open systems theory, “input” and “output” were counterpart concepts to a “black box” conception of systems. See LUHMANN, SOCIAL SYSTEMS, supra note 20, at 201-02. By representing systems as black boxes or transformation functions, “[o]ne can thereby represent the 'insides' of the system, which cope with 'throughput,' as very complex and opaque . . . yet still explain, in a 'systems-theoretical' way, observable regularities in the system's input and output behavior.” Id. at 201 (translation amended).

65 See Knodt, supra note 20, at xi. Luhmann, however, was never converted to Parsons' project of constructing and mapping the various “interchange media.”

66 See RECHT DER GESELLSCHAFT, supra note 18, at 442 n.5. For examples, see DIFFERENTIATION, supra note 60, at 38-39, 111, 143.

67 RECHT DER GESELLSCHAFT, supra note 18, at 42.
stronger accent on closure. As Luhmann puts it, the "paradigm change" he effects through autopoietic theory amounts to a shift "from input-type descriptions to closure-type descriptions."  

In the remainder of this section, I examine how Luhmann accomplishes this "paradigm change." I consider, first, Luhmann's notion of "operative closure" and the associated notion of system-specific "coding." I then examine how Luhmann accounts for (what he calls) "cognitive openness"—the capacity of a system's communication to "observe" the environment, conditioned always by the system's operative closure. Just as "operative closure" is paired with the notion of a system's "code," so is "cognitive openness" paired with the idea of a system's "programs."

### A. Operational (or Operative) Closure and System-Specific Coding

Luhmann emphatically rejects the traditional conception of society as an association among individual human beings. For Luhmann, while human beings are necessary conditions for society and "structurally coupled" to social systems, the elements of a social system are not individual human beings, but communications. Society, Luhmann says, is the "system that simply consists of communication and of every communication." Communications are both the elements of society and, in Luhmann's terminology, its "operations"—the means by which a society carries itself forth and reproduces itself as a system. Society, so conceived, is "operationally" or "operatively closed." This point is tautological, following from Luhmann's
definition of society as the system of all communications and his definition of communication as society's mode of operation. Communications, the operations of society, establish the system's boundaries. If something is a communication, then it is an element and an operation of society. If not, then it is in the environment of society as a system. The system of society is closed by its boundaries, and those boundaries are established by the operations called "communications." In this uninteresting sense, then, society is an "operatively" or "operationally closed" system.

Matters are more interesting with respect to the subsystems of society as system. Luhmann retains the idea, discussed above with respect to open systems theory, that modern societies are differentiated into a plurality of subsystems. The transition to modernity has been a process of differentiation, according to Luhmann, through which certain types of communication have separated out from the general run of societal communications, linking up to form specialized communicative networks. Examples of these specialized networks include the economy, law, science, politics, education, and art. Luhmann maintains that these subsystems, like the boundaries of the society that encompasses them, are operationally closed. Again, the conclusion of "operative closure" is tautological: "closure" refers to boundaries, and the system's boundaries are established by (indeed, coextensive with) the system's operations. Still, tautological or not, Luhmann's conclusion that social subsystems are operationally closed joins issue with open systems theory—with respect to its account of the boundaries between these subsystems, and its conception of the relations between and among social subsystems.

Luhmann rejects the idea, basic to open systems theory, that social subsystems' boundaries are points of connection through which information generated in one system may be exchanged for information generated in another. This departure from open systems theory follows from Luhmann's understanding of operational closure. If, as Luhmann contends, subsystem boundaries are established "internally," through the system's own operations, then a system's boundary will not necessarily be something it shares with another system, as in the picture underlying open sys-

---

75 See, e.g., RECHT DER GESELLSCHAFT, supra note 18, at 7, 16; Coding, supra note 63, at 155.
76 See, e.g., RECHT DER GESELLSCHAFT, supra note 18, at 85, 555; Operational Closure and Structural Coupling, supra note 34, at 1432.
tems theory. Further, Luhmann insists, information is system-specific; it has meaning only in the terms of the system whose operations have produced it. From the perspective of one subsystem, Luhmann says, the operations of another system provide (in the first instance) not information, but "noise." Whether and to what extent that "noise" may be processed as information depends upon the first system's internal structures and operations.

In place of the input/output interchange paradigm of open systems theory, Luhmann emphasizes the "recursive closure" of communicative subsystems. A present communication links recursively to past communications and establishes fresh possibilities for future communications. For example, when a court communicates a judicial decision, it typically relies on past legal communications, such as prior decisions, and in so doing it creates connective possibilities for future legal communications. In this recursive process, the system reproduces itself as a network of system-specific communications.

This recursive closure illustrates what Luhmann means by "autopoiesis" and the associated notions of self-production, self-reproduction, and self-reference. An autopoietic system is self-producing, in the sense that it produces its own elements through its own operations. It is self-reproducing, in the sense that its operations reproduce the system as a network of communications (which includes the possibility of transforming it). And it is self-referential, in the sense that it operates recursively upon its own elements.

Still, to say only that a social subsystem establishes its own boundaries through its own communicative operations is to leave open precisely how this process occurs. Luhmann further specifies the notion of operative closure through the idea of a system-specific "code." A code is a binary opposition between a positive and negative value. The code establishes the system's boundaries and organizes its communication. All communication invoking a particular subsystem's code belongs to that system; all other communication is in the subsystem's environment. The system's code,

---

77 See Recht der Gesellschaft, supra note 18, at 43.
78 See id. at 43 & n.11 (on the "order from noise" principle of general systems theory).
80 See Recht der Gesellschaft, supra note 18, at 60, 69-70; Ecological Communication, supra note 33, at 37-38; Operational Closure and Structural Coupling, supra note 34, at 1427-28; Coding, supra note 63, at 152.
Luhmann contends, establishes the system’s unity, which always at the same time means its distinction from its environment. The code closes the system off from the other systems in its environment by serving, as Luhmann puts it, as a “rejection value” for the codes of other systems.

The code of the legal system, Luhmann says, is the opposition between “Recht” and “Unrecht”—terms not easily translated, but best rendered as “legal” and “illegal.” All communication that concerns the attribution of the code values “legal” or “illegal” belongs to the legal system; all other communication belongs to the legal system’s environment. This conception of the legal system’s boundaries is expansive. The legal system consists for Luhmann not in a set of rules, nor in a complex of institutions such as courts and legislatures, but in communications that invoke the idea of legal validity or invalidity. Nor is law, for Luhmann, just “what officials do about disputes” (in Llewellyn’s famous phrase). While legal communication may take place in a formal institutional context, it need not. The statement “get off my property” is a communication within the legal system, to the extent it invokes a legal right to exclude.

Further, the legal system includes, for example, communications surrounding the formation of a contract or a

---

81 See RECHT DER GESELLSCHAFT, supra note 18, at 187. The unity is paradoxical, however, because the code consists in an opposition between positive and negative values. See id.
82 See id. at 214.
83 See id. at 181-82, 187; Coding, supra note 63, at 157.
84 See, e.g., RECHT DER GESELLSCHAFT, supra note 18, at 67, 131, 165-213; Operational Closure and Structural Coupling, supra note 34, at 1427-28; Some Problems, supra note 79, at 393-94; Coding, supra note 63, at 145; ECOLOGICAL COMMUNICATION, supra note 33, at 36. Sometimes the terms “Recht” and “Unrecht” have been translated as “right” and “wrong,” see, e.g., Self-Reproduction, supra note 63, at 115, but that rendition suggests something Luhmann wants to resist—the collapse of a distinction between law and morality. See Coding, supra note 63, at 146-47 (noting the problem of translation and stating that he employs “the terms legal and illegal quite independently of moral valuations”).
85 See Operational Closure and Structural Coupling, supra note 34, at 1428.
86 KARL N. LLEWELLYN, THE BRAMBLE BUSH 12 (1930) (emphasis omitted).
87 See Niklas Luhmann, Law As a Social System, 83 NW. U. L. REV. 136, 141 (1989) [hereinafter Law As a Social System] (“[E]very communication that makes a legal assertion or raises a defense against such an assertion is an internal operation of the legal system, even if it is occasioned by a dispute among neighbors, a traffic accident, a police action, or any other event.”).
88 See, e.g., RECHT DER GESELLSCHAFT, supra note 18, at 107, 136, 229, 237, 321, 324,
corporation, or the writing of a will. Nor is all law necessarily state law for Luhmann; communication about “intra-organizational” law belongs to the legal system. Although, as discussed below, Luhmann treats communication in and around the courts as “central” and other legal communication as “peripheral,” his expansive conception of the legal system’s boundaries should nonetheless be congenial to “legal pluralists” and others interested in law’s workings outside of formal legal institutions.

So far, however, Luhmann’s account of the relation between the legal system (for example) and other social subsystems is almost entirely negative. Social subsystems such as law, politics, economy, and science do not stand in a relation of input/output interchange. Information does not cross the boundaries from one system into another. The systems are operatively closed, in that they have distinct codes that serve as “rejection values” for one another. Luhmann has accounted, at least in a preliminary way, for systems’ “autonomy”. They are operatively closed networks of specialized communication, processing system-specific information according to system-specific codes. But how are these “operatively closed” systems positively related? Does Luhmann’s emphasis on systems’ operative closure and autonomy mean that he denies interdependencies and influences among the various spheres of society? Is he asserting a new brand of legal formalism that insists on law’s autonomy and denies the qualifications the phrase “relative autonomy” signals?

The answer to these questions is “no.” Autopoietic theory does not deny the mutual influences and interdependencies among the communicative subsystems it distinguishes. While autopoietic

---

327, 338; Operational Closure and Structural Coupling, supra note 34, at 1433-34; Coding, supra note 63, at 154, 175; ECOLOGICAL COMMUNICATION, supra note 33, at 64; Self-Reproduction, supra note 63, at 112.
89 See RECHT DER GESELLSCHAFT, supra note 18, at 107.
90 See id. at 338.
91 See id. at 322, 324-25.
92 See infra Part III.B.
94 Recently Luhmann has begun to approach the term “autonomy” with caution. See RECHT DER GESELLSCHAFT, supra note 18, at 62-66 (noting the confusions to which the term has led). By “autonomy,” Luhmann means “that structures of the system arise only through the operations of the system.” So understood, he says, autonomy is a consequence of operative closure. See id. at 63.
95 See, e.g., id. at 43-44, 76, 150, 204, 281-82; Operational Closure and Structural Coupling, supra note 34, at 1419-20, 1431-38; ECOLOGICAL COMMUNICATION, supra note 33,
systems are, Luhmann says, operatively closed, they are at the same time "cognitively open" to their environments. With this notion of "cognitive openness," and the associated concept of "programming," Luhmann begins his account of how the law (for example) is related to the various other differentiated systems of communication.\(^9\)

### B. Cognitive Openness and "Programming"

In describing autopoietic systems as "self-referential," Luhmann does not mean that an autopoietic system is autistic, operating as if the world consisted only in communications marked by the system's own code. Luhmann defines self-referential systems not as self-contained spheres isolated from everything else, but as systems that, through their operations, necessarily differentiate or distinguish themselves from their environments. The idea of a system, Luhmann emphasizes, includes this difference between the system and its environment.\(^9\) A system's self-reference, therefore, involves not just "self-reference" in the narrow sense, but "external" reference as well.\(^9\)

Luhmann's account of legal communication illustrates this relation between self-reference and external reference. In allocating the code values "legal" and "illegal," legal communication engages in "self-reference" in the narrow sense, by referring to the system's own code. But the something to which legal communication ascribes the code values "legal" and "illegal" is not necessarily itself a legal communication. Legal communications may refer to processes and events beyond the system's boundaries—that is, to events and processes that are not themselves "coded" according to the distinction between legal and illegal. In this way, the distinction between the legal system and its environment, implicit in all legal communication, "re-enters" the legal communication.\(^9\) The legal system is "cognitively open" to the extent that it offers, within legal communication, the possibility of "observing" the

---

\(^9\) The other parts of the story are in Luhmann's discussion of "interests" in legal argument, see infra text accompanying notes 241-62, and his account of "structural coupling," see infra Part IV.

\(^9\) See RECHT DER GESELLSCHAFT, supra note 18, at 23, 76, 92, 440; Closure and Openness, supra note 25, at 335.

\(^9\) See RECHT DER GESELLSCHAFT, supra note 18, at 52 (stating that "self-reference implies external reference, and vice versa"); Unity, supra note 63, at 23.

\(^9\) See RECHT DER GESELLSCHAFT, supra note 18, at 76, 89; Some Problems, supra note 79, at 411.
world beyond the legal system's boundaries.100

Legal communication is nonetheless "self-referential," in the broader sense, because its observations of the legal environment are conditioned by the premises, procedures, standards, and criteria of the legal system. The environment as it appears in legal communication is "operatively constructed," Luhmann says101—not passively or neutrally reflected, but framed by the operations of the legal system itself, subject to the observational conditions the legal system's operations presuppose and reproduce. In this sense, the system's operative closure is the condition for its cognitive openness—i.e., its openness to the environment beyond the legal system's boundaries.102

But to explain the sense in which the legal system is "open" to its environment, Luhmann needs something more than the notion of the legal code. The code is "invariant," Luhmann says, and accordingly it does not itself offer any way for the system to adapt to its changing environment.103 Nor does the code itself provide "criteria for the determination of legal and illegal."104 The code by itself is only a tautology (legal is not illegal, and illegal is not legal) or, if applied to itself, a paradox—the paradox of whether the distinction between legal and illegal is itself legal or illegal.105 In short, a system outfitted only with the legal code would be incapable of operation.106

The solution to these problems, Luhmann maintains, is in the "system-internal distinction between coding and programming."107 A system's code, Luhmann has said, is the binary distinction between two opposed values, one positive and one negative (such as legal and illegal). A "program" guides the allocation of those code values in particular situations.108

100 See RECHT DER GESELLSCHAFT, supra note 18, at 85; Self-Reproduction, supra note 63, at 113.
101 See RECHT DER GESELLSCHAFT, supra note 18, at 41 (referring to his approach as "operative constructivism").
102 See id. at 86; Self-Reproduction, supra note 63, at 113.
103 See RECHT DER GESELLSCHAFT, supra note 18, at 187-88; Coding, supra note 63, at 174.
104 See id. at 189-90.
105 See id. at 188; see also Coding, supra note 63, at 172-73; ECOLOGICAL COMMUNICATION, supra note 33, at 37 (noting problems of tautology and paradox associated with unsupplemented code).
106 See RECHT DER GESELLSCHAFT, supra note 18, at 187-91; Coding, supra note 63, at 172; ECOLOGICAL COMMUNICATION, supra note 33, at 37.
107 See RECHT DER GESELLSCHAFT, supra note 18, at 189.
108 See id. at 93, 189; Operational Closure and Structural Coupling, supra note 34, at 1428; Coding, supra note 63, at 171-72.
"RELATIVE AUTONOMY" OF LAW

While the code is invariant—without it, the legal system would no longer be a legal system—legal programs are variable. Indeed, the very meaning of positive law is that its content may be changed.

Luhmann connects the coding/programming difference to the distinctions between operative closure and cognitive openness and between self-reference and external reference. A system's coding accomplishes its operative closure and corresponds to the "self-reference" side of the distinction between self-reference and external reference. A system's programming is the basis for its openness to the environment and its capacity for "external" reference. A system is thus closed with respect to its code, but "cognitively" open with respect to its programs. Coding and programming thus mutually presuppose one another and combine internal reference with external reference, closure with openness.

According to Luhmann, the prototypical legal program is the "conditional" program: "if A, then B," where "A" is some past, ascertainable fact, and "B" is one of the code values, legal or illegal. This version of the conditional program should be familiar to American readers: it corresponds exactly to the idea of the "rule" in American legal process theory. But while the "rule" is

109 Coding, supra note 63, at 175; see also Operational Closure and Structural Coupling, supra note 34, at 1434 (legal programs include "laws, regulations, contracts"); Ecological Communication, supra note 33, at 64 ("laws or ordinances, statutes or procedural rules, . . . judicial rulings or contractual agreements").

110 See Recht der Gesellschaft, supra note 18, at 187, 193; Coding, supra note 63, at 173-74.

111 See Recht der Gesellschaft, supra note 18, at 533.

112 See id. at 93; Operational Closure and Structural Coupling, supra note 34, at 1429; Ecological Communication, supra note 33, at 40.

113 See Coding, supra note 63, at 173; Some Problems, supra note 79, at 395.

114 See Ecological Communication, supra note 33, at 40, 45.

115 See Recht der Gesellschaft, supra note 18, at 190. Programs refer to the code; the code could not operate without supplementation by programs. See supra text accompanying notes 103-06.

116 See Recht der Gesellschaft, supra note 18, at 195; Ecological Communication, supra note 33, at 45; see also Recht der Gesellschaft, supra note 18, at 83.

117 See Recht der Gesellschaft, supra note 18, at 197; Unity, supra note 63, at 23.

118 See Henry M. Hart, Jr. & Albert M. Sacks, The Legal Process: Basic Problems in the Making and Application of Law 139 (William N. Eskridge, Jr. & Philip P. Frickey eds., 1994) (claiming that a "rule," in "the narrow and technical sense," is "a legal direction which requires for its application nothing more than a determination of
but one form of legal directive for the legal process theorists, the conditional program is of much more general significance for Luhmann. Contrary to “everything jurists have been accustomed to thinking since the ‘social engineering approach’ at the beginning of this century,” Luhmann says provocatively, “the programs of the legal system are always conditional programs.” This claim follows, Luhmann thinks, from his view that the legal program’s role is to establish a combination of openness and closure, external reference, and self-reference. The conditional program makes this combination explicit, referring in its “then” clause to the system-internal code and in its “if” clause to the relevant event or process in the environment. Only the conditional program, Luhmann maintains, accomplishes an “ongoing connection of self-reference and external reference,” giving “the system’s orientation to its environment a cognitive, and at the same time deductively usable form.”

Despite this bold claim, Luhmann is aware that many legal “programs” do not appear to be cast in the form of conditional programs as he has described them. “Purposive programs,” such as the “best interests of the child” standard in family law, state general goals and give the legal decisionmaker discretion as to how to realize them. In contrast to the “retrospective” orientation of the conditional program, purposive programs are oriented toward the future, and they require weighing the likely consequences of possible decisions, not just the ascertainment of past facts.

Appearances notwithstanding, Luhmann argues, there are no “genuine” purposive programs, in the sense of rules that would make the present choice between “legal” and “illegal” contingent on the happening or non-happening of physical or mental events—that is, determinations of fact.

119 See id. at 138-43.
120 RECHT DER GESELLSCHAFT, supra note 18, at 195; see also Self-Reproduction, supra note 63, at 118 (“[C]onditional programmes are the hard core of the legal system . . . All legal norms are conditional programmes and if they are not formulated that way they can be translated into if-then relations.”).
121 RECHT DER GESELLSCHAFT, supra note 18, at 195; see also Unity, supra note 63, at 23.
122 See RECHT DER GESELLSCHAFT, supra note 18, at 200-01; Self-Reproduction, supra note 63, at 118.
123 See RECHT DER GESELLSCHAFT, supra note 18, at 195; see also Helmut Willke, Three Types of Legal Structure: The Conditional, the Purposive and the Relational Program, in DILEMMAS OF LAW IN THE WELFARE STATE, supra note 63, at 280.
124 See RECHT DER GESELLSCHAFT, supra note 18, at 197.
125 See id. at 198-204; Coding, supra note 63, at 171-77.
upon actual future events.\textsuperscript{126} The legal programs described as "purposive" are, he says, better understood as variants of the conditional program. In these programs, the condition on which the choice of code values depends is not a past fact, but a present projection of a future fact.\textsuperscript{127} Luhmann expresses serious reservations about this type of legal rule. He takes a skeptical view of the legal system's capacity to forecast the future,\textsuperscript{128} suggests that considerations of purpose come dangerously close to overstepping the bounds of the judicial role,\textsuperscript{129} and worries that the demonstrated inaccuracy of judicial predictions undermines the authority of legal decisions.\textsuperscript{130} Nonetheless, this "purposive" variant of the conditional program seems to satisfy the criteria of a valid legal program: it connects the system's self-reference with external reference, and it creates an "openness" of the system's operations toward the environment (and toward the future).

\textbf{C. Closure and Openness}

To this point, we have at least the beginnings of Luhmann's autopoietic reformulation of the open systems paradigm. Social subsystems do not exchange information through inputs and outputs that cross system boundaries; rather, information is system-specific, generated under the aegis of a particular code and with respect to the system's programs (or, rules that govern allocation of the code's values). Social subsystems are, by definition, "operatively closed": a system's coded communicative operations establish the system's boundaries, and no system performs operations in another system, i.e., under another system's code. In this sense, they are "autopoietic"—self-producing, self-reproducing, and recursively self-referential. A system's closure is the condition for any "openness" systems can attain: communication in one system may "observe" the system's environment, but only those aspects of the environment that can be made relevant to the system's code,

\textsuperscript{126} See ECOLOGICAL COMMUNICATION, supra note 33, at 66 ("[T]he basic form of law remains the conditional program, no matter how much talk there is in environmental law about 'goals.'"); RECHT DER GESELLSCHAFT, supra note 18, at 200.

\textsuperscript{127} See RECHT DER GESELLSCHAFT, supra note 18, at 200; Self-Reproduction, supra note 63, at 118.

\textsuperscript{128} See RECHT DER GESELLSCHAFT, supra note 18, at 200; Self-Reproduction, supra note 63, at 118.

\textsuperscript{129} See RECHT DER GESELLSCHAFT, supra note 18, at 201; see also Closure and Openness, supra note 25, at 347 ("[O]ne may reach the point when the anti-trust courts can no longer be distinguished from the anti-trust agency, or youth courts from the youth welfare office itself.").

\textsuperscript{130} See RECHT DER GESELLSCHAFT, supra note 18, at 202-03.
and only so far as they are communicable within the system's programs.

We have, further, some sense about the way Luhmann's autopoietic theory applies to the world of law. The legal system consists in communications coded by the distinction between legal and illegal. Its boundaries therefore include all, but only, communications that concern legal validity or invalidity. Legal programs encompass "the whole of positive law"—constitutions, statutes, regulations, court decisions, and also contracts. The prototypical form of these programs is the conditional program (understood to include also the so-called "purposive" program).

In no way, however, are we yet in a position to assess Luhmann's reformulation of the "relative autonomy" problematic. First, the account of the legal system provided so far is at best a sketch. More needs to be said about how the legal system operates before we will have even a minimally adequate map of the legal terrain. Second, the account of openness and closure, coding and programming, has not focused specifically on how the legal system is related to other particular subsystems, such as politics and the economy. To say that communication in any particular system has a limited capacity for openness to its various social environments—a capacity limited by the system’s operative closure—may be the beginning of Luhmann’s account of how law and other systems are related, but it is not the end of his story.

The following Parts address these two points. In Part III, I fill out Luhmann's map of the legal system. In Part IV, I discuss the notion of "structural coupling" that Luhmann uses to specify the relations between law and other communicative systems.

III. THE LEGAL SYSTEM'S "INTERNAL" DIFFERENTIATION

All communications that invoke the legal code, Luhmann has said, belong to the legal system. But not all legal communications are equally important in the system's ongoing reproduction, nor do they participate in this process in the same way. The legal system is itself a differentiated system, Luhmann maintains, with its own subsystems and particularized forms of communication. This section presents Luhmann's view of the legal system's "internal" differentiation.

A. Forms of Differentiation

Even in arguing for an expansive conception of the legal system's boundaries, Luhmann notes the centrality of its "organiza-
An essential condition for the development of legally coded communication, Luhmann argues, is the development of "a more narrow realm of legally binding decisions." This legal "subsystem," comprising both courts and legislatures, Luhmann calls "the organized decision system of the legal system." Within this organized decision system, Luhmann is particularly interested in accounting for what he calls "the special position of courts."

The legal system, a subsystem of the differentiated system of society, is thus itself internally differentiated into subsystems. But how should we conceive of this internal differentiation? How are the legal system's subsystems ordered? Luhmann approaches these questions, in the first instance, with a typology of "forms of differentiation" he developed before his turn to autopoiesis, according to which systems may be differentiated "segmentally," "hierarchically," or "functionally." Luhmann has relied on the notion of functional differentiation in his general account of society as a system: subsystems such as law, politics, and economy, he has claimed, are differentiated communicative networks devoted to particular societal functions. The other two forms can be explained together. "Segmentation," in Luhmann's terminology, is the differentiation of "equal subsystems." "Hierarchy" (or alter-
natively, "stratification") is the differentiation of "unequal subsystems." A society comprised of a collection of families with roughly equal wealth and power is "segmentally" differentiated, but to the extent that the various families are ranked in order of wealth or power, the society is "hierarchically" differentiated or "stratified." Given Luhmann's emphasis on functional differentiation in his account of social subsystems such as law, politics, and the economy, one might expect him to characterize the legal system's "internal" differentiation in the same terms. An emphasis on functional differentiation would support a legal-process-style account of the different functions of courts, legislatures, and administrative agencies, and the different forms of legal communication each function requires. And Luhmann begins his account of courts' "special position" by distinguishing between legislation and adjudication, describing that distinction as essential for an understanding of courts' activities. Nevertheless, for reasons he does not make entirely clear, Luhmann does not discuss explicitly the possibility that functional differentiation might be the primary form for the legal system's internal differentiation.

With respect to the other two forms in his typology, Luhmann does acknowledge instances of hierarchical and segmental differentiation within the legal system. For example, the American federal courts are arranged in a hierarchy from district courts to courts of appeals to the Supreme Court. And at the first two levels of this hierarchy, one finds segmental differentiation—the regional courts of appeals, for example, are similar in structure and undifferentiated by rank. But neither form of differentiation describes the organization of the legal system as a whole, nor is either, in Luhmann's view, the most fundamental form of differentiation in the "more narrow realm" of the "organized decision system." Neither form, he maintains, accounts for the courts' special position.

---

137 See DIFFERENTIATION, supra note 60, at 233-34; see also RECHT DER GESELLSCHAFT, supra note 18, at 297, 446-47.
138 See DIFFERENTIATION, supra note 60, at 234; see also RECHT DER GESELLSCHAFT, supra note 18, at 297, 447.
139 See RECHT DER GESELLSCHAFT, supra note 18, at 302.
140 He argues only that viewing the legal system as a functionally differentiated subsystem of society does not preclude other forms of "internal" differentiation. See id. at 333-37.
141 See id. at 323-24 (discussing the court system).
142 Id. at 145.
Luhmann is particularly interested in dispatching the idea that the courts' position should be understood in hierarchical terms. Despite his phrase "special position," Luhmann expressly denies that courts are more important than legislatures, either within the legal system, or in the legal system's relations with the rest of society.143 But neither do courts stand below legislatures in a "hierarchy of instruction."144 Traditional conceptions of legislative supremacy, in which the court is the legislature's faithful agent, miss the circularity of the relation between courts and legislatures. While courts seek to interpret the will of the legislature (or the meaning of legislation), for their part legislatures must try to anticipate judicial interpretation and to determine "how new statutes may be inserted into the totality of the courts' decision premises,"145 including prior judicial decisions.

This circularity in the relation between adjudication and legislation, between courts and legislatures, is the starting point for Luhmann's analysis of the legal system's internal differentiation.146 To explain that relation further, Luhmann introduces a form of differentiation comparatively undeveloped in his earlier work, and absent from his usual typology: differentiation according to a "center/periphery" schema.147 Courts' special position, Luhmann argues, is their "centrality" in the legal system's operations, in a sense of "centrality" explained below.

B. The Central Position of Courts

As Luhmann acknowledges, the center/periphery scheme has generally been understood in geographical or geopolitical terms. It has been used, for example, to account for the distinction between town and country in precapitalist societies,148 or to analyze the economic and technological differences among nation-states and other territorial regions in the early-modern capitalist world economic system.149 For his purposes, however, Luhmann ex-

---

143 See id. at 323; Self-Reproduction, supra note 63, at 119 ("Within the legal system the priority passes onto the legislature.").
144 RECHT DER GESELLSCHAFT, supra note 18, at 302.
145 Id. at 302.
146 See id. at 305.
147 Luhmann has mentioned this distinction in at least one work other than Recht der Gesellschaft. See LUHMANN, SOCIAL SYSTEMS, supra note 20, at 190. The invocation of center and periphery in Recht der Gesellschaft, however, seems to be one of the few instances in which Luhmann has used the distinction systematically. See also Teubner, supra note 93, at 1459-60.
148 See RECHT DER GESELLSCHAFT, supra note 18, at 333 & n.74.
149 See id. at 321 n.50, 333 & n.75. Luhmann mentions in this connection the work of
pressly disavows all "spatial materialization[s]" the center/periphery metaphor might have.\textsuperscript{150} He argues, further, that although this form of differentiation is more prevalent in premodern societies,\textsuperscript{151} it persists in some modern contexts.\textsuperscript{152} But if the center/periphery metaphor is not to be understood either spatially or in its usual temporal setting, what sense is it supposed to have?

1. Center, Periphery, and "Empire"

One approach to what Luhmann means by "center" and "periphery" is through comparison with a familiar and apparently similar position in American legal thought: Ronald Dworkin's claims for the special place of judicial decision in "law's empire."\textsuperscript{153} Like Luhmann's image of center and periphery, Dworkin's elaboration of the "empire" metaphor invokes premodern forms of social organization: "We are subjects of law's empire," Dworkin says, "liegemen to its methods and ideals."\textsuperscript{154} As in Luhmann's image of center and periphery, Dworkin's metaphor of law's empire carries geopolitical connotations—connotations that Dworkin, like Luhmann, ultimately tries to disavow.\textsuperscript{155} And Dworkin, too, places courts in the central position: "The courts," he writes, "are the capitals of law's empire, and judges are its princes."\textsuperscript{156}

Unlike Luhmann's survey of the legal terrain (as we will see), and despite the broad scope the "empire" metaphor suggests, Dworkin's focus in Law's Empire is concededly "narrow":\textsuperscript{157} he visits only law's "capitals," the appellate courts, and leaves the provinces or periphery unexplored. "A more complete study of

\textsuperscript{150} See Recht der Gesellschaft, supra note 18, at 321 n.50; cf. id. at 565, 567 (describing legal system as a social "immune system" and conflicts as "parasitic systems," but denying that this description should be understood "purely metaphorically").

\textsuperscript{151} See id. at 333 (suggesting that the center/periphery scheme first appears to be "a very old, certainly premodern form of differentiation").

\textsuperscript{152} See id. at 333-37.

\textsuperscript{153} See RONALD DWORIN, LAW'S EMPIRE (1986).

\textsuperscript{154} Id. at vii; see also id. at 407 (judges as "princes" of law's empire).

\textsuperscript{155} See id. at 413 ("Law is not exhausted by any catalogue of rules or principles, each with its own dominion over some discrete theater of behavior. Nor by any roster of officials and their powers each over part of our lives. Law's empire is defined by attitude, not territory or power or process.").

\textsuperscript{156} Id. at 407.

\textsuperscript{157} Id. at 12.
legal practice,” Dworkin admits, “would attend to legislators, police- 
men, district attorneys, welfare officers, school board chair- 
men” and others, not just the “judges in black robes” who preside 
over “formal adjudication.”158 Despite this admission, Dworkin 
nevertheless seeks to defend his choice of a narrower project 
against arguments for (what he calls) “social realism.” Precisely to 
the degree a theory is “realist,” he contends, it must recognize 
law’s “special feature,” namely, its “argumentative” structure.159 In 
principle, Dworkin maintains, one can study law's argumentative 
structure from either of two perspectives—the “internal, partici- 
pants’ point of view,”160 or the “external” perspective of the histo-
rian or sociologist. “Both perspectives on law,” Dworkin at first 
acknowledges, “are essential, and each must embrace or take ac-
count of the other.”161 But Dworkin reverses himself before the 
paragraph is over. The “external” accounts so far offered, he an-
nounces, “ignore the structure of legal argument” and are there-
fore “perverse,” “impoverished and defective,” and “program-
matic” rather than “substantive.”162 Taken together, Dworkin 
laments, these “external” accounts comprise the “depressing his-
tory of social-theoretic jurisprudence in our century.”163 Given 
that understanding of the situation, Dworkin of course opts for 
“the internal, participants’ point of view.”

But even if Dworkin were correct in dismissing so-called “ex-
ternal” accounts—a point I would not want to concede164—why 
does an “internal” or “participant’s” perspective require him to 
consider only judging and judicial decisions in his account of law's 
empire? As Dworkin acknowledges, most participants in the legal 
system are not judges, yet they too “worry and argue about what 
the law is.”165 If, as Dworkin says, he could have “taken their 
arguments as . . . paradigms rather than the judge’s,”166 and if “judges

158 Id. 
159 Id. at 13. 
160 Id. at 14. 
161 Id. at 13-14. 
162 Id. at 14. 
163 Id. 
164 Dworkin would almost certainly classify Luhmann’s work as an “external” account: 
it does not proceed from a participant's perspective, nor does it aspire to be a “practice-
guiding theory.” RECHT DER GESELLSCHAFT, supra note 18, at 24. Luhmann himself 
describes the theory as “external description.” See id. at 496-98. For a critique of 
Dworkin’s use of the internal/external distinction, emphasizing the questions the distinc-
tion excludes, see Schlag, supra note 10, at 917-22. 
165 DWORKIN, supra note 153, at 14. 
166 Id. at 14-15.
... are not the only or even the most important actors in the legal drama,” then why single out judicial decision as the paradigm of legal argument? Why focus only on “formal legal argument from the judge’s viewpoint”?

Dworkin's justification for judges' centrality in law's empire is as follows: "the structure of judicial argument is typically more explicit, and judicial reasoning has an influence over other forms of legal discourse that is not fully reciprocal." Having said that, however, Dworkin tells us in the next sentence that “[w]e need relief from the daunting abstraction of these ... remarks,” and he immediately proceeds to take up permanent residence in the appellate court, the capital of law's empire. No further explanation is forthcoming.

Luhmann's center/periphery schema shares Dworkin's sense that courts are central to the legal system's operations. But Luhmann would reject both of Dworkin's reasons for why that is so. The courts' “central” position is not a matter of their enjoying the lion's share of influence, either within the legal system, or in the legal system's relations to other social spheres. That conception would posit the legal system as a hierarchy with courts at the top, and as noted above, Luhmann rejects the idea that courts and legislatures are hierarchically differentiated. Nor would Luhmann agree with Dworkin's suggestion that judicial communications differ from other legal communications by making “more explicit” a “structure” common to both—as if judicial opinions were the original document, and all other legal communications were more or less faded copies. In describing courts as the legal system's center, Luhmann does not mean that the court system expresses the system's unitary structure, allowing one to discern the structure of the whole by examining the structure of a single (cen-

---

167 Id. at 12.
168 Id. at 14.
169 Id. at 15.
170 Id.
171 For many legal scholars, of course, there need be no explanation for focusing on courts and judicial opinions. American legal scholarship traditionally has been court-centered. That, perhaps, may be one reason why Dworkin's argument for courts' centrality is so abbreviated. The problem is that the very title of Dworkin's book, Law's Empire, suggests a broader scope, and his various admissions about the possibility of other perspectives positively require him to justify why he selects the conventional “through the eyes of the appellate judge” perspective.
172 See supra text accompanying notes 135-45.
173 This may not be what Dworkin is trying to suggest, but no alternative interpretation is immediately apparent.
The center/periphery scheme is thus neither a model of causal influence, nor a notion of a totality whose essence is expressed by some central part.

2. The Legal Obligation to Decide Legal Questions

Instead, the sense in which courts are “central” for Luhmann concerns their relation to the process of legal decision. While all communications invoking the legal code belong to the legal system, binding legal decisions are particularly important for the legal system’s operations and reproduction. In Luhmann’s phrase, the development of mechanisms for making and enforcing binding legal decisions tames what would otherwise be a “wild growth of normative projections.” By authoritatively allocating a code value, legal or illegal, binding decisions both establish points of connection for future communications (including future decisions), and at the same time exclude, as a practical matter, certain other communications that would otherwise be possible. The legal system’s autopoiesis, Luhmann has said, depends upon the development of an “organized decision system.”

Courts, of course, are not the only legal decisionmakers. Luhmann includes legislatures in his notion of the legal system’s “organized decision system,” and within the category of legal decisions he includes not just court decisions, but also (for example) contracts, statutes, treaties, . . . administrative acts, wills, [and] land registry entries—in short, any operation that “change[s] the situation of the law.” What makes courts “central” for Luhmann is not that they make legal decisions, but that they alone are under the legal obligation to render legal decisions. Courts, Luhmann points out, are legally required to render a decision in all cases before them, or else to explain why the case is not properly before them—itself a legal decision. By contrast, neither legislatures nor contracting parties are ordinarily legally obliged to reach decisions, though they may be under political or economic pressures to

174 See RECHT DER GESELLSCHAFT, supra note 18, at 337. To see the courts as expressing a structure common to all subsystems of the legal system is a version of the “segmental differentiation” thesis Luhmann rejects, at least as an account of the legal system as a whole. See supra text accompanying notes 135-42.
175 See supra note 18, at 147.
176 See supra text accompanying notes 131-34.
177 See supra note 18, at 320.
178 See supra note 18, at 320.
179 See supra note 18, at 320.
180 See supra note 18, at 310-14.
decide. According to Luhmann, the legal requirement that courts decide between legal and illegal, consistent with valid law, is what establishes the courts' "special" or "central" position in the legal system.

One might well ask: what's so "special" or "central" about that? Luhmann seems to rely here on an intuition that the legal obligation to decide "surrounds" courts by law, while the legislature, free from the legal obligation to decide, remains legally unsurrounded. A better argument for courts' centrality, however, would focus first on what makes communication outside the courts "peripheral." According to Luhmann, legal communication outside the courts—legislation, or contract- or corporation-formation, for example—is "peripheral" in the sense that it establishes "contact zones" to other social subsystems, such as the political and economic systems. As Luhmann will explain in his account of "structural coupling," the enactment of a statute is, from the point of view of legal communication, a legal decision that "change[s] the situation of the law." But from the point of view of the political system, it is an operation of politics, the product of legislative maneuvering. Similarly, the formation of a contract or corporation counts as an operation of the legal system because it, too, "change[s] the situation of the law." Considered as an economic transaction, however, it is an operation of the economic system that links up to past economic transactions and enables future transactions. The legal "periphery" is thus "peripheral" in the sense that its operations may also be seen at the same time as operations of some other system, whether political or economic.

Legal communication in the courts is not, in Luhmann's view, so closely connected to the operations of other systems. Courts employ various procedures and formalities that insulate them, through the law itself, from environmental pressures. Jurisdictional and procedural rules, for example, limit the kinds and numbers of controversies courts will have to decide, and they also ensure that the legal uncertainties courts consider will be presented...
in a manner suitable for court decision. Luhmann emphasizes, further, the way in which the courts develop, through law, their own "temporality," a distinctive connection of the present to the past and future. Courts "reconstruct the past into the format of a case," he says, through a selective "framing" and presentation of the events, in a manner governed by substantive and procedural law. And in deciding a present case, a judge will often consider future cases that may be affected by the present decision, or other kinds of future consequences—in either event imagining, in Luhmann's words, "the present as past of a future present." Luhmann speaks in this connection of the courts' "temporal autonomy": courts' decisions connect past, present, and future, in a way constructed and governed by law. And what one could call the "internal temporality" of this process—the duration and timing of court procedures—does not necessarily correspond to demands from the legal environment. Litigation does not simply settle disputes and resolve legal uncertainty; instead, Luhmann contends, one function of procedure is "the production of uncertainty through the protraction of [legal] decision."

Luhmann describes the courts' central position, alternatively, as one of "paradox management." A paradox arises when one tries to apply the legal code to itself, asking whether the distinction between legal and illegal is itself legal or illegal. Where the decision between legal and illegal is not itself legally required—as is the case, Luhmann has said, outside the courts—this basic paradox is more easily avoided. In the legislature, for example, the problem can be "externalized," by presenting legislation as a politically (rather than legally) motivated determination of legal and illegal. But in the courts, where legal decision is legally required, the paradox is more intractable. Programming, Luhmann has said, is a way of deflecting the paradox, by prescribing criteria, in the

189 See id. at 326.
190 Id.
191 Id.
192 See id. at 208.
193 See id. at 308, 325.
194 See id. at 208.
195 Id. at 209.
196 Id. at 320.
197 See Some Problems, supra note 79, at 401 (describing strategy of "externalizing" paradoxes).
form of legal rules, that govern the choice between legal and illegal. The idea is to suppress, or "make invisible," the foundational question whether the legal system's distinction between legal and illegal is itself legal—the question whether law can be self-legitimating. On Luhmann's view, the paradoxes of self-reference never fully disappear; they are only more or less successfully managed. This task of paradox management, according to Luhmann, is a basic problem for the courts.

The courts are thus "central" to the legal system, on Luhmann's view, because they are legally obliged to make legal decisions—or alternatively, because they are more insulated from their environment than "peripheral" legal communication—and because they perform the task of "paradox management." But this description does not itself provide much of a picture of how communication in the courts operates. Not all communication in the courts takes the form of decision, Luhmann acknowledges. What other forms of communication operate in the courts?

One important form of communication to which Luhmann's recent work has devoted considerable attention is legal argument.

199 RECHT DER GESELLSCHAFT, supra note 18, at 176, 215, 308 n.21, 500, 546-47 (on strategy of making paradoxes invisible); see also Third Question, supra note 198, at 156-57 (same).

200 See, e.g., Third Question, supra note 198, at 156 ("Paradoxes have a fatal inclination to reappear.").

201 In addition to the basic paradox involved in the code's self-application, Luhmann mentions further paradoxes more or less parallel in structure. For example, the idea of decision is paradoxical, according to Luhmann, because it is a unity, but a unity of the difference between alternatives that cannot be chosen simultaneously. (Much as the code is, on Luhmann's analysis, a unity between the incompatible alternatives of legal and illegal.) See RECHT DER GESELLSCHAFT, supra note 18, at 307-08. Luhmann further mentions the "paradox" that a judge must decide even if she cannot decide. See id. at 317.

Some autopoietic theorists argue that the discovery of these "paradoxes" is an important accomplishment of autopoietic theory. See, e.g., TEUBNER, supra note 34, at 4-5 (listing various legal paradoxes); id. at 10 (arguing that insistence on paradoxes is what "makes theories of self-reference and autopoiesis potentially so promising"); see also Teubner, supra note 93, at 1444. I am less convinced. I agree with Luhmann that the foundational problem of how law can be self-legitimating is an important one. But for reasons explained in Part V.B. below, I find Luhmann's thesis of binary coding unpersuasive, and thus I would not recast the substantive problem of law's legitimacy as a logical problem of the code's self-application.

202 See Legal Argumentation, supra note 178, at 286.

203 Luhmann devotes a long chapter of his recent book on law to the topic of legal argumentation. See RECHT DER GESELLSCHAFT, supra note 18, at 338-406. He has recently published an article, available in English, that covers many of the same themes. See Legal Argumentation, supra note 178.
3. Legal Argument

Luhmann presents his theory of legal argument as an alternative to conventional understandings. Some theories of argument, Luhmann suggests, proceed from the perspective of a participant, seeking (in Dworkin’s phrase) “to grasp the argumentative character of our legal practice by joining that practice and struggling with the issues of soundness and truth participants face.”204 Luhmann characterizes these accounts as “autological,” or self-including: they themselves offer reasons, seek justification, and try to avoid error, in the very ways they prescribe for legal argument.205 Dworkin’s use of the mythical Judge Hercules to specify how “law as integrity”206 would operate in particular cases exemplifies this theoretical strategy.207 The fundamental problem with such accounts, Luhmann suggests, is that to the extent they try to justify argumentatively the techniques and criteria of argumentative justification, they run into self-referential paradox.208 “Figures of justification,” Luhmann concludes, “are ultimately anchored dogmatically,” not argumentatively.209

Procedural theories of argumentation, Luhmann says, seek to avoid such self-referential paradoxes by exiting the context of substantive legal argument and offering, instead, general accounts of the framework in which legal argument is to occur. But in Luhmann’s view, these procedural theories are empty. While they prescribe, for example, “appropriateness” as a principle, and recommend impartiality and attention to all the circumstances,210

204 DWORKIN, supra note 153, at 14.
205 See Legal Argumentation, supra note 178, at 290 (stating that “autologically” means that “what it establishes” must also “apply to itself”).
206 See DWORKIN, supra note 153, at 225-75.
207 See id. at 15 (describing, under the heading “The Real World,” various chestnut cases that serve as “extended examples for the various arguments and discussions of later chapters”); id. at 15-30; id. at 239-40 (introducing Judge Hercules); id. at 238-54 (Hercules considers a case involving negligent infliction of emotional distress); id. at 317-37 (Hercules’ mythical colleague Hermes considers the “snail darter case” under the Endangered Species Act); id. at 337-54 (Hercules considers the snail darter case); id. at 379-92 (Hercules considers and decides Brown v. Board of Education, 347 U.S. 483 (1954)); id. at 393-97 (Hercules decides Regents of the University of California v. Bakke, 438 U.S. 265 (1978)).
208 See RECHT DER GESSELLSCHAFT, supra note 18, at 343.
209 Id. at 564; see also id. at 176 (“[A]ll justification has a dogmatic character.”).

Luhmann’s criticisms of participant-centered or procedural approaches are not ex-
these accounts neither influence legal practice nor correspond to the specificity and variety of actual legal argument.211

Luhmann's account of legal argumentation is not a substantive theory that would "offer those engaged in argument . . . assistance in the search for sound, convincing grounds."212 Unlike Dworkin, Luhmann does not investigate legal argumentation by performing it, either actually or virtually. His strategy, instead, is to observe the process of legal argumentation from "outside" of that process. And rather than propose a procedural theory of the framework in which legal argument occurs, Luhmann seeks argumentation's "system function"213—the connections between the operation called "argument" or "argumentation" and basic features of autopoietic systems, such as "self-reference" and "external reference."

Luhmann begins with the idea that the context in which legal argument occurs is a dispute over the meaning of legal texts, whether "statutes or legal opinions . . . or other noteworthy documents from legal practice."214 In that situation, where "the texts do not supply an unambiguous proposal for what decision should be made,"215 one must engage in what Luhmann calls "second-order observation," or, "an observation of the observation of texts, an observation of readers."216 Argument is, in Luhmann's terminology, the legal system's "self-observation"—a legal communication's observation of other legal communications, such as statutory texts or judicial decisions—in a context where legal decision is uncertain or contingent.217

Luhmann further characterizes this "second-order observation" or "self-observation" with the distinction, borrowed from information theory, between "information" and "redundancy." The notions of information and redundancy are opposites. A communication "produces information in so far as it produces surprises."218 It produces redundancies "so far as that is not the

---

211 See RECHT DER GESELLSCHAFT, supra note 18, at 345.
212 Legal Argumentation, supra note 178, at 285.
213 RECHT DER GESELLSCHAFT, supra note 18, at 352 n.37.
214 See Legal Argumentation, supra note 178, at 287; see also RECHT DER GESELLSCHAFT, supra note 18, at 338.
215 Legal Argumentation, supra note 178, at 287.
216 Id. at 288.
217 See RECHT DER GESELLSCHAFT, supra note 18, at 351-52.
218 Legal Argumentation, supra note 178, at 291.
Redundancies are the information- and systems-theoretical versions of what participants in argument call "reasons" or "grounds." And in Luhmann's view, they are the dominant feature of legal argument: "Argument," he maintains, "overwhelmingly reactivates known grounds."

Luhmann's point can be illustrated with a simple example. Consider, for instance, a lawyer presenting a legal argument to a common law court. That lawyer will almost certainly present readings or interpretations of prior cases—"observations" of the system's prior decisions, in Luhmann's terminology. He is likely to emphasize that his case is essentially the same as other decided cases that point in his favor—redundancy. And in writing her opinion, the judge is likely to emphasize her decision's continuity with precedent. In this way argument transforms the "information" of the case—the particular features that make it unique or non-identical with all other cases—into redundancies.

---

219 Id.
220 See id. at 292 ("Grounds are . . . nothing other than redundancy functions . . . "); Recht der Gesellschaft, supra note 18, at 373 ("Reasons are symbols for redundancy.").
221 Perhaps in order to distinguish his position decisively from participant-centered approaches, Luhmann claims at one point that "[a]n observation of argument using the distinction between information and redundancy can do without referring to grounds and errors. In the description they are not mentioned (just as in higher-order types of calculus, one no longer works with constants but with variables)." Legal Argumentation, supra note 178, at 292-93. Luhmann's account of argumentation in Recht der Gesellschaft, however, continues to speak of "reasons" or "grounds" ("Gründe"), even after introducing the notion of redundancy. See Recht der Gesellschaft, supra note 18, at 368-76. For the reader's ease, I sometimes use the terms "reason" or "ground" alongside the term "redundancy."
222 Legal Argumentation, supra note 178, at 292; see also Recht der Gesellschaft, supra note 18, at 353.
223 In an article Luhmann cites repeatedly, Martin Shapiro makes this connection between precedent and redundancy:
[I]t is obvious that legal discourse organized by the rules of stare decisis emphasizes, and itself insists that its success rests upon, high levels of redundancy, and therefore, . . . low levels of information. The strongest legal argument is that the current case, on its facts, is "on all fours" with a previous case and that the decision in that case is deeply imbedded in a long line of decisions enunciating (repeating) a single legal principle. In other words, the strongest argument is that the current case . . . is totally redundant, and under the rules of stare decisis the duty of the judge is to transmit a message that is equally redundant. . . . [T]he rules of legal discourse seem to require each attorney to suppress as much information and transmit as much redundancy as possible.
Martin Shapiro, Toward a Theory of Stare Decisis, 1 J. Legal Stud. 125, 127 (1972).
224 "Legal cases . . . come forth as concrete and thus different. They provoke the system to take account of their diversity. Argument takes up this provocation and transforms them into redundancies . . . " Recht der Gesellschaft, supra note 18, at 374; cf. Legal Argumentation, supra note 178, at 291 ("[C]ommunication may also be seen as the on-
The example also illustrates Luhmann’s further point: redundancies or reasons also exclude. In framing the matter to be decided, legal argument screens out, as legally irrelevant, certain aspects of the environment from which the litigation arose. And the reasons or redundancies offered in legal argument exclude not just environmental “noise,” but “internally produced noise” as well—that great bulk of legal communications, both past and potential, that is irrelevant to a given argument. The adverse relation of the parties and their attorneys dramatizes this exclusionary effect of redundancies or reasons. Each side marshals reasons for its position that “repel,” as it were, the opposing side’s arguments. And if the matter is presented for decision to a multi-judge panel, the antagonism among reasons or redundancies may appear in argumentative sparring between majority and dissent. Reasons are thus for Luhmann not just “attractors,” or points of connection that organize argumentative operations; they are also (one could say) “excluders” and “distinguishers.” Legal argument establishes connections to past legal communications, but those connections are always selective.

The example, finally, illustrates the process Luhmann calls “reapplication.” Argument takes up a distinction made in prior communication and reapplies it to a present case, perhaps envisioning further reapplication to future cases. Reapplication thereby “confirms” and enriches the redundancy or reason by extending it to a new context. Through this process of reapplication, perhaps most evident in common-law litigation, reasons or redundancies may “condense” as a rule, or ultimately as a principle. For Luhmann, then, legal concepts, as “successful redundancies,” are “condensed experiences and established distinctions” of the legal system.

This process of confirmation and condensation is intensified through the development of what Luhmann calls “legal dogmat-
ics”—essentially, doctrinal analysis, both in the courts and in the universities. By creating an “elaborated network” of legal concepts, Luhmann argues, dogmatics can make legal questions more precise and mistakes more evident. Legal dogmatics are thus not necessarily “dogmatic” in the sense of “uncritical.” While Luhmann generally describes the effect of legal dogmatics as one of “stabilization,” he notes that the process of conceptual clarification can also exercise a critical or even creative force in legal argument.

Important as redundancies are to legal argument, Luhmann maintains, the system could not operate only on that basis. A system that turns all information into redundancy, Luhmann notes, would lose its capacity to be stimulated by its environment. Redundancy is but one side of a distinction; its counterconcept is “variety,” “the number and diversity” of a system’s operations. Or, in Luhmann’s alternative formulation: variety is “the number and multifariousness of events which set off information processing within the system.” The concepts of redundancy and variety are opposed. The greater a system’s variety—the more numerous the events that must be accounted for in the system’s information-processing—the more difficult it will be for the system to connect its operations through redundancies. But like other binary oppositions in Luhmann’s thought, this opposition between variety and redundancy is not a simple one of mutual exclusion. Luhmann emphasizes that both redundancy and variety are conditions for the legal system’s operation. The system must therefore perform, in Luhmann’s phrase, a “mediation of variety and redundancy”—a balance between novelty and stimulation by the environment on one hand, and “reactivation of known grounds” on the other.

Luhmann approaches this relation between variety and re-

---

234 See RECHT DER GESELLSCHAFT, supra note 18, at 388.
235 See id. at 265, 275-76.
236 See id. at 276, 367-68, 388.
237 See id. at 358; cf. Legal Argumentation, supra note 178, at 291 (“[R]edundancy and information mutually presuppose each other.”).
238 See RECHT DER GESELLSCHAFT, supra note 18, at 374.
239 See id. at 358.
240 Legal Argumentation, supra note 178, at 292.
241 See RECHT DER GESELLSCHAFT, supra note 18, at 358; Legal Argumentation, supra note 178, at 298 (observing that the increase in variety has “internal costs,” i.e., costs of maintaining adequate redundancies or conceptual structure).
242 See RECHT DER GESELLSCHAFT, supra note 18, at 358, 361.
243 Id. at 371.
dundancy by considering the historical shift toward consideration of “consequences” in legal argument. He distinguishes between two kinds of consequences argument might consider. The first are “system-internal” consequences—the consequences a decision will have for future legal decisions. To consider these consequences, Luhmann observes, is a “normal moment of recursivity.” Legal decisions connect not just to past, but also to future decisions. This sort of consequence-weighing, Luhmann argues, poses little risk to the legal system. To determine whether a contemplated decision would make some future behavior legal or illegal, were the behavior to occur, does not involve an empirical prediction of whether, how frequently, on what occasions, and with what consequences for the legal environment, the behavior is in fact likely to occur.

More problematic, in Luhmann’s view, is this century’s trend toward consideration, in legal argument and decision, of “external” consequences, or, the effects a legal decision will have on its environment. Luhmann acknowledges that it would be odd to decide, for example, the question whether a volunteer rescuer should receive compensation for a rescue attempt, without considering the effects the various possible rules would have on future behavior. But prediction of a decision’s effects is by no means simple, Luhmann maintains, particularly in cases involving complex questions of risk-allocation. If even science has difficulty in predicting consequences, what reason is there to think that a judge will be up to the task? “Seen according to the standards of empirical research,” Luhmann contends, “orientation toward consequences is nothing but imagination with the force of law.” This skepticism about directing argument and decision toward “external” consequences connects with Luhmann’s misgivings, discussed above,

---

244 See id. at 380; see also id. at 293.
245 Id. at 380; see also Legal Argumentation, supra note 178, at 293 (“[A]ll that is involved is a testing of the recursiveness of the autopoietic operations, something required in any event.”).
246 See RECHT DER GESELLSCHAFT, supra note 18, at 380; see also Legal Argumentation, supra note 178, at 293 (“It is relatively unproblematic to determine legal consequences, that is, the legal positions which would obtain if the rule used to justify the decision were to apply.”).
247 See RECHT DER GESELLSCHAFT, supra note 18, at 381.
248 See id. at 381-82; cf. Legal Argumentation, supra note 178, at 294 (contending that correlations between future facts and present projections of future facts in legal argument are “uncertain precisely where they are supposed to be scientifically guaranteed”).
249 RECHT DER GESELLSCHAFT, supra note 18, at 382.
about purposive programming.\footnote{See supra text accompanying notes 117-30. Luhman notes that an orientation toward consequences in argument is not the same thing as purposive programming in decision. See RECHT DER GESELLSCHAFT, supra note 18, at 379. But he means only that argument must be distinguished from decision, see supra text accompanying notes 214-17, and that the consideration of “internal” consequences does not require purposive programming. See RECHT DER GESELLSCHAFT, supra note 18, at 379-80.}{250}

In Luhmann’s information-theoretical terms, the historical trend toward considering “external” consequences marks a shift toward variety and away from redundancy.\footnote{See Legal Argumentation, supra note 178, at 295 (referring to the “increase in variety which results from the consideration of consequences”); RECHT DER GESELLSCHAFT, supra note 18, at 383.}{251} This tension between variety and redundancy, between “responsiveness” to the legal environment and orientation toward legal concepts, appears in legal theory as the debate between “interest jurisprudence” (Interessenjurisprudenz) and “conceptual jurisprudence.”\footnote{See supra note 178, at 296-97 (arguing that systems theory must “detach[]” the notions of concepts and interests “from that unfortunate controversy between Begriffsjurisprudenz and Interessenjurisprudenz”).}{252} A central idea of the “interest” or “realist” approach, of course, is that it is absurd to decide basic legal issues simply by analyzing legal concepts, without considering and self-consciously weighing the social interests and values at stake.\footnote{See, e.g., BENJAMIN N. CARDOZO, THE NATURE OF THE JUDICIAL PROCESS 98-141 (1921) (“judge as legislator,” balancing social interests); Felix S. Cohen, Transcendental Nonsense and the Functional Approach, 35 COLUM. L. REV. 809 (1935) (criticizing “transcendental nonsense” of conceptual jurisprudence and recommending conscious evaluation of ethical, economic, and policy issues implicitly decided in conceptual approach); Oliver Wendell Holmes, The Path of the Law, 10 HARV. L. REV. 457, 465-66 (1897); Roscoe Pound, Mechanical Jurisprudence, 8 COLUM. L. REV. 605, 605-10, 615-16 (1908) (criticizing conceptualism or “mechanical jurisprudence” and touting Interessenjurisprudenz); Roscoe Pound, The Theory of Judicial Decision, 36 HARV. L. REV. 940, 955-59 (1923) (outlining “social engineering” approach).}{253} In Luhmann’s view, however, the polemic against “conceptual jurisprudence”—began with Jhering’s work in the late nineteenth century, and continued in this country under the headings of sociological jurisprudence and legal realism—has produced a “massive simplification” of the issues.\footnote{See RECHT DER GESELLSCHAFT, supra note 18, at 389-90.}{254} Luhmann attempts to reconstruct the debate and ultimately to recast it into systems-theoretical terms.

Luhmann is particularly interested in connecting the distinction between concepts and interests to a basic distinction of auto-poietic theory—the distinction between self-reference and external reference. All legal communication, he has said, employs both self-reference and external reference, referring both to its own
coded realm of legal communication and to events, processes, or communications that are not themselves coded as legal or illegal. 255 This distinction between self- and external reference appears, at the level of argumentation, in the form of the distinction between concepts and interests. The “concept” side corresponds in Luhmann’s scheme to the “self-referential” aspect of legal argument, and the “interest” side to argument’s “external reference.” 256 “Formal arguments,” in Luhmann’s terminology, are those that operate primarily on the basis of legal concepts. “Substantive arguments” are those that explicitly weigh interests recognized in the legal system’s environment. 257

Establishing this “external” link to the environment through “interests” is an accomplishment of the legal system, not a pre-given fact. In their “natural condition,” Luhmann says, environmental interests are homogenous from the legal system’s perspective, mere “wishes” or “preferences” with no particular claim on the legal system’s operations. 258 Environmental interests become relevant to legal communication only when they are constructed not as interests simpliciter, but as “legally protected interests.” 259 This construction is an achievement of legal argument. 260 The legal constructions of “interests” do not simply reflect the legal environment passively or neutrally. Here, too, argument operates selectively, framing the environment in such a way as to make it relevant to legal concepts and to the legal/illegal code. As Luhmann puts it: “With the concept of ‘interest’ the system constructs, for internal purposes, an external reference.” 261

In one sense, Luhmann’s description of interests is unremarkable, following as it does tautologically from the notion of operative closure. The distinction between a system and its environment, he has said, is a distinction “internal” to the system (i.e., accomplished through the system’s operations), and accordingly, characterizations of the environment (through the notion of “interest” and otherwise) are also “internal” to the system. 262

255 See supra text accompanying notes 97-102.
256 See RECHT DER GESELLSCHAFT, supra note 18, at 394-95; Operational Closure and Structural Coupling, supra note 34, at 1430; Legal Argumentation, supra note 178, at 296-97.
257 See RECHT DER GESELLSCHAFT, supra note 18, at 394.
258 See id.
259 Id. at 391-92.
260 See id. at 395.
261 Id. at 394.
262 See, e.g., RECHT DER GESELLSCHAFT, supra note 18, at 394-95; Operational Closure and Structural Coupling, supra note 34, at 1431.
theless, Luhmann’s account of the distinction between concepts and interests allows him to recast the traditional debate. The issue is not one of choosing between concepts and interests, Luhmann argues. Instead, concepts and interests each express one side of legal argument’s connection between self-reference and external reference. Because concepts and interests are related to this basic feature of autopoietic systems, the relation between them is a lasting problem of the system, Luhmann maintains. And the particular balance established between these two sides—whether toward self-reference and concepts, or toward external reference and interests—is historically contingent. There can be no “natural” preference for self-reference over external reference, or for external reference over self-reference.

This idea of ongoing tension between self-reference and external reference, concepts and interests, has consequences for what Luhmann calls the “interest” or realist project. Put negatively, the effect of Luhmann’s account is to dismiss, as incapable of realization, the early Legal-Realist dream of mirroring, in law, the world beyond law. Focusing on “interests” is not a matter of lifting the veil of legal form and gazing, unmediated by law, upon real social life, as the Realists were sometimes prone to suggest. While consideration of “interests” and consequences may develop the legal system’s responsiveness to its environment, the world as it appears in law will still be structured by legal concepts and legal procedures. One legal construction replaces another.

Put positively, Luhmann’s account of the tension between concepts and interests suggests new strategies for legal regulation.

---

263 See Operational Closure and Structural Coupling, supra note 34, at 1431 (arguing that while there may be tension in particular cases “between giving priority to the urgency of interests or to the purity of legal concepts, . . . the system as such cannot choose in this way”).

264 See supra text accompanying notes 255-57.

265 See RECHT DER GESELLSCHAFT, supra note 18, at 399.

266 Id.

267 Robert Gordon has described autopoietic theory as:

a novel way of expressing why the aspirations of Legal Realism or Interest Jurisprudence for a method of legal decision-making that would be completely open to [the] environment—to the “raw facts” of a dispute-situation, to commercial-custumary norms, to social and economic science, etc.—were in some ways absurd and bound to fail.

Gordon, supra note 13, at 6.

268 Cf. Gordon, supra note 11, at 109 (stating that while the Realists “yearned to break through the formal shell to . . . the ‘living’ reality beneath it,” the “living essences of power and need” they discovered were still legally structured).

269 See Legal Argumentation, supra note 178, at 298.

270 See, e.g., TEUBNER, supra note 34, at 81.
Improving law's responsiveness to its environment indeed requires, as the Realists recognized, improvements in the law's "models" of its social environment. But it also requires attentiveness to what Luhmann describes as the "internal" side of the distinction between self-reference and external reference. According to Luhmann, attempts to transform the legal system's "modeling" of its environment must include in the model the legal system itself, with its "internal" concepts, procedures, and operations. Proposals to incorporate social-scientific information and techniques into legal communication must consider how that information could be connected to legal concepts and how it might be acquired, in particular cases, through legal procedures. Luhmann emphasizes that developing these procedures and gathering the requisite information is no easy task, particularly in cases addressing difficult problems of social risk.271 Further, Luhmann suggests, strategies for increasing law's openness to its environment need to examine systematically how the legal system appears in the "internal models" of other systems—more systematically than in, for example, conventional references to the economic system's need for legal certainty.272

At this point, Luhmann's discussion of legal argument, and the "special position of the courts," is complete. The courts are "central" to the legal system's operations, Luhmann has said, because unlike other domains in the legal system, courts work under the legal obligation to render legal decisions, placing them in the position of "paradox managers." Legal argument, Luhmann has maintained, is an important form of communication in this center of the legal system: it presents the courts with alternative paths for

271 See RECHT DER GESELLSCHAFT, supra note 18, at 563. This accounts in part for Luhmann's skepticism about consequence-oriented decision, see supra text accompanying notes 122-30.

272 See RECHT DER GESELLSCHAFT, supra note 18, at 395. Another typical example is the general social interest in law's uniformity and impartiality. See id. at 392. Luhmann mentions the possibility of "oscillat[ing]" between the two perspectives from which the legal system may observe itself—from its own perspective, or from the (imputed) perspective of the legal environment. See id. at 395.

Other theorists influenced by autopoietic theory have developed the idea that the legal system and other social subsystems, though operatively closed, may be strategically linked through their mutual "observations" and "modeling" of one another. See, e.g., Gunther Teubner, After Legal Instrumentalism? Strategic Models of Post-Regulatory Law, in DILEMMAS OF LAW IN THE WELFARE STATE, supra note 63, at 299; Willke, supra note 123, at 280. For his part, Luhmann investigates the links between law and other social spheres primarily through the idea of "structural coupling." I defer discussion of these ways of describing law's connections to other social subsystems until Part IV, when I analyze Luhmann's notion of structural coupling.
decision; it frames the issues for decision by excluding most of the legal environment (and for that matter, most legal communication) as irrelevant, and it connects courts’ decisions to past and future legal decisions. Legal argument thus helps reproduce the legal system as a network of communication. And particularly in the form of consequence- or interest-oriented argument, it provides an “external reference,” or connection to the environment, within the legal system’s communication. The tension in legal argument between “redundancy” and “variety,” between “interests” and “concepts,” is a “basic problem” of the legal system, Luhmann has argued, and it is a medium through which legal communication maintains both self-reference and external reference. Such, in Luhmann’s view, is the “system function” of legal argumentation in the courts.

C. The Legal “Periphery”

In Luhmann’s center/periphery model of the legal system’s differentiation, all legal communication outside the courts—notably legislation and contract—is in the legal system’s “periphery.” Compared to his lengthy discussions of courts’ “central position” and legal argumentation, Luhmann’s treatment of the legal periphery is brief. But Luhmann states clearly that neither the brevity of his discussion, nor the term “periphery” itself, signifies that he considers communication outside the courts less important than communication inside the courts. Indeed, the legal system’s “real dynamism” occurs at its periphery. For Luhmann, “peripheral” legal communication is the legal system’s “contact zone[] to other functional systems of society,” such as the economy and the political system—that is, it is an important conduit for the mutual influences running among the legal system and other social spheres.

273 See RECHT DER GESELLSCHAFT, supra note 18, at 400.
274 See id. at 321.
275 Luhmann devotes only about six pages to the periphery in his 1993 book on law, Recht der Gesellschaft. See RECHT DER GESELLSCHAFT, supra note 18, at 321-23, 333-37. To my knowledge, he never used the center/periphery schema to describe the legal system’s internal differentiation before Recht der Gesellschaft.
276 See id. at 323.
277 The quotation comes from Gunther Teubner, see Teubner, supra note 93, at 1459, but Luhmann would likely agree.
278 RECHT DER GESELLSCHAFT, supra note 18, at 322; see also Teubner, supra note 93, at 1459-60.
279 This idea of “periphery” as the contact zone to other systems beyond the legal system’s boundary perhaps explains Luhmann’s selection of the “center/periphery” model.
This role as "contact zone" explains why Luhmann spends so little time discussing the periphery in his account of the legal system’s internal differentiation. To describe the operation of "peripheral" communication—such as legislation and contract—Luhmann needs to explain how social subsystems can be linked. The concept Luhmann uses to account for the mutual influences among social subsystems is "structural coupling."

IV. STRUCTURAL COUPLING

So far, Luhmann’s description of the legal system accounts for law’s "autonomy": its self-production and self-reproduction as an operatively closed network of coded communications, distinct from other social spheres. Despite his emphasis on closure and autonomy, however, Luhmann acknowledges the extensive and reciprocal influences and interdependencies running between law and its environment. These relations between law and its environment—relations conventionally classified as the "relative" part of "relative autonomy"—are, according to Luhmann, fully consistent with law’s autopoietic self-reproduction.

We have not yet encountered, however, Luhmann’s account of how this can be so. The focus to this point has been on law as an internally differentiated system facing a more or less undifferentiated environment, to which it is cognitively open but operatively closed. From this perspective, even the "external" links to the legal system’s environment—through, for example, the notion of "interests" in legal argument—appear as accomplishments of the legal system alone. The problem of how the legal system might be reciprocally related to other organized social subsystems, such as the political or economic systems, simply does not appear from this perspective.

Matters change when we consider that the legal system’s social environment includes not just communications in general, but the coded communications of other social subsystems. From that perspective, the legal environment appears not simply as an unorganized mass of "not-law," but as an environment that includes other organized, operatively closed, autopoietic systems. The relations among these systems are not products of a single system...
alone. Nor, according to Luhmann, are they merely random. Instead, Luhmann maintains, social subsystems' autopoietic processes may be linked through "structural coupling."

In this Part of the Article, I first explain what Luhmann means by "structural coupling" in general, then turn to his more particularized analysis of the structural couplings among the legal, political, and economic systems.

A. The Concept of Structural Coupling

From the perspective of one system's communication, Luhmann has said, other systems' communication presents not information, but a stream of "noise." Some communications in that stream of noise, however, may "irritate" the system—that is, "register" or "resonate" in the system's communication as (for example) a problem, surprise, anomaly, or disappointment. Whether and how this "irritation" (or, "perturbation") will occur, Luhmann says, depends upon the structures, categories, and criteria of the irritated system, not the system whose communication is perceived as an irritation. This point follows directly from Luhmann's more general notions of operative closure and cognitive openness: a system's openness to its environment is always conditioned by the system's specific form of closure. The ideas of "irritation" and a system's "irritability" simply specify that general thesis where the relation between system and environment is a relation between autopoietic systems.

Some irritations may be easily converted into information and processed within the irritated system's communication. Others, however, may be more problematic: they may not fit easily within the system's categories, yet not readily be dismissed as irrelevant to the system's communication. Such irritations may stimulate the system to transform its structures or categories. This process of structural change in response to irritation is the autopoietic equivalent for what open systems theory calls "adaptation to the

281 See supra text accompanying notes 76-78.
282 See RECHT DER GESELLSCHAFT, supra note 18, at 443.
283 The terms "irritation" and "perturbation" seem to be synonymous for Luhmann. See, e.g., Operational Closure and Structural Coupling, supra note 34, at 1432-33; RECHT DER GESELLSCHAFT, supra note 18, at 225 (equating "irritability," "perturbability," "sensitivity," and "resonance").
284 See RECHT DER GESELLSCHAFT, supra note 18, at 443; Operational Closure and Structural Coupling, supra note 34, at 1427 n.24.
285 See Operational Closure and Structural Coupling, supra note 34, at 1432 (referring to the "twin concepts of closure and structural coupling").
286 See id. at 1433.
environment.” But unlike simple models of adaptation in social systems theory—and, as Robert Gordon has observed, in most “law and society” models in mainstream legal theory as well—Luhmann does not treat this process as a simple causal transaction in which the environment causes the system to change. Nor does Luhmann assume that environmental events determine the path along which the irritated system “responds” or “adapts” to the irritation. Instead, he treats the system’s response to irritation as thoroughly contingent, dependent upon the system’s own history, structures, and communicative possibilities. And he focuses on the processes, “internal” to the system, by which the system’s communication “perceives” the irritation and changes its own structures.

Luhmann argues that systems can channel their mutual irritations, and increase their mutual responsiveness, through structural coupling. By “structural coupling” Luhmann means a connection between systems more durable than what he calls “momentary coupling”—the connection of two systems through an event relevant to both systems, such as a payment (economy) that satisfies a legal judgment (law). Structural coupling, as the name suggests, connects systems through system structures, not merely through a single event.

Consistent with Luhmann’s usual approach, structural coupling has two sides—it excludes as well as includes, and separates as well as connects. Structural couplings both “provide a continuous influx of disorder against which the system maintains or changes its structure” and, at the same time, they exclude most

287 Gordon’s article, Critical Legal Histories, describes mainstream legal theory’s “dominant vision” as one of “evolutionary functionalism,” in which legal change is a matter of the legal system adapting to changing environmental needs. See Gordon, supra note 11, at 59-65. Gordon argues that the simple idea of adaptation grossly underestimates the contingency and variety of responses to alleged environmental imperatives, and in particular, it understates the importance of law’s “peculiar internal structures.” Id. at 101. Legal forms and practices, Gordon contends, are “[t]o some extent . . . independent variables in social experience.” Id. He concludes that legal forms and practices “tend to become embedded in ‘relatively autonomous’ structures.” Id. But as Gordon has acknowledged elsewhere, and as argued in the introduction to this article, the notion of “relative autonomy” is not theoretically satisfying.

288 See RECHT DER GESELLSCHAFT, supra note 18, at 441; Operational Closure and Structural Coupling, supra note 34, at 1437 (events may “participate” in more than one system).

289 Luhmann’s standard move is to distinguish between an “internal” and an “external” side of a distinction, then to note that each side of the distinction presupposes the other. This move is apparent in his discussion of the distinctions between closure and openness, between coding and programming, and between self-reference and external reference.

290 See Operational Closure and Structural Coupling, supra note 34, at 1433; RECHT DER GESELLSCHAFT, supra note 18, at 441, 465.
"environmental facts from immediate relevance." Structural couplings both "admit[] irritation" and allow systems to "remain[] indifferent" to the great bulk of each other's communications. In other words, while structural couplings connect communications in the coupled systems, these connections are selective. Even in linking two systems' autopoietic processes, structural couplings presuppose those systems' separation as operationally closed networks of communication. Structural coupling is not fusion. But by limiting the irritations and "interferences" between systems' communications, structural couplings can heighten the systems' sensitivity or responsiveness to one another. Without structural couplings, everything in a system's environment would be potentially relevant to the system's communication, and that means, paradoxically, that nothing could be actually relevant: the system could not operate unless it selected some, but not all, of its environment as relevant at any particular time.

Luhmann applies the notion of structural coupling at all theoretical levels. The legal system, he says, is structurally coupled both to the more comprehensive societal system (of which it is a subsystem) and to "psychic" systems (or, individual consciousnesses). Most important, for present purposes, are the legal system's structural couplings to other functional subsystems of the general societal system. Two sets of structural couplings are especially significant for Luhmann—the connection of law and politics through constitutions, and the connection of law and the economy through property and contract.

B. Structural Coupling of Law and Politics

Conceiving law and politics as "structurally coupled" presupposes their separation. Luhmann acknowledges the difficulty of this presupposition at the outset, allowing that the "close and obvious connections between politics and law" suggest a "weakness" in his thesis of operative closure. Further, Luhmann acknowl-
edges, a long tradition since early modernity has linked politics and law under the single concept of "state."297 This tradition has found expression in American legal theory: the Legal Realists, for example, sought to relativize the distinction between law and politics by describing the legal institutions of property and contract as delegations of state power to "private" individuals, and by presenting the state as sitting in the middle of all transactions governed by private law.298 As Luhmann realizes, these attempts to collapse law and politics into "the state" present his theory of structural coupling with a threshold question: he must first explain why he conceives of law and politics as two systems rather than one.

1. Law and Politics As Differentiated Systems

In Luhmann's view, the distinction between the two systems appears first in their different coding.299 Legal communication, Luhmann has said, operates under the distinction between legal and illegal. Political communication, Luhmann argues, is organized by two codes: the distinction between government and opposition codes party-political competition for political power,300 and the distinction between governing and governed codes the application of political power.301 Luhmann acknowledges that an observer can trace the political consequences of, for example, a judicial decision, or attribute a political motivation to that decision. But the decision itself will not be coded in the language of party politics, nor will the lawyers' argument before the deciding court likely

297 See id. at 407.
298 See Joseph William Singer, Legal Realism Now, 76 CAL. L. REV. 465, 495 (1988). For representative Realist versions of this argument, see Morris R. Cohen, Property and Sovereignty, 13 CORNELL L.Q. 8, 11, 12 (1927) (characterizing Lochner-style decisions as "the passing of a certain domain of sovereignty from the state to the private employer of labor," and describing property right as "sovereign power compelling service and obedience"); Robert L. Hale, Coercion and Distribution in a Supposedly Non-Coercive State, 38 POL. SCI. Q. 470, 471 (1923) (describing property right as the right to invoke government compulsion); Robert L. Hale, Bargaining, Duress, and Economic Liberty, 43 COLUM. L. REV. 603, 604 (1943) (same); Friedrich Kessler, Contracts of Adhesion—Some Thoughts About Freedom of Contract, 43 COLUM. L. REV. 629, 641, 640 (1943) (describing contract law as "delegat[ing] to individual citizens a piece of sovereignty which enables them to participate constantly in the law making process").
299 See RECHT DER GESELLSCHAFT, supra note 18, at 420, 436.
300 See id. at 421, 436.
301 See id. at 436. Luhmann never explains why, despite his position that a system's code establishes the system's unity, the political system is entitled to two codes rather than one. I argue below that this inconsistency, together with other difficulties, indicates the need to revise Luhmann's notion of system coding. See infra Part V.B.
point directly to considerations of political advantage.

The distinction between the legal and political systems appears further, Luhmann argues, in the different "prehistories"302 and different "possibilities for connection"303 of their respective communications. Even what seems to be a single event, such as the enactment of a statute, may indicate these differences between systems. An observer may view the statute's enactment either as a political success or as a decision changing the "validity position" of the law.304 Viewed from the perspective of the political system, the statute's "prehistory" is its emergence from a process of legislative maneuvering and (perhaps) manipulation of public opinion. From this perspective, the legislative success alters the balance of power between government and opposition and creates fresh possibilities for further political maneuvers.305 From the perspective of the legal system, by contrast, the statute appears simply as valid law, the product of legally prescribed legislative procedures,306 and a point of connection for future legal decisions. And interpretation of the statute in adjudication, Luhmann observes, is not simply a matter of reenacting the political battles that led to the statute's enactment.307

Luhmann insists that legislation's double significance is comprehensible only if we posit two separate networks of communication, political and legal. But at the same time, Luhmann argues, legislation helps bring these two networks into connection. Luhmann's distinction between the legal and political systems thus emphatically does not mean their mutual indifference. Instead, legislation is the "place of transformation of politics into law," and conversely, its legally prescribed procedures effect a "legal restriction of politics."308

Finally, Luhmann distinguishes between the legal and political systems by noting their different "temporality." Modern political systems, Luhmann observes, are under heavy time pressure.309 Legal procedures, by contrast—and particularly adjudicative procedures—operate comparatively slowly, both in settling controversies and in effecting politically desirable structural change.

302 RECHT DER GESELLSCHAFT, supra note 18, at 435.
303 Id. at 436.
304 Id. at 434.
305 See id. at 435.
306 See id. at 435-36.
307 See id. at 420.
308 Id. at 429.
309 See id. at 427.
Legislation offers a way of closing this time gap and maintaining the systems' mutual responsiveness. From the perspective of the political system, legislation responds relatively quickly to political pressures.\textsuperscript{310} And from the perspective of the legal system, statutes operate as new law that need not be reconcilable with, let alone derived from, prior judicial decisions.\textsuperscript{311} Here, too, Luhmann insists that legislation's important function in connecting the legal and political systems is comprehensible only if those systems are seen as separate in principle.

Luhmann acknowledges that his "separation" thesis is counterintuitive. From the perspective of the legal system, he notes, law is everywhere; there are no "law-free spaces."\textsuperscript{312} Law constrains and channels political activity, and thus, from a legal point of view, politics appears as communication within legally established boundaries. From the perspective of the political system, by contrast, law is an instrument of politics, a means of attaining politically desirable goals. The notion of the Rechtstaat, or rule of law, brings these contrary perspectives into a single formula.\textsuperscript{313} But despite what Luhmann calls the "optical difficulties"\textsuperscript{314} in seeing the two systems as separate, law and politics are differently coded systems, on Luhmann's view, with distinct, but "structurally coupled," reproductive networks.

2. Forms of Structural Coupling Between Law and Politics

Luhmann's account of legislation—as the "contact zone" between law and politics and the "place of transformation of politics into law"—indicates that legislation is an important form of structural coupling between legal and political systems. Another form of structural coupling Luhmann discusses intermittently concerns the enforcement of legal judgments.\textsuperscript{315} As Luhmann notes, systematically unenforced judgments would threaten the legal system's long-run stability.\textsuperscript{316} The enforcement of such judgments requires a "certain functional synthesis"\textsuperscript{317} between the legal and political systems, a "reciprocally parasitic relation"\textsuperscript{318} that secures,

\begin{footnotesize}
\begin{enumerate}
\item See id.; Self-Reproduction, supra note 63, at 119.
\item See RECHT DER GESELLSCHAFT, supra note 18, at 427.
\item Id. at 422.
\item Id. at 422.
\item See id.
\item Id. at 428.
\item Id. at 423 (describing enforcement as a form of structural coupling).
\item Id. at 153.
\item Id.
\item Id. at 426.
\end{enumerate}
\end{footnotesize}
for the legal system, the likelihood that its decisions will be enforced.

Luhmann does not elaborate on how this reciprocal relation counts as a form of structural coupling, but the argument is not difficult to complete. A system is structurally coupled to another system, Luhmann maintains, if it “presupposes specific states or changes” in the other system and “relies on them.” Indeed, most communication in the legal system’s core (the courts) presupposes and relies upon the possibility that the political system will apply political power to enforce legal judgments.

Although legislation and enforcement are important forms of structural coupling between law and politics, Luhmann devotes more systematic attention to constitutions. Modern constitutions, Luhmann argues, are suitable mechanisms for structural coupling because they have both legal and political significance. From the legal system’s perspective, a constitution is a legal text, susceptible to interpretation and argument. Constitutions accomplish what Luhmann calls a “secondary coding” of legal communication—the distinction between constitutional and unconstitutional. Considered as a legal text, a constitution is “autological,” or self-including, foreseeing itself as part of the legal order it establishes. As the “positive law that grounds positive law,” a constitution exempts itself from the rule that new law trumps old law, except under conditions of amendment the constitution itself prescribes. From the point of view of the legal system, the constitution proceduralizes and normalizes the process of legal change. From the perspective of the political system, by contrast, the constitution is an act of political will that creates a governmental organization, “determin[ing] how political power is organized, and ... plac[ing] legal restrictions on political power.” In establishing the conditions by which positive law can be created and transformed, constitutions bring an “immense potential for political action.”

---

319 Operational Closure and Structural Coupling, supra note 34, at 1432; see also RECHT DER GESELLSCHAFT, supra note 18, at 441.
320 See supra text accompanying notes 148-203.
321 See supra note 148, at 452, 468-81; Operational Closure and Structural Coupling, supra note 34, at 1436.
322 See supra note 18, at 474-76.
323 Id. at 471.
324 See id. at 471-73.
325 See id. at 473.
326 Id. at 472.
327 Id. at 479.
The coupling of law and politics through constitutions accomplishes, further, a solution of sorts to each system's self-referential paradox—the paradox of a legal grounding for law, and a political grounding for politics. From the side of the legal system, the constitution "externalizes" the paradox of legal validity by locating the legal system's foundations outside the legal system, in the political act of the sovereign people. Similarly, from the side of the political system, the constitution represents the system's ground as lying beyond the system's boundaries—not in ordinary politics, but in the rule of law. In Luhmann's formulation: "The constitution . . . creates political solutions for the self-reference problem of law and legal solutions for the self-reference problem of politics."329

But at least in developed Western societies, Luhmann contends, the coupling of law and politics through constitutions has become deeply problematic. The second half of this century, Luhmann argues, has seen a shift toward "fundamental values" or moral-intuitions forms of constitutional interpretation, and a trend toward case-by-case balancing in constitutional law.330 Luhmann allows that these tendencies have increased the "variety" in legal argumentation—i.e., the system's openness toward environmental "interests" and particular facts of individual cases. Yet, according to Luhmann, this openness has come at the cost of the system's "redundancies," or, its network of legal concepts.331 The value-and interest-weighing approach may be "flexible," but it is also "vacuous."332 According to Luhmann, it remains unclear whether the "apparatus of classic constitutionalism" can be adapted to the conditions of the welfare state.333

Luhmann's critique of constitutional "value jurisprudence" parallels his polemics against "purposive" programming and consequentialist judicial decision,334 and it sounds themes familiar to

328 See id. at 478; see also Operational Closure and Structural Coupling, supra note 34, at 1436-37.
329 RECHT DER GESELLSCHAFT, supra note 18, at 478; see also Operational Closure and Structural Coupling, supra note 34, at 1436-37.
330 See RECHT DER GESELLSCHAFT, supra note 18, at 479-80. Luhmann mentions both the United States and Germany in this connection. See id. For a summary of the German debate over "value jurisprudence" in the Federal Constitutional Court, see JÜRGEN HABERMAS, BETWEEN FACTS AND NORMS: CONTRIBUTIONS TO A DISCOURSE THEORY OF LAW AND DEMOCRACY 240-61 (William Rehg trans., 1996).
331 See RECHT DER GESELLSCHAFT, supra note 18, at 480, 485-86.
332 Id. at 539.
333 Id. at 480.
334 See supra text accompanying notes 126-30, 247-50.
American constitutional theory. Nonetheless, the critique's fit with the basic premises of autopoietic theory is less than clear. In his more general account of the relation between "concepts" and "interests" in adjudication, Luhmann has insisted that both are "internal" creations of the system itself. Thus, the idea that the values in "value jurisprudence" have illicitly impinged on the legal system "from without" seems difficult to reconcile with autopoietic theory. If Luhmann is arguing, instead, that the shift toward interests or values has undermined some essential minimum basis of conceptual clarity or sophistication, that claim would require more analysis of actual patterns of constitutional argumentation than Luhmann provides, and an explicit defense of some standard of conceptual sufficiency.

Nor does Luhmann's characterization of "value jurisprudence" as "politicized" connect easily with his account of political communication. "Fundamental values" talk in constitutional adjudication does not seem to track either of the "codes" Luhmann suggests for political communication—the distinctions between government and opposition (in party-political competition for political power) and between governing and governed (in the application of political power). In short, Luhmann's critique of contemporary constitutional law seems to be at least in tension with the premises of his theory.

C. Structural Coupling of Law and Economy

The economy, like the political system, is in Luhmann's view an autopoietic system structurally coupled to other social subsystems, including the legal system. As an autopoietic system, the economic system must operate under a "code," or system-defining binary distinction, parallel to legal communication's distinction between legal and illegal. Luhmann is not altogether rigorous or consistent in defining this code. His usual formulation, however, is that the economic system has two codes—property and money—or more precisely, the binary distinctions between having/not having property, and payment/nonpayment.

336 See supra text accompanying notes 255-61.
337 See supra text accompanying notes 300-01.
338 See Recht der Gesellschaft, supra note 18, at 456; Ecological Communication, supra note 33, at 36. But see Coding, supra note 63, at 155 (suggesting
Historically, Luhmann says, the property code is the economic system’s “primary code.” As the determination of who has disposal over which commodities, property counts as the “minimal condition” of economic autopoiesis. But with the increasing importance of economic exchange, the “secondary code” of money has become dominant. In a thoroughly monetized economy, the economic meaning of property is its potential exchange value—so much so that Luhmann sometimes defines an autopoietic economic system in terms of the money code alone, as, for example, the network of “all those operations transacted through the payment of money.” And accordingly, with the development of an exchange economy, contract, the mechanism by which property rights may be assigned through exchange, likewise has become increasingly important. Law and economy, then, have come to be coupled not just through property, but also through contract. For Luhmann, property and contract are the principal forms of structural coupling between economy and law.

1. Property As Mechanism of Structural Coupling (with Special Attention to “Takings” Law)

Property has a “double meaning,” Luhmann claims—different, but related, significance in economic and legal communica-
tion. The economic meaning of property, Luhmann has said, is its potential exchange value in a monetary transaction.\textsuperscript{347} The currently dominant legal meaning of property, by contrast, appears in the familiar formula, “property as bundle of rights.”\textsuperscript{348} Yet despite the different meanings assigned to property in legal and economic communication—or rather, through these different meanings—the two systems manage to accomplish an ongoing connection to one another. Much as the double significance of legislation couples the legal and political systems,\textsuperscript{349} Luhmann argues, so the double meaning of property structurally couples the economic and legal systems.\textsuperscript{350}

Luhmann, however, does not elaborate much on the different meanings of property in law and economy. Nor does his primarily historical discussion of property\textsuperscript{351} explore in much detail how property operates in modern societies as a mechanism of structural coupling.

What follows is my sketch of how Luhmann might have addressed these issues. To give the sketch some particularity, I refer to recent developments in federal constitutional “takings” law. Other examples—from, for example, the law of real property or intellectual property would have been possible, and a complete account of property as a mechanism of structural coupling would have to attend to them as well. Thus, the focus on takings law is illustrative only; it should not be understood to suggest that some essential meaning of property appears only in that body of law.

The “bundle of rights” conception of property, increasingly evident in Supreme Court takings opinions,\textsuperscript{352} presents property as

\textsuperscript{347} See id. at 448, 456, 465.

\textsuperscript{348} On the dominance of the “bundle of rights” formulation, see, for example, J.E. Penner, The ‘Bundle of Rights’ Picture of Property, 43 UCLA L. REV. 711, 712-15 (1996). Luhmann mentions the formulation, see RECHT DER GESELLSCHAFT, supra note 18, at 457, but as noted in text, infra, he does not discuss the legal meaning of property very clearly or in much detail.

\textsuperscript{349} See supra text accompanying notes 299-314.

\textsuperscript{350} See RECHT DER GESELLSCHAFT, supra note 18, at 455.

\textsuperscript{351} His discussion in Recht der Gesellschaft focuses on the historical development of modern notions of property and their role in the differentiation of a modern economic system. See id. at 447-50, 457-58.

a legal institution consisting in legal rights established in and through the law. To that extent, the formulation refers "internally" to the legal system's own operations. But the various rights in the bundle—among them, the rights to use, exclusive possession, disposition, and profit—correspond to economic interests. This connection to interests allows legal communication to establish an "external" reference to the economic system. And takings law establishes, at the same time, another "external" reference—to the political system, framed as "the state" or "the government," whose regulation or other action allegedly has taken property without compensation. Thus in takings-law argument, on one side of the legal dispute stands the property owner, with her various economic interests and "investment-backed expectations." On the other side stands the government, whose regulation purportedly advances various "state interests." Through the references to interests and expectations, takings-law argument "observes" and "models" both the economic and the political systems, allowing the legal system to respond to "irritations" from both systems. This relation between systems is what Luhmann means by structural coupling.

To be sure, in characterizing and evaluating the various economic interests implicated in a property claim—in our particular example, a takings claim—courts do not necessarily duplicate the way economic communication constructs the notion of property. For example, while the Supreme Court has recognized a broad range of economic interests as "property" protected by the Takings Clause, it has excluded from that embrace a number of economically valuable interests, such as employment, government entitlements, tax exemptions, licenses, and money owed in taxes.

---

353 See, e.g., Loretto, 458 U.S. at 435-36 (describing the "bundle of rights" in a thing as the right to possess, use, and obtain a profit from it, and the right to exclude others from possession and use).
354 See supra text accompanying notes 255-61.
355 This second external reference—to the political system—arises because takings claims are constitutional claims, and, according to Luhmann, constitutions structurally couple the legal and political systems. See supra text accompanying notes 321-29.
356 The Court has characterized the once-standard regulatory-takings test as an "ad hoc, factual" inquiry that considers a number of factors, including the "character of the governmental action," the action's "economic impact" on the takings claimant, and the degree to which the government's action has "interfered with [the claimant's] distinct investment-backed expectations." Penn Cent. Transp. Co. v. New York City, 438 U.S. 104, 124 (1978). The Court has partially supplanted this inquiry with a new system of rules, as explained infra.
357 See supra Part IV.A.
358 See Molly S. McUsic, The Ghost of Lochner: Modern Takings Doctrine and Its Im-
Nor has the Court treated all recognized property interests as fungible, differing only in extent of economic value. Instead, the Court has extended much more stringent constitutional protection to interests in land than to other interests, regardless of the amount of economic value at stake.\textsuperscript{359} This special solicitude for land seems more responsive to legal tradition than to modern economic analysis.

Further, among the "bundle of rights" constituting ownership of land, the Court has selected some of the "sticks" as more essential than others. Thus, while the Court has tolerated many regulations that substantially reduced the economic value of a claimant's land,\textsuperscript{360} it has scrutinized carefully regulations that threaten the owner's legal right to exclude others from the property. This right to exclude, the Court has said, is "one of the most essential sticks in the bundle of rights that are commonly characterized as property."\textsuperscript{361} The right is so fundamental to property ownership, the Court held in the \textit{Loretto} case,\textsuperscript{362} that a government-authorized "permanent physical occupation" of land is a taking of property \textit{per se}\textsuperscript{363}—even when the physical intrusion is minimal,\textsuperscript{364} and even when it has "only minimal economic impact on the owner."\textsuperscript{365} As the Court has acknowledged, this emphasis on the legal right to exclude, rather than the diminution of economic value, does not seem to follow an economic logic.\textsuperscript{366}


\textsuperscript{359} See \textit{id.} at 608; \textit{id.} at 653 ("[T]he Court gives little consideration under the Takings Clause to purely economic regulations that do not affect land, even when large amounts of wealth are at stake."); \textit{id.} at 655-56 & nn.213-22 (citing cases); \textit{id.} at 656 ("In this Court's view, land is first among all assets . . . . [R]eal property receives more protection than other property . . . ."); \textit{id.} at 664-65.

\textsuperscript{360} See \textit{id.} at 656-57.

\textsuperscript{361} Kaiser Aetna v. United States, 444 U.S. 164, 176 (1979); \textit{see also id.} at 179-80 (explaining that the right to exclude is "universally held to be a fundamental element of the property right"); \textit{Loretto} v. Teleprompter Manhattan CATV Corp., 458 U.S. 419, 435 (1982) ("The power to exclude has traditionally been considered one of the most treasured strands in an owner's bundle of property rights.").

\textsuperscript{362} See \textit{Loretto}, 458 U.S. at 435.

\textsuperscript{363} See \textit{id.} at 426.

\textsuperscript{364} In \textit{Loretto}, for example, the intrusion amounted to one-eighth of a cubic foot of space on top of a Manhattan apartment building. \textit{See id.} at 443 (Blackmun, J., dissenting). The property owner admitted that she "would have had no other use for the cable-occupied space." \textit{Id.} at 453-54 (Blackmun, J., dissenting).

\textsuperscript{365} \textit{Id.} at 435.

\textsuperscript{366} See \textit{Lucas} v. South Carolina Coastal Council, 505 U.S. 1003, 1020 n.8 (1992) (describing the property owner's interest in \textit{Loretto} as "noneconomic"); \textit{cf. Loretto}, 458 U.S. at 450 (Blackmun, J., dissenting) (noting that the Court's distinction between permanent occupation and temporary intrusions "finds no basis in . . . economic logic").
An additional example of the difference between economic and legal understandings of property is the case of *Lucas v. South Carolina Coastal Council*, in which the Court decided that regulations “depriv[ing] land of all economically beneficial use” are unconstitutional per se. The Court acknowledged that this categorical “total takings” rule might provide full compensation for a 100% deprivation of value but no compensation for a 95% diminution. From an economic point of view, one would not attach such great significance to the difference between a 95% diminution in value and a 100% diminution in value. But in the Court’s words, speaking from the perspective of legal communication: “[t]akings law is full of these ‘all-or-nothing’ situations.” Here, too, the legal and economic significances of property seem to diverge.

Takings law illustrates another of Luhmann’s points about structural coupling—that it enables *mutual* and *reciprocal* “observation” among autopoietic systems. Legal communication, as mentioned, observes the economic system, in part through a property schema that connects various economic interests to the bundle

---

368 *Id.* at 1027. The Court qualified this per se “total takings” rule by recognizing a “nuisance” exception. *See id.* at 1029-32.
369 *See id.* at 1019-20 n.8.
370 *Id.* at 1020 n.8.
371 A similar analysis might apply to a difficulty the *Lucas* Court noted in determining whether a regulation effected a “total taking” or a “mere diminution in value.” “Regrettably,” the Court said,

the rhetorical force of [the] “deprivation of all economically feasible use” rule is greater than its precision, since the rule does not make clear the “property interest” against which the loss of value is to be measured. When, for example, a regulation requires a developer to leave 90% of a rural tract in its natural state, it is unclear whether we would analyze the situation as one in which the owner has been deprived of all economically beneficial use of the burdened portion of the tract, or as one in which the owner has suffered a mere diminution in value of the tract as a whole.

*Lucas*, 505 U.S. at 1016 n.7.

The Court suggested that,

[t]he answer to this difficult question may lie in how the owner’s reasonable expectations have been shaped by the State’s law of property—i.e., whether and to what degree the State’s law has accorded legal recognition and protection to the particular interest in land with respect to which the takings claimant alleges a diminution in (or elimination of) value.

*Id.* at 1017 n.7. From an economic point of view, however, this inquiry would seem irrelevant. As Justice Stevens observed in dissent, “[f]rom the ‘landowner’s point of view,’ a regulation that diminishes a lot’s value by 50% is... ‘the equivalent’ of the condemnation of half of the lot,” *id.* at 1066, whether or not either half of the lot corresponds to a legal interest protected by state property law. On the strategy of interpreting owners’ “expectations” by consulting state law, see *infra* text accompanying notes 387-91.
of legal rights recognized in law, such as the rights of possession, exclusion, use, and disposition. And for its part, Luhmann would argue, economic communication observes the legal system as well, through a property schema of its own. From an economic point of view, property is something with an economic value, and that value depends in part upon the likelihood that governmental entities might “take” or reduce the value of the property, upon the amount of compensation (if any) they would likely pay, and upon the likely expense and burden of legal procedures aimed at compensation. In order to predict the outcome of these legal procedures, economic communication must “observe” and “model” the decisions and legal argument in takings cases.

The mutual observations among systems may become more complicated. The legal system, for example, may observe its own observations of the economic system—as when legal communication reflects on the connections between the property schema it employs and the role of property in the economic system. This sort of reflection may become more complicated still. The legal system may observe, in its own communication, the way in which the economic system observes the legal system. In terms of the particular example of property: legal communication may examine the way in which legal communication over property appears from the perspective of the economic system, and the way in which the economic system responds to its own observations of the legal system.

Takings law does not present many examples in which courts explicitly recognize this reciprocal observation of economic and legal communication. When courts are aware of the matter (never, of course, in Luhmann’s vocabulary), it typically appears as a problem to be solved. For example, in his *Lucas* concurrence, Justice Kennedy notes what he calls an “inherent tendency toward circularity” in the takings-law inquiry “whether the deprivation is contrary to reasonable, investment-backed expectations.”

---

372 Again, property is not the only mechanism of structural coupling between the economic and legal system. Luhmann discusses contract as another important mechanism, see *infra* Part IV.C.2., and he does not deny that there are other such mechanisms through which legal communication can observe the economic system on an ongoing basis. See, e.g., *RECHT DER GESELLSCHAFT*, *supra* note 18, at 464-65 (arguing that one of the most “noteworthy” structural couplings between law and economy is the privilege to inflict harm intentionally through economic competition).

373 More generally, and apart from the particular “takings” problem, the economic value of property depends in part upon the availability and expense of legal protection.

374 *Lucas*, 505 U.S. at 1034 (Kennedy, J., concurring in the judgment). Here Justice Kennedy is invoking the once-standard regulatory-takings test, an “ad hoc, factual” in-
"circularity" arises because expectations concerning how much constitutional protection property will receive depend upon how much protection courts are willing to extend. Courts trying to decide how much protection to provide, then, cannot simply consult the "expectations" prevailing in economic communication, apart from the law. As Justice Kennedy puts it: "if the owner's reasonable expectations are shaped by what courts allow as a proper exercise of governmental authority, property tends to become what courts say it is." In other words, in answering the question

quary that considers a number of factors, including the "character of the governmental action," the action's "economic impact" on the takings claimant, and the degree to which the government's action has "interfered with" the claimant's "distinct investment-backed expectations." Penn Cent. Transp. Co. v. New York City, 438 U.S. 104, 124 (1978). The Court still applies this test to property interests unconnected to land. See Concrete Pipe & Prods., Inc. v. Construction Laborers Pension Trust, 508 U.S. 602, 643-45 (1993); see also McUsic, supra note 358, at 655-56. It does not, however, apply the test when one of the "per se" rules applies. See Lucas v. South Carolina Coastal Council, 505 U.S. 1003 (1992); Loretto v. Teleprompter Manhattan CATV Corp., 458 U.S. 419 (1982). Nor does the Court seem to apply the "ad hoc" balancing test when the challenged regulation affects what the Court considers a core property interest in land, such as the right to exclude. In the latter sort of case, the Court applies a form of heightened review, focusing on the "nexus" between the government's asserted interest and the burden placed on the property owner. See Dolan v. City of Tigard, 512 U.S. 374, 385-97 (1994); Nollan v. California Coastal Comm., 483 U.S. 825, 831-32 (1987).

375 Lucas, 505 U.S. at 1034 (Kennedy, J., concurring in the judgment). Justice Kennedy's insight is reminiscent of Felix Cohen's critique of "transcendental nonsense." Cohen criticized trademark law as resting on a "vicious circle": "It purports to base legal protection upon economic value, when, as a matter of actual fact, the economic value of a sales device depends upon the extent to which it will be legally protected." Cohen, supra note 253, at 815. And of the constitutional jurisprudence concerning rate regulation, which based a fair rate of return on the utility's market value, Cohen observed that this value depended upon the rates the court would permit the utility to charge. Thus, "[t]he actual value of a utility's property . . . is a function of the court's decision, and the court's decision cannot be based in fact upon the actual value of the property." Id. at 818 (emphasis omitted).

Cohen traces the problem of "circularity" and "transcendental nonsense" to the "fallacious" idea, id. at 814 n.14, that law is an autonomous or self-referential discourse. "To justify or criticize legal rules in purely legal terms," he says, "is always to argue in a vicious circle." Id. at 814. In the examples just discussed, however, courts have attempted to solve a legal problem by establishing an external reference—to economic value. The problem is not that the law is referring directly to itself, but instead that because of the coupling of law and economy, through property, the "external" reference to economic value is not in fact independent of law. Cohen's proposal that courts improve (as Luhmann would put it) their "observation" and "modeling" of the legal environment—through closer attention to social and economic "facts," and through "frank facing," id. at 817, of economic, political and ethical questions—would amount to a reformulation and deepening of law's external reference, not the replacement of self-reference with external reference. See supra text accompanying notes 271-72.

As Justice Kennedy points out, the same problem of circularity appears in references to "reasonable expectations of privacy" in Fourth Amendment law. See Lucas, 505 U.S. at 1034-35 (Kennedy, J., concurring in the judgment).
whether property has been taken, courts seek to break out of the
circle of legal communication by referring, "externally," to the ex-
pectations of property owners. But to the extent that these eco-
nomic expectations are themselves formed by modeling and pre-
dicting legal decisions, the circle remains unbroken. In looking
outside the law for an answer to the takings problem, the law
meets itself.  

While explicit discussion of this "circularity" problem in Su-
preme Court opinions is rare, one can read much of the Court's re-
cent takings law as, in part, an attempt to respond to it. Takings
doctrine once relied heavily on the "expectations" inquiry Justice
Kennedy mentions.  

Recently, however—and perhaps in part be-
cause of the apparent vacuity and circularity of the "expectations"
inquiry—the Court has followed a number of alternative strate-
gies.  

One strategy is to abandon the effort to observe the eco-
nomic system through property owners' expectations and to re-
treat, instead, to a purer form of self-reference. With this
approach, the Court looks "internally" to its own prior decisions,
and discovers in them a categorical or per se rule that can supplant
the expectations test. In *Loretto*, for example, the Court men-
tioned the expectations test, but shifted quickly to a review of
the Court's cases involving physical invasions of property. Those
cases, the Court concluded, "uniformly have found a taking" in
cases of permanent physical occupation, even where the economic
impact on the owner was "minimal." That conclusion rendered
the owner's expectations irrelevant. Similarly, in *Lucas* the
Court justified its "categorical" rule—that deprivation of all eco-
nomic value is a taking—by invoking a line of precedents that, it
said, established that rule. This "long-established" rule, the

---

376 The circularity becomes more apparent still when one realizes that the "expecta-
tions" the Court invokes are merely imputed from the safety of the Justices' chambers, not
discovered through some sort of empirical research technique.


378 Certainly one idea behind the changes in takings doctrine has been to increase the
level of constitutional protection for property owners. But while that motivation explains
why the Court might want to refashion the takings test, it does not necessarily explain how
the Court should refashion the test. See *infra* note 386.

379 See *Loretto*, 458 U.S. at 426.

380 Id. at 434-35.

381 Irrelevant, because the Court had described the expectations factor as part of a
more general inquiry into the regulation's economic impact. See *id.* at 432. As the Court
put it, the per se rule it distilled from prior cases classified all government-authorized
permanent physical occupations as takings, "without regard to other factors that a court
might ordinarily examine." *Id.*

Court said, was one that the Court did "not invent but merely appl[ied]."

Here, too, the Court did not need to consult the expectations of property owners to find a taking.

The *Loretto* and *Lucas* decisions are still circular, in the sense that they involve the legal system's self-referential observation of its own communications. But they do not involve the embarrassment of purporting to break out of the legal circle. Analyzing cases to generate categorical legal rules is perhaps a more congenial task for the Court—certainly, more congenial for some members of the Court—than case-by-case evaluation of regulations' "economic impact . . . and, particularly the extent to which the regulation has interfered with distinct investment-backed expectations." Whatever reasons might have motivated the Court, one effect of shifting toward categorical rules has been to unburden the legal system of its external reference to economic expectations.

A second and related strategy for responding to the "circularity" problem also breaks the external reference to economic expectations but extends the legal circle to include legal decisions other than those rendered by the Supreme Court. The Court followed this approach in *Lucas*. After fashioning its "categorical" rule that government may not "deprive[] land of all economically beneficial use" without paying compensation, the Court turned to

---

383 Id. at 1016 n.6.


386 Of course, one likely motivation behind *Lucas* and other recent Supreme Court takings decisions has been to strengthen constitutional protections for owners of land, particularly those with interests in development. See *Lucas v. South Carolina Coastal Council*, 505 U.S. 1003 (1992) (prohibition on building beachfront house is a taking); see also *Dolan v. City of Tigard*, 512 U.S. 374 (1994) (conditioning permit to expand hardware store on dedication of floodplain land and easement for bicycle path is a taking); *Nollan v. California Coastal Comm'n*, 483 U.S. 825 (1987) (conditioning permit to expand beach house on granting public right of passage along owner's beach is a taking). The results under the old expectations-based balancing test almost invariably favored the government. See *McCusker, supra* note 358, at 625 & n.85.

Still, there is no self-evident connection between the use of categorical rules, such as those employed in *Lucas* and *Loretto*, and more stringent constitutional protection for property owners. The centerpiece of *Dolan*, after all, is not a categorical rule but a "rough proportionality" test that compares the "degree of the exactions demanded by the [government's] permit conditions" and "the projected impact of [the property owner's] proposed development." *Dolan*, 512 U.S. at 388; see also id. at 391. How much protection this rule provides depends upon the degree of justification the Court demands from the government and how willing the Court is to insist that governments consider alternative regulatory strategies that are less burdensome on property owners.
the question whether its new rule has any exceptions. It began its analysis by invoking the expectations test. According to the Court, "the property owner necessarily expects the uses of his property to be restricted, from time to time, by . . . the State in legitimate exercise of its police powers," and in the case of personal property, the owner "ought to be aware of the possibility that new regulation might even render his property economically worthless." The words "necessarily expects" and "ought to be aware" indicate that the Court was speaking not of actual economic expectations, but of legally imputed expectations. And when the Court focused on whether the same analysis holds true of land, it shifted its attention from the expectations or awareness of hypothetical property owners to the "background principles of the State's law of property and nuisance." To defend a regulation that totally deprived an owner of his land's economic value, the Court held, the state would have to "identify background principles of nuisance and property law that prohibit the uses [the owner] now intends."

With this strategy, the Court avoids the "circularity" problem Justice Kennedy mentioned. Instead of conditioning its decision on economic expectations that the decision would itself create, reinforce, or alter, the Court refers to some other body of law—such as state nuisance or property law, or perhaps even "the whole of our legal tradition"—that the Court may consult but does not create. The decision, while circular from the perspective of the legal system as a whole, does not appear to be circular from the perspective of the Supreme Court in particular.

A third approach to the "circularity" problem is to shift the external reference from economic expectations to the other system involved in takings law—the political system. This approach appears in the Court's decisions in Nollan and Dolan. In Nollan, the Court considered a regulation that conditioned approval of a building permit upon the beachfront property owner's granting public access to part of the beach. The Court focused on the state's justifications, examining whether there was a "nexus" be-

---

387 Lucas, 505 U.S. at 1027.
388 Id. at 1027-28.
389 Id. at 1029. The Court also referred to the inconsistency between total deprivation and "the historical compact recorded in the Takings Clause that has become part of our constitutional culture." Id.
390 Id. at 1031.
391 Id. at 1035 (Kennedy, J., concurring in the judgment).
between the exaction and the asserted governmental interest, and between the exaction and the impact of the proposed development. The question then became not whether the regulation interfered with the property owner's "reasonable, investment-backed expectations," but instead, whether the state interest was legitimate, and whether the exaction "substantially advance[d]" that interest.

In Dolan, the Court sharpened this focus on the government's justifications for an exaction. The Court held that the government must make "some sort of individualized determination that the required dedication is related both in nature and extent to the impact of the proposed development." On the "extent" issue, the Court said that while the government need not present a "precise mathematical calculation," it would have to "make some effort to quantify its findings." Only if the impact of the exaction and the projected impact of the development are roughly proportional may the government insist upon its exaction conditions.

By avoiding the inquiry into economic expectations, the Nollan/Dolan approach limits courts' direct observation of the economic system. In each case, the Court emphasized the legal significance of impairing property owners' right to exclude. But in neither case did the Court determine the economic consequences of such an impairment for the property owner. The Court's strategy, instead, was to observe the political system. What interests does the governmental entity assert? How tight is the connection between the asserted interest and the exaction condition? And how thoroughly has the governmental entity examined the impact of the proposed development and the consequences of its exaction condition? This observation of the political system's observation avoids the circularity of the expectations test, and it is probably more manageable for courts than direct inquiry into a regulation's economic consequences.

In none of these shifts away from the expectations test—cate-

394 See Nollan, 483 U.S. at 834-35, 837-38.
395 See id. at 838-39.
396 Id. at 834-35. The Court held that the exaction condition entirely failed to advance the state's asserted interests.
397 Dolan, 512 U.S. at 391.
398 Id. at 395.
399 See id. at 391 (adopting "rough proportionality" requirement).
400 See Nollan, 483 U.S. at 831-32; Dolan, 512 U.S. at 393-94.
401 See Dolan, 512 U.S. at 396 (Stevens, J., dissenting) ("The record does not tell us the dollar value of petitioner Florence Dolan's interest in excluding the public from the greenway adjacent to her hardware business.").
gorical rules, recourse to state nuisance law, and focus on the political system’s justifications for exaction conditions—has the Court responded to the vacuity of the expectations test by developing a more sophisticated model of the economic system. Notwithstanding the various suggestions of commentators for improved models, the Court seems content with its schema of property as a bundle of rights, among which the right to exclude and the right to develop real property deserve special solicitude. Primitive as this model may be from an economic standpoint, it still provides a point of connection in takings discourse to the world of economic transactions. And, viewed from the other side, economic communication can observe, and respond to, legal decisions concerning the taking of property.

2. Contract As Mechanism of Structural Coupling (with Special Attention to Remedies and the UCC)

Luhmann identifies contract as a second important mechanism of structural coupling between the legal and economic systems. Put more precisely, he identifies “contract” as the legal name for a mechanism of structural coupling that economic communication identifies as “exchange.” As with his account of property, however, Luhmann’s discussion of contract is primarily historical; he does not provide much elaboration as to how contract serves in modern societies as a mechanism of structural coupling between law and economy. The kind of elaboration he might have given, however, seems readily apparent from a quick review of basic principles of contract law. The account that follows is sketchy and selective, but it should suffice to illustrate Luhmann’s general point.

Contract law’s focus on the bargained-for exchange suggests
an obvious connection to the world of market transactions. Consistent with Luhmann's general account of "external" reference, contract law establishes this connection between the legal and economic systems by attributing various "interests" to market participants, primarily the "expectation interest" in obtaining the promised benefit of a bargain.406 The basic contract-law remedy vindicates this interest, in case of breach, by seeking to place the plaintiff in the economic position he or she would have occupied had defendant performed.407 Accomplishing this remedy requires the court or jury to observe at least a small slice of the economic system—determining, for example, the price prevailing in the relevant market at the relevant time.408 Glosses on the basic expectations remedy, such as the "lost volume seller" rule,409 require further observation of the parties' particular economic situation. Other rules—such as the principle of avoidable losses (also known as the "duty to mitigate damages")—adjust the measure of recovery by incorporating norms of economically reasonable behavior into contract law.410 This coupling of law and economy through contract remedies appears in the diagnosis of economically minded commentators: contract law's protection of the expectation interest, they have argued, conforms to norms of economic efficiency.411

Developments in contract law during this century—developments that could be described as a shift from "formalism" to "realism" or "post-realism"—illustrate another aspect of structural coupling. Contract law has increasingly come to rely on systematic observation of the economic sphere and to incorporate these observations into legal rules or decisions. The sales article of the Uniform Commercial Code is a rich source of illustrations.412 The

406 The other interests contract law protects are, of course, reliance and restitution interests. See E. ALLAN FARNSWORTH, CONTRACTS 40 (1982).
407 See id.
408 See, e.g., U.C.C. § 2-708 (providing basic damage remedy for seller of goods against breaching buyer as "difference between the market price at the time and place for tender and the unpaid contract price together with any incidental damages . . . but less expenses saved"); id. § 2-713 (providing damage remedy for buyer who has not "covered" as "difference between the market price at the time when the buyer learned of the breach and the contract price together with any incidental and consequential damages . . . but less expenses saved").
409 See FARNSWORTH, supra note 406, at 851-55 (discussing conditions under which seller who, but for the breach, would have made two sales rather than one, may recover lost profits for lost sale despite having resold).
410 See id. at 858-73.
411 See, e.g., id. at 816-18 & 816 n.1 (citing sources); RESTATEMENT (SECOND) OF CONTRACTS ch. 16 introductory note & reporter's note (1981).
412 See, e.g., Lisa Bernstein, Merchant Law in a Merchant Court, 144 U. PA. L. REV.
Code's parol evidence rule, for example, "definitely rejects" the idea that written contractual language acquires meaning "by rules of construction existing in the law." Instead, the Code explains, in interpreting contractual language courts and juries must consult "the commercial context" in which the language was used, including the parties' course of performance, the course of their prior dealings, and customary usages of trade. Under this approach, then, in arriving at a legal decision about the meaning of written agreements, courts must observe their economic environment and incorporate this observation into legal communication itself. Luhmann would describe this observation as a form of structural coupling.

A second and similar illustration is the Code's treatment of formation issues. In its transformation of common-law offer-and-acceptance rules, the Code prescribes that "[a] contract for the sale of goods may be made in any manner sufficient to show agreement, including conduct by both parties which recognizes the existence of such a contract." The official comment to the quoted provision notes, in opposition to restrictive common-law notions, that "commercial standards on the point of 'indefiniteness' are in-

1765, 1765 (1996) (describing "the fundamental premise of the Uniform Commercial Code's adjudicative philosophy, the idea that courts should seek to discover 'immanent business norms' and use them to decide cases"); id. at 1766-68 & nn.1-9 (marshalling, to the same effect, authority from statutory text, official Code commentary, judicial opinions, academic commentary, and Llewellyn's writings).

Hereinafter, when I say "the Code," I mean Article 2 of the Uniform Commercial Code, governing the sale of goods. Obviously the Code does not apply in terms to all contracts, but it may nonetheless operate as persuasive authority beyond its terms. See, e.g., Farnsworth, supra note 406, at 33-34; see also id. at 25-26 (noting reliance by drafters of the Restatement (Second) of Contracts on analogies to the Code).

413 U.C.C. § 2-202 cmt. 1.
414 See id.
415 See id. §§ 2-202(a), 2-208.
416 See id. §§ 2-202(a), 1-205(1).
417 See id. §§ 2-202(a), 1-205(2).
418 The incorporation of usages of trade also has an economic justification: "The drafters assumed that commercial parties would not long persist in an inefficient practice. The mere fact that a trade practice is time-tested is evidence that it is 'efficient' and therefore desirable from an economic perspective." Maureen A. O'Rourke, Copyright Preemption After the ProCD Case: A Market-Based Approach, 12 BERKELEY TECH. L.J. 53, 68 (1997).
419 In a 1988 article—one of the few articles by American legal academics that systematically examines autopoietic theory—Richard Lempert takes this feature of the Uniform Commercial Code to be a counterexample to Luhmann's autopoietic theory. See Lempert, supra note 19, at 181. I think Lempert's interpretation would have been different, had he been able to consult Luhmann's post-1988 discussions of structural coupling. Only in his most recent work has Luhmann begun to develop the idea of structural coupling, as well as the idea of cognitive openness Lempert discusses.
420 U.C.C. § 2-204(1).
tended to be applied.421 Here, too, the Code prescribes openness to commercial realities and observation of the actual conduct of the parties, in partial replacement of legal formalities and self-referential interpretation of court decisions. The Code's provisions on interpretation handle missing or open-ended contractual terms in a similar fashion.422

On Luhmann's understanding of the term, law and economy were "structurally coupled" through contract even before the triumph, or partial triumph, of realist-inspired conceptions.423 But so long as legal conceptions of contract did not adequately model the economic world they regulated—and, viewed from the other side, so long as practices in the economic sphere did not track the law's formalities—the connections between law and economy could remain only haphazard.424 What the realists and their followers sought to accomplish was not the creation of a structural coupling between law and economy, but rather the systematic observation of this coupling and the reflexive incorporation of this observation into the law itself. Their project involved, as previously mentioned, developing a greater openness in law to the world of economic transactions, in place of classical formalism's relative indifference toward actual commercial practice.425 But the project

421 Id. § 2-204, cmt.

422 See, e.g., id. § 2-305(1) (to fulfill "dominant intention" of most contracting parties, contract with open price terms need not fail for indefiniteness; "reasonable price" may be implied); id. § 2-306(1) cmt. 1 (provision governing "output" or "requirement" contract incorporates "the general approach of [the Code] which requires the reading of commercial background and intent into the language of any agreement").

423 Luhmann describes structural coupling in terms of systems' mutual "irritations." See supra Part IV.A. Even during the heyday of classical formalism in contract law, the world of economic transactions supplied a steady stream of "irritations" for the legal system, through contract law, and courts' contract-law decisions registered in the economic sphere.

424 Here one might think of the "battle of the forms":

At the formation stage, each party usually will attempt to get the other's assent to its own form. Typically this is done by a term requesting that the form be signed and returned, or by a provision declaring that failure to object within a specified time shall constitute assent. In most cases, the purchaser's order will be acknowledged by the seller's own form, or vice versa, with neither party expressly assenting to the other's form. Occasionally, both forms may be signed by both parties, with no effort made to reconcile conflicting terms. Whatever the mechanics of the particular exchange of forms, appropriately dubbed "the battle of the forms," it is obvious that this process of achieving assent differs greatly from that presupposed by orthodox formation doctrine.

JOHN P. DAWSON ET AL., CASES AND COMMENT ON CONTRACTS 415 (5th ed. 1987).

425 The classic statement of classical formalism in contract is Langdell's observation
further involved observing how law appears from the other side of the law/economy coupling—considering, that is, how participants in economic transactions observe the law.

This latter part of the project is particularly evident in the Uniform Commercial Code. In attempting to "simplify" and "clarify . . . the law governing commercial transactions," the Code's drafters "treated businessmen, as well as lawyers and judges, as the principal addressees," crafting the Code's provisions to make them accessible to those engaged in the transactions the Code would regulate. Further, in distinguishing between mandatory rules and those that may be varied by agreement, the Code's drafters sought to anticipate, at least in some small measure, the way in which those engaged in commercial transactions would respond to the Code. The recent literature on default rules and "bargaining in the shadow of the law" has pursued this objective further and more systematically, seeking to make relevant, for legal communication, the way law's environment responds to the law. Indeed, one distinctive feature of realist and post-realist approaches to law has been the attempt (as Luhmann would put it) to model the law's economic environment, and, in so doing, to observe the way in which the law is observed within economic communication.

Nonetheless, this greater legal openness to the world of eco-

about the mailbox rule:

It has been claimed that the purposes of substantial justice, and the interests of contracting parties as understood by themselves, will be best served by holding that the contract is complete the moment the letter of acceptance is mailed . . . . The true answer to this argument is, that it is irrelevant . . . .

C. C. Langdell, Summary of the Law of Contracts 20-21 (1880). Langdell continued by crafting a quick policy argument in favor of his position, see id. at 21, but the statement, as quoted above, has "ever since been taken to express the wretched essence" of Langdellian formalism. Thomas Grey, Langdell's Orthodoxy, 45 U. Pitt. L. Rev. 1, 4 (1983).

426 U.C.C. § 1-102.
428 See id. at 303-05.
429 See U.C.C. § 1-102(3) ("The effect of provisions of this Act may be varied by agreement, except as otherwise provided in this Act and except that the obligations of good faith, diligence, reasonableness and care . . . may not be disclaimed by agreement . . . .").
nomic activity is still selective and still governed by law. For one thing, as Luhmann suggests in passing, various court-imposed doctrines—such as unconscionability, duress, undue influence, and other public policy concerns—operate to circumscribe the sphere of contract, as does protective or paternalistic legislation. Further, even with respect to the instances of legal openness I discussed above, Luhmann would emphasize that law’s openness is always conditioned by legal premises and procedures. For example, even in prescribing that interpretation of contract language must be open to the commercial context, the Code specifies a legal rank order for the various “extrinsic” sources, and, together with background rules of evidence and procedure, it specifies procedures by which courts are to acquire information from these sources. These rules and procedures condition and structure legal communication’s observation of its economic environment.

In short, as Luhmann maintains in his general account of self-reference and external reference in legal argument, the construction of “interests” and the observation of the legal environment are accomplishments of the legal system, not its environment. Even when legal argument incorporates external references to the economic system, it remains an operation of the legal system. That is the meaning of operative closure.

D. Coevolution and Structural Drift

Structural couplings, like contract or property or constitutions, mutually attune the autopoietic processes of the various social subsystems (such as the legal, political, and economic systems). In a relatively underdeveloped part of his analysis, Luhmann suggests that these couplings “evolve together” and may themselves coalesce into (what one might call) a common project. These “co-

432 See RECHT DER GESELLSCHAFT, supra note 18, at 464.
433 See FARNSWORTH, supra note 406, at 257-70, 293-323.
434 See id. at 325-47.
435 See supra text accompanying notes 101-02.
436 See U.C.C. §§ 1-205(4), 2-208(2) (stating that express terms, course of performance, course of dealing, and usage of trade are to be construed consistently whenever “reasonable,” but otherwise, these interpretive sources are ranked in the order just given).
437 See id. §§ 1-205(2), (5), (6) (rules governing evidence of usage of trade); id. § 2-202(b) (rules governing evidence of “consistent additional terms” not stated in the written document); see also, e.g., id. § 2-302 (providing that an unconscionable contract or clause is unenforceable and establishing procedures by which unconscionability is to be determined); id. §§ 2-723, 2-724 (prescribing procedures and evidentiary rules for proof of market price).
438 RECHT DER GESELLSCHAFT, supra note 18, at 495.
ordinated structural developments" Luhmann calls "structural drift." 439

Luhmann does not discuss the idea of structural drift very extensively or systematically. In one passage, he suggests that "trends in the direction of the welfare-state, the positivity of law, and decentralized economic development" belong together as a structural drift common to the political, legal, and economic systems, respectively. 440 In another passage, he indicates that the idea of compensating for risk is a theme common to welfare-state politics and the "arbitrariness and autocracy of judicial interventions into social valuations." 441 One would think, after considering his account of structural coupling, that Luhmann would have to specify the "mechanisms" by which various structural couplings among systems might coalesce into a common structural drift. Unfortunately, he does not, and the idea of structural drift, intuitively plausible as it might be, remains undertheorized in his work.

A more adequate account of coevolution or structural drift would require descending from the heights of general theory to a more concretely specified account of actual societies. Simply to say, for example, that contract operates as a mechanism that structurally couples law and economy does not adequately account for how, precisely, legal and economic communication are coupled in, and with what consequences for, particular legal and economic systems. Still less can one conclude anything with confidence about the common structural drift those structural couplings create. Only a more complete and specific elaboration of Luhmann's general account of structural coupling could make evident the "coordinated structural developments" among systems that he calls "structural drift."

I suggest in the next section—my critical account of the theory as a whole—that this descent from general theory to more particularized accounts would have other salutary effects on Luhmann's theory of legal autopoiesis.

---

439 Id. Teubner uses the term "coevolution." See Teubner, supra note 93, at 1445, 1446; TEUBNER, supra note 34, at 61.
440 RECHT DER GESELLSCHAFT, supra note 18, at 495.
441 Id. at 561.
V. CRITIQUE AND REFORMULATION OF LUHMANN’S AUTOPOIETIC THEORY

A. Autopoiesis and “Relative Autonomy”

Before beginning my critical assessment of Luhmann’s autopoietic theory, I want to return to the question of “relative autonomy” with which I opened this Article. The central problem with the notion of relative autonomy, I said, is that, by itself, the formulation is theoretically empty. Understood as a claim about the causal influences bearing upon the law, the idea of relative autonomy excludes only the extremes of complete determination by some other social sphere, on one hand, and complete independence from law’s social environment, on the other. Any other set of relations among social spheres is consistent with the “relative autonomy” formula. Thus, intuitively attractive as the formulation may be, to say only that law is “relatively autonomous” in this sense is to say very little.

Luhmann’s theory of legal autopoiesis, I have been suggesting, can be understood as an attempt to theorize the untheorized intuition behind the “relative autonomy” formula. The two central concepts of this reformulation are operative closure and structural coupling. These “twin concepts”\(^4\) correspond to the two parts of the “relative autonomy” formula: operative closure corresponds to “autonomy” and structural coupling to the qualifications expressed in the word “relative.”

According to the notion of operative closure, the legal system’s boundaries are established by, and coextensive with, the legal system’s coded communicative operations. If a communication is coded according to the distinction between legal and illegal, then it belongs to the legal system; if not, it belongs to the legal system’s environment. The notion of operative closure, further, emphasizes the recursive connections among a system’s communications. An autopoietic legal system, Luhmann maintains, reproduces and transforms itself by linking up to past legal communications and establishing points of connection for future communications. The operatively closed legal system, so understood, is autonomous, Luhmann contends, but not in the causal sense that the idea of “relative autonomy” typically presupposes.\(^5\) Rather, the system is

\(^4\) Operational Closure and Structural Coupling, supra note 34, at 1432.

\(^5\) See Law As a Social System, supra note 87, at 139 (“[T]he concept of the autonomy of the legal system cannot be formulated on the level of (causal) relationships of dependence and independence.”).
autonomous in the sense that it establishes its own boundaries and elements and reproduces itself through its own operations, not through the operations of some other system.\textsuperscript{444}

As Luhmann's critics have pointed out, this argument for the legal system's autonomy is tautological: Luhmann defines the legal system as operatively closed, and he defines autonomy in terms of operative closure.\textsuperscript{445} In my view, the critics are also correct that Luhmann uses the term "autonomy" idiosyncratically,\textsuperscript{446} not with the sense of independence from external influence that the term has traditionally carried.\textsuperscript{447} Luhmann would be well-advised, I think, not to speak of operative closure as "autonomy," given the settled sense of this term in (at least Anglo-American) legal theory.\textsuperscript{448}

What many of Luhmann's critics miss, however, is that operative closure and autonomy are only half the story for autopoietic theory. The other half is structural coupling, together with the associated notions of cognitive openness and external reference. According to Luhmann's idea of "cognitive openness," legal communication "observes" the world beyond its own coded communications, incorporating "external references" to the extra-legal world—though always under the premises, standards, and procedures of the legal system itself. Further, communication in other social subsystems both observes and refers to the legal system as well. Structural coupling, as I explained above, involves this mutual observation of systems—as when legal communication observes the economic system through the schemata of contract or property law. With structural coupling, systems presuppose and

\textsuperscript{444} See RECHT DER GESELLSCHAFT, supra note 18, at 63.

\textsuperscript{445} See, e.g., Danilo Zolo, The Epistemological Status of Autopoiesis, in STATE, LAW, AND ECONOMY AS AUTOPOIETIC SYSTEMS, supra note 63, at 67; Lempert, supra note 19, at 186 (stating that as a theory of legal autonomy, autopoietic theory is "true trivially or by definition"); cf. Richard Münch, Autopoiesis by Definition, 13 CARDOZO L. REV. 1463, 1465, 1468 (1992) (arguing that operational closure and autopoiesis are definitional for Luhmann; a system cannot be autonomous and yet dependent on another system).

\textsuperscript{446} See, e.g., Münch, supra note 445, at 1468-69 (arguing that "autonomy" is incompatible with system's dependence on another system's operations); Michel Rosenfeld, Autopoiesis and Justice, 13 CARDOZO L. REV. 1681, 1684-85 (1992) (noting that Luhmann's notion of autonomy is controversial); Zolo, supra note 434, at 118 (asserting that Luhmann's "tautological" notion misses important problems the idea of "legal autonomy" should address); Lempert, supra note 19, at 173-78 (noting that defining "autonomy" in terms of autopoietic theory obscures interesting issues).

\textsuperscript{447} See Lempert, supra note 19, at 173 (stating the "Anglo-American" definition of legal autonomy as "the (material) independence of applied law from other sources of power and authority in social life").

\textsuperscript{448} Cf. RECHT DER GESELLSCHAFT, supra note 18, at 62-66 (noting the confusion over the term "autonomy").
ely upon each other's operations—as when legal communication presupposes that legal judgments will be politically enforced. Structural coupling is Luhmann's way of accounting for the extensive and organized interrelations among "autonomous" systems of communication.

The idea behind the "relative autonomy" formula, I think, is that legal theory must account for both the legal system's "peculiar internal structures" and the legal system's interrelation with its nonlegal environment. Luhmann's combination of operative closure and structural coupling speaks to both parts of this intuition. For that reason, and despite his disdain for the term "relative autonomy," I take Luhmann's work to be an attempt to theorize the untheorized concerns that inspire invocations of law's "relative autonomy." Whether the attempt is entirely successful is another story. In the remainder of this Part of the Article, I indicate four general problems with Luhmann's elaboration of autopoietic theory.

The first problem concerns the idea of binary coding. In my view, the idea of binary coding is less fundamental to autopoietic theory than Luhmann suggests, and it seems to me an unnecessarily mechanical way of accounting for legal (or other) communication. Accordingly, I recommend that the idea simply be discarded.

The other three criticisms proceed from the premise I suggested at the close of the preceding section: if it is to be useful, autopoietic theory must be specified not just at the lofty heights of general theory, but also at a more particularized level. From that perspective, Luhmann's tendency to present systems as if they were themselves perceiving, communicating subjects would be more


450 Gordon, supra note 11, at 101; see also Lempert, supra note 19, at 159 ("We may think of the relative autonomy of law as the degree to which the legal system looks to itself rather than to the standards of some external . . . system for guidance in making or applying law.") (emphasis omitted).

451 See Law As a Social System, supra note 87, at 139 (explaining that in autopoietic theory, "both the dependence and the independence of the law are more strongly emphasized than in the customary expression 'relative autonomy'").

452 I have noted other disagreements with Luhmann already—such as my skepticism about Luhmann's argument that contemporary constitutional law is "politicized," see supra text accompanying notes 334-37, and my skepticism about the importance of functional analysis, see supra note 136.

453 See infra Part V.B.

454 The metaphor of height is Luhmann's own. See RECHT DER GESELLSCHAFT, supra note 18, at 376 (autopoietic theory sees "the lightly rippled sea of [legal] arguments" "as if from an airplane").
"RELATIVE AUTONOMY" OF LAW

1998] 2067

evidently dubious than it already is at the level of general theory.\textsuperscript{455} It would be apparent, also, that the connections among systems are more dense and extensive than Luhmann's account of structural coupling suggests.\textsuperscript{466} More apparent, too, would be the problem of specifying the boundaries of autopoietic systems.\textsuperscript{457}

One could of course criticize autopoietic theory "externally," from the perspective of some other developed theory. Much criticism of autopoiesis has proceeded on that basis, but for purposes of this Article, I prefer to diagnose autopoietic theory's deficiencies from a more "internal" perspective, examining whether the theory, as Luhmann elaborates it, realizes Luhmann's purpose of accounting both for law's distinctive qualities and its interrelations with other social spheres. Readers utterly unpersuaded by Luhmann's project will then have an additional set of reasons for their critical judgment.

B. Problems with the Idea of Binary Coding

According to Luhmann, a binary code of opposed values governs communication in each of the functionally differentiated systems he distinguishes—law, science, politics, economy, education, religion, and art.\textsuperscript{458} The code is basic to the system's identity. It "closes" the system's operations, establishing the system's boundaries and its unity.

One symptom of weakness in Luhmann's idea of binary coding appears in his specification of codes for the political and economic systems. According to Luhmann, as mentioned above, the political system operates under two "power" codes: the distinction between government and opposition, and the distinction between governing and governed.\textsuperscript{459} As for the economic system, Luhmann is not consistent about what code governs, or even how many codes govern. Sometimes he says the economic system operates under two codes—property (the distinction between having and not having property) and money (the distinction between payment

\textsuperscript{455} See infra Part V.C.
\textsuperscript{456} See infra Part V.D.
\textsuperscript{457} See infra Part V.E.
\textsuperscript{458} This list compiles Luhmann's usual examples of social subsystems. See, e.g., RECHT DER GESELLSCHAFT, supra note 18, at 7, 16; Coding, supra note 63, at 155.
\textsuperscript{459} See supra text accompanying notes 299-300. Luhmann probably should just describe the political code, instead, as the distinction between having and not having power, a distinction that is specified differently depending on whether one considers the vertical dimension of applications of power, on one hand, or the horizontal dimension of competition for power, on the other.
and nonpayment). On other occasions he posits only one code for
the economic system, but he is inconsistent on whether that code is
the money or the property code. Luhmann's equivocation about
the number and identity of codes for the economic system raises
red flags. If binary coding were as basic to a system's operations as
he suggests, it seems implausible that we would be unable to de-
termine what those codes are, or even how many there are. Fur-
ther, the idea of a system having *multiple* codes makes no sense if
the very reason for positing a binary code is to establish the *unity*
of a system's operations. A "system" with two codes would seem
to be two systems rather than one, if we accept the idea that only a
binary code can establish a system's unity. Luhmann's confusion
over the economic and political system's coding casts doubt on the
very idea of binary coding.

A second problem with the idea of binary coding, and the as-
associated notion of system programming, is that they invite misun-
derstanding. To describe legal communication as the legal sys-
tem's allocation of the code values "legal" or "illegal," according
to the legal system's "programs," is to make the process of legal
communication seem mechanical. The impression created is that
legal communications process information according to fixed pro-
grams and terminate in the flat conclusion, "x is legal" or "x is ille-
gal." But in fact, even communications that most closely resemble
this model—court pronouncements of decisions—are more nu-
anced. For one thing, distinctions other than the simple le-
gal/illegal distinction are critical to the meaning of legal decisions.
Luhmann mentions the "secondary coding" of constitutional/unconstitutional; similar distinctions that seem important
are, for example, the distinctions between civil and criminal, sub-
stantive and procedural, mandatory and permissive. Each of these
distinctions inflects the meaning of "legal" and "illegal."

Further, courts in rendering decision do not simply classify a
defendant's conduct; they must decide, also, the consequences
their classification will carry. When, for example, a court decides a
breach-of-contract case in favor of the plaintiff, the court must de-
cide, also, whether the defendant must perform the agreement
specifically or instead pay money damages. If the latter, the court
must decide further whether the award should be based on the ex-
pectation, reliance, or restitution interests, as well as how much

460 See supra notes 338-39 and accompanying text.
461 See supra text accompanying note 323.
462 I thank David Lyons for his suggestion along these lines.
money will be required to vindicate the relevant interest. The court's statement of these legal consequences will not take an entirely "binary" form. A money judgment for $11,413, for example, is not describable as one side of a binary distinction—unless one describes, as the other side of the distinction, every other consequence the court could have imposed. One might try to save the theory by saying that the court, at the end point of its analysis, has allocated to its own judgment the code value "legal," and to all other possible judgments "illegal." But that description would add nothing to the simple statement that the court has rendered a legal decision. Thus, in my view, even the ultimate outcome of legal communication in the courts—a legal decision—is not aptly described as a choice between opposed binary code values, the simple allocation of a code value, "legal" or "illegal." The idea of legal communication as a binary choice between "legal" and "illegal" does not do justice to the richness or texture of legal communication.463

My statement that the notions of coding and programming "invite misunderstanding" was not just a courtesy to Luhmann. He is in fact well aware that legal communication cannot be understood simply as mechanical information-processing in which "the system" operates fixed "programs" to allocate a value, positive or negative, from a binary code. His account of legal argument makes clear that much legal communication occurs in a context in which the meaning of legal texts, and the course of legal decision, is uncertain.464 And as Luhmann recognizes, argument does not concern only the way in which fixed rules should apply to a given case; it often involves, also, a choice among various potentially applicable rules. Why, then, the emphasis on the binary code, and the associated notion of legal rules as "programs" for allocating code values, given the misunderstanding that almost inevitably results?

463 Cf. George P. Fletcher, Law As Discourse, 13 CARDOZO L. REV. 1631, 1636 (1992) (questioning whether Luhmann's emphasis on binary coding is consistent with "legal standards of degree, such as discretion and the amount of damages"); Rosenfeld, supra note 446, at 1706 ("[L]egal practice can hardly nontrivially be reduced to the classification of actions as either legal or illegal.").

464 See Legal Argumentation, supra note 178, at 285 ("[W]here decisions are concerned, it cannot really be disputed that any decision could have been made differently."); id. at 287-88, 290; id. at 292 (noting that given the "endlessly changing situations" the legal system confronts, legal texts "remain indispensable as a reference, but do not sufficiently determine decisions"); see also RECHT DER GESELLSCHAFT, supra note 18, at 68 (arguing that every legal communication "leads very quickly into uncertainty"); id. at 207-08 (stating that a legal system creates, intensifies, and protracts uncertainty).
Luhmann never explains in a convincing way why he finds it necessary to posit a binary code as basic to autopoietic theory. When he operates in a mode other than simple dogmatic pronouncement, he tends to suggest that the idea of binary coding is a basic principle of systems theory and that it has significant technical advantages over other methods of information processing. A binary code, he suggests, is relatively easy to use and allows the system to "cross," through a simple operation of negation, from the positive to the negative value. The difficulty with these arguments, however, is that Luhmann is relying on a body of literature on information theory and artificial intelligence whose emphasis on binary coding has become—even in its home domain—at least controversial, and perhaps entirely obsolete. Its application to social systems seems to me even less obvious.

The argument on which Luhmann relies perhaps most heavily is that the assumption of binary coding is necessary to account both for the boundary between legal and other social communication and for the system’s unity. The legal/illegal code, in other words, establishes the system’s operative closure and its identity as a differentiated system. While the system’s “programs” change historically, Luhmann argues, the code remains invariant.

But even if we take the legal system’s closure and unity as facts to be accounted for, then still, binary coding—in Luhmann’s

465 See, e.g., Self-Reproduction, supra note 63, at 115 (“[T]he legal system, for its own reproduction of legal events by legal events, needs a binary structure in terms of which all events can be described as not being their counterpart.”); Coding, supra note 63, at 145 (assuming the binary code as a “thesis” that follows from “systems theory premises”); id. at 149-50 (“If we today accept this formality of a matured binary code, then the next step is to look at the special nature of binary coding.”).

466 See Unity, supra note 63, at 15-16.

467 Luhmann borrows the term “crossing” from Spencer Brown. See RECHT DER GESELLSCHAFT, supra note 18, at 177, 183.

468 See id. at 174-85; Coding, supra note 63, at 150-51.

469 See Alan Wolfe, Sociological Theory in the Absence of People: The Limits of Luhmann’s Systems Theory, 13 CARDOZO L. REV. 1729, 1731-34 (1992) (arguing that the “algorithmic understanding of communication” on which Luhmann relies “has been substantially discredited”; the newer paradigm of parallel data processing rejects Luhmann’s emphasis on binary coding in communication).

470 Cf. Law As a Social System, supra note 87, at 137 (“Current uncertainty is due primarily to the fact that a general theory of [autopoietic systems] does not exist, and consequently one is frequently working too directly with concepts borrowed from mathematics or biology, without adequate concern for the appropriateness of the transposition.”).

471 See, e.g., id. at 140 (arguing that the “dual function” of the legal/illegal code is to “differentiate the system for the specific task of the law” and to accomplish the system’s closure).

472 See RECHT DER GESELLSCHAFT, supra note 18, at 204; Coding, supra note 63, at 173-74.
sense, and with Luhmann's emphasis—is not the only means of explanation. Elsewhere in his work, Luhmann has suggested the idea of legal validity as a "circulating symbol" for legal communication, a symbol that is not exhausted in any particular reference but exists only in its "permanent reproduction" through ongoing legal communication. Legal validity in this sense is not a substantive norm but a "symbol of the system's dynamic stability"—dynamic because it can take on various references, and stable because it outlasts any particular reference or particular specification through legal rules. The symbol of legal validity transcends particular institutional locations, Luhmann indicates, operating to organize legal communication both in the legal system's "center" in the courts, and also in the "peripheral" regions of, for example, legislation, contract, and corporation-formation. This symbol, Luhmann says, "produces the unity of the system amidst the change in its operations."

This idea of legal validity as an organizing and unifying symbol for legal communication seems more appropriate to me than Luhmann's notion of binary coding. Luhmann's account of legal validity as a "circulating symbol" suggests that legal communication is differentiated from other social subsystems by (what one could call) its distinctive communicative theme. The idea of legal validity transcends the particular ways in which it is specified through legal rules. The legal system's identity is established by its orientation toward this theme of legal validity. One need not describe legal communication as the "allocation of code values," the binary choice between legal and illegal according to system "programs," in order to account for the legal system's unity, its differentiation from other social systems, and its "dynamic stability."

Let me be clear about the extent of my disagreement with Luhmann. He is unquestionably correct that the legal system operates, and presumably must operate, with a distinction between legality and illegality, or validity and invalidity. The question is the theoretical significance one gives this distinction. It seems to me better to describe legal communication as oriented toward and

---

473 Recht der Gesellschaft, supra note 18, at 107.
474 See id.
475 See id. at 103.
476 Id. at 107.
477 On Luhmann's "center/periphery" schema for the legal system's internal differentiation, see supra Parts III.B-C.
478 Recht der Gesellschaft, supra note 18, at 98; see also id. (symbol of legal validity maintains and reproduces the system's unity in the diversity of its operations).
bounded by the theme of legal validity than to describe it as a system that operates by allocating the binary code values "legal" and "illegal" to states of affairs according to system "programs." The former description seems to me more consistent with Luhmann's emphasis on legal communication's uncertainty, ambiguity, contingency, nuance, and indeterminacy, than does the mechanical-sounding vocabulary of "binary code" and "program." And it does not depend upon controversial (perhaps outdated) assumptions in general systems theory about the binary nature of communication and information-processing.

C. System As Subject?

Throughout Luhmann's discussion of legal autopoiesis, the legal system as a whole appears as a grammatical subject: it operates, distinguishes, refers, and couples. Often it appears as an epistemic subject: it observes, self-observes, perceives, and reflects. While Gunther Teubner has defended explicitly the idea that the legal system is an epistemic subject, the probability that this conception will resonate in American legal theory seems to me very low. Those sympathetic with the traditional idea of the subject will reject Teubner's notion on the ground that "only individuals think"—notwithstanding Teubner's defense that he has not "deconstructed" or denied the individual subject, just "decentered" it and "multiplied the centers of cognition." Those hostile to traditional conceptions of the subject will see the idea of law as supra-individual subject as a reinstatement of the traditional problematic at a different level, or else as the mere inversion (and thus repli-

---

479 See Gunther Teubner, How the Law Thinks: Toward a Constructivist Epistemology of Law, 23 L. & Soc'y Rev. 727, 730 (1989) ("law as an autonomous epistemic subject . . . constructs a social reality of its own"). But see TEUBNER, supra note 34, at 83 ("The legal system and the economic system do not as such have the capacity for action."); see also Operational Closure and Structural Coupling, supra note 34, at 1434 ("The legal system cannot communicate as a unity and the society has no address.").

480 See TEUBNER, supra note 34, at 45 ("[T]he autonomous reflecting subject . . . has . . . not been deconstructed, merely decentered."); see also id. at 44, 45 (arguing that autopoietic theory "is reinstating the autonomy of the individual" and "breathes new life into the individual"); Teubner, supra note 479, at 741 ("The point is not the individual subject withering away, but the multiplication of centers of cognition."); see also id. (although autopoietic theory characterizes individuals in their "social existence" as "constructs of autopoietic systems," it sees them in their "psychic existence" as "vibrant autopoietic systems"); Michael King, The 'Truth' About Autopoiesis, 20 J.L. & Soc'y 218, 228 (1993).

cution) of that same problematic.482

In any event, to describe the legal system as a whole as an epistemic subject seems at least in tension with Luhmann’s emphasis on the legal system’s “internal differentiation.” With his account of that differentiation, Luhmann begins to connect autopoietic theory to a more conventional institutionalist approach: his distinction between “center” and “periphery” is, in part, a distinction between courts and legislatures, adjudication and legislation.483 And in his account of legal argument, he distinguishes between argument and decision, suggesting a further distinction between the roles of judge and lawyer. Connecting the general concepts of autopoietic theory to an institutional framework of courts, legislatures, and contracting parties makes it more difficult to speak simply in terms of the legal system as such. Not all operations within the legal system connect to the network of legal communications in the same way, and not all operations have the same role in the reproduction of that network. Decision is not argument, and legislation is not adjudication. The differences among types of communication in the legal system are important, not just their common character as “operations of the legal system.”

This move away from exclusive focus on the legal system as a whole would accelerate if Luhmann were to descend from the level of general theory, at which his account of legal autopoiesis has so far operated, to a more particularized account of actual legal communications. Consider, for example, the legal communication that might take place concerning the termination of a public employee fired for activity arguably characterized as protected speech. This legal communication could take place at various locations and levels of the legal system’s “organized decision system”.484 informal procedures within the government agency; formal

---

482 Teubner’s description of his project in How the Law Thinks suggests such an inversion: human beings do not construct law as a “cultural artifact” through their intentional actions, he says; instead, “law as a communicative process . . . by its legal operations produces human actors as semantic artifacts.” Teubner, supra note 479, at 730.

483 See supra text accompanying notes 131-202.

484 Luhmann uses this term to refer to the complex of institutions responsible for binding legal decisions, legislative and adjudicative. See supra text accompanying notes 131-33.
grievance and arbitration procedures, perhaps with union representation; state administrative review of the agency's decision, perhaps with state judicial review; litigation in state court under the state law of wrongful discharge with appeal to higher state courts; federal constitutional litigation in state or federal court with appellate review; or, conceivably, legislative activity prompted by the termination. In each of these locations and at each of the various levels, different regions of the network of past communications would be relevant or irrelevant, and the argumentative links to past and future legal communications would be accordingly different. The form that particular communications would take would depend, further, upon whether they communicated decision, or only argument intended to influence decision.

To be sure, particular legal communications participate in a network of other legal communications. That network opens some possibilities for connection and tends to close off others. But simply to say that the legal system as a whole generates particular communications is to understate the extent to which the content of those communications depends upon their location in the differentiated legal system. And it is to understand, also, the agency and potential creativeness of those who engage in legal communication.

If Luhmann were to develop a more particularized account of the legal system than his general theoretical discussions offer, he would need to specify both the particular features of definite legal institutions in which communication occurs, and also the identity and nature of the agents, individual and collective, who exploit, or fail to exploit, the system's discursive and strategic possibilities. Focusing at a more particular level, not just the level of social sub-systems like the legal, political, and economic systems, would also allow autopoietic theory to incorporate into its mapping the various dimensions of stratification, such as race, gender, class, and sexual orientation, that Luhmann's systems-focused analysis almost entirely neglects.


Luhmann occasionally mentions the problem of differential access to legal protection, but never identifies any particular dimension of inequality. See RECHT DER GESELLSCHAFT, *supra* note 18, at 116; Self-Reproduction, *supra* note 63, at 120. In another passage he rejects notions of "hegemony" and class domination, calling it "questionable" whether one can find "a relation of structural coupling between the legal system and social stratification." RECHT DER GESELLSCHAFT, *supra* note 18, at 494.
Objection to Luhmann's tendency to treat systems as subjects would thus not necessarily be a simple protest that "only individuals think." Nor would it necessarily be a call for the reinstatement of the sovereign individual subject. But the more particularized account I am recommending, with its emphasis on institutions and social divisions, might call into question a basic premise of Luhmann's autopoietic theory: that communications and nothing else are the elements of society and social subsystems. If the meaning and effects of communications depend upon their connection (or lack of connection) to an institutional framework, then why should we insist that communications are elements of the system and institutions are not?

I am not arguing that Luhmann should respond by classifying various institutions, such as the courts, as elements of the legal system. Nor do I disagree with Luhmann's assumption that communication is central to the operation of modern societies. I would prefer, instead, to avoid both the question whether the system has "elements" or "components," and the further question what those elements and components are. The point is simply that to understand a legal system's operation, one needs to know something about legal and other institutions, and something about the agents, individual and collective, who engage in legal communication. This critical point seems to me often obscured in Luhmann's presentation—both by his emphasis on the legal system as subject, and by his emphasis on communications as the sole elements of society as system.

D. Problems with the Notion of "Structural Coupling"

Luhmann's account of "structural coupling"—the ongoing connections among differentiated communicative systems—examines only a few instances. Constitutions, as well as legislation and the enforcement of legal judgments, couple law and politics. Property and contract couple law and economy. While Luhmann occasionally mentions other instances of structural coupling, he focuses almost exclusively on the above examples. And while

487 Cf. Coombe, supra note 485, at 89 (arguing that the emphasis on agency as well as "structure" does not necessarily recreate traditional ideas of the autonomous liberal subject).
488 See supra text accompanying notes 71-73.
489 See, e.g., RECHT DER GESELLSCHAFT, supra note 18, at 464-65 (describing, in passing, the privilege to inflict economic harm intentionally through competition as a "note-worthy" coupling of law and economy).
490 Sometimes the list of structural couplings Luhmann considers is even shorter. In
Luhmann mentions the possibility that systems may be coupled "momentarily" through single events, he downplays this sort of connection between systems in favor of his preferred forms of structural coupling.\textsuperscript{491} Luhmann's discussion of structural coupling, then, tends to suggest that the connections among systems are few indeed, however important they might be.

The examples of structural coupling Luhmann does provide, however, are hardly exhaustive. In considering the connections between the legal and economic systems, for example, the idea of negligence seems a good candidate for the category of structural coupling. The term "negligence" has a legal meaning: failure to meet the legal standard of the reasonably prudent person. And as law and economics scholars have observed, negligence has an economic meaning as well: the failure to take cost-justified precautions.\textsuperscript{492} These two meanings of negligence\textsuperscript{493} allow for reciprocal observation between the two systems. From the side of the economic system, the legal negligence rule imposes the costs of accidents on those who "unreasonably" inflict them, and the prospect of having to pay those costs influences the course of economic decision. In this sense, economic communication "observes" the legal system and its negligence rule and incorporates that observation into economic decisionmaking. From the side of the legal system, the economic costs and benefits of an "untaken precaution"\textsuperscript{494} are at least important factors in determining whether the

---

\textsuperscript{491} See Operational Closure and Structural Coupling, supra note 34, at 1436-37.

\textsuperscript{492} See, e.g., RECHT DER GESELLSCHAFT, supra note 18, at 440-41 (referring to momentary coupling in passing as an "ambiguity of [system] identification," and beginning a lengthy discussion of structural coupling).

\textsuperscript{493} See Richard Posner, A Theory of Negligence, 1 J. LEGAL STUD. 29, 32-33 (1972) (discussing the "Learned Hand" or "BPL" formula stated by Judge Hand in United States v. Carroll Towing Co., 159 F.2d 169 (2d Cir. 1947)).

\textsuperscript{494} On the notion of "untaken precautions" as central to negligence litigation, see Mark F. Grady, Untaken Precautions, 18 J. LEGAL STUD. 139 (1989).
defendant was unreasonable or negligent in refusing to undertake it. Sometimes courts have made this observation of economic costs and benefits explicit, incorporating notions of cost/benefit analysis directly into their statement of the applicable legal rule.  

"Negligence," then, has meaning in both economic and legal discourse, and it establishes a schema for reciprocal observation between the two systems. On Luhmann’s understanding, then, it counts as a form of structural coupling.

Similar analysis would establish a whole series of other "structural couplings" between law and economy. Obvious examples would be the idea of the corporation, various notions of tax law, "competition" in antitrust law, and for that matter, the very idea of "liability"—all of which are significant in both legal and economic discourse, and all of which allow reciprocal "observation" between the two systems. One could discover innumerable other couplings between law and economy simply by following the path of the law-and-economics movement.

This point is not specific to the relation between law and economy. Examination of legal communications and legal rules would reveal many similar "couplings" between law and the other systems Luhmann distinguishes. Evidence law, for example, establishes the conditions under which legal communication may "observe" and incorporate scientific communication in litigation. Principles of intellectual property law establish couplings between the legal system and both scientific and artistic communication, by extending legal protection to original works in those spheres. The criminal law notion of "insanity" directs legal argument and decision to observe medical discourse, though under specifically legal premises and criteria. Administrative law, to take one last example, couples the legal and political systems by regulating the procedures and conditions under which governmental agencies

495 See, e.g., Camacho v. Honda Motor Co., 741 P.2d 1240, 1243 (Colo. 1987) (holding that a motorcycle manufacturer has a duty to "provide reasonable, cost-acceptable safety features"). While courts in "design defect" cases like Camacho often insist on calling their test one of "strict liability" rather than negligence, the drafters of the proposed Third Restatement of Torts governing products liability explain that the standard test is essentially a negligence inquiry. See RESTATEMENT (THIRD) OF TORTS: PRODUCTS LIABILITY § 2(b) (Proposed Final Draft 1997); id. § 1 cmt. a.

496 Cf. RECHT DER GESELLSCHAFT, supra note 18, at 87-88, 90-91 (legal system's observation of scientific and technical information structured by legal rules and procedures).

497 Further, by limiting nonowners' ability to appropriate such works for their own economic purposes, intellectual property law couples the legal and economic spheres. This point is consistent with Luhmann's notion of property as a mechanism of structural coupling between law and economy.
may permissibly operate. And so on. Although the details of these various couplings would have to be filled in much more thoroughly than I have done here, my general point should be clear. Law and other systems are “coupled” much more densely and extensively than Luhmann’s overview of structural coupling would suggest.498

The same conclusion follows when one examines the other way in which, according to Luhmann, systems can be connected. In introducing his idea of structural coupling, Luhmann distinguishes it from “momentary coupling,” or, the coupling of systems through events simultaneously relevant in more than one system.499 Luhmann does not give much attention to this idea of momentary or event coupling because his version of autopoietic theory focuses on systems, not events. Systems and their coded operations are primary for Luhmann; what one might in ordinary conversation describe as an “event” is relevant only so far as it can be seen as the coded operation of an autopoietic system. Thus, events that are simultaneously relevant to two systems of communication—such as a payment (economy) that satisfies a legal judgment (law)—appear in Luhmann’s formulation not as a single event, but as two separate operations of two systems.500 This departure from common-sense or “event-centered” ways of framing the social

498 From within the camp of autopoietic theorists, Gunther Teubner has come to similar conclusions. Law and other social discourses, he suggests, are more open to one another than Luhmann’s account of structural coupling implies. See Teubner, supra note 93, at 1447. In partial replacement of the notion of structural coupling found in General Systems Theory, see id., Teubner proposes the ideas of “interdiscursivity” and “productive misreading.” See id. at 1447. Legal communication may “productively misread” other social discourses, Teubner indicates, by incorporating a communication, concept, or process from the other discourse. With the word “misreading,” Teubner signals that this borrowing is always at the same time a transformation of what is borrowed—a reinterpretation to accommodate what is borrowed from the other discourse to the context of legal communication.

499 See supra text accompanying note 288. As an example of momentary coupling, Luhmann mentions a payment (economy) in satisfaction of a legal judgment (law). See RECHT DER GESELLSCHAFT, supra note 18, at 441. In another passage Luhmann suggests the following examples:

A payment can be at the same time . . . the fulfillment of a contractual obligation in the legal system and part of an economic transaction which transfers the capacity to make further payments in the economic system. The same holds true for an act of legislation which may have both political and legal relevance. An observer may identify these aspects as one event and may even find himself unable to see two different operations.

Operational Closure and Structural Coupling, supra note 34, at 1437. I have described legislation as a form of structural coupling above, but in this passage he seems to identify it as a form of “momentary” coupling. If so, then the category of momentary coupling, or coupling through events, is more important still.

500 See Operational Closure and Structural Coupling, supra note 34, at 1438 (“[A]ny ob-
mon-sense or "event-centered" ways of framing the social world is one of the bewildering features of Luhmann's work.

In my view, the connection of systems through events, not just system structures, is more significant than Luhmann suggests. Consider, for example, a communication even in the "core" of the legal system: an argument presented by a plaintiff's attorney in a civil case to a court of law. This argument is an operation within the legal system. But if the lawyer is private counsel retained for a fee, the "event" of presenting this argument can also be seen as an operation within the economic system: the rendering of services in exchange for payment. These two "operations" are related. The kind of "observation" of the legal system in which the lawyer will engage of course will not be neutral, but instead will be tailored to the interests of the paying client. Indeed, it will be directed toward influencing the legal decisionmaker to render a judgment that, when enforced, will produce a further economic operation favorable to the client—the payment of money damages. One would not fully understand the legal operation of argument without considering its connection, through the "event" autopoietic theory sees as legal argument, to the economic system. Were it not for the event's connection to the economic system, it would never occur, and there would be no operation within the legal system.

In the above example, the event through which the two systems are coupled is an operation within both systems. Another way in which systems can be connected through events, rather than system structures, is when an event that counts as an operation within one system is relevant to communication in, but is not itself an operation of, another system. A judicial decision, for example, may prompt extensive communication in the political system.

server who cares for the perspective of the system itself—of course, there can be other observers with other frames and interests—cannot cross-identify events across boundaries.

I prefer to speak of "an operation within the legal system," rather than "an operation of the legal system," to avoid the problem of "system as subject" I identified in Part C supra.

Perhaps Luhmann might describe these connections between law and economy as forms of structural coupling. The advocacy system is articulated as both an economic and a legal structure, the argument might go, with different but related meanings in the two systems. Even if Luhmann did take that path, however, two points would follow. First, as I have been arguing, the connections among the systems of communications Luhmann distinguishes would still be more dense than Luhmann's overview of structural coupling suggests. Second, the connection between systems would not be discoverable without seeing the "two operations" (legal and economic) as linked in the same event.

The most obvious examples are the Supreme Court's "big" cases, such as Brown v. Board of Education, 347 U.S. 483 (1954), or Roe v. Wade, 410 U.S. 113 (1973), but these
scientific or technological discovery may stimulate economic communication. More generally: the events that are “operations” in one system may be relevant to the communication of another system. Whether they are relevant, how they are made relevant, and the consequences of their relevance for the system in question, is determined within the communication of the observing system.

The point I am making follows directly from Luhmann's general account of systems' operative closure and the “irritation” and “resonance” among systems. It has become difficult to see for two reasons. First, Luhmann places so much emphasis on structural coupling as the mechanism connecting autopoietic systems that it virtually replaces the more general principle of “irritation” or “resonance.” Second, Luhmann's work is pitched at such a high level of abstraction that particular events have almost no significance.

As I have been arguing throughout this Part of the Article, autopoietic theory should be specified not just at the general theoretical level, but also at a more particularized level. These two levels of analysis need not be incompatible. Particular legal communications acquire significance in their connection to the more encompassing system of legal communications, and that system structures the possibility for such connections. Working in the other direction, what Luhmann describes as “the legal system” is a network reproduced through particular communications that are articulated in particular contexts of events and institutions. The point is thus not to choose between two levels of analysis, particular and general; the two levels have meaning only in relation to one another. Specification of the institutions and practices through which legal communication operates would connect the two levels of analysis. Luhmann's account of the legal system's internal differentiation begins, but by no means completes, that task.

E. Boundary Problems

I do not mean to suggest that connecting autopoietic theory to an account of institutions and practices would be easy. One difficult question concerns the boundaries of what Luhmann calls “the legal system.” When one first encounters autopoietic theory, one tends to identify Luhmann's notion of “society” with a particular nation-state, so that “the legal system” would refer to the legal sys-

---

are only the most obvious examples.
504 See supra text accompanying notes 281-87.
505 See supra Part V.C; see also supra Part IV.D.
tem of a particular political territory. But this way of specifying the legal system is by no means obvious. If, as Luhmann claims, the comprehensive autopoietic system called "society" consists in every communication, then, as he notes, society can only be world society. And the functional subsystems of society, such as the political, legal, and economic systems, would therefore not coincide with the boundaries of nation-states.

Luhmann begins to address this problem by noting that world society, and its various functional subsystems, are internally differentiated. He relies on the typology discussed earlier in this Article, with its distinctions among functional, segmentary, hierarchical, and center/periphery principles of differentiation. According to Luhmann, the form in which the world political system is differentiated is geographical "segmentation" into nation-states. The world economy, Luhmann says, increasingly transcends national boundaries, but a pattern of differentiation into center and periphery (developed and less developed) still persists. What of the legal system? Luhmann has already described the legal system as internally differentiated according to a center/periphery scheme, a form of differentiation Luhmann presents in institutionalist terms as a distinction between the courts and all other arenas of legal communication. But what is the relation between this kind of "internal differentiation" and the geographically articulated "internal differentiation" Luhmann describes for the economic and political systems? In what sense is there a world legal system, and in what sense is the world legal system differentiated segmentally, like the political system, according to the framework of nation-states? These are difficult questions Luhmann has not gone far in

---

506 See LUHMANN, SOCIAL SYSTEMS, supra note 20, at 410 ("[T]here is finally only one society: the world society, which includes all communication and thereby acquires completely unambiguous boundaries.") (footnote omitted); see also RECHT DER GESELLSCHAFT, supra note 18, at 571.

507 For Luhmann's typologies of internal differentiation, see supra text accompanying notes 135-38. "Functional differentiation" means a subsystem's specialization with respect to a particular social function. "Segmentation" is the differentiation of "equal subsystems." "Hierarchy" (or "stratification") is the differentiation of "unequal subsystems" that stand in a rank order. Luhmann illustrates the notion of center/periphery differentiation in his account of the courts' central role in the legal system. See supra text accompanying notes 148-201.

508 See ECOLOGICAL COMMUNICATION, supra note 33, at 85; RECHT DER GESELLSCHAFT, supra note 18, at 582.

509 See RECHT DER GESELLSCHAFT, supra note 18, at 555-56 (questioning whether it still makes sense to speak of national economies).

510 See ECOLOGICAL COMMUNICATION, supra note 33, at 85.
Accounting for the legal system's internal differentiation is complicated even with respect to a single nation-state. How should one describe the complex structure of federal and state law in the United States, for example? With respect to the differences among states, does communication about each body of state law constitute a separate, operationally closed subsystem with "internal" observation of its own circuit, and only "external" observation of communication concerning the law of other states? With respect to the difference between state and federal law, does federal law communication constitute a separate subsystem, a distinct network of legal communication? If we posit separate subsystems for state and federal law, how should their differentiation be understood—as hierarchical, as segmental, as functional, in some other way, or (more likely) in some combination of the above? Is there an autopoietic theory of federalism(s)?

I am by no means certain how autopoietic theorists would, or should, answer these questions. My sense is that they would do best by looking at the communications themselves to determine whether they form a network differentiated from other legal communications—sufficiently differentiated, that is, to justify positing a separate subsystem of the legal system. That is Luhmann’s justification for positing the various subsystems of “society,” such as the legal, political, and economic subsystems, and for positing courts and legislatures as separate subsystems of the legal system. I can imagine disagreement among autopoietic theorists about the way in which the legal system should be carved up into subsystems, and disagreement about the way in which the subsystems are differentiated from one another. I can imagine, also, the difficulties in charting the relations among, on one hand, the geographically defined subsystems—the legal systems for supranational, national, and subnational geographical regions—and on the other, the subsystems of courts and legislatures Luhmann has already introduced.

Suffice it to say that these problems are too difficult to solve here. Their solution would introduce an enormous amount of complexity into an already complex theory. But it is difficult to

---

511 He discusses them toward the end of Recht der Gesellschaft, noting briefly the senses in which different nations could and could not be said to have different legal orders. As Luhmann notes, one difficulty in describing the legal system as a world legal system is that enforcement of law is coupled to the political system, and the world political order is segmented geographically. See RECHT DER GESellschaft, supra note 18, at 571-86.

512 See supra Part III.A.
see how autopoietic theory could avoid facing these problems.

VI. CONCLUSION: AUTOPOIETIC THEORY AND AMERICAN LEGAL SCHOLARSHIP

I have described Luhmann’s work as an attempt to theorize a common but usually untheorized assumption of much American legal scholarship: the assumption that law is, in some sense, “relatively autonomous” from other social fields. In this conclusion to the Article I want to examine, briefly, how autopoietic theory could be “observed” from the perspective of other theoretical projects, and how it would observe them in turn.

As a purely predictive matter, I would not expect autopoietic theory to make much impression on those who practice what Edward Rubin has called, nonpejoratively, “standard legal scholarship”: the primarily doctrinal work whose “most distinctive feature . . . is its prescriptive voice, its consciously declared desire to improve the performance of legal decision-makers.” Autopoietic theory, as so far developed, does not speak directly to doctrinal issues, and its conceptual architecture is forbidding enough to discourage casual visitors.

Nonetheless, as I have tried to suggest in my discussion of takings law, I think autopoietic theory could illuminate the analysis of doctrinal issues. Autopoietic theory indicates that the significance of a legal communication, such as a court decision, needs to be understood first in terms of its connections to the network of other legal decisions. This “internal” focus is consistent with the practice of doctrinal scholarship, as is Luhmann’s discussion of the important role doctrinal analysis can play in stabilizing—but also transforming—legal communication. His account of legal argument, although written from the perspective of an “observer” rather than a participant, focuses on the courts, and


[T]he point of an article about a judicial decision is usually to remonstrate with the judge for the conclusion reached and for the rationale adopted. The point of an article about a statutory provision or a regulation is to expose the errors made in drafting it, and to indicate what should have been done instead. Occasionally, an article will actually speak about a legal decision with total approbation, but that does not alter its prescriptive quality. The point is then to recommend the same course of action to other decision-makers, or to encourage the original decision-maker to keep up the good work.

Id. at 1848.

514 See supra text accompanying notes 352-402.

515 See supra text accompanying notes 234-36.
through the distinction between self-reference and external refer-
ence he recasts the debate between "formalist" and "realist" ap-
proaches to adjudication.516

Some fields of substantive law may be particularly suitable for
inquiry informed by autopoietic theory. Evidence scholars and
proceduralists might be attracted by Luhmann's account of the
crucial role those bodies of law play in framing the issues of a case
and in structuring the "couplings" between law and other social
spheres.517 And scholars interested in regulatory issues might con-
sult Luhmann's ideas about the possibilities of improving law's
openness and responsiveness to its social environment.518 A litera-
ture on regulatory issues has begun to grow around Gunther
Teubner's idea—inspired in part by autopoietic theory—of "re-
flexive" law, or, legal strategies that take seriously both law's clo-
csure and its coupling to other social spheres.519

The most likely consumers of autopoietic theory, however,
are those committed more to systematically interdisciplinary
scholarship than to purely doctrinal work.520 Two very different
sorts of projects come to mind for illustrative purposes, neither of
which, however, has much engaged autopoietic theory so far.521

The first project includes work referred to more or less
loosely as "postmodernism." Some features of autopoietic theory
are consistent with the general approach of postmodernist theo-
ries. Luhmann envisions society as a decentered plurality of com-
municative systems, or (if one prefers) discourses, without a consti-
tutive human subject. No single organizing principle unites the

516 See supra text accompanying notes 251-72.
517 See supra text accompanying notes 188-90.
518 See supra text accompanying notes 267-72.
519 See, e.g., Reflexive Labour Law: Studies in Industrial Relations and
Employment Regulation (Ralf Rogowski & Ton Wilthagen eds., 1994); Eric W. Orts,
Reflexive Environmental Law, 89 NW. U. L. REV. 1227 (1995); Michael Herz, Parallel
520 Autopoietic theory might also illuminate the critique of purely doctrinal scholarship.
Because legal scholarship and judicial decision belong to different circuits of communica-
tion, without strong couplings between the two, the former does not often influence the
latter. Doctrinal scholarship might better be described as a self-referential network of
scholarly communication rather than a force that regularly influences decision, even if the
criteria for argument in doctrinal scholarship generally track the criteria for argument in
the courts. Cf. Schlag, supra note 10, at 844 (noting that while "normative legal thought"
is directed toward judges, "instead of reading normative legal theory in terms of what it
means for adjudication or 'law,' we can usefully read these theories for what they reveal
about the enterprise of normative legal thought"); id. at 838-45.
521 I do not mean to suggest that scholars committed to either project will necessarily be
persuaded by autopoietic theory or adopt its conceptual paraphernalia wholesale. I mean
only that an engagement with autopoietic theory might be stimulating or productive.
various systems, and there is no privileged position from which society as a whole can be surveyed.\(^{522}\) Further, according to Luhmann, communication does not passively reflect the world, but actively constructs it, according to system-specific criteria of relevance and value—criteria that no single communication or communicator creates. The subject, or the “individual,” is a construction or set of “subject-positions” within the communication of the various social subsystems, not their ground.\(^{523}\) And the development of these systems of communication is contingent and historical, not teleological.\(^{524}\) These aspects of autopoietic theory seem to resonate with “postmodernist” approaches.\(^{525}\)

This is not to say, however, that autopoietic and “postmodernist” theory coincide. Foucault-inspired postmodernist work has emphasized the ubiquity of power and its circulation through non-state as well as state channels.\(^{526}\) Luhmann’s autopoietic theory, by contrast, seems to be indifferent to issues of power, except so far as they are “coded” in terms of political power\(^{527}\)—and for Luhmann, political power is by definition governmental power.\(^{528}\) Further, if one were to attempt to incorporate something like a postmodernist conception of power into autopoietic theory, one would have to specify Luhmann’s theory not just at the level of systems, but also in terms of the particular institutions and practices through which power circulates.\(^{529}\) Incorporating such a concept of

\(^{522}\) See, e.g., ECOLOGICAL COMMUNICATION, supra note 33, at 63, 106, 134 (no system is central).

\(^{523}\) Autopoietic theory posits “psychic systems,” or individual consciousnesses, as environments to the social system. See supra text accompanying notes 71, 295.

\(^{524}\) See RECHT DER GESELLSCHAFT, supra note 18, at 292, 277, 286, 355, 553, 559; ECOLOGICAL COMMUNICATION, supra note 33, at 108.

\(^{525}\) See, e.g., W.T. Murphy, Systems of Systems: Some Issues in the Relationship Between Law and Autopoiesis, 5 LAW & CRITIQUE 241, 252-53 (1994); Wolfe, supra note 469, at 1730-31, 1735. But cf. RECHT DER GESELLSCHAFT, supra note 18, at 539 (refusing the term “postmodernity” as a description of contemporary society); Teubner, supra note 93, at 1444 (arguing that postmodernity and autopoietic theory are similar except that the latter seeks to move “beyond deconstructive analysis into reconstructive practice”).


\(^{527}\) Cf. Michael King & Anton Schütz, The Ambitious Modesty of Niklas Luhmann, 21 J.L. & SOC’Y 261, 265 (1994) (observing that use of system as unit of analysis might preclude “theories based upon the power inequalities between races or genders”); id. at 264-65; King, supra note 480, at 230-32 (noting criticism that Luhmann’s autopoietic theory lacks a notion of power, but emphasizing that Luhmann has an idea of political power).

\(^{528}\) The two “power” codes of the political system, Luhmann says, are the distinctions between government and opposition, and between governing and governed. See supra text accompanying notes 300-01, 459.

\(^{529}\) Cf. Jessop, supra note 136, at 256-57 (arguing that Luhmann does not reduce power
power would also require attending to power-related differences among social groups, such as race, class, gender, and sexual orientation. Finally, apart from the issue of power, I would expect postmodernist theorists to reject, as I have, both Luhmann's tendency to treat systems as supraindividual subjects and his notion of the binary code. In short, postmodernists would find much to criticize in autopoietic theory, but they might also find engagement with the theory productive.

A second project that converges in interesting ways with autopoietic theory is the developing literature on law and social norms. While generalizations about this diffuse literature are difficult, the term "social norms" seems to refer to informal norms, as distinguished both from (formal) legal rules and from individual preferences or behavior. The emphasis on norms as a determinant of individual preferences and behavior distinguishes the social norms project from orthodox law and economics work. And the

to state power, but noting that the focus on systems obscures power's strategic aspects).

---

530 Günter Frankenberg quips: "Were [Luhmann's] system theory completely cynically intended, one might with appropriate malice say that it was as postmodern as the neutron bomb, which eliminates the subject while leaving everything else as it was." Frankenberg, supra note 481, at 381. Frankenberg goes on, however, to note that "it would be more accurate to see [autopoietic theory] as an admittedly ingenious, but not postmodern, enterprise." Id. The reason, Frankenberg maintains, is that autopoietic theory is only too modern in adopting a "fixed point" of analysis—not the individual subject, but the self-referential system as subject. See supra Part V.C (criticizing Luhmann's tendency to place autopoietic social subsystems in the position of subject).

531 Postmodernists will also object to autopoietic theory, as Luhmann has so far developed it, as a "totalizing" theory. See, e.g., COSTAS DOUZINAS ET AL., POSTMODERN JURISPRUDENCE: THE LAW OF TEXT IN THE TEXTS OF LAW at x (1991) ("[P]ostmodern theory... distrusts all attempts to create large-scale, totalising theories in order to explain social phenomena" and seeks to "unsettle apparently closed systems and empires of meaning"); id. at ix. Luhmann's theory is a totalizing theory, in that he would apply the same general principles of autopoietic theory (openness and closure; self-reference and external reference, etc.) in every possible context of social life. But at the same time Luhmann emphasizes the specificity and incommensurability of communication in the various social subsystems. If he pressed further in particularizing the general principles of autopoietic theory—a project he begins with his account of the legal system's internal differentiation—the theory might be less suspect from the point of view of postmodern theorists. Further, autopoietic theory's emphasis on systems' "closure" is qualified by Luhmann's account of their possibilities for openness.


533 See, e.g., Sunstein, supra note 532, at 910-11; Dan M. Kahan, Social Influence, Social Meaning, and Deterrence, 83 VA. L. REV. 349 (1997); cf. Lawrence Lessig, Social Meaning and Social Norms, 144 U. PA. L. REV. 2181 (1996) (describing "norm talk" as a supplement to orthodox law and economics, but recommending "meaning talk" as a refinement
call to consider the interplay between informal social norms and legal rules distinguishes the norms project from what one might call "naive legal instrumentalism"—the idea that legal rules have a direct or unmediated influence on behavior. By developing a more complex and accurate understanding of the social determinants of human behavior, the law-and-social-norms project aims at more effective strategies of legal regulation (or deregulation).  

Emphasis on indirect legal regulation is a point of convergence between law-and-norms scholarship and autopoietic theory. In his critique of consequence-oriented judicial decision, Luhmann argues—and I think most "norms" theorists would agree—that prediction of legal rules' effects is difficult for social scientists, let alone generalist judges.  

Effective legal regulation requires accurate modeling of the context being regulated and attentiveness to its extralegal forms of organization. It requires, also, consideration of how communication in the regulated context would "observe" the law. This complex relation of mutual observation and modeling is what Luhmann calls "structural coupling."

"Norms" theorists have proposed different strategies, in different contexts, for how this coupling between law and the norms of a particular social sphere should be accomplished. One proposed strategy, particularly in the commercial context, has been to discover and incorporate the norms of the regulated sphere, either by direct incorporation into a legally enforceable rule, or by legal deference to the social norm and its extralegal enforcement.

534 Norms theorists differ about the criteria for effectiveness. For some, "effectiveness" would mean that the regulation promotes efficiency; for others, it would mean that the regulation promotes important public values other than efficiency. Examples of articles using efficiency as a criterion include Robert D. Cooter, Decentralized Law for a Complex Economy: The Structural Approach to Adjudicating the New Law Merchant, 144 U. Pa. L. Rev. 1643 (1996), Eric A. Posner, Law, Economics, and Inefficient Norms, 144 U. Pa. L. Rev. 1697 (1996), and Bernstein, supra note 412. Examples of articles invoking public values instead of or in addition to efficiency include Sunstein, supra note 532, at 907-08, and Richard H. McAdams, Cooperation and Conflict: The Economics of Group Status Production and Race Discrimination, 108 Harv. L. Rev. 1003 (1995).

535 See supra text accompanying notes 248-50. Luhmann would likely extend the point to legislatures, although he might argue that revision of statutes in response to contrary experience, while difficult, is more likely than the overruling of judicial decisions.

536 See Cooter, supra note 534, at 1696 (discussing a direct incorporation of norm "if it evolved from an appropriate incentive structure"); Bernstein, supra note 412 (relying on an empirical study of industry norms to recommend amending the UCC to allow parties to opt out of the UCC's interpretive approach); Edward B. Rock & Michael L. Wachter, The Enforceability of Norms and the Employment Relationship, 144 U. Pa. L. Rev. 1913, 1950 (1996) ("When parties choose to adhere to norms by not writing contracts, the efficiency minded court will stay out . . . ").
Another proposed strategy has involved the "management" of social norms, by coupling legal rules and informal norms in a way that would reinforce desirable norms and undermine undesirable norms. As norms theorists have generally recognized—and as Luhmann would emphasize—the attempt to couple law and norms can be extraordinarily complex. Information about the relevant norms, and the likely consequences of coupling those norms with legal rules, can be difficult to acquire and more difficult still to incorporate into legal (particularly adjudicative) procedures. Effective strategies of regulation must take those difficulties into account and determine how legal communication can accomplish the required modeling of the regulated sphere.

Despite these convergences with autopoietic theory, social norms theorists would likely object to the level of abstraction of autopoietic theory, or at least the level of sociological (rather than economic) abstraction. But for some norms theorists, at least, autopoietic theory might offer a helpful way of theorizing more precisely the distinction between law and norms, the meaning of claims that law and norms influence or "interact with" one another, and the difficulties inherent in the project of enforcing or "managing" informal norms through law. The norms project suggests that informal norms enjoy a sort of "relative autonomy" from both legal rules and individual behavior. Perhaps autopoietic theory might help specify the nature of that relative autonomy.

Finally, and apart from specific interdisciplinary projects, autopoietic theory might offer insights into the general impulse toward interdisciplinary scholarship. The various "law and" approaches that today dominate legal scholarship all involve forays across disciplinary boundaries. Itself an interdisciplinary project, autopoietic theory might defend interdisciplinary legal scholarship against charges that, for example, law-and-economics isn't really economics, or law-and-moral-philosophy isn't really philosophy. Autopoietic theory would emphasize that observation of other disciplines within legal scholarship isn't, but more important can't be,
a simple mirroring or reproduction of what occurs on the other side of the disciplinary boundary. Instead, this observation proceeds from premises and problematics established in legal theory—even if it seeks to transform them.\footnote{Autopoietic theory would point out that a discipline’s boundaries are established by the operations of the discipline itself. To that extent, they are not fixed and immovable (as legal scholarship in the past quarter-century has demonstrated). But neither are they entirely at the disposal of individual theorists.} One might still complain that interdisciplinary legal scholarship has diminished the complexity or nuance of the work it borrows. But the question would be whether greater complexity and nuance in observing or modeling the other discourse would improve the borrowing for purposes of legal scholarship, not just whether the borrowing has been a faithful copy of the original.

Autopoietic theory, however, would also offer two caveats to interdisciplinary scholarship—caveats that would apply to autopoietic theory itself. The first concerns the consequences, for theory itself, of interdisciplinary borrowing. Legal scholars who borrow from other disciplines cannot assume an automatic connection to their own discipline; instead, that connection must be established.\footnote{Thus, my attempts to establish connections between autopoietic theory and American legal discourse.} The discourse of legal theory may be open to observation of other disciplines, but it has at the same time its own specific forms of closure—its own criteria of relevance and value that do not necessarily coincide with those of the borrowed discipline. Insights from other disciplines thus must be “coupled” to legal-theoretical communication; they are not automatically relevant to legal theory simply because they come from another (and academically more prestigious) discipline.

The second caveat concerns the aspiration—probably more common in legal scholarship than in other forms of academic work—to influence, through theory, those parts of the world that are not themselves theory-producing systems.\footnote{Or, at any rate, not academic-theory-producing systems.} Here autopoietic theory might point to the conspicuous lack of couplings between legal scholarship and the operations of political and economic systems—and, for that matter, the operations of legal communication in courts, agencies, and legislatures. Indeed, autopoietic theory might identify legal theorists’ aspiration to influence “the world,” through proposals for policy or doctrinal reform, as more an “internal” premise of legal-theoretical communication than an actual coupling between legal scholarship and any other system of com-
If we take the idea of autopoietic closure seriously, the problem of how legal theory can influence the world becomes more acute. But perhaps it becomes, at the same time, more clearly posed.

542 See supra note 501 (discussing Pierre Schlag's similar comments about "normative legal thought").