
The Contract as Social Artifact

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This article outlines a distinctive, albeit not entirely unprecedented, research agenda for the sociolegal study of contracts. In the past, law and society scholars have tended to examine contracts either through the intellectual history of contract doctrine “on the books” or through the empirical study of how real-world exchange relations are governed “in action.” Although both of these traditions have contributed greatly to our understanding of contract law, neither has devoted much attention to the most distinctive concrete product of contractual transactions—contract documents themselves. Without denying the value of studying either contract doctrine or relational governance, this article argues that contract documents are independently interesting social artifacts and that they should be studied as such. As social artifacts, contracts possess both technical and symbolic properties, and the sociolegal study of contract-as-artifact can profitably apply prevailing social scientific theories of technology and symbolism to understand both: (1) the microdynamics of why and how transacting parties craft individual contract devices, and (2) the macrodynamics of why and how larger social systems generate and sustain distinctive contract regimes. Seen in this light, the microdynamics of contract implicate “technical” theories of transaction cost engineering and private lawmaking, and “symbolic” theories of ceremony and gesture. In a parallel fashion, the macrodynamics of contract implicate “technical” theories of innovation diffusion, path dependence, and technology cycles, and “symbolic” theories of ideology, legitimacy, and communication. Together, these micro and macro explorations suggest that contract artifacts may best be understood as scripts and signals—collections of symbols designed to yield technically efficacious practical action when interpreted by culture-bearing social actors within the context of preexisting vocabularies and conventions.

Contracts are many things to many people. To law professors, “contract” is a body of doctrine delineating how transacting parties

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can make agreements that the legal system will treat as binding. To economists, contracts are agreements that impose tangible costs in exchange for tangible benefits, regardless of whether those agreements enjoy legal recognition. To business lawyers, contracts are written instruments formalizing agreements that their clients believe themselves to have made—as well as addressing various remote contingencies that their clients should have considered but probably overlooked. To trial lawyers, contracts are pieces of evidence, either to be invoked as proof of agreements willingly made, or to be dismissed as ambiguous, inequitable, or unreflective of actual events. To lay people, contracts are simply pieces of paper that one signs in the course of commerce, often with an uneasy sense of finality, but rarely with a comprehensive understanding of the relevant scholarly doctrines, economic exchanges, contingent claims, or evidentiary implications. From this welter of divergent meanings, sociolegal scholars have tended to favor the perspectives of their colleagues in law schools and economics departments, studying contracts either legally, through doctrine, or economically, through exchange relations. This article, however, embraces a view that lies somewhat closer to that of practicing lawyers and lay people. Specifically, the following pages argue for serious scholarly consideration of contracts as *things*,¹ that is, for the analysis of contract documents as *social artifacts*.

Seeing contracts as social artifacts highlights a number of tensions—and with them, research opportunities—that traditional approaches tend to ignore. Like most artifacts, contracts often emerge from the labors of specific artisans; but also like most artifacts, contracts necessarily bear the markings of broader social contexts. Like most artifacts, contracts have material uses, and contract provisions often act as practical technologies; but again like most artifacts, contracts also have cultural meanings, and contract provisions sometimes act not as technologies but as symbols. Thus, contracts are at once both marketable devices and meaningful gestures, and contract regimes are at once both technical systems and communities of discourse. From this, it follows that to make sense of a contractual practice, one must understand both the economic and the cultural environments that

¹ Here and below, readers may detect echoes of Arthur Leff's (1970) article, "Contract as Thing." The present enterprise, however, differs from Leff's in at least two important ways. First, whereas Leff emphasized the thing-ness of standard-form "contracts of adhesion," the present article applies this perspective to all contracts, whether ready-made or carefully negotiated. After all, handcrafted objects are no less "artifacts" than their mass-produced counterparts, although, of course, they may be very different *kinds* of artifacts, reflecting very different social conditions. Second, whereas the primary focus of Leff's article fell on the legal implications of regulating contracts as things, the primary focus of the present article falls on the social-scientific implications of researching contracts as things. Thus, although Leff's analysis and this one share a central metaphor, the two pursue that metaphor to very different (albeit mutually compatible) ends.

gave it birth. At the same time, however, one must also recognize that contracts, like any artifacts, are themselves capable of affecting these environments, both culturally and economically. In short, a successful sociology of contract-as-artifact would simultaneously attend to several distinct but related dynamics. It would encompass both the private parties who use contracts and the professionals who produce contracts. It would encompass both individual transactions and extended social systems. It would encompass both practical contractual incentives and ceremonial contractual displays. And it would encompass both the influence of social environments on contractual practices and the reciprocal influence of contractual practices on social environments.

This article takes a few foundational steps toward constructing such a paradigm. The first section reviews how scholars have studied contracts in the past, and suggests how one might usefully augment such studies with research on contracts as social artifacts. The second section elaborates this central metaphor by highlighting some important similarities—and some important differences—between contracts and other, more familiar artifactual objects. Following this introduction, the third and fourth sections outline a multipronged artifactualist research agenda, apply the contract-as-artifact perspective to what could be called the “microsociology of contract” and the “macrosociology of contract,” respectively. At the micro level, sociolegal scholars have long debated why and how social actors² craft particular “contract devices”; here, a consideration of contracts as artifacts suggests helpful analogies between the sociology of contract and both the sociology of engineering and the sociology of the arts. At the macro level, sociolegal scholars have recently begun to explore why and how multi-actor economic communities generate and sustain particular “contract regimes”; here, a consideration of contracts as artifacts links the sociology of contract both to the sociology of technological systems and to the sociology of cultural discourses.

By seeing contracts as simply one among many types of artifact that we produce and deploy in our daily lives, we strip them of their legalistic mystique. And in their demystified forms, we find evidence of, and insight into, the same sociological processes that bring us all the other paraphernalia of the social world—artifacts ranging from tuning forks to pickle forks, from telephone poles to totem poles, from the internal combustion engine to the tail fins on a 1959 Cadillac Eldorado.³

² For convenience, this article employs the term “social actor” to refer generically to any entity, whether individual or organizational, that might enter into a contract. Readers should not, however, take this terminology to imply that all such entities are necessarily “actors” in the strict sense of being fully intentional, rational, and autonomous.

³ Some might argue that contracts differ from these other artifacts in that contracts, alone, are outcomes of bilateral bargaining. In many instances, however, this represents a

I. Terms and Perspectives

Over the years, sociolegal scholars have defined “contract” in a variety of ways. These definitions range from the breathtakingly expansive, in which the term covers virtually all forms of voluntary exchange (e.g., Maine 1970:140–41), to the painstakingly restrictive, in which the term covers only those exchanges that exhibit bilateral rational planning, clear rules of trade (both in the agreement itself and in the governing law), and a reliance on judicial enforcement (e.g., Macaulay 1963:56; cf. Feinman 1990:1286). Obviously, these definitions have important rhetorical consequences: the broader the definition, the more plausible the claim that contracts represent basic building blocks of social structure (cf. Hobbes 1996; Williamson 1981, 1985; Coleman 1990); and, conversely, the narrower the definition, the more plausible the claim that even sophisticated business transactions are often essentially noncontractual in character (cf. Macaulay 1963, 1977, 1985). For the purposes of the present analysis, however, the following middle-of-the-road formulation should suffice:

*A contract is a formally documented arrangement for governing a voluntary exchange relationship in the shadow of the law.*⁴

The key elements here are: (1) a relevant body of legal doctrine, (2) an exchange relationship, and (3) a documentary artifact. Building on this definition, researchers can (and do) study contractual phenomena in at least three distinct ways, which we could label “contract-as-doctrine,” “contract-as-relation,” and “contract-as-artifact.” Although the bulk of this article addresses the contract-as-artifact approach, a brief comparative description of

distinction without much of a difference. Many traditional artifacts reflect bargaining of some kind, whether among co-users or between users and creators. And many contracts—especially contracts between organizations—reflect complex multipartite social relations, in which explicit bilateral negotiations play only a small role. While this article makes no claim that contracts are perfectly identical to any other particular class of artifacts (see Section II), the argument nonetheless rests on a suspicion that traditional legal scholarship focuses a bit too much on the “defining” differences between contracts and other artifacts, and that researchers could learn a great deal by considering the unifying commonalities, as well.

⁴ Many contractual relationships incorporate “usages of trade,” “courses of dealing,” and other tacit expectations that go beyond the “formally documented arrangement” (see discussion of extra-contractual elements below). Furthermore, oral contracts by definition are not documented at all, although they may be formalized in other ways, and even written contracts often take on new meanings in light of post-execution behavior. Other definitional criteria, too, flex when pressed. Contracts vary widely in the degree to which they actually represent voluntary exchanges. And many arrangements that lay people would consider contracts may not, in fact, enjoy legal recognition. Thus, the domain of contract scholarship extends well beyond the study of contracts as defined here. Nonetheless, formally documented legally binding exchange relationships make up the core of what both scholars and lay people generally mean by “contract” (cf. Leff 1970:137–38), and this working definition encompasses the bulk of the subject matter to which the present analysis best applies.

all three may help to situate the present analysis against the backdrop of what has gone before.⁵

The contract-as-doctrine perspective is the oldest, the most well established, and, ironically, the most frequently criticized of the three. This approach revolves primarily around the “Law of Contracts” as manifested “on the books.” Broadly understood, such doctrinalism predominates not only in traditional legal scholarship, but also in most intellectual histories of the concept of contract (e.g., Atiyah 1979; Farnsworth 1982), and in many (but not all) treatments of contract law as ideology (e.g., Dalton 1985; Gabel & Fineman 1998). Although critics often attack doctrinal analyses as asocial and nonempirical, that charge unfairly caricatures a substantial portion of this literature. As the writings of intellectual historians and of ideology theorists demonstrate, for certain questions about the conceptual apparatus of a particular society or a particular epoch, legal doctrine may represent both a valid focus of sociological inquiry and a valid source of sociological data. Nonetheless, even the most socially informed variants of the contract-as-doctrine tradition stand apart from other forms of contract scholarship in their attention to official principles and pronouncements, and in their reliance on treatises, statutes, and casebooks as sources of issues and evidence. In essence, the doctrinalist approach emphasizes the abstract Law of Contracts, while paying little attention either to the actual exchange relations that real people form or to the actual contracts that real people write.⁶

To date, the primary challenge to doctrinalist orthodoxy has come from the contract-as-relation school. Partisans of this second approach advocate the study of contract law “in action”—by which they mean the study of how transacting parties actually secure each other’s performance, whether through legal sanctions, reputational threats, social bonds, or a range of other mechanisms. Despite representing a minority position within contract scholarship as a whole, the contract-as-relation perspective predominates among

⁵ Like any conceptual typology, this trichotomy overstates the separability of its categories. Not only are doctrines, relations, and documents intimately intertwined in practice, but also several prominent pieces of scholarship fall into the boundary zones between the camps. Nonetheless, the typology offers a reasonable summary of recurring themes in the various literatures and by doing so highlights the distinctive insights that flow from each general perspective. (For an alternative—but broadly compatible—categorization of the literature, see Feinman (1990).)

⁶ Many law and society critics would also note that the doctrinalist approach generally pays little attention to the *extra-legal* determinants of official pronouncements. The politics of the judiciary, for example, tend to vanish from doctrinalist accounts, especially to the extent that those politics revolve around local issues and allegiances bearing little relation to broader philosophical concerns. Admittedly, neither relationalists nor artifactualists have devoted much attention to judicial behavior either; however, in these latter branches of contract scholarship, this omission is somewhat less glaring, since neither relationalism nor artifactualism has many pretensions about predicting (or prescribing) judicial outcomes.

social-scientifically inclined researchers, as exemplified by the classic works of Stewart Macaulay (1963) and Ian Macneil (1974, 1980), as well as by the more recent works of Mark Granovetter (1985), Brian Uzzi (1996), and other economic sociologists (e.g., Lindenberg 1988; Esser 1996; see also Ellickson 1991; Bernstein 1992). Although studies in this tradition vary widely, they share a common emphasis on the careful ethnographic observation of how real-world actors govern real-world exchanges, with a particular focus on interorganizational relations in stable business communities. The key finding here is that “Contract Law,” as the doctrinalists study it, exerts remarkably little influence on a remarkably wide range of transactions. Exchange agreements are generally incomplete, with the terms (and even the parties’ goals) emerging over time in the context of deeply embedded social relationships (see, e.g., Macneil 1974, 1980; Whitford 1985). Legal doctrine and legal recourse often matter very little in this dynamic, since most transactions are governed, in practice, by informal community norms, enforced by informal social sanctions (see, e.g., Macaulay 1977; Gordon 1985; Ellickson 1991). Contracts-in-action are, in Macaulay’s (1963) famous phrase, largely “noncontractual.” So here, one gets the study of exchange relations, without much concern for either formal contract doctrine or formal contract documents.⁷

While both the contract-as-doctrine perspective and the contract-as-relation perspective have provided important sociological insights over the years, neither has devoted much attention to the most distinctive concrete product of contractual governance—contract documents themselves. This omission creates room for a third, largely overlooked alternative, which could be termed “contract-as-artifact.” Focusing on the actual formalized *documents* that we call “contracts,” this approach would ask what we might learn about social structure and exchange relations if we were to think of these documents as significant social artifacts in their own right.

Despite the ubiquity of contract documents in modern life, this question has received surprisingly short shrift from the existing literature. Doctrinalists tend to trivialize contract documents as mere occasions for applying Contract Law,⁸ while relationalists

⁷ Macaulay (1963:56), for example, explicitly rejects “a writing recording an agreement” as a defining feature of contract. Admittedly, given his focus on *noncontractual* relations, this move does not necessarily exclude written documents from the overall analysis; in practice, however, few relationalist scholars have paid much heed to the construction and deployment of “mere” documentation.

⁸ The law and economics tradition points out that, strictly speaking, contract documents and contract doctrine are intimately linked, since contract doctrine consists largely of (1) “default rules” governing how courts will interpret agreements in the absence of contrary documents, and (2) “opt-out rules” governing how contracting parties can construct documents that override these defaults (Ayres & Gertner 1989; Bebchuk 1989).

tend to marginalize contract documents as mere legalistic formalities. From an artifactualist perspective, however, such dismissals ignore a fundamental empirical puzzle: Evidence suggests that in most transactions, legal doctrine is obscure, and the threat of legal enforcement is remote; yet actors often invest substantial resources into producing written contracts, even in the sorts of socially embedded contexts that relationalists would describe as essentially “noncontractual” (cf. Hill 2001b). This paperwork, moreover, generally exhibits a systematic internal structure and generally changes in systematic ways over time. For better or worse, contract documents behave not like extraneous epiphenomena, but rather like systematically produced *social artifacts*, and we might learn something of value if we occasionally were to study them in precisely those terms. In particular, a contract-as-artifact perspective would highlight several provocative questions that prior scholarship has largely ignored: Do contract artifacts resemble other, more conventional artifacts, and if so, what kinds? Why and how do particular actors construct and employ contract artifacts of particular types? And why and how do particular styles, forms, features, and flourishes enter and leave the contractual repertoire over time?

The remainder of this article examines each of these questions. For now, this examination must remain theoretical and speculative, rather than empirical and probative: Existing studies of contracts as artifacts are simply too scarce and scattered to support more definitive assertions at this early date. The social sciences have, however, produced vast expanses of parallel research on other sorts of artifacts, and the underlying contract-as-artifact metaphor promises to open this foreign terrain for exploration by contract scholars in search of new puzzles, new predictions, new methods, and new models. The following pages map a few of the routes that such a journey of discovery might take.

II. Contract as Technology and Contract as Symbol

The label “artifact,” like the label “contract,” is broad but not all-inclusive. The dictionary defines “artifact” simply as “a product of human workmanship” (*Webster’s Revised Unabridged Dictionary* 1996). However, for present purposes, a somewhat more specific formulation might be more helpful.

Thus, one might argue that far from treating contract documents as trivial, doctrinal analysis is *all about* how courts should mesh doctrines and documents in order to determine rights and remedies. In practice, however, most doctrinal analysis (including most law and economics analysis) reflects a passion for the interpretation of general rules and an indifference to the observation of specific instances. To this mindset, an empirical examination of actual contract documents is no better (and perhaps worse) than a conceptual examination of well-chosen hypotheticals.

An artifact is a discrete material object, consciously produced or transformed by human activity, under the influence of the physical and/or cultural environment.

This definition highlights several relevant considerations (cf. Gagliardi 1990:3; Miller 1994). First, artifacts reflect conscious, transformative human action. Neither a leaf admired on a tree nor a leaf crushed unintentionally under a hiker's boot qualify as artifacts, but a leaf pressed and mounted in a scrapbook almost certainly does (cf. Wieand 1980:386).⁹ Second, artifacts are concrete *things*, possessing their own autonomous physicality. Unlike speech or gestures, they exist independently of their creators; unlike ideas, they are perceivable by the senses; and unlike analytic components of continuous biological or mechanical systems, they are distinguishable from their surroundings.¹⁰ Despite this quality of self-containment, however, artifacts attract scholarly attention precisely because of their intimate relationship to the natural and social environment. A truly autistic human product—say, a flat pebble worried smooth by constant nervous stroking—might be an artifact of a sort; but it would carry far less interest to researchers than an amulet rubbed for good luck or a flint honed to a cutting edge. In short, artifacts are concrete bits of “material culture,” and they merit study because of what they reveal about the lives and times of their makers and users.

By this definition, contract documents clearly qualify as artifacts. They are products of conscious human effort; they are tangible and discrete physical objects; and, in both form and content, they reflect a wide array of natural and social influences. The kinship between contracts and more conventional types of material culture is particularly obvious when one focuses on decorative features, such as seals, gilt edging, “legal-size” paper, and so on. This affinity persists, however, even when attention turns to more substantive elements, such as distinctive terms and phrases, or particular combination of operative provisions. One

⁹ Indeed, some authors would go even further, requiring that artifacts reflect *intentional*, not merely conscious, action (Gagliardi 1990:3). While this might fairly describe most artifacts (and certainly most contract documents), a requirement of intentionality would be overly restrictive if taken to mean that all artifacts directly serve recognized instrumental purposes. Some artifacts, instead, are mere byproducts—consciously produced, but not necessarily seen as useful or productive (cf. Turner 1990:372). Contracts, for example, would still be artifacts if they were produced purely out of habit or tradition with no clear instrumental objective.

¹⁰ Some authors would relax this criterion to include mental constructs such as language, and transitory displays such as dance, under the rubric of “cultural artifact” (e.g., Schein 1984). For the purposes of the present analysis, however, so expansive a definition would merely confuse the issue by making both legal doctrine and exchange relations into “artifacts” in their own rights. The artifactualist approach to contracts rest squarely on the premise that the discrete materiality of contract documents carries a unique social significance, worthy of explicit scholarly attention.

can analyze the design and styling of a clawback contract in much the same way that one might analyze the design and styling of a claw-head hammer—with attention to such features as impact and rigidity, crafting and polish, size and heft.

Technical and Symbolic Properties

Of course, artifacts are hardly all of a single type, and the study of contracts as artifacts must begin with a preliminary appraisal of how contract documents do, or do not, resemble other, more familiar social products. Because precisely positioning contracts within a complete taxonomy of artifacts would go far beyond the limited scope of the present article, the following pages simply compare contracts to a few broad classes of artifact, leaving more specific analogies for future research. Even at this level of generality, however, the picture is not a simple one. Rather than falling neatly into a single category, contract documents display a pervasive duality, acting simultaneously as both *technical* artifacts and *symbolic* artifacts, albeit in varying degrees across various contexts. This distinction between the technical and the symbolic pervades social-scientific thinking about artifacts of all kinds, echoing, for example, McLuhan and McLuhan's (1988) differentiation of "hardware" versus "software," and Kubler's (1962:16) contrast between "objects of use" and "works of art." More recently, many authors have argued that all artifacts embody *both* technical *and* symbolic elements (e.g., Gagliardi 1990:13, 29–30; Schatzberg 1999:18–20). Nonetheless, these two aspects still tend to evoke quite different styles of analysis, and this divergence hints at important tensions and cleavages within the artifactalist metaphor.

As technical artifacts, contracts establish intricate frameworks of procedures, commitments, rights, and incentives—all in order to accomplish practical objectives in the governance of human transactions. If exchange relations represent the interfaces between independently functioning pieces of social machinery, contracts represent the docking clamps and O-rings that allow the various subassemblies to operate as a single unit. Or, to invoke a somewhat more domestic metaphor, contracts provide the stitches and quilting that piece together the social fabric.¹¹ As with machinery and textiles, different types of contractual bindings have different technical characteristics: some more permeable and others more hermetic; some more flexible and others more rigid; some more durable and others more tenuous. A contract that refers to "market conditions" or "usages of trade" creates openings

¹¹ Jane Piliavin deserves thanks for mending an earlier, more threadbare rendition of this metaphor.

through which external factors may enter the transaction; a contract that requires the parties only to exert their “best efforts” allows more flexibility than a contract that specifies procedures for every contingency; and a contract containing a “right of first refusal” is more durable than a one-time exchange on the spot market. Different bindings also differ in how they distribute the burdens and stresses of conjoint action, and in how they channel energy, force, power, and reward. Indemnification provisions, contingency fees, inspection rights, and security deposits are but a few of the many ways contracts can yoke separate parties into an articulated (but not necessarily symmetrical) social apparatus. Thus, every contract embodies a particular “governance technology,”¹² with particular consequences in particular settings. Like other technical devices, contracts serve specific material ends, and an observer can gauge the sophistication of any given contract design by its efficiency and effectiveness in achieving those ends.

Few contracts are merely utilitarian, however. Alongside their technical functions, contract artifacts share important characteristics with certain forms of symbolic representation, as well. As cultural displays, contracts evoke normative principles and illuminate social experiences—at times expressing identity, solidarity, forbearance, and faith, and at times expressing differentiation, inequality, domination, and distrust.¹³ “Best efforts” clauses become signals of goodwill, and security liens become statements of suspicion; negotiated revisions become shows of mutuality, and preprinted forms become indicators of oppression; warranties become emblems of quality, and disclaimers become marks of deficiency. Seen in this light, contracts look a bit less like seamwork and a bit more like embroidery, a bit less like O-rings and a bit more like wedding bands. Technical analysis may adequately describe their tensile strength and thermal conductivity, but to capture their social relevance only a more interpretive approach will do. Thus, in addition to embodying a set of governance technologies, every contract also embodies a set of “significant gestures” (Mead 1962), carrying particular meanings within particular discourses. Like other symbolic tokens, contracts convey identifiable cultural messages, and an observer can gauge the sophistication of any given contract design not only by its efficiency

¹² The legal literature most commonly applies the term “governance technology” to various aspects of corporate structure, such as stock option plans and shareholder voting arrangements (see, e.g., Milhaupt 1998; Bebchuk & Roe 1999). The present analysis, however, uses the phrase more broadly, to indicate *any* mechanism for controlling and coordinating the behaviors of interdependent social actors, whether corporate or not. Organizational structures (and the contracts that comprise them) are, in this sense, governance technologies, but so too are more ephemeral market contracts and more informal handshake agreements.

¹³ The parallel between contractual displays and certain forms of conspicuous consumption deserves notice here.

and effectiveness, but also by its comprehensibility and evocative-ness—criteria of communicative rather than technological efficacy.

This duality suggests that, at the micro level, social actors will employ contracts both as a technical means of structuring relationships and also as a symbolic means of communicating beliefs. Similarly, at the macro level, the dynamics of contract regimes will resemble both the diffusion and standardization of technological innovations and the elaboration and institutionalization of cultural vocabularies. These parallel micro and macro presumptions motivate the two subsequent sections of this article.

Limits of the Metaphor

Before turning to these micro and macro explorations, however, a brief caveat may be in order: To say that contracts are social artifacts is not to imply a wholesale identity between contracts and any other *particular* class of artifacts, either technical or symbolic. Indeed, for certain questions, the differences between contracts and more familiar artifacts may prove as revealing as the similarities. In particular, artifactualists should remain alert to at least three significant factors that often distinguish contracts from other technologies and other symbols: differences in the organization of production, differences in the certainty of effects, and differences in the ownership of ideas.

First, contemporary society often organizes the production of contracts somewhat differently from the production of more conventional artifacts. In most industrialized economies, novel technical devices (and novel symbolic tokens, to a remarkable degree) usually arise from specialized research and development operations, funded by corporations, governments, and venture-capital investors (see, e.g., Florida & Kenney 1988). As a particular design gains prominence, control generally passes to bureaucratized mass-producers, who generate relatively homogeneous replicas, for sale to arm's-length purchasers in an impersonal commodity market (Hounshell 1984; Sabel & Zeitlin 1997).¹⁴

The world of contracts, however, only partially parallels this process. For transactions such as retail sales, car rentals, or consumer credit that rely on standard-form documentation, the analogy to conventional mass-production proves quite apt: corporations hire specialized contractors (outside counsel) to perform the initial design and development work (legal research and drafting); staff technicians (inside counsel) then use the resulting templates (boilerplate) as prototypes for assembly-line

¹⁴ Some observers have argued that the emergence of “flexible specialization” is changing all this (Piore & Sabel 1984). To date, however, such post-Fordist manufacturing strategies have led primarily to modestly customized mass production, not to a resurgence of hand-tailored craftwork.

reproduction (cf. Weise 1993:ch. 7).¹⁵ In many other transactions, however, contractual innovation and production occur together, usually in private law firms. For the most part, these professional partnerships operate less like rationalized Weberian bureaucracies than like feudal craftshops, organized around principles of apprenticeship, patrimonial authority, and guild control (Nelson 1988; Galanter & Palay 1991; Hill 2001b; cf. Bloch 1961; Baxandall 1980). Like medieval artisans, lawyers in such settings often seek to burnish their reputations and satisfy their patrons (corporate executives and in-house attorneys) by producing extensively hand-tailored wares.¹⁶ Flood (1991), for example, describes the intricate fine-tuning of contractual form and substance behind a shopping mall purchase and a multimillion dollar commercial loan. Even when drafting begins with preexisting boilerplate, “personalities ... dominate the proceedings. As they thrust and parry, we will see how a legal instrument—a contract—is cut up, then eventually stitched together and given new life” (1991:58). Thus, despite recent bureaucratizing trends (see, e.g., Spangler & Lehman 1982), legal innovation remains less systematic—and legal production less structured—than is the case in much of engineering and the arts.¹⁷ Consequently, in order to understand the distinctive nature of contract artifacts, one may need to consider the distinctive properties of the legal worksites that produce them.¹⁸

¹⁵ Here, the primary difference between contracts and other artifacts lies not so much in the organization of production as in the fact that standard-form contracts are generally used by the same corporations that assemble them, rather than being sold as commodities in an arm’s-length market. Even in this regard, though, the distinction is a bit slippery. One could certainly argue that when a corporation sells a product under a standard-form contract, the consumer is “buying” the contract document just as much as he or she is buying the focal product (Leff 1970). Indeed, as Llewelyn (1939:701–02; see also Rakoff 1983) argued more than 50 years ago, the affinity between standard-form contracting and standardized mass-production may be more than merely metaphorical: mass-production needs mass distribution, and mass distribution becomes much easier when buyers and sellers do not dicker individually over the terms of trade.

¹⁶ Of course law firm attorneys sometimes produce contracts that are every bit as standardized as the contracts produced by in-house counsel (see, e.g., Suchman 1994); but the balance between customization and boilerplate differs across the two sites. Moreover, the recent trend toward larger in-house counsel offices and more “transactional” outside representation (Nelson 1994) implies that independent law firms are less likely than before to perform routine drafting work, and more likely to get involved only when an issue becomes “nonstandard.”

¹⁷ The contrast is clearest with regard to consumer-product engineering, and to such symbolic fields as advertising, packaging, and commercial design. For the most part, the “high arts” remain essentially charismatic in structure, and both architecture and fashion design share many of the patrimonial characteristics of legal work (cf. Becker 1982; Larson 1994; Hirsch 1972).

¹⁸ Macaulay (1963), for example, reports that different coalitions of professionals tend to champion different forms of business relations, with outside counsel, accountants, and finance departments favoring more explicit contracting, and inside counsel, sales, and purchasing preferring more open-ended agreements. The unusual structure of contract production calls for further investigations of this sort. In particular, researchers must remain alert to ways in which the interests of lawyers and the interests of clients may

In addition to originating from distinctive sites of production, contracts also differ from many other artifacts (especially other technical artifacts) in the uncertainty of their effects. Contracting is a social rather than a physical technology, and like other social technologies, its efficacy is rarely subject to clear and proximate tests (Meyer & Rowan 1977). Nobody has yet delineated a set of unambiguous indicators for distinguishing effective contracts from ineffective ones, and the most widely suggested yardsticks all pose substantial practical difficulties. The most conceptually appealing criterion, “expected net present value” (Gilson 1984), is simply too abstract to be easily measured, and the more concrete alternatives are too disparate to be easily reconciled: contracts that expedite deal-making may impede enforcement; contracts that prevent opportunism may impair flexibility; contracts that facilitate coordination may invite co-optation; and contracts that maximize allocative efficiency may undercut distributive equity. Moreover, even if everyone could agree on a single outcome measure, the intervention of uncontrollable third-party forces—such as legislatures, courts, and markets—would work against any clear determination of cause and effect (cf. Gilson 1984:247–48). Given this, it is hardly surprising that the existing literature reports few cases of random, controlled “contract experiments.”¹⁹ Instead, the evaluation of contractual forms tends to rely on economicist *gedanken* experiments (e.g., Gilson 1984), coupled with large doses of superstitious learning (Levitt & March 1988:325–26). This, of course, does not distinguish contracts from many other artifacts, both technical and symbolic; but it *does* distinguish contracts from many of the technologies (and a few of the symbols) that have received the most attention in recent scholarly writings. Any attempt to study contracts as artifacts must recognize that the effects of various contractual forms will be less obvious—both to their creators and to their users—than the effects of, say, various microprocessors designs.

diverge. Because the exact course of this divergence varies with the structure of the bar, the resulting principal-agent problems lie largely beyond the scope of the current manuscript. Nonetheless, when the needs of lawyers and clients pull in opposite directions (as they often do), one can rarely understand the resulting contract artifacts without understanding the fundamental tensions surrounding contract production (see, e.g., Hill 2001b; Flood 1991; cf. Suchman & Cahill 1996).

¹⁹ In recent years, the law and economics literature has embraced the “event study”—a form of natural experiment that attempts to test the net present value of corporate decisions by examining before-and-after stock prices. Arguably, if a particular choice (for example, the adoption of one contract structure over another) has a positive net present value to the corporation, adopters’ relative stock prices will rise to reflect this gain. Unfortunately, unless capital markets are fully rational and efficient, such event studies provide a better gauge of investors’ *subjective perceptions* than of the *objective efficiency* of the choice itself. Under real-world conditions, the symbolic character of contract artifacts make this measurement strategy highly suspect, at least as a means of disentangling “true” technical costs and benefits from socially constructed superstitions.

A third distinction between contracts and other more conventional artifacts lies in the minimal “intellectual property” protections that contracts receive. To oversimplify somewhat, most present-day legal systems provide broad but relatively brief patent and trade secret protections to the creators of new technical devices, and narrower but longer-lasting copyright and trademark protections to the creators of new symbolic tokens (Dreyfuss & Kwall 1996). In theory, the creators of new contracts might wish to avail themselves of such proprietary rights as well. For example, a fast-food chain might wish to prevent others from imitating innovative franchise agreements that give it a cost advantage over its competitors, or a law firm might wish to prevent others from pirating innovative financial instruments that it is offering for a fee to its clients. In practice, however, although the creators of new contract designs may receive copyright and patent protection under certain circumstances, these rights are only weakly established and rarely enforced.²⁰ Consequently, contracts operate

²⁰ A handful of court opinions address the availability of copyright and/or patent protection for contractual designs. The holdings are mixed but generally hostile.

On the copyright side, courts seem more willing to acknowledge the copyrightability of contracts in the abstract than to find actionable infringement in specific cases (see generally Reiter 1971). To prevail, aggrieved contract writers must overcome three substantial hurdles: First, to be copyrightable, the contract must be original, neither replicating nor paraphrasing the language of older works. This rules out protection for most recombinations of pre-existing boilerplate, even if the resulting contract accomplishes relatively novel purposes (see, e.g., *Donald v. Uarco Business Forms*). Second, because copyright protection covers particular expressions rather than underlying ideas, courts will only find infringement if an imitation employs virtually the same words as the original, not if the imitation merely accomplishes the same legal ends (see, e.g., *Miner v. Employers Mutual Liability Insurance Co.*). Finally, even when two contracts employ essentially identical wordings, courts have sometimes still refused to find infringement, arguing that when an idea can only be put into effect through specific verbal formulae, the public must remain free to use those formulae, as long as such use is only “incidental to... use of the underlying idea” (*Continental Casualty Co. v. Beardsley*). As one opinion reluctantly acknowledged, the intersection of these constraints in the realm of contracts “leaves little, if any, protection to the copyright owner; in fact, it comes near to invalidating the copyright” (*Crume v. Pacific Mutual Life Insurance Co.*).

The situation on the patent side is hardly better. Here, the most apposite precedent is the 1906 case of *In re Moeser*, which rejected efforts to patent a “mere contract” for burial insurance. In a relatively brief opinion, the DC Circuit agreed with the Commissioner of Patents that “the form of such contracts... devised or adopted as a method of transacting a particular class of... business, is not patentable as an art.” Although *Moeser* has never been overruled or even directly criticized, its future has become substantially cloudier following the Federal Circuit’s recent elimination, in *State Street Bank & Trust Co. v. Signature Financial Group, Inc.*, of the once formidable bar against patenting “methods of doing business.” If business models are now patentable (Oberdorfer 1998), one might imagine that the contractual frameworks through which such models take effect would be patentable as well. No court has yet reached this newly unsettled question, however.

Overall, one might instructively compare the intellectual property regime governing contracts with the regime governing two somewhat analogous classes of artifacts: architectural structures and computer programs. As with contracts, American law historically withheld intellectual property protection from architectural structures on the grounds that utilitarian creations are not copyrightable, and from computer programs on the grounds that conceptual algorithms are not patentable. In both instances, the situation has changed dramatically in recent years, but both changes required direct and specific

essentially as nonproprietary intellectual goods, without even the benefit of trade secrecy once they have been shared with clients, transaction partners, or courts. Admittedly, legal mystification and professional courtesy may somewhat restrain the uncompensated appropriation of new contract designs, if lay people hesitate to copy contractual language from one context to another, and if lawyers hesitate to pass off colleagues' work as their own (compare Suchman 1989 with Powell 1993).²¹ Moreover, these restraints may gain additional force from ideological accounts that depict every transaction as unique and every contract as painstakingly individualized. Without the support of formal intellectual property law, however, such informal controls will rarely allow contractual innovators to capture the full economic value of their creations. As a result, one might predict that, among other things, contractual innovation rates will be relatively low, pure R&D shops will be relatively rare, and patterns of change will be driven as much by noneconomic considerations (such as prestige, curiosity, and fashion) as by market rewards.

All this having been said, however, the underlying contract-as-artifact metaphor nevertheless remains intact. Although contracts may differ in significant ways from some of the most often studied technical devices and symbolic tokens of the modern world, these disparities shrink if one looks back to earlier epochs when *all* artifacts were less bureaucratically produced, less scientifically tested, and less legally protected. And even in contemporary settings, scholarship on conventional artifacts—both technical and symbolic—offers numerous thought-provoking extrapolations, if not perfect parallels, to the study of contracts. To illustrate the potential for such cross-fertilization, the following sections apply an artifactualist perspective first to the microdynamics of contract formation and then to the macrodynamics of contract regimes.

III. The Microdynamics of Contract Formation

At the level of individual transactions, contract scholarship centers on the fundamental question of why and how particular social actors form particular kinds of contracts. This question, however, can be read in multiple (albeit interrelated) ways: whereas doctrinalists ask why and how actors acquire formal rights under

legislative intervention (see, e.g., *Richmond Homes Management, Inc. v. Raintree, Inc.* and *Apple Computer, Inc. v. Franklin Computer Corp.*, respectively). No such legislative initiatives have yet appeared in the contract field.

²¹ Citing the troubled history of medical patents, at least one commentator has suggested that strong professions may not merely compensate for weak intellectual property rights, but may in fact fight efforts to introduce more stringent regimes (Thomas 1999:47–50).

Contract Law, and relationalists ask why and how actors manage real-world exchange relations, the contract-as-artifact perspective instead asks why and how actors produce various types of contract *documents*. Although the doctrinalist and relationalist agendas occupy more established positions in the existing literature, the artifactualist inquiry highlights a puzzling empirical anomaly: evidence suggests that formal law rarely enters into the creation, enforcement, or remediation of real-world exchange relations, yet real-world actors often devote considerable time and effort to constructing formal contract documents. The contract-as-artifact perspective forces researchers to ask why. Without claiming to offer a comprehensive answer, the following pages outline the rudiments of three possible artifactualist responses—the first technical, the second symbolic, and the third mixed.

Technical Accounts of Contract Formation

To date, most studies of contracts as artifacts have focused on the technical characteristics of specific contract provisions. If one sees contracts as tools for solving practical governance problems, then the central question in contract formation becomes how well particular technologies accomplish particular tasks. For researchers working in this tradition, the analogy between contracts and more conventional technical artifacts is clear and often explicit: Ronald Gilson and other law and economics scholars, in particular, have suggested that business lawyers act as “transaction cost engineers” who design “efficient mechanisms” to address opportunism, risk-aversion, imperfect information, and other sources of economic “friction” (see, e.g., Gilson 1984:253–56; *Oregon Law Review* 1995; Katz 1999). Law and society scholars, too, have occasionally echoed this view, portraying transactional lawyering as an arena of “private innovation,” producing “novel legal devices” such as poison-pill takeover defenses and venture-capital financing contracts (e.g., Powell 1993; Suchman 1995a). Although the law and economics camp may be quicker than its law and society counterpart to assume that transactional efficiency will trump competing social and political objectives, the underlying engineering metaphor suggests that, in either case, researchers should study contract formation in technical terms—very much as one might study the development of an air filter, a pressure valve, or a transistor.

For some critics, this microtechnical orientation may tread uncomfortably close to the conventional doctrinalist approach. Although clearly artifactualist in its focus on contract documents rather than contract doctrine, the engineering perspective generally shares doctrinalism’s faith in the relevance and enforceability of formal legal rights. This is particularly true of economic

efficiency analyses, in the Gilsonian mold.²² Lacking the law and society movement's commitment to observational fieldwork, law and economics is often a bit too quick to take contracts-on-the-books at face value, glossing over the sometimes sizeable differences between describing a governance mechanism on paper and implementing a governance structure in practice. As partisans of the contract-as-relation perspective point out, transacting parties are ultimately bound together by social behaviors, not by documentary artifacts. At best, contracts serve as blueprints and programs, not as actual governance mechanisms. In any given setting, the degree of correspondence (not to mention the direction of causation) between contract artifacts and exchange relations demands careful empirical investigation (cf. Macaulay 1977; Ellickson 1991).

As important as this caveat may be, however, it hardly negates the value of considering contract artifacts in technical terms. Indeed, many divergences between formal provisions and actual relations are quite consistent with a technical account.²³ Parties may, for example, enter a contract prophylactically, with the understanding that the document will become relevant only if their ongoing, largely noncontractual relationship devolves into an "end game" (Bernstein 1996). Bernstein illustrates this point with evidence from the grain and feed industry, where contracts generally specify that weights should be measured on official scales, even though for convenience most actual shipments are weighed only on in-house scales. The contractual language, she argues, creates not the rules that the parties want to apply in their ongoing relationship, but rather the rules that the parties want a third-party adjudicator to apply if their relationship ever fails so thoroughly that third-party adjudication becomes necessary (1996:1799).²⁴ Contracts adopted for such precautionary purposes resemble conventional artifacts such as fire extinguishers, parachutes, or cardiac defibrillators: The fact that they may go unused for their entire duty cycle neither proves their uselessness nor argues against analyzing their performance characteristics.

Moreover, even when the noncontractual elements of an exchange run directly counter to the contract as written, a technical analysis may nonetheless have much to offer. After all,

²² Gilson, himself, is relatively attentive to the gap between law on the books and law in action. His economic reading of a standard business acquisition agreement (Gilson 1984:257 ff.), however, has served as a template for numerous less circumspect successors.

²³ Other divergences are more consistent with a "symbolic" account. Parties may, for example, enter a contract ritualistically, with uncritical faith in its quasi-magical ability to bind them together, regardless of its technical inadequacies. Such symbolic dynamics are discussed in greater detail later.

²⁴ Prenuptial agreements provide another good example of this end-game phenomenon.

engineers routinely analyze the technical properties of mechanical designs, even though actual performance may depend on environmental conditions, and even though actual specifications may change when a design is reduced to practice. As long as contracts exert *some* perceptible impact on the governance of exchange relations, one can plausibly argue that the social importance of these blueprints lies in the technical results that they produce when implemented—either when implemented faithfully, or when implemented with predictable deviations. Certainly, one should not take the relational component of contractual relations as evidence that the contractual component has no relevance.

The microtechnical perspective thus becomes substantially more plausible if one expands the frame slightly to incorporate two extra-contractual parallels between legal and physical engineering. First, one must recognize that contract designers, like the designers of other technical artifacts, rarely engineer entirely hermetic systems. Just as an internal combustion engine may draw oxygen from outside its man-made apparatus, so too may a contract draw rules and sanctions from outside the four corners of its documentation. Since two of the most common sources for such extra-contractual inputs are formal legal rules and informal community norms, this recognition moves the analysis closer to both doctrinalism and relationalism; however, this in no way vitiates the distinctively artifactualist concern with contract design. The question of why and how actors produce particular types of contract documents remains at the center of the inquiry; the only difference is that this question can now be answered, at least in part, by reference to the legal and social environment.²⁵ Raider (1999), for example, nicely illustrates this approach in her investigation of how contract provisions change over time as an accumulated history of cooperative interaction builds trust between the transacting parties (see also Eggleston, Posner, & Zeckhauser 2000).

A second extra-contractual parallel between legal and physical engineering lies in the fact that contract users, like the users of other technical artifacts, may employ even the most carefully designed devices in ways the designers never intended or anticipated. In research on more traditional artifacts, the emerging field of science and technology studies has repeatedly documented the irrepressible creativity of lay users—to the point where the distinction between design and use begins to seem more ideological than descriptive (Akrich 1992; Clement 1993; Suchman 1999).

²⁵ Significantly, social embeddedness does not always yield improved efficiency (Lindenberg 1988; see also Granovetter 1985). As with any open system, the results of embedded contracting depend on how the external inputs are used.

Contracts may be no different: Employed with a little ingenuity, detailed contingency provisions can serve to discourage close reading, as much as to ensure mutual agreement (cf. Hill 2001a); standard-form contracts can serve to disempower front-line sales staff, as much as to constrain transaction partners (Rakoff 1983); and dispute resolution procedures can serve to extract proprietary business information as much as to determine fair remedies (Ben-Shahar & Bernstein 2000). Far from undermining the engineering metaphor, such instances of user creativity simply demonstrate the need for ethnographies of contract practice, parallel to the existing ethnographies of other technology practices. By focusing attention on the use of contracts in courtrooms and boardrooms, this ethnographic turn would, like the consideration of extra-contractual inputs discussed above, move the analysis closer to doctrinalism and relationalism, respectively. But it would also preserve the fundamentally artifactualist impulse to place the document itself at the center of the inquiry. After all, certain documentary features may quite possibly elicit user responses that cannot be reduced to doctrinal principle or relational governance, conventionally understood. The size, language, and placement of clauses in a contract, for example, may direct attention toward some issues and away from others, may distinguish routine operations from unlikely eventualities, may encourage or discourage alterations and deviations, and may make the document seem more or less relevant to actual practice.²⁶ Although the operative “technology” has more to do with mobilizing cognitive biases than with minimizing transaction costs, one could still imagine researching its “efficacy” and reengineering contract documents to take advantage of its effects.

In short, the microtechnical account of contract formation depicts contracts as blueprints for resolving common governance challenges. To date, most work in this tradition has emphasized how particular contract provisions can economize on transaction costs. The potential of the approach extends far beyond these narrow roots, however. Researchers have already begun to explore various extra-contractual influences on contract blueprints, and future investigations will almost certainly explore the extra-contractual consequences of such blueprints, as well. As these explorations proceed, even the meaning of technical efficacy itself

²⁶ As a more concrete illustration of these effects, one could imagine studying the use of handwritten amendments to printed contracts. Handwriting indicates direct attention to a particular clause, and freehand alterations often stand out visually from the surrounding text. However, handwriting also often indicates afterthought, and freehand alterations may suffer from poor vetting and weak endorsement by key constituencies. Thus, an artifactualist concern with documents-in-use would focus attention on the internal and external factors that encourage or discourage such redactions, that make them more or less potent, and that shape their subsequent interpretation by the transacting parties and by outside audiences.

may expand to incorporate *multiple* design criteria, rather than transaction-cost minimization alone. The engineering metaphor provides little reason to believe that efficient, positive-sum collaboration will always be the sole, or even the primary, technical objective in contract design. From punitive liquidated damages to usurious interest rates to hair-trigger repossession policies, the world is rife with contract structures that function—quite efficiently—to intimidate, ensnare, or destroy. Swords and spears are technical artifacts no less than plowshares and pruning hooks.

Symbolic Accounts of Contract Formation

The foregoing analogy between contracts and blueprints highlights the fact that, alongside their technical functions, contracts share important characteristics with certain forms of symbolic representation, as well. Blueprints, after all, are highly stylized signifiers, whose technical effects ultimately rest on the existence of well-established interpretive conventions. Clearly, the technical effects of contracts, too, depend on a shared community of discourse—and this may partially explain why most existing studies of contracts-as-artifacts appear not in the literature on contract law, but in the literature on the legal profession (e.g., Gilson 1984; Powell 1993; Suchman 1994, 1995b). To date, however, few researchers have explicitly explored the nontechnical aspects of contract documentation and no one has yet developed a sustained analogy between contracts and other symbolic artifacts.

Guideposts toward such an analogy appear at the border between sociology, anthropology, and the humanities, in the growing literature on “material culture.” In an analysis of bicycle design, for example, Mills (1996) argues that even apparently technical artifacts can acquire important cultural meanings, and he offers five basic principles for reading the resulting symbolic “grammar.”

1. A feature can carry a variety of meanings [e.g., rounded contours might mean hygiene, speed, or organic form; the color white might mean hygiene, optimism, or innocence].
2. Meanings are filtered by the interaction of features [e.g., a product with white rounded contours will have a strong hygiene association, but a weaker association with either speed or optimism].
3. A feature acquires meaning from its context [e.g., tail fins come to imply speed and modernity because of their association with airplanes and rockets].
4. Acquired meanings can be transferred to new contexts [e.g., in the 1950s, designers placed tail fins on electric blenders to suggest the ultra-modern].

5. Meanings can be altered by application to new contexts [e.g., in the 1970s, hobbyists placed tail fins on Volkswagen Beetles to suggest ironic nostalgia] (Mills 1996:137–39; similarly, Bakke 1996).

Similar principles may apply to contracts as well. Certainly, contractual features can possess multiple meanings: standardized boilerplate, for example, can mean legalism, efficiency, or take-it-or-leave-it unilateralism; lengthiness can mean legalism, importance, or transaction-specific customization. As in the case of more conventional artifacts, particular combinations selectively evoke certain meanings over others: lengthy boilerplate contracts have strong associations with legalism, but only weak associations with efficiency or customization. And features often draw their meanings from context: boilerplate implies unilateralism in large part because of the extensive use of standard-form contracts in mass-market retail transactions. Once acquired, such meanings can often be transferred out of context, such as when standardized boilerplate, liquidated damages, or a seller's retention of title become signs of inequity even in large commercial transactions. But meanings can shift in transit: standard-form contracts, when used between two small businesses, can suggest a desire to make a transaction "legal" without actually incurring new legal expenses. And, indeed, this sensitivity to context underlies the Uniform Commercial Code's differentiation between merchants and non-merchants in the "battle of the forms" (UCC §2-207). Thus, while sociolegal scholars still have a long way to go in developing a practical glossary of signifiers and significations, the analogy between contracts and other elements of material culture is a strong one, and symbolic analysis would seem to merit a prominent position on the contract-as-artifact agenda.

As researchers explore the parallels between contracts and other cultural displays, two broad avenues of investigation seem likely to emerge. The first is the study of contract as "sacred symbol" (Geertz 1973), that is, the study of how contract artifacts link the lived-reality of individual transactions to broader cultural belief systems, including to the ideology of Contract Law. Even if transacting parties know relatively little about specific legal doctrines and have no intention of seeking court enforcement, the ceremony of drafting and signing a contract may reenact and reinforce central elements of faith, both about the transaction itself and about the larger social order. Under the liberal market regime of the contemporary United States, for example, contract rituals provide symbolic reassurance that the parties are entering into a predictable, controllable, and mutual relationship within a social order composed of voluntary arm's-length exchanges between equally endowed strangers (Gordon 1985). Although these

reassurances may often prove more mystical than factual, they can nonetheless shape legal consciousness and hence legal behavior.²⁷ Indeed, businesses often seem to rely on precisely such ideological effects when they demand that consumers and employees “voluntarily” sign contracts that would likely prove unenforceable in court. Of course, under other ideological regimes, contract rituals might evoke quite different mystical beliefs, such as a reliance on divine providence, or a trust in communal solidarity, or an acceptance of the economic leadership of the state. Whatever the specific messages, however, if contract documents play a central sacramental role in society’s transaction ceremonies, then these artifacts arguably merit at least as much attention as any other ritual objects.²⁸

The second promising direction for microsymbiotic analysis is the study of contract as “significant gesture” (Mead 1962), that is, the study of how contract artifacts allow transacting parties to communicate messages to one another or to third-party observers. At first, this focus might seem to belabor the obvious. Contract documents are, after all, written statements. Often, however, the “meaning” of a contract goes beyond the dictionary definition of the words on the page: aspects of contract structure and chunks of contract language become *ideograms*,²⁹ representing concepts and postures that the parties cannot or will not explicitly verbalize. Venture-capital financing agreements, for example, often contain tens of pages of convoluted legal jargon guarding against the risk that subsequent stock issuances may “dilute” the initial investors’

²⁷ In practice, legal consciousness regarding contracts is likely to contain much of the same multivocality that characterizes legal consciousness on other kindred topics (Ewick & Silbey 1998). When, in order to purchase a needed product, the consumer must accept the retailer’s standard-form contract, the symbolism may evoke hierarchy and oppression more than it evokes mutualism, voluntarism, or equality. Or, more likely, it may evoke both at once, leaving the consumer with a Hobson’s choice between a narrative of disempowerment (“I had no say in the matter”) and a narrative of self-blame (“I brought it on myself”).

²⁸ This view of contracts as ceremonial objects gains strength from the fact that under certain circumstances, courts have in fact treated other ceremonial symbols as effective substitutes for contractual documentation. One striking example occurred during the 1984 takeover battle between Texaco and Pennzoil for the purchase of Getty Oil. There, the Texas courts ruled that Pennzoil had successfully closed its purchase of Getty—based on such transaction ceremonies as handshakes, celebratory receptions, champagne toasts, and press releases—despite the fact that the parties had never signed a formal written contract (see, generally, *Texaco, Inc. v. Pennzoil Co.* 1987). A contract document would clearly have been sufficient to close the deal, but the courts ruled that it was not necessary. Other symbols, taken in conjunction, served just as well. (Stewart Macaulay deserves credit for alerting me to this example.)

²⁹ Ideograms are written symbols that convey conceptual rather than phonetic information. Exemplified by Chinese characters, ideograms can often be read either as discrete wholes or as composites of other, more basic, ideograms. Thus, for instance, the Chinese ideogram for “crisis” combines the symbols for “danger” and “opportunity.” (I am indebted to Alta Charo for suggesting the ideogram analogy, and to Claire Hill for conducting the empirical research that led Alta to do so.)

ownership stake. Yet, despite their apparent complexity, these antidilution clauses are, in fact, highly standardized and widely recognized emblems for a very limited number of regimes. Moreover, the choice of regime matters not merely for financial reasons but because it signifies the level of confidence, trust, and mutualism in the transaction. Thus, even without parsing the minutiae of such a clause, good venture-capital lawyers can easily determine what kind of relationship the other side wishes to construct and can advise their client accordingly. The study of contract-as-gesture would explore these sorts of implicit signals and connotations.

As with any vocabulary, the meaning of particular contract gestures can vary widely across different communities of discourse.³⁰ For instance, where Silicon Valley executives see lengthy, heavily covenanted agreements as symbols of timidity and legalism (Suchman 1994), executives in other communities might see such agreements as symbols of prudence and foresight. Considered in the abstract, however, contractual gestures can convey at least three sorts of messages. First, as the foregoing examples suggest, transacting parties within a single cultural milieu may use contractual gestures to communicate specific substantive messages about identity, capacity, character, and intention. Common subjects for such communications include risk preference, time horizon, cooperativeness, trust, bureaucratization, litigiousness, and so on (cf. Eggleston, Posner, & Zeckhauser 2000:117–18).³¹ Second, distinctive contractual gestures, like other linguistic markers, can serve to delineate group boundaries, facilitating the recognition of members and the stereotyping of nonmembers (cf. Gumperz 1982; Calhoun 1989). Thus, within any given sector, actors may invoke particular emblematic contract provisions as a way of saying “I know my business,” and “I am an insider in this community.” Third, and most generically, actors may use the formalities of contracting simply to signify commitment, seriousness, and finality, independent of the substance of any particular contract provision. The sanctity of contract is hardly universal, but throughout the capitalist world, most people perceive that the weight of a commitment changes when the parties “put it in writing” (Stolle & Slain 1997; Hans & Mott 2000).

³⁰ The systematic study of such variations lies at the heart of the “macrosymbolic” research agendas described in the following section.

³¹ Admittedly, transacting parties could convey many of these messages more explicitly in other ways. However, as Gorenstein (1996) notes, one of the distinctive characteristics of material culture is that it can evoke aberrant themes “sentiently” at a gut level, without demanding that those themes be explicitly stated or rejected, admitted or denied. Such ambiguity can often provide an indispensable social lubricant, especially during delicate multiparty negotiations (cf. Baer, March, & Saetren 1988).

Overall, then, the microsymbolic account of contract formation depicts contract documents as meaning-laden signs and symbols. Although few investigators have yet staked claims to this territory, the terrain seems vast and fertile. For researchers interested in legal ideology, the study of contracts as sacred symbols promises a link between the canopy of legal doctrine and the grassroots of economic practice; for researchers interested in business transactions, the study of contracts as significant gestures promises a link between the legally ordered formalities of relationship formation and the socially embedded realities of relationship governance. Behind both of these promises lies the insight that, as symbols, contracts often acquire meanings (and exert effects) that bear only a loose and fundamentally arbitrary relationship to “engineering” rationales. Contracts become symbols through social convention and only through the interpretation of social convention can one discern their full effects.

Mixed Accounts of Contract Formation

Although technical and symbolic considerations may sometimes work at cross-purposes, real-world contract formation generally implicates both simultaneously. Thus, any truly satisfying account must be “mixed,” at least in the sense of specifying the scope conditions that determine where one set of processes leaves off and the other begins. Significantly, however, contracts may mix technical and symbolic elements in a more thoroughgoing sense, as well: somewhere between acting as governance blueprints and acting as ritual gestures, contracts may act as *standardized scripts*.

Like the script for a play, a contract serves several purposes that are simultaneously both practical and expressive: First, a contract, like a script, invokes familiar narrative tropes, allowing (and encouraging) the actors to contemplate, rehearse, and modify their parts before performance begins. Even if everyone realizes that many scenes in the ensuing production will be played impromptu, an advance reading can highlight underlying themes, suggest possible plot dynamics, and give the players a chance either to get into character or to determine that they are wrong for the part. Second, a contract, again like a script, provides a taken-for-granted storyline to keep the performance on course, even in the face of substantial improvisation. Indeed, the greater the extemporaneous component of the production and the greater the number of players, the greater the importance of having a cognitively tractable reference document that can link the individual parts into a coherent and meaningful whole. Finally, by framing identities, expectations, and routines, a contract script can shape and coordinate behavior by inviting the players to “enact” readily recognizable roles (Weick 1979), even in the absence of readily

enforceable sanctions. Most theater performances, after all, proceed quite seamlessly, despite the fact that few stage actors can plausibly threaten to sue their fellow cast members for “breach of role.”

Although prior scholarship has rarely adopted such a dramaturgical perspective, encouraging glimpses of contracts-as-scripts appear throughout the empirical literature. Macaulay, for example, suggests that the central problem in most transactions “is not one of honesty but one of reaching an agreement that both sides understand” (1963:58–59). Contract-scripts solve this problem by organizing likely scenes—“the re-tooling,” “the first delivery,” “the production delay,” and so forth—into coherent narratives, structured around familiar cultural themes. Further, in keeping with the claim that contract-scripts provide reference points for stage managing complex multiplayer productions, Macaulay notes that even when standards of duty and remedy are essentially noncontractual, a fairly detailed contract can nonetheless prove quite valuable “as a communication device within a large corporation” (Macaulay 1963:65). Finally, again consistent with the dramaturgical metaphor, Macaulay reports that contracting parties devote substantial effort to planning performance—to editing the script, as it were—but very little effort to planning enforcement (1963:60).

These passing observations do not, of course, constitute definitive proof of the dramaturgical model; however, they help to illustrate both its plausibility and its potential for joining technical and symbolic considerations within a single account. If transacting parties coordinate their expectations, identities, and routines through essentially narrative means, then contract formation may be both technical and symbolic in a single breath: Contract-scripts *do* shape the technical structure of the exchange relationship, but they shape it symbolically—not by imposing material sanctions, but by invoking cultural schemas.

IV. The Macrodynamics of Contract Regimes

As important as the microdynamics of contract formation may be, neither technical nor symbolic artifacts arise in isolation from larger social processes. Thus, alongside the study of particular contract instruments, an artifactualist perspective invites more macroscopic consideration of entire contract regimes, as well. Rather than seeking to explain the documentation of individual transactions, this second line of inquiry seeks to explain patterns in the distribution of documentary features across time and space. Just as doctrinalists describe jurisprudential regimes as well as individual holdings, and relationalists describe production regimes

as well as individual exchanges, artifactualists can describe contract regimes as well as individual documents. Liberal market ideology tends to portray each contract as a unique and free-standing agreement, but in fact, contractual language often displays striking continuities (and sometimes equally striking discontinuities) from one transaction to another. These continuities and discontinuities are themselves social facts worthy of explanation. The contract-as-artifact perspective highlights such system-level dynamics, forcing researchers to grapple with the question of when, why, and how the form of one contract may affect the form of another.³²

Although previous contract scholarship has devoted relatively little attention to this aggregate level of analysis, the contract-as-artifact metaphor allows—or even encourages—extrapolation from other social-science traditions, where research on conventional artifacts has embraced increasingly macrosystemic views. The sociology of organizations, in particular, promises numerous instructive insights: not only have organizational theorists produced a sizable literature on the introduction, development, and diffusion of new products and practices, but also the “products and practices” in question have often involved substantial contractual components. Although rarely conceptualized in such terms, the financial instruments, employment policies, takeover defenses, and interorganizational alliances so often featured in these studies are, in part, contractual artifacts. Extended into the sociolegal realm, the propositions of this organizational literature suggest a wide array of technical, symbolic, and mixed accounts of the macrodynamics of contract regimes.

Technical Accounts of Contract Regimes

On the technical side, recent organizational scholarship posits that all technologies emerge within social systems and that researchers must therefore consider technical practices and social structures in tandem. When developing and selecting technologies, organizations operate not in isolation but in multipartite “collectivities,” with each actor often attending quite closely to the decisions

³² Artifactualists, of course, hold no monopoly on explaining the macrodynamics of contract regimes: doctrinalists generally assume that shifts in contractual language will reflect shifts in prevailing law in a fairly direct and unproblematic way; relationalists, for their part, either assume a similarly direct link between contractual language and the social organization of exchange, or assume that contract language, being irrelevant to exchange, will drift largely at random. Although occasionally drawing on arguments from both of these camps, artifactualism problematizes the macrodynamics of contract regimes and moves them to center stage. In particular, artifactualists note that trends in both doctrine and exchange often interact with important dynamics emerging for the documentary process itself. These essentially endogenous dynamics, artifactualists argue, give contract regimes a life of their own that is often neither externally predetermined nor causally irrelevant.

of its counterparts. Consequently, as Abrahamson and Rosenkopf (1993:493) note, “organizations should not be thought of as mere isolates that make independent adoption decisions based on their assessments of innovations’ [uncontextualized] returns”; rather, the creation, transmission, standardization, and replacement of technological designs all occur within a matrix of mutually aware actors.

Presumably, sociolegal scholars could say the same about the creation, transmission, standardization, and replacement of contract designs. To explore such collective processes, the macro-sociology of contracts might draw useful insights from at least three major literatures on organizations and technology: (1) the literature on innovation and diffusion, (2) the literature on path dependence, and (3) the literature on technology cycles. The following pages consider each of these in turn.

The body of scholarship on technological *innovation and diffusion* is large and diverse, with research dating back more than 50 years (see, e.g., Ryan & Gross 1943; Coleman, Katz, & Menzel 1966; Hagerstrand 1967). Work in this tradition examines both (1) the factors that determine whether individual organizations create and/or adopt new technologies (“innovation”), and (2) the factors that determine how new technologies spread within multiorganization collectivities (“diffusion”). On the first topic, research finds that organizations innovate most readily when they possess ample resources, a substantial base of prior technical knowledge, a decentralized authority structure, and open communication channels (for reviews, see Damanpour 1991; Drazin & Schoonhoven 1996). Evidence also suggests that whereas culturally legitimate and politically unthreatening innovations tend to originate from central players in the interorganizational network, more radical breakthroughs tend to originate from relatively peripheral entities—especially entrepreneurs located in the “structural holes” between otherwise disconnected cliques (Menzel 1960; Burt 1992).

Communication and network position play central roles in the second half of the innovation-and-diffusion agenda as well, in part because what looks like innovation at the level of single firms often looks more like diffusion when reexamined at the level of multifirm collectivities. Reconsidered in these terms, the fate of a new technology clearly depends not only on the native adaptability of individual organizations, but also both on the capacity of particular social ties to transmit information across organizational boundaries and on the overall pattern of ties in the interorganizational matrix (see, generally, Strang & Soule 1998). When efficacy is uncertain and plausible alternatives abound, even technically superior innovations can vanish under the wheels of on-rushing bandwagons, unless those innovations manage to secure strong,

visible, and well-connected champions (Abrahamson & Rosenkopf 1993, 1997).

Applied to contracts, these arguments suggest several intriguing research agendas. At one time or another, contractual “innovations” have revolutionized industries ranging from agriculture to insurance, from retailing to health care. Yet few studies have systematically explored the macrosociological conditions that favor the invention and diffusion of new contract technologies. If the parallel to more conventional technical artifacts holds true, however, one might predict that well-endowed professional organizations provide particularly conducive sites for contractual invention and that tightly interconnected business communities provide particularly conducive sites for contractual diffusion. Although much empirical work remains to be done, preliminary supportive evidence comes from two of the hallmark contractual innovations of the 1980s: the high-technology venture-capital financing contract and the poison-pill corporate takeover defense.

Consistent with the predictions of the innovation and diffusion literature, research on venture-capital financing (Suchman 1994, 1995b), finds that during the early 1980s, revolutionary contractual innovations emerged among a handful of Silicon Valley law firms, at the periphery of the larger legal profession. The new practices then spread rapidly within the region’s close-knit business community, but network holes slowed diffusion across the community’s borders. Specifically, whereas traditional financing models relied on covenants, sanctions, and legally enforceable exit paths to manage the risks of start-up investing, the Silicon Valley alternative favored multi-round staged investments, within a more open-ended “relational contracting” framework (Bygrave & Timmons 1992; Gompers & Lerner 1999; cf. MacNeil 1980). Originating in Palo Alto’s small community of suburban lawyers during the late 1970s, this model quickly became the local norm. Throughout the following decade, the success of Silicon Valley’s microcomputer industry helped to spread these contractual innovations to other regions. But diffusion beyond the local network was difficult and fitful: Even as late as 1990, deals without Silicon Valley participants looked significantly different from the Valley’s home-grown transactions, and interviews with local lawyers routinely elicited comments to the effect that “venture capital ... is a specialty that is practiced very well in Silicon Valley, yet it is not even understood in a lot of other places” (Suchman & Cahill 1996:701–02).

An analogous burst of contractual innovation appears to have occurred in the corporate merger market of the 1980s, with similar evidence of law firm leadership and similar patterns of network diffusion (Davis 1991; Powell 1993; Davis & Greve 1997). Here, a loosening of financial, statutory, and regulatory barriers in the early 1980s initiated a wave of hostile takeover attempts, which in

turn inspired several innovative quasi-contractual defenses.³³ The most significant of these defenses, both economically and legally, was the “poison pill,” a shareholder rights package that renders a takeover target virtually indigestible to any unwelcome acquirer.³⁴ As Powell (1993:433) describes, this innovation originated within a single law firm (Wachtell, Lipton, Rosen & Katz), at the periphery of the New York’s traditional “white-shoe” securities bar. Initially, most observers viewed the technology with skepticism, and diffusion proceeded only slowly, driven primarily by Wachtell Lipton’s entrepreneurial marketing efforts (Powell 1993:439) and by communication among interlocked boards of directors (Davis 1991). After the Delaware Supreme Court validated a Lipton-designed poison pill in 1985, the pace of diffusion accelerated dramatically and several other law firms entered the market with modified designs of their own.³⁵ Nonetheless, as late as 1989, a handful of specialist law firms still retained design leadership, and board-to-board contact through the directorship interlock network continued to be a strong predictor of adoption.

Future scholarship could profitably augment these case histories with broader comparative investigations of the general processes that transform particular firms and particular industries into such “hot spots” of contractual innovation. To avoid the risk of “pro-innovation bias,” however, these investigations would do well to recognize that not all contractual innovations are beneficial and that some diffusion mechanisms, such as faddish imitation and external coercion, may propagate decidedly suboptimal contract forms (cf. Abrahamson & Rosenkopf 1993:513). Davis and Greve (1997) demonstrate, for example, that another takeover-related technology of the 1980s, the “golden parachute,”³⁶ diffused much

³³ Bearing evocative labels such as “shark repellants,” “lock-ups,” and “poison pills,” most of the new takeover defenses combined negotiated transactions and spontaneous rights issuances. Thus, these technologies fall at the intersection between contract, property, and securities law. Nonetheless, their heavy reliance on legally effective documentation brings them within the legitimate purview of artifactualist analysis (cf. Greely 1989:152–58).

³⁴ Although the poison pill creates a package of new shareholder rights, most analysts agree that this device protects managers more than investors. In essence, a poison pill raises the transaction cost of a hostile takeover, thereby insulating management (and other inside stakeholders) from market discipline. Thus, economic analysis suggests that these “shareholder rights plans” may have the counterintuitive effect of diminishing shareholder control and reducing shareholder returns.

³⁵ The case in question, *Moran v. Household International*, pitted Wachtell Lipton against Skadden, Arps, Slate, Meagher, & Flom, an early and vocal opponent of the new technology. Ironically, shortly after the *Household International* decision, Skadden, itself, became a major poison-pill developer, releasing “a several-hundred page, three-ring volume, recommending the adoption of its own particular rights plan” (Powell 1993:442).

³⁶ A “golden parachute” is an employment contract awarding large severance payments to top executives who are displaced in a corporate buyout. Economic analysis suggests that such compensation packages can improve market efficiency by diminishing managerial resistance to takeovers that involve administrative reorganization and down-

more slowly than the poison pill, despite much stronger theoretical and empirical support. A key difference between the two technologies, Davis and Greve argue, lay in the fact that golden parachutes, although more justifiable from the standpoint of prevailing economic theory (see, e.g., Lambert & Larcker 1985; Coffee 1988), appeared more rapacious from the standpoint of prevailing business culture. Further, as Powell would no doubt add, golden parachutes were also less contractually ornate and they therefore provided fewer opportunities for law firm entrepreneurialism (compare Davis & Greve 1997:30 with Powell 1993:449). Together, these factors led the golden parachute, despite its arguably greater desirability, to diffuse through substantially less efficient, more segmented social networks than the poison pill. The general lesson for future researchers is that plausible legitimating accounts and persuasive entrepreneurial sponsors may be as important as technical superiority in determining which contractual artifacts proliferate and which languish—a point embraced explicitly by the “technology cycle” and “legitimation” literatures described below.

Resisting pro-innovation bias is not the only conceptual challenge facing studies of contractual innovation and diffusion, however. Even more fundamentally, before the analogy to traditional innovation studies can bear fruit, sociolegal researchers will need to determine whether the relevant “adopter” is the lawyer or the client. Several key theoretical typologies carry quite different implications, depending on how one answers this question. The innovation literature, for example, frequently distinguishes between product versus process innovations, and between technical versus administrative innovations (Damanpour 1991:560–62). Contracts, however, often operate *both* as technical products for law firms *and* as administrative processes for clients. Similarly, the diffusion literature frequently distinguishes “contagion” models based on peer-to-peer contact versus “broadcast” models based on external dissemination (Strang & Soule 1998:270–76). A comparative reading of the evidence from Silicon Valley and Wall Street, however, highlights the fact that new contractual practices often diffuse *simultaneously* through peer-to-peer contagion among law firms, through peer-to-peer contagion among clients, through external broadcasts from law firms to clients, and through external demands from clients to law firms. All of this suggests that the macrodynamics of contractual innovation and diffusion may be unusually complex, implicating highly interactive multi-actor processes, at multiple levels of analysis.

sizing (Lambert & Larcker 1985). Popular portrayals, however, have been much more negative, generally decrying the ability of upper management to emerge enriched from a takeover that imposes substantial hardship on lower-level employees.

Where the innovation and diffusion literature asks who adopts new technologies and when, a second macrotechnical literature, on *path dependence*, asks the slightly different question of which new technologies get adopted and why (see, generally, Arthur 1989, 1990). Specifically, this latter tradition explores the distinctive market dynamics that arise when two or more competing designs each exhibit “increasing returns” (Arthur 1989:116), that is, when each technology’s utility rises in proportion to that technology’s market share. Frequently cited examples include typewriter keyboard layouts (“QWERTY” vs. Dvorak), videotape-recording formats (VHS vs. Betamax), and computer operating systems (DOS/Windows vs. Macintosh) (see David 1985; Arthur 1990; but see Liebowitz & Margolis 1990). If one wishes to share typewriters, videotapes, or software with other users, one would be well advised to choose the most popular system, even if an alternative design has better performance characteristics in the abstract. Thus, under increasing returns, individual users’ adoption decisions are not independent, but instead interact to produce self-reinforcing feedback loops, wherein every additional adoption increases the pressure on other users to follow suit. In technology competitions such as these, one can predict that a single “standard” will eventually predominate, but one cannot predict, *a priori*, which of the various alternatives it will be. Instead, the outcome depends on how the sequential “path” of adoption decisions plays out in each unique historical setting.

Such path dependence has many implications, but from an economic perspective the most significant of these may be the fact that the technical superiority of a particular design cannot guarantee its market success, even if all adopters act as perfect rational utility-maximizers. Better engineering may improve a technology’s initial odds, but if, through some fortuitous confluence of events, a suboptimal competitor takes an early lead, increasing returns may soon outweigh any inherent technical weaknesses. Past this tipping point, subsequent adopters will be better off selecting the technology with the largest installed base, even if, in the abstract, they might have preferred to select something else. As a result, the invisible hand will be all thumbs: in the presence of increasing returns, individually rational action may “lock in” demonstrably inferior standards.

The path dependence model’s usefulness in explaining the histories of traditional technical artifacts raises the provocative question of whether similar explanations might apply to the histories of contract artifacts, as well. As Kahan and Klausner (1996, 1997; Klausner 1995; see also Greely 1989) note, several aspects of contractual technology could easily generate increasing returns: Widely used contract provisions enjoy more extensive field-testing, and therefore their governance effects are likely to be

more predictable; widely used contract provisions experience more extensive adjudication, and therefore their legal implications are likely to be less ambiguous; and widely used contract provisions become more familiar to third-party service providers (such as lawyers, accountants, underwriters, and brokers), and therefore their “maintenance” and “valuation” costs are likely to be less burdensome. Given these feedbacks, Kahan and Klausner predict that contract regimes will experience substantial pressures toward standardization—and that, at least occasionally, the resulting standards will *not* be optimal in a pure transaction-cost-engineering sense.

Evidence on corporate bond indentures tends to support this claim. Examining the spread of “event risk covenants” designed to protect bondholders during a corporate takeover, Kahan and Klausner (1997:740–60) find several hallmarks of a path dependent technology competition: Virtually nonexistent until 1987, event risk covenants emerged (and eventually disappeared) in a “bandwagon pattern of adoption and abandonment” consistent with the proposition that the covenants’ value to potential adopters increased as the covenants’ prevalence grew—presumably due to reduced drafting costs, fewer formulation errors, more efficient pricing in the securities market, and more potential for subsequent resale (Kahan & Klausner 1997:743–45). Further, the new covenants rapidly converged on a handful of highly standardized provisions, and although these standards underwent some technical improvement over time, they also appeared to lock in at least one element (the “put at par”) that was demonstrably inefficient from a purely technical standpoint (1997:750–51). As path dependence theory would predict, once enough firms (or even enough issuances *within* a single firm) had embraced a particular contract structure, the benefits of employing this familiar and prevalent design apparently outweighed the benefits of switching to a technically superior but more idiosyncratic alternative, producing inertia around a suboptimal equilibrium.

As the Kahan and Klausner study demonstrates, the path dependence perspective opens numerous avenues for future artifactualist scholarship. For example, since the pressures toward standardization almost certainly vary across economic setting and across contract type, one promising agenda would be to identify causal factors that affect the magnitude of these pressures—or that affect the likelihood that any given level of pressure will tip the contract regime into an irreversible slide toward homogeneity (see, e.g., Greely 1989; Lambert 1998). Conversely, contract scholars might also explore the causal factors that place spatial and temporal limits on the lock-in process. To understand the trajectories of contract regimes, one must understand not only the feedbacks that produce standardization, but also the economic

processes, network structures, and policy decisions that allow multiple standards to coexist at once, and that allow regimes to move from one equilibrium to another. Finally, having mapped the conditions under which contract regimes exhibit increasing returns, investigators might examine the strategic decisions that law firms and other “repeat players” (Galanter 1974) confront in the face of such positive feedback. For more traditional technical artifacts, path dependence often engenders intense struggles over market dominance, including “loss-leadership” pricing, preemptive announcements of nonexistent “vaporware,” and evangelical battles between “open” and “closed” system architectures (Farrell & Saloner 1985, 1986; Katz & Shapiro 1985). Many such strategies, however, rely on the existence of enforceable intellectual property rights, and extrapolation into the contractual realm poses a host of intriguing conceptual and empirical puzzles. Overall, the path dependence literature suggests that the macroeconomics of contract regimes may sometimes outweigh the microeconomics of transaction-cost engineering; the concrete implications of this insight, however, clearly demand further study.

Like the path dependence literature, the literature on *technology cycles* addresses macrotechnical issues of standard-setting and lock-in. Here, however, the focus falls less on once-and-for-all homogenization than on evolutionary cycles of stability and change, and market mechanisms take second stage to organizational and political factors. Examining long-term historical evidence, researchers in this tradition find that the core technologies of a wide range of industries have developed in fits and starts, with brief moments of technological discontinuity punctuating protracted periods of modest, incremental change (see, generally, Tushman & Anderson 1986; Anderson & Tushman 1990; Rosenkopf & Tushman 1994). Some of these technological discontinuities are “competence-enhancing,” while others are “competence-destroying.” The former supplement existing industry routines and bolster existing industry leaders; the latter supersede existing routines and undermine existing leaders. In either case, however, each discontinuity initiates a period of ferment, characterized by heightened uncertainty and intense political jockeying to determine the direction of future development. Out of this ferment, a dominant design eventually emerges and another period of placid incremental change ensues; however, depending on the nature of the discontinuity, the structure of the industry after the ferment may be quite different from the structure before.

Although “dominant designs” in the technology cycle model resemble “technical standards” in the path dependence model, the two approaches differ in their depictions of how such conventions emerge and persist. In particular, where path dependence theorists

emphasize the market behavior of isolated individual decision-makers, technology cycle theorists emphasize the political behavior of interacting industry coalitions. In the former account, the early stages of technology competitions are essentially black boxes, rife with “random perturbations” that can tip the balance unpredictably toward one technology or another; in the latter account, however, these random perturbations often turn out to be entirely predictable features of interorganizational politics. Although isolated adoption decisions may exert a bottom-up impact on these political dynamics, the technology cycle model works primarily from the top down, highlighting the activities of technology champions, strategic alliances, and industry-level standard-setting bodies, rather than the aggregate behavior of anonymous market actors.³⁷

Applied to contracts, this approach would argue that, in addition to looking for increasing returns and market lock-ins, researchers should consider how law firms (and other organizations) may act directly to promote particular contract designs—and how such actions may affect the structure of both the legal sector in which the designs are produced and the non-legal sectors to which the contracts are applied. Although few sociolegal scholars have invoked the technology cycle model by name, several recent studies resonate with these general themes. Statistical analyses of venture-capital financing contracts, for example, identify at least five distinct archetypes that entered and/or left the contractual repertory from 1975 to 1990, with a marked discontinuity around 1984 (Suchman 1994, 1995a). During this period of ferment, law firms and venture-capital funds played active political roles, championing particular contract designs both in business dealings and in interactions with public authorities (Suchman 1993, 1995a; Suchman & Cahill 1996). Similarly, studies of the mergers and acquisitions industry describe a period of ferment in the mid-1980s, prior to the emergence of the eventually dominant poison pill.

[T]he 1980s witnessed the creation of a whole slew of new antitakeover defenses and tactics, all with colorful popular designations, some of which were preventive in nature and others reactive to the takeover bid itself. Introduced were golden parachutes, pac-man defenses, scorched earth retreats, shark repellants, and lock-ups, all intended to make the takeover a protracted affair and prohibitively costly for the acquirer. (Powell 1993:434; see also Davis 1991; Davis & Greve 1997)

³⁷ Indeed, in the technology cycle model, even the general public is more likely to appear as a mobilized political constituency than as an atomized consumer market. In truth, however, the general public plays only a small role in the existing technology cycle literature, since relatively few of these accounts focus on mass-market commodities.

On Wall Street, as in Silicon Valley, lawyers actively championed competing designs, as evidenced by Powell's (1993) account of the running battle—in courtrooms, boardrooms, and legislatures—between the poison pill's originator, Marty Lipton, and his counterparts at Skadden Arps.³⁸

Future contract scholarship could embrace the technology cycle analogy even more explicitly. Researchers might, for example, analyze sequences of contracts, with an eye toward identifying periods of ferment and periods of incremental change (cf. Anderson & Tushman 1990). Historical studies could then map these periods onto social, political, and economic transformations in the legal sector and in its client industries. Researchers could also draw on the technology cycle model to distinguish between competence-enhancing and competence-destroying contractual innovations. Evidence on conventional technologies suggest that competence-enhancing discontinuities tend to originate within existing firms, increase barriers to entry, and drive smaller firms out of the market, whereas competence-destroying discontinuities tend to originate from new or marginal firms, decrease barriers to entry, and draw smaller firms into the market (Tushman & Anderson 1986). If similar patterns apply to contracts, the technology cycle model would provide a powerful new tool for understanding the role of legal innovation in shaping the market for legal services.³⁹ Finally, researchers could mine the technology cycle literature for insights into the emergence of dominant contract designs—including predictions about where such designs are likely to originate, how quickly they are likely to solidify, and how well they are likely to perform (Anderson & Tushman 1990).

Taken together, then, the literatures on innovation and diffusion, path dependence, and technology cycles all argue for considering contract artifacts as dynamic components of macro-technical industrial regimes, rather than as isolated products of microtechnical engineering decisions. Little contract scholarship to

³⁸ In contrast to these studies of venture-capital financing contracts and corporate takeover defenses, Kahan and Klausner's (1997) research on corporate bond covenants shows no significant evidence of law firm influence. Nonetheless, Kahan and Klausner's findings remain quite consistent with the technology cycle model more generally. In 1987, bondholder losses during the RJR Nabisco buyout sparked a brief but intense period of ferment, during which underwriters rather than lawyers took the lead in promoting particular contractual responses. By late 1989, a dominant design had emerged from this ferment, clearly bearing the imprints of Goldman Sachs and (to a lesser extent) First Boston, two of the largest underwriters in the market.

³⁹ Here, as with the innovation and diffusion literature, sociolegal researchers must give careful thought to the question of *which* industry is experiencing technological change. Anderson and Tushman (1990) argue that product innovations are likely to be competence-enhancing, while process innovations are likely to be competence-destroying. If contracts are products for law firms and processes for clients, this proposition implies that contractual innovations may often be more destabilizing for client industries than for the legal sector itself.

date has adopted this orientation, but the promise seems great. If contracts emerge, spread, standardize, and evolve like other, more familiar technical artifacts, the intricacies of the resulting technological system merit careful study. A few researchers have embarked upon this enterprise, but much still remains to be done.

Symbolic Accounts of Contract Regimes

In counterpoise to these macrotechnical investigations, researchers could also examine contract regimes as cultural discourses. While existing contract scholarship contains few such macrosymbolic analyses, the literature on other cultural artifacts offers fertile territory for exploration. Gestures and emblems, no less than techniques and devices, emerge and develop as elements of larger social systems, and most studies of conventional symbolic artifacts operate, at least in part, at this macroscopic level. In particular, sociolegal researchers might profitably build on models of ideology, models of legitimation, and models of communication to explore how contract regimes interact with broader societal beliefs and understandings.

Models of *ideology* depict quotidian artifacts as both telltale reflections and constituent elements of larger socially consequential belief systems. Thus, ideology-oriented research on contract regimes represents the macro-level counterpart to ritual-oriented research on individual transactions: If a contract document can sanctify an exchange relationship by linking the parties' lived reality to an overarching worldview, then the contract regime that emerges across many such exchanges should reflect and reproduce the deep thematic structure of those organizing beliefs—whatever those beliefs may be. The potential linkage between contracts and ideology already enjoys substantial recognition within certain segments of the doctrinalist literature, where critical legal studies theorists have frequently explored the parallels between various tenets of contract law and various bourgeois belief structures, such as individualism, voluntarism, and rationality (see, e.g., Feinman 1983; Dalton 1985; Gabel & Feinman 1998). An artifactualist treatment would extend these arguments in at least two ways. First, artifactualists would emphasize that many ideological forces affect contract *documents*, as well as affecting contract doctrines; and second, artifactualists would explore the possibility that, at times, the ideologies in question may bear only a loose relation to either formal contract law or traditional bourgeois liberalism, narrowly conceived. Certainly, beliefs about political economy can and do shape contractual documentation, but so, too, do beliefs (often tacit) about aesthetics, fate, and language itself.

This approach moves ideological analysis away from the study of elite intellectual history and toward the study of popular

material culture. From this new vantage point, contract scholars may be better able to recognize commonalities with scholars of other symbolic artifacts, who have increasingly traced elements of form and style—such as symmetry, decorativeness, and so forth—to underlying cultural themes (Gorenstein 1996). Bourdieu (1977), in particular, has argued that objects and practices often mesh together to produce a *habitus*—a way of living, acting, and thinking—that simultaneously embodies ideological beliefs and demarcates social boundaries. Sociolegal researchers might easily draw on such arguments to explore how contract regimes, too, can reveal and reproduce unspoken cultural assumptions about, for example, the linear versus cyclical structure of time, the presence or absence of symmetry in natural and social relations, and the relative importance of simplicity versus complexity, ambiguity versus precision, conflict versus consensus, autonomy versus solidarity, and optimism versus pessimism.

Gartman's (1986) study of automobile design provides a particularly interesting template for such ideological analysis. In essence, Gartman argues that the movement toward Fordism in the automotive industry transformed work relations from coordinated craftwork into proletarian factory labor, and transformed the resulting vehicles from organic wholes into fragmented symbols of alienated production. As the gap between luxury and mass-market products widened, the industry turned to marketers (and social scientists) to construct an ideological image of the "dream car" that symbolized technological progress and futurism and that hid issues of alienated production behind a mystique of empowered consumption (1986:183). Applying a similar logic to contract artifacts, researchers might examine the ideological ramifications of customized versus standardized documentation. Often, the two types of paperwork originate from different sites and relations of production (law firms versus corporate counsel offices), and the degree of customization in any given transaction correlates closely with the social status of the parties. Although wealthy individuals and large corporations may be able to demand hand-tailoring when they need it, ordinary consumers generally receive only mass-produced contracts of adhesion (cf. Weise 1993:ch. 7). Yet, with contracts, as with automobiles, such troubling aspects of production are often obscured behind ideological mystification—in this case, an image of the "binding commitment" that symbolizes efficiency, effectiveness, free choice, and legal protection for both sides (cf. Hans & Mott 2000). Thus, contract rituals emerge not in isolation, but in larger systems of social beliefs and power relations, and contractual symbolism responds not only to legal doctrine but to broader cultural themes, as well.

Models of *legitimation*, like models of ideology, depict contracts as meaning-laden cultural displays that link particular transactions

to larger belief structures. Researchers in this second macrosymbolic tradition, however, would emphasize that, in addition to sounding general ideological themes, contractual symbols may also provide more immediate legitimation for specific actors and specific actions. The “neo-institutional” branch of organizational sociology, in particular, argues that individual firms gain acceptance and support by adopting practices that conform with prevailing “rational myths”—practices, that is, that follow taken-for-granted cultural scripts about the capacities of particular classes of actors, the ends those actors should pursue, and the means those actors should adopt in pursuing those ends (see, generally, Meyer & Rowan 1977; DiMaggio & Powell 1991; Suchman & Edelman 1996). Even if conformity is largely ceremonial and bears little relation to underlying technical processes, organizations appear more legitimate (both to themselves and to others) when they display the formal attributes that society expects from exemplary entities of their type (Suchman 1995c). In the past, researchers have employed this perspective to explain the spread of bureaucratic personnel structures, internal grievance procedures, equal employment practices, financial accounting standards, and even the multidivisional organization form itself (see, respectively, Dobbin et al. 1993; Edelman 1990, 1992; Mezas 1990; Fligstein 1990).

Contract documents offer a natural addition to this list. Much contractual language seems ungainly or even counterproductive when judged by technical standards of clarity, economy, necessity, and effectiveness: Representations and warranties restate facts that the parties already know (or already know to be false); covenants “govern” remote eventualities that the parties tacitly acknowledge would justify renegotiation; buyers’ and sellers’ boilerplate clauses disagree in their particulars; liability waivers and liquidated damage provisions appear even where they are almost certainly unenforceable. Neo-institutionalists would argue that these technical irrationalities persist because such elements of contractual documentation have passed from being simple technical blueprints to being symbolic markers of seriousness, competence, attentiveness to detail, and other core properties of a legitimate exchange partner. Once such markers have become institutionalized, organizations that want to do business on a handshake become as suspect as doctors who want to practice medicine without a lab coat.⁴⁰

⁴⁰ Among other things, this extrapolation helps to explain the otherwise paradoxical finding that elaborate contract rituals frequently persist even in the presence of essentially noncontractual business relations (cf. Macaulay 1963; Suchman & Cahill 1996). To a neo-institutional sociologist, this observation merely represents a special case of the familiar proposition that in highly institutionalized environments, legitimating symbolic formalities often become “decoupled” from pragmatic technical routines (Meyer & Rowan 1977). The

Conformity to prevailing rational myths is not the only aspect of legitimation that has attracted the attention of neo-institutional theorists. Alongside the myriad studies of “isomorphism” within relatively stable regimes, recent institutionalist writings have increasingly focused on how *new* legitimating logics emerge and take hold (see, e.g., DiMaggio 1991; Friedland & Alford 1991; Morrill forthcoming). When established regimes experience unexpected anomalies, revisionist movements may coalesce around culturally compelling explanations and solutions, often without careful consideration of either technical efficacy or political expedience. Shepherded by various institutional entrepreneurs, these movements gradually forge new social templates through a process of “institutional structuration” (DiMaggio & Powell 1983; cf. Giddens 1984): As movement activity disseminates favored models across the landscape, the associated behavioral scripts become increasingly routinized, increasingly taken-for-granted, and increasingly coordinated with other elements of accepted practice until, eventually, the rationality of the new regime becomes a self-fulfilling prophecy. The new regime “works” not necessarily because it is fundamentally superior, but because the structuration process has reorganized the social environment to accord with the regime’s own distinctive institutional logic. In recent years, researchers have tracked such institutional dynamics over a wide range of organizational settings: Histories of civil-service reform, museum curatorship, business philanthropy, political protest, and hospital quality-control all evince substantial elements of myth-making and ceremonial conformity—and only limited traces of dispassionate technical evaluation (see, respectively, Tolbert & Zucker 1983; DiMaggio 1991; Galaskiewicz 1991; Soule 1997; Westphal, Gulati, & Shortell 1997).

Given this, it seems likely that contract regimes, too, will exhibit such macrosymbolic structuration dynamics. Research on Silicon Valley venture-capital contracts provides early evidence in support of this claim (Suchman 1994, 1995a). Beyond the macrotechnical processes described above, the region’s characteristic contractual forms appear to have originated, in large part, from the sense-making and proselytizing efforts of local institutional entrepreneurs. During the early years of the community, indigenous law firms and venture-capital funds, in particular, employed their central network positions to perceive, foster, and exploit hidden commonalities among otherwise isolated start-ups. The financing contracts that emerged from this structuration process embodied a limited number of clearly identifiable archetypes, each reflecting a

documentation that one needs in order to satisfy auditors, regulators, or courts may be very different from the tacit understandings that one needs in order to manage the day-to-day vicissitudes of an actual exchange relationship.

distinct internally coherent image of the fundamental logic of the venture-capital relationship. Over time, several of these archetypes fell by the wayside (often well before any meaningful performance data had accumulated), leaving the field to a handful of increasingly institutionalized variations on an increasingly taken-for-granted theme: in general terms, the mythology of Silicon Valley came to portray legitimate start-ups and legitimate investors alike as favoring close, nonadversarial, ongoing relationships. Allegiance to this model came to be symbolized by streamlined investment contracts that imposed few formal constraints, other than mandatory consultation, partial protection against stock dilution, and an explicit right for early investors to participate in future financing rounds.

Overall, such neo-institutional accounts of legitimation and structuration provide a system-level counterpart to microsymbolic accounts of contracts as emblems of competence and identity. Individual actors may, indeed, use contractual practices to signal standing within a particular community; however, rather than arising in isolation, such signals reflect collective preconditions and carry collective consequences. The legitimating power of various contractual models develops not at random, but through a complex process of account formation, entrepreneurship, and evangelism, often coupled with extensive interorganizational coercion, indoctrination, and mimicry (cf. DiMaggio & Powell 1983). And each time an actor decides whether or not to adopt a particular model, that decision affects not only the legitimacy of the deal in question but also the institutionalization of the model itself. Usually, these processes of top-down authorization and bottom-up endorsement (cf. Dornbusch et al. 1975) work in tandem to reconfirm the legitimacy of central community actors and to reinforce the taken-for-grantedness of established contractual forms. But institutions are merely self-repairing, not immutable: Changing worldviews and shifting social boundaries can yield parallel changes in contractual fashion, and new contractual forms can rise and fall on the economic, religious, and political tides (cf. Suchman 1994:266–77; Kahan & Klausner 1997:743–44).

Beyond neo-institutional theory, with its emphasis on homogenization and uniformity, a third macrosymbolic account might consider contracts not as emblems of legitimacy, but as mediums of *communication*. Like neo-institutionalism, this alternative would explore the macro-level preconditions and ramifications of micro-level signaling models. Here, however, the analytic framework would draw more on linguistics than on sociology. Specifically, such a linguistic approach would view the contractual repertoire of any given community as a sort of “gestural grammar” capable of expressing a wide array of particular messages. Although the precise content of those messages might vary from

transaction to transaction, their underlying morphology, etymology, semantics, and syntax would take shape primarily at the community level, and researchers could thus study the contract regime much as one would study any other language system. In particular, scholarship in this vein might examine how various contract provisions acquire accepted meanings within particular vocabularies and how social actors learn to use those provisions to convey particular messages about identity, capacity, character, and intention. In short, to extend the Meadian analogy from the micro to the macro level, sociolegal research could profitably explore the collective processes that construct a contract regime's "generalized other" and that thereby allow individual actors to tailor specific contract artifacts to serve specific expressive tasks (cf. Mead 1962).

Although the details of these linguistic processes lie beyond the scope of the present discussion, the study of contracts as communicative gestures holds the potential to integrate substantial elements of the ideology and legitimacy perspectives outlined above: For the most part, studies of communication and studies of ideology rely on quite similar readings of contracts as symbols; the primary difference between the two is simply that studies of communication highlight the variable deployment of particular symbols in particular circumstances, while studies of ideology highlight the baseline recurrence of general themes across the larger repertory.⁴¹ At the same time, studies of communication and studies of legitimacy rely on quite similar images of contracts as signals, the primary difference here being simply that studies of communication highlight the emergence of a diverse vocabulary of forms to signal relatively particularistic messages, while studies of legitimacy highlight the emergence of a single dominant form to signal, simply, "we are legitimate." Thus, much of what ideology theorists might say about contractual themes, and much of what legitimacy theorists might say about contractual displays, should apply, *mutatis mutandis*, to contractual grammars, as well. Both the evocation of ideological beliefs and the display of legitimating emblems are, after all, communicative acts.⁴²

⁴¹ Communication and ideology theories also differ somewhat in their conceptions of audiences and influence processes, with communication theories tending to emphasize the conscious reception of contractual symbolism by specific transacting parties, whereas ideology theories tend to emphasize the subconscious absorption of contractual symbolism by society at large.

⁴² A cautionary note may be in order here. Despite its promise, the symbolic approach is no less challenged than the technical approach by the question of which actors, precisely, are the motivating force behind the dynamics of contract regimes. Patterns of change and stability, convergence and divergence, growth and contraction are all likely to look much different if contract regimes convey ideology, legitimacy, and communication among *lawyers* than if they convey these same symbolic elements among *clients*. Work on the relationship between professional legal culture and popular legal culture (e.g., Sarat & Felstiner 1995; Halliday 1998) is still in its infancy, but its implications for artifactualist studies of contract regimes may ultimately prove to be enormous.

Taken together, then, these three macrosymbolic perspectives compose a relative coherent triad. The generic features of contracts evoke ideological themes; the features that vary between social groups express legitimacy claims; and the features that vary within social groups carry transaction-specific communications. Although the relative importance of each type of symbolism may differ from situation to situation, the legs of this triad ultimately brace against one another. Contracts confer legitimacy best when they communicate messages that resonate with central ideological themes; at the same time, contracts convey communication best when they draw on a collection of legitimate, ideologically resonant gestures; and finally, contracts perpetuate ideology best when they insinuate thematic resonances into apparently mundane legitimacy communications. Moreover, despite their different emphases and divergent intellectual roots, these three macrosymbolic accounts share a basic (albeit often unexpressed) assumption that contract regimes emerge through a sort of “cultural path dependence.” Contract provisions have little *inherent* meaning, but as more and more actors use particular provisions to convey particular messages, it becomes harder and harder to convey those messages in any other way—or to use those provisions to convey anything else. From a macrosymbolic perspective, the ability to engage in meaningful discourse represents the ultimate “increasing return.”

Mixed Accounts of Contract Regimes

Finally, one could also develop a number of mixed technical/symbolic accounts at the macro level. In some cases, constructing such accounts would require nothing more than reclaiming nuances that, for the sake of taxonomic clarity, the preceding exposition has suppressed. Much of the material culture literature, for example, attends to the symbolic properties of apparently “technical” artifacts, such as bicycles, telephones, and refrigerators (see Gorenstein 1996). And, conversely, much of the “production of culture” literature attends to the technical origins of apparently “symbolic” artifacts, such as paintings, sculptures, and novels (see Calhoun 1989). In other writings, the intermingling of technical and symbolic processes is even more thorough: Strang and Soule (1998:277), for example, argue that diffusion is as much a cultural process as a technological one: “Practices do not flow: Theorized models and careful framings do. ... Not all practices can be theorized and framed, and none come out of the process unmodified.” Meanwhile, in counterpoint, McLuhan argues that “the medium is the message” (1997; see also Goody & Watt 1986): technology often shapes culture as much as culture shapes technology. Indeed, as applied to contracts, even the basic conceptual distinction between the technical and the symbolic can

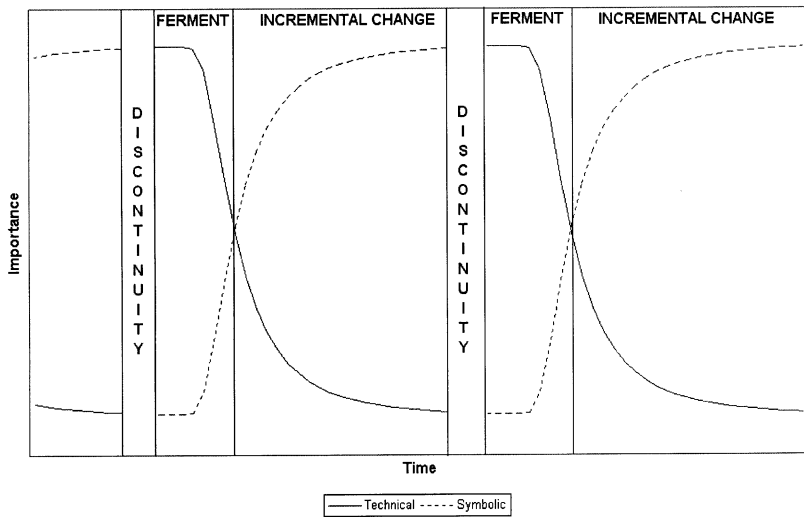
seem somewhat artificial. One could reasonably wonder why a contract should be called a technical device when it evokes a fear of legal sanction, but a symbolic emblem when it evokes a sense of communal solidarity.⁴³ Thus, examined closely, the technical/symbolic dichotomy appears to be as much an assertion about the metatheoretical priorities of particular scholars as a description of the underlying character of particular artifacts (cf. Hill 2001a).

The undeniable appeal of typology-breaking should not, however, blind researchers to the possibility of other, more pragmatic syntheses. Even in the relatively dichotomous terms of the preceding discussion, real-world contract regimes may possess both technical and symbolic elements, without either set of elements fully subsuming the other. Several such mixed accounts seem possible. However, one particularly appealing strategy would be to integrate technical and symbolic investigations along temporal lines, adapting the imagery of the technology cycle model (see above), to posit that technical and symbolic factors vary in primacy according to a regime's position in the cycle from incrementalism to ferment and back. In brief, this model would decompose the technical-symbolic balance into four phases, as depicted in Figure 1.

1. *Period of incremental change.* During these placid intervals, transactions tend to be relatively routine, and the importance of contract documents as technical governance mechanisms tends to be relatively minor. Exchange relations follow a limited number of widely recognized templates, and once the parties have determined what general type of relationship they want, their taken-for-granted understanding of the basic script renders contractual fine print both unnecessary and irrelevant. Consequently, actors are free to use contract artifacts for primarily symbolic purposes—to demonstrate legitimacy and to signal a preference for one standardized script over another.
2. *Technological discontinuity.* Although periods of incremental change can continue indefinitely, occasionally the contract regime will undergo a technological discontinuity, which disrupts and displaces previous practices. Discontinuities may arise from linguistic innovations in contract documents themselves, or (more likely) from behavioral innovations in exchange relations and/or doctrinal innovations in contract law. Regardless of source, however, such disjunctions tend to problematize once-familiar symbols and to refocus attention on the actual technical implications of particular contractual terms.

⁴³ One might particularly wonder about this in the light of the empirical evidence that, for many transactions, legal enforcement is a far more mythical bogeyman than community ostracism.

Figure 1. Technical and Symbolic Factors in Contributions.



3. *Period of ferment.* With the contract regime temporarily up for grabs, some drafters become more experimental, seeking the best verbal formulae to embody new governance technologies; others become more skeptical, cautiously parsing formerly routine language in light of the changed terrain. Both postures undercut the symbolic value of traditional contract forms. As new governance strategies emerge and idiosyncratic provisions proliferate, established ideograms may no longer carry their previous meanings. And, as the assumption of a shared grammar breaks down, transacting parties may find themselves forced to rely on explicit contractual stipulations rather than taken-for-granted relational scripts. As a result, symbolic meanings become dissociated from familiar signifiers, and the technical features of contracting come to the fore. Transactions become more consciously and intensively engineered, and different models (and their sponsors) compete on the basis of economic performance, numerical prevalence, and political/judicial endorsement.
4. *Dominant design.* Eventually, a limited number of dominant designs coalesce from the ferment and a new period of incremental change ensues. With the engineering challenge resolved, the also-ran models rapidly fall out of use, and technical concerns recede into the background again. As the regime stabilizes, various features of the ascendant designs begin to acquire symbolic overtones, with some provisions becoming homogenized as emblems of legitimacy, while others become diversified as vocabularies of gesture. Gradually, a new contractual grammar settles into place and symbolic considerations once again prevail—at least until the next cyclic discontinuity.

At present, this “contract cycle” model is only an hypothesis, intuitively plausible but untested against systematic empirical evidence. As macro-level artifactualist scholarship matures, researchers may also seek to integrate technical and symbolic accounts through cross-national or cross-sectoral comparisons, identifying particular aspects of culture, social structure, and political economy that conduce to particular balances of technical and symbolic elements (cf. Casper 2001). Across settings, as across time, the general factors affecting this balance are apt to be similar. Contracts are most likely to serve technical purposes (1) when transactions are familiar enough to allow meaningful assessments of contractual efficacy, but not yet familiar enough to be taken for granted, (2) when courts and other authoritative third parties parse contractual language to adjudicate disputes, rather than relying on extra-contractual substantive norms, (3) when contract enforcement is quick, inexpensive, and effective, and (4) when transacting parties agree more closely on the scripts for interpreting legal documents than on the scripts for governing extra-legal exchange relations. When, on the other hand, legal interpretation is alien, enforcement is ungainly, arbiters attend to social understandings as much as to written commitments, and transactions are either mysterious or routine, the symbolic elements of contracts are likely to predominate. As the contract cycle model suggests, the factors driving the technical-symbolic balance are highly sensitive to the pace of doctrinal, relational, and documentary change. But as comparativists would note, these factors are equally sensitive to such aspects of social context as demographic heterogeneity, market segmentation, state capacity, and the coherence and autonomy of the legal profession.⁴⁴ Whether across the span of a contract cycle or across the boundaries of a social system, the mix of utility and iconography in various contract regimes clearly merits sustained artifactualist attention.

IV. Conclusion

Taken as a whole, the artifactualist agenda argues that contract scholars can reap substantial rewards by augmenting interpretations of legal doctrine and observations of exchange relations with examinations of contract documents as social artifacts in their own

⁴⁴ Comparisons of industrial contracting in the United States and Germany (e.g., Casper 2001) suggest not only that these contextual factors may affect the mix of technical and symbolic dynamics in the contract regime but also that they may affect the relative importance of legal doctrine, exchange relations, and contract artifacts. Liberal polities in the Anglo-American mold privilege documentary artifacts by treating doctrine as merely a set of default rules, easily superceded by contractual agreement (see note 8). Corporatist polities in the Teutonic mold strike a different balance, treating contracts as the default rules, easily overridden by legal doctrine (Casper 2001:389–92).

right. Like many artifacts, contracts possess both technical uses and symbolic meanings, and they reflect both the exigencies of specific implementations and the dynamics of larger regimes. None of this, of course, happens in isolation from either contract-law-on-the-books or exchange-relations-in-action; however, by adopting the metaphor of contract-as-artifact, sociolegal researchers gain access to an entire conceptual tool kit that the dominant traditions have so far largely overlooked. The preceding pages have lifted the lid on that tool kit, but they have lifted it no more than an inch. At this point, the tools inside look sturdy and versatile, but until we have removed them and set them to work, we can foresee no more than the vaguest outlines of what they will ultimately allow us to build. With so much new technology awaiting, however, a period of ferment in the study of contract may be very near at hand.

References

- Abrahamson, Eric, & Lori Rosenkopf (1993) "Institutional and Competitive Bandwagons: Using Mathematical Models as a Tool to Explain Innovation Diffusion," 18(3) *Academy of Management Rev.* 487–517.
- (1997) "Social Network Effects on the Extent of Innovation Diffusion: A Computer Simulation," 8 *Organization Science* 289–309.
- Akrich, M. (1992) "The De-Scriptio[n] of Technical Objects," in W. Bijker & J. Law, eds. *Shaping Technology/Building Society*, pp. 205–24. Cambridge, MA: MIT Press.
- Anderson, Philip, & Michael L. Tushman (1990) "Technological Discontinuities and Dominant Designs: A Cyclical Model of Technological Change," 35 *Administrative Science Q.* 604–33.
- Arthur, W. Brian (1989) "Competing Technologies, Increasing Returns, and Lock-in by Historical Events," 99(1) *Economic J.* 116–31.
- (1990) "Positive Feedbacks in the Economy," 262 *Scientific American* 92–99.
- Atiyah, Patrick S. (1979) *The Rise and Fall of Freedom of Contract*. New York: Oxford Univ. Press.
- Ayres, Ian, & Robert Gertner (1989) "Filling Gaps in Incomplete Contracts: An Economic Theory of Default Rules," 99 *Yale Law J.* 87–130.
- Baer, Vicki E., James G. March, & Harald Saetren (1988 [1986]) "Implementation and Ambiguity," in J. March, ed. *Decisions and Organizations*, pp. 150–64. Oxford, UK: Basil Blackwell.
- Bakke, John W. (1996) "Technologies and Interpretations: The Case of the Telephone," 10 *Knowledge and Society* 87–107.
- Baxandall, Michael (1980) *The Limewood Sculptors of Renaissance Germany*. New Haven, CT: Yale Univ. Press.
- Bebchuk, Lucian Ayre (1989) "Limiting Contractual Freedom in Corporate Law: The Desirable Constraints on Charter Amendments," 102 *Harvard Law Rev.* 1820–60.
- Bebchuk, Lucian Ayre, & Mark J. Roe (1999) "A Theory of Path Dependence in Corporate Ownership and Governance," 52 *Stanford Law Rev.* 127–70.
- Becker, Howard S. (1982) *Art Worlds*. Berkeley, CA: Univ. of California Press.
- Ben-Shahar, Omri, & Lisa Bernstein (2000) "The Secrecy Interest in Contract Law," 109 *Yale Law J.* 1885–1925.
- Bernstein, Lisa (1992) "Opting Out of the Legal System: Extralegal Contractual Relations in the Diamond Industry," 21 *J. of Legal Studies* 115–57.

- (1996) "Merchant Law in a Merchant Court: Rethinking the Code's Search for Immanent Business Norms," 144 *Univ. of Penn. Law Rev.* 1765–1821.
- Bloch, Marc L. B. (1961) *Feudal Society* (L. A. Manyon, trans.). Chicago, IL: Univ. of Chicago Press.
- Bourdieu, Pierre (1977) *Outline of a Theory of Practice* (Richard Nice, trans.). New York: Cambridge Univ. Press.
- Burt, Ronald S. (1992) *Structural Holes: The Social Structure of Competition*. Cambridge, MA: Harvard Univ. Press.
- Bygrave, William D., & Jeffrey A. Timmons (1992) *Venture Capital at the Crossroads*. Boston, MA: Harvard Business School Press.
- Calhoun, Craig (1989) "Introduction: Social Issues in the Study of Culture," 11 *Comparative Social Research* 1–29.
- Casper, Steven (2001) "The Legal Framework for Corporate Governance: The Influence of Contract Law on Company Strategies in Germany and the United States," in P. A. Hall & D. Soskice, eds. *Varieties of Capitalism: The Institutional Foundations of Comparative Advantage*, pp. 387–416. Oxford, UK: Oxford Univ. Press.
- Clement, Andrew (1993) "Looking for the Designers: Transforming the 'Invisible' Infrastructure of Computerized Office Work," 7 *AI & Society: Special Issue on Gender, Culture and Technology* 323–44.
- Coffee, John C. Jr. (1988) "Shareholders Versus Managers: The Strain in the Corporate Web," in J. C. Coffee Jr., L. Lowenstein, & S. Rose-Ackerman, eds., *Knights, Raiders, and Targets: The Impact of the Hostile Takeover*, pp. 77–134. New York: Oxford Univ. Press.
- Coleman, James S. (1990) *Foundations of Social Theory*. Cambridge, MA: Harvard Univ. Press.
- Coleman, James S., Elihu Katz, & Herbert Menzel (1966) *Medical Innovation: A Diffusion Study*. Indianapolis, IN: Bobbs-Merrill.
- Dalton, Clare (1985) "An Essay in the Deconstruction of Contract Doctrine," 94 *Yale Law J* 997–1114.
- Damanpour, Fariborz (1991) "Organizational Innovation: A Meta-Analysis of Effects of Determinants and Moderators," 34 *Academy of Management J.* 555–90.
- David, Paul A. (1985) "Clio and the Economics of QWERTY," 75 *American Economic Rev.* 332–37.
- Davis, Gerald F. (1991) "Agents Without Principles? The Spread of the Poison Pill Through the Intercorporate Network," 36 *Administrative Science Q.* 583–613.
- Davis, Gerald F., & Henrich R. Greve (1997) "Corporate Elite Networks and Governance Changes in the 1980s," 103(1) *American J. of Sociology* 1–37.
- DiMaggio, Paul J. (1991) "Constructing an Organizational Field as a Professional Project: U.S. Art Museums, 1920–1940," in W. W. Powell & P. J. DiMaggio, eds., *The New Institutionalism in Organization Analysis*, pp. 267–92. Chicago, IL: Univ. of Chicago Press.
- DiMaggio, Paul J., & Walter W. Powell (1983) "The Iron Cage Revisited: Institutional Isomorphism and Collective Rationality in Organizational Fields," 48 *American Sociological Rev.* 147–60.
- (1991) "Introduction," in W. W. Powell, & P. J. DiMaggio, eds., *The New Institutionalism in Organizational Analysis*, pp. 1–38. Chicago, IL: Univ. of Chicago Press.
- Dobbin, Frank R., John R. Sutton, John W. Meyer, & W. Richard Scott (1993) "Equal Opportunity Law and the Construction of Internal Labor Markets," 99 *American J. of Sociology* 396–427.
- Dornbusch, Sanford M., & W. Richard Scott, with the assistance of Bruce C. Busching & James D. Laing (1975), *Evaluation and the Exercise of Authority*. San Francisco, CA: Jossey-Bass Publishers.
- Drazin, Robert, & Claudia Bird Schoonhoven (1996) "Community, Population, and Organization Effects on Innovation: A Multilevel Perspective," 39 *Academy of Management J.* 1065–83.

- Dreyfuss, Rochelle C., & Roberta R. Kwall (1996) *Intellectual Property: Trademark, Copyright and Patent Law*. Westbury, NY: Foundation Press.
- Edelman, Lauren B. (1990) "Legal Environments and Organizational Governance: The Expansion of Due Process in the American Workplace," 95 *American J. of Sociology* 1401–40.
- (1992) "Legal Ambiguity and Symbolic Structures: Organizational Mediation of Law," 97 *American J. of Sociology* 1531–76.
- Eggleston, Karen, Eric A. Posner, & Richard Zeckhauser (2000) "The Design and Interpretation of Contracts: Why Complexity Matters," 95 *Northwestern Univ. Law Rev.* 91–132.
- Ellickson, Robert C. (1991) *Order Without Law: How Neighbors Settle Disputes*. Cambridge, MA: Harvard Univ. Press.
- Esser, John P. (1996) "Institutionalizing Industry: The Changing Forms of Contract," 21(3) *Law and Social Inquiry* 593–629.
- Ewick, Patricia, & Susan S. Silbey (1998) *The Common Place of Law*. Chicago, IL: Univ. of Chicago Press.
- Farnsworth, E. Allan (1982) *Contracts*. Boston, MA: Little Brown & Co.
- Farrell, Joseph, & Garth Saloner (1985) "Standardization, Compatibility, and Innovation," 16 *Rand J.* 70–83.
- (1986) "Installed Base and Compatibility: Innovation, Product Preannouncements, and Predation," 76 *American Economic Rev.* 940–55.
- Feinman, Jay M. (1983) "Critical Approaches to Contract Law," 30 *UCLA Law Rev.* 829–60.
- (1990) "The Significance of Contract Theory," 1990 *Univ. of Cincinnati Law Rev.* 1283–1318.
- Fligstein, Neil (1990) *The Transformation of Corporate Control*. Cambridge, MA: Harvard Univ. Press.
- Flood, John (1991) "Doing Business: The Management of Uncertainty in Lawyers' Work," 25(1) *Law & Society Rev.* 41–71.
- Florida, Richard L., & Martin Kenney (1988) "Venture Capital, High Technology and Regional Development," 22(1) *Regional Studies* 33–48.
- Friedland, Roger, & Robert R. Alford (1991) "Bringing Society Back In: Symbols, Practices, and Institutional Contradictions," in Powell & DiMaggio, eds., *The New Institutionalism in Organizational Analysis*, pp. 204–31. Chicago, IL: Univ. of Chicago Press.
- Gabel, Peter, & Jay Feinman (1998) "Contract Law as Ideology," in D. Kairys, ed., *The Politics of Law: A Progressive Critique*, 3rd ed., pp. 497–510. New York: Basic Books.
- Gagliardi, Pasquale (1990) "Artifacts as Pathways and Remains of Organizational Life," in P. Gagliardi, ed., *Symbols and Artifacts: Views of the Corporate Landscape*, pp. 3–38. New York: Walter de Gruyter.
- Galanter, Marc (1974) "Why the 'Haves' Come Out Ahead: Speculations on the Limits of Legal Change," 9 *Law & Society Rev.* 95–160.
- Galanter, Marc, & Thomas Palay (1991) *Tournament of Lawyers: The Transformation of the Big Law Firm*. Chicago, IL: Univ. of Chicago Press.
- Galaskiewicz, Joseph (1991) "Making Corporate Actors Accountable: Institution-Building in Minneapolis-St. Paul," in W. W. Powell, & P. J. DiMaggio, eds., *The New Institutionalism in Organization Analysis*, pp. 293–310. Chicago, IL: Univ. of Chicago Press.
- Gartman, David (1986) "Reification of Consumer Products: A General History Illustrated by the Case of the American Automobile," 4 *Sociological Theory* 167–85.
- Geertz, Clifford (1973) *The Interpretation of Cultures*. New York: Basic Books.
- Giddens, Anthony (1984) *The Constitution of Society: Outline of the Theory of Structuration*. Berkeley, CA: Univ. of California Press.
- Gilson, Ronald J. (1984) "Value Creation by Business Lawyers: Legal Skills and Asset Pricing," 94 *Yale Law J.* 239–313.

- Gompers, Paul, & Josh Lerner (1999) *The Venture Capital Cycle*. Cambridge, MA: MIT Press.
- Goody, Jack, & Ian Watt (1986) *The Logic of Writing and the Organization of Society*. Cambridge, UK: Cambridge Univ. Press.
- Gordon, Robert W. (1985) "Macaulay, Macneil, and the Discovery of Solidarity and Power in Contract Law," 1985 *Wisconsin Law Rev.* 565–78.
- Gorenstein, Shirley (1996) "Introduction: Material Culture," 10 *Knowledge and Society* 1–18.
- Granovetter, Mark (1985) "Economic Action and Social Structure: The Problem of Embeddedness," 91(3) *American J. of Sociology* 481–510.
- Greely, Henry T. (1989) "Contracts as Commodities: the Influence of Secondary Purchasers on the Form of Contracts," 42 *Vanderbilt Law Rev.* 133–70.
- Gumperz, John J. (1982) *Language and Social Identity*. New York: Cambridge Univ. Press.
- Hagerstrand, Torsten (1967) *Innovation Diffusion as a Spatial Process* (Allan Pred trans.) Chicago, IL: Univ. of Chicago Press.
- Halliday, Terence C. (1998) "Lawyers as Institution Builders: Constructing Markets, States, Civil Society, and Community," in A. Sarat, M. Constable, D. Engel, V. Hans, & S. Lawrence, eds., *Crossing Boundaries: Traditions and Transformations in Law and Society Research*, pp. 242–95. Evanston, IL: Northwestern Univ. Press and the American Bar Foundation.
- Hans, Valerie P., & Nicole Mott (2000) "How Jurors Construct Schemas of Legal Contracts," paper presented at the 2000 annual meeting of the Law and Society Association.
- Hill, Claire A. (2001a) "A Comment on Language and Norms in Complex Business Contracting," 77 *Chicago-Kent Law Rev.* 29–57.
- (2001b) "Why Contracts are Written in 'Legalese,'" 77 *Chicago-Kent Law Rev.* 59–85.
- Hirsch, Paul M. (1972) "Processing Fads and Fashions: An Organization Set Analysis of Cultural Industry Systems," 77(4) *American J. of Sociology* 639–59.
- Hobbes, Thomas (1996 [1651]) *Leviathan*. Oxford: Oxford Univ. Press.
- Hounshell, David A. (1984) *From the American System to Mass Production, 1800–1932: The Development of Manufacturing Technology in the United States*. Baltimore, MD: Johns Hopkins Univ. Press.
- Kahan, Marcel, & Michael Klausner (1996) "Path Dependence in Corporate Contracting: Increasing Returns, Herd Behavior and Cognitive Biases," 74 *Washington Univ. Law Q.* 347–66.
- (1997) "Standardization and Innovation in Corporate Contracting (or 'The Economics of Boilerplate')," 83 *Virginia Law Rev.* 713–70.
- Katz, Avery Wiener (1999) "An Economic Analysis of the Guaranty Contract," 66 *Univ. of Chicago Law Rev.* 47–116.
- Katz, Michael L., & Carl Shapiro (1985) "Network Externalities, Competition, and Compatibility," 75 *American Economic Rev.* 424–40.
- Klausner, Michael (1995) "Corporations, Corporate Law, and Networks of Contracts," 81 *Virginia Law Rev.* 757–852.
- Kubler, George (1962) *The Shape of Time; Remarks on the History of Things*. New Haven, CT: Yale Univ. Press.
- Lambert, Frederick W. (1998) "Path Dependent Inefficiency in the Corporate Contract: The Uncertain Case with Less Certain Implications," 23 *Delaware J. of Corporate Law* 1077–1155.
- Lambert, Richard A., & David F. Larcker (1985) "Golden Parachutes, Executive Decision-Making, and Shareholder Wealth," 7 *J. of Accounting and Economics* 179–203.
- Larson, Magali S. (1994) "Architectural Competitions as Discursive Events," 23 *Theory and Society* 469–504.
- Leff, Arthur A. (1970) "Contract as Thing," 19(2) *American Univ. Law Rev.* 31–157.
- Levitt, Barbara, & James G. March (1988) "Organizational Learning," 14 *Annual Rev. of Sociology* 319–40.

- Liebowitz, Stanley J., & Stephen E. Margolis (1990) "The Fable of the Keys," 22 *J. of Law and Economics* 1–26.
- Lindenberg, Siegwart (1988) "Contractual Relations and Weak Solidarity: The Behavioral Basis of Restraints on Gain-Maximization," 144(1) *J. of Institutional and Theoretical Economics* 39–58.
- Llewellyn, Karl (1939) "Book Review," 52 *Harvard Law Rev.* 700–02.
- Macaulay, Stewart (1963) "Non-Contractual Relations in Business: A Preliminary Study," 28 *American Sociological Rev.* 55–70.
- (1977) "Elegant Models, Empirical Pictures and the Complexities of Contract," 11 *Law & Society Rev.* 507–28.
- (1985) "Law, Private Governance and Continuing Relationships: An Empirical View of Contract," 1985 *Wisconsin Law Rev.* 465–82.
- Macneil, Ian R. (1974) "The Many Futures of Contracts," 47 *Southern California Law Rev.* 691–816.
- (1980) *The New Social Contract: an Inquiry into Modern Contractual Relations*. New Haven, CT: Yale Univ. Press.
- Maine, Henry S. (1970 [1861]) *Ancient Law: Its Connection with the Early History of Society and Its Relation to Modern Ideas*. Gloucester, MA: Peter Smith.
- McLuhan, Marshall (1997 [1964]) *Understanding Media: The Extensions of Man*. Cambridge, MA: MIT Press.
- McLuhan, Marshall, & Eric McLuhan (1988) *Laws of Media: The New Science*. Buffalo, NY: Univ. of Toronto Press.
- Mead, George Herbert (1962 [1934]) *Mind, Self, and Society from the Standpoint of a Social Behaviorist*. Chicago, IL: Univ. of Chicago Press.
- Menzel, Herbert (1960) "Innovation, Integration, and Marginality: A Survey of Physicians," 25 *American Sociological Rev.* 704–13.
- Meyer, John W., & Brian Rowan (1977) "Institutionalized Organizations: Formal Structure as Myth and Ceremony," 83 *American J. of Sociology* 340–63.
- Mezias, Stephen J. (1990) "An Institutional Model of Organizational Practice: Financial Reporting at the Fortune 200," 35(3) *Administrative Science Q.* 431–57.
- Milhaupt, Curtis J. (1998) "Property Rights in Firms," 84 *Virginia Law Rev.* 1145–94.
- Mills, Russell (1996) "Toward a Grammar of Artifacts," 10 *Knowledge and Society* 129–55.
- Morrill, Calvin (forthcoming) "Institutional Change Through Interstitial Emergence: The Growth of Alternative Dispute Resolution in American Law," in W. W. Powell & D. L. Jones, eds., *How Institutions Change*. Chicago, IL: Univ. of Chicago Press.
- Nelson, Robert L. (1988) *Partners with Power: Social Transformation of the Large Law Firm*. Berkeley, CA: Univ. of California Press.
- (1994) "The Futures of American Lawyers: A Demographic Profile of a Changing Profession in a Changing Society," 44 *Case Western Reserve Law Rev.* 345–406.
- Oberdorfer, Carol B. (1998) "Patents: 'Boom' in Business Method Patent Filings Has Followed 'State Street' Ruling, PTO Says," 57 *Trademark & Copyright Daily (BNA)* 115.
- Oregon Law Review* (1995) "Symposium: Business Lawyering and Value Creation for Clients," 74 *Oregon Law Rev.* 1–339.
- Piore, Michael J., & Charles F. Sabel (1984) *The Second Industrial Divide: Possibilities for Prosperity*. New York: Basic Books.
- Powell, Michael J. (1993) "Professional Innovation: Corporate Lawyers and Private Lawmaking," 18(3) *Law and Social Inquiry* 423–52.
- Raider, Holly (1999) "Repeated Exchange and Evidence of Trust in the Substance of Contracts," paper presented at the 1999 annual meeting of the American Sociological Association.
- Rakoff, Todd D. (1983) "Contracts of Adhesion: An Essay in Reconstruction," 96 *Harvard Law Rev.* 1173–1284.
- Reiter, Paul G. (1971) "Copyright, Under Federal Copyright Laws, of Forms, or Form Books," 8 *American Law Reports (ALR) Federal* 869–91.

- Rosenkopf, Lori, & Michael L. Tushman (1994) "The Coevolution of Technology and Organization," in J. Baum & J. Singh, eds., *The Evolutionary Dynamics of Organizations*, pp. 379–402. New York: Oxford Univ. Press.
- Ryan, B., & N. C. Gross (1943) "The Diffusion of Hybrid Seed Corn in Two Iowa Communities," 8 *Rural Sociology* 15–24.
- Sabel, Charles F., & Jonathan Zeitlin, eds. (1997) *World of Possibilities: Flexibility and Mass Production in Western Industrialization*. New York: Cambridge Univ. Press.
- Sarat, Austin D., & William L. F. Felstiner (1995) *Divorce Lawyers and Their Clients: Power and Meaning in the Legal Process*. New York: Oxford Univ. Press.
- Schatzberg, Eric (1999) *Wings of Wood, Wings of Metal: Culture and Technical Choice in American Airplane Materials, 1914–1945*. Princeton, NJ: Princeton Univ. Press.
- Schein, Edgar H. (1984) "Coming to a New Awareness of Organizational Culture," 25(4) *Sloan Management Rev.* 3–16.
- Soule, Sarah A. (1997) "The Student Divestment Movement in the United States and Tactical Diffusion: The Shantytown Protest," 75(3) *Social Forces* 855–82.
- Spangler, Eve, & Peter Lehman (1982) "Lawyering as Work," in C. Derber, ed. *Professionals as Workers*, pp. 63–99. Boston, MA: G.K. Hall.
- Stolle, Dennis P., & A. J. Slain (1997) "Standard Form Contracts and Contract Schemas: The Effects of Exculpatory Clauses on Consumers' Propensity to Sue," 15 *Behavioral Sciences and Law* 83–94.
- Strang, David, & Sarah A. Soule (1998) "Diffusion in Organizations and Social Movements: From Hybrid Corn to Poison Pills," 24 *Annual Rev. of Sociology* 265–90.
- Suchman, Lucy A. (1999) "Working Relations of Technology Production and Use," in *The Social Shaping of Technology*, 2nd ed., pp. 258–65. Buckingham, UK: Open Univ. Press.
- Suchman, Mark C. (1989) "Invention and Ritual: Notes on the Interrelation of Magic and Intellectual Property in Pre-literate Societies," 89 *Columbia Law Rev.* 1264–94.
- (1993) *On the Role of Law Firms in the Structuration of Silicon Valley*, Dispute Processing Research Program Working Paper, DPRP 11-7. University of Wisconsin Institute for Legal Studies.
- (1994) "On Advice of Counsel: Law Firms and Venture Capital Funds as Information Intermediaries in the Structuration of Silicon Valley," unpublished Ph.D. dissertation, Department of Sociology, Stanford University.
- (1995a) "The Contracting Universe: Law Firms, Venture Capital Funds and the Institutionalization of New-Company Financing in Silicon Valley," paper presented at the 1995 annual meeting of the American Sociological Association.
- (1995b) "Localism and Globalism in Institutional Analysis: The Emergence of Contractual Norms in Venture Finance," in W. R. Scott, & S. Christensen, eds. *The Institutional Construction of Organizations*, pp. 39–63. Thousand Oaks, CA: Sage.
- (1995c) "Managing Legitimacy: Strategic and Institutional Approaches," 20(3) *Academy of Management Rev.* 571–610.
- Suchman, Mark C., & Mia L. Cahill (1996) "The Hired Gun as a Facilitator: Lawyers and the Suppression of Business Disputes in Silicon Valley," 21(3) *Law & Social Inquiry* 679–712.
- Suchman, Mark C., & Lauren B. Edelman (1996) "Legal Rational Myths: The New Institutionalism and the Law and Society Tradition," 21(4) *Law & Social Inquiry* 903–41.
- Thomas, John R. (1999) "The Post-industrial Patent System," 10 *Fordham Intellectual Property, Media and Entertainment Law J.* 3–59.
- Tolbert, Pamela S., & Lynne G. Zucker (1983) "Institutional Sources of Change in the Formal Structure of Organizations: The Diffusion of Civil Service Reform, 1888–1935," 30 *Administrative Science Q.* 22–39.
- Turner, Barry A. (1990) "Failed Artifacts," in P. Gagliardi, ed., *Symbols and Artifacts: Views of the Corporate Landscape*, pp. 365–84. New York: Walter de Gruyter.

- Tushman, Michael L., & Philip Anderson (1986) "Technological Discontinuities and Organizational Environments," 31 *Administrative Science Q.* 439–65.
- Uzzi, Brian (1996) "The Sources and Consequences of Embeddedness for the Economic Performance of Organizations: The Network Effect," 61(4) *American Sociological Rev.* 674–98.
- Webster's Revised Unabridged Dictionary* (1998). Plainfield, NJ: MICRA, Inc.
- Weick, Karl E. (1979) *The Social Psychology of Organizing*, 2nd ed. Reading, MA: Addison-Wesley.
- Weise, Richard H. (1993) *Representing the Corporate Client: Designs for Quality*. Englewood Cliffs, NJ: Prentice Hall Law & Business.
- Westphal, James D., Ranjay Gulati, & Stephen M. Shortell (1997) "Customization or Conformity? An Institutional and Network Perspective on the Content and Consequences of TQM Adoption," 42 *Administrative Science Q.* 366–94.
- Whitford, William C. (1985) "Ian Macneil's Contribution to Contracts Scholarship," 1985 *Wisconsin Law Rev.* 545–60.
- Wieand, Jeffrey (1980) "Defining Art and Artifacts," 38 *Philosophical Studies* 385–89.
- Williamson, Oliver E. (1981) "The Economics of Organization: The Transaction Cost Approach," 87(3) *American J. of Sociology* 548–77.
- (1985) *The Economic Institutions of Capitalism*. New York: Free Press.

Cases Cited

- Apple Computer, Inc. v. Franklin Computer Corp.* 714 F.2d 1240 (C.A. Pa. 1983).
- Continental Casualty Co. v. Beardsley.* 253 F.2d 702 (C.A. 2 1958).
- Crume v. Pacific Mutual Life Insurance Co.* 140 F.2d 182 (C.A. 7 1944).
- Donald v. Uarco Business Forms.* 478 F.2d 764 (C.A. 8 1973).
- Miner v. Employers Mutual Liability Insurance Co.* 229 F.2d 35 (C.A. D.C. 1956).
- Richmond Homes Management, Inc. v. Raintree, Inc.* 862 F. Supp. 1517 (W.D. Va. 1994).
- Texaco, Inc. v. Pennzoil Co.* 729 S.W.2d 768 (Tex. App.—Hous. [1st Dist.] 1987).

Statute Cited

- Uniform Commercial Code. §2-207.