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Keith Hylton
Boston Univeristy School of Law

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Abstract: Economic analysis of nuisance law can be divided into two branches: the transaction cost model and the externality model. The two models provide a relatively complete positive theory of nuisance law. Under the externality model, nuisance law optimally regulates activity levels. Nuisance law induces actors to choose socially optimal activity levels by imposing liability when externalized costs are far in excess of externalized benefits or not reciprocal to other background external costs. Proximate cause doctrine plays an important role in inducing optimal activity levels.

[*] Honorable Paul J. Liacos Professor of Law, Boston University, knhylton@bu.edu. I prepared this paper for the Research Handbook on the Economics of Property Law edited by Kenneth Ayotte and Henry Smith, and it has benefited from their suggestions. Haoqing Zhang provided research assistance. I take responsibility for errors and omissions.

I. Introduction

Nuisance law has been described as an impenetrable jungle.[1] Judging by the dearth of efforts to codify it in the form of blackletter rules, this appears to have been an opinion shared by most legal scholars.[2] The lack of clearly stated rules has probably delayed attempts to use economics to explain nuisance doctrine.

In spite of this, some efforts have been made to provide an economic theory of nuisance law. Most of those efforts, stemming from Coase,[3] have relied on the theory of transaction costs to explain the functional distinction between nuisance and trespass law.[4] But the core of nuisance doctrine involves balancing tests and limitations on scope that are not easily understood on the basis of transaction cost theory. This paper aims to explain the core doctrines of nuisance law. Instead of transaction cost analysis, I will rely on an approach that I will refer to as the externality model.

In contrast to the traditional legal commentary, I find nuisance law a coherent body of rules that serves an explainable function. Nuisance law optimally regulates activity levels. Nuisance law induces actors to choose socially optimal activity levels by imposing liability when externalized costs are far in excess of externalized benefits or far in excess of background external costs. Proximate cause doctrine plays an important role, in this analysis, in generating optimal activity levels.

II. Economics of Nuisances

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[1] WILLIAM L. PROSSER, HANDBOOK OF THE LAW OF TORTS 571 (1971).

[2] One effort to "codify" nuisance doctrine is Section 826 of the Second Restatement of Torts, which says: "An intentional invasion of another's interest in the use and enjoyment of land is unreasonable if:(a) the gravity of the harm outweighs the utility of the actor's conduct, or (b) the harm caused by the conduct is serious and the financial burden of compensating for this and similar harm to others would not make the continuation of the conduct not feasible." Restatement (Second) of Torts: Unreasonableness of Intentional Invasion § 826 (1977). This effort is of questionable value because it refers to the actor's conduct rather than his activity. The reference to conduct could easily lead readers to believe that Section 826 is equivalent to the balancing test observed in negligence law – i.e., the Hand Formula. Moreover, Section 826 implies that strict liability should be applied to any activity that has a nontrivial interference with the plaintiff's use and enjoyment of property. The difficult question in nuisance law is determining how to balance externalized risks and externalized benefits.

[3] The economic theory of nuisance doctrine can be traced to its brief treatment by Coase. Ronald H. Coase, *The Problem of Social Cost*, 3 J. L. & ECON. 1 (1960).

[4] The first detailed examination of the economics of nuisance law is that of Merrill, see Thomas W. Merrill, *Trespass, Nuisance, and the Costs of Determining. Property Rights*, 14 J. LEG. STUD. 13 (1985). Building on Coase, Merrill provides a transaction-cost theory of nuisance law. The transaction cost analysis is also rooted at least in part in the property-versus-liability rule analysis of Calabresi and Melamed, see Guido Calabresi & A Douglas Melamed, *Property Rules, Liability Rules, and Inalienability: One View of the Cathedral*, 85 HARV L. REV 1089 (1972). More recently, the transaction cost theory has been extended by Henry Smith, see Henry E. Smith, *Exclusion and Property Rules in the Law of Nuisance*, 90 VA. L. REV. 965 (2004). The transaction-cost approach is essential for understanding the reasons trespass law cannot serve as a functional substitute to nuisance law. However, the doctrines of nuisance law reflect considerations that go beyond the transaction cost theory.

The literature on the economics of nuisance law can be divided into two branches. One is the *transaction cost framework*, which began with Coase's discussion of nuisance in his famous article on transaction costs and resource allocation.[5] The transaction cost approach emphasizes the functional differences between nuisance and trespass law, and provides a positive theory of the boundary between nuisance and trespass.[6] It has also been applied to explain the law on priority ("coming to the nuisance").[7]

The other branch of work on the economics of nuisance law can be labeled the *externality model*, which focuses on the regulatory function of nuisance law.[8] The externality approach offers a sparse model of the function of nuisance liability, and a positive theory of the core doctrines of nuisance. The core doctrines examined under the externality model are those of intent, reasonableness, and proximate cause.

While the transaction cost model explains why nuisance law may be socially preferable to trespass law under certain conditions, the externality model attempts to explain the specific features of nuisance law. Alternatively, one could say that the transaction cost model addresses the boundary of nuisance law; explaining matters such as the choice between trespass and nuisance, the exclusion of liability for aesthetic disturbances, and rules on priority. The externality model addresses the law's function within the boundary.

Because I will examine the core nuisance rules here, I will focus on the externality model. The transaction cost models will be discussed as comparison points and largely in the margins. The distinction between activity and care levels is the starting point for the externality model.

A. Activity Levels, Care Levels, and Externalities

The law and economics literature distinguishes care and activity levels.[9] The care level refers to the level of instantaneous precaution that an actor takes when engaged in some activity. For example, an actor can take more care while in the activity of driving by moderating his speed or looking more frequently to both sides of the road. The activity level refers to the actor's decision with respect to the frequency or location of his activity.

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[5] Coase, supra note 3.

[6] Merrill, supra note 4; Smith, supra note 4.

[7] Donald A. Wittman, *First Come, First Served: An Economic Analysis of "Coming to the Nuisance"*, 9 J. LEG. STUD. 557 (1980); Christopher M. Snyder and Rohan Pitchford, *Coming to the Nuisance: An Economic Analysis from an Incomplete Contracts Perspective*, 19 J. LAW, ECON. & ORG. 491 (2003).

[8] Keith N. Hylton, *A Missing Markets Theory of Tort Law*, 90 NW. U. L. REV. 977 (1996); Hylton, *A Positive Theory of Strict Liability*, 4 REV. LAW & ECON. 153 (2008). Many of the arguments in this paper are drawn from Keith N. Hylton, *The Economics of Public Nuisance and the New Enforcement Actions*, 18 SUPREME COURT ECONOMIC REVIEW 43 (2010). The notion that liability rules can be used to control externalities has been well understood for a long time in the law and economics literature, see, e.g., A. Mitchell Polinsky, *Controlling Externalities and Protecting Entitlements: Property Right, Liability Rule, and Tax-Subsidy Approaches*, 8 J. LEG. STUD. 1 (1979). The externality (or missing markets) model uses this basic insight to understand the specific nuisance law rules.

[9] See Steven Shavell, *Strict Liability Versus Negligence*, 9 J. LEG. STUD. 1 (1980).

If, for example, the activity of concern is driving, it can be reduced by driving less frequently.

The invasions associated with nuisance law can be viewed as external costs associated with activity level choices. Consider, for example, a manufacturer who dumps toxic chemicals into the water as a byproduct of its manufacturing activity. Suppose the manufacturer is taking the level of care required by negligence law (reasonable care), and, in spite of this, the manufacturing process leads to some level of discharge of toxic chemicals. In this case, the environmental harm is a negative externality associated with the manufacturer's activity level choice.

Whether we are considering the activity of driving a car or that of manufacturing, the model examined here is of activities that impose external costs on society even when they are carried out with reasonable care. The question I consider is how the law can regulate activity levels in a way that leads to socially optimal decisions. I will argue that nuisance law appears to accomplish this goal.

I assume in the model below that there are two liability rules that can be applied to actors, strict liability and negligence.[10] Under either rule, actors are assumed to take reasonable care.

B. The Economics of Activity Level Choices

For any activity, the actor engaged in it will set his privately optimal level at the point which maximizes his utility from that activity. That means the actor will consider the benefits he derives from the activity as well as the costs, and choose a level at which the excess of private benefits over private costs is at its maximum. If $b(y)$ represents the private benefit enjoyed by the actor at activity level y, and $c(y)$ represents the private cost, the actor will increase his activity level until

$$b'(y) = c'(y) , \qquad\qquad (1)$$

where $b'(y)$ represents the marginal private benefit (MPB) to the actor and $c'(y)$ represents the marginal private cost (MPC). The actor's privately optimal activity level choice is given by the intersection of MPB and MPC in Figure 1 (point A).[11]

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[10] The model in this paper builds on a simpler model developed in Hylton, *Positive Theory*, supra note 8. By distinguishing incentives under strict liability and under negligence, the model is sufficiently general to be applied to trespass law. However, I will focus on nuisance law. This focus can be justified by the assumption that the invasions (externalities) examined here are of the type generally falling under nuisance doctrine – such as smoke, noise, odors, etc.

[11] Figure 1 assumes that marginal benefits diminish as the actor increases his activity level, which implies that the marginal private benefit schedule can be represented by a downward sloping line. Marginal private benefits decline because the actor gains less in utility from an additional unit of the activity as his activity level expands. The marginal private cost schedule is assumed to increase as the actor increases his level of activity (see MPC in figure 1).

There are negative externalities (or external costs) associated with many activities. Suppose the activity is driving. With each mile driven, the actor imposes some risk of harm from an accident or from pollution on the public in general. Or, if the activity is manufacturing, with each widget produced, a manufacturer who discharges chemicals in the water imposes clean-up costs on others. The marginal social cost of the actor's activity is simply the sum of the marginal private cost and the marginal external cost imposed on society. Thus if $v(y)$ represents the external cost of the activity, the marginal social cost (*MSC*) is $c'(y) + v'(y)$.

1. Cost and Benefit Externalization: Single Activity Model

There may be benefits to society generated by the actor's activity. For example, the provision of water to a building, even when carried out with great care, puts the tenant's property at risk of damage from escaping water, but also benefits society by enhancing sanitation.[12] Similarly, providing internet service to a home puts the resident's computer at risk through the transmission of computer viruses, but also enhances the spread of information across society.[13] And consider driving again. If the number of drivers increases from one to two, both drivers will have the added safety that if anything goes wrong on the road (e.g., a car falls into a pothole), they will find someone who can help them or call for help.

The marginal social benefit is the sum of the marginal private benefit and the marginal external benefit of an additional unit of activity. Thus, if $z(y)$ represents the external benefit, the marginal social benefit (*MSB*) is $b'(y) + z'(y)$.

The final step of this economic analysis of activity level choices is to consider the differences between private and social incentives. Social welfare is optimized when

$$b'(y) + z'(y) = c'(y) + v'(y) \ . \tag{2}$$

The level of activity that satisfies the social optimality condition may differ from the privately optimal level. The socially and privately optimal activity levels will be the same if the cost and benefit externalities are equal; that is, $v'(y) = z'(y)$. If the external cost exceeds the external benefit at all activity levels, $v'(y) > z'(y)$, then the privately optimal activity choice will exceed the socially optimal level; and the converse holds as well.[14]

Figure 1 can be used to elaborate. Consider the case of low and roughly equivalent externalities on both the cost and benefit sides, as shown in by *MSC (low externality)* and *MSB (low externality)*. The socially optimal level of activity, which equates the marginal

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[12] See Rickards v. Lothian [1913] A.C. 263.
[13] See Keith N. Hylton, *Property Rules, Liability Rules, and Immunity: An Application to Cyberspace*, 87 B.U. L. REV. 1 (2007).
[14] All externalities are real or technological externalities in this analysis. Moreover, I assume that all externalities are relevant in the sense of Buchanan and Stubblebine, see James M. Buchanan and William C. Stubblebine, *Externality*, 29 ECONOMICA 371-84 (1962).

social benefit and the marginal social cost, is found at the point *B* in Figure 1. The socially optimal level of activity (*B*) is roughly the same as the privately optimal level of activity (*A*). The reason is that the modest positive and negative externalities cancel each other out.

Consider the case of high externality on the cost side and low externality on the benefit side, as shown by the intersection of the *MSC (high externality)* and *MSB (low externality)*, or point *C* in Figure 1. Now there is a wide divergence between the privately optimal level of activity (*A*) and the socially optimal level of activity (*C*). In this case it appears desirable for the government to intervene to reduce the level of activity. Indeed, in the case of very high externality on the cost side (*MSC (very high externality)*) it may be desirable to shut down the activity completely.

Finally, consider the case of low externality on the cost side and high externality on the benefit side, as shown at point *D* in Figure 1. The privately optimal level of activity (*A*) is substantially below the socially optimal level (*D*). The law should intervene to increase the level of activity.

2. Cross Externalization of Costs and Benefits: Dual Activity Model

In many settings, actors cross externalize benefits and risk. For example, on the roads, drivers impose accident risks on each other even when driving with reasonable care. In addition, drivers may externalize benefits. The presence of other drivers may reduce some risks to certain drivers – e.g., the risk of being stranded by the side of the road may be lower if other drivers are present. The same may be true in a more general sense of neighboring activities. The noise from one factory may at times disturb the work of a neighboring business. But the factory's presence may draw suppliers, employees, and customers to the area, to the benefit of other local businesses.[15] Agglomeration externalities may make particular locations ideal for certain industries, even in the presence of substantial external costs.[16]

Consider two actors *S* and *T*. In the case of risk externalization, the activity total cost function for their activities can be represented as

$$c(y_S) + c(y_T) + V(y_S, y_T) \qquad\qquad (3)$$

where $V(y_S, y_T)$ represents the total externalized social cost of both of their activities.

For example, $V(y_S, y_T)$ might represent the costs imposed on society by a cloud of pollution that results directly from the activities of *S* and *T*. Alternatively, $V(y_S, y_T)$ could represent the costs to society from specific and independent invasions from *S* to *T* and vice versa. For example, *S* may emit noise that disturbs *T*, and *T* may emit a cloud of black smoke over *S*'s property.

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[15] Paul Krugman, *Increasing Returns and Economic Geography*, 99 J. POL. ECON. 483 (1991).
[16] These aspects of the economics of cities have been recognized in the nuisance case law, see Gilbert v. Showerman, 23 Mich. 448 (1871).

The total social cost of activity can be broken down as follows:

$$c(y_S) + c(y_T) + v_S(y_S,y_T) + v_T(y_S,y_T) \qquad (4)$$

where $v_S(y_S,y_T)$ represents the portion of the total externality cost borne by S and $v_T(y_S,y_T)$ represents the total of the externality cost borne by T. Return to the example of pollution. The breakdown in (4) assumes that the total cost of pollution is borne by S and T alone, so the total cost can be decomposed into the portions borne by both. The pollution example is complicated because it may be difficult to disentangle the specific contributions of S and T to the general harm. The alternative example of independent cross-externalization (e.g., S emits noise, T emits smoke) is simpler, because the specific contributions are easily identified and separated.

To simplify the discussion, assume we are dealing with a case of independent cross externalization – i.e., S emits noise that disturbs T, and T emits smoke that disturbs S. In this case, the total social cost of the activity can be represented as

$$c(y_S) + c(y_T) + v_{TS}(y_S,y_T) + v_{ST}(y_S,y_T) \qquad (5)$$

where v_{ST} represents the cost (or risk) externalized from S to T as a function of both activity levels and v_{TS} represents the cost externalized from T to S. Assuming, for simplicity, that no benefits are externalized, the privately optimal activity level for S will be determined by the condition

$$b'(y_S) = c'(y_S) + \frac{\partial v_{TS}}{\partial y_S} \quad, \qquad (6)$$

and a similar result holds for actor T. It should be clear that both actors will constrain their activity levels more than in the single activity case considered above, because they will take into account the risks they personally incur when increasing activity. If the benefit and cost functions are the same for both actors, and $\partial v_{TS}/\partial y_S = \partial v_{ST}/\partial y_T$, they will choose the same activity levels.

In the absence of externalized benefits, the privately optimal activity levels will be greater than the socially optimal levels. This is easy to see because the socially optimal activity level will be determined by:

$$b'(y_S) = c'(y_S) + \frac{\partial v_{TS}}{\partial y_S} + \frac{\partial v_{ST}}{\partial y_S} \quad. \qquad (7)$$

As long as the cost externalized by S to T is responsive to changes in S's activity level, S will choose an activity level that is too high from society's perspective.

If benefits are externalized, then it is no longer clear that the privately optimal activity levels are socially excessive. Whether the privately optimal activity levels coincide with

the socially optimal levels depends on the relationship between externalized benefits and externalized costs. In the case of externalized benefits, the privately optimal activity level will be determined by the condition
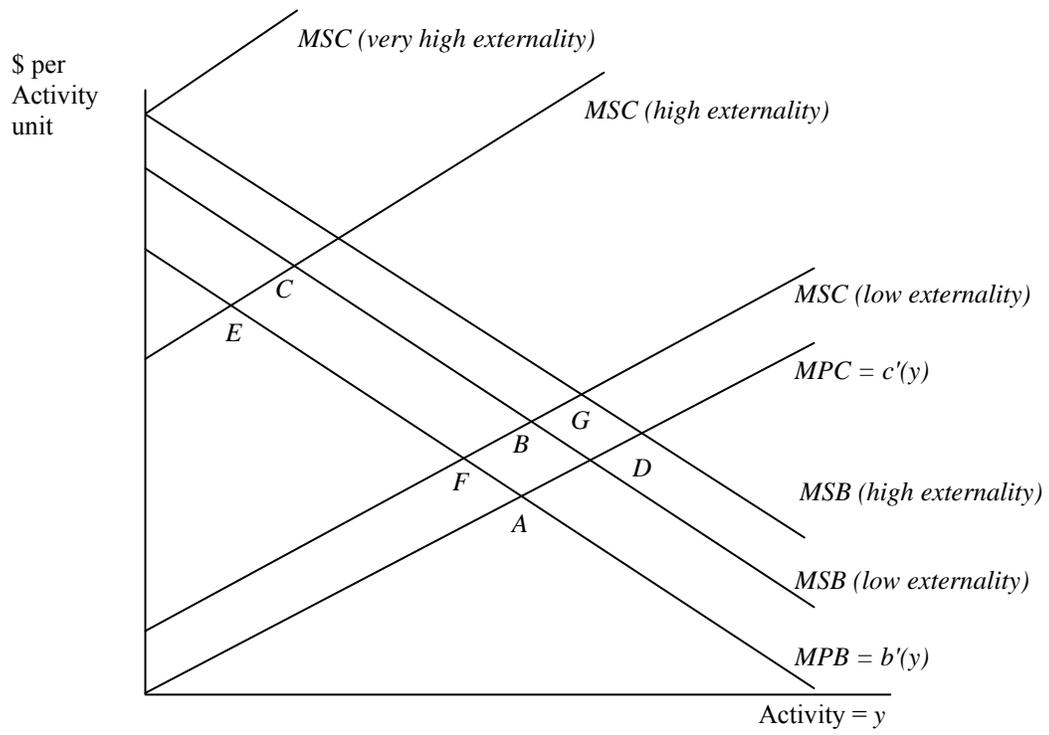
$$b'(y_S) + \frac{\partial z_{TS}}{\partial y_S} = c'(y_S) + \frac{\partial v_{TS}}{\partial y_S} \quad , \tag{8}$$

where z_{TS} represents the benefit externalized from T to S (assuming an independent cross-externalization setting). The socially optimal level of activity is determined by the condition

$$b'(y_S) + \frac{\partial z_{TS}}{\partial y_S} + \frac{\partial z_{ST}}{\partial y_S} = c'(y_S) + \frac{\partial v_{TS}}{\partial y_S} + \frac{\partial v_{ST}}{\partial y_S} \quad . \tag{9}$$

It should be clear that the level of activity that satisfies the private optimality condition may differ from the level that satisfies the social optimality condition.

Figure 1

$ per
Activity
unit

MSC (very high externality)

MSC (high externality)

MSC (low externality)

MPC = c'(y)

C

E

G

B

F

D

A

MSB (high externality)

MSB (low externality)

MPB = b'(y)

Activity = *y*

C. Law

Since the actors are assumed to be taking reasonable care, the negligence rule cannot influence their activity level choices. The negligence rule holds the actor liable only when he fails to take reasonable care. Since the actors are assumed to have taken reasonable care, the negligence rule will not lead to any findings of liability.[17]

Strict liability has the property that it imposes liability on actors even when they have taken reasonable care. The legal system can influence activity levels through imposing strict liability. In this part, I will examine the conditions under which strict liability leads to optimal activity levels.

1. Single Activity Case

Consider the case in which externality is high on the cost side and low on the benefit side. The socially optimal scale in this case is point *C* in Figure 1. In the absence of strict liability, the privately optimal scale is point *A*. Imposing strict liability on the actor is probably desirable in this case. When strict liability is imposed on the actor, his marginal private cost schedule becomes equivalent to the marginal social cost schedule. In the case of high externality on the cost side coupled with low externality on the benefit side, the actor's privately optimal activity level under strict liability will be point *E*. It is not the socially optimal level, which is at point *C*, but it is close. Social welfare will most likely be improved by using liability to lead the actor to choose level *E* rather than the socially excessive level *A*. I will argue below that proximate cause doctrine serves to adjust the activity level to the socially optimal point.

Now consider the case in which externality is low both on the cost and on the benefit side. The socially optimal scale of activity is associated with point *B*. The privately optimal level of activity is associated with point *A*. These are the same activity levels. If strict liability is imposed on the actor, it will reduce his activity level below the socially optimal scale, and therefore reduce social welfare.[18] Strict liability will lead him to choose the scale *F*, which is below the socially optimal scale.

It follows from the foregoing that *strict liability is desirable in the single activity case only when the external costs of the activity substantially exceed the external benefits associated with the activity*. In this case imposing strict liability reduces activity levels to

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[17] This assumes courts operate without error and that litigation is not costly. If courts make mistakes and litigation is costly, compliance with the negligence standard does not reduce liability costs to zero. On litigation costs and judicial error, see Keith N. Hylton, *Costly Litigation and Legal Error under Negligence*, 6 J. LAW, ECON. & ORG. 433 (1990).

[18] One could say that the externality is irrelevant, in the sense of Buchanan and Stubblebine, *supra* note 10, because the net marginal effect on the third party is zero (note that the marginal negative externality is just balanced off by the marginal positive externality). Alternatively, one could view this analysis as an exercise in "second best theory". Intervention to correct a market failure is sometimes ill-advised under second-best theory because the negative externality created by an actor may be offset by a positive externality (perhaps on another market). On the theory of second best, see Richard G. Lipsey and Kelvin Lancaster, *The General Theory of Second Best*, 24 REV. ECON. STUD. 11 (1956).

a point that is closer to the socially optimal scale than would be observed under the negligence rule. When the external benefits are roughly equal to or greater than the social costs associated with the activity, strict liability is not socially desirable.

2. Dual Activity Case

To simplify, assume there are no external benefits. When negligence is the legal rule that applies, the privately optimal level of activity in the cross externalization model is given by condition (6).

When strict liability is the legal rule, the privately optimal level of activity will depend on the type of strict liability rule adopted. Suppose the law adopts a rule of symmetric strict liability, which holds both S and T strictly liable for harms. Under the symmetric strict liability rule, the privately optimal activity level for actor S is determined by:

$$b'(y_S) = c'(y_S) + \frac{\partial v_{ST}}{\partial y_S} \quad . \tag{10}$$

Note, comparing (6) and (10), that strict liability and negligence lead to the same activity levels if

$$\frac{\partial v_{ST}}{\partial y_S} = \frac{\partial v_{TS}}{\partial y_S} \quad . \tag{11}$$

In other words, as long as the harm externalized by S to T is the same as the harm externalized by T to S, strict liability and negligence result in the same privately optimal activity levels. When the actors cross externalize reciprocal harms, strict liability and negligence result in the same activity levels.

This generates the following *Reciprocal Harm Theorem*: *when the costs externalized by two actors to each other are reciprocal, strict liability is not socially preferable to negligence.*[19] The reason is that under strict liability, you will pay for harms to others, while under negligence (again, everyone is complying with the negligence standard in this model) you will pay for only for the harms you suffer. Since those harms are the same, activity levels will not differ under the two regimes.

Given the condition governing socially optimal activity in (7), it should be clear that neither (symmetric) strict liability nor negligence will lead to socially optimal care. Still, if $\partial v_{TS}/\partial y_S$ is substantially less than $\partial v_{ST}/\partial y_S$, then it follows that strict liability will generate an activity level for S that is closer to the socially optimal level than will the negligence rule. This suggests that if S externalizes much more cost to T than T externalizes to S, strict liability will be socially preferable to negligence.

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[19] On the "reciprocal harm" proposition, see Hylton, *Missing Markets*, 1996; Hylton, *Positive Theory*, 2008; supra note 6.

Now consider asymmetric strict liability. Suppose S is subject to strict liability and T is subject to the negligence rule. Under asymmetric strict liability, the following conditions govern the activity levels chosen by S and T.

$$b'(y_S) = c'(y_S) + \frac{\partial v_{TS}}{\partial y_S} + \frac{\partial v_{ST}}{\partial y_S}$$

$$(12)$$

$$b'(y_T) = c'(y_T)$$

These conditions imply that S will exercise the socially optimal level of activity, because he will pay for the harms he externalizes to T and he will also have to pay for the harms externalized by T. T will not exercise the socially optimal level of activity. If, however, S's external costs are substantial and T's are trivial, this is a better solution than the one provided by the negligence rule.

III. Theory of Nuisance Law

I have presented an economic analysis of activity level choices and considered its implications for law. In this part I examine the law to see if it conforms to the predictions of the model.

Some parts of the doctrine are easily interpreted in light of similar tort rules. Consider the legal definition of a nuisance: an intentional, nontrespassory and unreasonable invasion into the quiet use and enjoyment of property. Intentional, in nuisance law, has always had a meaning similar to its meaning in the context of trespass law: it is enough if the defendant was aware of the nuisance, and the plaintiff is not required to prove that the defendant aimed to harm him. The term nontrespassory has always had the effect of distinguishing between invasions that interfere with exclusive possession of property or a portion of it (e.g., an invading boulder) and invasions that merely make it less desirable to remain in possession of property (e.g., smoke). I will go beyond these comparisons with trespass doctrine to examine how this paper's model justifies the definition and doctrines of nuisance.

A. Nontrespassory Invasions

The definition of a nuisance as a nontrespassory invasion distinguishes nuisances from trespasses and also from consensual transactions. If the interference is the result of the consent of the victim, then it is not properly characterized as an invasion.

The invasiveness requirement is implicated by the externality model. If the interference is consensual, in the sense that the affected party is fully aware of the nature of the interference and still contracts with the offending actor, then there is no need for the law to intervene to control the activity level of the offending actor. The activity level will be regulated to the optimal level by the market. Thus, if a person contracts with another to

install a noisy furnace, and he is fully aware of the noise that will be emitted by the furnace when he enters the contract, he has no basis to bring a nuisance claim against the furnace supplier for the noise interference.

This argument can be put in terms of the single-activity model. Suppose buyers are contracting with a seller whose product generates a negative externality – for example, the seller markets widgets that explode, but no one knows about the risk. Assume there is no positive externality associated with the product. Obviously, the buyers were not aware of the negative externality – otherwise it would not be an externality. The market equilibrium would occur at the output scale where the marginal private benefit of consumption equaled the marginal private cost of supply: $b'(y) = c'(y)$. But this would result in socially excessive consumption, because the socially optimal output scale occurs where $b'(y) = c'(y) + v'(y)$. If the buyers are aware of the negative feature of the product, then the effective market demand schedule would be $b'(y) – v'(y)$. The market equilibrium would occur where $b'(y) – v'(y) = c'(y)$, which is socially optimal.[20]

B. Intentional Invasions

The externality model provides a theory of intent in nuisance law. The purpose of strict liability is to regulate activity levels. In order to carry out this function, liability must be applied to actors that have sufficient information to have their activity level choices influenced by liability. For example, an actor that decides to locate a smoke-belching factory next to a residential area must be aware of the invasions caused by the smoke from his factory if strict liability is going to have any impact on his initial location decision.[21] In the cross externalization model examined earlier, strict liability led to optimal incentives on the part of the nuisance generator because the marginal cost of his activity became $c'(y_S) + \partial v_{TS}/\partial y_S + \partial v_{ST}/\partial y_S$. But if the nuisance generator does not have enough information to be aware of his imposition on others ($\partial v_{ST}/\partial y_S$), the threat of strict liability cannot regulate his activity level choices.

Suppose, for example, the nuisance generator's activity causes toxic chemicals to leach into the soil and contaminate a tributary to the groundwater supply used by the victim. If the nuisance generator is unaware that chemicals are leaching into the soil, or (more likely) of the existence of the tributary, then the intentionality requirement would not be satisfied.[22]

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[20] Invasiveness, viewed from an economic perspective, means that the negative externality was not the result of a consensual, fully informed transaction. Otherwise, the market would generate optimal consumption (activity) levels. It should be clear that there is no bright line economic definition of the invasiveness concept.

[21] It is quite likely that strict liability will have ex post effects on an actor's scale or location decision. After moving to a location, the burden of strict liability probably would induce a nuisance generator to scale back its activity and perhaps to move it to another location, even if the generator was not aware of the costs imposed on victims. However, strict liability cannot affect ex ante incentives if the generator is unaware of the costs externalized to victims.

[22] There is an underlying question of what it means to be "unaware" of the harm imposed on the victim. To some extent, this is a problem running through all of intentional torts. At some point, awareness of danger reaches the level where an actor's conduct has to be described as intentional. The courts have never set attempted to set out probability thresholds that would determine an awareness of harm that would requires

It follows that intention in nuisance law, at its core, does not mean intending to harm the victim, or intending to interfere with the victim's use of his property. It is sufficient that the actor has enough information to either be aware of or to easily foresee the harmful impact of his activity on others.

C. Unreasonable Invasions

The most important term in the definition of nuisance is "unreasonable". The theory of this paper suggests a clear interpretation for the reasonableness test of nuisance law. The model presented in the previous part suggests that an unreasonable invasion is one that is associated with an activity for which: (a) the external costs substantially exceed the external benefits, or (b) the external costs thrown off by the defendant's activity are not reciprocal to the external costs thrown off by other local activities.[23] These two conditions describe the settings in which the law should intervene to reduce an actor's activity level. Provided that the intentionality and nontrespassory descriptions apply to a particular invasion, the law should impose strict liability when the external costs exceed external benefits or are non-reciprocal.

Nuisance doctrine is closely related to the law and theory of strict liability articulated in *Rylands v. Fletcher*.[24] The *Rylands* court described several nuisance cases as falling within the rationale of its decision. This is useful because the law on *Rylands*-based strict liability has been set out with much greater clarity than nuisance law.

Using the theory of *Rylands* as the closest doctrinal source for nuisance law, we can set out the following test for a nuisance:

   (a) existence of a high degree of interference with the quiet use and enjoyment of land of others;
   (b) inability to eliminate the interference by the exercise of reasonable care;
   (c) extent to which the activity is not a matter of common usage;
   (d) inappropriateness of the activity to the place where it is carried on and;
   (e) extent to which its value to the community is outweighed by its obnoxious attributes.

I will refer to this below as the nuisance test. These factors are based on the Second Restatement's articulation of the *Rylands* doctrine in the form of a set of rules, in Section

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the label intentional. For an early and rather complete examination of intent and probability in the law, see Oliver Wendell Holmes, Jr., The Common Law 52-59 (1881).

[23] Many of the activities subjected to strict liability can be viewed as aggregations of risk rather than as different in kind from ordinary risks. For example, the risk created by storing explosives is simply an aggregation of the risk anyone creates by storing something that can explode. The unusual risk creation that justifies strict liability can therefore be viewed as an aggregation or consolidation of risks which are ordinarily confronted in a dispersed and uncorrelated form.

[24] L.R. 3 H.L. 330 (1868). The *Rylands* case treats ultrahazardous and nuisance cases as all part of the same general doctrine. On the connection between *Rylands* and nuisance doctrine, see also Hylton, Positive Theory of Strict Liability, *supra* note 6.

520. The foregoing five-factor test is an attempt to examine whether the external costs thrown off by a nuisance substantially exceed external benefits, or are reciprocated by background external costs of other activities.[25]

The first two factors of this test require that the interference be substantial even when the actor is taking reasonable care. As in the case of abnormally dangerous activities, the first two factors should be treated as minimal requirements for nuisance liability. If, in other words, the interference would be trivial if the actor took reasonable care, then the interference should not be considered a nuisance, and there is no need to examine the remaining factors of the test.[26]

The remaining three components present the core of the reasonableness test in nuisance law. The third factor, common usage, helps identify activities for which the risks are reciprocal to those of other common activities. If an activity is one of common usage, then actors engaged in the activity will impose reciprocal risks on each other, and there is no basis for adopting strict liability over negligence.[27]

The fourth factor, inappropriateness, is both another way of determining whether the activity imposes a reciprocated risk and a way of assessing whether the risks are balanced off by the external benefits. Since the fourth factor focuses on the location, it should be treated as a type of assumption of risk test. An activity would be considered appropriate or reasonable for its location if its costs are typical of other activities in the locale, or if its externalized benefits would make it reasonable for someone in the area to tolerate the costs (because the externalized benefits exceed the externalized costs).

The last factor asks the court to directly compare the benefits externalized by the activity and the costs externalized. When the benefits are substantial, the last factor suggests that the court should be reluctant to impose liability on a nuisance theory. Consider, for example, the noise generated by a fire station. Suppose it is a particularly busy fire station. The noise generated by fire trucks constantly moving in and out of the station with their alarms running could be deemed to substantially interfere with the quiet use and enjoyment of land by neighbors. However, the neighbors also benefit by being

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[25] The Second Restatement has another provision, Section 826, that sets out a test specifically for nuisance law (discussed supra, note 1). However, Section 826 fails to appropriately distinguish nuisance and negligence doctrine, and to give a proper sense of the balancing test implicit in nuisance doctrine. In contrast, Section 520 of Restatement (Second) provides a fairly accurate description of the *Rylands* common law, which is equivalent at its core to the nuisance common law.

[26] Judge Posner's decision in Indiana Harbor Belt R.R. v. American Cyanamid Co., 916 F.2d 1174 (7th Cir. 1990), an ultrahazardous activity strict liability case, is consistent with this proposition.

[27] One strand of the property-rights (or trespass law) perspective (discussed supra, note 4) has suggested that the reciprocal harms concept can be understood as a softening of property rights in settings in which transaction costs could justify it. See Richard Epstein, Nuisance Law: Corrective Justice and Its Utilitarian Constraints, 8 J. Legal. Stud. 49 (1979). The corrective justice theory is quite different from the economic model examined here. Corrective justice theories sometimes reach conclusions that are consistent with economic models, as in this case, but they tend to be based on a style of argument that eschews formal analysis. Moreover, within an economic framework, one of the important questions examined in any attempt to provide a positive theory of the law is whether the legal rule at issue is likely to lead to a socially optimal equilibrium. That question is unaddressed in the corrective justice context.

located close to the fire station. Since those benefits are substantial and widely dispersed, the neighbors should not be allowed to impose strict liability on a nuisance theory against the fire station. There is no economic basis for using liability as an incentive to force the fire station to cut back on its activity or to reconsider its location decision.[28]

In *Baines v. Baker*,[29] the defendants proposed to erect a hospital for treating smallpox patients in Coldbath Fields, London. The plaintiff, an owner of rental property in the area, sued to enjoin the building as a nuisance. The court refused to enjoin on the ground that the plaintiff's property-value losses due to fears, even though rational, were not recoverable through a nuisance action; and that the public benefits of the hospital would justify the external costs.

The most famous nuisance case involving the balancing of external costs and benefits is *Pennsylvania Coal Co. v. Sanderson*.[30] The defendants operated a coal mine, and in the process of operation brought up underground water. The water brought up by the mining operation flowed into and polluted a surface stream that was used three miles away by the plaintiff as a source of water for the home. The court described the case as pitting the interests of the leading industry of the state against riparian property owners. It also characterized the case as a purely private nuisance, not affecting general access to usable water, because the community had "abundant pure water from other sources."[31] The court held that the plaintiff's activity had to yield because of the importance of the defendant's activity to the local economy.[32]

The externality balancing test implies a movement toward expanding strict liability as an economy becomes wealthier. For a subsistence level economy, the introduction of industry should have enormous beneficial externalities. But as the wealth and industry expand, the positive externalities of industrial expansion probably diminish.[33] And wealthier consumers will attach a greater valuation to recreational and aesthetic interests.

D. Scope of Liability: Proximate Cause, Extra-Sensitive Plaintiffs, and Coming to the Nuisance

Under the proximate cause rule courts have limited the scope of nuisance liability to injuries that are connected in a predictable way to the externalized risk. Injuries that are

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[28] See Malhame v. Borough of Demarest, 162 N.J. 248, 392 A. 2d 652 (Law Div. 1978).

[29] (1752) Ambler 158; for a summary, see Nathaniel Cleveland Moak & John Thomas Cook, Reports of Cases Decided by English Courts: with Notes and References, 1884, at 368-69, text available online at: http://books.google.com/books?id=i3UyAAAAIAAJ.

[30] 113 Pa. 126; 6 Atl. 453 (1886). For an insightful discussion of *Sanderson*, see Todd J. Zywicki, *A Unanimity-Reinforcing Model of Efficiency in the Common Law: An Institutional Comparison of Common Law and Legislative Solutions to the Large-Number Externality Problems*, 46 CASE W. RES. L. REV. 961, 1017-1020 (1996).

[31] Id., at 459

[32] Id.

[33] In particular, the positive externalities created by the enhancement of market infrastructure and other social benefits from industrialization diminish. However, even in a wealthy industrialized economy, there may be commercial activities that throw off external benefits. For example, information technology, by enhancing the dissemination of information through society, carries significant positive externalities.

not predictably related to the externalized risk are not within the scope of strict nuisance liability. The externality model suggests a reason for this: to focus liability on the cost externalizing features of the defendant's activity rather than the activity per se. Suppose the victim drives his car into the defendant's malarial pond. To permit a strict liability action would fail to tax the defendant's activity for the specific risk creation – i.e., the risk of malaria – that nuisance law aims to discourage.

A clearer justification for the proximate cause rule in nuisance law can be based on the model of the previous section. Return to the single-activity model and let the externalized risk component, $v(y)$, be separated into two subcomponents,

$$v(y) = v_1(y) + v_2(y), \tag{13}$$

where $v_1(y)$ is the normal risk externalized by activities of the defendant's type and $v_2(y)$ is the extraordinary risk that makes the defendant's activity a nuisance. For example, in the case of a malarial pond, $v_1(y)$ is the risk externalized by any water storage, and $v_2(y)$ is the malaria risk. The proximate cause rule excludes liability for the normal risk component. If, as nuisance law implicitly assumes, normal risks are balanced off by (normal) positive externalities, then excluding liability for normal risk leads to optimal activity levels.

To see this, note that the social optimum would require the level of care to be set so that $b'(y) + z'(y) = c'(y) + v'_1(y) + v'_2(y)$. If most normal negative externalities (background risks) are cancelled out by normal positive externalities, $z'(y) = v'_1(y)$. Thus, the social optimum is achieved where $b'(y) = c'(y) + v'_2(y)$. The proximate cause rule leads to the social optimum in activity by excluding the normal risk component, $v_1(y)$, as a source of liability. In terms of Figure 1, suppose $v'_1(y)$ represents the "low externality" cost increment (*MSC (low externality)*), and suppose $v'_2(y)$ represents the "high externality" cost increment (*MSC (high externality)*). If normal positive externalities are present (i.e., *MSB (low externality)* measures the marginal social benefit of the activity), the socially optimal activity level is that associated with point C. However, strict liability applied without any offset based on the proximate cause rule would lead the actor to choose the activity level associated with point E. Applying the proximate cause rule of nuisance law, which limits application of strict liability to those injuries attributable to the extraordinary risk, leads the actor to choose the socially optimal activity level (point C).

The extra-sensitive plaintiff problem is closely related to the proximate cause issue. Nuisance law does not provide for compensation to the extra-sensitive plaintiff, such as one who complains of illnesses caused by such ordinary activity as the ringing of church bells.[34] The justification for this settled piece of the law is best understood in terms of the theory offered here. A nuisance exists when the externalized costs associated with an activity are substantially in excess of externalized benefits, or the externalized costs are not reciprocated by the external costs of other background activities. The comparison of externalized costs and benefits is made with respect to statistical averages, not to any particular plaintiff. If, on the basis of statistical averages, the externalized costs

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[34] Rogers v. Elliott, 15 N.E. 768 (Mass. 1888).

associated with an activity are not substantially greater than the externalized benefits (or background external costs), then the activity is not a nuisance, under this framework, even though an individual within the community might suffer an injury from it.

In terms of the model, the extra-sensitive plaintiff rule, as well as other rules, can be understood by introducing random components to the external cost. In the single-activity model, let

$$v(y) = v_1(y) + \varepsilon_1(y) + v_2(y) + \varepsilon_2(y) \tag{14}$$

where the error terms represent random shocks that might alter the externality level in specific instances beyond the average level. The law, however, has to be determined by and for average cases. Thus, the optimal activity condition is $b'(y) + z'(y) = c'(y) + v'_1(y) + v'_2(y)$, and since on average $z'(y) = v'_1(y)$, the optimal activity condition simplifies to $b'(y) = c'(y) + v'_2(y)$.

This analysis implies that if the average risk associated with the activity is only the background level $v_1(y)$, the activity is not a nuisance even if the associated random shock component ($\varepsilon_1(y)$) is substantial in a specific instance. The activity of ringing church bells emits a normal background risk. In a specific instance, it may lead to an unusual harm, such as causing a church neighbor to suffer a rare neurosis. The harm observed in that specific instance does not alter the finding that the activity itself does not constitute a nuisance.

In the same sense $v_2(y)$ can be taken to represent the expected risk associated with the extraordinary externalization component. Because social optimality requires $b'(y) = c'(y) + v'_2(y)$, strict liability is imposed for this component of the external cost. The error term ε_2 can be taken to represent remote risks. For example, suppose the actor emits an unusual amount of black smoke, sufficient to create a public nuisance for passersby on the roads. Suppose the smoke does not interfere with a passerby, but the passerby stops to look at the smoke. After the passerby returns to the road he gets into an accident. The smoke emission would be a "but-for cause" of the accident, but it would be considered a remote injury in relation to the extraordinary externalization component. By excluding liability for remotely related injuries, nuisance law maintains incentives for socially optimal activity levels.

A better sense of the motivation for the proximate cause test in the case in which the specific extraordinary risk has been realized can be suggested by writing the risk decomposition as

$$v(y) = v_1(y) + v_2(y)(1 + v_{1|2}(y) + \ldots + v_{N|2}(y)) \tag{15}$$

where each component $v_{1|2}(y)$ through $v_{N|2}(y)$ represents a conditional risk based on the realization of the extraordinary risk $v_2(y)$. When the extraordinary risk is realized – e.g., a continuing release of black smoke or loud noise – many other events may change as a result, generating injuries. Those other events can be viewed as conditional risks; again,

consider the example of the passerby who delays his travel as he looks at the black smoke and then gets hit by a bolt of lightning two minutes later. The release of the extraordinary risk reshuffles the deck, in a sense, and changes the path of later events. But if the nuisance generator is held liable because the release of the extraordinary risk has "reshuffled the deck", then he will be potentially liable for an infinite number of injuries. If courts held defendants liable for the conditional risks, the liability would be virtually limitless. The proximate cause test reduces the risk of limitless liability and generally avoids excessive liability.

E. Coming to the Nuisance

Sometimes defendants argue that plaintiffs should not be able to recover because they "came to the nuisance". The coming to the nuisance defense is valid in some cases, but not in all. The theory of this paper provides a justification for the ambiguous treatment of the coming-to-the-nuisance defense.

Since the goal of nuisance liability is to optimally regulate activity levels, a victim's decision to come to the nuisance is certainly a relevant piece of information. The victim's decision to move is no different from the case of the buyer who contracts with a seller to purchase some item with a latent and dangerous defect. If the buyers are aware of the negative feature of the product, then the effective market demand schedule would be described by $b'(y) - v'(y)$. The market equilibrium would occur where $b'(y) - v'(y) = c'(y)$, which is socially optimal. Thus, if a smoke-belching factory sits alone in an area, and the victim moves next door to it, there would be no reason to view the factory's activity as socially excessive. In this case, the coming-to-the-nuisance defense applies.

There are two reasons that the coming-to-the-nuisance defense might not be desirable in this model. First, the victim may not have been aware of the offender's activity when purchasing his property. In *Ensign v. Walls*,[35] the defendant maintained dog-breeding business in residential area of Detroit. The invasions (odors, noise, occasional escapes, filth) caused by the defendant's activity may not have been obvious to prospective residents; most probably became aware of the nuisance after moving in. Using the single-activity model for the purposes of analogy, in this sort of case the market equilibrium would occur where $b'(y) = c'(y)$ (because the invasive feature of the defendant's activity was not apparent to the new resident), while the social optimum would occur where $b'(y) - v'(y) = c'(y)$.

The second reason the coming-to-the-nuisance defense may not be desirable is that the market for real property can be distinguished from most other markets for goods or services. Suppose the community consists of one smoke-belching factory and 99 residents. It is clear in this case that the reciprocal harm condition would not be satisfied ($\partial v_{TS}/\partial y_S \neq \partial v_{ST}/\partial y_S$); the background risks externalized by the residents would be trivial in comparison to the cost externalized by the factory. If the coming-to-the-nuisance defense were allowed, there would be no mechanism to control the activity level of the factory. The factory could double its level of activity without meeting any liability. This

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[35] 34 N.W.2d 549 (Mich. 1948).

is distinguishable from the ordinary market setting in which the market transaction involves a fixed level of risk (e.g., a widget that explodes with probability .01), and in which the turnover of buyers continually constrains the consumption of risky products.[36]

As a general matter, strict nuisance liability hinges on a comparison of externalized costs to externalized benefits or to reciprocal background risks. The historical pattern should not be controlling.

The justifications for the law on priority offered within this model do not diminish the more traditional transaction-cost based understanding. A rule favoring priority would encourage socially wasteful races and expropriation.[37] My argument suggests that one can account for the law on priority without resorting to the transaction cost theory.

F. Shut Downs

Notice that in Figure 1 if external costs are very high and external benefits are nonexistent, the optimal scale of the offending activity is zero. Another way of expressing the same point is in terms of total benefit and total costs. A shut down of activity should occur when $b(y) + z(y) < c(y) + v(y)$; or equivalently when $b(y) - c(y) < v(y) - z(y)$. In other words, a shut down should occur when the net external cost exceeds the joint surplus from the activity.[38]

The theoretical recommendation that a cost-benefit test should apply to the issuance of injunctions is consistent with nuisance law. In *Boomer v. Atlantic Cement Co.*,[39] the New York court reversed a preexisting state doctrine that favored the granting of injunctions for any substantial unreasonable invasions. The court held that in the presence of a great disparity between the economic value of the nuisance generator's activity and the harm imposed on the victims, courts should issue damage awards rather than injunctions. The reason underlying the decision was consistent with long-standing principles of equity, which most courts follow on the matter of injunctions. Under those principles, an

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[36] The key problem is the ability of the factory to increase the invasion without facing any additional cost. In the case of the widget seller, the risk of explosion is fixed with every widget. Moreover, if the widget seller causes the risk of explosion to increase, that will affect the widget market – assuming buyers know the risk. The market constrains the widget seller, to some extent, from increasing the risk. In the nuisance context, suppose a new resident purchases property knowing the risk of an invasion, so the cost of the invasion is capitalized into the property price. But for any given expectation of risk, the nuisance-generating factory can always make it worse later. If the nuisance-generator could assert priority as a defense, the cost of making it worse for residents would be zero on the margin.

[37] Wittman, supra note 7; Snyder and Pitchford, supra note 7; Epstein, supra note 21; Smith, supra note 4.

[38] The shut down point is reached where the net social benefit from the activity is obviously negative. Although Calabresi and Melamed did not examine nuisance doctrine, the general notion that injunctions could be appropriately applied to activities for which the social costs clearly outweighed the social gains was explored, largely in the margins, of their famous article on property rules, see Calabresi and Melamed, supra note 4. For a more extensive model, see Keith N. Hylton, *Property Rules and Liability Rules, Once Again*, 2 REV. LAW & ECONOMICS 137 (2006). This is also consistent with Cooter's prices and sanctions model, see Robert D. Cooter, *Prices and Sanctions*, 84 COLUM. L. REV. 1523 (1984).

[39] 26 N.Y.2d 219, 257 N.E. 2d 871, 309 N.Y.S.2d 312 (1970).

injunction would be appropriate only when the benefits of an injunction appeared to be greater than the costs.

If damage payments accurately reflected all of the losses suffered by victims, there would never be a need to issue an injunction. Every case involving extremely high external costs would be shut down, in effect, by damage awards.[40] Given this, why are injunctions are ever issued?

The economic case for injunctions is that damage awards do not compensate for all of the losses suffered by victims of nuisances. The more specific reasons differ in the private and public nuisance settings. In the private nuisance setting, a sufficiently offensive invasion will impose large subjective losses on victims. For example, suppose the offending activity sends so much black smoke over the plaintiff's property that it is impossible to live on the property. Then the defendant has effectively seized the property of the plaintiff. A damage award in this case would compensate the plaintiff for the market value of the property, but not for the subjective loss from expropriation. The injunction is preferable because it forces offending activities to either pay for the full losses (objective and subjective) or shut down. In the public nuisance setting, the damage awards will also fail to compensate plaintiffs for all of their losses. The rule governing damages does not provide compensation for ordinary inconveniences. However, even if victims could be compensated for ordinary inconveniences, most would not sue because the cost of suit would be to be too high relative to the likely damage awards. Given this, the injunction is socially preferable.

The injunctions can be viewed in both cases as minimizing error costs. Damage awards could in theory lead to optimal shut down decisions, but the types of error built in to the strict liability system are obvious. Subjective losses are not compensated in the private nuisance cases and the standard inconveniences are not compensated through public nuisance lawsuits. Because of these gaps, nuisances that should be shut down may easily escape that outcome in a system in which courts applied only liability rules to nuisance activities.

VI. Remaining Notes on the Transaction Cost Model and Boundary Issues

A complete economic model of nuisance law would consist of the transaction cost model and the externality model, with the transaction cost model used to explain the boundaries of nuisance law and the externality model used to explain its regulatory function. The foregoing analysis deemphasizes the boundary question that has been the focus of transaction cost analysis. The strategic decision to deemphasize the boundary question does not at all imply that it, and the transaction cost model, are in any sense less important.

I have already noted some of the boundary questions examined under the transaction cost model; specifically the choice between trespass and nuisance, and the rule on priority.

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[40] See, e.g., A. Mitchell Polinsky, *Resolving Nuisance Disputes: The Simple Economics of Injunctive and Damage Remedies*, 32 STAN. L. REV. 1075 (1980).

The transaction cost model appears to be superior to the externality model as a theory of the boundary between nuisance and trespass law. However, both the transaction cost and externality models provide justifications for the law's treatment of priority.

One other boundary question, unexamined so far, is the exclusion of protection under nuisance law for aesthetic interests, such as the right to sunlight or to a view of the mountains.[41] The exclusion of aesthetic interests appears to be better explained by the transaction cost model than by the externality model. It is obviously an externality, in the technical sense, when a landowner erects a fence that blocks the sunlight to another adjacent landowner. There is no reason suggested by the externality model for not treating the harm to the adjacent landowner as potentially a nuisance.

Under the transaction cost model, there is a clearer economic case for excluding liability for aesthetic harms (such as blocked sunlight). If aesthetic interests were protected by nuisance law, there would immediately be questions of information and proof. If one adjacent landowner can sue the owner of a hotel for blocking sunlight, why not allow other adjacent landowners? The transaction costs of resolving these disputes in the bargaining process would be enormous. On the other hand, if the law refuses to protect aesthetic interests, then the transaction costs of resolving disputes would be much more manageable.

VII. Conclusion

Nuisance doctrine is complicated and covers a wide array of cases, but at its core it is simple and straightforward. The long-standing complaints about its incoherence are invalid. The law generates optimal activity levels by imposing strict liability when externalized risks are far in excess of externalized benefits or far in excess of background risks. Existing nuisance doctrine is consistent with this theory.

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[41] See, e.g., Fountainebleau Hotel Corp. v. Forty-Five Twenty-Five, Inc., 114 So. 2d 357 (Fla. App. 1959).