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Mindlessness and Nondurable Precautions

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INTRODUCTION

Memory is a funny thing. Sometimes, remembering to do a simple task, like picking up milk on the way home from school, can be quite a challenge. More often, remembering occurs with no effort at all. For example, typing on a computer keyboard usually requires no conscious effort whatsoever to remember the positioning of the letters. The realization that some memory tasks are more costly than others has important implications for the economic analysis of tort law because the positive cost of remembering should affect the calculation of negligence under the Hand formula.[1] In other words, if remembering is sufficiently costly, a reasonable person might sometimes forget to take a precaution. Contrary to this intuition, recent scholarship has suggested that negligence law contains a pocket of strict liability that imposes an absolute duty to remember to take proper precautions.[2] If, as Professor Grady asserts,[3] forgetfulness is "per se" negligence[4] and remembering is costly, then the implications for law and economics are striking.

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[1] *See* United States v. Carroll Towing Co., 159 F.2d 169, 173 (2d Cir. 1947) (defining negligence as failure to prevent loss when cost of prevention is less than probability loss will occur multiplied by its magnitude).

[2] *See, e.g.*, Mark F. Grady, *Why Are People Negligent? Technology, Nondurable Precautions, and the Medical Malpractice Explosion*, 82 NW. U. L. REV. 293, 303 (1988).

[3] *Id.*

[4] Technically, "per se" negligence is the violation of a criminal statute that results in harm to the victim. *See* W. PAGE KEETON ET AL., PROSSER AND KEETON ON THE LAW OF TORTS § 36, at 227-31 (5th ed. 1984). Many courts, however, have used the term to mean "negligence as a matter of law." *See, e.g.*, Armagast v. Medici Gallery & Coffee House, Inc., 365 N.E.2d 446, 450 (Ill. App. Ct. 1977). This Article will persist in this sloppy use of the term.

First, the systematic ignoring of a significant memory cost by the common law would engender inefficient results: even reasonable forgetfulness would result in a finding of negligence. This runs counter to the assertion made by some economists that common-law rules are generally efficient. In addition, such à pocket of strict liability would explain why negligence cases exist, a problem widely debated in law and economics literature.[5] It might provide proof of a substantial insurance component in negligence law. Grady's assertion that negligence law treats questions of non-memory intensive ("durable") precautions differently than memory-laden ("nondurable") precautions[6] poses a quandary worthy of further investigation. Grady[7] and others[8] conclude that the Hand formula does not provide a sufficient explanation for the nondurable precaution cases; this Article argues that it does.

Assuming initially that negligence law does not make the distinction between durable and nondurable precautions, this Article will first explain in economic terms why the failure of courts to take into account the cost of remembering may nonetheless be efficient. A substantial body of research on the phenomenon of mindless decisionmaking ("scripting") suggests that most remembering is automatic—a nonconscious response to frequently encountered patterns of stimuli.[9] Script theory suggests that once the behavioral script is in place, an automatic response operates at a very low cost. If so, the failure of courts to account for the cost

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[5] *See, e.g.*, Gary T. Schwartz, *The Ethics and the Economics of Tort Liability Insurance*, 75 CORNELL L. REV. 313, 349 n.155 (1990). Schwartz notes:

> [A]s Shavell and Grady enlarge their analyses to take the phenomenon of inattentive conduct into account, they are required to depart from economic conventions in important ways. Each is led to recognize that in many negligence cases the basic economic rationale for the doctrine of negligence liability does not apply—and to acknowledge that in such cases the imposition of liability is, in fact, economically problematic.

Id.

[6] Grady, *supra* note 2, at 302-10.

[7] *Id.* at 294.

[8] *See, e.g.*, G. EDWARD WHITE, TORT LAW IN AMERICA 220-21, 230 (1980) (determining that it is "quixotic" to think of tort litigants who have no consciousness of accident prevention as "rational planners"); Howard A. Latin, *Problem-Solving Behavior and Theories of Tort Liability*, 73 CAL. L. REV. 677, 682-88 (1985) (suggesting that liability rules do not influence inattentive people).

[9] *See* Paul J. Heald & James E. Heald, *Mindlessness and Law*, 77 VA. L. REV. 1127, 1171-75 (1991) (bibliographic appendix).

of remembering would not be so startling.[10] An examination of the case law in Part II of this Article, however, reveals that courts do consider the cost of remembering. The common law recognizes that not all forgetfulness is negligent and authorizes juries to find that reasonable people can forget. A close look at the case law reveals the sensitivity of the common law to the vagaries of human memory and the phenomenon of mindless decisionmaking. Nonetheless, Part III suggests that a focus on nondurable precautions may help explain the existence of negligence cases. Although the case law articulates efficient rules governing negligence in cases of forgetting, high information costs of the jury system may explain why negligence cases persist.

I. MINDLESSNESS AND COMPLIANCE COSTS

In an insightful recent article, Professor Grady asserts that "negligence law does not forgive inadvertence."[11] He notes that remembering to take a reasonable precaution is often a significant part of the cost of complying with a particular standard of care and he is troubled by the fact that "[c]ourts actually exclude some compliance costs—mainly the cost of *remembering* to use precaution—from their Learned Hand calculations."[12] Apparently, Grady concludes, the reasonable person "never forgets to use a reasonable precaution."[13] If true, this would explain a great deal about the phenomenon of negligent behavior. A primary cause of negligence cases presumably would be the failure of courts to excuse reasonable forgetting—to excuse the failure to remember when the cost of remembering outweighs the benefit. This insight might go a long way toward solving the quandary of why people "choose" to be negligent.[14]

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[10] *Id.* at 1170 & n.154.

[11] Grady, *supra* note 2, at 295.

[12] *Id.*

[13] *Id.* at 303 (citing Wood v. Richmond & D.R.R., 13 So. 552 (Ala. 1893); Brett v. S.H. Frank & Co., 94 P. 1051 (Cal. 1908); Buckley v. Westchester Lighting Co., 87 N.Y.S. 763 (N.Y. App. Div. 1904), *aff'd*, 76 N.E. 1090 (N.Y. 1905)).

[14] A good summary of the most important theories of why people behave negligently is contained in Grady, *supra* note 2, at 314-19. *See also* WILLIAM M. LANDES & RICHARD A. POSNER, THE ECONOMIC STRUCTURE OF TORT LAW 72-73 (1987) (proposing four possible reasons for negligence).

Remembering is not a significant cost in taking what Grady terms "durable" precautions.[15] Durable precautions involve the use of physical devices that reduce risk, such as smoke detectors. If the cost of buying and installing a smoke detector is less than the risk of fire damage without one, then under the Hand formula it is negligent not to install one. As with other durable precautions, the costs include acquiring (or designing) and installing (or developing) the precaution. The smoke detector provides very low cost protection once it is in place. Since remembering is not a significant cost, application of the Hand formula is easy and uncontroversial.

Nondurable precautions involve human memory. For example, most smoke detectors require some maintenance. Their batteries occasionally wear down and must be replaced. Monitoring and maintaining the smoke detector are nondurable precautions. Failure to take these precautions would be negligent under the Hand formula when the cost of compliance (primarily the cost of remembering to check the batteries and the physical effort involved in the battery substitution) is lower than the expected benefit. According to Grady, however, courts do not weigh the cost of remembering.[16] Rather, forgetting to replace the dead batteries in the smoke detector is per se negligence.[17] In other words, the Hand formula is a poor explainer of cases involving nondurable precautions.

Although others have asserted that the Hand formula does not accurately define negligence at common law,[18] Grady's proposal is especially helpful in that it pinpoints the specific type of case that eludes analysis under the Hand formula. Because the law ignores the cost of compliance (primarily the cost of remembering) in nondurable precaution cases, it must not be crafted per Judge Hand's specifications. Of course, Hand's analysis of the costs and benefits only fails to explain the cases if the cost of remembering is significant. If memory costs are typically insignificant in nondurable precaution cases, then the law's failure to consider

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[15] *See* Grady, *supra* note 2, at 299.
[16] *Id.* at 294.
[17] *Id.*
[18] *See supra* notes 7-8 and accompanying text.

them would not threaten the Hand formula's explanatory power. In fact, recent scholarship in the field of psychology suggests that when a nondurable precaution is "scripted," the cost of remembering may be insignificant.[19]

Script theory was developed in the early seventies and continues to be a major movement in the study of human decisionmaking.[20] Script theorists recognize that "cognitive strain is a costly feature of thought" and assume "that individuals attempt to keep the costs of thought below some threshold set by their information processing capacities and time constraints."[21] The mechanism by which individuals reduce the cost of thought is designated as "script" development, which is nothing more than an automatic, nonconscious response to previously encountered stimuli. In other words, much of our behavior is mindless in the sense that we respond without consciously making a decision.[22] For example, once we have learned, we do not think about the mechanics of shifting gears in a manual transmission car. We do not think about where to move our fingers on our typewriters, nor do we

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[19] *See* Grady, *supra* note 2, at 302.

[20] *See, e.g.*, Ellen J. Langer, *Rethinking the Role of Thought in Social Interaction*, *in* 2 NEW DIRECTIONS IN ATTRIBUTION RESEARCH 35 (John H. Harvey et al. eds., 1978) [hereinafter Langer, *Rethinking*]; ROGER C. SCHANK & ROBERT P. ABELSON, SCRIPTS, PLANS, GOALS, AND UNDERSTANDING (1977); NEW DIRECTIONS IN ATTRIBUTION RESEARCH (John H. Harvey et al. eds., 1976); THE UNCONSCIOUS RECONSIDERED (Kenneth S. Bowers & Donald Meichenbaum eds., 1984); Blake E. Ashforth & Yitzhak Fried, *The Mindlessness of Organizational Behaviors*, 41 HUM. REL. 305 (1988); Dennis A. Gioa & Charles Manz, *Linking Cognition and Behavior: A Script Processing Interpretation of Vicarious Learning*, 10 ACAD. MGMT. REV. 527 (1985); Shinobu Kitayama & Eugene Burstein, *Automaticity in Conversations: A Reexamination of the Mindlessness Hypothesis*, 54 J. PERSONALITY & SOC. PSYCHOL. 219 (1988); Robert G. Lord & Marcy C. Kernan, *Scripts as Determinants of Purposeful Behavior in Organizations*, 12 ACAD. MGMT. REV. 265 (1987). For a bibliography of other important recent publications in the area, see Heald & Heald, *supra* note 9, at 1171-75.

[21] Warren Thorngate, *Must We Always Think Before We Act?*, 2 PERSONALITY & SOC. PSYCHOL. BULL. 31, 31 (1976).

[22] For an early appearance of the concept of mindlessness in economic legal literature, see Gary T. Schwartz, *Contributory and Comparative Negligence: A Reappraisal*, 87 YALE L.J. 697, 717-19 (1978). Schwartz recognizes that much behavior is mindless, but he is primarily concerned with mindlessness as a cause of accidents. *See id.* Although scripted behaviors may sometimes cause accidents, *see infra* notes 58, 72 & 87 and accompanying text, especially when a script is invoked out of the context in which it was developed, the research cited in this Article asserts the prudence and purposefulness of most mindless behavior. Scripted behaviors are often precautionary measures.

think about the mechanics of our golf swings (lest we make a bad swing).[23]

Our behavior is often scripted, not only when we purposefully develop mindless behavior to enable us to perform two or more tasks simultaneously (like talking to a passenger while shifting gears) or to facilitate the efficient functioning of a complex task (like typing), but also when we might otherwise perceive ourselves to be alert and functioning consciously. Studies have demonstrated that people behave mindlessly when asked for favors,[24] when asked to respond to memos,[25] when ordering in restaurants,[26] and when acting in organizational settings.[27] Even casual observation confirms the suspicion that "much cognitive and behavioral activity occurs automatically or 'mindlessly,' with little or no real problem solving or conscious awareness."[28] There can be little doubt that we function by shaping and developing our pattern of responses to frequently encountered situations until we are satisfied with the effect of such responses. At this point, we have "scripted" our behavior for similarly encountered situations and shifted into automatic mode.

In fact, scripting may be the only way we can function efficiently. Given the number of decisions we must make simultaneously, the absence of the ability to script our responses would result in absolute paralysis. For example, when we drive, we must simultaneously steer, monitor speed, check mirrors, be alert for red lights on the dashboard, listen to the radio, drink coffee, be ready to brake, etc. One study indicates a rate of 200 observations per mile.[29] What a nightmare if we had to consciously attend to all these tasks! Our ability to develop scripts and engage in nonthink-

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[23] Hence the old saw, "Do you inhale or exhale on your backswing?" Sometimes consciousness can disrupt the proper functioning of a script.

[24] *E.g.*, Ellen J. Langer & Robert P. Abelson, *The Semantics of Asking a Favor: How to Succeed in Getting Help Without Really Dying*, 24 J. PERSONALITY & SOC. PYSCHOL. 26 (1972).

[25] *E.g.*, Langer, *Rethinking*, *supra* note 20, at 35-58.

[26] *E.g.*, SCHANK & ABELSON, *supra* note 20, at 42.

[27] *E.g.*, Ashforth & Fried, *supra* note 20, at 305-29.

[28] *Id.* at 306. Ashforth and Fried conclude that "much everyday organizational behavior occurs quite mindlessly." *Id.* at 311.

[29] *See* L.G. NORMAN, ROAD TRAFFIC ACCIDENTS: EPIDEMIOLOGY, CONTROL, AND PREVENTION 51 (World Health Organization, Public Health Papers no. 12, 1962)

ing behavior is essential to modern life.

Of course, this insight is hardly original, nor the sole product of modern research. As this century turned, Alfred North Whitehead had already recognized that:

> It is a profoundly erroneous truism, repeated by all copy-books and by eminent people making speeches, that we should cultivate the habit of thinking of what we are doing. The precise opposite is the case. Civilization advances by extending the number of operations which we can perform without thinking about them. Operations of thought are like cavalry charges in battle—they are strictly limited in number, they require fresh horses, and must only be made at decisive moments.[30]

Although Lord Whitehead does not call them such, scripts are the means by which we can attend to tasks "without thinking about them."

Whitehead and modern psychologists do more than describe the ubiquity of scripting—they identify its main purpose: to conserve limited mental resources for other tasks.[31] Once in place, scripts function at a very low cost, freeing the conscious mind for other tasks. Therefore, we should not be surprised to see courts ignoring compliance costs in cases involving scripted nondurable precautions. Since the cost of remembering is insignificant once the precautionary behavior is scripted, a finding of negligence per se for forgetting to take a precaution would not be that disturbing, especially if, as psychological research suggests,[32] the vast majority of our behavior is mindless.

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[30] Alfred North Whitehead, *quoted in* Langer, *Rethinking*, *supra* note 20, at 40.

[31] *E.g.*, Thorngate, *supra* note 21, at 31 (noting that only unfamiliar "caricatures" will invoke "higher mental processes"); Sara Kiesler & Lee Sproull, *Managerial Response to Changing Environments: Perspectives on Problem Sensing from Social Cognition*, 27 ADMIN. SCI. Q. 548, 556 (1982) (discussing "the limited capacity of human beings to deal with all of the information in their environment").

[32] *E.g.*, Ashforth & Fried, *supra* note 20, at 306-13 (discussing mindlessness of much organizational script "processing"); Langer, *Rethinking*, *supra* note 20, at 38 ("*Most* behavior may be enacted without paying attention to it, even complex social interaction.").

If scripts operate at a low cost, then those applying the Hand formula could properly ignore compliance costs. In fact, the foregoing characterization of scripts gives them attributes of durable precautions, because once a durable precaution is in place, compliance costs are low. As has been noted elsewhere, "Scripts, like other cognitive structures, are durable."[33] Even Grady admits that the Hand formula does a good job explaining cases involving the failure to take durable precautions.[34]

A specific example of the scripting of such a precaution might be enlightening. When flying airplanes, pilots face sudden emergencies requiring their immediate attention. In an unexpected windshear, a pilot may have less than three seconds to make a complex guidance response or the plane is lost. In anticipation of such events, pilots engage in repetitive exercises in order to render their required responses automatic. If the windshear occurs, a pilot literally has no time to think; he or she must respond automatically. One way to generate the mindless, automatic response is through purposefully practiced repetition. This repetition is costly, but the cost involved is much like that associated with durable precautions—it is consciously expended before the hazard occurs and involves an insignificant memory component once in place. Of course, we do not consciously develop all scripts (or even a majority of them).[35] Most of our mindless behaviors emerge gradually as we internalize social norms.[36] Whether a script develops unconsciously or as the result of conscious effort, it operates at low cost. If courts fail to excuse forgetting in the context of scripted precautions, no great violence is done to the descriptive economic theory of common-law negligence.[37]

Under the appropriate circumstances, however, the law does take into account the cost of remembering. In relaxing Grady's assump-

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[33] Heald & Heald, *supra* note 9, at 1144.

[34] *See* Grady, *supra* note 2, at 301 (explaining that durable precaution cases fit neatly into economic theory).

[35] *See* SCHANK & ABELSON, *supra* note 20, at 42 (stating that scripts do not have to be based on actual understanding).

[36] Heald & Heald, *supra* note 9, at 1155-56.

[37] If pilot error is blamed in an airplane accident, then one explanation would be that the pilot failed to have scripted the proper response—essentially a failure to take a durable precaution. The pilot is not held liable for failing to remember but for failing to have scripted the proper response before the accident.

tion that compliance costs are not weighed,[38] the following section illustrates the common law's profound recognition of the economics of scripted behavior.

II. FORGETTING AND THE COMMON LAW

Those asserting the existence of a rule that makes forgetting to take reasonable precautions per se negligence[39] have greatly overstated their case. Although a few earlier cases hinted at such a rule,[40]

> the majority of the courts which have passed upon the matter, at least in more recent years, tak[e] the view that in the exercise of memory, as in other connections, the capacity of the ordinarily prudent man is the test of care, [and] have adopted a rule that forgetfulness is not necessarily negligence but merely one factor to be considered in the light of the total situation.[41]

In addition, section 289(a) of the Restatement (Second) of Torts mandates the application of the reasonableness standard to forgetfulness.[42] According to the Restatement, an actor is required to exercise "such attention, perception of the circumstances

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[38] Grady, *supra* note 2, at 302.

[39] *See, e.g., id.* at 295 ("Courts make people strictly liable when they forget to use reasonable precaution . . . ."); *id.* at 303 ("[T]he reasonable person . . . never forgets to use a reasonable precaution."); *id.* at 330 ("[T]he no-forgetting rule is so clear, most nondurable-precaution cases will get settled."); *id.* at 332 (explaining that current negligence law makes defendants liable even if "they have selected the proper rate of advertence").

[40] *See* W.E. Shipley, Annotation, *Momentary Forgetfulness of Danger as Contributory Negligence*, 74 A.L.R.2d 950, 957-60 (1960) [hereinafter Shipley, *Momentary Forgetfulness*]. Of the three cases cited by Grady, Wood v. Richmond & D.R.R., 13 So. 552 (Ala. 1893); Brett v. S.H. Frank & Co., 94 P. 1051 (Cal. 1908); Buckley v. Westchester Lighting Co., 87 N.Y.S. 763 (N.Y. App. Div. 1904), *aff'd*, 76 N.E. 1090 (1905), all involve contributory negligence, and at least one is no longer law in its jurisdiction. *See* Austin v. Riverside Portland Cement Co., 282 P.2d 69, 76 (Cal. 1955) (overruling *Brett* sub silentio). In fact, the quotation which Grady uses to state the rule in *Wood* cannot be found in the case. *Compare* Grady, *supra* note 2, at 303 & n.44 (citing *Wood* for the proposition that "forgetfulness is *per se* negligent") *with Wood*, 13 So. at 552-53.

[41] Shipley, *Momentary Forgetfulness*, *supra* note 40, at 953.

[42] RESTATEMENT (SECOND) OF TORTS § 289(a) (1965).

[and] memory . . . as a reasonable man would have."[43] Although it seems intuitive that forgetfulness is not often excused by juries (imagine the fate of an airplane mechanic who forgets to replace a damaged vital part), nothing like a per se rule prevents juries from considering the cost of remembering in making their negligence calculations.

Interestingly, the precise parameters of excusable forgetfulness seem consistent with the human decisionmaking model described by script theory. When we encounter an event, an impression is made on our memory. Researchers have gathered evidence that enough similar encounters stimulate the development of an "episodic" script—a mindless response to a simple stimulus event.[44] Related episodes act conjunctively to generate more complex "categorical" scripts, which in turn may be drawn upon by a more generalized "hypothetical" script.[45] For example, baseball shortstops practice by repeatedly fielding ground balls hit to them. Eventually, positioning, reacting to the ball, picking-up, and throwing become scripted—a mindless response to the approaching ball. The simple reflexive action to move toward the ball (getting a "good jump" on it)[46] is an example of an episodic script. The entire act from positioning to moving toward the ball, picking-up, and throwing might be termed a categorical script. A player's overall baseball script, which allows appropriate sub-scripts (fielding, hitting, spitting) to operate at the appropriate time, could be denominated a hypothetical script. Typically, some scripts are invoked automatically (spitting), others consciously (hitting).

The common law assumes we react to hazard in a similar way. A reasonable person is expected to "remember" and respond to frequently encountered dangers by scripting the appropriate response. The Restatement (Second) of Torts makes the point by describing a person who drives down a road, encounters a hazard, and has an accident:

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[43] *Id.*

[44] Robert P. Abelson, *Script Processing in Attitude Formation and Decisionmaking, in* COGNITION AND SOCIAL BEHAVIOR 33, 33-45 (J. Carroll & J. Payne eds., 1976).

[45] *Id.*

[46] This response probably has to be purposely learned to overcome the instinctive response (another script?) to move away from a hard object rocketing toward one.

> [The driver] is not negligent . . . if he has driven over [the road] on only one or two occasions, having no reason to believe that he would be required to drive over it again in the near future. He is negligent if he has constantly driven over the road and therefore should have fixed and retained in his memory the location of the [hazard].[47]

Forgetting a hazard is excusable in the absence of an opportunity to script a response: one or two trips down the road is not enough. If the hazard is to be encountered frequently, however, forgetfulness will not operate as an excuse. In such a case, failure to develop consciously or nonconsciously a script is in itself unreasonable.[48] This is in accord with the conclusion in Part I that remembering is relatively costless once a precaution is scripted.[49]

A. CONTRIBUTORY NEGLIGENCE

The most interesting discussions of forgetfulness and mindless behavior are to be found in contributory negligence cases. Victims are often less than systematic in developing scripts to counter the often random hazards created by others. We develop some precautionary scripts (for example, a follow-the-car-ahead-of-you-at-a-safe-distance script) but often dangers do not appear systematically, so scripting is often difficult for the accident victim. In addition, victims may develop scripts in one environment and then inappropriately invoke them in different environments, causing injury to themselves. The following cases illustrate how in the

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[47] RESTATEMENT (SECOND) OF TORTS, § 289 cmt. f, illus. 4 (1965).

[48] The failure is actionable whether or not the driver consciously chose to disregard the hazard. If a reasonable person would have consciously *or nonconsciously* scripted a precaution, then failure to do so entails liability. Interestingly, this posits liability without "blame" in the sense that a precaution was consciously disregarded. Yet, liability is not strict, in that reasonableness remains a defense to the failure to script the precaution. If the reasonable driver would have nonconsciously developed a precautionary script, then "blame" for not having done so rests on nothing more than sheer failure to conform to a community norm. *See* OLIVER W. HOLMES, JR., THE COMMON LAW 87 (M. DeWolfe Howe ed., Little, Brown 1963) (1881) ("The law considers . . . what would be blameworthy in the average man.").

[49] *See supra* notes 20-32 and accompanying text.

contributory negligence context script theory explains why inadvertence and forgetfulness are frequently excused.

In *Jacobson v. Oakland Meat & Packing Co.*,[50] the plaintiff was a night watchman whose duties included filling the oil in a pump run by a powerful electric motor. In order to fill the oil, the plaintiff had to lean over the motor, which was covered by a guard.[51] After a year of filling the oil, the plaintiff was informed that the guard would be removed for repair.[52] Shortly thereafter, the plaintiff forgot that the guard was missing, caught his sleeve in the motor, and was severely injured.[53] In rejecting the argument that the plaintiff's admitted forgetfulness constituted negligence as a matter of law, the court held that plaintiff's complaint stated a claim.[54] The court emphasized "the unwillingness of courts to declare that forgetting a known danger always amounts to negligence."[55] The facts suggest that application of a per se rule would have been especially inappropriate. The plaintiff had only a very brief period of time to script a response to the danger. His only knowledge of the danger was third-hand; he had not directly encountered the guardless motor before his accident. Most importantly, he had been regularly leaning over the motor for a year, and that habitual leaning may have caused his injury. He not only needed time to develop a newly scripted response to danger but also to dismantle an existing automatic response.[56] A jury question certainly existed as to the reasonableness of the plaintiff's forgetting.[57]

Two cases from Illinois illustrate the same point. In *Armagast v. Medici Gallery & Coffee House, Inc.*,[58] the plaintiff was injured when he fell through an open trap door while making a milk delivery. Although he had seen the hole upon entering the

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[50] 119 P. 653 (Cal. 1911).

[51] *Id.* at 653-54.

[52] *Id.*

[53] *Id.* at 654.

[54] *Id* at 655.

[55] *Id.*

[56] Dismantling or adapting a stubborn script may be especially costly and difficult. *See* Heald & Heald, *supra* note 9, at 1160.

[57] *Jacobson*, 119 P. at 656 ("[T]he complaint stated a case sufficient, if proven, to go to a jury.").

[58] 365 N.E.2d 446 (Ill. App. Ct. 1977).

premises, he had forgotten about it by the time he exited and walked backward into the abyss.[59] In reversing the trial court's holding that such forgetfulness was negligence as a matter of law, the appellate court noted that in four years of delivering milk to the restaurant, the plaintiff had seen the trap door open only once.[60] Should he have established a trap door avoidance script? That was a question for the jury.[61]

In *Murphy v. Ambassador East*,[62] however, where a police officer was injured by a type of elevator door that he had encountered on other occasions, the court affirmed the grant of summary judgment to the defendant on the basis of the officer's inexcusable forgetfulness.[63] Other cases allowing juries to excuse forgetfulness in confronting relatively new hazards include a plaintiff who walked into a broken meter box,[64] a plaintiff who stepped off a platform,[65] and a plaintiff who tripped over scales in a drug store.[66]

Other cases, and some of those cited above, suggest that forgetfulness is especially excusable when understandably habitual behavior causes the injury. In *Shaw v. Colonial Room*,[67] the plaintiff, after consuming four cocktails, slipped on water and toilet paper on the floor of a tavern bathroom. Although she had previously noticed the debris on the bathroom floor, she forgot about it when she "habitually or automatically"[68] reached across her body to the toilet paper roll, shifted her weight, and slipped. In reversing a directed verdict for the tavern owner, the court held that "[w]hether this momentary forgetfulness was an habitual, automatic action absolving her from the charge of negligence, or whether it showed a want of ordinary care and constituted contributory negligence, was a question for the jury."[69] Although

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[59] *Id.* at 448.
[60] *Id.* at 450.
[61] *Id.* at 451-52.
[62] 370 N.E.2d 124 (Ill. App. Ct. 1977).
[63] *Id.* at 128.
[64] Haindel v. Sewerage & Water Bd., 115 So.2d 871, 879 (La. Ct. App. 1959).
[65] Kitsap County Transp. Co. v. Harvey, 15 F.2d 166, 168 (9th Cir. 1926).
[66] Harbourn v. Katz Drug Co., 318 S.W.2d 226, 232 (Mo. 1958).
[67] 1 Cal. Rptr. 28 (Cal. Ct. App. 1959).
[68] *Id.* at 30.
[69] *Id.*

she might have remembered the hazard, her reaching-for-the-toilet-paper script may have been too difficult to override on short notice.

The court's decision has several important implications. First, it recognizes that scripts are persistent, especially those that are invoked frequently and mindlessly. When was the last time we invoked consciousness concerning the mechanics of reaching for the tissue? Second, adherence to a script may excuse otherwise negligent forgetfulness. Reasonable automatic behaviors are desirable. We should not discourage them with a per se rule mandating constant consciousness. Certainly, Whitehead would find a constant consciousness rule inefficient.[70] Often, information may be "bright"[71] enough to jolt us out of an automatic behavior (for example, when a dog runs in front of a car);[72] however, not all new information will result in the modification of behavior in light of a particularly persistent script.[73]

Similarly, the court in *Andre v. Allynn*[74] found that a boy's "instinctive reaction" in "hailing a school chum" might excuse his failure to remember the dangerous conditions present on the ramp where he was walking.[75] The court's willingness to send this case to the jury is particularly interesting given that the boy had frequently encountered the slippery conditions of the ramp and should have scripted a response. The opinion seems to indicate that the "hello" script might be so deeply ingrained as to justify the failure to invoke an important hazard avoidance script. In addition, the court noted that the boy was distracted by his thoughts concerning his upcoming choir practice (wouldn't Whitehead be proud?), which contributed to his failure to remember the slippery nature of the ramp.[76]

Not all cases uniformly allow juries to pass on the question of the

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[70] *See supra* note 30 and accompanying text ("Civilization advances by extending the number of operations which we can perform without thinking about them.").

[71] *See* Sara Kiesler & Lee Sproull, *Managerial Response to Changing Environments: Perspectives on Problem Sensing from Social Cognition*, 27 ADMIN. SCI. Q. 548, 556 (1982).

[72] Being jolted out of the cruising script may automatically invoke an instantaneous, but equally mindless, scripted response to brake or swerve.

[73] *See* Heald & Heald, *supra* note 9, at 1160.

[74] 190 P.2d 949 (Cal. Ct. App. 1948).

[75] *Id.* at 954.

[76] *Id.* at 950.

reasonableness of forgetfulness. In *Ferrie v. D'Arc*,[77] the plaintiff, as was her habit, leaned out over the back porch to feed her dog.[78] Unfortunately for her, the carpenter hired to repair the porch had not yet replaced the railing and she fell.[79] Although she testified that for years her habit was to lean out over the railing to feed her dog, the court held that her forgetting of the railing's absence on this occasion barred her recovery as a matter of law.[80] The court noted that she knew the repair work had been going on for three days, she had witnessed the absence of the rail, and, in fact, had been out on the porch a mere hour before the accident.[81] Finally, considering that the accident occurred on a sunny day at one o'clock in the afternoon, the court held that the persistence of her leaning-over-the-rail script could not excuse her forgetfulness.[82]

B. HARM TO THIRD PARTIES

The Restatement focuses on pre-accident opportunities to script a precaution, recognizing that negligence resides less in forgetting than in failing to prepare a script (taking what amounts to a durable precaution).[83] The application of script theory to negligence cases is therefore relatively straightforward. Forgetting is a term of art that means unreasonable failure to script a response to a known danger. This explains why not all accidents result in liability. Often, however, liability will result. For example, take Grady's doctor who monitors a dialysis machine.[84] He has been trained to use the machine and is familiar with its operation. A reasonable doctor must develop a monitoring script in order to be an effective long-term monitor of patients undergoing kidney surgery. When he "forgets" and causes harm, he usually will be held liable. His forgetfulness is evidence of a failure to develop an effective monitoring script. An airplane mechanic who misses a

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[77] 155 A.2d 257 (N.J. 1959).
[78] *Id.* at 258.
[79] *Id.*
[80] *Id.* at 260.
[81] *Id.*
[82] *Id.*
[83] RESTATEMENT (SECOND) OF TORTS § 289(a) (1965).
[84] Grady, *supra* note 2, at 294-95.

damaged fuel line in a routine inspection is in similar trouble. Although some forgetfulness may be purely stochastic (a random malfunctioning of a script for an unobservable reason), most forgetfulness evidences a failure to take a durable precaution—to develop a script.[85]

The law's recognition of scripting may explain the "emergency doctrine."[86] When accidents are caused by the instinctive invocation of a precautionary script, liability may sometimes be excused. In *Ballew v. Aiello*,[87] the slumbering passenger instinctively grabbed the wheel of the car when he felt the driver pull over on the shoulder of the road to avoid an oncoming car.[88] His "involuntary" and "instinctive" reactions caused the car to strike another car and injure a passenger.[89] The court held the defendant was not liable for the accident.[90]

In *Cordas v. Peerless Transportation Co.*,[91] the court held that a taxi driver did not negligently cause injury to a bystander when he jumped out of his taxi to escape a gunman who was attempting to rob him.[92] One explanation for the law's willingness to excuse the occasional instinctive response that causes an accident may be its insistence on script development as a response to danger. Why punish those who understandably, even if inappropriately, invoke a danger script? This reasoning presumes, of course, that the scripts in cases like *Ballew* and *Cordas* are desirable in most other circumstances. If such scripts were *not* desirable, liability should have followed.

III. WHY PEOPLE ARE NEGLIGENT

The question of why people are negligent is of special importance to those who apply economic models to law. Since most researchers

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[85] Or, forgetfulness may evidence a failure to maintain a script in good working order by refraining from drugs and alcohol.

[86] *See* W. PAGE KEETON ET AL., PROSSER AND KEETON ON THE LAW OF TORTS § 33, at 196-97 (5th ed. 1984).

[87] 422 S.W.2d 396 (Mo. Ct. App. 1967).

[88] *Id.* at 398.

[89] *Id.* at 398-99.

[90] *Id.* at 400.

[91] 27 N.Y.S.2d 198 (City Ct. 1941).

[92] *Id.* at 202.

in the field of law and economics assume that people behave rationally,[93] they are concerned with the phenomenon of actors who "choose" to perform at a substandard level of care. The question of why people are negligent does not focus on why they are clumsy, but rather why negligence cases persist if negligence rules are efficient:

> Under negligence, however, it might seem that the number of lawsuits should be zero. If the injurer maintains the due care level . . . he is not liable for any accidents that occur; and he will not set a lower level of care, because he minimizes his private costs by adhering to that level . . . . [T]he only victims will be victims of "unavoidable accidents," for which there is no liability under a negligence system.[94]

Professor Grady asserts that his insight into nondurable precaution theory provides a powerful explanation of why negligence cases persist (and in fact are increasing).[95] This section will examine his conclusions and offer an alternative explanation in light of previous observations about the role of the jury in determining the reasonableness of forgetting.

A. THEORIES OF NEGLIGENCE

Several suggestions have been made to explain the existence of negligence cases.

1. Judicial Error. Commentators suggest that one explanation for negligence cases is that judges may make mistakes.[96] If judges misapply negligence rules with the result that some non-negligent injurers are held liable, then some non-negligently injured parties will have an incentive to bring suit. Some undeserving parties will recover, stimulating more unjustified suits.

2. Depreciating Precedent. Another suggested explanation hinges

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[93] *See* Heald & Heald, *supra* note 9, at 1131-32.

[94] LANDES & POSNER, *supra* note 14, at 72.

[95] Grady, *supra* note 2, at 322-34.

[96] *E.g.*, LANDES & POSNER, *supra* note 14, at 72; Grady, *supra* note 2, at 317-318.

on the informational value provided by judicial decisions.[97] As precedent ages, it may become difficult to apply for both judges and the general population. When the standard of reasonable care is unclear, people may rationally decide to act with more or less than the level of care subsequently determined by a court judging the behavior.[98]

3. Disablement. Some people incur higher costs than others in seeking to maintain a reasonable standard of care[99]—perhaps they are "accident prone."[100] Such people may rationally choose to behave negligently rather than sustain the added cost of care. Of course, other accident prone people will cease a behavior entirely if they cannot conform to the standard level of care. Importantly, Landes and Posner defend the use of the reasonableness standard in part by noting the added information costs of an alternative system that uses individualized standards of care.[101]

4. Politics. A particular political atmosphere may make courts hostile to a particular class of defendants.[102] In some cases, in order to further political ends, courts might find defendants liable for non-negligently causing injuries.[103]

5. Stochastic Care. Even people who sustain average costs in maintaining a reasonable level of care sometimes will be unable to adhere perfectly to that standard.[104] Although the reasonable person takes care in shaving, she (or he) will occasionally cut her shin (or his face). Given human imperfection, some inadvertence is inevitable. Landes and Posner note, however, that the stochastic nature of care merely explains why some people cut themselves shaving.[105] It does not explain why a court would hold such

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[97] LANDES & POSNER, *supra* note 14, at 73; Grady, *supra* note 2, at 318-19.

[98] *See* Richard Craswell & John E. Calfee, *Deterrence and Uncertain Legal Standards*, 2 J.L. ECON. & ORG. 279 (1986).

[99] *See* LANDES & POSNER, *supra* note 14, at 73; Grady, *supra* note 2, at 315-16.

[100] *See* Fleming James, Jr. & John J. Dickinson, *Accident Proneness and Accident Law*, 63 HARV. L. REV. 769 (1950) (discussing implications of accident proneness for tort law).

[101] LANDES & POSNER, *supra* note 14, at 126.

[102] *See* Grady, *supra* note 2, at 319-20.

[103] Posner considered and rejected the hypothesis that animosity toward railroads caused a rise in negligence cases against railroads from 1875 to 1905. Richard A. Posner, *A Theory of Negligence*, 1 J. LEGAL STUD. 29, 85-91 (1972).

[104] *See* Peter A. Diamond, *Single Activity Accidents*, 3 J. LEG. STUD. 107, 123-40 (1974); LANDES & POSNER, *supra* note 14, at 72-73; Grady, *supra* note 2, at 320-22.

[105] LANDES & POSNER, *supra* note 14, at 72-73.

inadvertence to be negligence.[106] In a sentence that will be examined in a moment, they cryptically conclude that "[b]ecause an omniscient court would take account of the stochastic character of care . . . we are making a point about the information costs of determining negligence."[107]

6. Grady's Nondurable Precaution Theory. Building upon Landes and Posner's hint about the importance of the cost of information, Grady suggests that negligence cases exist because courts systematically ignore the very real cost of remembering to take nondurable precautions.[108] This would result in finding non-negligent injurers liable for damages they caused by reasonable inadvertence. Since nondurable precaution cases dominate negligence dockets,[109] a per se rule establishing all inadvertence or forgetting as negligent would go a long way toward explaining the existence of negligence. Case law, however, does not evidence such a rule. Although no such rule exists, Grady, and Landes and Posner, may be on a promising track.

B. JURIES, THE COST OF INFORMATION, AND BIAS

The recognition of a stochastic element in human behavior cannot in and of itself explain the existence of negligence cases. It may explain why even reasonably careful people sometimes cause injuries but, as Landes and Posner note,[110] an omniscient court would be able to sort out the inevitable accidents even reasonably careful people cause from accidents resulting from careless behavior. Courts are not omniscient, however, and, as noted above, normally leave the negligence question to juries.

Consider the following examples: one in the context of contributory negligence and one in the context of negligent injury to a third party. In the first example, Earl is sixteen years old and just learned to drive three months ago. He understands the importance of wearing a safety belt and makes it a point to buckle up immediately after putting the key in the ignition but before starting his

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[106] *Id.*
[107] *Id.*
[108] Grady, *supra* note 2, at 310-14.
[109] *See id.* at 322-34 (collecting empirical evidence).
[110] *See* LANDES & POSNER, *supra* note 14, at 72-73.

engine. Although his buckling behavior is scripted, one morning he forgets to fasten his belt. Maybe he is preoccupied with something else, or perhaps something has distracted him, but on that particular morning he has an accident and suffers injuries which the use of a seatbelt could have avoided. In the second example, Bill, a boy of similar age and experience, has not cultivated the habit of fastening his seat belt. Sometimes he does, and sometimes he does not. He, too, forgets to buckle up one morning and suffers a similarly avoidable injury. Both boys sue a third party who negligently caused their accidents, and both boys counter the charge that they were contributorily negligent by claiming excusable inadvertence.

Although both Earl and Bill forgot to take a precaution, Earl's inadvertence is reasonable and Bill's is not. Earl did what reasonable people do: he developed a buckling script. Bill did not. Bill's haphazard approach to a frequently encountered precautionary necessity resulted in his injury. Whether a jury would recognize this distinction is hard to say. As noted above,[111] the law certainly permits juries to find that some inadvertence is reasonable. Confronted with all the facts, a jury may sense the right result without being instructed about such fancy terms as "scripts."

The jury's inquiry, however, is peculiarly subjective and individualized. From all outward appearances, Earl and Bill have done exactly the same thing. Therefore, their mental states are crucial to determining whether their episodes of forgetfulness are excusable or not. This raises the cost of information to the jury. Distinguishing between careless forgetting and excusable (stochastic) forgetting is bound to be difficult. Interestingly, Landes and Posner endorse the reasonable person standard precisely because the cost of employing an individualized standard is usually too high.[112] In the particular application of the reasonableness standard to forgetting, the cost also may be very high.

Different problems may be posed vis-à-vis injuries caused to third

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[111] *See supra* part II.

[112] *See supra* note 101 and accompanying text.

parties.[113] Imagine Mary, a motorist who, after failing to look in her side mirror when changing lanes, runs another motorist off of the highway. Mary is a careful driver. Like most careful drivers, she routinely checks her mirrors. Like most careful drivers, her mirror-checking behavior has long been automatic and habitual. In other words, she long has done everything any careful person can do to maximize the chance that she will take the precaution of checking her side mirror when she changes lanes. However, on one morning, Mary forgets to check her mirror and injures a fellow motorist whom she has forced off the road. Although no legal rule prevents Mary from arguing that her inadvertence was stochastic and not careless,[114] a jury probably would not let her off the hook. How is the jury to determine whether this is excusable inadvertence or not? In addition, and maybe more importantly, a finding of excusable inadvertence would bar the recovery of damages by an innocent injured party.

Two explanations might be offered to explain a jury's finding Mary liable. First, information may be yet more costly in the context of harm caused to third parties.[115] Injurers causing harm to third parties face suffering a loss in the form of a judgment against them. As a result, juries may discount defendants' versions of the answer to the question, "Why did you forget?" Unfortunately, given the subjective nature of the inquiry, the defendant has the best access to the relevant information. Furthermore, juries may feel that, in general, people are more likely to be careless when others are the potential victims. Although economists equate the fifty percent chance of someone suffering a hundred dollar harm with the fifty percent chance that a third party will recover a hundred dollars from that person, juries may believe that a potential victim is more likely to take due care. Second, juries may have a pro-compensation bias. Excusing forgetting in the contribu-

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[113] *See* Schwartz, *supra* note 22 (noting double standard of care applied in contributory negligence and conventional negligence cases).

[114] In some contexts, courts have held particular sorts of inadvertence to constitute negligence as a matter of law. *See* Ravi v. Williams, 536 So. 2d 1374, 1377 (Ala. 1988) (holding forgetting to remove sponges from patient after surgery negligent as matter of law).

[115] To avoid part of this cost, of course, a court could adopt the "no forgetting" rule described by Grady. Grady, *supra* note 2, at 303. As noted, script theory suggests that the error costs of such a rule might be low—perhaps lower than the rate of jury error.

tory negligence context results in victim compensation. Not excusing forgetting in the context of harm suffered by third parties also results in victim compensation. To the extent that juries are likely to approve of compensating injured parties, they may be responsible for a discrepancy in the treatment of inadvertence between the two negligence contexts, a result suggested by the hypotheticals.

Interestingly, an exhaustive search of reported decisions discussing the reasonableness of forgetting reveals no cases outside the contributory negligence context, although the Restatement of Torts states a reasonableness test for judging failures to remember that "caus[e] an invasion of another's interest" as well as one's own.[116] Although the black letter law treats the role of inadvertent harm to oneself and harm to third parties the same, the intuition remains that inadvertent harm to others may be less easily forgiven by juries than inadvertent harm to oneself.

In any event, the suggestion made here is that, contrary to Grady's assertion, the existence of negligence cases is not explained by a per se rule preventing jury consideration of excusable forgetting. Rather, negligence cases exist precisely because juries are allowed to consider the reasonableness of forgetting. The practice of sending this question to the jury may result in negligence cases for several reasons. First, as just explained, the probability of error is high because the issue of reasonable forgetfulness involves the examination of a mental state: Was the forgetfulness stochastic and therefore excusable, or was it the result of a careless failure to script an appropriate precaution? If the probability of error is high, injured parties will have an incentive to litigate the question of negligence whether their injury was caused by carelessness or mere stochastic inadvertence.

This same problem surfaces in the context of the decision to sue. The potential defendant's mental state at the time of the accident is seldom evident. How is a victim to know whether a particular act of forgetfulness is excusable or not? The victim may be better off suing and taking his or her chances. Finally, when the issue is forgetfulness, juries possibly will err on the side of compensating the victim, and this may further encourage suits. This possibility

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[116] RESTATEMENT (SECOND) OF TORTS § 289 (1965).

would stimulate suits from both forgetful victims and the victims of others' forgetfulness.

This explanation is a combination of others' insights. Landes and Posner earlier identified the possibility that error (judicial error and/or the error inherent in using a reasonableness standard) stimulates negligence cases. Diamond, Grady, Landes, and Posner have noted the role that the stochastic nature of care might play in explaining why people are negligent. In addition, Grady has argued persuasively that the predominance of cases involving inadvertence indicates something special about the role of nondurable precautions in explaining negligence. The synthesis presented here concludes that the answer is not judicial error or problems with precedent—the black letter law recognizes the role scripts play in human decisionmaking and authorizes excusing the right sort of inadvertence. The high probability of jury error in answering the question of whether a particular act of inadvertence is excusable or not, combined with the possibility of a compensation bias, better explains the persistence of negligence cases.

CONCLUSION

My suggestions are not criticisms of the common law. The existence of negligence cases does not prove the common law is inefficient; it merely proves that no judge or jury is "omniscient," to use Landes and Posner's term. That practical lack of omniscience, especially in cases involving mindless behavior, guarantees a relatively certain flow of negligence cases into the judicial system. Interestingly, the insights provided by script theory do not blunt the effectiveness of the Hand formula as an explainer of the adjudicated cases for which there are written opinions. In contributory negligence cases, courts frequently recognize the persistence of scripted behavior and authorize juries to weigh the cost of advertence. In cases where forgetful actors harm third parties, the Hand formula as applied seldom lets injurers off the hook because courts rightfully treat scripted precautions as durable. In most cases, script theory is supportive of traditional economic explanations of tort law.