ABSTRACT:
This article sets forth a new model of “notice” and deterrence that helps explain some long-standing contradictions in the literature on deterrence. Nearly all the work in the area of criminal law and deterrence has included an assumption that would-be offenders know the laws and the threatened sanctions, and therefore adjust their behavior in light of these disincentives. The fact that most people seem to be ignorant of the exact boundaries of the rules, and ignorant of the sanctions, presents an enormous conceptual problem for the classic model of deterrence. This new model presents an alternative mechanism for deterrence based on the distinction between risk and uncertainty that is frequently discussed in economic literature: in a nutshell, people “play it safe” or steer clear of violating the law more when there is some uncertainty about the parameters of the law and the sanctions. Economic understandings of aversion to uncertainty help explain why deterrence works as well as it does in an environment where comprehensive legal knowledge is generally impossible. In addition, this article demonstrates that public ignorance of the law or uncertainty is an unavoidable function of the verbal formulations used in modern statutes. The “notice requirement” does not ensure public awareness of the law (which the courts have never required in any actual sense), but rather sets limits on the range of prohibitions and sanctions confronting the citizenry, striking an optimal balance between under-deterrence and over-deterrence.

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Solomon is known for his wisdom; less known is the story of how he obtained it. Early in his kingship, apparently when he was a very young man, he had gone to a certain religious shrine to pray and offer sacrifices.¹ That night, he had a profound dream as he lay sleeping: God appeared to him and offered him anything he asked.² The young man’s first response was that he needed to know the difference between right and wrong;³ he felt as ignorant as a child in this regard.⁴ God was very pleased with this request, a remarkable improvement upon the usual pleas for riches, fame, defeat of one’s enemies, or long life. The request so delighted him, in fact, that he promised to give Solomon all of the above: wisdom, plus riches, plus fame, etc.⁵ The well-known story where Solomon successfully determines biological maternity of an infant using a psychological trick (being without the aid of modern forensics and DNA testing, of course) follows immediately thereafter.⁶

The interesting thing about this story is not just the historical curiosity, or the irony that Solomon was asking for wisdom but already possessed enough sense to make the perfect request. It is striking that in the midst of a culture permeated with Mosaic law, surrounded by prophets commanding obedience and consistency, and visited by frequent acts of divine judgment, young Solomon—of all people—claimed to be utterly clueless about the rules. In addition, his claim in this context functions as more than a mere humble acknowledgment of his own ignorance. By

¹ See II KINGS 3:4; II CHRONICLES 1:2-6 (describing his journey to the “high place” at Gibeon, where the Tabernacle was temporarily stationed—the Temple in Jerusalem was itself to be Solomon’s greatest building project—and his offering of a thousand animal sacrifices).
² See II KINGS 3:5-4; II CHRONICLES 1:7 (“That night God appeared to Solomon and said to him, ‘Ask for whatever you want me to give you.’” (New International Version)).
³ See II KINGS 3:9; II CHRONICLES 1:10.
⁴ See II KINGS 3:7.
⁵ See II KINGS 3:10-14; II CHRONICLES 1:11-12.
⁶ See II KINGS 3:16-28. This is the story of the two prostitutes who were housemates, and who awoke one morning to find one of their newborns dead and the other alive; each claimed the surviving child as her own. Recognizing the evidentiary problem of the case—the only two witnesses were engaged in a swearing contest—Solomon feigned to prepare to chop the living infant in half and divide it equally between them. The true mother then offered to let her opponent keep the child rather than have it die; the other approved of the proposed settlement on the spiteful grounds that neither of them would be better off. Solomon promptly delivered the child alive to the one who had withdrawn her case, so to speak, and sent the other packing.
his choice he set the value of knowledge about the rules above silver or gold, or any of the other things kings cherish. His request is as surprising, perhaps, as King Midas’ wish was predictable (to be able to turn everything into gold). Solomon’s story is full of paradoxes—that he is wise enough to ask for wisdom in the first place; that right versus wrong would seem so inscrutable to an heir of the throne in ancient Israel; that the value of such knowledge is deemed unquantifiable, but then such valuation is rewarded with remuneration. Solomon received it all.

There are certain unexplained—and inadequately discussed—paradoxes related to knowledge of right and wrong in our legal system as well. Laws and associated sanctions are supposedly designed to deter crime; but it is almost a truism to say that very few people know much about what the laws say, or what the actual sanctions are for different crimes. Ignorance of the law is no excuse, but a general ignorance of the law is so universal, except perhaps among

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7 See, e.g., Neal Katyal, Deterrence’s Difficulty, 95 Mich. L. Rev. 2385, 2447 (1997) (“Implicit in the discussion up to this point was the assumption that people actually know the cost of an activity despite the costs of obtaining such information.”); Floyd Feeney, Robbers as Decisionmakers, in The Reasoning Criminal 53-71 (Cornish & Clarke, eds. 1986); Maurice Cusson & Pierre Pinsonneault, The Decision to Give Up Crime, in The Reasoning Criminal 72-81 (Cornish & Clarke, eds. 1986); Cesare Beccaria, On Crimes and Punishments (1764); See Gary S. Becker, Crime and Punishment: An Economic Approach, 76 J. Polit. Econ. 69 (1968); Richard Posner, Economic Analysis of Law 237-269 (6th ed. 2003). Most of the modern approaches to deterrence focus on the rational mind and calculating decision-making mechanisms, instead of primal emotions like fear (or even morality). See David Friedman, Price Theory 459-465 (1986); George J. Stigler, The Optimum Enforcement of Laws, 78 J. Polit. Econ. 526 (1970).

8 See generally John M. Darley, Kevin M. Carlsmit, and Paul H. Robinson, The Ex Ante Function of the Criminal Law, 35 Law & Soc’y Rev. 165 (2001) (citing new sophisticated survey evidence that people do not know even important rules in their own jurisdictions); Franklin E. Zimring & Gordon J. Hawkins, Deterrence: The Legal Threat in Crime Control (1973) (an older empirical survey also showing that the general public is disturbingly ignorant about the prohibitions of criminal law and the associated sanctions—although prison inmates demonstrated impressive knowledge by comparison).

9 See Oliver Wendell Holmes, Jr., The Common Law 47 (1991) (noting that this "substantive principle is sometimes put in the form of a rule of evidence, that every one is presumed to know the law"). It is exactly this form of the rule that this section brings into question. See also Joshua Dressler, Understanding Criminal Law 147-158 (2nd ed. 2001); Model Penal Code § 2.02(9) (1966) (“Neither knowledge nor recklessness nor knowledge as to whether conduct constitutes an offense or as to the existence, meaning or application of the law determining the elements of an offense is a defense.”).

Holmes’ explanation includes a strong dose of "tough luck" in typical Holmesian prose:

The true explanation of the rule is the same as that which accounts for the law’s indifference to a man’s particular temperament, faculties, and so forth. Public policy sacrifices the individual to the general good. It is desirable that the burden of all should be equal, but it is still more desirable to put an end to robbery and murder. It is no doubt true that there are many cases in which the criminal could not have known that he was breaking the law, but to admit the excuse at all would
lawyers, that it is almost presumed. 10 We have a “notice requirement,” because people must be able to know the law in order for the law to be fair and legitimate, 11 but in practice this only means that the laws must be published and made available to the public, who never read them. 12

Reading the laws would not be terribly helpful for the public; their technical nature and formulaic style is fairly inscrutable expect to professional interpreters. If members of the public actually do read laws and misinterpret something, their misunderstanding carries as much legal weight as would their complete ignorance, 13 so reading the law may not put one in a better position to encourage ignorance where the law-maker has determined to make men know and obey, and justice to the individual is rightly outweighed by the larger interests on the other side of the scales.

H OLMES, at 48. See also PAUL H. ROBINSON, CRIMINAL LAW 545-53 (1997); DRESSLER at 165-77 (summarizing the general rule and its traditional rationales). Dressler notes that ignorance of the law is more likely to constitute a defense if it somehow negates a mens rea requirement for the specific crime in question. Sometimes, of course, mistake of law (which I believe is different from, but overlaps with, ignorance of the law, although Dressler treats them together) can be an excuse where the defendant in the case relied upon an official interpretation of the law, such as an Attorney General opinion letter. See Commonwealth v. Twitchell, 617 N.E.2d 609, 619 (Mass. 1993); Miller v. Commonwealth, 492 S.E.2d 482, 484-87 (Va. App. 1997).

10 See, e.g., Doctor’s Hospital of Hyde Park v. Appeal of Daiwa Special Asset Corp., 337 F.3d 951 (7th Cir. 2003) (“There are an enormous number of state laws, and it might be unreasonable to expect a person . . . to determine in advance the possible bearing of all of them.”); Torres v. INS, 144 F.3d 472, 475 (7th Cir. 1998).

11 See, e.g., North Carolina v. White, 2004 LEXIS ____ (Jan. 20, 2004) (“Although ignorance of the law is no excuse, due process requires that the defendant have knowledge, actual or constructive, of the statutory requirements before he can be charged with its violation.”); John Calvin Jeffries, Jr., Legality, Vagueness, and the Construction of Penal Statutes, 71 VA. L. REV. 201, 206-12 (1985). See also WAYNE R. LA FAVE, PRINCIPLES OF CRIMINAL LAW 217-18 (2003). As statutes relate to strict liability, La Fave says that “…some attention should be given here to the question of whether liability may be imposed for an omission when the defendant was…unaware of the existence or scope of the legal duty.” Some courts refuse to hold defendants liable for crimes of omission without having knowledge of the statute creating the duty omitted, according to La Fave, but courts generally assume that defendants have (constructive) knowledge of statutes when they violate them with affirmative actions.

It is important to note that this article focuses entirely on the “notice requirement” pertaining to criminal laws and their applicability; this is distinct (and essentially unrelated) to the “notice requirement” for administrative agencies promulgating regulations (i.e., the mandatory “notice and comment” period that must precede such rulemaking), as well as the “notice requirement” that pertains to informing a criminal defendant clearly about the charges or allegations of an indictment or proceeding, which has its civil docket counterpart (usually discussed as a personal jurisdiction issue); see, e.g., U.S. v. Frye, 2002 U.S. Dist. LEXIS 4083 (2002) (defendant complaining that he received no notice of what acts constituted the basis of a conspiracy charge). Neither of these latter types of notice (notice and comment rulemaking or notice of charges to be defended against) will be discussed or pertain to the theory advanced here. Of course, all “notice” issues ultimately relate to issues of procedural fairness and can therefore implicate constitutional due process rights; “notice” about criminal laws is directly related to deterrence, however, while the others are not.

12 See, e.g., Jeffries, supra note 11, at 207. [T]he kind of notice required is entirely formal. Publication of a statute’s text always suffices; the government need make no further effort to apprise the people of the content of the law…And what if notice fails? . . . The answer, of course, is that we punish him anyway.”

position. In praxis, the situation is not very different from what it would be if the laws were kept secret. Yet notice—at least “constructive notice”—is required for a law to be legitimate.

This article sets forth a new model of “notice” and deterrence that attempts to explain these paradoxes, reconcile some of the apparent inconsistencies, and offer guidance for making the laws more effective in the future. I contend that radical changes to our present system are not
necesary, at least with respect to the issues discussed in the preceding paragraph; in fact, we may have an optimal system already in place, keeping crime to a minimum while balancing the need for individual freedom and personal autonomy. The thesis is that the notice requirement functions as a mechanism for maintaining a desirable equilibrium of limited uncertainty about the law, rather than functioning as a guarantor that the law is adequately communicated to the citizenry. Viewed through this lens, the law stultifies socially harmful behavior through uncertainty about the rules and sanctions. Uncertainty breeds caution and restraint; while in some contexts uncertainty can over-deter useful activities, I argue that in the criminal context the risk of over-deterrence is small, especially in light of the notice requirement. In addition, the nominalization inherent in legislation, the process of naming and categorizing activities, helps individuals frame their behavioral choices in terms that foster self-restraint and community. The notice requirement is in praxis focused entirely on the relationship of the rules to the relevant state actors (judges, law enforcement, etc.), rather than on the availability of the rules to private citizens. Understood in this way, however, notice sets important limits on the amount of uncertainty confronting potential defendants, preventing situations that could cause either over-deterrence or under-deterrence.

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16 For the traditional view, see, e.g., Jeffries, supra note 11, at 212-24.
18 I maintain, however, that with regards to criminal law, over-deterrence is of limited concern because most crimes do not border on socially desirable behaviors; that is, many of the activities that come “close” to the line of illegality would present no social loss in being avoided. In addition, I maintain that the under-deterrent effect would be weaker than any over-deterrent effect, given that aversion to uncertainty seems to always outweigh aversion to risk. This argument is developed more throughout the article. See Richard Craswell & John E. Calfee, Deterrence and Uncertain Legal Standards, 2 J. L., Econ. & Org. 279, 299 (1986) (“Our analysis shows that if the uncertainty created by the legal system is distributed normally about the optimal level of compliance, and if the
This is a departure from the classic model of deterrence that seeks to shape citizens’ behavior simply through the straightforward effect of threatened sanctions, factored together with the odds of detection. Deterrence should, in theory, be absolutely dependent on information, or at least on perceptions of which activities are forbidden and the attendant penalties. Criminals and citizens alike, however, operate without this information; the perceptions they do have are often mistaken, or do not factor into their considerations. On these facts, one would think that deterrence would not work at all (as some claim, of course). What is surprising is how often deterrence does seem to work, at least in certain settings; a recent study, for example, found that violent crime rates dropped noticeably in jurisdictions following well-publicized executions. There is just enough evidence that deterrence may be feasible to make one wonder how this can be when there is no real mechanism in place to transfer knowledge of legal sanctions to the citizenry. Nevertheless, commentators from Jeremy
Bentham\textsuperscript{25} to Paul Robinson\textsuperscript{26} have found the “information gap” in legal deterrence to be rather alarming, and the usual proposed solutions run along the lines of having greatly simplified laws or more pervasive legal education for the general public.\textsuperscript{27} Both of these notions are problematic in terms of tradeoffs\textsuperscript{28} and ultimate benefit.\textsuperscript{29}

The new model proposed here begins with a long overdue recognition that laws—at least the verbal formulations of law that fill the pages of our code books—are addressed to the state itself, and not to the general public.\textsuperscript{30} Years ago, philosophers of language like Searle\textsuperscript{31} and
Grice categorized legal pronouncements or legislation as “declaratives,” a special category of speech acts that differ from the regular imperatives we use to get people to do what we want. Declaratives do not tell listeners directly what to do so much as they create a state of affairs where certain activities (or actors) are classified in a certain way. In the criminal context, this means actions are prohibited and perpetrators are subject to punishment.

All communication has a target audience. “Audience design” has recently come into its own as a subcategory of sociolinguistic studies. Applying the methodology of audience design studies to the “declaratives” that constitute our penal codes, it becomes evident that the true “audience” of the law is the collection of state actors—judges, officials, police officers, and lawyers (who function as special auxiliaries of the state in this model). This analysis explains...
the prevalent inscrutability of laws, at least for the layperson. Instead of seeing this as problematic, however, I argue that the phenomenon is purely natural and expected. Clarity and precision in drafting are always beneficial, of course, but attempts to dumb-down the law into the common parlance of those outside the legal community is misguided and unproductive.

The importance of linguistics studies to our understanding of the functional role of the law should not be underestimated. The relationship between law and linguistics goes beyond arguments about grammar and lexical meanings of words within the statutes; the way that our minds process information about the law is closely related to the way we process language in general. Economists have long emphasized the influence of future discounting, or hyperbolic discounting, on deterrence and consideration of legal sanctions; impulsive lawbreakers were assumed to be unable to appreciate the seriousness of the threatened sanctions because the punishments were generally too remote. Recent studies in cognition and neurological sciences, however, indicate that self-control is handled by the language faculties of the brain (associated enforcement/prosecutorial agents who execute its terms, then the lawyers and judges who interpret and apply the terms; at no time does it matter whether the public reads the law or not.


It is not only the American legal system that has produced statutes that are almost unreadable to the untrained eye; other nations in Europe and the Far East have similar grammatical complexities in their legislation. See JOHN GIBBONS, FORENSIC LINGUISTICS AT ______. (2003)

39 See, e.g., The Hyperbolic Consumption Model: Calibration, Simulation, and Empirical Evaluation, 15(3) J. ECON. PERSP. 47-68 (Summer 2001); see also Dru Stevenson, Should Addicts Get Welfare? Addiction and SSI/SSDI, 68 BROOK. L. REV. 185, 209-10 (2002) (discussing the problem of hyperbolic discounting and drug addiction). Other commentators have observed the problem with individuals who engage in too much future discounting in the criminal context. See, e.g., Tom Baker, Alon Harel, & Tamar Kugler, The Virtues Of Uncertainty In Law: An Experimental Approach, (February 14, 2003) available at http://ssrn.com/abstract=380302 (“For example, a criminal who is more present-oriented and who assigns a greater disutility to the first year of imprisonment than to subsequent years will be deterred more effectively by increasing the probability than the size of a sanction.”); see also Steven Shavell & A. Mitchell Polinsky, On the Disutility and Discounting of Imprisonment and the Theory of Deterrence, 28 J. LEGAL STUD. 1, 1–13 (1999); see also Michael K. Block & Robert C. Lind, An Economic Analysis of Crimes Punishable by Imprisonment, 4 J. LEG. STUD. 479, 481, 489–90 (1975).
with abstract thought, etc.) rather than the part of the brain devoted to time and perceptions of the future.  

There is value in lawmaking besides commanding and coercing the citizens. Making laws is a process of nominalization, that is, naming and categorizing actions and even events that would otherwise be intangibles, and more generally of grammatical metaphors. This is a linguistic process of abstraction that enables members of the community to better prioritize their values, to conceptualize alternative courses of action, and to ascribe positive and normative significance to one’s impulses and behavior. In short, the nominalization process of lawmaking fosters or enables self-control among the citizens. The traditional economic model

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41 For more explanation by linguists of the concept of “nominalization,” and examples from several areas of law, see Bowers, supra note 30, at 96-97, 143-44; John Gibbons, Forensic Linguistics 19-20, 192-94 (2003); Tiersma, supra note 38, at 77-79; Jackson, supra note 35, at 119-21.

This term is used in this article because many criminal laws describe not simply a prohibited action or verb (like “killing” or “stealing”), but a carefully delineated set of circumstances, including the identity of the victim (as with child molestation statutes), the identity of the perpetrator (use of force by those who are not peace officers), the situation in which the action occurs (as with the felony murder rule or the common law burglary element of nighttime), or the state of mind of the perpetrator (premeditated murder is perhaps the clearest example).

42 See Gibbons, supra note 38, at 20.

43 Gene M. Heyman, Resolving The Contradictions Of Addiction. Behavioral and Brain Sciences 19 (4): 561-610 (1996). Heyman summarizes his key ideas as: “(1) The behaviors that comprise addiction are voluntary even though their net consequences are aversive; (2) A voluntary aversive state can exist because the amount of behavior devoted to an activity is a function of its relative (rather than absolute) reinforcement rate (the matching law); (3) Local rather than overall value functions typically determine drug preference; and (4) But there are occasions in which the overall values functions determine preference, as when the drugs are not immediately available and options are under scrutiny.” Id. at 602-3.

44 The linguistic model being presented is not the same as the “educative” theory of criminal law espoused by other commentators, although the two are not necessarily mutually exclusive—they can work in tandem. See Johannes Andenaes, Punishment and Deterrence (1974); Dan M. Kahan Social Influence, Social Meaning, And Deterrence, 83 Va. L. Rev. 349 (1997). The educative model posits that criminalizing certain harmful activities generates (sometimes unconsciously) social norms that such activity is bad or reprehensible even apart from its illegality; people avoid the harmful activity because of these engendered norms, not because of the legal proscriptions, even though legal proscriptions helped create the norms in the first place.

The linguistic model, in contrast, states that it is an enlightening process for people to have certain activities even named or identified; it enables people to reflect on their options in a new way, to choose courses of action based on principles that they could not articulate before, and to restrain their impulses less by specific rules than by the ability to frame their choices more globally. For example, many traditional cultures and legal systems eschew drunkenness or intoxication, but the concepts of “addiction,” “dependence,” and “substance abuse” are all relatively modern terms, and are significant concepts for framing choices about consumption. Similarly, many traditional legal systems may have proscriptions against some forms of battery; but the idea of “aggravated assault” is again relatively modern, but extremely helpful in conceptualizing the significance of that behavior (menacing with a
assumes that people maximize their self-interest, and that sanctions simply tilt the scales of which opportunities are the most self-maximizing. The linguistic model accepts that people are rational actors, but holds that laws themselves enable people to engage in self-maximizing decisions in the first place, or at least in a more developed way. Many of our proscribed activities would be contrary to one's long-term self-interest anyway; it is not the state-imposed sanctions that make them bad decisions. Fratricide, wife-beating, substance abuse, and ill-gotten gains all bring their own deleterious consequences eventually. The sanctions serve to illustrate how seriously bad (counter productive and harmful generally) the decisions would be if conceptualized properly.

The second component of the new model is a new appreciation for the role of uncertainty in personal decision-making. Instead of washing out the deterrent effect of laws, as the classic

deadly weapon), especially to the victim. Such abstractions in themselves foster a level of reflection about one’s behavior that transcends mere adherence to new social norms, which the educative model suggests.

See, e.g., Posner, Economic Analysis of Law, supra note 7, at 267: “[T]he primary function of law, in an economic perspective, is to alter incentives.”

This is a related idea to Calfee & Craswell’s “egregiousness” principle, although they are focused on activities that gradually span a continuum of social harm, like polluting, and distinguishing the types of deplorable activities just mentioned above. Calfee & Craswell, supra note 17, at 980.

Of course, in the first two instances mentioned, only after a victim has been wrongly injured or killed, so it would be better to prevent such crimes ex ante. Prevention, however, is not necessarily the same as deterrence, and deterrence is one category of prevention.

This could even be true of sanctions that seem controversially disproportionate at first blush. The severe sanctions for some vice crimes that seem relatively insignificant in an individual instance may reflect the aggregate harm that results from the deceptively innocent appearance of certain activities.

“Uncertainty” for economists is distinct from “risk,” despite the fact that the two terms are often interchangeable in common parlance. “Risk” in economic terms refers to quantifiable odds (to varying degrees of precision, of course) of an event or loss occurring; “uncertainty” refers to possibilities whose likelihood of occurring is not quantifiable. “Uncertainty” is sometimes used interchangeably in economic literature with “ambiguity,” although the overlap in meaning may not be complete; this article uses “uncertainty” throughout. See generally Frank Knight, Risk, Uncertainty, and Profit (1921) (famously observing that uncertainty and risk are distinct in economic terms, and that true profits are more associated with the former rather than the latter); Marcello Basili, Knightian Uncertainty in Financial Markets: An Assessment, available at www.ssrn.com (demonstrating that uncertainty in financial markets tends to generate inertia in investing decisions); See also Daniel Ellsberg, Risk, Ambiguity and the Savage Axioms, 75 Q. J. Econ. 643 (1961). Ellsberg demonstrated that individuals act “as though the worst were somewhat more likely than his best estimates of likelihood,” which would “indicate he distorted his best estimates of likelihood, in the direction of increased emphasis on the less favorable outcomes and to a degree depending on his best estimate.” Ellsberg conducted famous experiments in which subject faced two urns, M and N, which each contained on hundred red or black balls. Subjects were informed that Urn M contained exactly half red and half black balls; the other contained an unknown proportion of each. Bets were placed on the
law and economics writers have assumed, uncertainty functions as a deterrent on its own. Recent commentators have suggested, in fact, that uncertainty may be a better deterrent than a corresponding risk of punishment that is clearly quantifiable to would-be criminals. The “information gap” created by widespread ignorance of the law, which is an inevitable and natural result of laws addressed to the state, is not necessarily an insurmountable obstacle to deterring 

subject’s ability to draw a black ball from either urn; subject showed a strong preference for Urn M, for which they knew the likelihood of winning (fifty percent); this presented a contradiction to the classic ration-actor model of economic thought, because the subjects had no rational basis for such a consistent preference—uncertainty was just as likely to favor them, especially when compared to a fifty-fifty chance, as it was to disfavor them. This pattern of human decision-making has been verified in innumerable subsequent experiments and came to be known as Ellsberg’s Paradox. Uncertainty can take the form of straightforward ambiguity—the individual knows the set of possible outcomes, but cannot ascertain the relative likelihood of one as opposed to another. Alternatively, uncertainty can take the form of the individual’s recognition that there are unknown or hitherto unimagined possible outcomes of a situation, an awareness of one’s own ignorance. This latter type of uncertainty would not apply to Ellsberg’s experiment, of course, because the subjects knew that they would either draw a black ball or a red one; there was no chance of drawing yellow or blue.

Applying uncertainty principles to legal settings can implicate either type. Individuals will sometimes face discreet possible outcomes, such as winning or losing a case, but may have unquantifiable odds for either outcome (as when the case is based on a novel but compelling argument, or where both parties have very poor evidence for their side). Jurisdiction and venue questions, such as whether one’s criminal case will be prosecuted in state court or federal court, also provide finite sets of options but (sometimes) uncertain probabilities of one outcome actually occurring. Other situations confront us with unknown possible outcomes—the amount of punitive damages in a newer type of mass tort claim, for example, or the types of torts for which we may become victims.

50 See, e.g., POSNER, ECONOMIC ANALYSIS OF LAW, supra note 7, at 267: “[L]aw must be public. If the content of a law became known only after the events to which it was applicable occurred, the existence of the law could have no effect on the conduct of the parties subject to it.” See also ROBINSON, supra note 9, at 54-55 (“One also may wonder how effective the criminal law can be in deterring criminal conduct if the law’s demands are unclear.”). 51 See, e.g., Alon Harel and Uzi Segal, Criminal Law and Behavioral Law and Economics: Observations on the Neglected Role of Uncertainty in Deterring Crime, 1–2 AM. L. ECON. REV. 276 (1999) (demonstrating that uncertainty about detection combined with well-warned sanctions creates the most efficient level of deterrence); Tom Baker, Alon Harel, & Tamar Kugler, The Virtues Of Uncertainty In Law: An Experimental Approach, (February 14, 2003) available at http://ssrn.com/abstract=380302 (demonstrating the value of uncertainty about detection and the size of sanctions in both the criminal setting and the punitive damages area of torts). Both of these articles acknowledge voluminous precedent from courts and commentators alike that equates uncertainty in law with unfairness or a lack of legitimacy in the legal system; this is typically due to fears of government abuses, which due process rules are designed to forestall—and uniformity in outcomes is seen as a benchmark of both fairness and due process. Harel, Baker, and their co-authors, however, observe that uncertainty can be generated and manipulated carefully so as to avoid room for abuses such as favoritism, conflicts of interest by officials, etc., and harnessed so as to exploit the aversion most people have to uncertainty, thereby deterring socially harmful conduct. These previous commentators have focused primarily uncertainty with respect to the size of punitive sanctions and the likelihood of detection; these are invaluable contributions to these areas, but my article focuses more on uncertainty about the rules themselves, that is, what conduct subjects one to possible sanctions.
harmful activities. Rather, an optimal level of uncertainty may generate an appropriate equilibrium of deterrence and personal liberty.\(^\text{52}\)

Too much uncertainty about legal sanctions, however, can be counter-productive.\(^\text{53}\)

When people feel the law or sanctions are not just unknown, but unknowable, they will either be overly cautious and reclusive (avoiding too many useful activities),\(^\text{54}\) due to the “chilling effect,” or overly careless about the consequences of their actions, creating significant externalities for society.\(^\text{55}\) When the law seems unknowable, it increases the likelihood that it is arbitrary and

\(^{52}\) The point is that excessive ignorance of the law would obviously be counter-productive, or at least self-defeating: but a controlled degree of uncertainty may useful and desirable. Of course, some individuals can reduce or avoid certain types of uncertainty by acquiring the legal information, although this involves costs (either money or time or both). Even in cases where the targets of certain laws have easier access to legal knowledge (as is the case with rules imposing sanctions specifically on lawyers for certain forms of misconduct), uncertainty is possible via special measures, like frequent changes in the rules or significant fluctuations in enforcement.

\(^{53}\) See generally Louis Kaplow, Optimal Deterrence, Uninformed Individuals, and Acquiring Information about Whether Acts are Subject to Sanctions, 6 J. L. ECON. & ORG. 93 (1990); Ferguson & Peters, supra note 17, at 1-25 (arguing that vague rules have more deterrent value and are often more efficient); Ehrlich & Posner, supra note 17, at 276 (arguing that vagueness-related uncertainty about legal sanctions results in inefficient over-deterrence, errors in adjudication, and abuses of discretion in enforcement). Of course, too much certainty leads to erosion of the rule of law as people are able to find loopholes to circumvent the literal terms of the law; this loophole problem leads to additional injustice because it is inherently anti-redistributive; those who can afford ex ante legal counsel escape liability while still pursuing the socially harmful activities, while the poor bear the costs of the legal sanction regime. See Ferguson & Peters, supra this note 17, at 25 (discussing the wealth-favoring loophole issue, but not focusing on the injustice of the increased inequality).

\(^{54}\) Richard Posner discusses the problem of over-deterrence created by making too many activities illegal, or by having sanctions that are too draconian. See RICHARD POSNER, ECONOMIC ANALYSIS OF LAW, supra note 7, at 233-34. Elsewhere in the same treatise, however, Posner says that vague rules are inefficient because they underdeter would-be offenders, who discount the chance that they will be convicted with the additional possibility that their conduct might not fit within the ambit of the statute. See id. at 556. As mentioned above, supra note __ (previous page), there is a rich economic literature on the subject of how uncertainty discourages investment in financial markets. See also __, Investment Under Uncertainty and Policy Change, available at www.ssrn.com (modeling how uncertainty about changes in governmental policy—particularly taxation of assets and investment returns—discourages investment generally). Criminal law, of course, focuses less on financial markets (although there seems to be a growing trend to target money laundering activities as a method of choice for law enforcement, which does impact financial markets). Instead, criminal laws affect human interactions, certain forbidden goods and services, and property rights. Too much uncertainty about what activities might expose one to criminal liability could, for example, have a chilling effect on free speech, discourage travel and socializing, and undermine investments in “social capital” or other intangible features of modern life.

\(^{55}\) See generally Calfee & Craswell, supra note 17, arguing generally that uncertainty overdeters and underdeters the wrong people respectively. Calfee & Craswell, however, specify that their model does not address either-or decisions, which would include most serious crimes, but rather socially harmful activities that span a continuum (like pollution). See id. at 967.
capricious, or that state actors will exploit their positions of power to further their own self-interest. Outright rebellions can result in these circumstances.\textsuperscript{56}

It is valuable to the public, therefore, to believe that there are established, ex ante rules that are binding upon state actors.\textsuperscript{57} These protect against the abuses of power associated with ad-hoc, or ex post, rules.\textsuperscript{58} This is the real value of the notice requirement in a system where the laws are addressed to the state (which describes all modern legal systems). That which courts call “constructive notice” (as opposed to actual notice) is, in practice, actual notice for the state actors involved in implementing or executing the rules. The best way to ensure that there are pre-established rules and actual notice for state actors is to have ex ante potential notice for the general public.\textsuperscript{59} Thus the state publishes the laws it promulgates, and makes them somewhat

\textsuperscript{56} Widespread rebellion is not the only danger, and probably the most remote danger; the more immediate harm would be a widespread fatalism about legal sanctions, resulting in a “what the heck, why not?” attitude instead of a socially desirable level of circumspection. See Craswell & Calfee, \textit{Deterrence and Uncertain Legal Standards}, supra note 18, at 280 (“Very broad uncertainty, on the other hand, is more likely to lead to under compliance).

\textsuperscript{57} It is worth reiterating the important point that “classic” deterrence depends not on the actual sanction or likelihood of detection but rather on the would-be criminal’s perception of these things. Similarly, the deterrent effect of uncertainty depends more on the would-be offender’s perception of uncertainty rather than an objective state of affairs. See Baker et al., \textit{ supra} note 39, at __, discussing this particularly in the context of uncertainty about the likelihood of detection and the size of sanctions (discussing the example of Rudolph Guiliani, while Attorney General, picking random days of the week to prosecute all drug arrestees in federal court where the sentences are typically much higher). Perceptions of uncertainty about the law’s requirements (or prohibitions) are therefore more critical than objective ignorance or misinformation. One troubling feature of Robinson and Darley’s work for my thesis is their survey evidence that people believe they know more about the law than they actually do; that is, people are ignorant of their own level of ignorance, being overly optimistic about their own legal acumen. See \textit{generally} Robinson & Darley, \textit{ supra} note 21. I do not believe this is fatal for my thesis for the following reasons. First, the rate of overestimation is relatively small; most people do not believe they have anywhere near complete knowledge of the law. The remaining level of perceived uncertainty (beyond the self-delusional overestimation) may very well be enough to achieve the necessary level of aversion; quantifying uncertainty aversion seems to be a nascent science. Second, the overestimation of knowledge documented in the surveys focused on specific (although well-selected) rules of criminal law, and it is unclear whether similar levels of misplaced self-confidence would pervade all other areas of criminal law, particularly the ones that cause the most social harm. Finally, if it were determined that there is a detrimental level of misplaced self-confidence in this regard (a good area for further research), this could be adjusted by taking measures that basically inform people of how little they know, etc.

\textsuperscript{58} See \textit{generally} \textit{POSNER, ECONOMIC ANALYSIS OF LAW, supra} note 7, at 556 (discussing the problems with unclear rules (apparently in the context referring to vague rules, not unknown rules)).

\textsuperscript{59} See id. at 556-57, arguing that uncertainty in the form of vague rules create six sources of inefficiency: more mistakes in adjudication, inefficient targeting of enforcement resources, fewer pre-trial plea bargains, longer trials, higher informational costs associated with the laws, and the increased potential for abuses of discretion by judges, juries, and other decision makers. Indeed, uncertainty in the form of vagueness can present these problems, but uncertainty in the form of lack of actual notice (while still having a notice requirement under the model I am
available, although not terribly accessible, to the public. It is not necessary, however, for anyone in the public to actually read the statutes or have a direct knowledge of their entire content, while this is a necessity for judges, enforcement officers, and lawyers. In fact, actual notice is completely irrelevant for a member of the public; a private lay-interpretation of the law will have no legal significance once the actor has violated the rule according to the official interpretation.\textsuperscript{60} Ignorance of the law is no excuse, but knowledge of the law is no excuse, either. Notice, then, refers to actual notice for the state, and potential notice for the public—and no more.\textsuperscript{61}

The notice requirement, however, has an additional benefit: it provides an optimal level of inertia in lawmaking.\textsuperscript{62} The notice requirement has the effect of generating a somewhat cumbersome process for changing the laws; the practical result is that conduct requirements of the law almost always change incrementally, rather than drastically.\textsuperscript{63} Some change is necessary

\textsuperscript{60} See Torres, 144 F.3d 472; People v. Marrero, 515 N.Y.S.2d 212, 507 N.E.2d 1068 (N.Y. 1987). See also Dressler, supra note 9, at 168-69; Jeffries, supra note 11, at 2210-12.

\textsuperscript{61} John Jeffries advocated a position similar to this idea some years ago; I hope to build substantially upon the concept. See Jeffries, supra note 11, at 212 (“In the context of the penal law, it means that the agencies of official coercion should, to the extent feasible, be guided by the rules – that is, by openly acknowledged, relatively stable, and generally applicable statement of proscribed conduct.”).

\textsuperscript{62} This is another sense in which the uncertainty that comes from ignorance of the law (related to notice issues) is superior to the uncertainty that comes from the legal text’s inherent vagueness. Vagueness generates enforcement discretion, and therefore agency costs; surprises in the law’s application result, to a level that can be hard to contain, at least ex ante. Ignorance of the law with a nominal notice requirement, however, limits the problem of infinitely expanding liability that occurs under vagueness.

\textsuperscript{63} For an in-depth discussion of the value (and occasional detriment) of incrementalism in judicial rulemaking, see generally Cass Sunstein, One Case At A Time (1999) (focusing on judicial minimalism, which seeks to proceed by only incremental change). This article focuses on incrementalism in criminal law, which in modern times is almost universally a matter of legislation rather than judge-made rules, although the genesis of most of our criminal law doctrine was the common law. Rules of criminal procedure tend to be judge-made even today, which can of course affect the likelihood of prosecution for crimes (and thus the deterrent effect of criminal law, if the judge-made procedural impediments are widely known); otherwise, rules of criminal procedure our outside the scope here. See also Keith J. Bybee, the Jurisprudence of Uncertainty, 35 Law & Soc’y Rev. 943 (2001) (reviewing proposing) avoids most or all of them. See also Ferguson and Peters, supra note 17, at 17-19 (discussing Ehrlich & Posner, supra, and contending that an optimal level of vagueness could still be found).
in order or adapt to new developments in our society or to make genuine progress in our legal regime, but sweeping changes can prove disastrous if based on imperfect information, which is usually the case.\textsuperscript{64} The notice requirement, then, functions as an incrementalist requirement.\textsuperscript{65}

The incrementalist requirement puts a cap on the uncertainty present in our legal system; in fact, it helps maintain legal uncertainty at an optimal level. Citizens awake each day knowing that their knowledge of legal sanctions is incomplete, warranting a certain level of caution and restraint; but they also know the law are not completely different from the day before.\textsuperscript{66} Any unknown changes are relatively minor, even if they are not insignificant.\textsuperscript{67} This predictability

\textsuperscript{64} This is similar, of course, to the argument in the Federalist Papers for Separation of Powers in the federal government; namely, that democracies are chronically vulnerable to hijacking by factions or special interest groups. Separation of Powers makes it much more difficult for a faction to seize control of the entire federal government all at once. This safeguard against factions contained in the Separation of Powers, in turn, seems to be part of a more general safeguard against shocks to the system from drastic changes in governmental policy. It is true that there is a danger that factions or special interest groups will infringe on the liberty of others and oppress those who dissent; but in theory, it is also possible that a faction could be benevolent, and able to “get more done” without a system of checks and balances. A certain degree of epistemological doubt overshadows the notion that sweeping change in governmental policy would be good in the long term; there are too many things about the future that we do not understand. A government susceptible to sudden, drastic change would create too much uncertainty for legitimate or productive activities, discourage investment, and stifle growth and development of the economy, technology (which requires investments in research and invention), and other areas of society that require investment of time or resources. In the end, the fact that the Separation of Powers forces change to be incremental, thereby fostering investment in every sector of the economy and society (because of the increased predictability and reduced uncertainty) may be as important for national vitality as the safeguards against individual abuses typically envisioned in the checks-and-balances discussions.

\textsuperscript{65} The notice requirement forces change in criminal laws to be incremental in the following ways: 1) publication/distribution imposes transaction costs on the government for promulgating changes; 2) the notice requirement provides accountability and support for the procedural requirements of lawmaking, making it more onerous (higher transaction costs) to enact changes; and 3) the notice requirement will generally impose time delays (a subset of the transaction costs in the previous two items, admittedly) on getting each change through the pipeline, making it difficult to change too much overnight or without any possible warning.

\textsuperscript{66} This has tremendous value from a Bayesian standpoint, especially as it affects individual decisionmaking; if an individual knows that her daily routine (work, home, recreation, etc.) did not result in any tangling with law enforcement yesterday, or the day before that, or the day before that, it becomes a safe bet that the same routine will avoid criminal liability the next day. Such predictability is extremely useful for investing and engaging in productive activities.

\textsuperscript{67} This is similar to the idea Calfee & Craswell set forth in their model of “distribution of probabilities,” that is, the “estimates of the likelihood of liability attached to each course of action,” although their entire focus is on activities where the social harm runs along a gradual continuum, which they distinguish from most serious crimes (in fact, the only crime they seem to use as an example are speeding infractions). Calfee & Craswell, \textit{supra} note 17,
TOWARD A NEW THEORY OF NOTICE AND DETERRENCE

allows people to pursue useful levels of activity and capital investment (financial ventures would be discouraged or dampered by too much unpredictability in the law), and to develop routines filled with legitimate behaviors. The inertia in our government is, in some sense, part of its strength. The notice requirement encourages a balance between inertia or static law and incremental improvement or progress.

This article develops the new model in steps. Part II consists of background material about the “information gap” problem in modern deterrence theory, with a survey of some of the most important contributions in the field. Readers already familiar with this literature, or already convinced that most people do not know the law, may want to skim this section and move on. Part III introduces the linguistic modeling of legal formulations as “declaratives,” and the analysis of “audience design” from sociolinguistics; many readers will find these terms and concepts new, and they are presented so as to be accessible to the legal community. Part IV presents the useful role of uncertainty in deterrence, especially for criminal law. Part V introduces the notice requirement in light of the foregoing sections, and explains how the notice

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68 Calfee and Craswell describe a sort of “horse sense” that people without ex ante legal counsel have about the possible range of proscribed activities and corresponding sanctions: “They are more likely to rely on a ‘horse sense’ judgment as to how the risk of liability changes as they steer close and closer to any given line, combined with the equally intuitive judgment as to what constitutes an ‘acceptable risk’ of liability.” Calfee & Craswell, supra note 17, at 970 n.13.

69 That is, the notice requirement presumes ongoing changes in the law, but imposes numerous transaction costs and time delays on promulgating each change. Of course, this means that there would be an economy of scale in making all changes drastic, but the fact that the transaction costs are almost always situated in a bipartisan legislature prevents this type of economizing, which would involve unfortunate amounts of risk for unintended consequences of the new, drastic rules. The result of transaction costs associated with each change, in a political environment, are that the changes tend to come in “baby steps.” The inertia of government is likely to be a constant source of frustration for constituents, of course, because significant reform in any area is difficult to accomplish. The overall result, however, is more predictability and certainty for useful and productive activities, while still having enough uncertainty to discourage deviations from productive activities into possibly criminal enterprises or behavior.
requirement optimizes the level of uncertainty and deterrence, as well as the optimal level of inertia in the law. Part VI offers a brief conclusion.  

PART II:  
DETERRENCE & THE PROBLEM OF INFORMATION

At first glance, communication about forbidden activities and punishments would seem to be a sine qua non for deterrence. Even Richard Posner, a veritable patriarch of deterrence theory, says that “a threat that is not communicated cannot deter.” Presumably he would also

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70 The purpose of the article is to present a theory that reconciles some paradoxical features of our legal system, and less as a set normative exhortations. As with any model, however, it would have implications for future policy alternatives, especially misguided attempts to rectify perceived problems that are actually part of the strength of the system. For policy makers seeking deterrence through enacted laws (or judicial opinions, for that matter), uncertainty may provide a key for achieving this goal, rather than mitigating the deterrent effect—which was assumed in the literature up to now.

71 The level of deterrence corresponds to varying levels of the sanctions or potential costs for the would-be offender, as well as the probability of facing the sanction, which in criminal law turns mostly on the comprehensiveness of enforcement. Both of these auxiliary factors carry their own costs to the rest of society, forcing policy makers to engage in some sort of cost-benefit analysis about the optimal—or feasible—level of deterrence. Even if an individual can deliberate over a decision with highly imperfect or incomplete information, some perception of the legal sanctions involved must be present. See generally Floyd Feeney, Robbers as Decisionmakers, in THE REASONING CRIMINAL 53-71 (Cornish & Clarke, eds. 1986); Maurice Cusson & Pierre Pinsonneault, The Decision to Give Up Crime, in THE REASONING CRIMINAL 72-81 (Cornish & Clarke, eds. 1986); CESARE BECCARIA, ON CRIMES AND PUNISHMENTS (1764); Gary S. Becker, Crime and Punishment: An Economic Approach, 76 J. POLIT. ECON. 69 (1968); Posner, Economic Analysis of Law, supra note 7, at 237-269.

Most of the modern approaches to deterrence focus on the rational mind and calculating decision-making mechanisms, instead of primal emotions like fear (or even morality). See DAVID FRIEDMAN, PRICE THEORY 459-465 (1986); George J. Stigler, The Optimum Enforcement of Laws, 78 J. POLIT. ECON. 526 (1970).

72 Posner, Economic Analysis of Law, supra note 7, at 267. Posner does admit that the single major exception to this rule is “the prevention or incapacitation theory that lies behind some doctrines of criminal law,” but presumably information or communication is not as necessary for these purposes—although he does not address that point. It seems to me that deterrence and incapacitation are both subcategories of “prevention,” what Posner calls “prevention” I would probably call “target-hardening,” the term used more often by law enforcement. In a sense, “prevention” would broadly characterize any of the purported goals in criminal law besides retribution, including newer theories of the “expressive” value of criminal law and the “educative” or norm-shaping school; all of these seek to reduce crime in a utilitarian manner. See, e.g., Kay Levine & Virginia Mellema, Strategizing The Street: How Law Matters In The Lives Of Women In The Street-Level Drug Economy, 26 LAW & SOC. INQUIRY 169, 170 (2001); See, e.g., Dau-Schmidt, supra note ___; Michael Shapiro, Regulation as Language: Communicating Values by Altering the Contingencies of Choice, 55 U. PITTL. L. REV. 681 (1994) (focusing on the regulation of biotechnology as a means of communicating and instilling values and norms about the sanctity of human life, individual liberty, etc.).
agree that the receiving end of the communication line is more important than the sending point; that is, the reason a threat that is not communicated cannot deter is that the would-be offenders have to have the information in order for it to bear upon any decision.

Universal ignorance of the law, however, appears to be almost complete, except for the most rudimentary notions of what is illegal and hazy ideas about what some of the details might be. In a recent study of educated citizens in four different states, the results confirmed the hypothesis that “people do not have a clue about what the laws of their states hold on . . . important legal issues.” Worse still, citizens are not very aware of their own ignorance; the respondents generally thought that they did know the laws of their state on certain points, but consistently were wrong. These respondents were not surveyed about picayune details of the

The categorization issue can be confusing, of course, because the decisions about which activities to deter and how drastic our measures should be often involves strongly moralistic sensibilities about the wrongfulness of certain acts; retributive language creeps in even in the most sterile, utilitarian settings. Target-hardening and incapacitation do not necessarily require information about legal sanctions among the pool of would-be perpetrators, of course. Expressive or educative theories seem just as dependent on information and communication as classic deterrence. Michael Shapiro, who sees regulation primarily in this sense, struggles with the missing piece of a clear mechanism for this process:

- Shapiro, supra note 73, at 697. This seems too speculative considering that it is necessary for Shapiro’s idea that regulation “sends a message” and engenders values and norms. On the following page, Shapiro seems to backtrack and takes a more positivist tack: “ ‘Communication,’ ‘inference,’ and ‘learning’ are of course not synonymous. The loose use of ‘communication’ here, however, arises from the focus on learning effects, even though there may be no literal communication in any given case. There are structural similarities in communicative and noncommunicative routes to learning, and these are captured by the broad usage.” Id. at 698.

- In other words, we know the communication takes place because the people learn what they were supposed to about values and norms (the “learning effects”). This appears rather circular in an article calling for more regulation for the purpose of sending a message to the citizens and instilling values. How can it not matter whether the “learning” takes a “communicative” or “noncommunicative” route, if his argument is pushing for one route as opposed to the other? It seems that the mechanism or route be critical to this approach. It would make more sense to acknowledge that the public is not the addressee of the laws or regulations. As we increasingly treat legislation, regulation, and jurisprudence as means of general behavior modification, this becomes increasingly important. Even if that modification is purportedly endogenous, like instilling values and norms, it is meaningless if the objects of the instillation are several steps removed, socially and epistemologically, from the didactic rules and regulations.

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74 Id. at 182-84.
code; rather, the study focused on broad behavioral mandates, such as whether there is a duty to assist strangers in apparent distress, to report a felony, to retreat before using deadly force, or whether one can use deadly force to defend personal property.\footnote{Id. at 167, 171. States were selected that had the majority rule on each of these points, as well as one control state with a deviant (non-majority) rule for each question. This facilitated a comparison between the knowledge of citizens within majority-rule jurisdictions (who presumably have the advantage of having heard their state’s rule through a wider variety of sources) with those in maverick jurisdictions (who might be more aware of their state’s law because of its distinctiveness). The results were abysmally poor across the board. See id. at 173-81. The notable exception was that Texans were more likely to assume, correctly, that their state’s law authorized them to use deadly force to defend their personal property. See id. at 178, 182.}

Ignorance of the law is no excuse; one of the rationales for the rule has always been that the courts would be overwhelmed with defendants claiming that they have never read a law book in their lives.\footnote{See DRESSLER, supra note 9, at 166-68 (surveying views of different legal writers that allowing an “ignorance of law” defense would create too much subjectivity, too much uncertainty about fraudulent claims, etc.).} Unless a person has attended law school, their chances of knowing even a fraction of the contents of their state’s penal code are very small; even for those who have graduated from law school, practitioners, most could not recite provisions of their jurisdiction’s criminal code without looking it up, except for those regularly practicing in the area.\footnote{Of course, the (roughly) thirty percent of those who fail the multistate bar exam each year have also completed a law school curriculum or (in some places) its equivalent.}

So we have a problem: how can deterrence work without most people knowing the law? The answers to this question fall into three general groups: those who insist deterrence cannot work due to this “information gap,” those who insist it can work in spite of the information gap, and (my view) the position that deterrence works—at least in part—because of the information gap.

It is not new to argue that deterrence does not work, and such commentators often point in part to the “information gap.”\footnote{See Johannes Andenaes, The General Operative Effects of Punishment, 114 U. PA. L. REV. 949, 955 (Andenaes summarizes the main variations on this criticism, although he himself argues in favor of deterrence). Defenders of the approach point to survey data or empirical studies of crime rates to show that the model is indeed congruent with the real world.} Robinson and Darley are leading proponents of this school of
thought.79 Deterrence does not die so easily, however;80 even these authors suggest investing more resources to salvage it.81

In the second group are those who contend that deterrence still works in spite of this information gap. Posner fits into this camp, arguing that “the better test of a theory than the realism of its assumptions is its predictive power,”82 noting that criminals respond to changes in opportunity costs, likelihood of detection, and severity of punishment, even for crimes of passion and crimes committed by minors.83 He leaves the mechanism to mystery; the successful predictive power of the deterrence model, even when an essential prerequisite seems to be missing, is (almost) magic.

Alongside this “magic” model is the alternative idea that people are, in fact, getting the information, but through means other than books or the media.84 Johannes Andenaes85 and Neal

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79 See generally Robinson & Darley, supra note 21; see also ROBINSON, supra note 9, at 63.
80 See, e.g., the recent work of Hashem Dezhbakhsh, Paul H. Rubin, and Joanna Shepherd, in Does Criminal Punishment Have a Deterrent Effect? New Evidence from Postmoratorium Panel Data, 5 AMER. L. & ECON. REV. 344 (2003), assessing the effects of the death penalty by analyzing fluctuations in crime rates immediately after a death sentence is carried out. The authors conclude there is a strong deterrent effect.
81 See Robinson & Darley, supra note 21; ROBINSON, supra note 9, at 80: “The legislature should set the rules, and the formulations should be calculated to give adequate notice to deter effectively and properly and to condemn a violation fairly.”
82 POSNER, ECONOMIC ANALYSIS OF LAW, supra note 7, at 220.
83 Id.
84 Darley, Carlsmith and Robinson were surprised to discover in their recent study, however, that there were no cases covered in the media that could have educated the general public about new, counter-intuitive or counter-majoritarian laws. See Darley, Carlsmith & Robinson, supra note 8, at 185.
85 See ANDENAES, supra note __, at 137. For high-publicity cases, where either the defendant is a celebrity or the crime has attracted a great deal of media attention. Andenaes notes, “If a case has for some reason attracted great publicity, a severe sentence could be expected to have great deterrent effect.” Andenaes gives more emphasis, however, to a type of incapacitation model rather than a classic deterrence model. He argues that one of the most effective ways to lower criminal activity is to remove “bad examples” from a section of society. When transgressions become visibly commonplace, other individuals feel emboldened to engage in the same conduct; the “unthinkable is not unthinkable any more when one sees one’s comrades doing it.” Without a “bad example,” others would never have thought of committing the offense, or would have felt inhibited from doing so. When the initiators of certain types of offenses are either deterred or incarcerated, even if others do not know of the punishment, they may be less likely to conceive of the crime or less confident about attempting it. See id. at 122-125.

This is, of course, not exactly the classic incapacitation model, either; the focus is not on removing the perpetrators of crimes, but the encouragers or tempters (although in this context these are often instigators or initiators). It is like the flip side of deterrence—instead of giving an incentive not to commit a crime, the focus is on removing social incentives in favor of crime. While manipulating social networks (or removing social vanguards)
Katyal have each proposed models that certain individuals function as “information vanguards,” wherein a convict’s entire social network becomes acutely aware of the law and sanctions relevant to that case. Depending perhaps on the types of social and communication networks the friends and family have, the knowledge may spread to another layer of contacts, and so on.

Another explanation for how the “word gets out” indirectly is that set forth by Omri Ben-Shahar, arguing that short sentences can be used to teach more people a valuable lesson. Ben-Shahar acknowledges that knowledge about the law seems to be highest among those who have been incarcerated, even for a short time. This is consistent with the empirical survey data presented by Zimring and Hawkins, which shows vastly increased knowledge among inmates about a variety of laws and the respective sanctions, compared with any other segment of the population. Ben-Shahar suggests that greater enforcement with shorter sentences would thus foster more widespread knowledge of criminal laws, and thereby produce more deterrence. More individuals would have the enlightening experience of incarceration, and shorter sentences would place the inmates back in the general population more quickly, where their knowledge may be a useful tool in reducing crime rates, it is somewhat outside the scope of this article, which is focused more on general deterrence.

86 See Katyal, supra note 7, at 2447 (“Implicit in the discussion up to this point was the assumption that people actually know the cost of an activity despite the costs of obtaining such information.”).
87 See id. at 2449-2450. Katyal postulates that certain people are “information vanguards” about the penalties associated with crimes- namely, those who are convicted, and necessarily alert their families and friends to the consequences that come upon the offender. Perhaps lawyers fill this role as well to some extent.
88 See id. at 2449: This trickle-down theory leads me to posit the existence of information vanguards--people who “get the message” first and then transmit it to others. These information vanguards take in information, digest it, and pass it along to the rest of the world. They may relay the message as they first heard it-- committing murder has a 20 year jail sentence--or they may pass it along in a processed form as lore--committing murder is simply bad. It does not matter for deterrence purposes which one of these actually happens.
90 See ZIMRING & HAWKINS, supra note 8, at 302.
91 See generally Ben-Shahar, supra note 89.
could be shared and disseminated to others.\footnote{Id.} Of course, this runs counter to the prevailing wisdom in deterrence theory, that higher sanctions deter more effectively, and cost the state less than increased enforcement.\footnote{Ben-Shahar’s theory also requires a revision of incapacitation goals in criminal law. On the one hand, if criminals receive shorter sentences, recidivists are out on the street sooner and can commit more crimes. On the other hand, if it turned out that criminal careers tended to be short periods of time in the offender’s youth (say, a two or three year period), short sentences may achieve adequate incapacitation effects, at least for certain types of crimes. See Louis Kaplow, \textit{Optimal Deterrence, Uninformed Individuals, and Acquiring Information about Whether Acts are Subject to Sanctions}, 6 J. L., ECON., & ORG.’s, 93 (1990); Richard Craswell & John E. Calfee, \textit{Deterrence and Uncertain Legal Standards}, 2 J. L., ECON. & ORG. 279, 299 (1986) (modeling the effects of uncertainty on deterrence under certain circumstances and concluding that overdeterrence is more likely to result than underdeterrence).}

Somewhat contradicting to Ben-Shahar’s view is that of Louis Kaplow, who argues that sanctions should be set to reflect the relative uncertainty in the minds of would-be offenders.\footnote{See id. at 99-103.; see also Ehrlich & Posner, \textit{supra} note 17, at 276; POSNER, \textit{ECONOMIC ANALYSIS OF LAW}, \textit{supra} note 7, at 221; Ferguson & Peters, \textit{supra} note 17, at 7.} Misperceptions about the law can have two disadvantages: some may be underdeterred from illegal (socially costly) activity, while others may be overdeterred from socially desirable behavior.\footnote{Kaplow, \textit{supra} note 94, at 107-9.} Kaplow proposes that sanctions can be set to strike a middle ground between these groups when differentiation is not possible.\footnote{This is not to say that the classic model of deterrence would not work if there were sufficient communication of the information about crimes and their sanctions. If individuals are truly aware of the parameters of the rule and the associated sanctions, presumably such factors would enter into the decision about whether to commit a crime. Of course, deterrence’s other problems remain, such as the individual’s impulsiveness, erosion of the rules through the finding of loopholes, other opportunity costs, and the accuracy of perceptions about the likelihood of getting caught. My model is not an attempt to dismiss the classic view of deterrence, but to help explain how deterrence operates in a context with a communication breakdown in information about the rules and} Like Posner and others, however, Kaplow assumes that a true information gap would cause a breakdown for deterrence, and that some indirect means for disseminating knowledge of sanctions must be found (like making the sanctions more sensational).

My argument is that deterrence does not work “in spite of” ignorance of the law, rather, it works \textit{because of} ignorance of the law, albeit with certain limitations in place.\footnote{Kaplow, \textit{supra} note 94 at 107-9.} People’s
aversion to uncertainty will lead them to avoid even coming close to activities they suspect are illegal. Over-deterrence, or the “chilling effect,” presents problems, of course, for activities that span a continuum from being socially useful in small doses to being harmful in excess, like pollution or speeding.  

Most criminal activities, however, do not even border on socially useful behaviors. Murder is an overly obvious example; consider instead assault. While making menacing or threatening gestures with one or two fingers may not constitute “assault” in most jurisdictions, there would be little social loss if people avoided such rudeness because it might approach the margins of what they suspect is illegal. Similarly, the felony murder rules vary significantly from jurisdiction to jurisdiction, change all the time, and are impossible to keep straight. We would prefer, however, that potential felons miss it by a mile.

Certainty about the law enables individuals to find loopholes or plan around its literal terms; uncertainty forces more self-restraint. Certainty, therefore, seems inevitably to allow some under-deterrence for those able to obtain ex ante legal counsel. In contrast, too much

98 See Craswell & Calfee, supra note 17, at 969; Ferguson & Peters, supra note 17, at 16 (discussing the chilling effect of vagueness in legal rules, which they maintain may be more desirable than the loopholes created by increased specificity, which are exploited by experts at the burden of non-experts).

99 See DRESSLER, supra note 9, at 515-26. For an example of the rules changing within a jurisdiction suddenly, see State v. Canola, 374 A.2d 20 (N.J. 1977) (holding that the felony murder rule should be restricted to killings committed by one of the co-felons, but not by others such as the crime victim, but noting this veered from the common law rule); N.J.S. § 2C: 11-3 (2001) (state statute subsequently changed to say that the rule applies even where the fatality was caused by another party, as long as the person killed was not herself a co-felon); State v. Martin, 573 A.2d 1359 (N.J. 1990) (“[T]he Legislature effectively overrode so much of Canola as held that one of multiple perpetrators could not be guilty of felony murder when the death was caused by the victim.”).

100 See, e.g., Ehrlich & Posner, supra note 17, at 263 (“Those costs [of overdeterrence through uncertainty] must be compared with the costs in reduced prevention of socially undesirable activity as a result of loopholes that must arise when the legislature reformulates the statutory prohibition in more specific terms.”); Louis Kaplow, Optimal Deterrence, Uninformed Individuals, and Acquiring Information about Whether Acts are Subject to Sanctions, 6 J. L., Econ., & Org.’s 93 (1990) (demonstrating that there is a social cost in the availability of legal counsel because of the increased awareness of loopholes); Ferguson and Peters, supra note 17, at 7 (“More complex rules provide a greater advantage to those skilled in creating loopholes.”).
ignorance of the law necessarily leads to under-deterrence.\footnote{But see Craswell & Calfee, supra note 17, at 974 (arguing that for social harms spanning a continuum, like pollution, there can be under-deterrence from uncertainty).} As long as people have even the broadest or most rudimentary knowledge of what types of activities carry criminal sanctions, the aversion to uncertainty will lead almost everyone to turn aside from that path. To take another example from Robinson and Darley’s study,\footnote{See Darley, et al, supra note 8, at 167 -71} suppose that people do not know when it is permissible to use deadly force in self-defense or defense of property.\footnote{For a discussion of the rules in this area, see DRESSLER, supra note 9, at 259-62.} To the extent that people perceive the presence of uncertainty in this area, the natural tendency will be to reserve deadly force as the last resort; this is approximately what we would want in any jurisdiction,\footnote{See id.} and will avoid litigation of the issue in most cases.

The operation of uncertainty on individual decisions is the subject of a subsequent section;\footnote{See infra Section IV.} there is an additional issue, though, that I see as problematic (or at least neglected) in both the other groups and their handling of the information gap in deterrence. Robinson and Darley seem to assume that the laws are addressed to the individuals who are the target of deterrence, and propose more extensive educational measures.\footnote{See Robinson & Darley, supra note 21.} The second group recognizes that the rules must be communicated through indirect means, but does not tie this to the nature of the rules themselves. The next section explains how the rules are not addressed linguistically to the citizenry at all, but rather to state actors, providing a natural explanation for the information gap. Even if this linguistic model were not necessary for the idea that uncertainty generates deterrence, it is necessary for tying together uncertainty with the theory of notice that delimits the uncertainty to an appropriate level; therefore, the discussion is necessary before moving on to the discussions of uncertainty and notice per se.

\footnotetext[101]{But see Craswell & Calfee, supra note 17, at 974 (arguing that for social harms spanning a continuum, like pollution, there can be under-deterrence from uncertainty).}
\footnotetext[102]{See Darley, et al, supra note 8, at 167 -71}
\footnotetext[103]{For a discussion of the rules in this area, see DRESSLER, supra note 9, at 259-62.}
\footnotetext[104]{See id.}
\footnotetext[105]{See infra Section IV.}
\footnotetext[106]{See Robinson & Darley, supra note 21.}
PART III: LINGUISTICS OF THE LAW

Much of literature on criminal deterrence theory proceeds as if the laws were formulated as instructions to individuals about how to act. Yet the verbal formulations that are embodied in our published laws simply list what punishment befits which criminal conduct, rather than being addressed as commandments to the reader; they mostly tell the law officer or court what to do to perpetrators of certain acts. The verbal formulations admonish the perpetrators themselves only by implication, not through direct communication. The indirect nature of such admonishments, if they are truly present, has significant implications for deterrence theory, given the crucial role of perceptions or information in the traditional model.

Modern criminal statutes are formulated very differently from grand social imperatives such as the Ten Commandments. The texts use no second-person pronouns or verb forms; they nowhere say “you” (or “Thou”). Instead, they use phrases like, “Whoever does _______ is guilty of a felony,” or, even more abstractly, “It is a felony to do _______.,” (then listing the elements of the crime).

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107 See generally Stevenson, supra note 30, at 114-31.
108 See id.
109 See id. at 148-67 for a discussion of other implications of these linguistic aspects of the laws.
110 See id. at 124-25.
111 See M.B.W. Sinclair, Plugs, Holes, Filters and Goals: An Analysis of Legislative Attitudes, N.Y.L. SCH. L. REV. 237, 242-44 (1996); for a discussion of Sinclair’s model, which is close to that presented here (but with a few critical differences), see Stevenson, supra note 30, at 129-30.
The influential legal philosopher Jeremy Bentham recommended that laws be formulated this way.112 “To say to the judge, ‘Cause to be hanged whoever in due form of law is convicted of stealing.’ is, though not a direct, yet as [sic] intelligible a way of intimating to men in general that they must not steal, as to say to them directly, ‘Do not steal.’”113 Bentham believed this formulation would actually be much more “efficacious” in producing the desired result.114

A small but important inconsistency emerges in Bentham’s writings on this point. A few paragraphs earlier, he offers the same example to distinguish different addressees of the laws, asserting that different addressees requires two different laws:

A law confining itself to the creation of an offense, and a law commanding a punishment to be administered in case of the commission of such an offense, are two distinct laws, not parts (as they seem to have been generally accounted hitherto) of one and the same law. The acts they command are altogether different; the persons they are addressed to are altogether different. Instance, “Let no man steal”; and “Let the judge cause whoever is convicted of stealing to be hanged.” 115

Modern criminal or penal codes comport with Bentham’s model for the formulation for the laws; Model Penal Code is an example. Bentham never returned to this point about the “altogether different” addressees, a phenomenon that results from his suggested formulation (the judge instead of the would-be offender). Never resolved, however, was the issue that the entire body of codified law was being “addressed” to judges and enforcement officers instead of the

112 For a more in-depth discussion of Bentham’s ideas in this area, see Stevenson, supra note 30, at 126. Of course, some commentators find such drafting inherently objectionable. See, e.g., ROBINSON, supra note 9, at 63: Unfortunately, rules of conduct are frequently drafted in a form that is more appropriate for a principle of adjudication, entailing broad and open-ended inquiries or detailed and complex rules. Consequently, many people cannot discern the rules of conduct. And many people who think they know the answers will be wrong. Can one lawfully shoot a basement burglar? Must one help the burglar when he is bleeding and helpless?
113 See BENTHAM, INTRODUCTION TO THE PRINCIPLES OF MORALS AND LEGISLATION, Ch. 17 §2, n.7 § VIII.
114 Id. By this he seems to mean that closely associating the proscription with an authorization for state coercion or punishment gives it more force than it would have otherwise. It also makes for more concise codes, and succinctness was one of Bentham’s other priorities in code-drafting.
115 Id. at Ch. 17 §2, n.7 § VI.
general population. Bentham’s goal of “notoriety” (making the law knowable to everyone),\textsuperscript{116} including his preference for using laypersons’ English, runs counter to this result. The idea that the laws are addressed only to the state would strike Bentham as radical and undemocratic;\textsuperscript{117} yet this is the clear legacy of implementing his recommended legislative style.

Bentham, of course, was not the sole influence for the format of modern penal codes; other commentators made a similar point about the formulations and the addressees.\textsuperscript{118} Hans Kelsen, claimed that the part of a law directed at the would-be offender is unnecessary and redundant:

\begin{quote}
An example: “One shall not steal; if somebody steals, he shall be punished.” If it is assumed that the first norm which forbids theft is valid only if the second norm attaches a sanction to theft, then the first norm is certainly superfluous in an exact exposition of law. If at all existent, the first norm is contained in the second, which is the only genuine legal norm.\textsuperscript{119}
\end{quote}

Kelsen’s point is that the “law” (in the sense of the statute, not the more abstract notion of “law”) is not the prohibition of a given act, but the mandate to the state to sanction the act, because the former cannot exist without the latter.\textsuperscript{120} Similarly, J.L. Austin wrote, “It is perfectly clear that the law which gives the remedy, or which determines the punishment, is the only one that is absolutely necessary.”\textsuperscript{121}

As a poignant illustration of the modern format, consider New York’s first-degree murder statute:

\textsuperscript{116} See \textit{supra} note 25 and citations therein.
\textsuperscript{117} The idea that the law is addressed to the state could sound undemocratic especially if it were confused with the issue of transparency of the government. I am not advocating diminished transparency for government; to the extent that publishing the legislature’s enactments and distributing them to libraries furthers the democratic goal of transparency and accountability, I would certainly support that. This type of “reporting,” serving the goal of government accountability, is very different than inculcating the laws into the people.
\textsuperscript{118} See \textit{generally} Stevenson, \textit{supra} note 30, at 127-28 for a survey.
\textsuperscript{119} HANS KELSEN, \textit{GENERAL THEORY OF LAW AND STATE} 61 (1945) (hereinafter “\textit{GENERAL THEORY}”).
\textsuperscript{120} Id.
\textsuperscript{121} AUSTIN, \textit{JURISPRUDENCE} 767.
§ 125.27 Murder in the first degree
A person is guilty of murder in the first degree when:
1. With intent to cause the death of another person, he causes the death of such person or of a third person; and
   (a) Either:
      (i) the intended victim was a police officer as defined in subdivision 34 of section 1.20 of the criminal procedure law who was at the time of the killing engaged in the course of performing his official duties, and the defendant knew or reasonably should have known that the intended victim was a police officer; or
      (ii) the intended victim was a peace officer as defined in paragraph a of subdivision twenty-one, subdivision twenty-three, twenty-four or sixty-two (employees of the division for youth) of section 2.10 of the criminal procedure law who was at the time of the killing engaged in the course of performing his official duties, and the defendant knew or reasonably should have known that the intended victim was such a uniformed court officer, parole officer, probation officer, or employee of the division for youth; or
   [ . . . (eleven more conditions similarly stated are omitted, including one about acts of terrorism). . .]
   (b) The defendant was more than eighteen years old at the time of the commission of the crime.122

Bentham and Kelsen both state that this type of formulation is directed at the state, and Kelsen goes so far as to say only a state actor can “break” such laws, in a technical sense.123 Bentham seems not to have noticed that he lost the citizens as addressees along the way; Austin admits this presents a problem for his definition of law as addressed to the citizens, and moves on.124

More relevant to the issue of deterrence and notice, Kelsen bluntly states that the influence on a citizen’s behavior is indirect.125 The implications for the behavior of the citizens

122 N.Y. LAW § 125.27 (McKinney 2002); notice how “causes” becomes the defining verb for the law, rather than a “must not” or “shall not,” as discussed in the previous footnote.
123 See Kelsen, General Theory 64 64.
124 Austin, supra note 73, at 767.
125 Kelsen, General Theory at 61. Some more recent commentators have also observed that the linguistic formulation of present-day statutes read as statements or declarations, rather than as imperatives addressing the reader directly. See, e.g., Sinclair, Plugs, Holes, Filters, and Goals, supra note __, at 243-44:
   Manslaughter is punishable by imprisonment in the state prison, not exceeding ten years.” You see the difference is rather marked. We might say that no one is commanded not to kill. We have a statement- a
are just that – implications. This does not mean that the implications are insignificant or unlikely to influence behavior; implied messages can drastically affect behavior. At the same time, people can live productive lives as law-abiding citizens without poring over statutes in their free time.

As mentioned above, much of the literature on deterrence theory proceeds as if the laws were what many linguists call “directives,” instructing individuals about what to do. While conditional statement. Such and such acts are classed as manslaughter. Whoever does them- he is punishable in a certain way

The problem comes when we turn to other features of Bentham’s project, such as making sure the people all study and learn the law. To some, it may be a frightening state of affairs that the legal texts have no place in the lives of most citizens; but this makes sense if the texts embody only formulations directed to state actors. For example, people can play baseball without the official rule book, the rules are helpful but not necessary to play. See OFFICIAL RULES OF MAJOR LEAGUE BASEBALL, 2000 ed., available at [Link].

There are eleven codified sections simply covering how the ball should be put into play, twelve sections regulating the activities of runners between bases; ten sections, spanning several pages, regarding “the batter,” and so on. The rules are tedious and difficult to decipher. Many of the detailed sections correspond to familiar rules, such as the three strikes allowed batters, but some of the details (such as those regarding “dead balls,” or what motions the pitcher may do for a windup) are relatively unknown. Still, ignorance of these rules does not keep people from playing an actual game and enjoying it. Lack of time or physical ability may deter people from engaging in baseball as a pastime, but ignorance of the official, published rules does not. Most people would not read the rules even if they knew where to find them. At the same time, the written rules are not irrelevant; in games with an umpire, the umpire’s decisions are supposedly made in adherence to these regulations. The situation with the official published rules of our legal system is similar.

In addition, even when there is a question the umpire must decide using the rules, as when a player has done something questionable, the players themselves do not typically ask to see the rules, but rather the coaches and umpires review the rules and make a decision. The analogy here would be that citizens are generally bound to defer to the judge or legal counsel about the meaning or application of laws, and generally seem content with this arrangement or authority structure. No one is happy about legal fees, and no one enjoys an unfavorable ruling from a judge, but few people suggest as an alternative that a laypersons’ interpretation of statutes should carry the same weight as those within the legal system.

General-preventative effects do not occur only among those who have been informed about the penal provision and their applications. Through a process of learning and social imitation, norms and taboos may be transmitted to persons who have no idea about their origins- in much the same way that innovations in Parisian fashions appear in the country clothing of girls who have never heard of Dior or Lanvin. Andenaes’ focus is on criminal law. It is not so clear that “norms and taboos” would cover the myriad of regulatory offenses that constitute a large part of our modern legal framework or other malum quia prohibitum acts, but his point is well-taken that the law can influence society even if the laws themselves remain unknown to most citizens.

The term was employed by philosopher-linguist John R. Searle to describe a subset of speech acts (“illocutions”) in more specificity than the catch-all phrase of “performatives” earlier pragmatic theorists were using. See John R. Searle, A Taxonomy of Illocutionary Acts, reprinted in PHILOSOPHY OF LANGUAGE 151-164 (A.P. Martintech, ed., 2001). Searle explains that every type of communication indicates, among other things, the “direction of fit” between reality and the statement’s verbal content. “Assertives” have a “words-to-world” direction
the ultimate goal of the state may be to manipulate the behavior of would-be offenders (to deter socially harmful activities), it should be recognized that this is being attempted through what linguists refer to as “declarations” (“hereby”-type statements), rather than through “directives.”130 Modern statutes are formulated as “declarations” (“A person is guilty of felony murder if he….”) rather than as “directives” (“You must not commit certain acts that are considered manslaughter”). “Declarations,” of which statutes are a subset,131 only “work” in linguistics if there is some social institution to interpret them and give them effect.132 This institution itself is the “addressee.”133 The law’s addressee is best understood as the institution that interprets, implements, and enforces the law: the state.

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130 See id. at 156-159
131 Other declarations (sometimes called declaratives, depending on the writer) include official ceremonial pronouncements by individuals vested with appropriate authority: “I now pronounce you man and wife,” “I hereby christen thee ___,” or “You’re out!” in baseball.
132 Id. at 159; see also Allan Bell, Language as Audience Design, 13 LANG. SOC. 145, 177 (1984) (“The authority of the norm comes from its institutional position, rather than the personal charisma of the enactor.”). Bell not only surveys a number of studies in this area, but explains how the primary addressee exerts the most influence over the crafting of the communication, while known overhearers have a small effect on the design of the speech or writing. In the context of legal formulations, such as statutes and court opinions, the true addressee- the state- shapes the form of the text. For a fascinating discussion of audience design and its application to property law, see Smith, supra note 36, at 1133-40
133 Without such an institution in the role of receiving and enforcing the declaration, there is no declaration. See Searle, supra note 83 at 159 (“It is only given such institutions as the church, the law, private property, and the state and a special position of the speaker and hearer within these institutions that one can excommunicate, appoint,
The idea of “addressee” and “audience” provides an interesting model for explaining the phenomenon noted by Bentham, Kelsen, and others. The overall “audience” is whoever hears (or reads) a communication, including overhearers; basically, it includes everyone privy to the conversation. The “addressee” is the hearer (or reader) whom the communicator designed the speech or text to reach and affect in a primary way.

The insights from modern linguistic theory echo what Bentham said to describe the formulations used in modern cases and statutes: the “addressee” is the state itself, while the citizenry is left in a more remote position, perhaps as “auditors,” “overhearers,” or perhaps completely unaware, as empirical studies suggest.

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134 The definition of “addressee” is eloquently explained in the influential article by Herbert H. Clark & Thomas B. Carlson, *Hearers and Speech Acts*, 58 LANGUAGE 2:332-371 (1982): “The addressees are the ostensible targets of what is being said. Ordinarily, they are the participants for whom the speaker has the most direct and obvious goals in designing his utterances.” *Id.* at 344. Addressees and participants are often distinguished “through the content of what is being said.” *Id.* at 347.

135 See generally Bell, supra note 36. In the context of legal formulations, such as statutes and court opinions, the true addressee- the state- shapes the form of the text the most. Bell calls non-addressee recipients of the communication “auditors.” See also Smith, supra note 36, at 1133-40; Clark and Carlson, supra note 134, at 342-43:

If speakers relied solely on conventional linguistic devices to convey what they meant, everyone who knew the language should have equal ability to understand them. But the examples we have offered suggest quite the opposite: when speakers design their utterances, they assign different hearers to different roles; and then they decide how to say what they say on the basis of what they know, believe and suppose. This is a fundamental property of utterances we call AUDIENCE DESIGN. . .The speaker defines who are the addressees, who are audience participants, who are overhearers...

136 It is fairly easy to see how this applies to statutes; a similar paradigm can be used to analyze judicial decisions as well. Adjudication passes a verdict on an individual’s claims or guilt. Even so, it would be a mistake to say the decisions are “addressed” to the parties themselves. Courts generally prefer the more formal third-person: “I find the defendant guilty.” Even if the court said, “I find you guilty as charged and sentence you to ___,” the defendant is not expected to do anything to effectuate the court’s order (as would be the case with a “directive”). The sentence will be carried out against the defendant’s will. The court’s ruling really tells the defendant what the sheriff is going to do to him or his bank account. The state is the institution that gives declaratory force to the law, functioning in the role of addressee. See, generally, M.B.W. Sinclair, *Notes Toward a Formal Model of Common Law*, 92 IND. L. J. 355 (1986). Judge Cardozo seemed to be particularly aware of the fact that the true audience for his opinions was other judges, not the parties in the case, as he carefully chose wording that would be particularly memorable and become the rule adopted by subsequent courts. See RICHARD A. POSNER, CARDOZO: A STUDY IN REPUTATION 92-124 (1990) see also Posner, *Judge’s Writing Styles (And Do They Matter?)*, 62 U. CHI. L. REV.
This is not to say, as Paul Robinson suggests, that it is important to structure the law so as to make it more directly communicative to the individuals whose behavior the law seeks to modify.\textsuperscript{137} Rather, the system as it is strikes an uneasy balance, a type of equilibrium that may, in fact, be optimal. The formulations simply reflect the reality that in a complex modern society the state functions as an independent social organism and the law as what sociologists sometimes call an “autopoietic system.”\textsuperscript{138}

Meir Dan-Cohen proposed in his now-famous article that the law is simultaneously addressed to both the state actors and the citizenry.\textsuperscript{139} He draws from the same passages in Bentham’s writings I have quoted in previous sections, and then proposes a model of “acoustic separation” for criminal law. Under this model, some portions of the law are directed toward the courts to guide decisions about the law’s application, while the other portions are directed toward citizens, especially would-be offenders.\textsuperscript{140} The judge-directed portions of a statute are termed “decision rules” (he discusses only examples relating to the judiciary).\textsuperscript{141} In contrast, “conduct

\textsuperscript{137} See, e.g., ROBINSON, supra note 9, at 80 (“[T]he formulations should be calculated to give adequate notice to deter effectively and properly and to condemn a violation fairly.”); see also id. at 63: [M]any people cannot discern the rules of conduct. And many people who think they know the answers will be wrong. Can one lawfully shoot a basement burglar? Must one help the burglar when he is bleeding and helpless? The rules governing the justification of force in the defense of one’s property or premises and the rules defining one’s affirmative duties to act are notoriously complex. In other instances, principles of adjudication are drafted in a form that may be appropriate for a rule of conduct but that does not accommodate the complex and multifaceted analyses that determine an actor’s blameworthiness for violating a rule of conduct.

\textsuperscript{138} See GUNTHER TEUBNER, LAW AS AN AUTOPOIETIC SYSTEM 69-70 (1993) (arguing that “[f]or society, all legislation does is produce noise in the outside world. In response to this external disturbance, society changes its own internal order.”)

\textsuperscript{139} Meir Dan-Cohen, Decision Rules and Conduct Rules: On Acoustic Separation in Criminal Law, 97 HARV. L. REV. 625 (1984). Dan-Cohen seems mostly focused on demonstrating that the law is addressed to the courts and not only the citizens. See id. at 628 (“We can successfully account for the normative constraints that the law imposes on judicial decisionmaking only if we impute to the legal system an additional relevant norm whose norm-subject is the judge and whose norm-act is the act of judging or imposing judgment.”).

\textsuperscript{140} See id. at 626-27.

\textsuperscript{141} Id. at 637-48.
rules” are directed at the citizen.\textsuperscript{142} Dan-Cohen claims that decision rules and conduct rules can be found within the same statute, woven together, without identifying markers.\textsuperscript{143} He also asserts that the “ordinary language” portions of the statute generally correspond to the “conduct rules” directed at citizens, while the presence of technical terms and legal jargon indicates the section is directed at the judiciary.\textsuperscript{144} The examples he uses are mostly judge-made rules, however, not statutes: the common-law excuse of duress,\textsuperscript{145} the “act at your own peril,” principle,\textsuperscript{146} and the maxim that “ignorance of the law is no excuse, but vagueness in the law can be.”\textsuperscript{147} He also focuses on a practical application for statutory rape, which itself is often considered an anomaly in our legal system.

One possible reading of Dan-Cohen is that he was focusing on something other than the narrow question of the verbal formulations when he considered the law’s “audience;” perhaps he was probably using “law” in a more general, intangible sense. This would explain the examples he cites, which are mostly jurisprudential traditions rather than official verbal formulations of the law. One wonders if his “decision rules” refer to the actual written formulations of laws, being addressed to state actors, while his “conduct rules” are the intangible operation of the “law” in

\begin{footnotesize}
\begin{enumerate}
\item[142] \textit{Id.} at 648-51.
\item[143] \textit{See id} at 631:
First, conduct rules and decision rules may often come tightly packaged in undifferentiated mixed pairs... [R]adical separation is unnecessary in the real world. As Bentham pointed out, a single statutory provision may simultaneously guide both conduct and decision and may thus function as both a conduct rule and a decision rule. A criminal statute, to use Bentham's example, conveys to the public a normative message that certain behavior should be avoided, coupled with a warning of the sanction that will be applied to those who engage in the prohibited conduct. The same statutory provision also speaks to judges: it instructs them that, upon ascertaining that an individual has engaged in the forbidden conduct, they should visit upon him the specified sanction.
\item[144] \textit{See id.} at 652: “[T]he law may seek to convey both the normative message expressed by the common meaning of its terms and the message rendered by the technical legal definitions of the same terms.”
\item[145] \textit{Id.} at 637-643.
\item[146] \textit{See id.} at 644- 645.
\item[147] \textit{See id.} at 645-647. Sometimes statutes do incorporate certain “affirmative defenses,” including extreme duress, either by listing the defenses in a section of the code, or by making such mitigating circumstances the dividing lines between different degrees or classes of the same crime (murder to manslaughter, for example). The rule about duress that Dan-Cohen discusses, however, is the rule as created by the judiciary in common law, a self-promulgating tradition. This includes the court-created exceptions for prison escapes and refusals to testify in court.
\end{enumerate}
\end{footnotesize}
achieving its desired end in the population’s behavior. This would make more sense of his model, but he seems to contradict this when he states that the “ordinary language” portions of the statute are addressed to the commoners. The implication is that he is splitting the verbal formulations themselves into two divergently-directed communicative acts, as opposed to viewing the verbal formulations (texts) as one side of the “acoustic separation” and the law in a more general, intangible sense as the other side.

If Dan-Cohen’s model is applied strictly to written laws, the lines between the two sides of his “acoustic separation” really become indistinguishable. For example, judges must use the entire “conduct rule” portion of the statute to determine how the “rule” applies to the facts. Similarly, criminal defense attorneys usually try every angle of the search and seizure rules of criminal procedure, which are supposedly addressed to the police, to find some way to circumvent the actual charges in the case. The acoustic separation breaks down quickly as both parties must listen to and heed both sides of the “acoustic separation” model.

From a linguistic perspective, Dan-Cohen’s binary-addressee model is problematic, if indeed he was focused on statutory formulations and not “the law” in some more general sense.

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148 See id at 652. This really does not align well with real-life statutes (which Dan-Cohen neglects to present). Under his view, the word “murder” within a criminal statute is “ordinary language” and constitutes the “conduct rule” part of the law. Yet “murder” in many state codes is distinguished from “voluntary manslaughter” in technical ways that bear no connection to the street usage of the word “murder.”

149 For a somewhat less deferential discussion of Dan-Cohen’s model, see Stevenson, supra note 30, at 132-35.

150 See Kelsen, Pure Theory 234-35. Kelsen argued that all “application” of the law by judges was, in a technical sense at least, “making” law for the specific arrangement of facts in that case. Interestingly, he asserted that this was true whether the judge was operating within a common-law system or the “code” systems prevalent in Europe and South America. Interestingly, Bentham saw the “law-making” function of common-law courts as very undesirable and pushed for the Continental model to replace it. Kelsen argues in this section that there is not as much practical difference between the two as one might think, or as much as Bentham thought.

151 For example, even though Miranda warnings are clearly a requirement placed upon the police (to the extent that this requirement is still upheld by the courts), this state-actor-addressed rule is so important to citizens that people speak of “Miranda Rights.” Where is the “decision rule” and where is the “conduct rule” here? The same rule is perhaps equally important for both parties, albeit in different ways. It is important to police as a direct rule about how to conduct themselves. It is a life-saving rule for many defendants, but only indirectly, to the extent that it invalidates the actions of the arresting officers.
It is not possible to have distinct intended meanings addressed to each hearer by the same speech act, unless one of them is being deceived or strong irony is afoot; although it is possible to have multiple or even indeterminate addressees. It is a maxim of communication theory that communication has a sender, a message, and a receiver. H.P. Grice coined the phrase “m-intentions” to describe the subjective meaning effect a speaker intends to produce in the hearer. For example, the “m-intended effect” of imperative communication is that “the hearer should intend to do something (with of course the ulterior intention on the part of the utterer that the hearer should go on to do the act in question).” The “m-intentions” must be the same for all, even if there is an indeterminate set of possible addressees. As Clark and Carlson explain, “Speakers can have m-intentions (that is, how they want to be understood) toward one or more hearers at a time, but not toward a collection of hearers.” The idea that the same rule is

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152 For example, suppose Alice leaves her office with several people still lingering behind, and says, “The last one out should turn off the lights.” It is still undetermined who that will be; the addressee of the request will self-select by virtue of being the last to leave. At the time of the utterance, though, the entire audience (those in the room) are potential addressees. They are not addressees collectively, though. Alice could not have intended everyone to turn out the light; she explicitly narrowed the request to a single undetermined actor. The audience is defined clearly in this case, and the addressee will be whichever individual is last to leave. Clark & Carlson also note, “A party can address an individual addressee within a group of audience participants without necessarily knowing which individual is the addressee: Charles, to Ann and Barbara: ‘Please return my map, whichever of you has it.’” Clark & Carlson, supra note 134, at 338.

153 Willem J. Witteveen, *Significant, Symbolic, and Symphonic Laws: Communication Through Legislation*, in SEMIOTICS AND LEGISLATION: JURISPRUDENTIAL, INSTITUTIONAL, AND SOCIOLOGICAL PERSPECTIVES 27 (Henneke van Schooten, ed. 1999). Witteveen contends, “Most duly enacted laws do not come to mean very much for most of their intended audience when those the law addresses on paper have no need or no incentive to make it part of their actual considerations and doings. There are no pragmatic differences.” *Id.* at 27. I understand “intended audience” very loosely, not meaning “addressee” in the technical sense discussed here. In order for meaningful information processing to take place, the same codes must be used in sending and receiving. *Id.* at 30; see also Clark and Carlson, *supra* note 134, at 344 (“The addressees are the ostensible targets of what is being said. Ordinarily, they are the participants for whom the speaker has the most direct and obvious goals in designing his utterances.”).


155 See Grice, *supra* note 154, at 68.

intended to mean different things to different addressees makes the law either a deception or a nonsensical communication.\textsuperscript{157}

To step back from technical linguistic terminology for a moment, imagine a simple version of the “acoustic separation” model. Suppose three people are engaged in regular conversation where one party says something to the other two. There are a limited number of options for “addressees” in this case:

1. The speaker can address the same sentence to both of the others collectively, as when one informs two friends of the same fact or gossip. Both listeners presumably hear the same thing and receive the same meaning, notwithstanding subjective interpretations they may apply to it.

2. The speaker could address both equally but distributively, as when asking which of the two is responsible for some misdeed or which one is willing to help with something. The meaning for both is the same, although both understand that only one is supposed to respond affirmatively.

3. The speaker can address one in front of the other, which lets the non-addressee know that the other listener is being told ____. The addressee, of course, knows that the other person is hearing this. Sometimes this can be quite significant, as when a jury observes the colloquy between a lawyer and a trial witness. The meaning is shaped by the specific addressee, even if the question and answer routine is for the benefit of the other listeners (as with cross-examination done before a jury). They jury knows the spectacle is for their benefit. But it would

\textsuperscript{157} See Witteveen, \textit{supra} note 153, at 30-48. Witteveen compares the law to a symphony. Just as a symphony has a composer a composer (sender), a score (message), and (hopefully) an orchestra that reads/plays the score (the receiver), statutes have a sender (legislature), message (text), and the receivers (civil servants, judges, enforcement officers, etc.). The most interesting feature of this metaphor is that it helps illustrate that the end recipients are those who interpret and implement the laws (as the orchestra does with the score), rather than the orchestra’s patrons attending the concert.
be a misinterpretation for a juror to think that the question posed to the witness is addressed to the juror herself. The question is for the benefit of the juror, but the juror is not supposed to speak up and answer the question!

4. A speaker with two listeners may say something that one will interpret at face value, while the other person is privy to the knowledge that the speaker means something completely different. The classic example is when couples attending a party together know that each other’s niceties toward certain unsavory guests are laden with sarcasm, but the sarcasm is lost on the addressee. This is a case where there is one statement, but two distinct intended meanings for the two listeners respectively. It is hard to imagine such scenarios, however, apart from the context of irony or deception.

These are the main categories of speech acts involving multiple audience members. Dan-Cohen’s acoustic separation model seems to say that laws have two distinct intended meanings for two members of the audience respectively. This seems to correspond to the fourth option above, which only occurs in contexts laden with sarcasm, irony, or deception, none of which are likely to be embedded intentionally in the statutes.

Perhaps Dan-Cohen is arguing that laws are a unique form of speech that fits in the fourth category above, having multiple simultaneous intended meanings for the two sets of listeners, but devoid of irony or deception. If this is his argument, he does not say so very clearly. It

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158 Others have tended to assume there are two addressees of the law, although it is usually mentioned in passing and not defended. See, e.g., Ehrlich & Posner, supra note 17, at 261: Rules are addressed to two audiences: people who might violate (or be accused of violating) the law, and participants in the process of determining whether a violation has occurred (judges, lawyers, etc.). The effects of the choice between rule and standard on the first group we shall call “primary behavior,” as contrasted with the effects of the choice on law enforcement and other activities in the legal system. My concerns with Dan-Cohen’s model would be equally applicable here. On the other hand, elsewhere in their article, Ehrlich and Posner emphasize the importance of specificity in the rules for state actors (like prosecutors and law enforcement), because of the increased efficiency of court proceedings; this fits nicely with the model presented here. See id. at 264.

159 See generally Stevenson, supra note 30, at 135-36.
makes more sense to understand the law as fitting into the third category, where the courts and enforcement officers are the addressee of the legislature’s communication (as Bentham himself explained). The citizens function as overhearers to the extent that they are privy to the communication directly. Even if the citizenry sits allegorically in the seat of the “juror” in the example above, knowing that the transmission of intentions in the legal texts are for their benefit, this does not put citizens in the seat of the witness, as the addressees of the communication. Just as it would be a mistake for the juror to speak up and answer the lawyer’s question herself, it is a mistake for us to presume that the written formulations of the law are addressed to the citizen. The structure and phrasing appears to be addressed to the state.\footnote{\textsuperscript{160}}

John Griffiths has written a fascinating documentary piece about the failure of euthanasia laws to reach medical practitioners in an accurate and true form.\footnote{\textsuperscript{161}} Extensive studies show that despite efforts to communicate the parameters of the legislative changes to the medical profession,\footnote{\textsuperscript{162}} and despite a rapid change in social norms on the issue,\footnote{\textsuperscript{163}} the doctors most affected by the law almost universally held mistaken notions about the law’s requirements.\footnote{\textsuperscript{164}}

He explains that transmission from the state to the “shop floor” is not only haphazard, but results in alterations in content:

\footnote{\textsuperscript{160} It seems, though, that any model of deterrence that depends in a necessary way on information about laws and sanctions is going to run into trouble on this account. See, e.g., \textit{Posner, Economic Analysis of Law}, \textit{supra} note \textsuperscript{7}, at \textsuperscript{267}:}

\begin{quote}
[L.]aw must be public. If the content of a law became known only after the events to which it was applicable occurred, the existence of the law could have no effect on the conduct of the parties subject to it. The economic theory of law is a theory of law as deterrence, and a threat that is not communicated cannot deter.
\end{quote}


\footnote{\textsuperscript{162} \textit{Id.} at \textsuperscript{97-98}. Griffiths describes how hospital manuals were revised to reflect the rules under pressure from local prosecutors or regulatory inspectors.}

\footnote{\textsuperscript{163} \textit{Id.} at \textsuperscript{81-87}. Griffiths chronicles the process by which “euthanasia” went from being a taboo word within hospitals to being a routine part of medical practice in less than twenty years.}

\footnote{\textsuperscript{164} For example, many doctors continue to “report deaths due to the use of euthanatica as ‘natural’ even when they themselves regard them as amounting to termination of life. When asked they say they did so because they actually regarded the death as a ‘natural’ one.” \textit{Id.} at \textsuperscript{100}.}
The transmission process is, in other words, a “transformation” process in which the original legislative message both gets distorted and becomes enriched with all sorts of additional information (for example, concerning the significance of the rule or the wisdom of following or not following it). The message about the law that ultimately comes to an actor’s attention—if any message gets through at all—is seldom the same as, and almost always more complex than, what the legislator “intended.”

Griffiths postulates that the medical profession constitutes a distinct social group with its own set of norms, which interacts somewhat collectively with society at large, the “shop floor.” The idea of distinguishable social groups with shared values, and recurrent but limited interaction with the norms and values of society in general, “plays the central role in the theory of the social working of law” for many sociologists. Lawyers often function as intermediaries between the state and such segments of society; still, Griffiths argues that legal knowledge is socially contingent, filtered through one’s “social field,” and altered in the process. This applies both to knowledge of what the law says and what the law means.

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165 Id. at 95.
166 Id. at 92; sociologists since Sally Moore have referred to a distinct social group as a “semi-autonomous social field” (SASF), but the technical terminology is not terribly necessary to convey the concept.
167 Id. at 93. But see Teubner, supra note 30, at 76: Finally, the autopoiesis model gives us a clearer indication of the nature of the resistance of social autonomy to legislation and other interventions from the outside. It is not simply, as in Sally Moore’s “semi-autonomous social fields,” of conflicting social and legal norms . . . It is far more a question of circularity, from the minor self-referential operation up to the autopoiesis of the entire system. This is more than, and different from, the resistance say of peasants to official legal centralism. . . .
168 Id. at 94 (“The legislature often counts on specialized intermediaries such as lawyers to communicate legal information to the public.”).
169 Id. at 95: It has often been observed that laymen may be incapable of understanding the language in which legal rules are couched and that where no translation facilities (such as legal assistance) are available this can be a formidable obstacle to the effectiveness of law. I want to make a rather different point here, namely that ordinary people may know a rule perfectly well— they may be able to formulate it in a reasonably adequate way— but that it may mean something rather different to them from what the legislature contemplated.
The assertion being made here is that the state itself is a semi-autonomous sociological group, a type of self-contained institution or system.\textsuperscript{170} The transmission of laws flows from the lawmaker to the relevant state actors, and courts. A flow of information from the lawmaker to the public means jumping from one social subsystem or group to another. This jump involves a radical “filtering” effect, that is, the message mutates from its original expression at the lawmaker level to a different message (often with different normative content) at the level of the citizens. This second step is better conceived of as a second, separate communicative act, if a communicative act at all.

\textit{Non-incentive Linguistic Affects on Behavior}

It is a distinctive feature of every modern society that legal language nominalizes heavily;\textsuperscript{171} That is, verbs and action-related events are named and classified, taking on the grammatical property of labels on classifications. “Malice aforethought” is not a thing, but a label or classification that carries hefty consequences. At common law, “malice” included a range of subjective states, from revenge-based premeditation to simple reckless indifference. Courts had to struggle in each homicide case to decide whether to label the facts as “malice.” The same is true of “murder,” “rape,” and even “burglary;” these are not things in themselves, but more of a reification category for any given set of circumstances. The nominalization process, of course, extends beyond common law felonies and hate crimes; “consideration,” “mitigation,” “malpractice,” and “insider trading” are all more modern examples.

\textsuperscript{170} See Hanneke van Schooten, \textit{Instrumental Legislation and Communication Theories}, in \textit{SEMIOTICS AND LEGISLATION} 185-211 (Henneke van Schooten, ed. 1999).
\textsuperscript{171} See Bowers, supra note 30, at 96-97; 143-44; Gibbons, supra note 38, at 19-20, 192-94; Tiersma, supra note 38, at 77-79; Jackson, supra note 35, at 119-21 (1995).
Nominalization is often mentioned as a leading culprit in the “legalese” phenomenon meaning that it makes legal texts difficult for laypersons to read and understand. At the same time, most linguists regard it as fairly inevitable, a necessary feature of lawmaking and judicial case resolution. Declaratives, speech acts that create a state of being, state that “X” = ”Y,” “x” referring to a classification required set of responses (sometimes a defined range of possible responses) by the state. To this extent, nominalization is not just an inevitable result of lawmaking, it is lawmaking.172

The situation is far from lamentable: rather it is useful and effective. Choices and decisions are not mere selections of competing goods or opportunities in every case: rather the framing or clustering of alternatives. Nominalization enables us to analyze situations, to step outside of the realm of immediate payoffs and view things socially, morally, or even more rationally.

Ancient legal or moral codes sometimes viewed intoxication or drunkenness as a vice, or at least an act of foolishness. This introduced a new level of abstraction, and facilitated reflection to the point that moderation, temperance, or abstinence were available as concepts—concepts to which people could pre-commit. Contrast the decision of ancient Stoics to avoid drunkenness with a modern child’s inability to understand “heartburn” or “indigestion” at an early age; most children presented with buckets of candy, without supervision, will eat until they feel sick, and will do so repeatedly, day after day. This is more than merely underdeveloped short term memory; the same children can remember promises their parents made days before, and can often recount the number of days until their next birthday. This is also more than a failure to

172 But not necessarily “law” itself, which refers alternatively to the organized expression of the states coercive power, to the rules promulgated, to the study of the ruler- just like “theology” means both the study of God and the study of theology
understand cause and effect—the same children know to stop eating when a parent says so, recognizing that there are unpleasant consequences of defiance.

With intoxication, the introduction of the very idea, along with its associated taboos, simultaneously suggests the concept of temperance. Much later, when terms like “addiction,” “alcoholism,” and “chemical dependence” came into popular usage, a new level of abstraction about one’s behavior, and how such behaviors could be grouped and judged as patterns, came into being. More pertinent to the field of criminal law, “aggravated assault” seems to be a relatively modern example of nominalization. The undesirability for regular social interactions of menacing each other with deadly weapons is self-evident when considered in the abstract, of course; but people are more likely to consider it in the abstract once it is nominalized by lawmakers.173

As mentioned in the introduction, recent studies in neurological sciences and psychology indicate that self-control is more dependent on the language faculty in the brain than the faculties for assigning time values.174 This makes intuitive sense: one’s ability to view one’s actions in the abstract allows a person’s violation to be governed by principle rather than impulse.

This is not to suggest that this “nominalization” process is necessarily the primary means by which laws shape behavior. The point is simply that the idea manifested in a nominalized

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173 The phenomenon I am describing is not the same as the idea that laws inform social norms, which in turn influence individual behaviors; nor does it necessarily contradict that model. As mentioned earlier (see supra note __), however, the law’s influence on social norms requires a mechanism of communication that is not obviously in place, except perhaps for rules pertaining to corporate entities, who receive more ex ante legal information than private individuals. Ironically, then, the “social norms” idea of law-abiding behavior may have its strongest application in the impersonal corporate context, where the norms become standard trade practices. The nominalization process can work more directly than social norms; the individual processes the new “idea” contained in a rule (even if only the vaguest notions of the rule get communicated) and translates it into a norm for herself. The usual model for the social norms is, obviously, social—individuals receive norms (taboos, etc.) from those around them, instead of generating their own convictions, as my model suggests. At the same time, of course, nominalization facilitates the development of social norms as well, through a similar process. The “idea” manifested in a nominalized form in a new rule is perhaps easier to translate into a new social norm than it would be otherwise.

174 See supra notes 40-43 and sources cited therein.
rule, once known to an individual, is itself an aid to self-control, besides the incentive-altering possibility of sanctions. This does not require much direct communication or information, however; even the vaguest notions of the rule would suffice in this regard.\(^ {175}\) In other words, laws can affect behavior on some level apart from disincentives (disincentives including threats of punishment, threats of social stigma or shame, opportunity costs, increased costs of perpetration through hardening of targets, etc.), and this incentive-neutral mechanism requires less communication of the law’s contents than the disincentive-dependent model of classical deterrence.

The two mechanisms are not mutually exclusive; the law can affect behavior through the conceptual framework it provides, and behavioral affects can be enhanced (and the moral message emphasized) by associating sanctions. The two can easily work in tandem, and perhaps each works best when working in tandem with the other. Classical deterrence, however, depends on the assumption of adequate information about the rules and sanctions.\(^ {176}\) Given that laws are addressed to the state, with the citizenry generally left out of the communication loop, a new mechanism for disincentives is necessary, one that explains how disincentives can operate well in a context of widespread ignorance, rather than widespread mastery of the laws. Aversion to uncertainty provides such a mechanism, and this is the subject of the next section.

\(^ {175}\) This is not to suggest that the rules themselves should be vague, but rather that vague, partially-informed perceptions of the citizenry may be adequate for the purposes of this model. My model contains a preference for rules drafted in language that will seem precise to judges, prosecutors, and lawyers.

\(^ {176}\) See, e.g., Posner, supra note 7 at 267 (“The economic theory of law is a theory of law as deterrence, and a threat that is not communicated cannot deter.”).
IV. UNCERTAINTY

Uncertainty has not been well esteemed in legal scholarship and court opinions.177 Traditionally (but continuing to the present) uncertainty about the law’s requirements, potential punishments, or the likelihood of enforcement have all been equated with unfairness, injustice, and oppression.178 In the law and economics field, the general view is that uncertainty is a bad thing, because predictability about income facilitates rational decision-making. Some of the more recent commentators in this field have expressed concern that uncertainty about legal liability will over-deter useful activities and under-deter some harmful activities.179 Kaplow’s

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177 This is especially true in the literature about deterrence. See, e.g., Ehrlich & Posner, supra note 17, at 275 (“Yet it should now be clear that one method of increasing deterrence is to specify the prohibited conduct more exactly.”); id. at 277:

With the definition of crimes confined to the legislatures, and given that legislatures act prospectively, uncertainty with respect to criminal liability is minimized. A person is never forced to speculate about the probable reaction of a court or jury to conduct that, while not the subject of a specific prohibition, might be deemed contrary to some standard of good behavior. He can avoid possible entanglement in the criminal process by refusing to engage in well specified courses of conduct.

Notice not only how the supposed elimination of uncertainty is eulogized, but also the assumption (surprising given the previous section) that everyone knows the details of the laws.

178 For example, recent commentaries on tort reform and punitive damages have almost universally decried the uncertainty resulting from variations in jury awards, without evaluating whether such uncertainty may be socially useful and justifiable. See generally Baker et al. supra note 39, at 11-12, discussing these sources (but disagreeing in favor of allowing more uncertainty in punitive damages); David Schkade, Cass Sunstein, & Daniel Kahneman, Deliberating About Dollars: The Severity Shift, 100 COLUM. L. REV. 1139, 1142-43 (2000); Cass Sunstein, Daniel Kahneman & David Schkade, Assessing Punitive Damages (With Notes on Cognition and Valuation in Law, 107 YALE L. J. 2071, 2075 - 76 1998) (“If similarly situation people—plaintiffs and defendants alike—are not treated similarly, erratic awards are unfair.”).

179 See e.g., See, e.g., POSNER, ECONOMIC ANALYSIS OF LAW, supra note 7, at 221:

If there is a risk of accidental violation of the criminal law (and there is, not any crime that involves an element of negligence or strict liability) or of legal error, a savage penalty will induce people to forego socially desirable activities at the borderline of criminal activity. For example, is the penalty for driving more than 55 m.p.h. were death, people would drive too slowly (or not at all) to avoid an accidental violation or an erroneous conviction.

See also Sunstein et al., supra note 178, at 2076 (“[A]s a practical matter, a risk of extremely high awards is likely to produce excessive caution in risk-averse managers and companies. Hence unpredictable awards create both unfairness and (on reasonable assumptions) inefficiency, in a way that may overdeter desirable activity.”); Kip Viscusi, the Social Costs of Punitive Damages Against Corporations in Environmental and Safety Torts, 87 Geo. L. J. 285, 288-99 (1998) (arguing that punitive damages have little deterrent effect against harmful activities and are therefore inefficient’); see also Baker, et al., supra note 39, at 12 (discussing these previous commentators).

Whatever the merits of these concerns in the tort context (I believe it is a debatable subject), I am focusing entirely on criminal sanctions, not civil liability. The two are distinguishable in terms of the value of uncertainty, because most torts involve activities that are socially desirable when limited in amount, degree, or level of precaution or safety backups: driving, manufacturing, medical procedures, etc. (those actually seem to be three of
discussion of uncertainty includes individual ignorance about the nature or extent of one’s own activities (his example is pollution, given that many polluters do not keep track of exactly what they dump or how much), regardless of what the applicable rules dictate for that activity.

With very few notable exceptions, however, these commentators have neglected the place of uncertainty in economic thought. Since Frank Knight’s seminal work in this area, distinguishing uncertainty from risk (and arguing that pure profits only accompany the former), economists have understood, at least partially, that uncertainty is simply another

the largest categories). Some torts and regulatory violations have criminal counterparts, but it seems that most criminal activity does not closely border any desirable activities; violence, aggression, trafficking in narcotics or human lives, or infringement with another’s property rights may not cross the line of illegality in a given case, but are socially harmful in some degree in almost every case. Of course, there are certain exceptions (like self-defense or defense of property), but the law has always recognized this through affirmative defenses – and the rules generally discourage such behaviors except as a last resort. Thus, overdeterrence or a “chilling effect” is less of a concern with crimes than torts. Many people pay a premium, in fact, to live in neighborhoods where aggression and violence is almost unknown, carousing is nonexistent, trespassing impractical and uncommon, and civility and self-control are the norm.

The deterrence literature, however, has tended to go the opposite way. Ehrlich and Posner, for example, argue that criminal liability should have more certainty than civil liability:

The “chilling” of socially valuable behavior by an uncertain law is a potentially serious problem whenever criminal penalties are involved . . . Not only do criminal sanctions tend to be more sever (costly), but it is normally impossible to purchase insurance against criminal liability. The average individual can avoid the risk of being subjected to a criminal penalty only by avoiding criminal activity. But if what constitutes criminal activity is uncertain this is not enough: he can eliminate the risk only by avoiding, in addition to all clearly criminal behavior, all other behavior that is within the penumbra of the vague standard.

Ehrlich & Posner, supra note 17, at 263. This is exactly what I am arguing: deterrence is greater in criminal law where some uncertainty is present. It is unclear what desirable activities Ehrlich and Posner believe are appurtenant to crimes carrying hefty punishments. I believe one would be hard pressed to find an example; the steeper the penalties, the more the crime seems to be an activity whose “penumbra” is something we would happily discourage as well. A “chilling effect” on violence generally, or on substance abuse, conversion of another’s property, deception, or sex with youngsters seems like a pleasant result.

See generally FRANK KNIGHT, RISK, UNCERTAINTY, AND PROFIT (1964); for an application of Knightian profit theory to the market for illegal drugs, see Katyal, supra note 7, at 2415. To summarize, risk involves multiple possible outcomes of a scenario, where the odds of each outcome are fairly clear and quantified. An example would be a bet (or lottery or raffle) where the chances of winning are one in fifty; or, for that matter, the Reader’s Digest Sweepstakes, which typically has odds on the order of one in two hundred million. Uncertainty, in contrast, involves possible outcomes whose odds are either unknown or unknowable. This is not necessarily saying that “life is full of uncertainties,” or that “anything can happen,” (although both of these statements are also true). Rather, Knightian uncertainty may involve a finite set of reasonable possibilities where it is impossible to ascertain beforehand which is more likely, or how much more likely. Of course, uncertainty could refer to an infinite range of outcomes or possibilities as well. For purposes of criminal law, however, it may be uncertain whether one is in a jurisdiction that allows the use of (questionably necessary) deadly force against an intruder in one’s home in daylight. It is not a reasonable possibility, however, that one might not be allowed to run away from a mugger. See, e.g., Barbara Fried, Ex Ante/Ex Post, 13 J. CONTEMP. LEG. ISSUES 123, 142 (2003); Johan Deprez, Risk, Uncertainty, and Nonergodicity in the Determination of Investment-Backed Expectations: A Post Keynesian
predictor in human decision-making, along with widespread risk-aversion, future discounting, and the endowment effect.\textsuperscript{181} Studies have shown repeatedly that most people are not only averse to uncertainty, they are more averse to it than to comparable levels of quantifiable risk.\textsuperscript{182} Thus, as long as one can avoid unfairness and injustice in the situation, uncertainty could prove useful in deterring people from harmful activities. If harnessed properly, uncertainty could be even more effective than regular threat-of-sanction deterrence where the risks of detection and penalty are somewhat quantifiable.\textsuperscript{183} One of the perennial problems with classic deterrence is that some individuals are risk-prefering, and criminals tend to be those individuals (thus requiring higher sanctions in order to obtain normal levels of deterrence).\textsuperscript{184} It seems, though,

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\textsuperscript{181} I recognize that these three features are often included in the list of “exceptions” to the rational-actor model, and they factor into the argument for “bounded rationality.” It is outside the scope of this article to take sides in the debate about the continuing validity of the rational actor model. For present purposes I will maintain that each of these three (future discounting, risk aversion, and the endowment effect), could just as easily be understood as part of the individual’s utility being maximized they could be seen as undermining self-maximization.
\textsuperscript{182} See supra note 49, discussing Ellsberg’s famous experiments; also see generally Ferguson & Peters, supra note 17, Basili, supra note \_\_; see also Claire A. Hill, \textit{How Investors React to Political Risk}, 8 DUKE J. COMP. & INT’L L. 283, 297-309 (1998) (discussing investor skittishness in response to any signs of political turmoil).
\textsuperscript{183} See generally Baker et al, supra note 39. Harel et al, supra note 51.
\textsuperscript{184} Indeed, Ehrlich and Posner contend, somewhat surprisingly, that certainty or uniformity in criminal law would avoid deterrence being undermined by risk-preference among would-be offenders:

Suppose that most people who engage in socially undesirable activities (criminals, tortfeasors, and other violators) are risk preferring while most people who engage in socially desirable activity are risk averse. Then an increase in specificity, by reducing the variance in outcomes associated with engaging in a particular activity, would tend to have a disproportionately deterrent effect on undesirable activity and a disproportionately encouraging effect on desirable activity. This is because people who like risk may invest in risky activities resources greater than the expected gain, while people who dislike risk may invest in the avoidance of risky activities resources greater than the expected costs of those activities, and the elimination of risk discourages both kinds of investment.

Ehrlich & Posner, supra note 17, at 262. This is a little confusing: it seems that Ehrlich and Posner are using risk and uncertainty interchangeably (which seems fairly epidemic in the deterrence literature, unfortunately), despite the authors’ clear expertise in economics. It also fails to distinguish between activities on a continuum of useful endeavors (which characterizes many torts) and crimes, which seem to border mostly behaviors “deemed contrary to some standard of good behavior.” \textit{Id.} at 277. Significantly, despite the fact that most of their article is concerned about specificity in the statutes themselves (i.e., the dangers of vagueness, or more accurately, the inferiority of legal “standards” to clear-cut “rules”), this excerpt appears to be focusing on the law in terms of outcomes, which includes enforcement patterns, sentences, and so on – they want uniform results. Again, even if one buys their argument that uniformity is one way of solving the problem of risk-prefering potential offenders, it seems that this strategy would have the inverse effect with respect to uncertainty-aversion. See also Robinson & Darley, supra note 21.
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that uncertainty-loving individuals are less common than risk-seekers; using uncertainty instead
of risk may help address this problem in deterrence.

The few commentators who have argued in favor of manipulating uncertainty to produce
useful deterrence have focused primarily on uncertainty about the size of the sanction and
uncertainty about the likelihood of detection and arrest. This is partly because these works
are building on earlier commentators who tossed about the idea of a sentencing lottery, and
law enforcement techniques that stage periodic campaigns or sweeps to rid certain
neighborhoods of gang activity or drug distributors.

A more neglected area, however, has been uncertainty regarding the lines or boundaries
of criminalization; that is, uncertainty about what the rules require and forbid. This is a separate
issue from the likelihood of sanctions and detection. Yet this could be a particularly fruitful area
to put uncertainty to work, turning it into an aversion to activities that are socially harmful.
Uncertainty about the size of legal sanctions offers more efficient deterrence in certain situations
because this type of uncertainty usually costs less to generate than the sanctions cost to impose;
more deterrence is obtained at less cost. Uncertainty about detection, which is produced when

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185 See id.; see also Ioffe, supra note 14, at 4: “[in ancient Rome], only patricians, the dominant stratum of
the Roman people (populus Romanus), had any knowledge of the appropriate customs which were concealed from
the plebeians, the stratum below the patricians.” Despite the large amount of rhetoric in modern American legal
writing about the absolute need to the law to be publicized to the citizenry in order for it to be legitimate, the Roman
system operated with secret laws and did not implode as result.

186 See David Lewis, The Punishment that Leaves Something to Chance, Phl. & Pub. Affairs 53
(1989). Lewis’ article appears to be the seminal piece among those arguing that there may be some advantages to
uncertainty about criminal sanctions. Lewis’ ideas were provocative, but have not caught on—there is still a strong
resistance in the legal community to disparities in sentences in general (although disparities continue to be
commonplace), so the idea of creating intentional disparities strikes many as regression rather than progress. See
Harel & Segal, supra note 51, at ___; Baker et al., supra note 39, at 12-14 (both articles discussing the idea of
sentencing lotteries). A New York City judge was censured in 1982 for flippuing a coin to decide whether to give a
defendant twenty or thirty days in jail. See Judith Resnick, Precluding Appeals, 70 Cornell. L. Rev. 603 (1985).
Richard Posner simply calls this “irrational.” See POSNER, ECONOMIC ANALYSIS OF LAW, supra note 7, at 267:

The requirement that the law must treat equals equally is another way of saying that he law must
have a rational structure, for to treat differently things that are the same is irrational. . . . Insofar as
the law has an implicit economic structure, it must be rational; it must treat like cases alike.

187 See generally Baker et al., supra note 39.
police do random, unannounced sweeps or enforcement campaigns, also produces higher avoidance of bad activities at less cost than doing consistent sweeps and campaigns. The same principle applies to the rules themselves. Where people have a fuzzy knowledge that a certain type of activity could subject them to criminal liability, but they are uncertain about the exact parameters of the rules, the tendency, according to most studies, will be for people to steer clear of the activities as much as possible; in many cases, such as crimes against the person and crimes against property, such circumspection would be socially desirable. The risk that socially useful activities will be over-deterred is small for most serious crimes, because even activities near the margins of illegality are generally undesirable.\footnote{In addition, the risk of undercompliance is lower with small amounts of uncertainty than overcompliance would be. See Craswell & Calfee, \textit{Deterrence and Uncertain Legal Standards}, supra note 18, at 280, 299.} There is also a possibility that the levels of uncertainty can be adjusted depending on the crime, by having more uniform (i.e., universal) rules, which are simpler, clearer, and perhaps more well-known.\footnote{Notoriety can be gained in limited cases through extensive publicity (though this is not feasible for every law); an example would be the FBI copyright warnings displayed at the beginning of almost all rented videos and DVD’s. On the other extreme, associating a sensational sanction with certain serious offenses can garner media attention, etc. On the issue of tweaking the level of uncertainty itself to find optimal deterrence levels, Craswell & Calfee offer the following from their analysis of the negligence rules in torts: Thus, an uncertain “gross negligence” standard (one that is centered significantly below the optimal level of care) could generate much the same incentives as would be generated by an ordinary negligence standard (one set at the optimal level of care) in the absence of uncertainty. If the uncertainty is unavoidable, the uncertain gross negligence standard could actually be superior to an uncertain ordinary negligence standard. In other words, depending on the extent of uncertainty (and on various other factors) legal rules that appear to be aimed too high or too low can sometimes create just the right incentives for optimal compliance. \textit{Id} at 285.}

Activities involving the line between harmful/useful activities by businesses should be treated separately in any case, because businesses are much more likely to have ex ante legal counsel about their activities. The fact that businesses are more likely to get professional legal advice beforehand means both that uncertainty will be more difficult to foster (but may be less
desirable in this case), or will require unique measures to outwit or outmaneuver corporate attorneys.190

In general, though, it is well-established in the economic literature that individual investment drops when uncertainty is present (as opposed to risk).191 There is no reason that this could not be applied to the “investment” of resources and activity in crime. To some extent, of course, this area—uncertainty about the law’s contents—may be more of a sacred cow for those who argue that uncertainty undermines the legitimacy of the legal system.

For example, consider the felony murder rule,192 which could be seen as one of the purest examples of maintaining uncertainty at optimal levels.193 Perpetrating a felony often involves the rule of violence: forceful self-defense (for crimes against person), defense of property (for theft crimes), and resorting to violent self-help in the “victimless” crimes that involve forbidden

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190 See Kaplow, supra note 94. Of course, some commentators feel that uncertainty for corporate crime is still undesirable. See, e.g., John S. Baker, Reforming Corporations through Threats of Federal Prosecution, 89 CORNELL L. REV. 310, 320 (2004) (“[V]agrancy laws that do not clearly define what is criminally proscribed are unconstitutionally vague because such laws do not provide adequate notice to affected persons . . . The [new Justice Department] organization guidelines, however, allow for increased punishment for failing to take ‘good citizen’ actions . . .”).

191 See supra note 54 and sources cited therein.

192 For an excellent and fascinating discussion of the felony murder rule, including a defense of its retention, see Susan Waite Crump & David Crump, In Defense of the Felony Murder Doctrine, 8 HARV. J. L. PUB. POL’Y 359 (1985). See also DRESSLER, supra note 9, at 515-26; ROBINSON, supra note 9, at 725-36. For a very thorough but slanted history of the doctrine, and the classic arguments about its legitimacy, see People v. Aaron, 299. N.W.2d 304 (Mich. 1980) (purporting to abolish the felony murder rule entirely in that jurisdiction).

193 Indeed, the rule has a long history of unpopularity, in part because commentators could not find enough deterrent value in the rule. See, e.g., La Fave, supra note 11, at 590:

Long ago Holmes, in his book The Common Law, discussing the felony-murder doctrine, supposed the case of the one who, to steal some chickens, shoots at them, accidentally killing a man in the chicken-house whose presence could not have been suspected. Holmes suggests that the fact that the defendant happened to be committing a felony when he shot is an illogical thing to fasten onto to make the accidental killing a murder, for the fact that the shooting is felonious does not increase the likelihood of killing people. “If the object of the [felony-murder] rule is to prevent such accidents, it should make accidental killing with firearms murder, not accidental killing in the effort to steal; while if its object is to prevent stealing, it would do better to hang one thief in every thousand by lot.”

The irony of the quote from Holmes is that he sees the deterrent value of uncertainty, going so far as to propose (perhaps the original source of this idea) a sentencing lottery for thieves; but he does not see how the same principle could apply to the would-be thief planning to go armed to the chicken farm. For a similar issue relating uncertainty to accomplice liability for killings in perpetration of theft, see Hamilton v. People, 113 Ill. 34, 55 Am. Rep. 396 (Ill. 1885) (three thieves stealing watermelon from a field scuffle with the farmer, whom they eventually shoot to death).
transactions between willing parties. The would-be felon might be tempted, therefore, to go armed into the activity, lest he find himself outgunned. A clear-cut felony murder rule, however, is something the perpetrator might be able to work around, by stopping short of killing the retaliatory victim; if the felony murder rule involves no uncertainty, it is, after all, just the murder rule. Most crimes can be perpetrated without murdering the victim. In any case as the risk is more quantifiable, the perpetrator can plan ways to hedge at it or offset it.

Uncertainty in the rules changes this. Many jurisdictions will apply the felony murder rule for innocent bystanders killed inadvertently by stray fire from the felon when the crime scene turns into a shootout; others (sometimes the same ones) impose the charge where law enforcement officers are killed from each others’ bullets in a “friendly fire” accident; and some include liability for the death of one’s co-felons whether it comes from the hand of law enforcement, armed victims, a partner’s bad aim, or even elf-inflicted wound. If the criminal

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194 See DRESSLER, supra note 9, at 515-16. Many states, however, limit the rule to cases where the underlying felony is “inherently dangerous,” which in turn becomes a subject of debate, so that the rules in this regard contain some level of uncertainty at any given time as well. See, e.g., People v. Patterson, 778 P.2d 549 (Cal. 1989) (holding that possession, transport, and sale of drugs is not “inherently dangerous,” and cannot be the basis for a felony murder charge); People v. Phillips, 414 P.2d 353 (1966) (holding that grand theft is not “inherently dangerous” and cannot constitute the underlying felony for purposes of the rule); but see People v. Stewart, 663 A.2d 912 (R.I. 1995) (neglect of child could constitute underlying felony for rule, even though neglect is not necessarily dangerous to human life in the abstract; case-by-case approach adopted).

Similarly, some states forbid application of the rule where the underlying felony is “incorporated” into the murder itself; assault is the most common example. See, e.g., People v. Smith, 678 P.2d 886 (Cal. 1984) (holding that child abuse is an “incorporated” offense and cannot furnish the basis for a felony murder jury instruction). 195 See, e.g., Dowden v. State, 758 S.W.2d 264 (Tex. 1988) (police officer killed during shootout at police station as defendants attempted to break out their brother); ROBINSON, supra note 9, at 725–27; DRESSLER, supra note 9, at 524-26.

196 See, e.g., State v. Hoang, 755 P.2d 7 (Kan. 1988) (co-arsonist burned to death in fire defendant and he created); U.S. v. Martinez, 16 F.3d 202 (7th Cir. 1994). Martinez is an interesting case in terms of illustrating some of the principles being discussed here. The defendants in the (fairly amusing) case were incompetent mafia thugs whose job it was to punish pornography shops that failed to pay protection money. At some point the defendants decided to switch from using sledge hammers (destroying items in the stores) to remote-detonated pipe bombs. Although several establishments in downtown Chicago were scheduled as targets, the perpetrators did not succeed in bombing a single store; but one of them did manage to have a bomb go off in his lap, killing him. The others were charged with racketeering and attempted arson; the judge applied a sentencing enhancement, however, that essentially invoked a felony murder rule, ratcheting up some of the sentences significantly. The defendants claimed on appeal that this was unfair because their co-felon had died by his own hand, and because his death was so unforeseeable as to make punishment unfair.
knows the rules with certainty ahead of time, planning can reduce the risks of any of them (targeting only isolated victims with a team of co-felons; or working alone, to avoid liability for a partner’s death, or the partner being trigger-happy). The uncertainties of the situation, however, should push against the idea of going armed at all. Going unarmed counsels against choosing crimes that are likely to escalate into violent self-help or retaliation. The ideal, then, may not be for the criminal to be warned of the precise rules in her jurisdiction, but rather to know generally that something like this rule exists, with varying parameters. First-year law students find it bothersome that the felony murder rule varies from jurisdiction to jurisdiction: would-be perpetrators would find this even more bothersome, which is a good thing. In the end, the instinctive reaction to limited uncertainty is a cautious retreat somewhere toward the boundary of security. The framing effect from having any type of “felony murder” rules is conducive towards reconceptualizing one’s course of action. This mental framing, combined with the aversion to the uncertainty about exactly “where the boundaries lie,” pushes in the direction of desirable, law-abiding behavior; for most, it creates a relatively stable equilibrium.

The greater aversion individuals have to uncertainty as opposed to risk means that even risk-
preferring individuals – who might be undeterred by normal threats of sanctions – could find uncertainty to be a significant disincentive. 198

A similar analysis applies to the classic affirmative defenses to crimes, such as the permissible level of force for self-defense (or defense of property). The rules vary across space and time as to how far one can go to ward off attackers, vandals, or thieves. Here the natural policy goal would be for people to use the least amount of violence necessary for self-help, and to reserve deadly force as the last resort. The rules seem to be variations on this theme, balanced against competing concerns that victims not be disfavored in the law as opposed to criminals. At the same time, the moment of confronting an intruder, mugger, or assailant is not a prime instance for cool, measured responses or reflective workarounds. Such adrenaline-dominated moments seem to be poorer candidates for behavioral regulation in the form of precision rules and graded repercussions; a more intuitive type of deterrence is more appropriate. The fact that the rules for appropriate responses vary, change frequently, but still hearken to familiar themes, pushes in the direction of generally “playing it safe,” regardless of the excitement of the moment. The results are likely to fall within the penumbras of the rules.

Saying that contradictory rules (state-to-state) or inconsistent results might be desirable is admittedly radical; saying that inconsistency aids deterrence almost heretical to the classic literature. Uniformity and consistency have been traditional benchmark goals of deterrence theory. Yet where the citizenry is chronically ignorant about the precise rules, variations between jurisdictions, court decisions, and within a jurisdiction over time (through incremental

198 Myriad other crimes could supply examples of state-to-state variations in the rules. For example, the rules surrounding kidnapping appear to be in a state of flux (perhaps because modern inventions such as the automobile, modern interstate organized crime, and modern financial vehicles for untraceable ransoms have changed the nature and frequency of the crime); a high level of uncertainty is present. This has led some commentators to complain that the rules are so broad that “virtually every assault, robbery, sexual assault, and some murders will constitute both the substantive offense plus kidnapping.” Karen Bartlett, Hines 57: The Catchall Case to the Texas Kidnapping Statute, 35 St. Mary’s L. J. 397, 420 (2004). It is difficult to see a net societal loss involved in deterring these appurtenant activities to kidnapping.
changes in legislation) all provide benefits that must be weighed against their costs. This is not to say, of course, that inconsistent results should escape scrutiny for the possible taint of prejudice; but where prejudice is absent, varying rules and outcomes can provide certain benefits.

Concerns about excessive discretion for prosecutors, judges, and law enforcement are also valid; often the discussions about the necessity of the notice requirement focus on the potential for abuse without it. Vague statutory terms are inherent delegations of discretion, and therefore delegations of power to these three groups of state actors. Each could target

199 In general, specificity in the rules addressed to the state will be inversely proportional to laypersons’ knowledge, that is, the citizenry’s grasp of the rules. Increased complexity or specificity in the rules, however, should lower the amount of litigation in criminal law, fostering more plea bargains (and therefore fostering judicial economy). Citizens, out of aversion to the increased uncertainty, will steer clear of violations even more, meaning fewer violations will occur at the borderline of illegality. Fewer violations at the borderline of illegality means fewer disputes about the borderlines of rules, or ambiguities in the wording. There should be a tendency toward polarization, as more people steer further away from potentially illegal conduct and those who do violate the rules do so defiantly or flagrantly. This simplifies the process of establishing guilt, because more of the violations that do occur will fall well within the boundaries of the rule’s proscriptions. The outcome of trials for arrestees, therefore, will be more certain and predictable, which encourages more pre-trial settlement (plea bargains) and fewer costly trials. In other words, increased specificity and complexity in criminal laws, which increases uncertainty for most citizens, should mean that actual prosecutions are somewhat pre-screened to have obvious outcomes. See Ferguson & Peters, supra note 17, at 17 (arguing that vague rules “reduce the efficiency of the legal system,” because “when rules are vague there are more disputes over which activities prohibited and which ones are not.”).

In addition, the relevant state actors will have more specific, clear rules to apply to the case, further increasing the predictability of the outcome of a trial, and therefore enhancing the process of settlement (plea bargains). Overall, therefore, the model suggested here could help explain the growth in plea bargains and the shrinking role of criminal trials in our legal system as rules have become more complex, specific, and varied among jurisdictions (the common law was simpler and more uniform, ironically). If this hypothesis holds up, there could be a normative implication that the model presented in this article – i.e., advocating that limited uncertainty is useful in generated law-abiding behavior – could also be more efficient as it reduces overall litigation costs. An interesting side issue is that the self-selection process that would occur (toward clear-cut criminal cases where arrests are made) could also affect the ratio of evidentiary vs. rule-ambiguity disputes as the issue in the cases that actually do go to trial.

200 The flip side of this idea, however, is that highly specific terms create loopholes, which are most likely to be known by insiders in a regulated industry or community (although this only sometimes pertains to criminal law). Complexity and specificity in regulatory terms, therefore, are indications of “agency capture” by the regulated community itself. See Ferguson & Peters, supra note 17, at 5 (“[I]f regulators are ‘captured’ by industry, then regulations will tend to be less vague and, consequently, overly strict. These more specific (and strict) regulations effectively provide industry insiders with a roadmap that enables them to uncover and exploit loopholes, and insulates them from outside competition.”). They conclude their article with a helpful example:

An amusing illustration of the tradeoff between specificity and loophole creation appears in George Orwell’s Animal Farm. When the animals take over the farm from its human owners they paint some very general rules (the “seven commandments”) on a barn wall including, “No animal shall sleep in a bed,” “No animal shall drink alcohol,” and “No animal shall kill any other animal.”
unpopular individuals unfairly, or act out of vested interests, or could simply be arbitrary and capricious.\textsuperscript{201} It is undeniable that unfettered government has a tendency toward the tyrannical; it is also generally agreed that tyranny is socially costly. State actors can have strict, clear boundaries and limits, however, without necessarily implicating the information gap for the citizenry. The rules that delimit judges and prosecutors do have to be in the minds of everyone else.\textsuperscript{202} What is needed in this regard is for the citizens to know with some assurance that such rules exist, that the existence of such rules could be verified. It may also be helpful for the citizenry to know that truly outrageous rules would or could be noticed and decried by the relevant state actors and legal professionals. These safeguards are the subject of the next section.

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\textsuperscript{201} See generally Jeffries, \textit{supra} note 11, at 201-19; M. GLENN ABERNATHY AND BARBARA A. PERRY, \textsc{Civil Liberties Under the Constitution} 39-40 (6\textsuperscript{th} Ed. 1993)

\textsuperscript{202} Richard Posner explains that such concerns are really agency costs that are typically (but I maintain not necessarily) associated with legal uncertainty, particularly in the form of vagueness. His statement includes his own view of the law’s addressee:

> Another problem with a broad standard is that it raises agency costs. It is harder to determine whether law enforcement officers and judges are straying outside the boundaries of their authority in prosecuting and adjudicating. Rules and standards are addressed not only to the persons out there in society whose behavior the legal system wants to constrain but also to actors within the legal system—the society’s agents.

POSNER, \textsc{Economic Analysis of Law}, \textit{supra} note 7, at 557. While I disagree that the law is “addressed” to the “persons out there in society” (obviously), I interpret his conclusion to be a hint at exactly what I am saying: that the existence of the rules addresses the state-actor agency problems.
V. NOTICE

The notice requirement has a threefold purpose in my model. First, it sets an important limit on the uncertainty confronting citizens about potential criminal liability; while they may not know the particulars of the rule, simply knowing that there are particulars of the rule assures citizens that the range of possible outcomes is not infinite. The important thing from a deterrence standpoint is that the uncertainty lies within a limited enough range that it can be avoided by choosing alternative (clearly legal) behaviors. This is the “play it safe” or “steer clear” concept: the uncertainty needs to be clustered around a point just enough so that citizens can steer clear of it, driven by their aversion to uncertainty.

The “chilling effect” of uncertainty is not a genuine drawback unless the criminal activity closely borders useful or desirable activities; this is certainly the rare exception, not the rule. Uncertainty that is too expansive, of course, creates a problem because by definition useful activities will abut illegal ones. While there are occasionally loitering statutes that crumble under constitutional scrutiny, most criminal laws do not contain or engender such expansive (approaching infinite) uncertainty. The problem with loitering statutes, incidentally, is not the uncertainty – citizens actively engaged in productive or useful activities can usually steer clear of them – but rather the excessive delegation of power and discretion to bottom-tier law enforcement, creating a situation prone to abuse as agents act out of self-interest or vendetta rather than the public interest.

Although I am not advocating uncertainty caused by intentionally vague rules, Ferguson and Peters argue that vagueness in the rules fosters a chilling effect, which is sometimes helpful as a deterrent, despite the drawbacks: 

[V]agueness creates a chilling effect. Increasing uncertainty about which activities are restricted and which ones are not causes individuals to overcomply with the rules. This overcompliance leads individuals to underinvest in socially (and privately) desirable activities. . . In other words, for a given aversion to risking punishment, the vaguer the rule the greater the overcompliance. This is the chilling effect. Second, the more vague a rule is, the more difficult it is to engage in schemes to evade it. Vagueness elevates the importance of the spirit of the law relative to the letter of the law. Vague rules are less well defined, which makes it more difficult for skilled entrepreneurs to create loopholes. In this way vagueness combats the erosion that accompanies loopholes.

Ferguson & Peters, supra note 17, at 16.
uncertainty; it is false certainty. Complete absence of information is not the goal; rather, the goal is an uncertain but still bounded range of possible liabilities.

Second, the notice requirement avoids the true dangers of legal uncertainty, that is, the agency problems involved in delegating unfettered discretion to enforcement officers or prosecutors (or courts, for that matter). The relevant actors are bound by rules; the citizens need not fret unduly that the uncertainty creates an opening for abuses of authority. The potential tyranny of enforcement agents with too much discretion delegated through vague statutory terms is the only true drawback of uncertainty; the notice requirement functions as a partial safeguard against open-ended discretion.

Third, the notice requirement also confines legal uncertainty within manageable limits because it generally restricts changes in the law to incremental amendments. The fact that changes must be enacted by a legislature and published limits both the frequency and amplitude of the changes. The notice requirement imposes substantial transaction costs on any change

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204 See POSNER, ECONOMIC ANALYSIS OF LAW, supra note 7, at 556-57. See also L.C. & S. Inc. v. Warren County Area Plan Comm’n, 244 F.3d 601, 602-3 (7th Cir. 2001), in which Judge Posner explain that law’s “prospective character enables persons affected by it to adjust to it in advance . . .Prospectivity and generality of legislation are key elements of the concept of the rule of law. . . :” He adds that the right to notice, which he calls part of “the essence of that concept,” is a substitute for prospectivity, and is necessary to protect citizens from oppression by legislators and from tyranny by electoral majorities.”

This is an important point to clarify: I am not arguing that rules should be written so as to be vague. Rather, rules should be written with the specificity and complexity appropriate to guide prosecutors, lawyers, and judges, to whom they are addressed. That fact that this perpetuates the chronic problem of widespread ignorance of the law (among laypersons) is not problematic, however, for deterrence. In addition, I want to emphasize that the uncertainty being harnessed for its deterrent value is not the uncertainty that comes from statutory language so vague as to delegate unfettered power in the police. Rather, it is the overall uncertainty derived from the fact that the rules vary between jurisdictions, change (incrementally) from time to time, are enforced somewhat randomly, and are generally not communicated directly to the citizenry (which would be infeasible in any case).

205 For background discussion, see generally Jeffries, supra note 11, at 196-97; DRESSLER, supra note 9, at 43-46; ROBINSON, supra note 9, at 75-77. There is, of course, a difference between “vagueness” and “ambiguity,” in statutes; the former means the terms could describe an almost infinite range of activities (no clear lines at all), while the latter describes (typically a single term or phrase) that could have two meanings, and a court must decide which to use. The two are treated differently by the judiciary: vagueness can become a constitutional issue (depriving citizens of due process), which makes a statute void, while ambiguity is simply resolved with a tilt in favor of the defendant (the “rule of lenity”). See, e.g., id. at 76; Rewis v. United States, 401 U.S. 808 (1971) (addressing ambiguity in interstate criminal activity statute).

206 Ehrlich and Posner observe a similar point:
in the rules, which in turn substantially limits the range of possibilities for criminal liability. The continuity that is fostered by this incrementalist regime facilitates the pursuit of activities that have not brought liability thus far, and the avoidance of new activities that pose less known (from a Bayesian standpoint) risks of liability. While this phenomenon could be seen as a “chilling effect” on innovative activities or experimentation in behavior, it could just as easily seen as a positive reinforcement of socially desirable activities, a discouragement from deviating away from useful pursuits.

In spite of these apparently sensible grounds for the notice requirement, the judicial rhetoric has traditionally emphasized the mythological communication of rules and sanctions directly to the citizenry. While my model provides a rhyme and reason to the actual rulings in this area (notice, vagueness, *ex post facto* laws, etc.), the communication-based rhetoric is shown to be disingenuous and probably dispensable.

"The idea of secret laws is repugnant. People cannot comply with laws the existence of which is concealed."\(^{207}\) After such a statement, one might have expected Judge Posner to rule in favor of the appellant deportee who could not have known that the deadline for filing an immigration petition had suddenly changed, decreasing from ninety to thirty days; the new

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The formulation of a statutory rule requires negotiation among the legislators. This makes legislative production an extremely expensive form of production: the analysis of transaction costs in other contexts suggests that the costs of legislative negotiation are likely to be substantial due to the number of legislators whose agreement must be secured. The costs of negotiation will be even higher when a proposed rule is controversial, that is, costly to a politically effective segment of the community.


207 Torres v. INS, 144 F.3d 472, 474 (7th Cir. 1998). The petitioner in this case was a Guatemalan alien who had entered a sham marriage in order to prolong his legal stay in the United States; when the INS discovered his ruse, it denied his application for permanent residency and, after a series of unsuccessful applications for asylum, ordered him deported. *Id.* at 473. The final deportation order occurred on December 17, 1996; there had been a long-standing rule that deportees could appeal such orders into federal circuit court within ninety days, so Torres did so on March 14, 1997. Unbeknownst to Mr. Torres or his attorney, the time period had been changed pursuant to a rider on the “Nurse’s Act,” §309(c)(4)(C), that was passed on October 11, 1996. Pub. L. 104-32, 110 Stat. 3657 (amending 8 U.S.C. § 1105a(a)(1)). The change made his petition overdue, although under the previous, published rule it would have been timely.
regulation was effective despite being unavailable in print form or on computer databases such as Westlaw or Lexis-Nexis.\(^{208}\) Even the appellant’s attorney would have discovered only by a minor miracle, it seemed.\(^{209}\)

Instead, Judge Posner ruled against the defendant, explaining that the legislature cannot possibly be expected to ensure that everyone knows the rules before being held accountable:

But it is an impermissible leap to conclude that Congress is under a constitutional duty to take measures . . . to make sure that no one is caught unawares by a change in law. The duty of fair notice of changes in law is a technical and qualified one. Many laws take effect on the date of enactment . . . . Civil laws are sometimes (tax laws routinely) made retroactive, which means that they go into effect before publication; and this is allowed. Judge-made rules of law are frequently changed by judicial decision, and the change goes into effect on the date of the decision, which means before publication in the law reports. Ignorance of a statute is generally no defense even to a criminal prosecution, and it is never

\(^{208}\) *Id.* The same page of the opinion explains how even the deportee's attorney would have had great difficulty discovering the change in time in this case:
West Publishing Company had not yet published the reform act in or as a supplement to the United State Code Annotated. And a search of the Immigration and Nationality Act on either Westlaw or Lexis-Nexis (or both), the standard computerized databases for legal research, would not have disclosed that the 90-day provision had been repealed. A search of Westlaw's Public Laws database would have revealed both the Omnibus Consolidated Appropriations Act and the Extension of Stay in the United States for Nurses Act, but neither of these titles would have alerted the reader to the fact that the acts had changed the period within which to seek judicial review of orders under the immigration laws, although the full title of the Nurses Act does imply a connection to immigration.

\(^{209}\) *See id.*; the opinion explains how difficult it would have been for even an attorney to find the new rule in the published acts (which had not been published, actually, by the major reporters):
Congress passed the immigration reform act as part of the Omnibus Consolidated Appropriations Act of 1997. That act is 1,927 pages long and contains no index. Section 309(c)(4)(C) appears on page 1,699. The provision of the Nurses Act that amended the section to eliminate an ambiguity that made it uncertain whether the new 30-day limit would apply to petitions for review filed within the first 180 days after the enactment of the reform act is part of a separate law, not part of the Omnibus Consolidated Appropriations Act. Both acts were "published" in the sense that Congress printed them up and made them available for distribution on the dates of their enactment. But when, in January 1997, the Board of Immigration Appeals having the previous month entered its final order of deportation against Torres, Torres' counsel researched his client's right of judicial review, West Publishing Company had not yet published the reform act in or as a supplement to the *United State Code Annotated.* And a search of the Immigration and Nationality Act on either Westlaw or Lexis-Nexis (or both), the standard computerized databases for legal research, would not have disclosed that the 90-day provision had been repealed. A search of Westlaw's Public Laws database would have revealed both the Omnibus Consolidated Appropriations Act and the Extension of Stay in the United States for Nurses Act, but neither of these titles would have alerted the reader to the fact that the acts had changed the period within which to seek judicial review of orders under the immigration laws, although the full title of the Nurses Act does imply a connection to immigration.

*Id.* at 474.
a defense in a civil case, no matter how recent, obscure, or opaque the statute. A
defendant convicted of a crime created by a statute that took effect the day before
he committed the crime would ordinarily have no defense of lack of fair notice,
even if the enactment of the statute had received no publicity at all, so that the
defendant had proceeded in warranted, perhaps indeed unavoidable, ignorance of
it. 210

At first blush, this seems merely to illustrate the difference between the concepts of
“actual notice,” meaning the individual actually had subjective knowledge of the law, and
“constructive notice,” meaning (broadly) that the defendant could have had knowledge of the
law—that is, knowledge was offered or made available.211 The very issue in this case, however,
was that the law was not available, not knowable, for which the Court is largely unapologetic.
The Torres case casts doubt on whether a “notice requirement” has any meaning for defendants
in practice.

Judge Posner points out that this fits well with the traditional rule that “ignorance of the
law is no excuse;”212 the ignorantia juris rule makes it irrelevant that the defendant did not have
access to legal knowledge. In fact, the Torres case seems to imply that the inaccessibility of
many rules, especially newly enacted ones, furnishes part of reason for the prohibition against
“mistake of law” or “ignorance of the law” defenses; any other rule would open the floodgates
for defenses about missing statutory deadlines.213

210 Id.
211 “Constructive notice” is used here to refer to situations where public knowledge of the law; it is
sufficient that the law was passed according to established protocol and that the courts can verify its terms, even if
the parties cannot.
212 Torres, 144 F.3d at 472. (“Ignorance of a statute is generally no defense even to a criminal prosecution,
and it is never a defense in a civil case, no matter how recent, obscure, or opaque the statute.”).
213 Id. at 465. Elsewhere, Posner gives an argument similar to Holmes justification of ignorantia juris:
Legislation is prospective in effect and, more important, general in its application. Its prospective character enables
the persons affected by it to adjust to it in advance. Its generality offers further, and considerable, protection to any
individual or organization that might be the legislature’s target by imposing costs on all others who are within the
statute’s scope. The prospect of such costs incites resistance which operates to protect what might otherwise be an
isolated, vulnerable, politically impotent target of the legislature’s wrath or greed. The mechanism of protection is
similar to that provided by the principle of equal protection of the laws. Equal protection limits the power of a
legislature to target a particular individual, organization, or group by requiring that the legislature confer benefits or
impose costs on a larger, neutrally defined group; it cannot pick on just the most vulnerable. Prospectivity and
Yet the “ignorance of the law” rule and the notice requirement would normally seem to work together in the exact opposite way: it is easier to justify the *ignorantia juris* rule when the laws are readily available, leaving the defendant with little excuse. Where the rules are unavailable, it is arguably unfair to imply that the defendant should have known better. *Torres*, however, stands for the proposition that the defendant is simply out of luck if the rules change overnight, because there is no feasible way to disseminate the information to every affected party.

The generality of legislation are key elements of the concept of the rule of law, a concept that long predates either the principle of equal protection (though there is a resemblance) or the concern with procedural regularity embodied in our modern concept of due process of law. The right to notice and a hearing, the essence of that concept, are substitutes for the prospectivity and generality that protect citizens from oppression by legislators and thus from the potential tyranny of electoral majorities. The generality of legislation makes notice by service or otherwise impracticable; many of the persons affected by the legislation will be unknown and unknowable. See L.C. & S., Inc. v. Warren County Area Plan Comm'n, 244 F.3d 601, 602-3 (7th Cir. 2001).

Joshua Dressler presents this as the first rationalization for the rule (citing John Austin and Blackstone); the fact that the law is “definite and knowable” means that “there is no such thing as a reasonable mistake of law; anyone who misunderstands the ‘definite and knowable’ law has simply not tried hard enough to learn it and, consequently, is morally culpable for failing to know the law.” DRESSLER, supra note 9, at 165-66. Dressler goes on to explain that this would have been more plausible at common law when there were a limited number of crimes to keep track of; and the common law crimes were almost all *mala in se*, rather than *malum prohibitum*, meaning they overlapped largely with social values about which deed were serious evils. Of course, even at common law, the rules were relatively unknowable and constantly changing at the margins, because they were judge-made rather than being promulgated and published by the legislature. See id. at 166. La Fave takes a similar position: But even if there was once a time when the criminal law was so simple and limited in scope that such a presumption was justified, it is now an “obvious fiction” and “so far-fetched in modern conditions as to be quixotic.” No person can really “know” all of the statutory and case law defining criminal conduct. In deed, the maxim has never served to explain the full reach of the ignorance-of-the-law-is-no-excuse doctrine, for the doctrine has long been applied when the defendant establishes beyond question that he had good reason for not knowing the applicable law. LA FAVE, supra note 11, at 201.

This case involves two joined suits concerning bonds purchased to raise capital for the same group of railroads, sold by two incorporated municipalities of the State of Illinois, in accordance with a statute purportedly passed in February, 1957 in one form, and March, 1869 in another. The language reads as follows:

This bond is one of a series of twenty bonds, bearing even date herewith, each for the sum of $1,000, . . . and is issued in pursuance of an election held in said town, on the eighth day of October, 1866, under and by virtue of a certain act of the legislature of the State of Illinois, approved Feb. 18, 1857, entitled ‘An Act authorizing certain cities, counties, incorporated towns and townships to subscribe to the stock of certain railroads,’ . . . at which election a majority of the legal voters participating in the same voted ‘for subscription’ to the capital stock of said railroad in the sum of $20,000, and to issue the bonds of said town therefor; and the said election was by the proper authorities duly declared carried ‘for subscription,’ previous application having been made to the town clerk of the town, and said clerk having called said election in accordance therewith, and having given due notice of the time and place of holding the same, as required by law and the act aforesaid.
It appears as though the rule changes depending on the name of the defense or the context: the law must be widely available and accessible before criminal liability can attach, but not before the fate of one’s immigration status is permanently sealed. There may be an argument in favor of raising the bar for criminal liability as opposed to civil liability, as the former involved true deprivation of liberty and permanent social stigma; but both of these consequences frequently attend deportation as well.

When courts address the issues of vagueness, however, suddenly the notice requirement becomes sacred and inviolable. “A fair warning should be given to the world in language that the world will understand, of what the law intends to do if a certain line is crossed.”

Id. It certainly appeared to be a valid statute, and certainly was interpreted to be such by the citizenry. The Court discussed the state’s official procedure of enacting laws, the necessary percentage of the legislature for enactment, the necessity of the signature of the governor, and the subsequent duty of the Secretary of the State to have them printed in statute books, providing notice of their proper passage. Such procedure and printing were deemed necessary to enforce the validity of statutes.

The Court then discusses two subsequent dates, on which the Illinois legislature, having the false impression that the act had been properly enacted, passed statutes which, in their title and content, attempted to amend the statute. The Court notes that the Illinois legislature could have been referring to the statute at issue, then noted that it had not been properly passed, and voted to enact it in its original or an amended form from that day forward. No such language or intention was found in the legislative journals. The Court concluded that if the legislature could be forced into enacting laws, retrospectively by judicial misinterpretation, that it had not fully intended to enact, through mislabeling or mis-speaking, it “…would be dangerous, and would lay the foundation for evil practices.” The Supreme Court of Illinois had already ruled that the statute was void, not voidable, and any attempt to enforce bonds under it was therefore invalid. This ruling is therefore affirmed. These bonds had been sold by municipalities, had raised revenue for the railroads that they purported to invest in, and had supposedly been published in various periodicals advertising their sale. The case illustrates that without actual notice to the citizens, and more shockingly, the legislature, laws are sometimes followed to the letter, and claims arising out of their believed existence are pursued in the courts, civilly, all the while under the false impression that the law exists. Perhaps the most striking statement from the Court is the following:

It would be an intolerable state of things if a document purporting to be an act of the legislature could thus be a law in one case and for one party, and not a law in another case and for another party; a law to-day, and not a law to-morrow; a law in one place, and not a law in another in the same State. And whether it be a law, or not a law, is a judicial question, to be settled and determined by the courts and judges.”

Id. at 267. The lower court’s decision to allow recovery from the municipalities to the bondholder was reversed and remanded so that the municipalities could demonstrate that the law was void. It is worth mentioning that there are important sources that seem to contradict Torres. For example, the Model Penal Code specifically allows for a “mistake of law defense” where the operative law “has not been published or otherwise made available prior to the conduct alleged.” MPC § 2.04(3)(a) (1962). Of course, this pertains to a “mistake of law” defense; Mr. Torres raised a “failure of notice” defense instead (probably because it was an untimely deportation appeal rather than a criminal case), but in this particular case, there is a complete overlap between the two concepts.

216 McBoyle v. United States, 283 U.S. 25, 27 (1931) (Holmes, J.); see also Coleman v. City of Richmond, 364 S.E.2d 239, 241-42 (Va. Ct. App. 1988) (requiring that the language of the statute provides a person
invocations of the crucial need for notice appear in discussions of the constitutional ban on *ex post facto* laws: the notice is necessary to “allow people to go about their business without fear that their behavior, though noncriminal when engaged in, will subject them to punishment.” 217

The treatment of the notice requirement, then, is either contradictory, varying with the context, or paradoxical, needing a larger model to explain the surface inconsistencies. 218 The principle that laws are addressed to the state ties the otherwise conflicting cases together: notice is indispensable as a formality but irrelevant as a practicality. 219 Those responsible for processing the cases—lawyers, at the input end, and judges, responsible for outputs—simply must have the rules as their raw material, so to speak, for inputs and outputs. The citizens do not need notice themselves, 220 but do need to know that the other players in the legal game—the official players—do have it. 221

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217 Prater v. United States Parole Comm’n, 802 F.2d 948, 952 (7th Cir. 1986).
218 See generally Jeffries, supra note 11, for an excellent discussion of the contradictions and problems with notice and its related rules.
219 See id at 212 (“In the context of the penal law, it means that the agencies of official coercion should, to the extent feasible, be guided by the rules – that is, by openly acknowledged, relatively stable, and generally applicable statement of proscribed conduct.”).
220 As mentioned before, in ancient Rome, "only patricians, the dominant stratum of the Roman people (*populus Romanus*), had any knowledge of the appropriate customs which were concealed from the plebeians, the stratum below the patricians.” Ioffe, supra note 14, at 4. I am not advocating that laws actually be concealed from the citizens today, but rather observing that some complex legal systems have done this without instantly imploding.
221 I recognize that this stands in contradiction to what is considered an essential tenet of law and economics. See, e.g., Posner, *ECONOMIC ANALYSIS OF LAW*, supra note 7, at 267: “The economic theory of law is a theory of law as deterrence, and a threat that is not communicated cannot deter.” It may be true that an absolute ignorance of the law would eliminate much of its effectiveness, but it is not clear that this is possible in the real world, where a true law exists. Even where the media do not report laws, or people are illiterate and cannot read anything about the law, the basics seem to get through based on personal experience and observation—of others’ interactions with the legal system, and with one’s own lack thereof.

Apart from any of my sociolinguistic evidence, I refer again to my example of an illiterate adult who does not watch television or read newspapers (the millions of immigrants in this country who do not know any English could easily fit into this category). Posner’s statement would make it seem that such individuals would be running afoul of the law at random, and therefore relatively frequently, given the comprehensiveness and complexity of our regulatory regime. Visa and residency issues aside, this does not seem to be the case—at least, there is no reason to think that such individuals run afoul of the law more than the rest of us do. The non-English-speaking resident poses a significant problem for the traditional model of deterrence, I believe, because they manage to live their lives more or less within the ambit of the law without possibly knowing any of it (via the usual presumed communication, at
At the same time, the rules, even when unknown, are not irrelevant to the affected individual’s behavior of choices. The rule in *Torres* generally stood for the idea of hastening the resolution of one’s deportation case, within a reasonable enough time to facilitate preparation of a defense in a hypothetically meritorious case. On the other hand, one can look at the dates in *Torres* and see the pitfall of having too much certainty and specificity in the rules; the petitioner or his lawyer had waited until nearly the end of the old deadline (ninety days) even to file a petition. This is akin to filing tort actions on the last days of the statute of limitations. If Mr. Torres or his attorney had accounted more for the possibility of change, they might have filed earlier, which would be more consistent with the notion of hastening the resolution of one’s own case (the message of deadline rules). It would have been reasonable, in fact, to file as early as possible. The new rule (thirty days) probably reflected the other end of the reasonable time spectrum, the earliest possible filing time that would allow for adequate preparatory work in meritorious cases. The level of uncertainty here encourages reasonable haste, and discourages unnecessary delays; delays clog the legal system. At the same time, the uncertainty is not absolute, or even at a level that would make it pointless for the affected class to bother trying least), or having their incentives altered by it. Some would argue this is the result of social norms; but non-English-speaking immigrants are outsiders to the community in which they live (unless they live in an exclusively ethnic neighborhood, but many do not), so the “norms” idea seems to break down as well. We need a new model with a new mechanism to explain the puzzle of law-abiding behavior; I contend that the sociolinguistic model presented here provides that mechanism.

222 Historically, it seems that courts were more likely (unsurprisingly) to fixate on the notice requirement as pertains to the availability of laws in cases where the uncertainty was simply too expansive. *See, e.g.*, The Cotton Planter case, 6 F. Cas. 620 (Fed. Cir. N.Y. 1810). The *Cotton Planter* case involved a prosecution for violation of a shipping embargo that had been enacted after the ship set sail (was out of reach of land communication), but was applicable to ships arriving in port. The Circuit Court reversed the conviction and forfeiture, explaining:

> A more abject state of slavery cannot easily be conceived, than that the legislature should have the power of passing laws inflicting the highest penalties, without taking any measure to make them known to those whose property or lives may be affected by them. It is not only necessary, therefore, in a country governed by laws, that they be passed by the supreme or legislative power, but that they be notified to the people who are expected to obey them. The manner in which this is done may vary; but whatever mode is adopted, it should be such as to afford a reasonable opportunity to every person who is to be affected by them, of being as early as possible acquainted with them. ‘Whatever way is made use of, it is incumbent on the promulgators,’ says the learned commentator on the laws of England, ‘to do it in the most public and perspicuous manner.’
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at all. The uncertainty operates as unquantifiable risk of policy change, and even more unquantifiable odds of predicting the outcome; but the parties know that any change is likely to fall within reasonable increments.223

The notice requirement, then, is not just an arcane doctrine, legal formalism, or even a tangled web of unforeseen contradictions. Instead, its paradoxical nature is explained by the valuable contributions it makes to a balanced equilibrium of uncertainty, with the result that most people pursue mostly law-abiding activities.

VI. CONCLUSION

This article ties together new developments in the area of deterrence theory, information/uncertainty, sociolinguistics, and the paradoxes of the notice requirement. The classic model of deterrence assumes would-be offenders receive some kind of information about

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Id. at 621; see also ROBINSON, supra note 9, at 546 (discussing the case as an example of the MPC’s rule already in use at common law). It is fascinating that the Court here proclaims there is a duty for the legislature to find a way to disseminate new rules effectively. Of course, this case is very distinguishable from most crimes, and supports the exception to my model that I have proposed throughout the article: shipping and commerce are clearly useful activities, and the embargo at issue in Cotton Planter was clearly malum prohibitum, not mala in se. Thus, it would be socially undesirable to cause a chilling effect on otherwise legitimate shipping and commerce through uncertainty about drastic changes in the rules. Most crimes are not so appurtenant to such beneficial pursuits. It should be noted that some modern commentators take a position more like that in Torres and less like that in the Cotton Planter; see, e.g., LAFAVE, supra note 11, at 204: “A mere claim by the defendant that the statute under which he is being prosecuted had not come to his attention prior to the time he engaged in the conduct charged is, of course, not a valid defense.”

223 This was another problem with the Cotton Planter case, and similar cases; the trade embargo at issue in that case was sudden and drastic, and therefore distinguishable from most changes in criminal law. An interesting feature of the Cotton Planter case that supports another component of my thesis, however, is the Circuit Court’s suggestion about what should constitute adequate notice in cases like this one:

But as it regards laws of trade, which is the case before it, rendering penal acts, although sanctioned by former laws, and done in concurrence and with the consent of its own officers, the court thinks it cannot greatly err in saying, that such laws should begin to operate in the different districts only from the times they are respectively received, from the proper department, by the collector of the customs, unless notice of them be brought home in some other way to the person charged with their violation.

Id. at 621. In other words, the court is saying that notice for potential defendants is adequate when the relevant state actor – the customs officer, in this case – has received actual notice; the state is posited as the relevant addressee or audience.

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legal proscriptions, sanctions, and the likelihood of detection. This is founded on the overwhelming evidence that non-lawyers do not possess very good information about any of these things. The lack of information is so pronounced that the bigger puzzle is why deterrence seems to work at all, given these circumstances.

Rather than suggesting that we “solve this problem” by disseminating the information more effectively to everyone, my model accepts this legal information gap as a natural state of affairs, given that the law is truly addressed to the state. This is not to say that promulgating laws is irrelevant; on the contrary, rulemaking is valuable because it helps citizens categorize and assess various behaviors or choice alternatives, which facilitates self-control and more productive decision-making. Associating sanctions with forbidden behaviors helps draw attention to the laws themselves, and their relative seriousness. When the sanctions are known and understood, of course, they can also deter behavior under the classic model.

Uncertainty about the laws and the sanctions has drawn the attention of a few commentators, but mostly focused on one aspect or the other; traditionally, uncertainty about legal liability was viewed as something to be avoided. My model, however, assumes that appropriate levels of legal uncertainty play a vital role in deterring socially harmful behavior, just as much or more than perceived “odds” of facing certain sanctions. While Baker and Harel focused mostly on uncertainty regarding the likelihood of detection, and uncertainty about the size of the sanctions, this model gives equal emphasis to uncertainty about the parameters of the rules themselves.

Indeed, the main objections to this model are likely to be along the lines of the unfairness of uncertainty: just as Judge Posner wrote that “the idea secret laws is repugnant,”224 some will argue that it is simply unfair or unjust to punish citizens for “crossing a line” that was not clearly

224 Torres, 144 F.3d at 474.
marked. While a full treatment of the “fairness” or “justice” of uncertainty is a broad enough topic for an article of its own (and elusive enough as well), such an objection does not have to be fatal to the model presented here.225 First, the fact that people are punished without first-hand knowledge of the law is the present state of affairs, and has proved unsolvable so far; it is not a situation created by my model. Second, to the extent that borderline activities may or may not be illegal, a person who tries to walk the line of illegality can hardly claim the moral high ground. For most crimes, we want to deter both the substantive offense and behaviors that approach it. Third, for those who place sufficient value on ex ante knowledge of the law’s specifics, the notice requirement generally provides an opportunity, albeit at significant cost, to obtain the desired certainty.

The notice requirement fits well with the model of uncertainty and the state as the law’s addressee; and it sets the appropriate balance for the level of uncertainty. While citizens may have only imperfect knowledge about what constitutes a given crime, or what the sanctions may be, they are aware that such matters are delineated within fairly clear boundaries for the state actors who are processing criminal cases. In addition, the notice requirement ensures that

225 The allegation of unfairness regarding any defect in laws arises on both the individual and societal level. An individual defendant who receives a harsher sentence than another defendant guilty of the same crime will naturally cry foul; and where the inconsistencies over time evince a pattern of disparate treatment for certain groups, there is a collective complaint. Often such societal-wide disparities in treatment occur via overly vague rules that delegate too much power and discretion to the bottom two or three tiers of the state’s police power hierarchy (officers, chiefs, and prosecutors). There is, however, an argument that precise, complex rules create as much or more unfairness and inequality. As rules are made more specific, exploitable loopholes erode the overall deterrence (and hence, order in society). The brunt of enforcement under these circumstances falls on the least sophisticated, or at least on those with the least access to ex ante legal advice (typically those with greater resources). In addition, to restore or maintain the accustomed level of order or adherence, enforcement will become stricter and harsher to offset the erosion of the rules caused by loopholes. The argument goes, then, that those without access to the loopholes – generally, those already disadvantaged in society – thus receive more frequent and more severe punishments, under this theory, as rules become more specific, bearing the brunt of the social costs of punishment. They will also bear the brunt of any overdeterrent effects of the rules (less of a problem for mala in se crimes than malum prohibitum ones, of course), taking fewer opportunities to invest in potentially fruitful opportunities. See Ferguson & Peterson, supra note 17, at 21. While I do not advocate intentional vagueness in legislative drafting, pace Ferguson and Peters, their point about the redistributive effects of legal certainty versus uncertainty are thought provoking, and could apply to uncertainty that is not tied to vagueness, such as that espoused in this article.
changes in the law occur relatively incrementally. This allows citizens to comply with the law by erring on the side of safety. Notice is a paradox when studied under the case method; but it provides a unifying theory for deterrence and rulemaking when considered from this new perspective.