

STRATEGIC SPILLOVERS

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Abstract

The traditional problem with externalities is well known: self-interested individuals and profit-maximizing firms often generate harm as an unintended byproduct of their use of property. I examine situations in which individuals and firms *purposely* seek to generate harm, in order to extract payments in exchange for desisting. Situations involving such “strategic spillovers” have received relatively little systematic attention, but the underlying problem is a perennial one. From the “livery stable scam” in Chicago during the nineteenth century to “pollution entrepreneurs” in China in the twenty-first century, various parties have an incentive to engage in externality-generating activities they otherwise would not have undertaken, or increase the level of harm given that they are engaging in such activities, to profit through subsequent bargaining or subsidies. I investigate the costs of strategic spillovers, the circumstances in which threats to engage in these spillovers are credible, and solutions for eliminating, or at least mitigating, this type of opportunism through externalities.

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INTRODUCTION

Just over fifty years ago, Ronald Coase, writing in the *Journal of Law and Economics*, published *The Problem of Social Cost*.¹ Coase's article revolutionized legal scholarship,² profoundly influenced economic thinking,³ and was responsible, in no small part, for launching the field of law and economics.⁴ In his seminal article, Coase focused on social costs, that is, the harmful effects that individuals and firms may impose on others through the use and enjoyment of their property rights. Since then, countless articles, essays, and books have been written addressing these harmful effects, so-called "negative externalities", and proposing a number of mechanisms for resolving externalities in a variety of contexts.⁵

¹ Ronald H. Coase, *The Problem of Social Cost*, 3 J. L. & ECON. 1 (1960).

² See Fred R. Shapiro, *The Most-Cited Law Review Articles Revisited*, 71 CHI.-KENT L. REV. 751 (1996) (Table 1) (ranking *The Problem of Social Cost* as the most-cited law review article in the Social Sciences Citation Index from 1956 through May 1995, with nearly double the citations of its nearest competitor).

³ In 1991 Coase received the Nobel Prize in Economics "for his discovery and clarification of the significance of transaction costs and property rights for the institutional structure and functioning of the economy". Nobel Foundation, "The Sveriges Riksbank Prize in Economic Sciences in Memory of Alfred Nobel 1991", available at http://nobelprize.org/nobel_prizes/economics/laureates/1991/.

⁴ See Charles K. Rowley, *An Intellectual History of Law and Economics: 1739-2003*, in THE ORIGINS OF LAW AND ECONOMICS: ESSAYS BY THE FOUNDING FATHERS 15 (Francesco Parisi & Charles K. Rowley, eds., 2005) (noting that with this article Coase launched the Law and Economics research program); Francesco Parisi, *Coase Theorem and Transaction Cost Economics in the Law*, in THE ELGAR COMPANION TO LAW AND ECONOMICS 114 (Jürgen G. Backhuas, ed., 2d edition 2005) ("Coase's article, discussing widely cherished themes in the legal and economic traditions, constitutes, according to many commentators, the first example of an economic analysis of law in North American literature.")

⁵ Economists define the term "externality" in various ways. Compare R.H. COASE, THE FIRM, THE MARKET, AND THE LAW 24 (1988) (defining externality as "the effect of one person's decision on someone who is not a party to that decision"), with Harold Demsetz, *Toward a Theory of Property Rights*, 57 AM. ECON. REV. 347, 348 (1967) (defining externality as a situation in which a party does not have an incentive to internalize a harmful or beneficial effect). Pigou provided much of the seminal work on externalities in the first half of the twentieth century, see A.C. PIGOU, THE ECONOMICS OF WELFARE 172-203 (4th ed. 1932); A.C. PIGOU, WEALTH AND WELFARE 148-171 (1912), although, according to Coase, the term itself "appears to have been coined by [Paul] Samuelson in the 1950s," Coase, *supra*, at 23. For an historical overview of the concept, see generally ANDREAS A. PAPANDREOU, EXTERNALITY AND INSTITUTIONS 13-68 (1994) ("There is one persistent problem reiterated throughout the history of the notion of externality, and that is the sense that no good characterization of externality exists."). For a recent analysis and synthesis of the economic approach to external effects, see STEVEN SHAVELL,

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The classic problem with negative externalities is thus well known. For example, in deciding whether to operate a factory, a firm will calculate its own costs but may disregard certain social costs like external health risks arising from elevated concentrations of particulate matter. Similarly, in deciding whether to build a subdivision, a developer will consider its own costs but may ignore certain harms to others such as increased congestion on nearby streets or additional runoff on adjacent parcels. The primary reason these harms are socially problematic is straightforward: a party may have an incentive to engage in an activity because the activity's private benefits exceed its private costs even though, as a result of the externality, the activity is undesirable as its social costs exceed its social benefits.

But activities that entail negative externalities can be problematic for another reason as well: namely, individuals and firms may *purposely* seek to generate harm in their use of property, to extract payments from victims in exchange for desisting. Indeed, an individual or firm may engage in an activity even though the activity's private costs exceed its private benefits. That is, despite the fact that, in the absence of the externality, a party would not have had any reason to undertake an activity, the party may do so in an attempt to profit by imposing social costs on others. Thus, externalities, properly understood, are not only an unintended byproduct of otherwise self-serving activities; externalities also can be employed opportunistically as a means of extortion, the problem of "strategic spillovers".⁶

FOUNDATIONS OF ECONOMIC ANALYSIS OF LAW 77-109 (2004). In this Article, I use the terms "externality," "spillover," and "external effect" interchangeably, so an activity that entails a spillover or an external effect is an "externality" even if the parties can bargain to resolve the effect or even if the effect depends on the initial definition of property rights.

⁶ As discussed below, *see infra* Part II.A.1, in *The Problem of Social Cost*, Coase himself acknowledges that parties might threaten to impose harm on others to improve their bargaining positions. *See* Coase, *supra* note 1, at 7-8. In the wake of Coase, a handful of economists also noted that firms may have an incentive to generate externalities if they could exact bribes to refrain or desist. *See, e.g.*, Jerome Rothenberg, *The Economics of Congestion and Pollution: An Integrated View*, 60 AM. ECON. REV. 114, 114 (1970); E.J. Mishan, *The Postwar Literature on Externalities: An Interpretative Essay*, 9 J. ECON. LIT. 1, 24 (1971); Donald C. Shoup, Comment, *Theoretical Efficiency in Pollution Control*, 9 W. ECON. J. 310, 310-11 (1971). Two economists, George Daly and J. Fred Giertz also criticized the "Coase-inspired" literature for failing to perceive that "if bargaining is possible there is no a priori reason for ignoring the existence and consequences of externally harmful externalities which fail to yield direct private benefits but can yield profitable side payments." George Daly & J. Fred Giertz, *Externalities, Extortion, and Efficiency*, 65 AM. ECON. REV. 997, 998 (1975). Their article led to a brief exchange in the *American Economic Review* between Daly and Giertz and several other economists. *See* Harold Demsetz, *On Extortion: A Reply*, 68 AM. ECON. REV. 417 (1978); Daniel W. Bromley, *Externalities, Extortion, and Efficiency: Comment*, 68 AM. ECON. REV. 730

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Consider an example from the City of Chicago. In the nineteenth century, a series of disputes arose regarding the location of livery stables. These stables provided horse owners with a place to board their animals, but they also generated a number of unpleasant side effects—noise and light, congestion, and, of course, the smell of manure.⁷ Under Illinois state law, the determination of whether any particular stable constituted a nuisance was made only after the stable was operational.⁸ A proposal to build a stable could therefore jeopardize the property values, as well as the quiet enjoyment, of nearby residents.⁹ Recognizing an opportunity, a number of crafty Chicagoans “developed a regular practice of buying vacant lots in residential subdivisions, threatening to build a stable, and then extorting a steep price from the neighbors to be bought out.”¹⁰ The practice was widespread and became known as the “livery stable scam.”¹¹

This type of opportunism was limited neither to livery stables nor to the Windy City. With San Francisco’s rapid growth in the 1840s and 1850s, many land uses, including “[s]laughterhouses, chandleries, soap and acid factories, charcoal burners, and other petty manufacturers whose trades had offensive side effects,” imposed significant social costs on city residents.¹² Affluent residents sometimes offered to buy neighboring

(1978); George Daly & J. Fred Giertz, *Externalities, Extortion, and Efficiency: Reply*, 68 AM. ECON. REV. 736 (1978). My analysis of strategic spillovers differs in important respects from these early articles that mention or discuss externalities and extortion.

⁷ See Fred P. Bosselman, *The Commodification of “Nature’s Metropolis”*: *The Historical Context of Illinois’ Unique Zoning Standards*, 12 N. ILL. U. L. REV. 527, 569 (1992) (citing *Oehler v. Levy*, 139 Ill. App. 294 (1907)), excerpted in ROBERT C. ELLICKSON & VICKI L. BEEN, *LAND USE CONTROLS: CASES AND MATERIALS* 395 (3d ed. 2005). Livery employees, known as “hostlers”, also had a less than stellar reputation: “hostlers had a reputation for gambling and drinking. Stables were often the sites of illegal cockfights and of neighborhood fistfights.” CLAY MCSHANE AND JOEL A. TARR, *THE HORSE IN THE CITY: LIVING MACHINES IN THE NINETEENTH CENTURY* 119 (2007).

⁸ See Bosselman, *supra* note 7, at 569 (citing *Sheldon v. Weeks*, 51 Ill. App. 314, 315 (1893) (“Courts may and often do restrain the creation of nuisances, but it can not be known in advance that this stable will be a nuisance. . . . If this contemplated stable shall be kept so as to be a nuisance, a court of equity may then interfere.”)).

⁹ See *id.* at 569-70.

¹⁰ *Id.* at 570.

¹¹ *Id.* (citing ANDREW L. KING, *LAW & LAND USE IN CHICAGO* 245-48 (1986)). The harmful effects arising from stables created conflicts in other cities as well. See, e.g., *Reinman v. City of Little Rock*, 237 U.S. 171, 174 (1915) (upholding municipal ordinance prohibiting operation of livery stables in Little Rock, Arkansas and discussing harm created by odors and disease emanating from such stables).

¹² ROGER W. LOTCHIN, *SAN FRANCISCO 1846-1856* (1974), excerpted in ELLICKSON & BEEN, *supra* note 7, at 609 (alterations in ELLICKSON & BEEN).

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parcels to avoid these costs: “When J. Wieland proposed to put a brewery at the corner of Folsom and Second, in an aristocratic area, the ‘indignant’ residents ‘authorized fellow resident Milton S. Latham [a lawyer and politician] . . . to wait upon [Mr. Wieland] and make an offer of purchase for the property.’”¹³ And, as in Chicago, some of these transactions involved extortionate motives; according to one San Francisco newspaper, “a speculator had purchased a lot in a respectable section for the purpose of establishing a house of prostitution on it, knowing full well that the residents would buy him out at an inflated price.”¹⁴

These historical examples—livery stables in Chicago and breweries and bordellos in San Francisco—are merely illustrative of a more widespread problem that continues to this day. The United Nations recently alleged that several Chinese factories are purposely generating excessive amounts of HFC-23, a potent greenhouse gas, to profit from carbon credits. Under the Kyoto Protocol, firms in industrialized nations are permitted to pay factories in China and other developing nations to reduce their emission of greenhouse gases such as HFC-23.¹⁵ The problem is that the value of the credits the factories can obtain by creating and then incinerating HFC-23 (\$300,000 per ton) is considerably higher than the cost of manufacturing and destroying HFC-23 (\$5,000 per ton). Thus, there is a perverse incentive for “pollution entrepreneurs” to manufacture goods in which HFC-23 is a byproduct and then extract a payment by selling credits.¹⁶ In 2010, after reviewing “evidence that manufacturers of HFC-23 are gaming the system for profit by intentionally producing HFC-23 . . . at higher rates and quantities than necessary,” the United Nations halted the issuance of carbon credits for five Chinese projects and launched “a comprehensive investigation to ensure the projects do not result in fake emissions offsets.”¹⁷ Generating excessive pollution to “cash in” on carbon credits exemplifies the problem of strategic spillovers in the twenty-first century.¹⁸

¹³ *Id.*

¹⁴ *Id.* (citing the *Daily Alta*, see http://en.wikipedia.org/wiki/The_Daily_Alta_California).

¹⁵ See Kyoto Protocol to the United Nations Framework Convention on Climate Change, Dec. 10, 1997, 37 I.L.M. 22 (1998).

¹⁶ Shoup, *supra* note 6, at 310-11.

¹⁷ *UN CDM Acts to Halt Flow of Millions of Suspect HFC-23 Carbon Credits*, PR NEWSWIRE (Aug. 20, 2010); *Climate Change/ETS: Member States Agree to Boost Carbon Market Security*, EUROPE ENERGY (Feb. 9, 2011) (“Chinese manufacturers of refrigerant gases earned billions of dollars by agreeing to destroy the HFC-23 emitted by their production processes. According to some NGOs, certain firms are taking advantage of this windfall and producing HFC-23 solely to obtain credits associated with its destruction.”).

¹⁸ STEVEN STOFT, *CARBONOMICS: HOW TO FIX THE CLIMATE AND CHARGE IT TO OPEC* 212 (2008)

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In this Article, I attempt to provide the first comprehensive analysis of “strategic spillovers” by exploring the structure of strategic spillovers, examples of strategic spillovers, the harm of strategic spillovers, solutions for strategic spillovers, and variations of strategic spillovers.

In Part I, I distinguish between conventional externalities and strategic spillovers. For conventional externalities, an individual or firm is usually concerned only with the costs and benefits that it will itself internalize.¹⁹ Thus, under traditional assumptions, a negative externality is of *zero* value to the party generating the externality. By contrast, under my theory, this negative externality has a *positive* value to an individual or firm because the individual or firm may be able to extract a payment in exchange for ceasing its activity. Because of this positive value, the party may have an incentive to consider the externality in deciding whether or not to engage in the activity. I illustrate the distinction between conventional externalities and strategic spillovers with a numerical example involving pollution.

In Part II, I identify a number of legal issues involving strategic spillovers. First, I analyze strategic spillovers relating to property and environmental law, including nuisance and coming to the nuisance, pollution and climate change, spite fences and spite structures, and conservation easements and development. Second, I suggest that strategic spillovers are ubiquitous by discussing various types of strategic spillovers in intellectual property law (cybersquatters and patent trolls), corporate law (greenmailers and shareholder initiatives), legislation and regulation (“milker bills” and rent extraction), and litigation and settlement (negative expected value suits and objector blackmail).

In Part III, I discuss the social costs of strategic spillovers. Parties often bargain to resolve externalities, so threatening to engage in strategic spillovers reduces social welfare as parties will incur transaction costs to prevent external harm without engaging in any productive activity.

¹⁹ The usual assumption is that, in the absence of a corrective tax, corrective subsidy, or other mechanism that causes a party to internalize an externality, neither external benefits nor external costs will affect the party’s incentive to engage in an any action. *See, e.g.*, Brett M. Frischmann & Mark A. Lemley, Essay, *Spillovers*, 107 COLUM. L. REV. 257, 259 (2007) (citing RICHARD CORNES & TODD SANDLER, THE THEORY OF EXTERNALITIES, PUBLIC GOODS, AND CLUB GOODS 55 (1996) (“[T]he only motive that an individual has to provide units of such a good is his or her own private motive of present or future consumption. Enjoyment of those units by others is an incidental by-product.”)); ROBERT S. PINDYCK & DANIEL L. RUBINFELD, MICROECONOMICS 621-22 (5th ed. 2001) (noting that a party “has no incentive to account for the external costs that it imposes” on others).

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Opportunistic parties also may invest time and resources to engage in externality-generating activities, or in the steps antecedent to such activities, if doing so is necessary to establish the credibility of their threats. In addition, even if it is infeasible to negotiate with potential victims *ex ante*, strategic parties may make suboptimal decisions if they anticipate that victims might be willing to make payments *ex post*. And potential victims, knowing parties may engage in strategic spillovers, may have an incentive to undertake wasteful precautions.

In Part IV, I investigate potential solutions for strategic spillovers. To prevent the social harm that strategic spillovers may entail, it is necessary to identify *opportunistic* behavior and devise mechanisms for deterring it. The objective is to determine a party's motivation for engaging in an externality-generating activity by distinguishing between an activity that a party would have undertaken even in the absence of harmful effects (i.e., out of a self-interested motivation) and an activity that the party would not have undertaken in the absence of harmful effects (i.e., based on an opportunistic motivation). However, it is usually difficult to determine whether a party that is engaging in an externality-generating activity is doing so *despite* the harm, or *because of* the harm, arising from the external effects of its activity.

Unfortunately, many of the traditional mechanisms for resolving conventional externalities are ineffective for deterring strategic spillovers. Notably, attempting to resolve strategic spillovers through Coasean bargaining leads to perverse outcomes. Bargaining enables opportunistic parties to extract payments from potential victims, so bargaining is likely to exacerbate, rather than ameliorate, this form of opportunism.²⁰ Similarly, public subsidies, payments by the government to reduce expected social harm, are likely to result in perverse outcomes as well. Such payments provide a financial incentive for parties to create harm, thereby encouraging opportunistic behavior. Regulatory prohibitions are problematic as well. Prohibiting all possibly troublesome instances of an externality-generating activity would eliminate not only strategic spillovers but also certain socially desirable activities that do not involve opportunism.

If bargaining and subsidies allow too many externality-generating activities and prohibitions enable too few externality-generating activities,

²⁰ See Daly & Giertz, *supra* note 6, at 997 ("Critics have noted that the reliance on private bargaining to control the creation of externally harmful activities may well have the adverse effect of encouraging the very phenomena it seeks to control." (citing Mishan, *supra* note 6, at 24, and Rothenberg, *supra* note 6, at 114)).

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two alternatives are liability rules or corrective taxes. These alternatives would force opportunistic parties to pay victims (in the case of liability rules) or the government (in the case of corrective taxes) for the harm or expected harm of their externality-generating activities. If forced to internalize this harm, opportunistic parties would not have an incentive to extract payments, and self-interested parties would engage in externality-generating activities only if the activities were socially desirable. Thus, the existence of strategic spillovers seems to suggest that, all other things being equal, the legal system should rely on liability rules or corrective taxes more often than would be the case if individuals and firms acted to further their self-interest or maximize their bottom line but did not act opportunistically.

A problem with liability rules or corrective taxes is that, to separate strategic spillovers from other externalities, courts or agencies would have to impose liability or levy a tax on *each party* engaging in an activity. For example, in Chicago's residential neighborhoods, the courts would have had to impose liability equal to actual damages on each livery owner or the City would have had to levy a tax equal to expected harm on each livery owner, regardless of whether or not the spillover was strategic. As a result, relying on liability rules or corrective taxes might increase litigation or administrative costs significantly. Also, if liability were to exceed actual damages or a corrective tax were to exceed expected harm, the parties that are liable or subject to the tax may have an incentive, irrespective of whether they were originally engaging in strategic spillovers, to attempt to extract a payment from those who would be overcompensated.²¹

Because the traditional mechanisms for resolving conventional externalities are imperfect, I also explore a number of innovative approaches for targeting strategic spillovers. These approaches include mandatory disclosure of a party's financial records to reveal the private benefits and costs of an externality-generating activity, non-enforcement of contracts between strategic parties and potential victims to reduce the credibility of strategic threats, the use of inalienability rules to deter the strategic acquisition of property or enforcement of entitlements,²² and a reliance on equity and equitable maxims to detect opportunism in situations in which *ex ante* rule-making is infeasible.²³

²¹ See A. Mitchell Polinsky, *Resolving Nuisance Disputes: The Simple Economics of Injunctive and Damage Remedies*, 32 STAN. L. REV. 1075, 1093-95 (1980).

²² See Lee Anne Fennell, *Adjusting Alienability*, 122 HARV. L. REV. 1403 (2009).

²³ See Henry E. Smith, "An Economic Analysis of Law Versus Equity," (Oct. 22, 2010), available at http://www.law.yale.edu/documents/pdf/LEO/HSmith_LawVersusEquity7.pdf.

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Moreover, I suggest that the problem of strategic spillovers might be worse (and could be worse in the future), if not for the existence of several non-legal limitations—transaction costs, reputation effects, and social norms—all of which may reduce the opportunity for opportunism. To the extent that transaction costs diminish, reputation becomes less important, and underlying social norms are less effective, the magnitude of the strategic spillovers problem is likely to increase going forward.

In Part V, I discuss how strategic spillovers may involve *positive*, as well as *negative*, externalities. Certain individuals and firms may purposely withhold (or threaten to withhold) benefits that otherwise would be generated in their use of property, to extract payments in exchange for undertaking an activity. The opportunistic withholding of external benefits may be just as prevalent as the opportunistic imposition of external costs.

I conclude with a summary of the Article's main points.

I. THE STRUCTURE OF STRATEGIC SPILLOVERS

A. Conventional Externalities Versus Strategic Spillovers

In this section, I distinguish between conventional externalities and strategic spillovers. The conventional understanding of externalities is that, self-interested individuals and profit-maximizing firms will use their property for various purposes and, in the course of doing so, these individuals and firms may impose external effects on others. That is, a party may undertake an action that has not only private benefits and costs, which directly affect the party engaging in the activity, but also social effects, which affect the welfare of other parties.²⁴ If these social effects are beneficial, the action entails *positive externalities*; if these social effects are detrimental, the action entails *negative externalities*.

The primary focus of this Article is negative externalities.²⁵ A textbook example is the “exhaust from automobiles [which] is a negative externality because it creates smog that other people have to breathe.”²⁶ Drivers of automobiles will focus on the private benefits and costs of driving but may ignore the harm their driving imposes on others who wish

²⁴ See *supra* note 5.

²⁵ I discuss positive externalities and the opportunistic withholding of social benefits in order to extract a payment in Part V.A.

²⁶ N. GREGORY MANKIW, *ESSENTIALS OF ECONOMICS* 204 (5th ed. 2008).

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to breathe clean air. Another classic example is pollution from a factory.²⁷ In deciding whether to open a factory or increase production, a factory owner will compare her private benefits and costs but may ignore the social costs of pollution on local residents, other countries, or future generations.

An important distinction is that this type of negative externality may be associated with an activity that is *socially undesirable*—the social costs of the activity outweigh its social benefits—or *socially desirable*—the social benefits of the activity outweigh its social costs.

For example, an automobile factory that emits pollution as a byproduct of manufacturing cars may be engaging in an activity that is either undesirable or desirable from a social perspective. Operating the factory is socially undesirable, even if the owner has a private incentive to operate the factory, if the social costs of operating the factory, including the external costs of the pollution, exceed the social benefits of manufacturing the automobiles. Operating the factory is socially desirable, despite the external costs of the pollution, if the social benefits of manufacturing the automobiles exceed the social costs of operating the factory, including the external costs of the pollution.²⁸

The conventional conception of externalities, whether associated with socially undesirable or socially desirable activities, is that externalities arise as the *unintended byproduct* of otherwise self-serving activities.²⁹

²⁷ See Daniel C. Esty, *Toward Optimal Environmental Governance*, 74 N.Y.U. L. REV. 1495, 1497 n.5 (1999) (“The classic text characterizing environmental pollution as an unintentional externality is William J. Baumol & Wallace E. Oates, *Economics, Environmental Policy, and the Quality of Life* 75-79 (1979).”).

²⁸ See Henry N. Butler & Jonathan R. Macey, *Externalities and the Matching Principle: The Case for Reallocating Environmental Authority*, 14 YALE J. ON REG. 23, 30 (1996) (“[T]he economics of pollution control demonstrate that it would be undesirable to prevent all externalities because many externalities are the result of socially desirable economic activity.” (citing James M. Buchanan & Craig Stubblebine, *Externality*, 29 ECONOMICA 371 (1962))).

²⁹ See, e.g., Robert N. Stavins, *Environmental Economics*, in THE NEW PALGRAVE DICTIONARY OF ECONOMICS 1 (Steven N. Durlauf & Lawrence E. Blume, eds., 2d ed. 2008) (defining externality as “an *unintended* consequence of market decisions which affect individuals other than the decision maker”); Louis Kaplow & Steven Shavell, *Property Rules Versus Liability Rules: An Economic Analysis*, 109 HARV. L. REV. 713 716 n.2 (1996) (“By harmful externalities, we mean adverse outcomes that occur as a *byproduct* of an injurer’s activity”); see also Energy Info. Admin., U.S. Dep’t of Energy, Annual Energy Outlook 2006 with Projections to 2030, at v (2006), available at <http://www.eia.doe.gov/oiaf/archive/aeo06/index.html> (defining externalities as “benefits or costs resulting as an *unintended byproduct* of an economic activity that accrue to someone other than the parties involved in the activity”).

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Under this conception, in deciding whether to undertake an externality-generating activity, the party creating the externality has no reason (in the absence of legal liability or some other corrective mechanism) to consider the harm it is imposing on others. Because a party is only concerned with the costs and benefits it will itself internalize, a negative externality, it has been assumed, does not have any value to the party generating the externality.

My contention is that, in certain circumstances, a self-interested individual or profit-maximizing firm may *purposely* seek to generate harm in the use of property, to extract payments from victims in exchange for desisting. In these circumstances, the negative externality has a positive value for the individual or firm engaging in the activity. Thus, under my theory, in deciding whether to undertake an externality-generating activity, an individual or firm may have an incentive to consider not only the costs and benefits it will internalize but also the positive value of the negative externality. The party will engage in the externality-generating activity if the expected benefits of doing so, including any benefits derived from payments by victims, exceed the costs of engaging or threatening to engage in the activity.

Despite this private incentive that certain parties may have to engage in strategic spillovers, strategic spillovers are socially undesirable. The social costs of such spillovers are discussed in more detail below,³⁰ but the basic intuition is that strategic spillovers are problematic because they involve a party engaging (or threatening to engage) in an activity that, but for the possibility of extracting a payment from victims, the party otherwise would not have undertaken. Put another way, strategic spillovers involve activities that not only entail external harm but also are contrary to an individual's self-interest or a firm's pursuit of profits (unless these concepts are defined broadly to include extortionate payments).³¹

In addition, strategic spillovers are socially undesirable irrespective of whether the strategic party does or does not engage in the externality-generating activity. If the party does engage in the externality-generating

³⁰ See *infra* Part III.

³¹ Cf. George M. Cohen, *The Negligence-Opportunism Tradeoff in Contract Law*, 20 HOFSTRA L. REV. 941, 973 (1992) ("Opportunistic behavior produces no social benefits; instead of adding to the net wealth of society it merely redistributes wealth from one party to another. Because opportunistic behavior, like criminal activity, violates social norms, any private gains to the opportunistic party must be excluded from the social calculus.").

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activity,³² the activity is socially undesirable. Here, the loss in social welfare includes both the external harm imposed on others and the private loss to the individual or firm (by definition, private costs exceed private benefits), as well as any transaction costs related to bargaining to extract payments. But, even if the strategic party does not engage in a externality-generating activity (suppose the party agrees not to engage in the activity in exchange for a payment), threatening to engage in the activity and then attempting to extract a payment is itself socially undesirable. Here, the loss in social welfare includes any transaction costs associated with bargaining to extract payments, investments the strategic party undertakes to establish the credibility of the threat, and precautions that potential victims might undertake to avoid strategic spillovers.³³

Thus far, I have identified three situations involving external effects: (i) conventional externalities associated with socially undesirable activities; (ii) conventional externalities associated with socially desirable activities; and (iii) strategic spillovers, which are socially undesirable regardless of whether the opportunistic party undertakes or threatens to undertake the activity. The external harm that arises in the first two categories is the unintended byproduct of individuals and firms using their property for what are otherwise self-serving activities. By contrast, the external harm that arises in the third category, strategic spillovers, is often imposed purposely, with the objective of extracting a payment in exchange for desisting.

But how are we to distinguish between behavior that is “self-interested” and behavior that is “opportunistic”? And what additional problems do strategic spillovers raise for the resolution of externalities?

As jurists and economists have recognized, “opportunistic” behavior is notoriously difficult to define.³⁴ Oliver Williamson famously defined opportunism as “self-interest seeking with guile.”³⁵ Within this definition, Williamson includes “calculated efforts to mislead, deceive, obfuscate, and

³² As discussed below, there are a number of reasons a strategic party may undertake, rather than merely threaten to undertake, the externality-generating activity: initiating the activity may be necessary to establish the credibility of the threat; bargaining may fail and the strategic party may initiate the activity because it is concerned about the credibility of future threats; or bargaining may be infeasible *ex ante* but not *ex post* and the party may initiate the activity to extract a payment in exchange for desisting. *See infra* Part III.A-C.

³³ *See infra* Part III.A-D.

³⁴ *See, e.g.*, G. Richard Shell, *Opportunism and Trust in the Negotiation of Commercial Contracts: Toward a New Cause of Action*, 44 VAND. L. REV. 221, 228 (1991) (“The term ‘opportunism’ is not defined precisely in either the legal or economic literature.”).

³⁵ OLIVER E. WILLIAMSON, *THE ECONOMIC INSTITUTIONS OF CAPITALISM* 47 (1985).

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otherwise confuse,” including the incomplete disclosure of information.³⁶ More recently, Henry Smith suggests that opportunism is “behavior that is undesirable but that cannot be cost-effectively captured—defined, detected, and deterred—by explicit ex ante rulemaking.”³⁷ Under this view, opportunistic behavior is “technically legal but is done with a view to securing unintended benefits from the system, and these benefits are usually smaller than the costs they impose on others.”³⁸ *Id.*

The idea underlying strategic spillovers is consistent with both of these definitions. A party engaging in a strategic spillover is seeking to maximize its own self-interest but is doing so in a way that involves “guile”: those bearing the harm would be unwilling to pay if they had perfect information about the opportunistic party’s private costs and benefits.³⁹ By undertaking or threatening to undertake an activity that is otherwise contrary to its self-interest, the strategic party is engaging in “calculated efforts to mislead, deceive, obfuscate, and otherwise confuse.”⁴⁰ In addition, strategic spillovers involve behavior that is socially undesirable but “technically legal”, even though such behavior might not be permissible if it could be cost-effectively targeted by ex ante rulemaking.⁴¹

Strategic spillovers also complicate the resolution of externalities. The principal problem addressed in the existing literature is the difficulty of distinguishing between conventional externalities arising as the unintended byproduct of *socially undesirable* activities and conventional externalities arising as the unintended byproduct of *socially desirable* activities.⁴² Thus, prior scholars have focused, understandably, on various mechanisms—including bargaining, regulation, liability, taxes, and subsidies—for

³⁶ *Id.*; cf. Oliver E. Williamson, *Opportunistic Behavior in Contracts*, in 2 THE NEW PALGRAVE DICTIONARY OF ECONOMICS AND THE LAW 703 (Peter Newman ed., 1998) (“Opportunism is a type of self-interest seeking and may be contrasted both with stewardship (unself-interest seeking) and with simple self-interest seeking (look to your interests but keep all of your promises). Opportunism contemplates self-interest seeking with guile—to include the incomplete or distorted disclosure of information, especially calculated efforts to mislead, distort, disguise, obfuscate or otherwise confuse.”).

³⁷ Smith, *supra* note 23, at *9.

³⁸ *Id.* at *10.

³⁹ WILLIAMSON, *supra* note 35, at 47.

⁴⁰ Williamson, *supra* note 36, at 703.

⁴¹ Smith, *supra* note 23, at *9-10.

⁴² Cf. Buchanan & Stubblebine, *supra* note 28, at 381 (“[T]he observation of external effects, taken alone, cannot provide a basis for judgment concerning the desirability of modification in an existing state of affairs. . . . The internal benefits from carrying out the activity, net of costs, may be greater than the external damage that is imposed on other parties”).

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resolving such externalities.⁴³ Almost invariably the objective of these mechanisms is to force parties to “internalize” their external costs, with the ultimate objective of separating socially desirable from socially undesirable activities.⁴⁴

The problem I analyze, by contrast, is the difficulty of distinguishing between *conventional externalities* that arise as the unintended byproduct of *socially desirable* activities and *strategic spillovers* (which, as noted above, are generated purposely to extract a payment). Identifying strategic spillovers may be possible, especially in situations, like the livery stable scam, in which potential victims can acquire information regarding a party’s motivation. However, strategic spillovers are often difficult to detect because an opportunistic party may be engaging in behavior that is identical to, albeit with a different motivation than, a self-interested party who is undertaking an externality-generating activity that is in fact social desirable. Below, I illustrate this difficulty, and the distinction between conventional externalities and strategic spillovers, with an example involving pollution.⁴⁵

⁴³ See generally SHAVELL, *supra* note 5, at 83-109.

⁴⁴ See, e.g., Jedediah Purdy, *The Politics of Nature: Climate Change, Environmental Law*, and 119 YALE L.J. 1122, 1132 (2010) (“The standard solution to negative externalities . . . is to change the incentives of individual choices by legally internalizing some of the costs of the harms.”); Kyle D. Logue, *Coordinating Sanctions in Tort*, 31 CARDOZO L. REV. 2313, 2315 n.6 (2010) (noting that, “when there is an activity that is known to produce external social costs (but is not known necessarily to be socially undesirable overall), then society may decide to internalize that external cost to the party engaging in the activity and then allow that party to equate marginal benefit and marginal cost”). The idea of forcing parties to internalize the externalities of their activities is well-established in several of the seminal articles dealing with property rights and externalities. See, e.g., Robert C. Ellickson, *Alternatives to Zoning: Covenants, Nuisance Rules, and Fines as Land Use Controls*, 40 U. CHI. L. REV. 681, 684 (1973) (“Welfare economists have urged that harmful externalities be ‘internalized’ to eliminate excessive amounts of nuisance activity. Internalization is said to be accomplished through devices that force a nuisance-maker to bear the trust costs of his activity.”); Demsetz, *supra* note 5, at 348 (“A primary function of property rights is that of guiding incentives to achieve a greater internalization of externalities.”).

⁴⁵ One concern with attempting to define, and to deter, strategic spillovers is that in doing so the legal system may unnecessarily target certain activities that are generally considered to be legitimate. For example, an investor in securities purchases a particular stock, hoping the price will rise, to obtain a payment, even though there may be negative effects on third parties. Similarly, a real estate or oil speculator may have no intention of residing on the land or utilizing the oil in manufacturing, but nevertheless engages in speculation to obtain a payment. The concern is noteworthy but unlikely to be critical. We can consider strategic spillovers as a distinct legal and economic problem because of the difference between *pecuniary* and *non-pecuniary* externalities. Pecuniary externalities entail external effects on third parties through prices (e.g., relative prices or asset prices) rather than actual resource effects. By contrast, non-pecuniary (i.e., “real” or “technological”) externalities

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B. A Numerical Example Illustrating Strategic Spillovers

Suppose an entrepreneur is contemplating whether to open a factory to produce a new mobile phone and internet device, the “j-Phone5”. The entrepreneur expects, if she opens the factory, to receive private benefits (“revenue”) based on j-Phone5 sales. The entrepreneur also expects that producing the j-Phone5 will entail private costs (“cost”). Moreover, as a result of manufacturing the j-Phone5, there will necessarily be, even under the best available technology, external effects that impose a certain level of harm (“external harm”) on the factory’s neighbors. (Assume for the sake of simplicity that there are no external benefits to the neighbors and that none of the neighbors know the entrepreneur’s private benefits and costs.) Here, the social welfare function of manufacturing the j-Phone5 is the private benefit to the entrepreneur minus both the private cost to the entrepreneur and the external harm on neighbors.

Table 1 (below) illustrates three situations in which manufacturing a j-Phone5 involves this type of external harm on neighbors: (1) a situation in which manufacturing is profit-maximizing from the entrepreneur’s perspective but, because of the external harm, manufacturing is socially undesirable; (2) a situation in which manufacturing is profit-maximizing from the entrepreneur’s perspective and, despite the external harm, manufacturing is socially desirable; and (3) a situation involving a strategic spillover in which manufacturing not only is socially undesirable but also is, by itself, not profit-maximizing.

involve external harm that has a direct resource effect on a third party (e.g., a factory’s pollution on neighbors). In traditional cost-benefit analysis, pecuniary externalities are not taken into account, although they may affect the political process. See Randall G. Holcombe and Russell S. Sobel, *Public Policy Toward Pecuniary Externalities*, 29 PUB. FIN. REV. 304, 304 (2001). Thus, my focus in this Article, like Coase’s focus in *The Problem of Social Cost*, is on activities that involve non-pecuniary, as opposed to pecuniary, externalities. See J.J. Laffont, *Externalities*, THE NEW PALGRAVE DICTIONARY OF ECONOMICS (Steven N. Durlauf & Lawrence E. Blume, eds., 2d ed. 2008); cf. Clifford G. Holderness, *The Assignment of Rights, Entry Effects, and the Allocation of Resources*, 18 J. LEGAL STUD. 181, 184 n.9 (1989) (“Consistent with the title of his article, ‘The Problem of Social Cost,’ Coase limits all of his examples and, presumably, his analysis, to physical interferences between individuals.”). Consequently, I do not consider situations involving externalities from market competition, speculative investing, or other changes in asset prices. Rather, the strategic spillovers that I investigate involve actual harm that parties may impose on others.

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TABLE 1:
Three Situations Involving External Effects

	Situation #1 Externality Undesirable Activity	Situation #2 Externality Desirable Activity	Situation #3 Strategic Spillover Undesirable Activity
Private Benefit to Factory Owner	50	50	30
Private Cost to Factory Owner	35	25	35
External Harm on Neighbors	20	20	20
Social Welfare	-5	+5	-25

More specifically, in column 1, the private benefit to the entrepreneur is 50, the private cost to the entrepreneur is 35, and the external harm on neighbors is 20. Thus, the entrepreneur has an incentive to operate the factory because her private benefit (50) is greater than her private cost (35), even though operating the factory results in a decrease in social welfare ($50 - 35 - 20 = -5$). This column represents the conventional problem with externalities: a party might have a private incentive to engage in an activity even though, as the result of the harm arising as the incidental byproduct of its activity, the activity itself is socially undesirable.

For column 1, it is worth noting that, even if the legal system erroneously assigns the initial entitlement and the entrepreneur has an entitlement to engage in the activity (i.e., the neighbors cannot enjoin operation of the j-Phone5 factory), the parties could resolve the problem of social costs through bargaining, as Coase emphasized.⁴⁶ A range of possible values exists such that both the entrepreneur and the neighbors would be better off if the neighbors paid the entrepreneur *not* to operate the factory. Specifically, for any agreement between 15 and 20, the entrepreneur would be better off because any payment from the neighbors above 15 is greater than the profit the entrepreneur might obtain from operating the factory ($50 - 35 = 15$), and the neighbors would be better off because any payment below 20 is less than the external harm the factory is imposing (20). Thus, assuming bargaining costs are zero, bargaining is effective for resolving the externality and achieving the optimal result (i.e., no production of the j-Phone 5), even if the initial assignment of entitlements is erroneous.

⁴⁶ See Coase, *supra* note 5, at 8.

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In column 2, the private benefit to the entrepreneur is 50, the private cost to the entrepreneur is 25, and the external harm on neighbors is 20. (N.B. The private benefit and external harm in column 2 are equivalent to the private benefit and external harm in column 1; the only difference between the columns is the magnitude of the private cost.) Here, as in column 1, the entrepreneur has an incentive to operate the factory because her private benefit (50) is greater than her private cost (25). However, unlike in column 1, operating the factory is socially desirable because doing so results in an increase in social welfare ($50 - 25 - 20 = +5$). Column 2 represents the situation in which, even though a negative externality exists, the activity is socially desirable because social benefits exceed social costs.

It is again worth noting that, even if the legal system erroneously assigns the entitlement and the neighbors have an entitlement to be free of the external harm (i.e., the neighbors can enjoin operation of the factory), the parties could resolve the problem of social costs through bargaining.⁴⁷ In Column 2, as in Column 1, a range of values exist such that both the entrepreneur and the neighbors would be better off if the entrepreneur paid the neighbors for the right to operate the factory. Specifically, for any agreement between 20 and 25, the entrepreneur would be better off because any payment to the neighbors that is less than 25 is less than the profit from operating the factory ($50 - 25 = 25$), and the neighbors would be better off because any payment to the neighbors above 20 is greater than the external harm arising as a result of operating the factory (20). Thus, assuming costs bargaining costs are zero, bargaining is once again effective for resolving the externality and achieving the optimal result (i.e., production of the j-Phone5), even if the initial assignment of entitlements is erroneous.

Now consider column 3, the column that illustrates the concept of a strategic spillover. In column 3, the benefit to the entrepreneur is 30, the private cost to the entrepreneur is 35, and the external harm on neighbors is 20. Legal scholars and economists typically have assumed that this kind of situation does not present a problem; seemingly, the entrepreneur would have an incentive *not* to operate the factory because the entrepreneur's private costs (35) exceed her private benefits (30).⁴⁸ That is, the

⁴⁷ See *id.*

⁴⁸ See Keith N. Hylton & Steven E. Laymon, *The Internalization Paradox and Workers' Compensation*, 21 HOFSTRA L. REV. 109, 114 (1992) ("Private incentives are determined by comparing the private benefits with the private costs of a given action."); Richard A. Posner, *An Economic Analysis of Sex Discrimination Laws*, 56 U. CHI. L. REV. 1311, 1315 (1989) (assuming people "consistently act to maximize the excess of their private benefits

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entrepreneur would have no reason to operate the factory if doing so would result in a net loss (-5). Under the conventional wisdom, the entrepreneur's private incentive not to operate the factory is consistent with the optimal social outcome because operating the factory would be socially undesirable (as the overall costs, 55, exceed the overall benefits, 30). However, the conventional wisdom ignores the possibility that the entrepreneur may have an incentive to engage (or threaten to engage) in production if the entrepreneur is able to impose external harm (20) and then extract a payment from neighbors in exchange for agreeing to cease production of the j-Phone5.

For example, if the entrepreneur has an entitlement to engage in this activity (i.e., the neighbors cannot enjoin operation of the factory), the neighbors may be willing to pay the entrepreneur 10 for not operating the factory. The neighbors are willing to make this offer because the cost of the payment, 10, is less than the costs of bearing the external harm, 20. The entrepreneur is willing to accept this offer because the offer, 10, is greater than the benefits of operating the factory, -5. Thus, the entrepreneur may have an incentive to operate the factory (or threaten to do so), even though the activity is socially undesirable, -25, and even though, in the absence of the external harm and bargaining to resolve such harm, the entrepreneur's private costs (35) exceed her private benefits (30). Bargaining is therefore ineffective for resolving this type of externality, a strategic spillover, and may result in a suboptimal outcome, even if bargaining costs are zero.⁴⁹

Ultimately, the fundamental problem underlying strategic spillovers, as this examples illustrates, is a problem of asymmetric information.⁵⁰ An opportunistic party (here, the entrepreneur) knows the private benefits and

over their private costs"); Frank H. Easterbrook & Daniel R. Fischel, *Limited Liability and the Corporation*, 52 U. CHI. L. REV. 89, 92 (1985) ("Unless investors in a firm can capture private benefits exceeding the private costs, they will not incur these costs.").

⁴⁹ Technically, this example does not defeat the "Coase Theorem" because Coasean bargaining—frictionless bargaining with zero transaction costs—assumes not only the absence of bargaining costs but also perfect information. See SHAVELL, *supra* note 5, at 84 n.8 (noting that the Coase Theorem is "sometimes expressed by saying that a mutually beneficial outcome will be achieved in the absence of transaction costs, where the latter are interpreted to be any hindrance to bargaining—whether literally costs of bargaining, or instead other obstacles, notably, asymmetries of information between bargaining parties").

⁵⁰ Cf. Smith, *supra* note 23, at *9 ("Models of self-interest combined with asymmetric information can explain a lot of the behavior we would call opportunistic."). For an accessible introduction to asymmetric information, see BRIAN HILLIER, *THE ECONOMICS OF ASYMMETRIC INFORMATION* xii (1997) ("This sphere of economics deals with situations where agents on one side of the market know something that agents on the other side do not . . .").

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private costs of engaging in an externality-generating activity. However, the potential victims (here, the neighbors) usually do not know the party's private benefits and costs. If they had perfect information, the neighbors would be unwilling to pay the entrepreneur and, as a result, the entrepreneur would not have any incentive to manufacture the j-Phone5. Yet, because their information is imperfect, the neighbors may decide to bargain with the entrepreneur to avoid the harm, and, knowing this, the entrepreneur may engage (or threaten to engage) in a strategic spillover.

In short, this example highlights several key points about strategic spillovers. First, strategic spillovers involve activities that parties would not have undertaken but for the possibility of extracting a payment. Without the possibility of such a payment, the entrepreneur in Column 3 would not manufacture the j-Phone5. Second, strategic spillovers involve opportunistic behavior. Although manufacturing the j-Phone 5 is legal, the entrepreneur is maximizing her self-interest through a form of guile and the incomplete disclosure of information. Third, the primary difficulty that strategic spillovers present is distinguishing conventional externalities involving socially desirable activities, on one hand, and strategic spillovers, on the other. The self-interested entrepreneur in Column 2, whose activity is socially desirable, and the opportunistic entrepreneur in Column 3, whose activity is socially undesirable, are engaging in identical external behavior but with different internal motivations. Fourth, bargaining is inadequate for resolving strategic spillovers. While bargaining may provide a solution for the conventional externalities in Columns 1 and 2, bargaining fails to deter the strategic spillover in Column 3. Fifth, the problem with strategic spillovers is ultimately a problem of asymmetric information. The entrepreneur in Column 3 has the ability to impose externalities opportunistically only because the neighbors are unaware of the entrepreneur's private benefits and private costs from manufacturing the j-Phone5.

II. EXAMPLES OF STRATEGIC SPILLOVERS

In the previous section, I illustrated the basic structure of strategic spillovers with a numerical example involving pollution.⁵¹ In this section, I illustrate the real-world significance of strategic spillovers with examples from property and environmental law, as well as intellectual property law, corporate law, legislation and regulation, and litigation and settlement.

⁵¹ See *supra* Part I.B.

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A. Property and Environmental Law

1. Nuisance

In *The Problem of Social Cost*, Ronald Coase discusses a number of “court decisions arising out of the common law relating to nuisance.”⁵² In doing so, Coase himself mentions the possibility that one party might undertake an action for the purpose of inducing another party to pay a higher sum in subsequent bargaining. Specifically, in discussing his famous example of a cattle-raiser and farmer who bargain to resolve social costs arising from grazing cattle who wander onto the farmer’s land, Coase states:

It might be thought that it would pay the cattle-raiser [when the cattle-raiser was not liable for damage] to increase his herd above the size that he would wish to maintain once a bargain has been made, in order to induce the farmer to make a larger total payment. And this may be true. It is similar in nature to the action of the farmer (when the cattle-raiser was liable for damage) in cultivating land on which, as a result of an agreement with the cattle-raiser, planting would subsequently be abandoned (including land which would not be cultivated at all in the absence of cattle-raising).⁵³

Coase recognizes the possibility that either the rancher, in buying additional cattle, or the farmer, in cultivating additional land, might attempt to increase social costs for the purpose of extracting a higher payment. However, after flagging the issue, Coase chooses not to pursue it, dismissing such strategic “manoeuvres” as mere “preliminaries to an agreement.”⁵⁴ Such actions, he asserts, “do not affect the long-run equilibrium position, which is the same whether or not the cattle-raiser is held responsible for the crop damage brought about by his cattle.”⁵⁵

⁵² Coase, *supra* note 1, at 23.

⁵³ *Id.* at 7-8.

⁵⁴ *Id.* at 8.

⁵⁵ *Id.* In a subsequent article in the *Virginia Law Review* on blackmail, Coase revisits the issue he acknowledged but did not investigate in *The Problem of Social Cost*. According to Coase, he mentioned the possibility of the blackmail scenario in *The Problem of Social Cost* because of a conversation he had with Harvard Law Professor David Cavers, a conversation that occurred when both Coase and Cavers were fellows at the Center for Advanced Study of the Behavioral Sciences at Stanford:

When I discussed my ideas with [David Cavers] he pointed out, correctly, that if someone had a right to commit a nuisance, he might

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As discussed above, there a number of historical examples involving the law of nuisance in which one party imposed social costs on another in order to extract a payment. In Chicago, the livery stable scam was possible because courts determined whether any stable was a nuisance only after the stable was built.⁵⁶ In San Francisco, opportunists sometimes threatened to operate breweries, bordellos, and other nuisance-like activities in affluent neighborhoods, and such threats were feasible because of the absence of land use controls. Of course, once zoning laws separated residential parcels from commercial and industrial parcels, many strategic spillovers arising from conflicting land uses were no longer possible.⁵⁷ However, notwithstanding the advent of zoning in the early twentieth century, similar conflicts have continued to arise in certain residential areas.

For example, in 2004, Randall Collins and his wife purchased a home in a new subdivision of Springdale, Arkansas. However, neighbors soon learned that Collins had prior criminal convictions for sexual abusing his nieces,⁵⁸ and several residents threatened to move if Collins did not. Unable to sell any of the subdivision's remaining homes, the developer brought an action against Collins, his wife, and their realtor for failing to disclose Collins's criminal history. The complaint alleged, among other things, that Collins had called the developer and offered to leave the

threaten to create that nuisance simply to extract money from those who would be harmed by it, in return of course for agreeing not to do so. In effect, Cavers felt that what I was advocating would lead to blackmail or something analogous to it.

Ronald H. Coase, *The 1987 McCorkle Lecture: Blackmail*, 74 VA. L. REV. 655, 657 (1988). Coase's subsequent analysis of blackmail is enlightening (and his article in the *Virginia Law Review* is worthy of serious attention). However, ultimately, even in that article, Coase is rather agnostic on what the legal system should do about the problem, in nuisance cases or otherwise. *See id.* at 676.

⁵⁶ *See supra* note 8 and accompanying text.

⁵⁷ It is worth noting that zoning laws may eliminate strategic spillovers as the byproduct of eliminating all externalities, but zoning laws did not solve the problem of strategic spillovers *per se*. Cities enacted zoning ordinances based on the idea that the costs of not separating incompatible land uses, including the harm not only of strategic spillovers but also of conventional externalities associated with socially undesirable activities, exceeded the costs of separating certain land uses, including losing the social benefits of externality-generating activities associated with socially desirable activities. *Cf.* Ellickson, *supra* note 44, at 694 ("If zoning is directed solely toward eliminating nuisance costs, planners will impose land use controls so restrictive as to create inefficiently high prevention costs.").

⁵⁸ *See Collins v. State*, No. CACR97-407, 1998 WL 75661 (Ark. Ct. App. Feb. 11, 1998).

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neighborhood in exchange for \$250,000; otherwise, Collins had vowed to “stay there and kill their subdivision.”⁵⁹

Similarly, in 2005, residents in Goshen, Ohio discovered that their new neighbor, David Lanford, was classified as a “sexual predator” under Ohio state law. This time, instead of threatening to move, neighbors recruited a new buyer for Lanford’s home and offered Lanford \$20,000 in “moving expenses” if he agreed to leave the community. One local prosecutor opined that the neighbors’ offer, which Lanford planned to accept, was “perfectly legal and not considered extortion.”⁶⁰

Conflicts involving convicted sexual offenders in residential areas illustrate the complexity of identifying strategic spillovers. Although Collins allegedly attempted to extract a payment of \$250,000 from the developer in Springdale and although neighbors offered Landford \$20,000 to move out of Goshen, it is unclear whether either situation involved a strategic spillover. If the reason Collins and Lanford moved into these neighborhoods had nothing to do with attempting to extract a payment to move out, then their actions would not constitute strategic spillovers. For, if their actual preference was to live in these neighborhoods, moving in was not opportunistic and negotiating with neighbors was simply a way of resolving an “externality” after the fact (although query whether the external “costs” residents may experience as a result of residing near a convicted sex offender are costs society should recognize).⁶¹ However, if their actual preference was to live an isolated life in a non-suburban area, but Collins and Lanford had purposely moved into these areas to impose social costs on the neighbors and then profit from potential side payments, their actions would constitute strategic spillovers.

In many of the nuisance situations discussed above, including the livery stable scam, the farmer and rancher, and the convicted sex offenders, the opportunistic party might have attempted to bargain with potential victims *before* initiating its externality-generating activity. For example, the livery stable scammers bought vacant parcels, announced their intentions to the neighborhood, and then attempted to extract payments,

⁵⁹ Associated Press, *Sex Offender Sued for Slow Home Sales*, N.Y. TIMES (Feb. 7, 2005).

⁶⁰ Reid Forgrave, *Sex Offender’s Neighbors Giving Him Money To Move*, CINCINNATI ENQUIRER, at 1C (Mar. 24, 2005).

⁶¹ Cf. Suzanna Hartzell-Baird, *When Sex Doesn’t Sell: Mitigating the Damaging Effect of Megan’s Law on Property Values*, 35 REAL EST. L. J. 353 (2006) (concluding that “it is unlikely that a nuisance claim would be granted against a sex offender moving into a residential neighborhood” because “fear derived from someone’s past capacity for criminal activity” is typically not a legitimate basis for injunctive relief).

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before constructing or operating a livery stable. Similarly, Coase asserts it would be unnecessary for a farmer actually to plant crops or a rancher to buy cattle before agreeing not to do so because “it is reasonable to suppose that someone wishing to obtain money for agreeing not to engage in an activity would normally not engage in it before negotiating, but would threaten to do so since this would be less costly.”⁶² And, presumably, a convicted sex offender could purchase a home in a residential neighborhood and attempt to extract a payment before he or she had physically relocated.

However, in certain circumstances, it may not be feasible for a party to bargain with potential victims until *after* initiating the externality-generating activity. Nevertheless, strategic spillovers might still arise because an opportunistic party might consider the possibility of bargaining *ex post* in deciding *ex ante* whether or not to engage in the activity.

One example of this type of strategic spillover arises in the context of the coming-to-the-nuisance problem.⁶³ Historically, a party that came to a preexisting nuisance had no grounds for relief: “The early common law ‘coming to the nuisance’ rule . . . was that if a noxious trade were established in a place remote from habitations, those who afterward acquired property in the vicinity were barred from obtaining either damages or an injunction, having assumed the risk of the nuisance by purchasing property with knowledge of the conditions.”⁶⁴ Most American courts now reject this categorical approach and instead consider the fact that a party has come to a nuisance as one factor among many in deciding whether or not to issue an injunction or award damages.⁶⁵

⁶² See Coase, *supra* note 55, at 657.

⁶³ On the coming-to-the-nuisance problem, *see generally* Donald Wittman, *Coming to the Nuisance*, in 1 THE NEW PALGRAVE DICTIONARY OF ECONOMICS AND THE LAW 292 (1998) [hereinafter Wittman, *Coming to the Nuisance*]; Donald Wittman, *First Come, First Served: An Economic Analysis of “Coming to the Nuisance”*, 9 J. LEGAL STUD. 557 (1980); *see also* Rohan Pitchford & Christopher M. Snyder, *Coming to the Nuisance: An Economic Analysis from An Incomplete Contracts Perspective*, 19 J.L. ECON. & ORG. 491, 510-11 (2003) (noting that the “coming to the nuisance cases” usually involve “an inability of the parties to contract over the first mover’s initial investment decision because the second mover is not yet present”).

⁶⁴ *Mangini v. Aerojet-General Corp.*, 230 Cal. App. 3d 1125, 1139 (3d App. Dist. 1991) (quoting Note, *Torts: Nuisance: Defenses: “Coming to the Nuisance” as a Defense*, 41 CAL. L. REV. 148, 148 (1953)); *see also* Wittman, *Coming to the Nuisance*, *supra* note 63, at 292 (“For Blackstone, being first is everything: when the plaintiff comes to the nuisance, then the nuisance has the right to continue; when the nuisance comes to the plaintiff, then the plaintiff has the right.”).

⁶⁵ *See, e.g.*, *Pre-Club, Inc. v. Elliot Inv. Corp.*, No. 17347, 1996 WL 122086, at *1 (Ohio App. 9 Dist. Mar. 20, 1996) (“Although some jurisdictions may apply the coming to the

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Suppose a firm must decide where to locate a new factory or other facility involving harmful effects such as pollution, congestion, or noise. The firm may choose (i) a location that is unlikely to conflict with future suburban development (the “rural location”); or (ii) a location in which there is some probability of a conflict with future suburban development (the “exurban location”).

Even if the optimal outcome is the rural location, and even if, all other things being equal, the firm would prefer the rural location, the firm might have an incentive to locate its facility in the exurban location. The reason is that the firm knows that, if a suburban development eventually does reach its facility, it may be able to obtain a higher price from the developer or homeowners because of the social harm it may impose. (Appendix A contains a numerical example demonstrating this result.) The crucial point is that, even if the firm wanted to negotiate with potential victims beforehand, such negotiations are infeasible because the future developer or future homeowners are not yet identifiable. Because these negotiations are infeasible, the firm may choose the socially undesirable location now, in the expectation that the firm might extract a payment later.

The fact that, in choosing a site for its facility, a firm may take into account the possibility of a potential conflict, as well as the likelihood of subsequent bargaining, seems to support the modern approach to the problem of coming to the nuisance.⁶⁶ A firm may have arrived in the exurban location before the homeowners, but, nevertheless, the firm may have strategically taken into account the possibility of future development in deciding where to locate its factory. Thus, the firm may have anticipated the possibility that parties would later come to its externality-generating activity and despite this fact (indeed, because of this fact) chosen to locate its facility in a location that, from a social perspective, is suboptimal.⁶⁷

nuisance doctrine as a complete defense to a nuisance action, the prevailing American view is that this ‘defense’ is just one of several factors to be considered in determining whether a nuisance exists.”); *see also* *Patrick v. Sharon Steel Corp.*, 549 F. Supp. 1259, 1267-68 (N.D. W. Va. 1982) (“Jurisdictions as near to West Virginia as Kentucky and as distant as the United Kingdom have rejected the doctrine of coming to the nuisance as a defense.”).

⁶⁶ *Cf.* Edward Rabin, *Nuisance Law: Rethinking Fundamental Assumptions*, 63 VA. L. REV. 1299, 1344 (1977) (exploring a hypothetical in which the “traditional nuisance rule” actually “would encourage the polluter to produce smoke because the more smoke he produces the more likely he will be able to . . . extort excessive profits” (citing Restatement of Torts, 941, Comment c (1939))).

⁶⁷ *Cf.* Pitchford & Snyder, *supra* note 63, at 511 (“Allocating property rights to the first mover (i.e., following a coming to the nuisance rule) leads to overinvestment by the first

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However, under the modern approach to coming to the nuisance, it is possible that potential victims may engage in a similar type of strategic behavior. Specifically, if potential victims anticipate that they may be able to enjoin the activities of a preexisting facility, these victims may purchase land affected by the facility's external effects to extract a payment from the facility's owners. Consider the situation in *Edwards v. Allouez Mining Co.*:

The year following the erection of defendant's mill, complainant purchased a piece of land through which the creek runs a short distance below the mill, and upon which the mill as operated was depositing [stamp] sand. The land was not purchased for use or occupation, but as a matter of speculation, and apparently under an expectation of being able to force defendant to buy it at a large advance on the purchase price. It was offered to defendant soon after the purchase, and though no price was named, the valuation which has been put upon it by complainant and his witnesses is from three to five times what it cost him, and this perhaps gives some indication what his expectations were. . . . When defendant declined to purchase, this bill was filed. The prayer is that defendant be restrained from running or depositing its stamp sand on complainant's land, and from polluting the waters of the stream by its operations.⁶⁸

Ian Ayres and Kristin Madison point out that *Edwards* "represents a strategic 'coming to the nuisance' in order to extort a supercompensatory payment."⁶⁹ Based on the facts above, it appears the complainant purchased the land being affected by the defendant's mill solely for the purpose of extracting a payment from the defendant. More broadly, if the victims of

mover. . . . [T]he first mover strategically overinvests to improve its position in subsequent bargaining with the second mover."). A suboptimal locational choice is a concern in many situations, in addition to the coming-to-the-nuisance problem. See, e.g., Herbert Mohring & J. Hayden Boyd, "Externalities": "Direct Interaction" vs. "Asset Utilization" Frameworks, 38 *ECONOMICA* 347, 354-55 (1971) (discussing locational consequences of conflicting water uses (citing A.A. WALTERS, *THE ECONOMICS OF ROAD USER CHARGES* 127 (1968) (discussing locational implications of highway investment decisions))).

⁶⁸ 38 Mich. 46, at *1 (1878).

⁶⁹ Ian Ayres and Kristin Madison, *Threatening Inefficient Performance of Injunctions and Contracts*, 148 U. PA. L. REV. 45, 51 (1999) (citing EDWARD YORIO, *CONTRACT ENFORCEMENT: SPECIFIC PERFORMANCE AND INJUNCTIONS* 85 (1989) ("[T]he peculiar facts of *Edwards* dramatize how equitable remedies may be used to extort overcompensatory settlements.")).

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any externality-generating activity have the legal right to enjoin the activity, the victims may be able to extract a payment from the party engaging in the activity in exchange for not seeking an injunction.

Thus, the coming-to-the-nuisance problem also illustrates the fact that strategic spillovers are possible irrespective of the initial allocation of entitlements (i.e., regardless of how property rights are defined).⁷⁰ If a *factory owner* has a right to operate its factory regardless of the social costs on its neighbors (a “Rule 3” approach under the Calabresi-Melamed framework for analyzing property rules and liability rules), the owner may threaten to operate the factory to extract a payment from neighbors in exchange for desisting. Conversely, if the *neighbors* have a right to shut down the factory regardless of the social costs on the factory owner (a “Rule 1” approach under the Calabresi-Melamed framework), one or more of the neighbors may threaten to enjoin the factory to extract a payment for not seeking an injunction.⁷¹ And, in either situation, the factory owner in the former or the neighbors in the latter, the party may assert its legal entitlements even though, in the absence of the possibility of imposing social costs, the party would have had no incentive to do so.

2. Pollution and Climate Change

As noted above, the typical concern with pollution is that the owners of factories and other facilities whose byproducts may damage the air, water, or climate will not internalize the harm their activities are imposing on others.⁷² But pollution may arise for another reason as well. Writing in the wake of Coase, a handful of economists observed that, theoretically, certain firms might have an incentive to become “pollution entrepreneurs” who would profit by emitting excessive pollution to extract payments from those bearing the social costs.⁷³ Under this logic, a firm might decide to

⁷⁰ I thank Terry Anderson for emphasizing to me the importance of this point in several conversations at the Searle-Kauffman Institute on Law, Innovation, and Growth.

⁷¹ Calabresi and Melamed develop a framework in which society must first choose which party receives an entitlement (e.g., plaintiff or defendant) and then how to protect the entitlement (property rules, liability rules, or inalienability). Guido Calabresi & A. Douglas Melamed, *Property Rules, Liability Rules, and Inalienability: One View of the Cathedral*, 85 HARV. L. REV. 1089, 1090-1093 (1972). Bracketing inalienability, *see infra* Part IV.B.3, this framework yields four possibilities: (i) the plaintiff has an entitlement protected by a property rule (“Rule 1”); (ii) the plaintiff has an entitlement protected by a liability rule (“Rule 2”); (iii) the defendant has an entitlement protected by a property rule (“Rule 3”); or (iv) the defendant has an entitlement protected by a liability rule (“Rule 4”).

⁷² *See supra* Part I.A.

⁷³ Shoup, *supra* note 6, at 310-11; *see also* Mishan, *supra* note 6, at 24 (“If institutional innovations over time cause transactions costs to decline . . . , there would be . . . a

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operate a factory or increase production not only because doing so might result in higher profits. Rather, by imposing harm on others, the firm might be able to extract payments in exchange for agreeing not to pollute.

Historically, one of the primary reasons we typically did not observe firms engaging in this type of opportunism is likely to be, as E.J. Mishan suggests, transaction costs.⁷⁴ It would have been too costly for a firm to collect payments from each individual who is bearing the external costs of its pollution. Even if a firm's pollution was concentrated in a particular region, the costs to the firm of negotiating with each of the affected parties would quickly surpass the gains from the payments it might expect to extract. Moreover, the individuals affected by the pollution would each have an incentive not to make payments and free ride off of their neighbors.

But this problem, once only a theoretical possibility, is now a reality, especially in markets for greenhouse gases. These markets emerged as a result of the Kyoto Protocol's Clean Development Mechanism (CDM). Under the Kyoto Protocol, companies in Annex I countries, including most European nations, are permitted to pay chemical plants in developing nations such as China to stop emitting greenhouse gases, including gases like trifluoromethane or HFC-23.⁷⁵

HFC-23 is a byproduct that arises from manufacturing HFC-22, a common refrigerant used in residential heat pump and air conditioning systems.⁷⁶ Scientists estimate that, because of its potential contribution to global warming, HFC-23 is approximately 11,700 times worse for the environment than carbon dioxide. Thus, under the CDM, eliminating one ton of HFC-23 earns a plant 11,700 tons of carbon offset credits, also known as "Certified Emission Reductions" (or CERs). To avoid emitting HFC-23 into the atmosphere, Chinese industrial gas plants are capable of incinerating the gas. In early 2008, carbon credits were trading at around

temptation for enterprising firms, and others in a position to do so, to produce unnecessary pollution in order to extract greater tribute from the public."); Rothenberg, *supra* note 6, at 114 ("[I]f external diseconomies against others can be expected to lead to bribes by victims to desist, then the production of negative externalities becomes a valid by-product of primary production."); *cf.* Douglas H. Ginsburg & Paul Shechtman, *Blackmail: An Economic Analysis of the Law*, 141 U. PA. L. REV. 1849, 1863 n.46 (1993) ("A similar observation concerning 'pollution entrepreneurs' who might threaten to undertake production in order to be bribed to refrain appears in Donald C. Shoup [*supra*] . . .").

⁷⁴ See Mishan, *supra* note 6, at 24.

⁷⁵ See *supra* note 15.

⁷⁶ For more on HFC-22, see <http://www.epa.gov/ozone/title6/phaseout/22phaseout.html>.

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\$25 per ton, so incinerating one ton of HFC-23 created a benefit of almost \$300,000 (i.e., 11,700 x \$25), at a cost of only \$5,000.⁷⁷

As a result, there is speculation that certain “Chinese companies have built chemical plants mainly to cash in on carbon credits.”⁷⁸ In 2006, the *New York Times* reported on a United Nations study finding that “the profits are enormous in destroying . . . HFC-23” and that “industrial nations could pay \$800 million a year to buy credits, even though the cost of building and operating incinerators will be only \$31 million a year.”⁷⁹ A number of academics also highlighted the problem:

[C]lose scrutiny of the economics of HFC-23 projects revealed that they were, in many senses, too good to be true. Our work and the work of others showed that the sale of carbon credits generated from HFC-23 capture is far more valuable than production of the refrigerant gas that leads to its creation in the first place. . . . In response to these perverse incentives, the CDM Executive Board implemented a number of restrictions that limited, but failed to eliminate, the perverse incentive to produce refrigerant in order to produce waste HFC-23, capture this waste, and so create enormous quantities of HFC-23.⁸⁰

Ultimately, the United Nations halted the issuance of CERs for five Chinese plants suspected of engaging in excessive production to generate HFC-23.⁸¹ And, recently, several members of the CDM Executive Board recommended “that the procedure of issuing U.N. carbon credits to industrial gas projects which destroy [HFC-23] should be revised.”⁸²

⁷⁷ STOFT, *supra* note 18, at 212.

⁷⁸ *Id.*

⁷⁹ Keith Bradsher, *Outsize Profits, and Questions, In Effort to Cut Warming Gases*, N.Y. TIMES, Dec. 21, 2006, at A1.

⁸⁰ Michael W. Wara & David G. Victor, “A Realistic Policy on International Carbon Offsets,” PESD Working Paper #74 (2008), available at http://iis-db.stanford.edu/pubs/22157/WP74_final_final.pdf (citing Michael Wara, “The Performance and Potential of the Clean Development Mechanism,” PESD Working Paper #56 (2006), available at http://iis-db.stanford.edu/pubs/21211/Wara_CDM.pdf; UNEP Technical and Economic Assessment Panel, Response to Decision XVIII/12, Report on the Task Force on HCFC Issues; Emissions Reduction Benefits Arising from Earlier HCFC Phase-Out and Other Practical Measures (August 2007)).

⁸¹ See *supra* note 17 and accompanying text.

⁸² Nina Chestney, *UN Panel Backs Revision to Issuing of HFC-23 Offsets*, REUTERS (Nov. 24, 2010).

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Operators of industrial gas plants in China are not alone. Economist Steven Stoft documents how operators of a coal-fired power plant in South Africa are engaging in a similar scheme. These operators “said they would keep using dirty coal unless they got carbon credits to buy some natural gas instead.”⁸³ However, they had already “signed a gas contract before the CER policy went into effect. That is, they had already planned to cut their carbon dioxide emissions. They were simply hoping to defraud the United Nations”⁸⁴ Stoft points out that firms may take such actions even if they do not intend to act opportunistically: “Whoever takes most advantage of [CERs] makes the most profit and can sell their product for less and undercut their competition. Businessmen fear their competitor will employ such a strategy, and so, in self-defense, they feel they must employ it themselves.”⁸⁵

The fundamental difficulty is distinguishing between those actions that represent actual reductions in greenhouse gases that would not have been undertaken but for the carbon credits and those actions that represent apparent reductions in greenhouse gases that would have been undertaken even in the absence of carbon credits. This problem suggests the need, as many environmental law scholars have recognized, for defining and implementing a “principle of additionality.”⁸⁶ A principle of additionality would provide a mechanism for distinguishing between projects that would not occur in the absence of the subsidy (i.e., that are “additional”), and thus that the government may have an interest in subsidizing, and projects that would occur in the absence of the subsidy (i.e., that are not “additional”), and thus that the government probably has no interest in subsidizing.⁸⁷

⁸³ *Id.* at 211.

⁸⁴ *Id.*

⁸⁵ *Id.* at 212.

⁸⁶ See Carol M. Rose, *Big Roads, Big Rights: Varieties of Public Infrastructure and Their Impact on Environmental Resources*, 50 ARIZ. L. REV. 409, 438 (2008) (describing the “Kyoto insistence that forestry and other so-called clean development credits meet the criterion of ‘additionality’—that they be some measure in addition to what was going to happen anyway.” (citing Dennis D. Hirsch, *Trading in Ecosystem Services: Carbon Sinks and the Clean Development Mechanism*, 22 J. LAND USE & ENVTL. L. 623, 634 (2007))); Robert N. Stavins, *A Meaningful U.S. Cap-and-Trade System To Address Climate Change*, 32 HARV. ENVTL. L. REV. 293, 323 (2008) (pointing out that, “because of concerns about additionality and related perverse incentives, the role of project-based offsets should be defined carefully”).

⁸⁷ See David M. Driesen, *Sustainable Development and Market Liberalism’s Shotgun Wedding: Emissions Trading Under the Kyoto Protocol*, 83 IND. L.J. 21, 57 n.208 (2008) (“Because many energy efficiency projects are economically attractive on their own, they have difficulty satisfying this [additionality] criterion.” (citing LEGAL ASPECTS OF IMPLEMENTING THE KYOTO PROTOCOL MECHANISMS: MAKING KYOTO WORK 193 (David

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To be sure, instead of subsidizing emissions reductions, the government could impose a corrective tax so that each firm would be forced to internalize the harm that it is generating.⁸⁸ The corrective tax approach, which I discuss in more detail below,⁸⁹ recognizes that, by engaging in an activity that involves the emission of greenhouse gases such as carbon dioxide, the firm is imposing harm on others and attempts to force the firm to internalize this harm.

However, as a number of commentators have pointed out, a corrective tax of a significant magnitude may not be a feasible option for forcing firms to internalize pollution externalities.⁹⁰ Given these practical constraints, governments may continue to rely on subsidies to encourage emissions reductions, an approach that increases the likelihood that “pollution entrepreneurs” will engage in opportunistic behavior.⁹¹

3. Spite Fences and Spite Structures

Landowners sometimes may construct fences or other structures they know will impose social costs on their neighbors. These structures

Freestone & Charlotte Streck eds., 2005) (describing “improved energy efficiency technologies that would have become widely used” as an example of this problem)).

⁸⁸ See, e.g., Louis Kaplow & Steven Shavell, *On the Superiority of Corrective Taxes to Quantity Regulation*, 4 AM. L. ECON. REV. 1, 2 (2002) (arguing that “the traditional notion of the superiority of corrective taxes should continue to be a benchmark for economists’ thinking about the control of externalities”).

⁸⁹ See *infra* Part IV.A.4.

⁹⁰ See, e.g., Barton H. Thompson, Jr., Forward, *The Search For Regulatory Alternatives*, 15 STAN. ENVTL. L.J. vii, xix (1996) (pointing out that, while direct incentives such as taxes may be “more dynamic than marketable permit systems,” they are “politically less feasible”); cf. J.R. DeShazo & Jody Freeman, *Timing and Form of Federal Regulation: The Case of Climate Change*, 155 U. PA. L. REV. 1499, 1544-45 (2007) (arguing that “stronger industry consensus [will] emerge in favor of cap-and-trade”).

⁹¹ Obviously, externalities can include visual pollution (e.g., aesthetic blight) or audio pollution (e.g., loud noises) as well as air and water pollution. However, the same type of opportunistic behavior is possible. For example, in analyzing eminent domain, Lee Fennell discusses the “particularly troubling” situation in which owners blighted property might share in an assembly’s surplus. Lee Anne Fennell, *Taking Eminent Domain Apart*, 2004 MICH. ST. L. REV. 957, 986. Fennell notes that “[t]he incentives for extortionate behavior are clear enough if people are allowed to create bad situations and then glean some of the surplus associated with relieving the negative condition.” *Id.* She compares such situations to a claim that “someone who is making hideous music on the sidewalk has a right to some of the surplus associated with stopping the racket.” *Id.* (citing Randy Cohen, *The Ethicist: Pay for No Play?*, N.Y. TIMES MAG., Nov. 28, 2004, at 66).

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might interfere with access to light, prevent the circulation of air, or obstruct a particular view.⁹²

Under the doctrine of “ancient lights,” the common law courts of England would grant a prescriptive easement to an individual who continuously enjoyed access to light, air, or a view.⁹³ American courts, although initially incorporating this doctrine into their own common law traditions, ultimately rejected the doctrine.⁹⁴ American courts did, however, recognize a limited number of exceptions including what is known as the “spite fence” doctrine.⁹⁵ This doctrine prohibits a landowner from constructing a structure that interferes with a neighbor’s access to light, air, or a view if the landowner’s motivation is spiteful or malicious.⁹⁶ Most state courts require that spite or malice be the sole, or at least the predominant, motivation for the interference.⁹⁷

Sometimes a structure that interferes with a neighbor’s access to light, air, or a view is constructed not out of malice or spite but instead to extract a payment from one’s neighbor.⁹⁸ For example, in the classic

⁹² Perhaps the most famous example is *Fontainebleau Hotel Corp. v. Forty-Five Twenty-Five, Inc.*, 114 So. 2d 357 (Fla. App. 3 Dist. 1959), in which the owner of the Fontainebleau, the “premier hotel of Miami Beach,” constructed a windowless “spite wall” facing the Eden Roc hotel and casting a shadow over its pool. THOMAS W. MERRILL & HENRY E. SMITH, *PROPERTY: PRINCIPLES AND POLICIES* 1005 (2007).

⁹³ See *Prah v. Maretti*, 321 N.W.2d 182, 188 (1982).

⁹⁴ See *Lucas v. Planning Bd. of Town of LaGrange*, 7 F.Supp.2d 310, 324 (S.D.N.Y. 1998); *Prah*, 321 N.W.2d at 188.

⁹⁵ See ELLICKSON & BEEN, *supra* note 7, at 520; JOSEPH WILLIAM SINGER, *PROPERTY LAW: RULES, POLICIES, AND PRACTICES* 347 (3d ed. 2002).

⁹⁶ See *Prah*, 321 N.W.2d at 189. Many states have now enacted “spite-fence statutes,” which explicitly identify the circumstances in which a court may grant relief if an individual maliciously constructs a structure to interfere with another’s access to light, air, or a view. See, e.g., R.I. Gen. Laws § 34-10-20 (Supp. 2004).

⁹⁷ Compare *Austin v. Bald II, LLC*, 658 S.E.2d 1 (N.C. App. 2008) (“A spite fence is one which is of no beneficial use to the owner and which is erected and maintained solely for the purpose of annoying a neighbor.” (quoting *Welsh v. Todd*, 133 S.E.2d 171, 173 (N.C. 1963))), with *Wilson v. Handley*, 97 Cal. App. 4th 1301, 1313 (Cal. App. 2002) (adopting “the ‘dominant purpose’ test for determining whether the ‘malice’ element of [California’s spite fence statute] has been satisfied”). But cf. Stewart E. Sterk, *Neighbors in American Land Law*, 87 COLUM. L. REV. 55, 62 (1988) (noting that several cases have held that “landowners may build whatever structures they please on their own land, whatever their underlying motives, subject only to applicable zoning restrictions” (citing *Cohen v. Perrino*, 50 A.2d 348 (Pa. 1947))).

⁹⁸ See, e.g., Mark Tushnet, *Spite Fences and Scholars: Why Race Is and Is Not Different*, 26 CONN. L. REV. 285, 286 (1993) (considering the situation involving “a suit by your neighbor claiming that you have erected a spite fence simply to inflict financial harm”); Ginsburg & Shechtman, *supra* note 73, at 1860-64 (1993) (analyzing the circumstances in

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English case *Hardie & Lane, Ltd. v. Chilton*, the court poses the following hypothetical:

A. has land facing a new house of B.'s. A. proposes to build on that land a house which will spoil the view from or light to B.'s house and depreciate the value of his property. B. implores A. not to build. A. says: 'I will not build if you pay me 1,000£, but I shall build if you do not.' B. pays the money and A. does not build. Could it be seriously argued that B. could recover the money back as obtained by threats?⁹⁹

Likewise, Mitchell Berman refers to philosopher Robert Nozick's discussion of the "deceptively tricky case" involving "B's threat to build a structure on his land that will block the view of his neighbor A, unless A pays B \$1,000."¹⁰⁰ The possibility of building a structure that imposes harmful effects on one's neighbor and then bargaining for a payment not to impose such effects is another example of a strategic spillover.¹⁰¹

This type of opportunistic behavior occurs on a relatively regular basis in the skies above many major cities, and the stakes are often quite high. Owners of skyscrapers and other prominent buildings frequently oppose the construction of new structures that may affect their buildings or property values. In New York City, owners of the Empire State Building objected vehemently to the planned construction of a new tower that has the potential to detract from the scenic views and iconic status of what was once the world's tallest building.¹⁰² Likewise, in Hong Kong, many

which an owner may build a fence higher than the owner would have otherwise desired to extract a payment through bargaining); Sterk, *supra* note 97, at 84 (pointing out that, if a fence builder "can construct a fence at low cost that inflicts great hardship on his neighbor, he might be able to extract money from his neighbor to remove the fence").

⁹⁹ 2 K.B. 306, 316 (1928).

¹⁰⁰ Mitchell N. Berman, *The Evidentiary Theory of Blackmail: Taking Motives Seriously*, 65 U. CHI. L. REV. 795 n. 230 (1998) (citing ROBERT NOZICK, ANARCHY, STATE, AND UTOPIA 84-85 (1974)).

¹⁰¹ Cf. Larry Alexander, *Is Morality Like the Tax Code?*, 95 MICH. L. REV. 1839, 1843 (1997) (suggesting problem with building spite fences and undertaking similar activities "consists of intentionally exploiting another's vulnerability, making the actor better off than she would be had the victim not existed, and—importantly—making the victim worse off than she would be had the actor not existed" (reviewing LEO KATZ, *ILL-GOTTEN GAINS: EVASION, BLACKMAIL, FRAUD AND KINDRED PUZZLES OF THE LAW* (1996))).

¹⁰² See Charles V. Bagli, *For the King of the Skyline, a Tall and Unwelcome New Neighbor*, N.Y. TIMES, at A1 (Aug. 26, 2010) (reporting "a fierce weeklong public relations and lobbying campaign by the owners of the Empire State Building to stop the

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residents feared that four new skyscrapers might obstruct the view from several office towers and a luxury hotel.¹⁰³

Although certain conflicts in the airspace above city centers may involve behavior that is not opportunistic, the setting is ripe for strategic spillovers. Existing owners can assert their legal entitlements, or at least colorable claims to such entitlements, in order to obstruct new construction and extract a monetary payment from developers.

According to litigation partners David Scharf and Kristin Roy, a common strategy in New York City is for owners to attempt to hinder or delay a development project by asserting claims based on adverse possession. Scharf and Roy explain that, “[a]s a result of the substantial value associated with the right to develop upwards into airspace, neighboring owners often attempt to claim a right to airspace by adverse possession both in order to prohibit development to protect existing encroachments or sight lines and/or to improperly gain leverage to extract monetary payments from eager owners and developers wishing to build upwards.”¹⁰⁴ The strategy is often successful: “Owners and developers wanting to proceed expeditiously with projects in which substantial time and money have been invested often are required to make substantial cash settlements to those claiming adverse rights, thereby holding hostage the ability to develop into the disputed airspace. Payments nothing short of extortion are made in order to prohibit protracted legal disputes that halt development indefinitely in the interim.”¹⁰⁵

In New York, the legislature recently amended the state’s adverse possession statute, both to require “good faith” and to eliminate the possibility that *de minimis* encroachments might ripen into valid claims. The revised statute effectively “makes entrepreneurial neighbors seeking cash payments in order to permit upward development a thing of the past.”¹⁰⁶ However, although the statute addresses the possibility that opportunistic owners might attempt to obstruct development for their

rival tower, contending that its bulky profile would scar the skyline and diminish the Empire State Building’s iconic status”).

¹⁰³ Monday Ng, *Chief Clears Air on Tamar View Fears*, STANDARD (China) (Oct. 15, 2005) (“The chief executive has taken to the airwaves to deny he has any intention of blocking sea and mountain views with the sprawling government complex proposed for the former British military headquarters site on the Tamar Basin in Central.”).

¹⁰⁴ Y. David Scharf and Kristin T. Roy, *Adverse Possession of Air Rights*, 240 N.Y. LAW J. 10 (Nov. 24, 2008).

¹⁰⁵ *Id.*

¹⁰⁶ *Id.*

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financial gain, there is no analogous provision that prevents developers from threatening to build structures that would impose social costs on existing owners and then agreeing not to build once a side payment is made.

4. Conservation Easements and Development

An increasing percentage of land in the United States is subject to conservation easements, servitudes that restrict the future use and development of land. According to one estimate, “the amount of land in the United States subject to conservation easements exploded from very little in 1980 to over 5 million acres by 2003.”¹⁰⁷ Since then, the number of acres subject to easements has continued to expand dramatically, spurred in part by federal and state tax incentives.¹⁰⁸ Although there are various types of conservation easements, among the most common is a restriction that prohibits commercial development and new subdivisions but allows existing agricultural and residential uses.¹⁰⁹

However, the use of generous tax deductions, intended to encourage developers and land trusts to increase the number of conservation easements, has created several significant controversies. Specifically, in the past, some developers have received substantial tax deductions for agreeing *not* to build on certain parcels of land even though the developers ostensibly did not have any incentive to develop the parcels.

Pennsylvania developer Kenneth C. Hellings says he restricted building on ‘unusable’ portions of his new subdivision and took ‘a shocker’ of a tax deduction. . . .

¹⁰⁷ MERRILL & SMITH, *supra* note 92, at 1038-39 (2007) (citing Land Trust Alliance, National Land Trust Census, Nov. 18, 2004 *available at* <http://www.landtrustalliance.org/census/index.shtml>).

¹⁰⁸ See Ann Harris Smith, Note, *Conservation Easement Violated: What Next? A Discussion of Remedies*, 20 FORDHAM ENVTL. L. REV. 597, 598 (2010); *see also* Larry Ribstein, “The Market for Conservation Law,” at *8 (May 17, 2010), *at* http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1609793 (noting that “easements and easement statutes spread across the states following the 1976 federal income tax exemption” and pointing out “experimental evidence indicating that tax incentives influence the demand for easements” (citing Christopher Anderson & Jonathan R. King, *Equilibrium Behavior in the Conservation Easement Game and Economics*, 80 LAND ECON. 355 (2004))). The federal tax incentive expired at the end of 2009, but Congress recently renewed it for 2011 and also made it retroactive to the beginning of 2010. *See* H.R. 4853 §723 (Dec. 15, 2010), *at* <http://www.gpo.gov/fdsys/pkg/BILLS-111hr4853eas2/pdf/BILLS-111hr4853eas2.pdf>.

¹⁰⁹ *Id.* at 1039. For additional background on the history and background of conservation easements, *see* Ribstein, *supra* note 108, at *5-6.

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Using guidance from a local land trust, Hellings's lawyers wrote an easement covering a dozen islands of protected land, one as small as six-tenths of an acre. Then they placed a second easement directly on 220 acres of the golf course, including the fairways, bunkers and putting greens. The easements were accepted by the Brandywine Conservancy, a well-established Pennsylvania land trust.¹¹⁰

Developers like Hellings were essentially able to extract a payment from the government for agreeing not to impose the social costs associated with development, even for lands they had no intention of developing.¹¹¹ These tax deductions illustrate that individuals and firms may undertake strategic spillovers not only to extract payments from other private parties but also to capture tax deductions, subsidies, and other payments from the government.

In recent years, a similar phenomenon is occurring in many cities and towns in the northeastern United States. These localities are hoping to expand the amount of land devoted to open space. To this end, municipal governments are increasingly seeking to purchase undeveloped parcels of land or the development rights to such parcels.¹¹² However, realizing the municipality's interest in acquiring additional open space, landowners are beginning to act opportunistically. Specifically, even if a landowner had no intention of building on a particular parcel, the landowner may announce construction plans to secure an elevated price from the municipal government that is seeking to preserve the land as open space.¹¹³

B. The Ubiquity of Strategic Spillovers

Strategic spillovers are apparent not only in disputes involving property and environmental law. This type of opportunism is possible in

¹¹⁰ Joe Stephens and David B. Ottaway, *Developers Find Payoff in Preservation*, WASH. POST, Dec. 21, 2003 A1.

¹¹¹ Cf. Ribstein, *supra* note 108, at *8 (asserting that “the public benefit of the easements encouraged by the tax break may be disconnected from the public cost” (citing Dominic P. Parker, *Conservation Easements: A Closer Look at Federal Tax Policy*, at *15-17, PERC POLICY SERIES, PS-34 (Oct. 2005), available at <http://www.perc.org/pdf/ps34.pdf>)).

¹¹² See Amanda Siek, Comment, *Smart Cities: A Detailed Look at Land Use Planning Techniques that are Aimed at Promoting Both Energy and Environmental Conservation*, 7 ALB. L. ENVTL. OUTLOOK J. 45, 62 & n.99 (2002) (discussing the purchase of development rights as a “land use technique in which state or local authorities purchase a conservation easement on farmland or undeveloped open space”).

¹¹³ Cf. *id.* (noting that “one drawback could be the expense required to employ a purchasing of development rights program”).

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any situation in which one party can impose (or threaten to impose) costs on another through an otherwise licit activity and then extract a payment for agreeing to desist (or not commence) the activity. Below, I briefly explore similar situations arising in intellectual property law, corporate law, legislation and regulation, and litigation and settlement.

1. Intellectual Property Law

Strategic behavior is common in the world of intellectual property. There are a number of situations in which parties may undertake activities that impose harm on others even though, in the absence of the ability to extract a payment, they would not have had any incentive to do so.

Cases involving “cybersquatters”, which initially arose under trademark and unfair competition law, are one example. A “cybersquatter” is an individual who seeks to acquire the domain name of a website to extract a payment from a company that subsequently seeks to acquire the same name. For example, in *Intermatic, Inc., v. Toeppen*,¹¹⁴ plaintiff Intermatic, a company that had been manufacturing and distributing a variety of electrical and electronic products since 1941, brought suit under federal and state trademark and unfair competition laws against defendant Dennis Toeppen. Toeppen was a resident of Champaign, Illinois who at the time operated an internet service provider and registered approximately 240 internet domain names including “deltaairlines.com”, “crateandbarrel.com”, “ramadainn.com”, “greatamerica.com”, and “ussteel.com”, as well as “intermatic.com”, the subject of the litigation.¹¹⁵

But for the possibility of extracting a payment for resale or licensing, it is unlikely that Toeppen would have expended the time and effort necessary to register “intermatic.com” and these other domain names. The district court noted that “[o]ne of Toeppen’s business objectives is to profit by the resale or licensing of these domain names, presumably to the entities who conduct business under these names.”¹¹⁶ The district court ultimately enjoined Toeppen from using the “intermatic.com” website, and Congress eventually attempted to address the issue more systematically in the Anticybersquatting Consumer Protection Act (ACPA).¹¹⁷

¹¹⁴ 947 F. Supp. 1227 (N.D. Ill. 1996).

¹¹⁵ *Id.* at 1229-1230.

¹¹⁶ *Id.* at 1230.

¹¹⁷ Pub. L. No. 106-113, § 3002(a), 113 Stat. 1501A-545 (1999) (codified at 15 U.S.C. § 1125(d) (2006)).

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Under ACPA, Congress defines “cybersquatting” as “registering, trafficking in, or using domain names that are identical or confusingly similar to trademarks with the bad faith intent to profit from the goodwill of the trademarks.”¹¹⁸ However, considerable controversy remains over how to distinguish a legitimate owner of a domain name who may harm other businesses as an incidental byproduct of such ownership and a cybersquatter who is engaging in a strategic spillover. The distinction turns, as the statute indicates, on the concept of “bad faith” but, in many circumstances, bad faith may be difficult to define as well as to detect.¹¹⁹

Similarly, in patent law, a “patent troll” (a term that has various meanings) may rely on an erroneously issued patent to extract a payment from a company that has independently discovered the same invention.¹²⁰ As Doug Lichtman and Mark Lemley point out, “a large and growing number of ‘patent trolls’ today play this exact strategy, using patents on obvious inventions quite literally to tax legitimate business activity.”¹²¹ By acquiring patents they do not intend to use, patent trolls may impose harm on others, including legitimate businesses that are attempting to license multiple patents for a new product, in order to extract a payment.¹²² The difficulty, once again, is how to determine whether a patent holder that is

¹¹⁸ *Id.*

¹¹⁹ See Orion Armon, Note, *Is This As Good As It Gets? An Appraisal of ICANN’s Uniform Domain Name Dispute Resolution Policy (UDRP) Three Years After Implementation*, 22 REV. LITIG. 99, 110 (2003). For more on this controversy, see Mairead Moore, *Cybersquatting: Prevention Better Than Cure?*, 17 INT’L J.L. & INFO. TECH. 220 (2009); Natalia Ramirez, Note, *Will the Anticybersquatting Consumer Protection Act Create More Problems Than It Solves?*, 8 WASH. U. J.L. & POLICY 395 (2002); Catherine T. Struve & R. Polk Wagner, *Realspace Sovereigns in Cyberspace: Problems with the Anticybersquatting Consumer Protection Act*, 17 BERKELEY TECH. L.J. 989 (2002).

¹²⁰ On the origin of the term patent troll, see Steve Seidenberg, *Troll Control*, 92 A.B.A. J. 51, 53 (2006) (explaining that “patent troll” was “first used in 2001 by Peter Detkin, then an in-house counsel at Intel Corp., to describe the small companies that were suing Intel for patent infringement”).

¹²¹ Doug Lichtman & Mark A. Lemley, *Rethinking Patent Law’s Presumption of Validity*, 60 STAN. L. REV. 45, 48 (2007).

¹²² For more on patent trolls and the problems they present, see, e.g., J. Jason Williams, Mark V. Campagna, and Olivia E. Marbutt, *Strategies for Combating Patent Trolls*, 17 J. INTELL. PROP. L. 367 (2010); Mark A. Lemley, *Are Universities Patent Trolls?*, 18 FORDHAM INTELL. PROP. MEDIA & ENT. L.J. 611 (2008); Gerard N. Magliocca, *Blackberries and Barnyards: Patent Trolls and the Perils of Innovation*, 82 NOTRE DAME L. REV. 1809 (2007); John M. Golden, *“Patent Trolls” and Patent Remedies*, 85 TEX. L. REV. 2111 (2007).

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currently not exercising a patent is sitting on the sidelines for a legitimate business reason or has an opportunistic motivation.¹²³

2. Corporate Law

In the corporate context, parties also may engage in activities that bear a notable resemblance to the strategic spillovers described above. For example, a party may threaten to engage in a hostile takeover for purposes of “greenmailing” a company’s existing managers. In *Heckmann v. Ahmanson*, a California appellate court explains how “[a] greenmailer creates the threat of a corporate takeover by purchasing a significant amount of the company’s stock [and] then sells the shares back to the company at a premium when its executives, in fear of their jobs, agree to buy him out.”¹²⁴

Greenmail is usually thought to be problematic if it is initiated solely to extract a payment. However, certain forms of “greenmail” may be socially desirable. Stephen Brainbridge, citing prior work by Jonathan Macey and Fred McChesney, notes that “greenmail actually may be beneficial in that it may allow the board to seek higher bids or to enhance value (above the greenmail bidder’s price) by making changes in management or strategy. . . . Consequently, a greenmailer may be a catalyst for change from within or for a bidding war and may therefore deserve to make a profit.”¹²⁵ The difficulty is in determining whether a party that is threatening a hostile takeover is taking an otherwise socially wasteful action to extract a payment or is acting out of legitimate self-interest in a manner that may be socially desirable.

Similarly, corporate shareholders may use shareholder initiatives for benevolent or malevolent purposes. Lucian Bebchuk is optimistic about the role of shareholders and “presents the case for giving shareholders the power not only to elect and replace directors, but also to initiate and adopt rules-of-the-game decisions to amend the corporate charter or to

¹²³ Cf. Greg Halsey, Comment, *There is a Pink Elephant at our Patent Negotiation, and His Name is Declaratory Judgment*, 46 SAN DIEGO L. REV. 247, 275 (2009) (“In declaratory judgment cases, the only way courts can distinguish between aggressive patent trolls and quiescent patent holders is through the application of prudential considerations.”).

¹²⁴ 168 Cal. App. 3d 119, 214 Cal. Rptr. 177, 180 n.1 (1985).

¹²⁵ Stephen M. Bainbridge, *Unocal at 20: Director Primacy in Corporate Takeovers*, 31 DEL. J. CORP. L. 769, 792 n.98 (2006) (citing Jonathan R. Macey & Fred S. McChesney, *A Theoretical Analysis of Corporate Greenmail*, 95 YALE L.J. 13, 15-16 (1985); Fred S. McChesney, *Transaction Costs and Corporate Greenmail: Theory, Empirics, and a Mickey Mouse Case Study*, 14 MANAGERIAL & DECISION ECON. 131, 133-34 (1993)).

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reincorporate in another jurisdiction.”¹²⁶ But shareholders also may utilize the initiative process to extract payments in exchange for not imposing harm on the corporation and its managers. Jeffrey Gordon emphasizes that shareholder initiatives create “an opportunity for shareholders to pursue private wealth maximization through bargaining with managers.”¹²⁷

Gordon explains how “[s]hareholders can threaten to make a shareholder initiative that has some probability of success, or having made the initiative, can suggest a willingness to withdraw it, and thereby induce managers with valuable agency benefits to use the firm’s resources to buy them out at a premium over market or make other transfers.”¹²⁸ This type of shareholder initiative, Gordon concludes, “may make it possible to extract greenmail-like payments from the firm.”¹²⁹

3. Legislation and Regulation

Strategic spillovers also appear to be quite common in the course of the legislative and regulatory process. Legislators or regulators have the ability to impose costs on a party that is being regulated or that is seeking regulatory approval. The ability to impose these costs provides an opportunity for strategic legislators or regulators (or others who may be capable of influencing the substance or timing of regulation) to extract payments in exchanging for not imposing such harm.

In the legislative process, Fred McChesney has observed that “payments to politicians often are made, not for particular political favors, but to avoid particular political disfavor, that is, as part of a system of political extortion, or ‘rent extraction.’”¹³⁰ McChesney gives an example:

The political strategy of cost forbearance can assume several forms. Perhaps most obvious is the threat to deregulate an industry previously cartelized. Expected political rents created by earlier regulation are quickly capitalized into firm share prices. If politicians later breach their contract and vote unexpectedly to deregulate, shareholders suffer a wealth

¹²⁶ Lucian Arye Bebchuk, *The Case for Increasing Shareholder Power*, 118 HARV. L. REV. 833, 837 (2005).

¹²⁷ Jeffrey N. Gordon, *Shareholder Initiative: A Social Choice and Game Theoretic Approach to Corporate Law*, 60 U. CIN. L. REV. 347, 381 (1991).

¹²⁸ *Id.*

¹²⁹ *Id.*

¹³⁰ FRED S. MCCHESENEY, *MONEY FOR NOTHING: POLITICIANS, RENT EXTRACTION, AND POLITICAL EXTORTION 2* (1997).

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loss. Rather than suffer the costs of deregulation, shareholders will pay politicians a sum, up to the amount of wealth loss threatened, to have them refrain from deregulating. And in fact one routinely observes payments to politicians to protect previously enacted cartel measures. Dairy interests pay handsomely for continuation of congressional milk-price supports; physician and dentist political action committees (PACs) contribute large sums for continuation of self-regulation.¹³¹

Here, politicians threaten to enact legislation for which they would not have voted in order to extract payments, in the form of campaign contributions or other benefits, from those that would be disadvantaged under the new statutory regime.

McChesney points out that the “extraction option is not mere blackboard economics” and that “politicians practice rent extraction routinely.”¹³² He notes that “[m]ilker bills’ is one term used by politicians to describe legislative proposals intended only to ‘milk’ private producers for payments not to pass the rent-extracting legislation.”¹³³ He also quotes an earlier paper by William Stubblebine in which Stubblebine vividly describes the practice of “milker bills” in the California state legislature.¹³⁴ Thus, in certain situations, public officials may purposely engage, or threaten to engage, in an activity that would impose harm on a particular constituency to extract payments in exchange for desisting.

Likewise, in the regulatory process, individuals often challenge various types of regulatory approvals, not because they have an interest in preventing the grant of a license to a particular party, but to extract a payment from the party in exchange for ceasing their opposition. As one commentator on the communications industry notes: “Frequently,

¹³¹ *Id.* at 23 (citing LARRY J. SABATO, PAC POWER: INSIDE THE WORLD OF POLITICAL ACTION COMMITTEES 133-37 (1984)).

¹³² *Id.* at 29.

¹³³ *Id.*

¹³⁴ *Id.* at 29-30 (quoting W. Craig Stubblebine, “On the Political Economy of Tax Reform,” Paper presented at the annual meeting of the Western Economic Association 1-2 (1985) (“Early on in my association with the California legislature, I came across the concept of ‘milker bills’—proposed legislation which had nothing to do with milk to drink and much to do with money, the ‘mother’s milk of politics’ . . . Representative Sam, in need of campaign contributions, has a bill introduced which excites some constituency to urge Sam to work hard to for its defeat (easily achieved), pouring funds into his campaign coffers and ‘forever’ endearing Sam to his constituency for his effectiveness.”)).

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challenges to license renewals are mounted by persons who have no interest in broadcasting. The purpose of mounting a challenge is to obtain a payoff from the licensee in exchange for dropping the challenge.”¹³⁵ Here, the objective is once again to impose costs on another party by challenging, or threatening to challenge, the grant of a license or other regulatory approval, in order to extract a payment for agreeing to desist.

4. Litigation and Settlement

Strategic spillovers also occur within the litigation process itself. For example, a plaintiff may file a negative expected value suit solely for its nuisance value. Lucian Bebchuk explains that, “in many disputes, the potential plaintiff recognizes that the expected value to him of going to trial is negative. This might be the case either because the chances of winning a trial are small (the suit is ‘frivolous’) or because the judgment is small relative to the expected litigation costs.”¹³⁶ Yet, “the negative expected value of litigation might not deter the plaintiff from suing: the plaintiff might sue—hoping to extract a settlement offer from the defendant, and planning to drop the case if such offer is not received.”¹³⁷ Bebchuk explores the circumstances in which such threats to extract a settlement are credible.¹³⁸

The primary legal mechanism for deterring frivolous suits and other actions brought solely for their nuisance value is Rule 11 of the Federal Rules of Civil Procedure.¹³⁹ For this reason, one commentator has drawn an analogy between Rule 11 and spite fence statutes: “What does [Rule 11] have in common with rules of nuisance-abatement that apply to spite fences? The rule is designed to deter vexatious and frivolous legal actions . . . that are brought for purposes other than to obtain the relief sought in the

¹³⁵ Donald L. Bell, *Unbundling: An Alternative to the Current System of Cable Television Franchising*, 21 CUMB. L. REV. 43, 69 n.127 (1990) (citing Fields, Comparative Renewal Faceoff, 36 TELEVISION/RADIO AGE, Feb. 20, 1989, at 39).

¹³⁶ Lucian A. Bebchuk, *Suing Solely to Extract a Settlement Offer*, 17 J. LEGAL STUDIES 437, 437 (1988).

¹³⁷ *Id.* at 437; see also David Rosenberg & Steven Shavell, *A Model In Which Suits Are Brought for Their Nuisance Value*, 5 INT’L REV. OF LAW & ECON. 3 (1985).

¹³⁸ Bebchuk, *supra* note 136, at 437-39.

¹³⁹ Rule 11 permits a federal court to sanction any attorney, law firm, or party for violating a provision that requires “an attorney or unrepresented party [to] certifi[y] that to the best of the person’s knowledge, information, and belief, formed after an inquiry reasonable under the circumstances” that a pleading, written motion, or other paper “is not being presented for any improper purpose, such as to harass, cause unnecessary delay, or needlessly increase the cost of litigation.” FED. R. CIV. P. 11.

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pleading, motion, or other demand for relief.”¹⁴⁰ Of course, as many commentators have noted, Rule 11, at least as most courts currently apply the Rule, is underinclusive in deterring negative expected value suits.¹⁴¹

Strategic spillovers are present in settlement as well as litigation. Under Federal Rule of Civil Procedure 23(e)(5), any class member may object to the proposed settlement of a class action.¹⁴² But, in many cases, “professional objectors” file objections to receive monetary payments in exchange for withdrawing their objections.¹⁴³

Brian Fitzpatrick analyzes this possibility of “objector blackmail”.¹⁴⁴ Fitzpatrick explains that, even if a federal district court approves a class action settlement, class members who filed objections with the district court can appeal the court’s approval.¹⁴⁵ An appeal delays final resolution of the settlement, but “it also delays the point at which class counsel can receive their fee awards, which are contingent upon the settlement.”¹⁴⁶ Eager to obtain their fees, class counsel “are willing to pay objectors out of their own pockets to drop the appeals.”¹⁴⁷ Consequently, class members may file “wholly frivolous objections and appeals for no other reason than to induce these side payments from class counsel.”¹⁴⁸

The concern about objector blackmail in class action litigation settlements has a structure similar to the problem of strategic spillovers. Certain class members may not have any incentive to object to a class action settlement. However, knowing they can impose costs on class counsel (in the form of a delay in receiving their fee awards), these class

¹⁴⁰ Joseph M. Perillo, *Abuse of Rights: A Pervasive Legal Concept*, 27 PAC. L.J. 37, 66 (1995)).

¹⁴¹ See, e.g., Ronald J. Gilson, *The Devolution of the Legal Profession: A Demand Side Perspective*, 49 MD. L. REV. 869, 908 (1990) (citing T. WILLGING, *THE RULE 11 SANCTIONING PROCESS* 157-68 (Fed. Jud. Cen. 1988); Snyder, *The Chill of Rule 11, LITIGATION*, Winter 1985, at 16).

¹⁴² FED. R. CIV. P. 25(e)(5).

¹⁴³ See generally WILLIAM B. RUBENSTEIN, ALBA CONTE & HERBERT B. NEWBERG, 4 NEWBERG ON CLASS ACTIONS 11:55 (4th ed. 2008) (noting that “objecting has become big business” but that courts must carefully review objectors as some objections are “obviously “canned” objections filed by professional objectors who seek out class actions to simply extract a fee by lodging generic, unhelpful protests” (quoting *Shaw v. Toshiba America Information Systems, Inc.*, 91 F. Supp. 2d 942 (E.D. Tex. 2000)).

¹⁴⁴ Brian T. Fitzpatrick, *The End of Objector Blackmail?*, 62 VAND. L. REV. 1623 (2009).

¹⁴⁵ See *id.* at 1624.

¹⁴⁶ *Id.*

¹⁴⁷ *Id.*

¹⁴⁸ *Id.*

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members may object opportunistically, i.e., for the purpose of extracting a payment in exchange for ceasing their objections.¹⁴⁹

* * *

Of course, various types of activities that also might be characterized as strategic spillovers arise in many other areas of the law as well. The examples of strategic spillovers discussed above are thus not intended to be a comprehensive list but merely illustrative of a problem that appears in different forms throughout the law.

III. THE HARM OF STRATEGIC SPILLOVERS

Before examining a number of potential solutions for mitigating the harm from strategic spillovers, it is necessary to identify the underlying problem more precisely. In a 1975 article in the *American Economic Review*, economists George Daly and J. Fred Giertz discussed the connection between externalities and extortion.¹⁵⁰ Daly and Giertz argued that, in addition to the obvious distributive effects, using externalities to engage in “extortion” is socially undesirable because bargaining to resolve such externalities involves transaction costs.¹⁵¹

However, the misallocation of resources that can occur as a result of strategic spillovers is, in my view, not merely, or even primarily, a matter of needless transaction costs. The possibility of strategic spillovers creates three additional problems, each of which is potentially more significant than the costs of bargaining.

First, strategic parties may engage in socially wasteful actions to establish the credibility of threats to engage in strategic spillovers. Second, strategic parties may undertake socially wasteful actions because, in certain situations, it is infeasible for these parties to bargain with potential victims

¹⁴⁹ See William B. Rubenstein, *The Fairness Hearing: Adversarial and Regulatory Approaches*, 53 UCLA L. REV. 1435, 1459 (2006) (concluding that the “track record of professional objectors to date . . . has been less than stellar” and that “[t]his part of the profession has arguably attracted lawyers more interested in coercing a fee than in correcting a wrong”); Bruce Hay & David Rosenberg, *“Sweetheart” and “Blackmail” Settlements in Class Actions: Reality and Remedy*, 75 NOTRE DAME L. REV. 1377, 1401 n.45 (2000) (noting that “non-class counsel [who] file or threaten objections to the class settlement for the purpose of forcing a side-settlement with class counsel” may be engaging in the socially detrimental practice of “extracting nuisance-value settlements”).

¹⁵⁰ See Daly & Giertz, *supra* note 6.

¹⁵¹ *Id.* at 1001.

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ex ante. Third, potential victims, realizing that strategic parties may engage, or threaten to engage, in such externality-generating activities, may undertake various types of socially wasteful precautions. After briefly discussing transaction costs, I discuss each of these problems in turn.

A. Transaction Costs Incurred While Bargaining

Clearly, permitting parties to engage in strategic spillovers has a distributive effect. For example, by threatening to construct a spite structure, a strategic landowner may be able to extract a significant payment from his neighbors. By continuing to emit an excessive level of pollution, an opportunistic firm may be able to obtain a substantial subsidy from the government. Or, by threatening to deregulate a regulated industry, a conniving politician may be able to acquire additional campaign contributions from his constituents. As Daly and Giertz noted, using externalities to extract payments from others may “result in profound changes in the distribution of income.”¹⁵²

Yet Daly and Giertz point out that attempts to extract payments using externalities may have an allocative, or welfare, effect as well as a distributive effect. The reason for this welfare effect, they assert, is that, in the course of bargaining to resolve these externalities, parties may incur transaction costs.¹⁵³ If a strategic landowner and his neighbors bargain over a payment to ensure the landowner will not build a spite structure, the costs of bargaining are social costs that are incurred for no productive purpose.¹⁵⁴ Similarly, if an opportunistic firm lobbies the legislature for a carbon subsidy and the government grants a subsidy to the firm, the costs of lobbying for and of administering the subsidy are social costs that are incurred for no productive purpose. Likewise, if a conniving politician collects campaign contributions that guarantee a bill will not be enacted, the costs of soliciting and making the contributions are social costs that are incurred for no productive purpose.

¹⁵² *Id.*; see also *id.* (concluding that, “[i]n a world of costless transacting, extortion . . . will not inhibit efficient resource allocation under either competitive or monopolistic circumstances; it may, however, result in profound changes in the distribution of income”).

¹⁵³ See *id.* 999-1000 (“While extortion redistributes wealth and is sometimes condemned on the basis of equity, there also seem to be important allocative reasons for its disfavor as well which relate to the costliness of the bargaining process.”).

¹⁵⁴ See *id.* 1000 (“With any positive level of bargaining costs, extortion will clearly lead to a reduction of social welfare since scarce resources are utilized in the process of negotiation while failing to improve the allocation of resources.”); see also Fennell, *supra* note 22, at 1424 (“Scholars analyzing phenomena like blackmail and cybersquatting have correctly homed in on the worthlessness of the underlying acquisition activity.”).

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Thus, according to the conventional wisdom among economists, allowing parties to extract payments by engaging in externality-generating activities may have not only a distributive effect (because of the payments from potential victims to strategic parties) but also a welfare effect (because of the transaction costs that accompany bargaining for such payments).¹⁵⁵

B. Investments To Establish the Credibility of Threats

The conclusion that transaction costs are the primary problem with parties attempting to extract payments using externalities is premised on an assumption. The simplifying (yet, ultimately, unrealistic) assumption is that threatening to engage in an activity that entails a negative externality is equivalent to engaging, or preparing to engage, in the activity itself. Ronald Coase, for example, remarks: “Of course, it would not be necessary actually to plant the crops or increase the herd before agreeing not to do so. All that need be done would be to threaten to take such actions”¹⁵⁶ Likewise, Stewart Sterk notes that it may be unnecessary for a landowner to construct a spite fence because the “mere threat of building the fence is likely to induce his neighbor to pay money to be free of the fence.”¹⁵⁷

However, in many circumstances, if strategic parties are merely issuing verbal threats that they intend to undertake externality-generating activities, it is unlikely that potential victims will be willing to pay such parties not to engage in these activities. For example, it is unlikely that a Chicago resident would have transferred money to a stranger who, after announcing plans to operate a livery stable in the neighborhood, demanded a payment in exchange for agreeing not to operate the stable. In the absence of some credible evidence that the stranger intended to operate the stable, the landowner might have dismissed the threat as merely “cheap talk.”¹⁵⁸ A cheap talk threat is one that is costless to make and is thus considered to be not credible.¹⁵⁹

¹⁵⁵ See Daly & Giertz Reply, *supra* note 6, at 736 (“In a world of zero transactions cost, extortion would merely redistribute resources; in a world of costly transactions it would result in resources being used in the bargaining process with no allocative gains, that is, it would result in a movement to a point further from the production-possibility frontier.”).

¹⁵⁶ Coase, *supra* note 55, at 657.

¹⁵⁷ Sterk, *supra* note 97, at 84.

¹⁵⁸ For a relatively accessible introduction to cheap-talk games, see ROBERT GIBBONS, *GAME THEORY FOR APPLIED ECONOMISTS* 210-18 (1992).

¹⁵⁹ See Joseph Farrell & Matthew Rabin, *Cheap Talk*, 10 J. ECON. PERSPECTIVES 103 (1996).

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Social costs begin to arise because a strategic party might attempt to make his or her threat credible by incurring some costs. Incurring costs provides an informational signal to potential victims because it allows threateners to distinguish themselves from other parties for whom it would not be worthwhile to carry out the threat. For example, in commenting on Coase's cattle-raisers, Harold Demsetz points out that "[t]he acquisition of a larger sum by the owner of ranchland generally will require him to incur some cost to make his threat credible, perhaps by actually beginning to increase herd size beyond normal levels."¹⁶⁰

Similarly, to convince neighboring landowners that the threat to open a livery stable was credible, a strategic party might have had to incur some costs such as ordering equipment for operating the stable or beginning the construction of the stable itself. At the very least, neighboring landowners would want to know whether the party had purchased the land for the livery stable. These steps antecedent to engaging in the externality-generating activity—purchasing land, ordering equipment, and beginning construction—entail costs that otherwise would not have been incurred and that, therefore, are socially wasteful.

Moreover, in certain circumstances, the strategic party may have to begin undertaking the externality-generating activity to demonstrate to potential victims that they will in fact suffer harm, or to show the extent to which they will suffer harm, as a result of the activity. An individual who wanted to engage in the livery stable scam in Chicago may have had to begin operating the stable because the neighbors may not have realized the extent of the harm until after they had experienced it; hearing about the possibility of horse manure has a potentially different effect than having to smell the manure itself. Furthermore, in some circumstances, the strategic party may prefer to wait until the externality-generating activity is in progress before attempting to extract a payment. Attempting to bargain with victims after the externality is already occurring might arouse less suspicion that the spillover is strategic than demanding payments from potential victims before the fact.

Thus, even if contracting between strategic parties and potential victims is possible *ex ante*, strategic parties often will make investments and expend resources to establish the credibility of their threats. Yet these investments and resources are costly. And such costs are socially wasteful

¹⁶⁰ Harold Demsetz, *When Does the Rule of Liability Matter?*, 1 J. LEGAL STUD. 13, 23-24 (1972).

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because strategic parties would not have incurred these costs in the absence of the possibility of extracting payments.¹⁶¹

C. Decisions Made When Ex Ante Bargaining Is Infeasible

Strategic spillovers are also problematic because it is sometimes infeasible for parties that are planning to engage in externality-generating activities to bargain with the potential victims of their activities ex ante. In certain circumstances involving opportunistic behavior, the primary concern is the possibility that ex post opportunism will cause parties to incur additional costs ex ante. In the contractual holdup literature, for example, the concern is that parties may attempt to renegotiate a contract as a result of a change in circumstances.¹⁶² Because contracting parties anticipate the possibility of such renegotiations, they may initially invest effort to structure their contracts to minimize the likelihood of holdup, or they may forgo the contractual relationship altogether.¹⁶³

But, at least for certain strategic spillovers, this possibility of negotiating ex ante is infeasible. For example, as noted above, a firm that is planning to construct a new factory, quarry, or other facility that entails

¹⁶¹ Social costs also may arise because a strategic party is concerned about the credibility of *future* threats. Suppose an opportunistic party threatened to engage in an externality-generating activity, but the party was unsuccessful in extracting a payment because bargaining with potential victims failed. In this circumstance, the party would normally have an incentive not to engage in the activity as private costs exceed private benefits. However, if the opportunistic party is concerned about the credibility of future threats, the party may still undertake, rather than just threatening to undertake, the activity.

¹⁶² On the problem of contractual holdup and renegotiation of contracts, see generally Steven Shavell, *Contractual Holdup and Legal Intervention*, 36 J. LEGAL STUD. 325, 326 (2007); Aaron S. Edlin and Benjamin E. Hermalin, *Contract Renegotiation and Options in Agency Problems*, 16 J.L. ECON. & ORG. 395 (2000); Oliver Hart & John Moore, *Incomplete Contracts and Renegotiation*, 56 ECONOMETRICA 755 (1988). Ian Ayres and Kristin Madison also discuss a “parallel problem” in which “parties threaten inefficient performance of contractual promises or other legal duties solely to gain bargaining power in a subsequent negotiation.” Ayres & Madison, *supra* note 69, at 47.

¹⁶³ See Abraham L. Wickelgren, *The Limitations of Buyer-Option Contracts in Solving the Holdup Problem*, 23 J.L. ECON. & ORG. 127, 127 (2007) (citing Yeon-Koo Che & Donald B. Hausch, *Cooperative Investments and the Value of Contracting*, 89 AM. ECON. REV. 125 (1999); Oliver D. Hart & John Moore, *Foundations of Incomplete Contracting*, 66 REV. OF ECON. STUDIES 115 (1999); and Ilya Segal, *Complexity and Renegotiation: A Foundation for Incomplete Contracts*, 66 REV. OF ECON. STUDIES 57 (1999)); see also Hart & Moore, *supra* note 162, at 756 (“[T]he fact that revisions and/or renegotiation will occur will affect the form of the original contract. Less obvious, perhaps, is the fact that it will be in the interest of the parties to try to *constrain* in the original contract the final outcome of the revision/renegotiation process.”).

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harmful spillovers may have an incentive to build its facility in a suboptimal location that is more likely to conflict with future development.¹⁶⁴ The reason is that the firm anticipates that, if a conflict does arise, it may be able to bargain with the future developer or future homeowners and extract a payment, e.g., a higher sales price.

However, the firm that is deciding where to locate its facility may be incapable of bargaining with the future developer or future homeowners that will bear the external costs of its activities. At the time of the firm's decision, neither the developer nor the homeowners will be known. The developer or homeowners may not decide whether to settle near the facility until several years after the firm has chosen a site for its facility. The firm may therefore build a facility in a socially undesirable location even though, if ex ante bargaining were feasible, it might have negotiated an agreement with potential victims. A social loss will occur, even if bargaining is possible ex post, because the firm will already have chosen the suboptimal location.

Thus, strategic spillovers also may result in a misallocation of resources in situations in which there is no opportunity for bargaining to occur before a party must decide whether to undertake an externality-generating activity.

D. Precautions To Avoid Harmful Effects

Strategic spillovers are problematic not only because opportunistic parties will undertake socially wasteful actions, either to establish the credibility of their threats or because ex ante bargaining is infeasible, but also because potential victims may undertake socially wasteful precautions. Knowing that opportunistic parties may engage in strategic spillovers, potential victims will have an incentive to lower their vulnerability to externality-generating activities.

In the general context of extortion or blackmail, Steven Shavell describes how "potential victims of threats will want to reduce their vulnerability to threateners" and can do so by "diminish[ing] the scale of the activities that expose them to risk" or "tak[ing] precautions to lower the likelihood of threats."¹⁶⁵ The precautions taken by potential victims of

¹⁶⁴ See *supra* Part II.A.1; see also Appendix A (describing this situation in detail).

¹⁶⁵ Steven Shavell, *An Economic Analysis of Threats and Their Illegality: Blackmail, Extortion, and Robbery*, 141 U. PA. L. REV. 1877, 1879-80 (1993). For several additional economically-oriented analyses of extortion and blackmail in the legal literature, see

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extortion and blackmail are the same type of precautions that potential victims of externality-generating activities might undertake to avoid the effects of strategic spillovers. But the precautions to avoid such spillovers, like the precautions to avoid extortion and blackmail in general, reduce social welfare.¹⁶⁶

For example, in anticipating the livery stable scam, a potential purchaser of real estate in Chicago may have decided not to buy a lot adjacent to an empty parcel of land. The purchaser might have feared that a strategic party could later buy the empty parcel and threaten to operate a livery stable there. The decision to forgo purchasing a particular property for this reason is socially undesirable; the buyer may choose to purchase an alternative parcel that entails less consumer surplus or choose not to purchase any parcel solely because of the possibility of strategic behavior. Alternatively, existing owners, such as the affluent residents in San Francisco, might decide to buy a vacant parcel preemptively to avoid the risk that a strategic party will purchase the parcel and threaten to engage in a nuisance-like activity like a brewery or bordello. The decision to buy the vacant parcel is also socially undesirable. The buyer is choosing to purchase an additional parcel only as a precaution against the possibility of strategic behavior.

Strategic spillovers also reduce social welfare because of risk aversion. If potential victims are risk-averse and had some way to insure against the possibility of strategic spillovers, they would likely avail themselves of the opportunity. Lawrence Blume and Daniel L. Rubinfeld point out that “[i]ndividuals would presumably be willing to pay something

Mitchell N. Berman, *supra* note 100; Henry E. Smith, *The Harm in Blackmail*, 92 NW. U. L. REV. 861 (1998); Ginsburg & Shechtman, *supra* note 73; Richard A. Posner, *Blackmail, Privacy, and Freedom of Contract*, 141 U. PA. L. REV. 1817 (1993); Coase, *supra* note 55; James Lindgren, *Unraveling the Paradox of Blackmail*, 84 COLUM. L. REV. 670 (1984); Richard A. Epstein, *Blackmail, Inc.*, 50 U. CHI. L. REV. 553 (1983).

¹⁶⁶ See Shavell, *supra* note 165, at 1894 (pointing out that “precautions taken by potential victims avoiding threats reduce social welfare”). The costs of such precautions can be significant. As Nicole Garnett points out in the context of private investments to prevent crime, “Americans spend more on these private precautions—estimates range from \$160 billion to \$300 billion—than on the total U.S. law-enforcement budget. In other words, private individuals spend more to avoid being victimized than U.S. governments at all levels (federal, state, and local) spend on police, prosecutors, judges, and prisons. And these figures do not reflect the total cost of crime avoidance, such as the opportunity costs of remaining inside behind locked doors to avoid victimization.” NICOLE STELLE GARNETT, *ORDERING THE CITY: LAND USE, POLICING, AND THE RESTORATION OF URBAN AMERICA* 133 (2010); see also Robert A. Mikos, “Eggshell” Victims, *Private Precautions, and the Societal Benefits of Shifting Crime*, 105 MICH. L. REV. 307 (2006).

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to insure against the prospect of a factory moving nearby and imposing substantial externalities.”¹⁶⁷ Parties would likely be willing to insure against the possibility of an externality regardless of whether the harm arises unintentionally as the byproduct of an externality-generating activity or purposely as the result of a strategic spillover.

Overall, the precautions undertaken by potential victims, like the activities undertaken by strategic parties, are socially undesirable. These precautions are actions that would not have been undertaken in the absence of the possibility that an opportunistic party might attempt to extract a payment by means of a strategic spillover.¹⁶⁸

IV. SOLUTIONS FOR STRATEGIC SPILLOVERS

A. Conventional Mechanisms for Resolving Externalities

In attempting to mitigate the social harm arising from strategic spillovers, I first analyze four of the traditional mechanisms for resolving conventional externalities: (i) Coasean bargaining; (ii) public subsidies; (iii) regulatory prohibitions; and (iv) corrective taxes or liability rules.

1. Coasean Bargaining

¹⁶⁷ Lawrence Blume & Daniel L. Rubinfeld, *Compensation for Takings: An Economic Analysis*, 72 CAL. L. REV. 569, 592 (1984).

¹⁶⁸ The existence of strategic spillovers also suggests that seemingly “irrelevant externalities” may be relevant. In *Irrelevant Externality Angst*, David Haddock points out that previous work among economists, including James Buchanan and William Stubblebine, has “discussed how external effects can be irrelevant to efficient resource allocation.” David D. Haddock, *Irrelevant Externality Angst*, 19 J. INTERDISCIPLINARY ECON. 3 (2008) (citing James M. Buchanan & William C. Stubblebine, *Externality*, 29 ECONOMICA 371 (1962)); see also David D. Haddock, *When Are Environmental Amenities Policy-Relevant?*, 44 NAT. RESOURCES J. 383, 387 (2004) (“Externalities, positive and negative, are everywhere but are usually economically meaningless. Though chronic, such externalities ... need no regulation.”). Indeed, much of the literature on property rights and the internalization of externalities “distinguishes between those ‘relevant’ externalities that ought to be taken into account in policy analysis and ‘irrelevant’ externalities that ought to be discounted. Irrelevant externalities are those external benefits that should not be internalized.” David W. Barnes, *Trademark Externalities*, 10 YALE J. L. & TECH. 1 (2007). However, even if a party does not have a sufficient incentive to undertake an activity with harmful effects, the effects of such activities are not necessarily irrelevant. The party can threaten to impose such harm on others unless a payment is made. See *supra* Parts II. Conversely, even if a party does have a sufficient incentive to undertake an activity with beneficial effects, these effects are not necessarily irrelevant. The party can threaten to withhold such benefits unless a payment is made. See *supra* Part V.

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Bargaining is often considered an effective way for resolving externalities. Coase emphasizes “the possibility that externality problems would be cured by bargaining, and the consequent irrelevance of the law to substantive outcomes, when parties can bargain with little cost.”¹⁶⁹ However, bargaining is relatively ineffective for controlling strategic spillovers.¹⁷⁰ Relying on such bargaining is problematic, regardless of the magnitude of negotiating costs (at least in the absence of perfect information),¹⁷¹ because it allows a strategic party to engage in the very activity, namely, bargaining, that is necessary to extract payments from potential victims.

To see why bargaining is suboptimal, consider again the livery stable scam. Owner Z is an opportunistic individual in Chicago who is considering whether to operate a livery stable in order to extract payments from the owners of neighboring parcels. If Owner Z decided to operate a stable, he would obtain a private benefit of 8 and have a private cost of 10. In addition, operating a livery stable involves an external cost of 5 on the stable’s neighbors. Thus, by operating a livery stable, Owner Z creates a social loss of 7 (i.e., $-2 - 5$). It is better, therefore, for Owner Z not to operate a livery stable.

Under the conventional wisdom regarding externalities, Owner Z would not in fact have an incentive to operate a stable. Owner Z’s private benefits (8) are less than his private costs (10).¹⁷² The problem is that, when the possibility of opportunistic behavior is considered, Owner Z may have an incentive to operate a stable. Although Owner Z’s private costs (10) outweigh his private benefits (8), Owner Z may engage in the activity in order to impose harm (5) on his neighbors. By doing so, Owner Z is then able to bargain for a payment (suppose the neighbors agree to pay Z 4) in exchange for agreeing to cease his externality-generating activity. Assuming transaction costs are 0, Owner Z will decide to operate the stable—the socially undesirable outcome—because his private benefits of 12 ($8 + 4$) outweigh his private costs of 10.

Instead of actually operating a livery stable, Owner Z could just announce a threat to operate the stable. However, without incurring any costs to make the threat credible, such a threat is merely cheap talk.¹⁷³ The

¹⁶⁹ SHAVELL, *supra* note 5, at 109 (citing Coase, *supra* note 1).

¹⁷⁰ See *supra* Part I.B.

¹⁷¹ See *supra* note 49.

¹⁷² See *supra* note 48 & accompanying text.

¹⁷³ See *supra* notes 158-59 & accompanying text.

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neighbors who are being threatened might not pay unless Owner Z incurred some cost to make his threat credible. Suppose, for example, that Owner Z could purchase the equipment necessary to make his threat credible at a cost of 1. Under these circumstances, Owner Z would incur this cost because the benefit of extracting a payment through a credible threat, 4, is greater than the cost of making the threat credible, 1. However, this result is, once again, socially undesirable because Owner Z's investment in this equipment, -1, is a deadweight loss. Owner Z would not have purchased the equipment if not for the possibility of extracting a payment. Thus, relying solely on bargaining to resolve strategic spillovers leads to an undesirable outcome, regardless of whether the strategic party engages in the externality-generating activity or merely threatens to do so.

2. Public Subsidies

Subsidies are invoked frequently as a solution for increasing externality-generating activities that involve positive externalities, but the use of subsidies is also possible for attempting to control activities that entail negative externalities.¹⁷⁴ Specifically, the government may choose to pay a party that is causing a negative externality an amount “equal to the reduction in expected harm from some benchmark level that the party accomplishes.”¹⁷⁵ But, like bargaining, this type of subsidy is relatively ineffective for resolving strategic spillovers. Indeed, like bargaining, subsidies may create a perverse incentive for opportunistic parties to engage in activities they otherwise would not have undertaken.

To see why a subsidy is ineffective, return to the numerical example involving Owner Z described above. Suppose the government decided to pay livery stable owners for a reduction in expected harm. In this case, the government might pay Owner Z 5 if Owner Z reduces the harm on neighbors to 0 from the baseline of 5, either by modifying its activity to limit external effects or refraining from the activity itself. Anticipating that the government will subsidize this reduction, Owner Z, who ordinarily would not have an incentive to operate a livery stable (because Owner Z's private benefits, 8, are less than his private costs, 10), might open a livery stable and then close the livery stable in exchange for receiving a payment of 5. Here, Owner Z has the same incentive as the “pollution entrepreneurs” in China who are engaging in excess production to generate additional HFC-23 in order to cash in on carbon credits,¹⁷⁶ because the

¹⁷⁴ See SHAVELL, *supra* note 5, at 94.

¹⁷⁵ *Id.*

¹⁷⁶ See *supra* Part III.A.2.

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benefit of obtaining the subsidy, 5, exceeds the costs of creating and eliminating the social harm, -2.

3. Regulatory Prohibitions

Now suppose that, in addition to Owner Z, there are three other individuals in Chicago, Owners A, B, and C, each of whom is considering establishing a livery stable. Unlike Owner Z, Owners A, B, and C have served as apprentices at other livery stables and are true equine experts. If Owners A, B, and C each decided to operate a stable, each owner would obtain a private benefit of 17 at a private cost of 10, for a profit of 7. Once again, if Owner Z decided to operate a stable, he would obtain a private benefit of 8 and have a private cost of 10. In addition, operating a livery stable involves an external cost of 5 on the stable's neighbors. Thus, by operating a livery stable, Owners A, B, and C each create a social benefit of 2 (i.e., $7 - 5$), and Owner Z creates a social loss of 7 (i.e., $-2 - 5$). The socially desirable outcome is for Owners A, B, and C to operate a livery stable and Owner Z not to operate a livery stable. *See* Table 2.

Table 2				
The "Livery Stable Scam"				
<u>Owner</u>	<u>Private Benefit</u>	<u>Private Cost</u>	<u>External Cost</u>	<u>Social Welfare</u>
Owner A	17	10	5	2
Owner B	17	10	5	2
Owner C	17	10	5	2
Owner Z	8	10	5	-7

Under the conventional wisdom regarding externalities, only Owners A, B, and C would choose to operate a stable because only these three owners have a private benefit (17) that exceeds their private costs (10). Owner Z would not have an incentive to operate a stable because his private benefits (8) are less than his private costs (10). If owners A, B, and C operate livery stables, social welfare is 6 ($2 + 2 + 2$), the socially desirable outcome.

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As discussed above, relying on bargaining to resolve strategic spillovers leads to an undesirable outcome.¹⁷⁷ Opportunistic parties like Owner Z actually hope to bargain with potential victims to extract payments in exchange for agreeing to cease their externality-generating activities. Likewise, relying on subsidies to resolve strategic spillovers leads to an undesirable outcome.¹⁷⁸ If they are unable to extract payments directly from potential victims, opportunistic parties like Owner Z hope to obtain subsidies from the government in exchange for reducing or eliminating the social harm of their externality-generating activities. Thus, in the absence of any regulation, Owner Z, as well as Owners A, B, and C, will have an incentive to operate a stable, and social welfare will be $-1 (2 + 2 + 2 - 7)$, a socially undesirable outcome.

But what if the city enacted a regulation prohibiting livery stables in all residential areas? Enacting this regulation would result in a higher level of social welfare than relying exclusively on bargaining or subsidies, but the outcome would not be optimal. If Owners A, B, C, and Z were each prohibited from operating a livery stable, then social welfare would be 0 because, with no livery stable operations, there would not be any costs or any benefits. Here, a prohibition is better than permitting the activity and then allowing bargaining to resolve harmful effects or providing subsidies to reduce social harm because 0, the outcome if livery stables are prohibited, is greater than -1 , the outcome if all four owners operate stables.

However, the regulatory prohibition is worse than the socially desirable outcome because 0 is less than 6. The prohibition on livery stables in residential areas prevents the opportunistic party, Owner Z, from engaging in a strategic spillover. But the prohibition also prevents the non-opportunistic parties, Owners A, B, and C, from engaging in activities that, although having harmful effects, are socially desirable because the social benefits exceed the social costs. Thus, if policymakers are unable to target opportunistic behavior, then regulatory prohibitions will be suboptimal. Unless there is a way to distinguish strategic spillovers from other externality-generating activities, such prohibitions will deter desirable, as well as undesirable, activities.¹⁷⁹

¹⁷⁷ See *supra* Part IV.A.1.

¹⁷⁸ See *supra* Part IV.A.2.

¹⁷⁹ Cf. Demsetz, *supra* note 160, at 25 (“Because it is difficult to sort desirable from undesirable increases in herd or crop size, there is a real danger of penalizing desirable increases in herd or crop size by mistake if such wealth transfers are treated as extortion.”); Mohring & Boyd, *supra* note 67, at 349 (discussing how “under the bribery approach [for

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4. Liability Rules or Corrective Taxes

Liability rules or corrective taxes seem to offer a potentially promising solution for addressing strategic spillovers. Ideally, either liability rules or corrective taxes would force each party that is engaging in an externality-generating activity to internalize the external costs of its activities.¹⁸⁰ If strategic parties were forced to internalize the costs of their externalities, these parties would have no incentive to engage in strategic spillovers. Rather than being able to extract payments from potential victims, such parties would have to compensate victims (under liability rules) or pay the government (under corrective taxes) for the harm they are imposing or expected to impose.

Moreover, unlike regulatory prohibitions, liability rules or corrective taxes would not eliminate the externality-generating activities that are socially desirable. On one hand, if the private benefits of engaging in an activity still exceeded the private costs of engaging in the activity (including the liability costs or tax payments), a non-opportunistic party would continue to engage in the activity. On the other hand, if the private benefits of engaging in an activity did not exceed the private costs of engaging in the activity (including the liability costs or tax payments), a non-opportunistic party would cease the activity. Thus, if forced to internalize their external costs, all parties, both strategic parties and non-strategic parties, would have a private incentive that converges with the socially desirable outcome.

To see why an approach based on liability rules or corrective taxes would lead to the optimal result, consider once again the livery stable example. With liability rules, Owners A, B, C, and Z would each be required to compensate their neighbors for the harm (5) if they operated a livery stable. Under these conditions, Owners A, B, and C would continue to operate their stables, even after being forced to internalize their external costs, because their private benefits, 17, would still be greater than their private costs including liability costs, 15 (i.e., 10 + 5). Owner Z, instead of being able to extract a payment of 4 from his neighbors, would be required to pay 5 to his neighbors to compensate them for the harm. If Owner Z is unable to extract payments by imposing external costs, Owner Z's private benefits, 8, would be less than either his private costs, 10, or his private costs including liability costs, 15 (i.e., 10 + 5). As a result, Owner Z would

resolving congestion externalities], it could prove troublesome to separate genuine potential drivers from those who pretend to be such merely to obtain bribes”).

¹⁸⁰ On the internalization of externalities, *see supra* note 44.

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not have any incentive to operate the stable. Thus, under the liability rule approach, social welfare is 6, the socially desirable outcome, because Owners A, B, and C would each operate a stable and Owner Z would not operate a stable. The same result occurs if the owners are required to pay the government a corrective tax in the amount equal to expected harm.¹⁸¹

Thus, the existence of strategic spillovers seems to suggest that society should rely on liability rules or corrective taxes somewhat more frequently than would be the case if individuals and firms acted to further their self-interest or maximize their profits but did not act opportunistically. However, it is unclear whether this theoretical conclusion suggests the need for an increased reliance on liability rules or corrective taxes in practice as there is no definitive empirical evidence regarding whether or not such mechanisms are currently over- or under-utilized.¹⁸²

One reason why liability rules or corrective taxes are not a panacea for solving strategic spillovers, as the example above might seem to suggest, is the existence of litigation costs or administrative costs. The problem is that liability rules or a corrective tax would entail litigation or administrative costs for imposing liability not only on parties engaging in strategic spillovers but also on parties who are engaging in non-opportunistic spillovers.

In the example above, if litigation costs are assumed to be 0, then liability rules would result in the socially desirable outcome. But if litigation costs are assumed to be 2 for determining liability and awarding damages in each case, then liability rules do not result in the socially desirable outcome. Litigating each case that involves a livery stable owner who imposes harm on others would increase social costs by 8 ($2 + 2 + 2 +$

¹⁸¹ With a corrective tax, Owners A, B, C, and Z would each be required to pay the government for the expected harm to neighbors (5) if they operated a livery stable. Owners A, B, and C would continue to operate their stables, even after being forced to internalize these external costs, because their private benefits, 17, would be greater than their private costs including the corrective tax, 15 (i.e., $10 + 5$). Owner Z, instead of being able to extract a payment of 4 from his neighbors, would be required to pay 5 to the government. If Owner Z is unable to extract payments by imposing external costs, Owner Z's private benefits, 8, would be less than either his private costs, 10, or his private costs including the corrective tax, 15 (i.e., $10 + 5$). As a result, Owner Z would not have any incentive to operate the stable. Thus, as in the case of liability rules, under a corrective tax, social welfare is 6, the socially desirable outcome, because Owners A, B, and C would each operate a stable and Owner Z would not operate a stable.

¹⁸² Compare Shavell, *supra* note 5, at 101 (pointing out that regulation and liability rules are the "preeminent tools that society employs to control externalities", that subsidies are "utilized relatively infrequently", and that corrective taxes are "used rarely").

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2). Social welfare is thus equal to 6, the benefits of permitting Owners A, B, and C to operate a stable and deterring Owner Z from operating a stable, minus 8, the litigation costs of imposing liability on each owner, for a total of -2. Here, the inclusion of litigation costs means that liability rules will lead to less welfare, -2, than just prohibiting livery stables in residential areas entirely, 0. The same result occurs under a corrective tax system in which administrative costs are assumed to be -2 for levying a tax against each livery stable owner. Overall, whether liability rules or corrective taxes are superior to regulation depends on whether the opportunity costs of deterring externality-generating activities that may be desirable exceed the litigation costs or administrative costs of determining liability or expected harm for each externality-generating activity.¹⁸³

Of course, actual litigation costs or administrative costs might be lower because the imposition of liability or a tax would deter certain parties from engaging in these activities. Knowing they would be liable *ex post* or subject to taxation *ex ante*, strategic parties would not have an incentive to engage in strategic spillovers. In theory, therefore, there would be no litigation or taxation involving strategic parties.

However, because other parties would continue to engage in these externality-generating activities and because imposing liability or a corrective tax on these parties would be necessary to distinguish between opportunistic and non-opportunistic behavior, litigation costs or administrative costs might still be significant. For example, in the livery stable example, liability rules or a corrective tax might deter Owner Z from acting opportunistically, resulting in no litigation between Z and Z's potential victims or no taxation of Z. But owners A, B, and C would continue to operate their livery stables and the victims of their spillovers could still litigate to recover damages for the harm suffered (under a liability rule) or the government could still impose a tax to recover money for the expected harm (under a corrective tax). Thus, litigation costs or administrative costs would be 6 (2 + 2 + 2), and a liability regime with

¹⁸³ Interestingly, this analysis is seemingly consistent with the development of the law with respect to livery stables. Initially, when litigation costs were relatively low, a determination of whether any particular stable was a nuisance was made on a case-by-case basis. *See, e.g., Flint v. Russell*, 9 F. Cas. 286, 288 (E.D. Mo. 1879) (“a livery stable in a town or city is not per se—that is, necessarily and unavoidably—a nuisance”). Ultimately, when the number of stables and other conflicting uses began to increase, cities began to separate conflicting uses by simply prohibiting these activities in residential areas, even though certain instances of these activities were socially desirable. *See, e.g., Sheldon v. Weeks*, 51 Ill. App. 314, 315 (1893) (noting that “[m]any private stables are kept in the best residence neighborhoods”).

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litigation costs or a corrective tax with administrative costs would lead to the same welfare, 0, as prohibiting livery stables in residential areas.

The legal system could attempt to distinguish between strategic livery stable owners and non-opportunistic livery stable owners and impose liability or a tax only on strategic owners. However, attempting to separate the strategic owners from the non-opportunistic owners raises the same informational problem that arises in the absence of liability rules or corrective taxes. Thus, unless the strategic behavior is easily observable, the liability rule approach or corrective tax system is useful only if the overall costs of imposing liability or administering a corrective tax on all externality-generating activities are relatively low, at least compared to the benefits of deterring strategic spillovers.

Moreover, there is a second potential disadvantage of relying on liability rules or corrective taxes to deter strategic spillovers. As discussed above, if liability equals actual damages or a tax equals expected harm, then liability rules or corrective taxes should deter opportunistic parties without unnecessarily deterring non-opportunistic parties (assuming that litigation costs or administration costs are non-existent). However, if liability *exceeds* damages or a corrective tax *exceeds* expected harm, then parties that were planning to undertake externality-generating activities that are socially desirable, as well as parties that are attempting to engage in strategic spillovers, may opportunistically threaten not to engage in the underlying activity in order to extract a payment.¹⁸⁴

For example, in the livery stable example above, Owners A, B, and C, the non-opportunistic owners, would not threaten to extract a payment from their neighbors if liability is equal to damages. However, suppose a livery stable owner's liability is 6, even though the damage to neighbors is only 5. Under these circumstances, the neighbors will gain 1, the amount by which liability exceeds damages. As a result, Owner A, B, or C could threaten not to operate unless the neighbors paid some amount up to their potential gain of 1. If the neighbors refuse to accede to the owner's demand (perhaps the neighbors believe they are better bargainers) and the owner carries out the threat (perhaps to make future threats credible), then A, B, or

¹⁸⁴ See A. MITCHELL POLINSKY, AN INTRODUCTION TO LAW AND ECONOMICS 22 (3d. ed. 2003) ("Under the damage remedy, to overcome strategic behavior it is necessary to set liability equal to actual damages. If liability exceeds actual damages, then the party who is liable has an incentive to threaten to deny the other party's overcompensation by choosing an inefficient outcome.").

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C will not operate the livery stable, even though doing so is socially desirable.¹⁸⁵

Likewise, owner Z, the opportunistic owner, who would not have threatened to extract a payment from his neighbors if liability is equal to damages, would also have an incentive to engage in this type of threat if liability, 6, exceeds damages, 5. Once again, by threatening not to operate unless the neighbors paid for the potential gain of 1, Owner Z might attempt to extract a payment from the neighbors. Here, it is better for Owner Z and the neighbors not to bargain because it is socially desirable for Owner Z not to operate the stable.

Similarly, if the government attempted to implement a corrective tax, rather than rely on liability rules, the livery stable owners might have an incentive to engage in a strategic threat if the amount of the tax exceeds expected harm. Suppose the corrective tax is 6, which exceeds the damages to neighbors, 5. Here, because the government (or taxpayers) might realize a gain of 1, livery stable owners A, B, or C might threaten not to operate unless paid some amount up to 1. If bargaining between the government and owners is unsuccessful, these owners will not operate livery stables, even though doing so is socially desirable. Owner Z also might engage in this type of threat, although, as in the case of liability rules, a failure to bargain successfully with an opportunistic owner like Z is consistent with the socially desirable outcome.

Thus, liability rules or corrective taxes are an imperfect solution for strategic spillovers, not only if litigation costs or administrative costs are positive but also if liability exceeds actual damages or a corrective tax exceeds expected harm.¹⁸⁶

Ultimately, whether the litigation costs of imposing liability or the administrative costs of imposing taxes on each party would outweigh the benefits of deterring strategic spillovers is an empirical question that will depend on each particular situation. If the number of opportunists is low relative to the total number of parties engaging in an externality-generating activity (consider, for example, the percentage of all fences that are “spite fences”), then it may not be worthwhile to impose liability or a corrective

¹⁸⁵ *See id.*

¹⁸⁶ For strategic spillovers, setting liability less than actual damages or a corrective tax lower than expected harm is also problematic. Although non-opportunistic parties would not have an incentive to bargain for a payment from neighbors or the government, opportunistic parties may still have an incentive to engage in strategic spillovers.

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tax. By contrast, if the number of opportunists is high relative to the total number of parties engaging in an externality-generating activity (consider, for example, the percentage of all subsidized projects that may not result in additional emissions reductions), then this may militate in favor of liability rules or a corrective tax.

B. Innovative Approaches for Targeting Opportunism

Because each of the traditional ways of resolving conventional externalities is imperfect for addressing strategic spillovers, I now consider four innovative approaches: (i) financial disclosures; (ii) contractual non-enforcement; (iii) inalienability; and (iv) equity.

1. *Financial Disclosures*

As noted above, the difficulty with strategic spillovers is ultimately a problem of asymmetric information.¹⁸⁷ An opportunistic party knows the private benefits and costs of its own activities, but the potential victims typically do not have access to this information. Many of the conventional mechanisms for resolving externalities rely on forcing the opportunist to internalize the external effects of its activities.¹⁸⁸ However, this internalization of externalities would be unnecessary for deterring strategic spillovers if potential victims had a way of knowing that, in the absence of the externality, the opportunistic party would have no incentive to act.

One possibility, therefore, for addressing strategic spillovers is to require greater disclosure of financial information from parties that are engaging in externality-generating activities.¹⁸⁹ Information disclosure might take a number of different forms. For example, disclosure might be made before the fact to a regulatory agency or other administrative body as a prerequisite of engaging in the activity. Or disclosure might be made after the fact to a court or arbitrator as part of a litigation or arbitration.

¹⁸⁷ See *supra* note 50 and accompanying text.

¹⁸⁸ See *supra* notes 43-44 and accompanying text.

¹⁸⁹ Debates about disclosure are, of course, ubiquitous because “[f]ederal securities law imposes extensive mandatory disclosure obligations on public corporations” WILLIAM T. ALLEN & REINIER KRAAKMAN, COMMENTARIES AND CASES ON THE LAW OF BUSINESS ORGANIZATION 130 (2003). For a seminal study in this area, see George J. Stigler, *Public Regulation of the Securities Market*, 37 J. Bus. 117 (1974); see also Paul Mahoney, *Mandatory Disclosure as a Solution to Agency Problems*, 62 U. CHI. L. REV. 1047, 1048 (1995) (contending that “the principal purpose of mandatory disclosure is to address certain agency problems that arise between corporate promoters and investors, and between corporate managers and shareholders”).

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Moreover, disclosure might be mandatory (e.g., government audits or required disclosure) or discretionary (e.g., private audits or voluntary compliance).¹⁹⁰ Whatever the precise institutional mechanism, to the extent the strategic party disclosed truthful information about the private benefits and costs of the activity, the party would be unable to make credible threats to extract a payment. Potential victims, as well as public officials, would be unwilling to pay if the private costs exceed the private benefits.

Increasing financial disclosures may be one aspect of the solution, but auditing is unlikely to be a panacea. First, auditing, either ex ante by regulators or ex post through the courts, is time-consuming and expensive. Although strategic spillovers could be detected if auditing was costless and error-free,¹⁹¹ auditing is both costly and subject to human limitations.¹⁹² Second, in response to a request for information, a party that is being audited or the firm that is performing the audit may act opportunistically.¹⁹³ For example, the party might strategically disclose too much information,¹⁹⁴ or an audit firm might perform a low-quality review due to the low probability that its opportunism will ever be detected.¹⁹⁵ Third, even though non-disclosure of the private benefits and costs of an activity could be the result of an opportunistic motivation, the right not to disclose is often

¹⁹⁰ For an examination of mandatory versus discretionary disclosure in the securities context, see Joseph A. Franco, *Why Antifraud Prohibitions Are Not Enough: The Significance of Opportunism, Candor and Signaling In the Economic Case for Mandatory Securities Disclosure*, 2002 COLUM. BUS. L. REV. 223, 292 (“Mandatory disclosure requirements, like antifraud provisions, discourage opportunistic forms of quality disclosure and thereby increase the average disclosure quality of issuers generally.”).

¹⁹¹ Cf. Mehmet Bac & Parimal Kanti Bag, *Graduated Penalty Scheme*, 29 INT’L REV. L. & ECON. 281, 282 n.5 (2009) (“If auditing were costless and perfect, opportunistic defaults could be eliminated.”).

¹⁹² See A. Mitchell Polinsky, *Optimal Fines and Auditing When Wealth is Costly to Observe*, 26 INT’L REV. L. & ECON. 323, 324 (2006) (explicitly incorporating the “cost of an audit” into enforcement authority’s ability to acquire private information); Frank B. Cross & Robert A. Prentice, *The Economic Value of Securities Regulation*, 28 CARDOZO L. REV. 333, 350-353 (2006) (“Auditors are humans and subject to the same cognitive shortcoming, even irrationalities, that affect all humans.”).

¹⁹³ See Cross & Prentice, *supra* note 192, at 351 (“Outside auditors have shown themselves to be every bit as opportunistic as other informational intermediaries.”).

¹⁹⁴ See Joshua D. Blank, *Overcoming Overdisclosure: Toward a Tax Shelter Detection*, 56 U.C.L.A. L. REV. 1629 (arguing that a mandatory disclosure result can result in opportunistic “overdisclosure in an attempt to avoid detection of abusive tax planning”).

¹⁹⁵ See Robert A. Prentice, *The Case of the Irrational Auditor: A Behavioral Insight Into Securities Fraud Litigation*, 95 NW. U. L. REV. 133, 217 (2000) (pointing out that “it is possible for an audit firm to engage in opportunistic behavior by performing a low-quality audit that is never discovered” and, “[i]f an audit failure is discovered, financial statement users will not know whether the audit firm’s failure was due to opportunistic behavior, human frailty, a rogue employee, or bad luck”)

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socially beneficial. Specifically, individuals and firms often will be unwilling to disclose various types of proprietary information, especially relating to their business plans, litigation strategies, or trade secrets, and requiring disclosure may reduce the incentive to compete or innovate.¹⁹⁶

In certain contexts, regulators have attempted to require disclosures or engage in auditing. For example, because of the concern regarding opportunism in the market for carbon offset credits,¹⁹⁷ “some carbon sequestration accounting standards require that an economic analysis be performed to determine if an economically rational owner of the project area would have undertaken the project without the project generating any carbon offsets credits.”¹⁹⁸ If the owner would have undertaken the project even in the absence of the offset credits, the project does not satisfy the additionality requirement and no subsidy is awarded.¹⁹⁹ However, to date, there is no meaningful consensus on the appropriate definition of additionality or how the additionality principle should be implemented in practice.²⁰⁰

2. Contractual Non-Enforcement

In the absence of any other relief, potential victims may be willing to pay a strategic party to cease its externality-generating activity.

¹⁹⁶ See, e.g., RICHARD A. POSNER, *ECONOMIC ANALYSIS OF LAW* 481 (7th ed. 2007) (“Mandatory disclosure can also undermine the use of secrecy as a legitimate device for appropriating the benefits of being the first company to make a valuable discovery or to obtain commercially valuable information.”).

¹⁹⁷ See *supra* Part II.A.2.

¹⁹⁸ Peter L. Gray & Geraldine E. Edens, *Carbon Accounting: A Practical Guide For Lawyers*, 22-WTR NAT. RESOURCES & ENV'T 41, 48-49 (2008); see also James L. Olmsted, *The Global Warming Crisis: An Analytical Framework to Regional Responses*, 23 J. ENVTL. L. & LITIG. 125, 163 (“One way to prevent the expenditure of carbon offset funding for pre-existing or already funded projects is to require that any carbon offsets demonstrate ‘additionality.’ Requiring additionality means that any anti-global warming program for which funding from offsets are used would not have taken place but for the offsets program.”).

¹⁹⁹ See Gray & Edens, *supra* note 198, at 49.

²⁰⁰ See Mark C. Trexler et al., *Developing Project-Level Emissions Reductions at the State Level*, 14 WIDENER L.J. 269, 272 (2008) (“The lack of a concrete definition of additionality has allowed for development of widely divergent interpretations of how additionality should be applied.”); see also Michael Wara, *Measuring the Clean Development Mechanism's Performance and Potential*, 55 UCLA L. REV. 1759, 1798-99 (2008) (discussing problems with existing criteria for additionality, recommending reforms to existing CDM structure, but noting that such reforms “do not resolve the issue of how to separate additional from nonadditional projects in regulated and state-owned industries like the Chinese energy sector.”).

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Specifically, if the costs of paying to cease an externality are less than the costs of continuing to bear the externality, then a victim would be willing to pay the strategic party not to undertake its activity. However, if potential victims are contemplating a payment to a strategic party, they typically will want some type of assurance that, if paid, the strategic party will not continue to engage (or threaten to engage) in the externality-generating activity. Ideally, from the perspective of potential victims, such an assurance would be in the form of a contractual agreement.

But what if a court refused to enforce such a contract between a strategic party and potential victims? By refusing to enforce such a contract, the court might eliminate the incentive for a party to impose externalities opportunistically. Knowing a contract is unenforceable, potential victims may not be willing to pay a strategic party; and, the strategic party, realizing potential victims may be unwilling to pay, may not succeed in extracting a payment.

More specifically, the immediate consequence of having a court not enforce such a contract is that potential victims would not be entitled to expectation damages if they entered into an agreement with a strategic party and the strategic party continued to engage in the activity. However, if potential victims know they will not be entitled to these damages, it will be difficult for a strategic party to make an enforceable promise to cease the activity. Anticipating that the strategic party will not cease its activity, potential victims might refuse to pay the strategic party. And, if the strategic party knows that potential victims will be unwilling to pay to cease the externality-generating activity, the strategic party might not have any incentive to engage in the activity in the first place. (See Appendix B for a game-theoretical model illustrating this idea in a sequential game.)

This type of reasoning through backward induction suggests that, by refusing to enforce contracts between strategic parties and potential victims, courts might be able to deter certain types of strategic spillovers. The possibility of non-enforcement, when strategic behavior is observable and verifiable, eliminates the incentive for individuals and firms to impose externalities opportunistically. As a result, a court might, for example, refuse to enforce a contract between a property owner who threatened to build a structure that interfered with a neighbor's view and the owner's neighbor who would bear the costs of such an interference, if the neighbor could show that, in the absence of the possibility of extracting a payment, the owner would not have constructed the structure.

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By contrast, when this type of strategic behavior is not observable, there is a plausible argument that courts should continue to enforce otherwise valid contracts. In these circumstances, it is generally too difficult to detect opportunism and, at the very least, enforcing otherwise valid contracts permits parties to resolve conventional externalities through bargaining. Consequently, a court should probably enforce a contract between, say, a factory owner who decides to locate his facility in an exurban area and the subsequent developer or homeowners who are affected by the factory's external effects.

But the difficult cases are, of course, those in which the determination of whether or not a particular behavior is strategic is ambiguous (say the strategic behavior is observable but not verifiable). Whether or not courts should enforce contracts in these cases depends on the relative magnitude of (i) the expected benefits of deterring opportunistic parties from engaging in strategic spillovers, (ii) the opportunity costs of mistakenly deterring self-interested behavior that may be socially desirable, and (iii) the litigation or administrative costs of targeting strategic behavior.

All other things being equal, if the opportunity costs of misidentifying desirable behavior as strategic are relatively low, courts may wish to refrain from enforcing contracts for resolving spillovers. In these circumstances, the possibility that the spillover is strategic might outweigh the risk of deterring a desirable activity. By contrast, if the opportunity costs of misidentifying desirable behavior as strategic are relatively high, courts may wish to enforce such contracts. Here, the risk of deterring self-interested activities that entail externalities, but that are also socially desirable, might outweigh the possibility that the spillover is strategic.

Finally, it is worth noting that, even if a strategic party and potential victims are able to resolve a particular strategic spillover contractually (and even if the courts were to enforce this type of contractual agreement), it may not be feasible for a standard contract to prevent *subsequent* strategic spillovers. For example, the same strategic party may attempt to extract payments from other potential victims: livery stable owner *A* who obtains a payment from neighborhood *A* may decide to move to neighborhood *B* and extract a similar payment from neighborhood *B*. Alternatively, a different strategic party may attempt to extract payments from the same potential victims: livery stable owner *B*, learning of the payment from neighborhood *A* to livery stable owner *A*, may decide to move to neighborhood *A* and

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extract a similar payment from neighborhood *A*.²⁰¹ The same strategic party might even attempt to extract payments from the same victims: livery stable owner *A*, having obtained one payment from neighborhood *A*, may hire an agent and extract another payment from neighborhood *A*.²⁰²

3. Inalienability

In a recent article in the *Harvard Law Review*, Lee Anne Fennell proposes “inalienability” as another mechanism for discouraging certain types of strategic behavior.²⁰³ Fennell explores inalienability rules not in the usual context of whether human organs or legal rights should be transferable but instead the potential of inalienability rules “as tools for achieving efficiency (or other ends) when applied to resources that society generally views as appropriate objects of market transactions.”²⁰⁴

A number of the examples discussed above are also situations that Fennell raises. For example, Fennell mentions the problems created by patent trolls, cybersquatters, and several land use entitlements (including variations on the strategic spillovers in nuisance, coming to the nuisance, and spite structures).²⁰⁵ She also points out, citing an earlier version of this Article, that “[m]any similar problems of the ‘pay me not to’ or ‘pay me to stop’ variety can be readily imagined.”²⁰⁶

Fennell’s contention is the legal system might be able to address the opportunism present in these situations through the use of inalienability. She focuses on “inalienability’s capacity to alter upstream decisions by would-be resellers about whether to acquire an entitlement in the first place.”²⁰⁷ According to her argument, “[i]f the entitlements in question were inalienable, certain acquisitions and threatened uses would drop out of the picture. Foreseeing the inability to sell, those motivated solely by resale

²⁰¹ Cf. Holderness, *supra* note 45, at 185-88 (1989) (describing how bargaining is “futile” in circumstances in which there is an open class because assignment of liability will encourage entry into the open class).

²⁰² For an example of a case illustrating this potential for subsequent strategic spillovers, see *Lewis v. Gollner*, 29 N.E. 81, 81 (N.Y. 1891).

²⁰³ See Fennell, *supra* note 22. As noted above, Calabresi and Melamed discussed inalienability, as well as property rules and liability rules, in their classic article on entitlements, see Calabresi & Melamed, *supra* note 71.

²⁰⁴ Fennell, *supra* note 22, at 1406.

²⁰⁵ *Id.* at 1413-17.

²⁰⁶ *Id.* at 1417 (citing Daniel B. Kelly, Strategic Spillovers (Dec. 13, 2008) (unpublished manuscript, on file with the Harvard Law School Library)).

²⁰⁷ *Id.* at 1406.

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opportunities would simply select out of the market.”²⁰⁸ Thus, if patent trolls, cybersquatters, and other strategic parties have no ability to extract a payment *ex post*, these parties will have will not have any incentive to acquire property for opportunistic purposes *ex ante*.

Adjusting alienability is a useful tool for deterring certain strategic spillovers. However, as Fennell acknowledges, inalienability rules have limitations. Most importantly, by prohibiting transfers in which one party may have acted strategically, inalienability not only blocks strategic spillovers; it also may deter socially desirable activities because “any restriction on alienability carries the potential to inefficiently block the flow of goods to higher valuing users.”²⁰⁹ Fennell does attempt to mitigate this problem by advocating for an increased reliance on mechanisms like put options and Vickrey auctions.²¹⁰ Also, it is “very difficult” to tell “one’s reason for wishing to engage” in a given action, and an interest in selling an entitlement is not necessarily relevant, let alone dispositive, for determining whether a party’s motivation is self-interested or opportunistic.²¹¹ Overall, as Fennell concludes, “[w]hether inalienability rules offer the best chance for increasing surplus or achieving other goals in a given context is a comparative inquiry that turns on the feasibility, efficacy, and normative desirability of other courses of action, including doing nothing.”²¹²

Nevertheless, inalienability has already proven useful in addressing one strategic spillover: objector blackmail in class action settlements. Brian Fitzpatrick, citing Fennell, notes that “inalienability rules separate those persons who wish to acquire an entitlement for strategic reasons from those sellers who genuinely value the entitlement.”²¹³ Applying inalienability to objector blackmail, Fitzpatrick argues: “If objectors were prohibited from selling their right to appeal to class counsel, then objectors who wished to appeal solely to extract rents from class counsel eager to avoid delay, risk, and litigation costs would not bother filing appeals at all.”²¹⁴ At the same time, “no legitimate objector would be discouraged

²⁰⁸ *Id.* at 1420.

²⁰⁹ *Id.* at 1408; *see also* Fitzpatrick, *supra* note 144, at 1662 (“Inalienability rules typically come with one very big downside: unless they can somehow be restricted only to strategic acquirers, they will prohibit utility-enhancing transactions as well as utility-diminishing ones.” (citing Fennell, *supra* note 22, at 1420)).

²¹⁰ *See* Fennell, *supra* note 22, at 1457-63.

²¹¹ *Id.* at 1454; *see also id.* at 1455 (pointing out that, “by blocking potential bargains, such rules risk leaving in place inefficiently ugly but earnestly constructed fences”).

²¹² *Id.* at 1463.

²¹³ Fitzpatrick, *supra* note 144, at 1661 (citing Fennell, *supra* note 22, at 1424).

²¹⁴ *Id.* at 1662.

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from having their appeals heard in the face of an inalienability rule.”²¹⁵ Because “an inalienability rule can thwart blackmail-minded objectors at the same time it leaves access to appellate review open for sincere objectors,”²¹⁶ inalienability disentangles opportunism from self-interest and “may be the optimal solution to the problem of objector blackmail.”²¹⁷

4. Equity

A final alternative approach, a reliance on equity, is perhaps the oldest of the aforementioned mechanisms for addressing strategic behavior. In a recent paper, Henry Smith sheds new light on the function of equity by suggesting that “equity in private law is a coherent package of features motivated largely by one overriding goal: preventing opportunism.”²¹⁸

Smith cites some historical evidence that judges and commentators viewed equity as a way for addressing opportunism,²¹⁹ but his primary objective is to analyze the functional basis for equity and equitable maxims. As noted above, Smith defines opportunism as “behavior that is undesirable but that cannot be cost-effectively captured—defined, detected, and deterred—by explicit *ex ante* rulemaking.”²²⁰ Based on this interpretation, courts of equity were necessary, in Smith’s view, to supplement common-law courts because the common-law courts could not adequately consider the many circumstances in which a strategic motivation may have played a role in the actions of a plaintiff or defendant. Equity, including the various maxims of equity, provided a “private law solution to opportunism.”²²¹

For example, Smith highlights the maxim that “Equity will not allow a wrongdoer to profit from his own wrong.”²²² He describes this maxim as

²¹⁵ *Id.*

²¹⁶ *Id.*

²¹⁷ *Id.* at 1664. As Fitzpatrick notes, inalienability rules also might be useful in preventing strategic spillovers involving negative expected value suits. *See id.* at 1661 (citing Randy J. Kozel & David Rosenberg, *Solving the Nuisance-Value Settlement Problem: Mandatory Summary Judgment*, 90 VA. L. REV. 1849 (2004)).

²¹⁸ Smith, *supra* note 23, at *3.

²¹⁹ *Id.* at 4-5 (“Justice Story recognized that it is foundational that equity must be open-textured in light of the ability of parties to opportunistically evade their obligations, or as he put it, ‘[f]raud is infinite’ given the ‘fertility of man’s invention.’” (quoting 1 J. STORY, COMMENTARIES ON EQUITY JURISPRUDENCE, AS ADMINISTERED IN ENGLAND AND AMERICA 184 n.1 (9th ed. 1866) (quoting a Letter from Lord Hardwicke to Lord Kaimes (June 30, 1759)))).

²²⁰ *Id.* at *9.

²²¹ *Id.* at *17.

²²² *Id.* at *28.

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“almost a statement of the anti-opportunism principle.”²²³ Likewise, Smith points out that equity “uses disproportionate hardship as one of its main proxies for opportunism.”²²⁴ He also notes that, because injunctions can themselves facilitate opportunism, injunctions are a discretionary remedy.²²⁵

However, a reliance on equity to address strategic spillovers has certain limitations. First, despite the possibility that equity courts may have enjoyed a comparative advantage over common-law courts in detecting opportunism, it is still difficult for equity courts (then) or any court (now) to distinguish between externalities arising as the incidental byproduct of a party’s activities and strategic spillovers.²²⁶ Second, while equity may perform a significant function for detecting opportunism in disputes involving a small number of participants in a relatively circumscribed area, it is less clear whether equity is capable of providing a comprehensive solution for complex global issues like the opportunistic use of carbon offset and the principle of additionality in international environmental law.

C. Non-Legal Limitations for Minimizing Strategic Spillovers

There are several reasons why, irrespective of the applicable legal rule or even in the absence of any legal rule, an individual or firm may decide *not* to engage in strategic spillovers. These non-legal limitations include transaction costs, reputation effects, and social norms.

First, positive transaction costs might deter parties from attempting to profit from activities they otherwise would not have undertaken. As noted above, the concern about “pollution entrepreneurs” was, until recently, primarily of theoretical interest.²²⁷ The transaction costs of collecting payments from a large number of victims, some of whom may have been unaware of the harm being imposed, was most likely prohibitive.

Second, individuals and firms may refrain from strategic spillovers if they are concerned that engaging in such actions would be detrimental to

²²³ *Id.*

²²⁴ *Id.* at *33; *see also id.* (noting that “a (perhaps somewhat broader) notion of disproportionate hardship lies at the heart of the civil law doctrine of abuse of right, which despite the lack of equity courts in such systems, resembles my reconstruction of equity as an anti-opportunism device”). On abuse of right, *see infra* note 236.

²²⁵ *Id.* at *36-37 (discussing *eBay v. MercExchange* and the problem of “patent trolls”).

²²⁶ *See id.* at *29 (“Notice that the standard for the maxim to apply to avoid the straightforward application of the [law] is absurdity or (manifest) unreasonableness. Equity is not supposed to be used for borderline policy calls . . .”).

²²⁷ *See supra* note 73 and accompanying text.

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their reputations.²²⁸ For example, a landowner may decide not to attempt to extract payments by building a spite structure if she knows she is in a repeat game with her neighbor.

Third, and perhaps most importantly, basic social norms of reciprocity and decency often discourage this type of opportunistic behavior.²²⁹ Social norms are relatively effective at preventing opportunism among family, friends, and neighbors,²³⁰ but their effectiveness is less clear with regard to strangers, parties in arms-length transactions, and participants in a large and diffuse marketplace.²³¹

However, as one can infer from the various strategic spillovers discussed above,²³² these non-legal limitations are sometimes insufficient to deter opportunistic behavior.²³³ It is also possible that, with the arrival of

²²⁸ Cf. A. Mitchell Polinsky & Steven Shavell, *The Uneasy Case for Product Liability*, 123 HARV. L. REV. 1437, 1478 (2010) (questioning “Justice Traynor’s view that firms employ their reputations opportunistically to sell risky products”); David T. Robison & Toby E. Stuart, *Network Effects in the Governance of Strategic Alliances*, 23 J.L. ECON. & ORG. 242, 250 (2007) (noting “potential long-term reputation cost of opportunistic behavior in transactions with centrally positioned clients”).

²²⁹ See Louis Kaplow & Steven Shavell, *Fairness Versus Welfare*, 114 HARV. L. REV. 961, 973 (2001) (“Internalized social norms . . . are maxims that people want to obey because the maxims have been inculcated in them or are inborn. These social norms appear attractive to us not only because they are internalized, but also because they possess instrumental social value: they guide individuals’ decisions and curb opportunistic behavior in everyday life.”); cf. Eric Posner, *LAW AND SOCIAL NORMS* 74 (2000) (discussing “additional nonlegal sanctions . . . that help deter opportunistic behavior”).

²³⁰ Cf. Robert C. Ellickson, *Unpacking the Household: Informal Property Rights Around the Hearth*, 116 YALE L.J. 226, 250 (2006) (“[I]n most societies ambient social norms support loyalty to kin. An opportunistic act at the expense of kinfolk thus is particularly likely to provoke neighbors to inflict diffuse third-party sanctions, such as negative gossip.”).

²³¹ See Scott R. Bellhorn, Note, *Settling Beyond the Shadow of the Law: How Mediation Can Make the Most of Social Norms*, 20 OHIO ST. J. ON DISP. RESOL. 981, 999 (2005) (“While evidence suggests that social norms operate in large, anonymous groups as well as tightly knit ones, there is good reason to believe that disputants belonging to the latter can maximize the utility of social norms in ways that the former cannot.” (citing Lior J. Strahilevitz, *Social Norms from Close-Knit Groups to Loose-Knit Groups*, 70 U. CHI. L. REV. 359, 361-65 (2003) and April Mara Major, *Norm Origin and Development in Cyberspace: Models of Cybernorm Evolution*, 78 WASH. U. L.Q. 59, 75-95 (2000))).

²³² See *supra* Part II.

²³³ Cf. Douglas C. North & Barry R. Weingast, *Constitutions and Commitment: The Evolution of Institutions Governing Public Choice in Seventeenth-Century England*, in *EMPIRICAL STUDIES IN INSTITUTIONAL CHANGE* 136-39 (Lee J. Alston, et al., eds., 1996) (discussing “insufficiency of repeat play and reputation to prevent renegeing”).

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technological advances such as the internet, these non-legal limitations may be weakening, at least to a degree.

Take the bizarre case of Toby the Bunny, in which an individual on the internet attempted to extort money by threatening to kill Toby unless payments were made to his account.²³⁴ Essentially, this individual was attempting to extract payments for imposing harm on others who might suffer mental anguish and emotional distress from seeing the bunny killed. Presumably, in the absence of such payments, this individual would not have had any reason to target the hapless bunny. The strategic spillover was likely possible only because the internet had lowered transaction costs—the costs of transmitting the threat, finding an audience willing to pay, and collecting payments. Moreover, by allowing such threats to be made anonymously, the internet may have diminished the effectiveness of reputation costs and social norms in deterring the strategic spillover.²³⁵

To be sure, Toby is just one example of a strategic spillover made possible by the internet. However, to the extent transaction costs are decreasing, reputation is becoming less important, and social norms are losing their effectiveness, it is possible we may observe an even higher number of strategic spillovers in the future. Correspondingly, the costs to society of having the legal system essentially ignore such spillovers is likely to increase as well.²³⁶

²³⁴ See generally Stephen E. Sachs, Comment, *Saving Toby: Extortion, Blackmail, and the Right to Destroy*, 24 YALE L. & POL'Y REV. 251 (2006).

²³⁵ Cf. Julie Seaman, *Hate Speech and Identity Politics: A Situationalist Proposal*, 36 FLA. ST. U. L. REV. 99, 113 (2008) (“Countless laboratory and field studies . . . have demonstrated that a feeling of anonymity can often increase—even cause—aggressive, disturbing, and antisocial behavior, including speech.”).

²³⁶ Interestingly, it appears that, unlike the United States, many legal systems in the civil law tradition already attempt to address this type of opportunism explicitly under the doctrine of “abuse of right,” see, e.g., Antonio Gambaro, *Abuse of Rights in Civil Law Tradition*, in AEQUITAS AND EQUITY: EQUITY IN CIVIL LAW AND MIXED JURISDICTIONS (Alfredo Mordechai Rabello ed., 1997); John H. Crabb, *The French Concept of Abuse of Rights*, 6 INTER-AM. L. REV. 1 (1964), a concept that also may inform certain common law doctrines, see Larissa Katz, “A Jurisdictional Principle of Abuse of Right,” at *1-2 (2010), at <http://law.queensu.ca/facultyAndStaff/facultyDirectory/katz/abuseFinalSubmission.pdf> (identifying “a common law principle of abuse of (property) right” and arguing that this principle “does not permit [owners] to do things with their property that even they do not deem to be valuable (but merely deem to be useful as ways to harm another or to gain leverage for some further negotiation)”). I thank Holger Spamann for bringing this point to my attention. This comparative perspective suggests the feasibility, as well as desirability, of beginning to address strategic spillovers more systematically.

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V. Strategic Spillovers: Positive and Negative

Thus far, my focus has been almost exclusively on the opportunistic use of negative externalities. But strategic spillovers may arise in situations involving *positive*, as well as *negative*, externalities. In fact, opportunistically withholding external benefits may be just as prevalent as, if not more prevalent than, opportunistically imposing external costs.

The classic problem with positive externalities, like the classic problem with negative externalities, is well known. Parties sometimes generate benefits as an unintended byproduct of their use of property. However, if they are unable to internalize these benefits, parties may forgo certain externality-generating activities that are socially desirable. For example, the owner of a business may refrain from planting trees or installing benches on the sidewalk in front of her shop because a portion of the benefits are enjoyed by other nearby business owners. The primary reason these benefits, so-called “positive externalities”, can be socially problematic is straightforward: a party may not have an incentive to engage in an activity because the activity’s private costs exceed its private benefits even though, as a result of the externality, the activity is desirable as its social benefits exceed its social costs.

Yet activities that entail positive externalities can be problematic for another reason as well: self-interested individuals and profit-maximizing firms may purposely seek to withhold benefits that would be generated in their use of property, in order to extract payments from beneficiaries in exchange for undertaking an activity. In certain situations, a party may refrain from a socially desirable externality-generating activity even though the activity’s private benefits exceed its private costs. That is, even though, in the absence of the externality, the party would have had a sufficient incentive to engage in the activity, the party may refrain. The reason is that, by refraining from the activity, the party anticipates the possibility of obtaining a payment, either from the government in the form of a subsidy or from other private parties in the form of a side payment, in exchange for undertaking the activity.

There are many examples in which it is difficult for the government to determine whether a party attempting to obtain a subsidy has a sufficient incentive to engage in the externality-generating activity. Economic historians, for example, have long disagreed about whether federal loans and land grants to railroad companies in the nineteenth century were

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necessary to enable the construction of railroads to the Pacific Ocean.²³⁷ One commentator concludes that “subsidies to the Central Pacific were ‘excessive’ at the margin, where ‘excessive’ describes subsidization that influenced neither the decision to invest in the railroad nor the speed of its construction.”²³⁸ He asserts that “the rate of return excluding land grants was sufficient to have induced construction at a maximum rate of speed, implying that the entire land grant was an excessive subsidy—what a reasonable man might reasonably term a ‘giveaway.’”²³⁹ If subsidies to the Central Pacific were in fact unnecessary, then the costs of lobbying for such subsidies, as well as the administrative costs of providing such subsidies, were a social waste.

Likewise, in certain situations involving the assembly of multiple parcels of land, “a private benefit may not be large enough to induce a private party to assemble property even though a positive externality makes the project socially desirable.”²⁴⁰ To facilitate such assemblies, the government may need to provide a subsidy to the assembler or choose to assemble the land using eminent domain.²⁴¹ However, it is often less expensive for an assembler to convince a local government to exercise eminent domain on its behalf than to purchase the parcels in the real estate market.²⁴² Thus, an assembler might claim the private benefit is insufficient

²³⁷ Compare ROBERT W. FOGEL, *THE UNION PACIFIC RAILROAD* (1969) and Lloyd J. Mercer, *Rates of Return for Land Grant Railroads: The Central Pacific System*, 30 J. ECON. HIST. 606 (1970) with Charles S. Morgan, *Problems in the Appraisal of the Railroad Land Grants*, in *THE PUBLIC LANDS* (Carstensen, V., ed., 1968) and Heywood Fleisig, *The Central Pacific Railroad and the Railroad Grant Controversy*, 35 J. ECON. HIST. 552 (1975).

²³⁸ Fleisig, *supra* note 237, at 552-53.

²³⁹ *Id.* at 553.

²⁴⁰ Daniel B. Kelly, *The “Public Use” Requirement in Eminent Domain Law: A Rationale Based on Secret Purchases and Private Influence*, 92 CORNELL L. REV. 1, 42 (2006).

²⁴¹ *See id.* at 42-45.

²⁴² *See* Daniel B. Kelly, *Acquiring Land Through Eminent Domain: Justifications, Limitations, and Alternatives*, in *RESEARCH HANDBOOK ON THE ECONOMICS OF PROPERTY LAW* 355 (Kenneth Ayotte & Henry E. Smith, eds., 2011) (explaining why “private parties often will have an incentive to capture the eminent domain process for their own advantage, even though they may not have sought or acquired the same land if they had been required to pay the property’s actual value through consensual purchases with existing owners or even the property’s ‘fair market value’ in a direct transfer from the government”); *cf.* Thomas W. Merrill, *The Economics of Public Use*, 72 CORNELL L. REV. 61, 88 n.91 (1986) (noting that “[c]ondemnation followed by retransfer is especially likely to engender rent seeking if, as in *Poletown*, the price charged by the government on retransfer is less than the compensation awarded under the opportunity cost formula”

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to induce assembly, even though the assembler does have an incentive to purchase the parcels. Indeed, as I have pointed out in a previous article, “if a party’s private incentive would already be substantial enough (i.e., if the private value of assembly is greater than the value to existing owners), then the use of eminent domain would be unnecessary even if a significant externality exists.”²⁴³

Moreover, even in non-assembly situations, corporations and other property owners, whose activities arguably entail positive externalities for the community, may threaten to relocate if public officials do not pay them substantial subsidies. Such threats to relocate are often credible if the companies “provide towns or cities with substantial tax revenue” or other benefits like the potential for new jobs or economic rejuvenation and the companies “are capable of moving to other locations.”²⁴⁴

For example, JPMorgan Chase & Co. hoped to move from midtown to downtown Manhattan and build a new office building on the site of the World Trade Center. Unsatisfied with a benefits package involving “a combination of tax breaks, cash payments and subsidized electricity benefits worth more than \$100 million,” the company threatened to move from New York to Connecticut if its demands were not met.²⁴⁵

JPMorgan Chase is threatening to move thousands of employees from Midtown to Stamford, Conn., if New York officials do not give it a larger subsidy package to build a 50-story skyscraper near ground zero Officials view the bank’s threat to relocate outside Manhattan as the latest move in what has become a routine game of corporate poker in which companies try to extract special benefits. But Chase has gotten in touch with at least one large property owner in downtown Stamford, although it remains unclear whether the bank is serious or bluffing.²⁴⁶

(citing *Poletown Neighborhood Council v. City of Detroit*, 304 N.W.2d at 469-70 (Mich. 1981) (Ryan, J., dissenting)).

²⁴³ Kelly, *supra* note 240, at 43.

²⁴⁴ Daniel B. Kelly, *Pretextual Takings: Of Private Developers, Local Governments, and Impermissible Favoritism*, 17 SUP. CT. ECON. REV. 173, 180 (2009).

²⁴⁵ Charles V. Bagli, *Chase Says It Will Move To Stamford If City Balks*, N.Y. TIMES, at B2 (Apr. 25, 2007).

²⁴⁶ *Id.*

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Eventually, JP Morgan Chase and New York city officials did reach an agreement,²⁴⁷ although Chase subsequently “abandoned its plan to build a new headquarters for its investment banking division near ground zero.”²⁴⁸ The notion of threatening to relocate in order to extract a payment is not entirely unfamiliar to law professors and other academics who sometimes may accept a lateral “visit” at another school in order to obtain a competing offer and then negotiate for a higher salary at their home institution.²⁴⁹

It is worth noting that many of the strategic spillovers discussed above could be characterized as either strategically imposing some harm or strategically withholding a benefit. For example, a developer could be viewed as threatening to engage in an activity, e.g., building on certain parcels of land, with negative externalities, to extract a payment from a municipality that is interested in preserving open space. Alternatively, the developer could be viewed as refraining from an activity, i.e., not building on certain parcels of land, with positive externalities to extract the payment. If “harm-imposing” actions and “benefit-withholding” actions are indistinguishable, strategic negative spillovers—opportunistically imposing harms on others—and strategic positive spillovers—opportunistically withholding benefits from others—may be functionally equivalent.

CONCLUSION

The problem of strategic spillovers involves situations in which individuals or firms purposely seek to generate harm in their use of property, to extract payments from victims in exchange for desisting. As

²⁴⁷ Charles V. Bagli, *Chase Bank Set To Build Tower By Ground Zero*, N.Y. TIMES, at B1 (June 14, 2007) (“After months of sharp bargaining and threats to relocate, JPMorgan Chase is expected to announce today that it has struck a deal to build a skyscraper near ground zero and move its investment banking headquarters from Midtown . . .”). It is unclear whether Chase was able to extract “subsidies worth about \$100 million” or a deal “fairly comparable with Goldman’s”. *Id.*

²⁴⁸ Charles V. Bagli, *As Finance Offices Empty, Developers Rethink Ground Zero*, N.Y. TIMES, at A19 (Apr. 15, 2009).

²⁴⁹ See, e.g., Posting of Rick Bales to MoneyLaw: The Art of Winning an Unfair Academic Game, available at <http://money-law.blogspot.com/2007/06/merit-pay-and-performance.html> (June 29, 2007, 14:36 EST) (“While annual merit increases may be small, my sense is that most deans have the capacity to match lateral offers from elsewhere. This, unfortunately, forces productive faculty to shop themselves on the market if they want a significant raise . . .”); cf. Clayton P. Gillette, *Law School Faculty as Free Agents*, 17 J. CONTEMP. LEG. ISSUES 213, 219 (2008) (pointing out that “free agency should increase income even for those [law professors] who do not move” because “deans have incentives to anticipate and attempt to foreclose financially motivated moves by offering market rate salaries to mobile professors”).

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discussed above, this problem is more pervasive than is ordinarily thought. From historical events like the “livery stable scam” in Chicago to contemporary controversies such as “pollution entrepreneurs” in China, parties may engage in externality-generating activities that will impose harm on others to profit by agreeing to cease their activities.

In certain situations, parties may threaten to engage in these activities and then bargain with potential victims *ex ante*. In other situations, bargaining *ex ante* is infeasible and parties undertake such activities because they know there is some potential for bargaining *ex post*. In either case, strategic parties have an incentive to undertake socially wasteful activities, and, anticipating such activities, potential victims may engage in wasteful precautions. In addition, parties may engage in strategic positive spillovers—opportunistically withholding social benefits—as well as strategic negative spillovers—opportunistically imposing social costs.

The legal system can possibly reduce, but almost certainly cannot eliminate, this type of opportunistic behavior. Transaction costs, reputation effects, and social norms may decrease the likelihood of strategic spillovers, even in the absence of any legal intervention. However, when strategic spillovers do occur, the legal system usually fails to address them. Moreover, attempting to address strategic spillovers through the traditional mechanisms for resolving conventional externalities, such as bargaining, subsidies, and regulation, can result in suboptimal outcomes. Bargaining and subsidies encourage the very activities, negotiating for payments and lobbying for subsidies, that opportunistic parties wish to undertake.

Overall, the Article suggests that policymakers, courts, and academics should be more cognizant of this type of opportunistic behavior and, in those circumstances in which detecting opportunism may be feasible, begin to address it. For example, by imposing liability or corrective taxes on externality-generating activities, policymakers may be able, in certain situations, to deter strategic spillovers while still permitting externality-generating activities that are socially desirable. In other circumstances, by mandating disclosure of financial records, refusing to enforce contracts between strategic parties and victims, prohibiting the transfer of property acquired strategically, and relying on equity to detect opportunism, courts may be able to avoid both insufficiently deterring strategic behavior and excessively deterring non-opportunistic behavior.

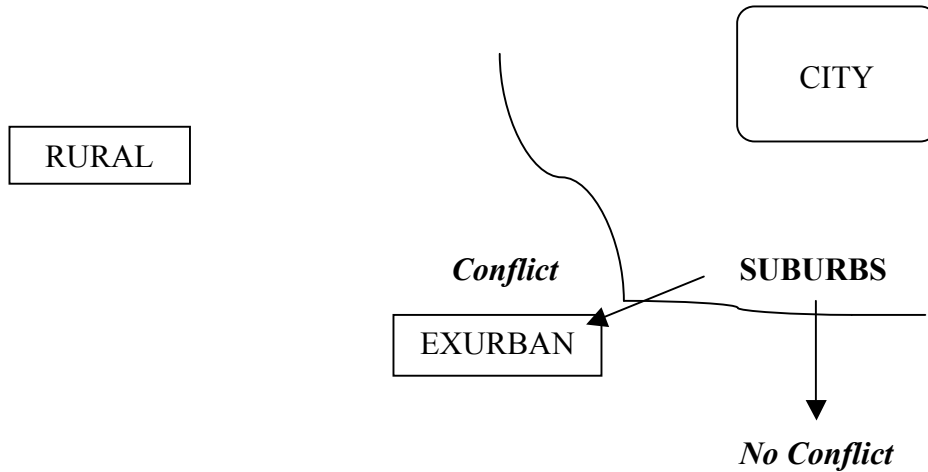
In any event, future analyses of social costs should not assume that the harm arising as a byproduct of an activity is necessarily unintended.

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Appendix A: The Coming-to-the-Nuisance Problem

Consider the following hypothetical. Mr. Slate, the CEO of Slate Rock & Gravel, Inc., must select the site for a new quarry. Slate has two alternatives, both of which are acceptable to him, i.e., the private benefits exceed the private costs. Slate could locate the quarry in a “rural” area. If Slate locates the quarry in the rural area, there is no possibility of any conflict with future suburban development. Alternatively, Slate could locate the quarry in an “exurban” area. If Slate locates the quarry in the exurban area, there is a possibility of conflict with future suburban development, although the likelihood of conflict depends on the direction of suburban growth. See Figure 1. My hypothesis is that, even if Slate does not intend to impose external costs on future homeowners, Slate may have an incentive, because of the possibility of subsequent bargaining, to choose the suboptimal site that entails some likelihood of conflict.

Figure 1
Slate’s Options of Where To Locate His Quarry: Rural or Exurban



Assume that if Slate chooses to locate his quarry in the rural area he will obtain a private benefit of 18, at a private cost of 9, for a net benefit of 9. By contrast, if Slate chooses to locate his quarry in the exurban area he will obtain a private benefit of 21, at a private cost of 9, for a net benefit of 12. Assume as well that the existing suburbs can develop in one of two directions and that this development is exogenous, i.e., it does not depend in any way on whether Slate chooses rural or exurban. For either direction in which the suburbs develop, the net benefit for the new homeowners will be 40 (ignoring, for the moment, any potential conflicts with Slate’s quarry).

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However, while the likelihood of suburban development reaching the rural site is 0, the likelihood of suburban development reaching the exurban site is 0.5. Thus, if Slate chooses rural, there is no possibility of conflict, and there are no external costs imposed by the quarry on the homeowners or vice-versa. By contrast if Slate chooses exurban, there is a fifty-fifty chance of conflict. If there is a conflict, the homeowners impose costs of 8 on the quarry—assume Slate’s trucks will have to battle more traffic congestion—while the quarry imposes costs of 12 on the new homeowners—assume the homeowners will experience noise and dust from blasting within the quarry.

Under these circumstances, what is the socially optimal outcome, and will Slate have an incentive to choose it? The social welfare function here is the net benefits to Slate plus the net benefits to the homeowners. If Slate chooses rural, there is no possibility of conflict and social welfare is Slate’s net benefits from rural (9), plus the homeowners’ net benefits from rural (40), for a total of 49. If Slate chooses exurban, there is a fifty-fifty chance of conflict with the future development. If there is no conflict, then social welfare is Slate’s net benefits from exurban (12), plus the homeowners’ net benefits from exurban (40), for a total of 52. If there is a conflict, then social welfare is Slate’s net benefits from exurban (12), minus the external costs imposed by the homeowners (8), plus the homeowners’ net benefits from exurban (40), minus the external costs imposed by Slate (12), for a total of 32. Because there is a fifty-fifty chance of a conflict, the expected net benefit of Slate choosing exurban will be 42 (i.e., $0.5 \times 52 + 0.5 \times 32$). The net benefit if Slate were to choose rural (49) is thus greater than the expected net benefit if Slate were to choose exurban (42), and the socially desirable outcome is for Slate to choose rural. *See* Table A-1.

Table A-1
Social Welfare of Mr. Slate and Suburban Homeowners

Location	Slate	Homeowners	Total
Rural			
No Conflict	9	40	*49*
Exurban			
No Conflict	12	40	52
Conflict	12 – 8	40 – 12	32

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Expected	0.5 (12 + 4)	0.5 (40 + 28)	42
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Whether or not Slate will choose the socially desirable outcome of rural depends, however, on Slate's *private* benefits and costs. It is therefore necessary to compare the benefit to Slate from choosing rural with the benefit to Slate from choosing exurban. Assume, for now, that Slate and the homeowners cannot bargain either *ex ante* (i.e., before Slate chooses a site) or *ex post* (i.e., after Slates chooses a site). If Slate chooses to locate the quarry in rural, there is no possibility of conflict with future development and Slate's net benefit is 9, the difference between his private benefit (18) and his private costs (9). If Slate chooses to locate the quarry in exurban, there is a fifty-fifty chance of conflict. If there is no conflict, then Slate's net benefit is 12, the difference between his private benefit (21) and the private costs (9). If there is a conflict, then Slate's net benefit is only 4, the difference between his private benefit (21) and the sum of both his private costs (9) and the costs he would incur because of his proximity to the homeowners (8). Because there is a fifty-fifty chance of a conflict, Slate's expected net benefit is 8, the average of his net benefit with no conflict and his net benefit with a conflict (i.e., $0.5 \times 12 + 0.5 \times 4$). In the absence of bargaining, Slate will thus choose the rural site, rather than the exurban site, because the net benefit of rural (9) is greater than the expected net benefit of exurban (8). Slate's decision to locate his quarry on the rural site is therefore desirable from a social perspective. See Table A-2.

Table A-2
Mr. Slate's Strategy With No Bargaining

Location	Benefit	Cost	Net Benefit
Rural			
No Conflict	18	9	*9*
Exurban			
No Conflict	21	9	12
Conflict	21	9 + 8	4
Expected	0.5 (21 + 21)	0.5 (9 + 17)	8

But now compare the net benefit Slate would obtain from choosing the rural site with the net benefit Slate would obtain from choosing the exurban site if bargaining is infeasible *ex ante* (because Mr. Slate does not

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know who the future homeowners will be) but feasible ex post (because Mr. Slate and the neighbors will be able to bargain if they ultimately become neighbors). If Slate chooses to locate the quarry in the rural site, there is no conflict and Slate's net benefit is 9, the difference between his private benefit (18) and the private costs (9). This result is the same whether or not bargaining is feasible ex post because the parties have no reason to bargain if there is no conflict. If Slate chooses to locate the quarry in the exurban site, there is still a fifty-fifty chance of a conflict. If Slate chooses exurban and there is no conflict, then Slate's net benefit is 12, the difference between his private benefit (21) and the private costs (9). Again, this result is the same whether or not bargaining is feasible ex post.

However, if Slate chooses exurban and there is a conflict, then Slate and the homeowners are likely to negotiate. Under these circumstances, there exists a range of mutually agreeable bargains under which both parties would be better off. Specifically, Slate will be willing to accept any offer above 4 not to operate the quarry (because 4 is Slate's net benefit from operating the quarry in the absence of bargaining) and the homeowners will be willing to offer Slate any amount up to 12 not to operate the quarry (because 12 is the external cost the quarry imposes on the homeowners). If we assume the homeowners agree to pay Slate at least 4, the minimum amount that Slate will accept to cease its operations, and the parties divide the surplus evenly ($(12 - 4) / 2 = 4$) so that Slate receives an additional 4, then Slate's net benefit would be 8 ($4 + 4$). Because there is a fifty-fifty chance of a conflict, Slate's expected net benefit is 10 (i.e., $0.5 \times 12 + 0.5 \times 8$). With the possibility of bargaining, Slate will thus choose the exurban site, rather than the rural site, because the net benefit of rural (9) is less than the expected net benefit of exurban (10), even though choosing the exurban site is socially undesirable. See Table A-3.

Table A-3
Mr. Slate's Strategy With Bargaining

Location	Benefit	Cost	Net Benefit
Rural			
No Conflict	18	9	9
Exurban			
No Conflict	21	9	12
Conflict	4 + 0.5 (12 - 4)	0	8

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Expected	0.5 (21 + 8)	0.5 (9 + 0)	*10*
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Overall, the problem is that Slate's expected net benefit in choosing exurban differs depending on whether or not Slate can bargain with the homeowners ex post. If Slate chooses exurban and there is no conflict, then Slate receives a net benefit of 12, regardless of whether or not bargaining is permitted, because the parties have no reason to bargain if there is no conflict. However, if Slate chooses exurban and there is a conflict, Slate receives a benefit of only 4 when there is no possibility of bargaining ex post but receives a benefit of 8 when there is a possibility of bargaining ex post. Slate's expected net benefit is thus 8 when bargaining is not permitted and 10 when bargaining is permitted. And because Slate's net benefit from choosing the rural site is 9, Slate prefers the socially desirable outcome, rural, when no bargaining is permitted (because the benefit from rural, 9, is greater than the expected benefit from exurban, 8) but prefers the socially undesirable outcome, exurban, when bargaining is permitted (because the benefit from rural, 9, is less than the expected benefit from exurban, 10).

Ultimately, although Slate preferred the rural location, which would have avoided the conflict with the homeowners, Slate had an incentive to locate his facility in the exurban location. Even if Slate wanted to avoid the conflict by negotiating with potential victims beforehand, such negotiations would have been infeasible as the future developer or future homeowners were not yet known. Thus, this example illustrates that strategic spillovers may occur not only if opportunistic parties attempt to extract a payment from potential victims by threatening to impose harm and then bargaining with such victims ex ante but also if individuals and firms are unable to bargain with potential victims ex ante but take into account the potential gain from bargaining ex post in making a socially suboptimal decision.

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Appendix B: The “Livery Stable Scam” as a Sequential Game

To illustrate why courts might refuse to enforce contracts between strategic parties and potential victims, consider the “livery stable scam” as a sequential game. In Period 1, the strategic party, SP, decides whether or not to issue a threat to neighboring residents: “I plan to open a livery stable in your neighborhood unless you pay me X dollars.” In Period 2, if SP has issued the threat, the potential victims, Vs, must decide whether or not to enter into a contract with SP in which the Vs agree to pay SP “X dollars” in exchange for SP agreeing not to undertake the externality-generating activity. After SP and the Vs have had an opportunity to enter into a contractual agreement in Period 2, SP decides whether or not to engage in the externality-generating activity in Period 3.

For this example, I make the following assumptions. I assume that SP only issues credible threats and that costless threats are not credible; consequently, each threat in Period 1 has a positive cost of \$2. This cost might be the cost of taking some step antecedent to operating the livery stable such as purchasing equipment that is necessary for stable operations. When SP issues a threat, SP demands that the potential victims pay SP \$4 in exchange for SP agreeing not to operate the stable. If SP decides to engage in stable operations in Period 3, SP gains \$3 and loses \$2, although SP’s total private costs from operating the stable, \$4, exceed its total private benefits from operating the stable, \$3, because SP already will have incurred \$2 as a result of purchasing the stable equipment in Period 1. By operating the stable, SP imposes external costs of \$6 on the Vs. If a contract between SP and the Vs is enforceable, Vs obtain expectation damages, \$2, if SP breaches the contract, i.e., if SP operates the stable even though it has contractually agreed not to do so.

These assumptions lead to five possible payoffs depending on (i) what SP chooses to do in Period 1, (ii) what the Vs choose to do in Period 2, and (iii) what SP chooses to do in Period 3.

Payoff #1 = (1,8). If SP makes a threat (1a), the Vs agree to pay SP (2a), and SP nevertheless engages in stable operations (3a), SP receives a benefit of \$1 and the Vs bear a loss of \$8. SP incurs a cost of \$2 to make the threat, receives a payment of \$4 from the Vs, obtains a benefit of \$1 from engaging in the activity, and then must pay \$2 in damages, so $-2 + 4 + 1 + -2 = \$1$. The Vs pay \$4 to SP, bear \$6 in external costs, and then receive \$2 in damages, so $-4 + -6 + 2 = \$-8$.

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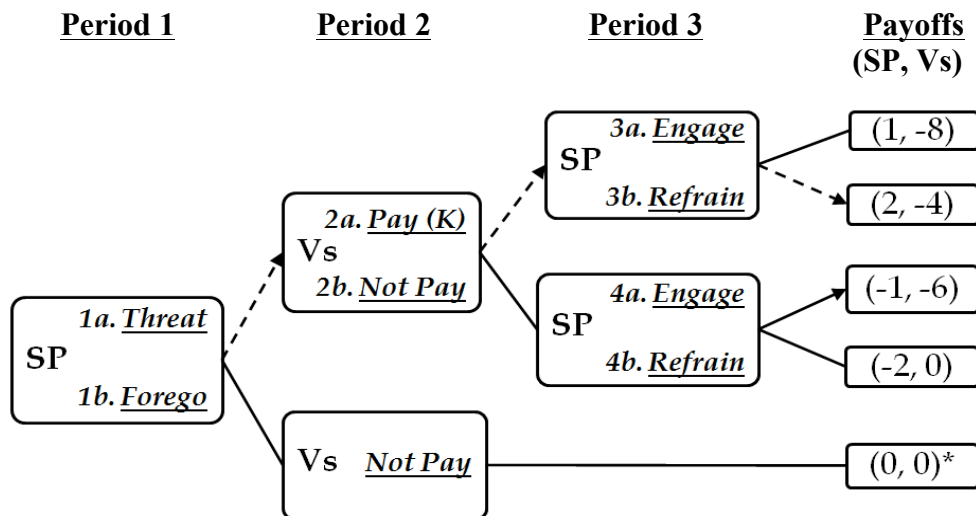
Payoff #2 = (2,-4). If SP makes a threat (1a), the Vs agree to pay (2a), and SP refrains from stable operations (3b), SP receives a benefit of \$2 and the Vs bear a loss of \$4. SP incurs a cost of \$2 to make the threat and receives a payment of \$4 from the Vs, so $-2 + 4 = \$2$. The Vs pay \$4 to SP.

Payoff #3 = (-1, -6). If SP makes a threat (1a), the Vs refuse to pay (2b), and SP engages in stable operations (4a), SP bears a loss of \$1 and the Vs bear a loss of \$6. SP incurs a costs of \$2 to make the threat and then obtains a benefit of \$1 from engaging in the activity, so $-2 + 1 = -1$. The Vs bear \$6 in external costs.

Payoff #4 = (-2, 0). If SP makes a threat (1a), the Vs refuse to pay (2b), and SP does not engage in stable operations (4b), SP bears a loss of \$2 and the Vs receive \$0. SP incurs a cost of \$2 to make the threat. The Vs do not pay and do not bear any external costs, so their total is \$0.

Payoff #5 = (0,0). If SP does not make a threat (1b), the Vs will not pay, and both SP and the Vs receive \$0—the socially desirable outcome. The socially desirable outcome is \$0 because \$0 is equivalent to the status quo ante, i.e., the opportunistic party does not attempt to engage in a strategic spillover. The payoff (0,0) yields an outcome of \$0, which is greater than the sum of the parties' payoffs under Payoff #1 = (1,-8) = \$-7; Payoff #2 = (2,-4) = \$-2; Payoff #3 = (-1,-6) = \$-7; and Payoff #4 = (-2, 0) = \$-2. See Figure B-1.

Figure B-1
Enforcement of Strategic Ks



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The equilibrium outcome, illustrated in Figure B-1 by the dotted lines with arrows, is that SP makes a threat in Period 1, the Vs pay SP in Period 2, and SP refrains from operating the stable in Period 3. This outcome is derived using backward induction. In Period 3, SP will refrain (3b) if SP has made a threat (1a) and the Vs have agreed to pay (2a) because the benefit of refraining, \$2, is greater than the benefit of engaging, \$1. If SP has made a threat (1a) and the Vs have refused to pay (2b), SP will engage (4a) because the benefit of engaging, \$-1, is greater than the benefit of refraining, \$-2. In Period 2, the Vs, knowing SP will refrain if they pay and will engage if they do not pay, will agree to pay (2a) because the benefit of paying and having SP refrain (3b), \$-4, is greater than the benefit of not paying and having SP engage (4b), \$-6. In Period 1, SP, knowing the Vs will pay if it threatens and will not pay if it forgoes the threat, will issue a threat (1a) because \$2 is greater than \$0. Overall, the equilibrium outcome here (2, -4), which entails a social loss of \$2, is suboptimal because it is less than the socially desirable outcome (0, 0), which entails a social loss of \$0.

If the courts refused to enforce contracts between SP and the Vs, all of the payoffs would remain the same except for the payoff in which SP makes a threat (1a), the Vs pay SP (2a), and SP engages in stable operations (3a). Instead of obtaining a benefit of \$1, SP would now obtain a benefit of \$3. (SP incurs a cost of \$2 to make the threat, receives a payment of \$4 from the Vs, and obtains a benefit of \$1 from engaging in the activity, so $-2 + 4 + 1 = \$3$.) SP would no longer have to pay expectation damages of \$2 for continuing to engage in the activity in violation of its agreement with the potential victims; no damages are available for the breach of a contract the court is unwilling to enforce.

Conversely, instead of bearing a loss of \$8, the Vs would now bear a loss of \$10. (The Vs pay \$4 to the SP and bear \$6 in external costs, so $-4 + -6 = \$-10$.) The Vs no longer obtain expectation damages of \$2 if SP continues to engage in the activity in violation of its agreement with the Vs; once again, a court will refuse to enforce such a contract. Thus, at first glance, the court's unwillingness to enforce contracts between a strategic party and potential victims appears to help the strategic party (whose payoff increases from 1 to 3) and hurt the potential victims (whose payoff decreases from -8 to -10).

Yet this seemingly small change in a single payoff box actually makes a significant difference in the outcome of the game. In Period 3, SP will now decide to engage in stable operations (3a and 4a) because the

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payoff from engaging in stable operations is higher than the payoff from refraining, regardless of whether the Vs pay SP in Period 2 ($\$3 > \2) or do not pay SP in Period 2 ($\$-1 > \-2). In Period 2, the Vs, knowing SP will operate the stable regardless of whether there is a contract, no longer have any incentive to pay SP (2a) because their payoff when they pay, $\$-10$, is less than their payoff when they do not pay, $\$-6$. In Period 1, SP, realizing the Vs will not pay, regardless of whether or not it makes a threat, will decide not to make a threat (1b) because the payoff of not making a threat, $\$0$, is higher than the payoff of making a threat, $\$-1$. SP's incentive not to make a threat, i.e., not to engage in a strategic spillover, is thus aligned with the optimal social outcome (0, 0). See Figure B-2.

Figure B-2
Non-Enforcement of Strategic Ks

