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Articles

WILLS AND SURVIVAL

Richard F. Storrow*

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I. INTRODUCTION

Lisa Gersten would have been a much wealthier woman if only her uncle Seymour had lived another month. It was not that Seymour himself was wealthy. Indeed, he owned no real estate and had never had much of an income. He had, though, been left a small inheritance by his parents. Named Seymour’s executor and primary beneficiary, Gersten discovered numerous storage lockers where Seymour had stashed the products of what can only be explained as a retail shopping mania: mountains of XXL and XXXL clothing, purchased with his inheritance. It took Gersten over a year to settle Seymour’s estate.

Although Seymour was not a wealthy man, he had a lifelong friend, Alan, who was. Seymour became Alan’s caregiver after Alan had a stroke. Eventually, Seymour could no longer care for Alan, and Alan moved into a nursing home. Alan had named Seymour the beneficiary of his house in the Hamptons, a manse worth several million dollars. But Seymour died three weeks before Alan. The common law doctrine of lapse states that the beneficiary of a testamentary gift receives nothing if he predeceases the testator. The property does not go to the predeceasing beneficiary’s estate unless the testator so intends. Even if Seymour had outlived Alan, in some states he would have had to survive him by at least five days to avoid lapse, in accordance with a trend in the law toward requiring survival by 120 hours.

Lapse is a venerable doctrine and a cornerstone of wills law. Its rationale, though, remains murky. As Leonard Levin has observed, “[L]apse has been largely accepted with little analysis of why the death of a beneficiary before the testator should produce such an outcome.” The doctrine’s blunt, unforgiving application has troubled courts and policy makers and has given rise to anti-lapse legislation—supposedly geared toward better carrying out a testator’s probable intent. There is reason to believe, though, that the typical testator does not fully appreciate the lapse doctrine or its various statutory exceptions. Back in 1823, the Pennsylvania Supreme Court remarked, “That a legacy lapses by the

1 80 AM. JUR. 2D Wills § 1408 (2015).
2 Id.
death of a legatee in the lifetime of the testator is a consequence known to few testators . . . "6 Although it is not known how many testators seek legal counsel when they finally get around to executing a will, it is doubtful that in the intervening 175 years testators have become more aware of how the rule of lapse will affect the distribution of their estates. It is, furthermore, not clear that the doctrine contributes in any meaningful way to the task of carrying out the testator’s intention, the paramount objective of wills law.7

This Article examines the rule of lapse, discusses how efforts to reform the damage it does has led to the doctrine of anti-lapse, and advocates an alternative approach. I argue that allowing the provisions of a beneficiary’s probated will to take the gift where the beneficiary has predeceased the testator by one year or less would be preferable to the predominant anti-lapse approach that essentially benefits a narrow set of the testator’s heirs. The argument herein rests solidly on the conviction that testators do not have in mind survival when their wills make no such indication. Thus, bequeathing property without using survivorship language to express the preference that the beneficiary possess and control it and without providing for a substitutionary gift in the event that the beneficiary predeceases the testator evinces an intention that the legatee decide who will take the property if that legatee, in turn, has exercised her intentionality by executing a valid will of her own. This alternative approach to what we currently define as lapse would unsettle certain basic tenets of wills law, namely that a testator’s will controls only the property he owns at his death.8 The rationale behind this approach, however, is to fashion lapse and anti-lapse rules that are less about creating efficiency in the administration of estates and more about the paramount goal of carrying out a testator’s intentions.

My proposal does not chart entirely unfamiliar territory. Indeed, in a narrower form it was a feature of the English Wills Act of 1837,9 and it is today found in the law of Maryland, whose statutory alteration of lapse dates back to 1810 in what can best be described as its complete

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6 Craighead v. Given, 10 Serg. & Rawle 351, 353 (Pa. 1823). Of course, the legal presumption is that testators are aware of the rule of lapse. See Aldred v. Sylvester, 111 N.E. 914, 915–16 (Ind. 1916); Detzel v. Nieberding, 219 N.E.2d 327, 331 (Ohio Prob. Ct. 1966).
7 In re Janney’s Estate, 446 A.2d 1265, 1266 (Pa. 1982) (“[T]he intention of the testator is of primary importance, the lodestar, cornerstone, cardinal rule.”).
8 In actuality a will may govern the distribution of property an estate acquires after the testator’s death. See, e.g., Mich. Comp. Laws Ann. § 700.2602(2) (West 2015).
9 Wills Act 1837, 7 Will. & I Vict. c. 26 § 33 (Eng.). For further discussion, see John B. Rees, Jr., American Wills Statutes: II, 46 Va. L. Rev. 856, 899 & n.764 (1960).
abrogation. While support for my proposal could be sought in the doctrine of independent significance or the use of powers of appointment to complete one’s estate plan—theories I explore below—it is most appropriately grounded in a straightforward use of extrinsic evidence to construe wills, as well as the philosophy of intention. I am, of course, not arguing that those who are ultimately entitled to a decedent’s property need not survive the testator, but simply that rules used to identify those who should succeed to lapsed property have outlived their usefulness.

The remainder of this Article consists of three parts. Part II examines the common law requirement of survival in succession law as a mechanism for determining entitlement to inherit or to take as a beneficiary under a will. It examines statutory approaches to survival, including the requirement’s role in intestacy law and the most common effort to circumvent its ill effects in the law of wills, the anti-lapse statute. This part also focuses on the problem of simultaneous death and examines its treatment in statutes and uniform laws. Part III probes the interrelationship between efforts to address lapse and efforts to carry out the intention of the testator. This Part urges consideration of a rule that would allow, within certain bounds, a gift to a predeceasing beneficiary to be distributed to those named in that beneficiary’s will. Part IV considers whether powers of appointment or the doctrine of acts of independent significance provide doctrinal support for the proposed rule. In what follows, although I acknowledge that the common law treated lapsed legacies and lapsed devises differently,11 this Article uses the terms legacy, devise, bequest and gift interchangeably.

II. THE REQUIREMENT OF SURVIVORSHIP IN SUCCESSION LAW

Survivorship is a central feature of succession law. In intestacy, heirs must survive the decedent to take a portion of the estate.12 If they do not, their surviving descendants “represent” them and take in their stead.13 If there are no surviving descendants of a predeceasing heir, the

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12 JESSE DUKEMINIER ET AL., WILLS, TRUSTS & ESTATES 80 (8th ed. 2009).
13 Id. at 87.
property goes to the next heir in line, according to a hierarchy established in the applicable intestacy statute.\textsuperscript{14} If the intestate decedent dies with no heirs at all, the property belongs to the state.\textsuperscript{15} With some variation at the margins, intestacy laws are quite similar across the fifty states.\textsuperscript{16} They embody the presumed intent of most people who die without making a will to benefit those with whom one has the closest kinship relationships.\textsuperscript{17} Such statutes presume, “with little or no discussion,”\textsuperscript{18} that the decedent would not have wanted his property to go to the estate of a predeceasing heir.

Survivorship is also an important feature of the common law of wills. With almost no exception,\textsuperscript{19} an individual named in a decedent’s will must survive the testator in order to benefit from it. If that individual fails to survive, the property that would have devolved to him will be distributed under the residuary clause of the testator’s will or according to the rules of intestacy.\textsuperscript{20} If he does survive, his death before the distribution of the estate’s assets is of no consequence.\textsuperscript{21} To avoid the disenfranchising effect of lapse in its common law form, the named individual must survive the testator, if only by the briefest conceivable interval of time.\textsuperscript{22}

In contrast to wills and intestacy, survivorship is not a common feature of the law of future interests.\textsuperscript{23} The recipient of a gift of a future interest need not even be alive at the time the gift is made, but must have the potential of coming into existence. For example, the future interest in an \textit{inter vivos} gift of a life estate to X with a remainder to X’s children, where X has previously died childless, would fail for lack of potential beneficiaries. If X is alive, however, and has one child, A, then A need

\begin{footnotesize}
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\item \textsuperscript{14} See id. at 88–89.
\item \textsuperscript{15} WILLIAM M. MCGOVERN ET AL., WILLS, TRUSTS & ESTATES INCLUDING TAXATION & FUTURE INTERESTS 8 (4th ed. 2001) (defining “escheat”).
\item \textsuperscript{16} Brian Peters & Michael Boehlje, \textit{A Summary of State Laws of Intestate Property Distribution and Succession} 2 (Iowa State Univ. Staff Paper No. 120, 1981).
\item \textsuperscript{17} 26B C.J.S. Descent and Distribution § 6 n.1 (2015).
\item \textsuperscript{18} MCGOVERN ET AL., supra note 15, at 420.
\item \textsuperscript{19} Two important exceptions are where the beneficiary is a debtor of the testator or vice versa. 96 C.J.S. Wills § 2079 (2015) (citing \textit{In re} Tuck, 11 N.Y.S.2d 790, 793 (Sur. Ct. 1939)). See, e.g., \textit{In re} Pierce’s Will, 276 N.Y.S. 433, 435 (Sur. Ct. 1934) (providing an exception for funeral expenses).
\item \textsuperscript{20} See generally 97 C.J.S. Wills § 2109 (2015) (stating that the lapse of a residuary bequest will be distributed to the remaining residuary legatees or to the testator’s heirs or next of kin).
\item \textsuperscript{21} \textit{In re} Hall’s Estate, 71 N.Y.S.2d 825, 829 (App. Div. 1947).
\item \textsuperscript{23} DUKEMINIER ET AL., supra note 12, at 853.
\end{itemize}
\end{footnotesize}
not survive X’s death to be entitled to the property. In the absence of a condition in the original gift, if A dies before the distribution date—the death of X—his will or the law of intestacy will direct who will be given possession.24 Although a frequently litigated question, the law does not require that someone in A’s position survive to the time of distribution.25 As will be discussed in more detail below, some states have begun to enact statutes that do away with the vested remainder approach and apply anti-lapse principles to inter vivos trusts.26

It is easy to assume, mistakenly, that the law of future interests is a contradiction of the law of wills. But a testamentary devise does not constitute a gift until the testator dies,27 whereas the conveyance of a future interest is a completed gift.28 The law of wills and the law of gifts are consistent in that they both require recipients of gifts of present possession to be living at the time the gifts take effect. Gifts of future interests, though, postpone possession.29 Since possession is postponed, the recipients of gifts of future interests need only to have a potential existence when the gift is made.30 If the hypothetical gift described in the previous paragraph were made under a will, and the gift of the remainder interest were to Y’s children rather than X’s, X having predeceased the testator and Y having survived him,31 it is easy to see that the gift to Y’s children is valid even if Y has no children.32 As long as Y is alive, her children have a potential existence and can for this reason be thought of

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28 Dukeminier et al., supra note 12, at 851.
30 Id.
31 I have deliberately fashioned a hypothetical that does not trigger the rule of convenience, which dictates that “a class will close whenever any member of the class is entitled to possession and enjoyment of his or her share.” Dukeminier et al., supra note 12, at 877 (emphasis in original). Instead, since “no members of the class have been born before the testator’s death,” this hypothetical falls within the exception to the rule that holds the class open “until the death of the designated ancestor of the class,” here Y. Id. at 878.
32 This assumes that the doctrine of destructibility of contingent remainders has been abolished in the jurisdiction in question. The Restatement indicates that nearly all states have abolished it. Restatement (Third) of Prop.: Wills & Other Donative Transfers § 25.5 (Am. Law Inst. 2011).
as having “survived” the testator.33

A. Failure to Survive under the Common Law

1. Lapse

In law, “lapse” means the failure of a right or privilege because of a contingency that has not been satisfied or a purpose that has failed or become impossible.34 The term is used in various legal contexts, including the failure of insurance coverage when premiums remain unpaid,35 the expiration of offers and options,36 and whether the lapse of time renders evidence inadmissible.37 But the most common use of the term relates to the requirement that a beneficiary named in a will survive the testator in order to take the testamentary gift.38 In other words, a testamentary beneficiary’s gift is conditioned on his survival,39 and if he does not survive the testator, his gift is said to lapse.40 Under the common law, the effect of the failure to survive makes it as if the name of the legatee is missing from the will.41 Absent a gift in substitution, whether by statutory dictate or other provision of the will, the gift will lapse and be distributed according to specific rules.42 Neither the testator’s knowledge of the beneficiary’s death, either before or after the execution of the will, nor the devisee’s death testate will change this result.43

A lapsed gift does not pass to the beneficiary or his estate, but is disposed of in another manner. Generations of law students have had to

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36 C.J.S. Vendor § 16 (2016) (offer to sell or purchase realty); Id. § 159 (options).
37 Volkswagen of Am., Inc. v. Ramirez, 159 S.W.3d 897, 908 (Tex. 2004) (distinguishing between excited utterances and deliberative statements).
40 See In re Estate of McFarland, 167 S.W.3d 299, 303 (Tenn. 2005).
41 See Robinson v. McIver, 63 N.C. 645, 651 (N.C. 1869).
43 See 96 C.J.S. Wills § 2066 (2015). Some courts have, though, entertained assumptions that by including a named individual in the will, the testator must have believed the individual to be alive. See Thomas M. Cooley II, “Lapse Statutes” and Their Effect on Gifts to Classes, 22 Va. L. Rev. 373, 403 n.90 (1936).
master these dispositional rules. The first rule in the cluster relates to the event that constitutes a lapse. When a beneficiary is alive at the time the will is executed but predeceases the testator, if the will provides no gift in substitution, the gift lapses. The remaining rules dictate with specificity the disposition of devises in the event of lapse. If the gift is to a class, the gift is shared by the surviving members of that class, the reasoning being that membership in the class is to be ascertained at the time of the testator’s death, not at the time of the execution of the will. It is not, therefore, possible for the gift to a member of a class to lapse. If the gift is not to a class and is specific or demonstrative, the lapsed portion will be distributed according to the terms of the residuary clause. If the bequest to the predeceased individual consists of the residue of the estate, the bequest will be distributed to the testator’s heirs at law under the terms of the applicable intestacy statute. Thus, the strong presumption in wills law against partial intestacy has an important exception in the doctrine of lapse. Partial intestacy may result, of course, in some beneficiaries receiving property under the terms of the will and via intestacy, a “mixing” of regimes that was disliked by the common law but tolerated under the tenet that there is no residue of a residue.

In sum, lapse is an event and its effects. It is common, though, to define lapse as constituting either the event or its effects, but not both. For example, some define lapse merely as the passing of the bequest or devise into the residue of the estate or by intestacy. Others define a
lapsed gift as “one which fails to vest when the time for vesting arrives by reason of the incapacity or unwillingness of the beneficiary to receive it.”\(^{53}\) Thus, lapse alternatively refers to the failure of a testamentary gift due to events occurring after the execution of the will or to the effect of those events on the ultimate disposition of the subject of the gift. Until a more rarefied definition or new terminology appears, it is important to conceive of lapse as encompassing both of these meanings.

The lapse doctrine is a default rule that can be altered by the use of specific terms in a will that sets up its own rules regarding survivorship. Bequeathing the property to a secondary beneficiary in the event that the primary beneficiary does not survive the testator is one such lapse-avoidance mechanism. If the primary beneficiary predeceases the testator, then the gift does not lapse but simply becomes the subject of the provision for substitution of the secondary beneficiary and is carried out according to its terms, assuming of course that the secondary beneficiary has not also predeceased.\(^ {54}\) Another lapse-avoidance mechanism is for a will to direct that the property be given to the estate of a beneficiary who has predeceased him.\(^ {55}\) As Patricia Roberts has noted, “Although such gifts are not recommended, there appears to be no policy reason to prohibit them.”\(^ {56}\)

2. Voidness

The law distinguishes voidness from lapse. A bequest is void when one who would otherwise be a beneficiary predeceases the execution of the will, regardless of whether the testator was aware that the beneficiary had already died.\(^ {57}\) There are other, less common, reasons for declaring a bequest void, such as the incapacity of a beneficiary, whether for reasons of alienage, having served as a subscribing witness, or status as *domitae naturae*.\(^ {58}\) One court has even deemed a gift to an estate void because “an estate is not a person or legal entity.”\(^ {59}\) Void bequests are “incapable

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\(^{53}\) GARDNER, *supra* note 52, at 575; see also Chaffin, *supra* note 11, at 269–70.

\(^{54}\) 97 C.J.S. *Wills* § 2082 (2015).


\(^{57}\) 97 C.J.S. *Wills* § 2075 (2015) (citing *In re Doyle’s Estate*, 80 P.2d 374, 375 (Mont. 1938)).


\(^{59}\) See 80 AM. JUR. 2D *Wills* § 1082 (2016) (citing *Martin v. Hale*, 71 S.W.2d 211, 213
of taking effect from the time of making the will." Under the common law, a void bequest was thus not considered lapsed, since the beneficiary did not survive the will’s execution. The disposition of the subject of a void bequest was also distinct: it passed as intestate property. Today, the dispositional rules relating to void gifts are similar to those relating to lapsed gifts.

B. The Policy Behind the Lapse Doctrine

Although the rules governing the disposition of lapsed devises are clear, the rationale behind the lapse doctrine is not. Wills scholars have advanced a number of explanations for the persistence of the doctrine. Jesse Dukeminier and Robert Sitkoff theorize that the lapse rule embodies the fundamental principle that “[a]ll gifts made by will are subject to a requirement that the devisee survive the testator, unless the testator specifies otherwise.” Thomas Jarman reasons that since wills do not take effect until the death of the testator, they cannot benefit those who have predeceased him. Mary Louise Fellows believes the rule is justified because “good estate planning would leave the final disposition of the property in the testator’s control if a beneficiary predeceases a testator.” Courts, too, have attempted to explain the policy behind the rule. The Supreme Court of Tennessee has deemed aspects of the lapse doctrine “just, natural, and reasonable,” largely on the basis of stare decisis. The court may have had in mind a case from 1568 that justifies the

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(Tenn. Ct. App. 1954)); In re Glass’ Estate, 130 P. 868, 869 (Cal. 1913). But see Rogers v. Walton, 39 A.2d 409, 411 (Me. 1943) (recognizing a valid transfer to the estate of a deceased person); accord Cumming v. Cumming, 135 S.E.2d 402 (Ga. 1964). It is perfectly acceptable for a testator to bequeath property to another’s estate. RESTATEMENT (THIRD) OF PROP.: WILLS AND OTHER DONATIVE TRANSFERS § 1.2 cmt. g (AM. LAW INST. 1999); L.S. Tellier, Devise or Bequest to Designated Individual “or His Estate,” “or His Children,” “or His Representatives,” or the Like (Other Than “or His Heirs”), As Subject to Lapse in Event of Individual’s Death Before That of Testator, 11 A.L.R.2d 1387 § 3 (1950).

64 DUKEMINIER ET AL., supra note 12, at 359; GARDNER, supra note 52, at 579. See, e.g., Martineau v. Simonson, 69 N.Y.S. 185, 186 (App. Div. 1901) (holding that void gifts to certain members of class passed to other members of that class).

65 DUKEMINIER ET AL., supra note 12, at 358. We could just as easily say there is an implied revocation, but that speaks to the operation of lapse and not the policy behind it.

66 See Philip Mechem, Some Problems Arising under Anti-Lapse Statutes, 19 IOWA L. REV. 1, 1 (1933) (citing JARMAN ON WILLS 398 (7th ed. 1930)).


68 In re Estate of McFarland, 167 S.W.3d 299, 305 (Tenn. 2005).
doctrine on the basis that the rule simply “‘ought to be’” thus.68 These scholarly and judicial explanations tell us a great deal about what the law is and what it values, but they tell us little about the role that lapse doctrine is meant to play in forwarding the paramount concern of wills law—to carry out the intention of the testator. The explanations likewise present us with no more than conclusory justifications for the tenacity of the lapse rule. While no one would dispute that a dead person cannot own property,69 which itself might explain why we have wills in the first place, commentators and courts make no attempt to explain why, in the absence of a condition expressed in the decedent’s will, the estate plan of the predeceased individual may not control the disposition of a lapsed devise.70 Relinquishing control of property to another is, after all, precisely what a will is meant to do.

A few commentators do discern a connection between lapse rules and testamentary intentions. One author suggests that doing away with all lapses would be “too broad to accord with the testator’s probable intention.”71 Adam Hirsch has opined that lapse rules reflect the intent of the reasonable testator, who knows that “dead persons have no use for property” and “would prefer to bequeath [it] to someone who is living.”72 Hirsch is undoubtedly correct that the reasonable testator understands that she herself will not own anything after she dies. His theory does not tell us, though, why she necessarily has survival of her beneficiary in mind when her will states no such preference and it cannot be otherwise established that she wished the beneficiary actually to possess the property.73 It fails as well to say who a testator desires to possess the property in lieu of the predeceased beneficiary. The testator, in considering that a beneficiary may predecease her, may just as likely expect that the property will find its way into the hands of a living person “through the probate estate of the named beneficiary.”74 As Philip Mechem sees it, “It is apparent . . . that in many instances [a] testator, if sufficiently

68 See Mechem, supra note 65, at 1 n.2 (quoting Brett v. Rigdon, 1 Plowd. 340 (1568)).
71 Note, Legacies and Devises—Statute Preventing Lapse Held Applicable When Legatee and Testator Die in Common Disaster, 55 HARV. L. REV. 691, 692 (1942) [hereinafter Legacies and Devises].
73 See, e.g., White v. Brown, 559 S.W.2d 938, 938 (Tenn. 1977) (bequesting a house “to live in and not to be sold”).
74 Hirsch, supra note 72, at 238.
informed, would have preferred some representative of the original donee to take [the property], rather than that the property should pass to his own heir or residuary legatee.”

Although Mechem is discussing the narrow anti-lapse statutes we know today, his insight comports with the theory that a testator may believe that the intended beneficiary’s will is just as suitable a channel for the distribution of a lapsed bequest as is the residuary of the testator’s estate or a statute dictating to whom the lapsed legacy will pass. Good estate planning or not, a testator has no expectation of retaining control of her property merely because a beneficiary has predeceased her. In the absence of good counsel, and sometimes even with it, she likely has no knowledge whatsoever of the rule of lapse. In a world where few testators seek the advice of well-trained lawyers, her true intentions on the matter will seldom be established. What she does understand, however, is that her own estate plan will control any property to which her estate becomes entitled after she dies, and she understands this to be true of other testators’ wills. In this sense, she is what I call “wills-minded.”

The wills-mindedness of testators is what makes a rule that takes account of a predeceased beneficiary’s will in carrying out a testator’s estate plan more in keeping with the average testator’s intent in cases of lapse. We can be even more certain of this intention when “there is little doubt of the predeceasing legatee’s desire to dispose of his estate in a method counter to the statutory manner of distribution.”

C. Statutory Alterations of the Common Law Survivorship Doctrine

The remorseless workings of the lapse doctrine have spawned an immense amount of litigation. Attempts to stem the tide have led to statutory exceptions to lapse. The most well-known of these reforms is anti-lapse legislation, aimed at better carrying out a testator’s probable intent when a gift to a relative lapses. A reform that also applies to intestate succession is simultaneous death legislation, designed to eliminate excruciating questions about survival where deaths occur in close temporal

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75 Mechem, supra note 65, at 1.
76 See ATKINSON, supra note 44, at 778.
78 Note, Anti-Lapse Statutes and the Conflict of Laws, 47 YALE L.J. 1216, 1221 (1938) [hereinafter Anti-Lapse Statutes].
proximity. The most recent reforms require heirs or beneficiaries to survive the testator by 120 hours in order to spare the estate the costs of being administered twice in a short period of time. Despite their salutary aims, these statutory reforms have created new problems that should motivate us to scrutinize their role in carrying out the intention of testators.

1. Anti-Lapse

Described as “barbarous to the ear” by one commentator, the curiously named anti-lapse statutes found in most jurisdictions do not so much overturn the lapse rule as they, in a few specific instances, direct the disposition of a lapsed devise in a manner divergent from the common law. Thus, even statutes that declare that a devise covered by the anti-lapse statute “shall not lapse” mean merely that the distribution of the property will be different from what the common law dictates. In most cases, contemporary American statutes direct that a gift that would otherwise lapse be taken by the surviving issue of the predeceased beneficiary using a representational scheme similar to that used for intestate distribution. In this regard, they differ from the original English anti-lapse law, which actually prevented lapse by declaring that the property “shall not lapse, but shall take effect as if the Death of such Person had happened immediately after the Death of the Testator.” The “fictitious survivorship” theory that undergirded the English law required distribution of the property as if the legatee had survived the testator, that is, through the estate plan of the predeceased beneficiary. The evident pur-

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80 DUKE MINIER ET AL., supra note 12, at 80.
81 Id.
82 Mechem, supra note 65, at 1 n.4.
85 See, e.g., 20 PA. CONS. STAT. ANN. § 2514(9) (West 2015).
86 See, e.g., GA. CODE ANN. § 53-4-64(a) (West 2015); IOWA CODE ANN. § 633.273 (West 2015); N.C. GEN. STAT. ANN § 31-42(a) (West 2015); R.I. GEN. LAWS ANN. § 33-6-19 (West 2015).
87 Wills Act 1837, 7 Will. 4 & 1 Vict. c. 26, § 32 (Eng.); Anti-Lapse Statutes, supra note 78, at 1217–18 (“The words [of the statute] . . . creat[ed] a fictitious survivorship which carries with it all the incidents of an actual survivorship. The gift is pictured as vesting in the legatee, and is disposable by his will.”).
88 Anti-Lapse Statutes, supra note 78, at 1217.
Pose of this approach to lapse is to bestow the property on “those persons who would presumably have enjoyed the benefits of such devise, had the devisee survived the death of the testator and died immediately afterwards.” England has since discarded the fictitious survivorship theory. In the United States, fictitious survivorship is embodied only in the law of Maryland, where the law directs property bequeathed to predeceased beneficiaries to that person’s devisees or heirs.

The consensus appears to be that “fixing” lapse law in the way anti-lapse statutes do is a “benevolent design” promoting the reasonable testator’s unarticulated wish that when she bequeaths property to her close relatives, she intends it to benefit their progeny as well. Roger Andersen reveals himself to be of this view in stating that anti-lapse statutes reflect the legislative belief “that in some cases [lapse] would be contrary to a common testator’s intention.” Thomas Atkinson describes anti-lapse provisions as carrying out “the probable intention of the average testator, if he had thought of the possibility of his surviving the legatee or devisee.” Dukeminier and Sitkoff elaborate: “The idea is that, for certain predeceasing devisees, the testator would prefer a substitute gift to the devisee’s descendants rather than for the gift to pass in accordance with the common law of lapse.”

The generality of such statements is probably due to the fact that it is likely not possible to determine whether anti-lapse statutes promote testamentary intent. Nonetheless, legislatures have indeed “indulge[d] in generalizations as to the presumed intent of an average reasonable testator” in enacting anti-lapse laws in nearly every state.

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90 See IOWA CODE ANN. § 633.273; see also McGovern et al., supra note 15, at 420 n.2. (citing Administration of Justice Act 1982, § 19 (Eng.).

91 MD. CODE ANN., EST. & TRUSTS § 4-403 (West 2015).

92 McAllister, 167 N.W. at 79.


94 ROGER W. ANDERSEN, UNDERSTANDING TRUSTS AND ESTATES 251 (5th ed. 2013).

95 ATKINSON, supra note 44, at 779; accord Chaffin, supra note 11, at 272.

96 DUKEMINIER ET AL., supra note 12, at 364.


98 Mechem, supra note 65, at 2.
a. The Mechanics of Anti-Lapse

Anti-lapse statutes are best described as narrow departures from lapse law because they apply, almost without exception, only to testamentary gifts to certain consanguineous or adopted relatives.99 The relatives covered by anti-lapse provisions vary significantly across states. Many apply to gifts to the testator’s issue100 or issue and siblings101 (including adopted children, although this was not always so).102 Some variations include gifts to children and grandchildren,103 gifts to any descendant,104 or gifts to the children of siblings.105 Some are more expansive, extending to the testator’s parents and their descendants,106 grandparents and their descendants,107 great-grandparents and their descendants,108 the testator’s kindred,109 his heirs,110 or even to any beneficiary.111 Some statutes explicitly include predeceasing spouses;112 others have been construed as excluding spouses.113 Washington has two anti-lapse statutes, one that applies to gifts to the issue of grandparents114 and another that applies to gifts to any beneficiary who cannot be located at the time of distribution but who has “clearly . . . died prior to the decedent.”115 Both statutes benefit the lineage descendants of the predeceas-

99 See, e.g., TEX. EST. CODE ANN. § 255.153(a) (West 2015) (including “a descendant of the testator or a descendant of a testator’s parent”).
100 See, e.g., 755 ILL. COMP. STAT. ANN. 5/4-11(a) (West 2015).
101 See, e.g., N.Y. EST. POWERS & TRUSTS LAW § 3-3.3 (McKinney 2015).
102 See, e.g., In re Phillips’ Estate, 17 Pa. Super. 103, 109 (1901) (“One adopted has the rights of a child without being a child.” (quoting Schafer v. Eneu, 54 Pa. 304, 306 (1867))).
103 See, e.g., CONN. GEN. STAT. ANN. § 45a-441 (West 2015).
104 See, e.g., IND. CODE ANN. § 29-1-6-1(g) (West 2015).
105 See, e.g., 20 PA. CONS. STAT. ANN. § 2514(9) (West 2015).
106 See, e.g., TEX. EST. CODE ANN. § 255.153(a) (West 2015).
107 See, e.g., ALA. CODE § 43-8-224 (West 2015); N.C. GEN. STAT. ANN. § 31-42 (West 2015).
109 See, e.g., CAL. PROB. CODE § 21110(c) (West 2015); VT. STAT. ANN. tit. 14, § 335 (West 2015).
110 KAN. STAT. ANN. § 59-615(a) (West 2015). The statute reads “relative by lineal descent or within the sixth degree” and is thus congruent with the definition of heirs in intestate succession. See Id. § 59-509.
111 See D.C. CODE ANN. § 18-308 (West 2015); GA. CODE ANN. § 53-4-64(a) (West 2015); IOWA CODE ANN. § 633.273(1) (West 2015) (excluding spouses, IOWA CODE ANN. § 633.274); KY. REV. STAT. ANN. § 394.400 (West 2015); MD. CODE ANN., EST. & TRUSTS § 4-401 (West 2015) (excluding spouses); R.I. GEN. LAWS ANN. § 33-6-19 (West 2015); TENN. CODE ANN. § 32-3-105 (West 2015); W. VA. CODE ANN. § 41-3-3 (West 2015).
112 See, e.g., KAN. STAT. ANN. § 59-615(a).
115 Id. § 11.76.240; Reutlinger, supra note 5, at 25.
ing beneficiary. The Uniform Probate Code ("UPC"), more expansive than most anti-lapse provisions, includes grandparents, the issue of grandparents, and stepchildren. Some statutes alter the basic anti-lapse scheme in certain cases. Pennsylvania, for example, protects the testator’s closest family members. The issue of the predeceasing beneficiary do not take if, in lapsing, the legacy would otherwise go to the testator’s children or spouse under the residuary clause or in intestacy.

What is not so varied is the application of anti-lapse statutes to class gifts. As mentioned above, under the common law, class members who failed to survive the testator were simply not members of the class; their portion of the gift did not lapse. In bequeathing property to a class, the testator was presumed to intend a gift only to those members of the class who survived his death. Based on this reasoning, an anti-lapse provision would not apply to a class gift. Today, even though some statutes do not explicitly include class gifts, there are no anti-lapse statutes that explicitly exclude them. Courts have been willing to interpret such statutes as inclusive of class gifts in part on the rationale that “such statutes are remedial and should receive a liberal construction . . . .” Another rationale is the testator’s probable intent, a presumed intent supplied by the law. The modern trend is decidedly in favor of applying anti-lapse provisions to class gifts. Under such statutes, it can be said with accuracy that the anti-lapse statute trumps the class gift rule.

Even though there is near uniformity in including class gifts within the ambit of anti-lapse provisions, there is variation among the states on the question of whether anti-lapse statutes apply to class members who

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116 UNIF. PROBATE CODE § 2-603(b) (amended 2010) (UNIF. LAW COMM’N 1969). See also MICH. COMP. LAWS ANN. § 700.2709 (West 2015); N.J. STAT. ANN. § 3B:3-35 (West 2015).

117 20 PA. CONS. STAT. ANN. § 2514(9) (West 2015).

118 SHAFFER & MOONEY, supra note 46, at 93; Drafts v. Drafts, 114 So. 2d 473, 475 (Fla. Dist. Ct. App. 1959) (“[A] gift to members of a class cannot lapse so long as any member of the class survives the testator.”); A. James Casner, Class Gifts—Effect of Failure of Class Member to Survive the Testator, 60 HARV. L. REV. 751, 761 (1947); Cooley, supra note 43, at 398.

119 Cooley, supra note 43, at 379.


121 See, e.g., OKLA. STAT. ANN. tit. 84, § 142 (West 2015); D.C. CODE ANN. § 18-308 (West 2015).

122 JOHN E. ALEXANDER, 2 COMMENTARIES ON THE LAW OF WILLS § 874 (1917), quoted in Clifford v. Cronin, 117 A. 489, 490 (Conn. 1922); see also GARDNER, supra note 52, at 446 (stating that anti-lapse statutes “are commonly construed as applying to gifts to a class”).

123 Cooley, supra note 43, at 375, 379.

124 See, e.g., N.Y. EST. POWERS & TRUSTS LAW § 3-3.3(a)(3) (McKinney 2015).
predecease the execution of the will. According to the traditional understanding of class gifts, they are not members of the class unless the testator expressly defines the class to include them. Another reason for excluding them parrots the common-law logic regarding void gifts: anti-lapse statutes do not apply to void portions of class gifts because voidness is distinct from lapse. This highly unsatisfying semantic rationale is contradicted by the UPC, whose drafters thought it likely that the testator would want all predeceasing members of a class treated similarly, and by many contemporary anti-lapse statutes that bring class gifts within their ambit and act equally upon either lapsed or void portions of such gifts. Despite the trend in the direction of including the void portions of class gifts within the ambit of anti-lapse statutes, some states nonetheless explicitly exclude void portions of class gifts, leaving them subject to the common law.

One common anti-lapse provision that includes any beneficiary is the statutory abrogation of the rule that a lapsed residuary devise is distributed through intestate succession. This no-residue-of-a-residue rule has been severely criticized as an override of a testator’s intent not to benefit his heirs and as a concession to the antiquated English common law that favored intestacy. Some courts have simply ruled that the lapsed portion of a residuary devise to individuals is shared by the surviving residuary takers. Today, statutes in many states embody this

125 See, e.g., In re Harrison’s Estate, 51 A. 976 (Pa. 1902).
126 See, e.g., In re Estate of Shappell, 227 A.2d 651, 652 (Pa. 1967) (will included bequest to children who “shall predecease me in death”).
127 Drafts v. Drafts, 114 So. 2d 473, 475 (Fla. Dist. Ct. App. 1959) (“[A] beneficiary who is dead at the time the will is executed is void, and no question of lapse arises.”); Md. Code Ann., Est. & Trusts § 4-404 (West 2015); Succession Law Reform Act § 23, R.S.O. 1990, c. S.23 (Can.).
129 Id. § 2-603 cmt.
132 See, e.g., In re Gray’s Estate, 23 A. 205, 206 (Pa. 1892); In re Slack Tr., 220 A.2d 472, 472–73 (Vt. 1966); Chaffin, supra note 11, at 306–08.
rule.\textsuperscript{134} The rule prevents the distribution in intestacy of certain lapsed residuary devises. Like the class-gift rule it resembles, the abrogation of the no-residue-of-a-residue rule is itself trumped by the anti-lapse statute in instances where the predeceased residuary beneficiary falls within its ambit.\textsuperscript{135}

In some cases, an anti-lapse statute will operate in a manner similar to what the outcome would have been under lapse law, as when the gift of the entire residue is to a predeceased child whose surviving issue are the testator’s only intestate heirs. Anti-lapse rules are unnecessary in such cases, as Dukeminier and Sitkoff explain, “because a multigenerational class absorbs the concept of representation familiar from inheritance law.”\textsuperscript{136} Perhaps for this reason, New York recently amended its anti-lapse statute to exclude gifts to “issue” and “descendants,” preferring to let the definition of those terms found in the intestacy law determine the distribution of such gifts.\textsuperscript{137}

\textit{b. Anti-Lapse and Words of Survivorship and Substitution}

In Patricia Roberts’s estimation, “[t]he most frequently litigated issue in the lapse statute cases is whether the testator has indicated a contrary intent.”\textsuperscript{138} Courts and policy makers have been unable to reach a consensus on this question, with some taking the position that words of survivorship merely speak in favor of the statute and that a substitutional gift would be required to circumvent it. The majority of jurisdictions, however, take the position that a testator’s deliberate choice of words of survivorship should defeat the application of the default rule, whether or not she specifies a taker in substitution. There is good reason to adhere to the majority rule.

The anti-lapse statute is a default rule based on the notion that in making a gift to a parent the testator contemplated the benefit of such parent’s children, in the absence of a contrary intention being expressed in the will. Therefore, if the testator qualifies a bequest with a specific

\begin{itemize}
  \item \textsuperscript{134} See, e.g., \textsc{Cal. Prob. Code} § 21111(b); \textsc{Ga. Code Ann.} § 53-4-65(b) (West 2015); 755 \textsc{Ill. Comp. Stat. Ann.} 5/4-11(c) (West 2015); \textsc{N.J. Stat. Ann.} § 3B:3-37; \textsc{N.Y. Est. Powers & Trusts Law} § 3-3.4; \textsc{N.C. Gen. Stat. Ann.} § 31-42(b) (West 2015); 20 \textsc{Pa. Cons. Stat. Ann.} § 2514(11) (West 2015); \textsc{Ohio Rev. Code Ann.} § 2107.52(D)(2) (West 2015); \textsc{R.I. Gen. Laws Ann.} § 33-6-20 (West 2015); \textsc{Unif. Probate Code} § 2-604(b) (amended 2010) (\textsc{Unif. Law Comm’n} 1969).
  \item \textsuperscript{135} See, e.g., \textsc{N.Y. Est. Powers & Trusts Law} § 3-3.3(a)(3).
  \item \textsuperscript{136} Dukeminier et al., supra note 12, at 379 n.19.
  \item \textsuperscript{137} \textsc{N.Y. Est. Powers & Trusts Law} § 3-3.3 cmt. The definition of issue can be found in § 1-2.10.
  \item \textsuperscript{138} Roberts, supra note 56, at 345–46.
\end{itemize}
requirement that the beneficiary survive him, a majority of courts and some legislatures will not apply the anti-lapse statute to the testator’s will. Avoiding the operation of the statute in these jurisdictions is a simple matter of making it clear that survivorship of the legatee is essential. In contrast, a minority of courts have ruled that mere words requiring survival are not enough to defeat the anti-lapse statute. The drafters of the UPC concur, reasoning that “mere words of survivorship merely duplicate the law-imposed survivorship requirement deriving from the rule of lapse.” In other words testators who use survivorship language are simply choosing to articulate the default rule of law requiring beneficiaries to survive the testator. Under this reasoning, when a testator includes words of survivorship but does not include a substitute devise, his intent regarding what should become of the property in the event of lapse is incomplete, and the anti-lapse statute should apply.

A couple of cases involving what I will call provisions requiring dual or alternative survivorship suffice to illustrate the difficulty courts have in evaluating the interplay between words of survivorship and anti-lapse statutes. The will in In re Estate of Ulrikson contained a provision bequeathing the residue to the testatrix’s brother and sister in equal shares. The will specifically dictated that if one of the siblings predeceased the testatrix, the surviving sibling would take the entire residue. But in this case, both siblings predeceased the testatrix, and only the brother left issue. A lawsuit between the testatrix’s heirs at law and the brother’s issue ensued. The heirs argued that the provision in the will placed an absolute condition of survival on the gifts to both siblings,
and therefore, since both siblings predeceased the testatrix, neither had an entitlement to the property that could be preserved by the anti-lapse statute.\footnote{Id. at 759.}

The Minnesota Supreme Court was unconvinced. Referring to the wills law presumption against intestacy, it reasoned that the testatrix intended for the requirement of survivorship to apply only in the event there were survivors. The testatrix simply had not contemplated that there might not be a survivor, and for this reason her expressed intention was incomplete.\footnote{Id.} The anti-lapse statute thus operated to complete the expression of her intent by preserving the residue for the two children of the testatrix’s brother, to the exclusion of the seven other heirs at law who otherwise would have shared the residue equally with them.\footnote{Ulrikson, 290 N.W.2d at 759.} Although the \textit{Ulrikson} decision is obviously limited to will provisions requiring dual or alternative survivorship, the comments to the UPC cite it for the extravagant proposition that in Minnesota words of survivorship do not override the anti-lapse statute.\footnote{UNIF. PROBATE CODE § 2-603 cmt. (amended 2010) (UNIF. LAW COMM’N 1969).}

In a similar case, a different court also used the presumption against intestacy to rule in favor of applying the anti-lapse statute despite the testator’s gift in substitution to the survivor of his two brothers.\footnote{Early v. Bowen, 447 S.E.2d 167, 172 (N.C. Ct. App. 1994).} The North Carolina appeals court also gave intent-based reasons for its ruling. In bequeathing his property to his two brothers “or to the survivor,” the testator failed to contemplate that both of his brothers might predecease him.\footnote{Id. at 172–73.} This court went further than the \textit{Ulrikson} court, though, in remarking that there was “no clear intent on Testator’s part that either brother outlive him in order for his gift to be effective.”\footnote{Id.} In other words, the court believed that a stronger expression of survivorship would be necessary for the anti-lapse statute to be overridden. Since the testator had not specified what should happen to his estate if both of his siblings predeceased him, his brothers’ issue took the property to the exclusion of the heirs at law.\footnote{Id. at 172–73.}

\textit{Ulrikson} and \textit{Early} do not establish that words of survivorship, standing alone, are insufficient to trump the anti-lapse statute. They are cases of dual or alternative survivorship and are based wholly on the fact that neither testator expressed what to do with the estate should both sib-
lings die first. Since the testators’ intentions regarding the events that actually occurred remained unknown, the anti-lapse statute applied. These cases establish that anti-lapse statutes work best when they fill in gaps in wills in which testators have not expressed their intentions regarding survivorship. This is the fashion in which rules of construction generally function. This position has the virtue of respecting the oft-cited principle that a court should strive to give effect to every word of a last will and testament. The opposite position, by contrast, assumes that in some instances the testator’s words are simply a mouthpiece for the wisdom of the common law.

The problem with the theory that survivorship language by itself expresses an incomplete intention is that it does not allow the words employed by the testator to convey any meaning. It instead assumes that the testator has used them to parrot the lapse doctrine. The words of survivorship are thus emptied of their particular meaning for the testator because, where the same testator does not use survivorship language in the will, the lapse rule will apply in the same fashion. This feeble method of interpretation effaces the possibility that the testator intended for the words to negate the anti-lapse statute. By requiring survivorship, the reasonable testator likely intends for the beneficiary to possess and control the property and to make conscious decisions about its disposition. A predeceased beneficiary cannot make such decisions. By requiring the beneficiary to survive her death, a testator is not even remotely expressing an intention that the beneficiary’s descendants should take in his stead.

Those who hold that words of survivorship express no more than the rule of lapse have argued that words of survivorship might be deemed ambiguous and need to be construed. The comments to the UPC, for example, stress that a judge is always at liberty to call for extrinsic evidence to interpret the will as circumventing the anti-lapse statute. Of course, there is usually nothing particularly ambiguous about an express survivorship requirement. Thus, advocates would have a difficult time arguing that a will is ambiguous when the words used are so plain on their face. Most courts would be justified and would prefer to employ a plain-language interpretation of words of survivorship and would use the rules of lapse and anti-lapse to fill in the testator’s unspo-

154 See, e.g., Carlson v. Sweeney, 895 N.E.2d 1191, 1197 (Ind. 2008); Lemmon v. Wilson, 28 S.E.2d 792, 800 (S.C. 1944).

ken intentions regarding the disposition of his property. 156

c. Anti-Lapse and Disinheritance

Yet another constructional problem on which the courts disagree is the effect of disinheritance on the application of an anti-lapse statute. This problem arises when the will disinherits the person who would otherwise take the property by operation of an anti-lapse provision. For example, in In re McKeon’s Estate, the testator bequeathed property to her sister but specifically disinherited her niece.157 The court ruled that the anti-lapse provision was not triggered by these facts because “the testatrix clearly expressed in her will her intent that the child of the legatee was to take no part of her estate.”158 The court reasoned that the anti-lapse statute “was not intended to nullify the right of the testator to select the objects of his bounty and to specify the conditions and limitations upon any legacy.”159 Indeed, given that the statute is meant to carry out a probable intent, it should not be applied when the testator’s intent is so clearly contrary to it.160

It is thus extraordinary to find other courts applying the anti-lapse statute in like circumstances. In Bruner v. First National Bank, the testatrix bequeathed the residue of her estate to her daughter Dressie and disinherited Dressie’s son Raymond.161 As in McKeon, the residuary beneficiary predeceased the testatrix. The Oregon Supreme Court ruled that the specific disinheritance of Raymond did not prevent him from taking the testatrix’s estate via the anti-lapse provision.162 The court believed that the language employed by the testatrix merely exhibited an intent to prevent her grandson from taking under the pretermitted heirs statute and that depriving him of the estate as a taker under the anti-lapse provision was beyond her purpose.163 This limited-purpose theory was employed as well in In re Carleton.164 There the testator had bequeathed $1,000 to each of her grandchildren but in a codicil revoked this provision, stating “I feel that I should not remember [Horace M. Carleton] in any finan-

158 Id. at 350.
159 Id. at 351.
160 Id.
161 443 P.2d 645, 645–46 (Or. 1968).
162 Id. at 646.
163 Id. at 647.
cial way in my Will.' The testator’s will also contained a bequest to her son Alexander, Horace’s father. Since Alexander had predeceased the testator, Horace claimed a share of the bequest to his father under the anti-lapse statute. The court construed the codicil as relating solely to the bequest of $1,000 and not, as its language would suggest, to a broader disinheritance of Horace that would include any benefit from the bequest to Alexander. As such, the testator was presumed to have intended for Horace to be included as a taker of the bequest to Alexander.

\[\text{d. Anti-Lapse and Will Substitutes}\]

Whether anti-lapse provisions apply to will substitutes such as life insurance policies, pension plans, and pay-on-death or transfer-on-death financial accounts remains an open question. Very few legislatures have moved in this direction by enacting the 1989 revision of the UPC’s article 6, requiring the beneficiaries of pay-on-death bank accounts and transfer-on-death security accounts to survive the owners of such accounts, and by enacting the 1990 revision of the UPC’s article 2, which includes an anti-lapse provision that covers non-probate transfers and applies to beneficiaries who are grandparents, descendants of a grandparent, or stepchildren of the decedent. As is true of the UPC’s anti-lapse provision applicable to wills, the anti-lapse provision applicable to will substitutes is rendered inoperative by the inclusion of an “alternative beneficiary designation” but not by mere “words of survivorship.” If the predeceased beneficiary is not among the group of beneficiaries for whom a descendant will be substituted, the property is retained by whichever beneficiary survives or in the estate of the last surviving party to the account. This approach mirrors anti-lapse legislation on lapsed residuary devises.

The Uniform Probate Code’s extension of anti-lapse principles to remainders in inter vivos trusts is controversial in that it overturns a familiar principle of the law of future interests—that a beneficiary need

\[\begin{align*}
165 & \text{Id. at 340.} \\
166 & \text{Id.} \\
167 & \text{Id. at 341.} \\
168 & \text{Brauer, 151 N.Y.S.2d at 341.} \\
169 & \text{Dukeminier & Johanson, supra note 33, at 348.} \\
170 & \text{UNIF. PROBATE CODE §§ 6-212(a)-(b), 6-307 (amended 2010) (UNIF. LAW COMM’N 1969).} \\
171 & \text{Id. § 2-706(b).} \\
172 & \text{Id. § 2-706(b)(3)-(4).} \\
173 & \text{Id. §§ 6-212(b)(2), 6-307.} \\
\end{align*}\]
not survive to the time of possession. The attempted reform is meant to harmonize the law of wills and the law of future interests by moving the vesting of the remainder in the beneficiary from the time of the creation of the trust to the time of distribution. The assumption underlying the reform is that the donor of a future interest has in mind preserving the property for the issue of the beneficiary in the event the beneficiary does not survive the date of distribution. This assumption resembles what is assumed to be a testator’s desire to preserve testamentary bequests for the issue of predeceased beneficiaries with whom he has a consanguineous or adoptive relationship. Harmonizing the law of wills and trusts makes the most sense when a trust is revocable. As with wills, the settlor of a revocable *inter vivos* trust is free to make changes to his estate plan to respond to the deaths of beneficiaries. But irrevocable *inter vivos* trusts and other present transfers, such as those evidenced by deeds, do not permit such changes. In drafting such a trust, a settlor would not only have to consider drafting around anti-lapse principles that have historically never applied to trusts but would also have to consider the possibility that the trust property will remain in his estate in the event a predeceased beneficiary has no issue surviving the settlor. Nonetheless, states that choose to enact an anti-lapse provision applicable to trusts are unlikely to distinguish between revocable and irrevocable trusts. Like the UPC’s insistence that words of survivorship are not enough to trump an anti-lapse provision, the extension of anti-lapse principles to remainders has not caught on, and many courts have rejected arguments urging such an extension.

Although the idea of treating revocable trusts like wills appeals to me given the similarities between these instruments, I wish to suggest a different direction that the law might take. My proposal is that we treat lapsed devises more like remainders. In short, instead of bringing anti-lapse concepts into trust law, I advocate bringing vesting concepts into wills law in the specific situation where the beneficiary predeceases the testator leaving a valid will of her own. I believe it is more in keeping with the average testator’s intention that the estate of a predeceased ben-

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174 See, e.g., 760 ILL. COMP. STAT. ANN. 5/5.5 (West 2015). *In re Estate of Button*, 490 P.2d 731, 734 (Wash. 1971) (construing *inter vivos* trust and remarking, “A gift to be enjoyed only upon or after the death of the donor is in practical effect a legacy, whether it is created in an *inter vivos* instrument or in a will.”).


176 See, e.g., 760 ILL. COMP. STAT. ANN. 5/5.5.

eficiary who has been as wills-minded as she assume control of the be-
quethed property. To address at least one of the controversial aspects of
my proposal, one that the courts of Maryland have had to contend with
given the similarity of that state’s law to my proposal, I would limit the
applicability of the rule to beneficiaries who have predeceased the testa-
tor by a maximum of one year. This period of time would give the testa-
tor a reasonable time to learn of and respond to the beneficiary’s death.
The Maryland law and my proposal are explored in more detail in Part
III, below.

2. Simultaneous Death

Problems posed by deaths occurring “simultaneously” have fasci-
nated the probate bar and the wider public, and for good reason. The in-
creasingly fast pace of living in the 20th century, made possible by new
forms of transportation, has made contemporaneous deaths a more prom-
inent feature of the administration of estates.178 A true simultaneous
death would not satisfy the condition of surviving the testator imposed
by the common law on will beneficiaries. But simultaneity of deaths is
not itself the problem. Indeed, due to the infinite divisibility of time,
there is surely never a truly simultaneous death.179 The problem lies in
the fact that the law is left to contend with our inability to calculate, es-
specially in connection with deaths in a common disaster, the precise time
of death of the testator and the legatee. For this reason, some deaths may
appear to be simultaneous. The indeterminacy of the order of death plac-
es a heavy burden on those claiming entitlement to the estate by virtue of
survivorship. Furthermore, the common law offers them no presumption
of either simultaneous death or survivorship in such situations.180 The
problem relates to cases of lapse and to wills that expressly condition a
bequest upon the survival of the recipient.

The solution to this problem devised by the National Conference of
Commissioners on Uniform State Laws (“NCCUSL”) in 1940 was the
Uniform Simultaneous Death Act (“USDA”). Although the USDA was
meant to apply to cases where title to property “depends upon priority of
death,” to joint tenancies, tenancies by the entirety, and insurance poli-

178 See UNIF. SIMULTANEOUS DEATH ACT pref. note (amended 1953), 8B U.L.A. 338
(2014).
179 Legacies and Devises, supra note 71, at 692.
180 See UNIF. SIMULTANEOUS DEATH ACT pref. note (amended 1953), 8B U.L.A. 338
(2014); People v. Eulo, 472 N.E.2d 286, 291 n.2 (N.Y. 1984); Glover v. Davis, 366 S.W.2d
227, 231 (Tex. 1963).
cies, the Act was limited to cases where no evidence showed that the parties had died other than simultaneously. The Act provided that, where “there is no sufficient evidence that the persons have died otherwise than simultaneously, the property of each person shall be disposed of as if he had survived.” The act propounded a useful presumption as an aid to distributing the estates of those who had died contemporaneously, but it did not diminish the amount of litigation aimed at establishing other than simultaneous death by adducing sufficient evidence that the beneficiary had survived the testator. Thus, gruesome details involving the rates and manner of decomposition of the corpses, inhalation of noxious fumes during a catastrophe, evidence of a violent struggle to survive, response of the pupils to light, the presence of brain waves, the meaning of which required the testimony of expert witnesses, were the unsavory features of many cases in which survivorship was unclear. Litigating such cases in the past has not only been gruesome but administratively inefficient.

From the early 1940s until as late as 1972, the 1940 USDA was adopted in 47 states, the District of Columbia, and the United States Virgin Islands. Twenty-two states, the District of Columbia, and the Virgin Islands later repealed the 1940 USDA in favor of the 1993 revised USDA, discussed below. The 1940 version was also later repealed in both Michigan and Oregon, which had by that time enacted 120-hour survivorship requirements for both wills and intestacy. Ohio, which never had enacted the 1940 version of the USDA, enacted the 1993 version in 2002.

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182 Id.
185 See, e.g., In re Campbell’s Estate, 641 P.2d 610, 613 (Or. Ct. App. 1982).
187 See, e.g., id. at 420–21.
188 Halbach & Waggoner, supra note 3, at 1094.
3. Survival by 120 Hours

The “complete inadequacy of the USDA to resolve many survivorship problems” led NCCUSL to expand the amount of time required for survival under that provision beyond any amount of time to 120 hours, thus bringing the USDA into line with the UPC, which has required survival by 120 hours from its earliest iteration in 1969. It had been common prior to that time for testators drafting their wills with the assistance of legal counsel to express “that a particular devisee or all devisees must survive the testator for a stated period.” Estate planners recommend such provisions to avoid the difficulties and inefficiencies inherent in cases where deaths occur within a short period of time, not only in cases of common disasters. Courts, too, are sympathetic to the problem and have in the past devised ways of circumventing it. In one case, for example, the court construed the phrase “in a common disaster” to include a beneficiary who had been involved in the same automobile accident but who had actually survived the testator by a full two hours. At the time of the accident, Florida did not require the survival of a will beneficiary by 120 hours.

Deaths that occur closely in time often affect the distribution of jointly held property. Under the USDA, failure to survive a co-owner by the requisite 120 hours would result in half of the property being distributed as if one of the co-owners had survived the other and the other half being distributed as if the other co-owner had survived. A Michigan case applying such a provision involved Frederick and Barbara Leete, an elderly couple who owned, as tenants by the entirety, a cottage that had been in Frederick’s family for about 100 years. The husband had left the car running in the attached garage of their home, and the couple was asphyxiated by the noxious fumes. Barbara died that day, but Frederick lingered for four more days. Frederick’s share of the cottage went to his children in accordance with his will. But the wife’s daughter claimed a half interest in the cottage because Frederick had not survived Barbara

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197 Id. at 861.
198 *Leete*, 803 N.W.2d at 894.
by more than 120 hours.\textsuperscript{199} Thus, even though Barbara predeceased Frederick, the cottage was not yet his sole property when he died. Frederick’s children vigorously opposed the claim, but Barbara’s daughter prevailed.\textsuperscript{200}

The problems of “double administrative costs”\textsuperscript{201} and “multiple administrations”\textsuperscript{202} that result from property being probated in rapid succession through two different estates prompted NCCUSL, in the 1969 iteration of the UPC, to require that a devisee survive the testator by 120 hours.\textsuperscript{203} The UPC also applies the survival-by-120-hours requirement to intestate succession,\textsuperscript{204} but not if the result would be a taking of the property by the state in escheat.\textsuperscript{205} Many states now have 120-hour-survival requirements.\textsuperscript{206} They are not limited to wills and intestacy but can also be found in provisions designed for the protection of the testator’s spouse and children, including the elective share,\textsuperscript{207} the homestead allowance,\textsuperscript{208} and provisions relating to will substitutes.\textsuperscript{209} Where the enactment of a 120-hour statute applicable to wills and intestacy does not explicitly repeal a simultaneous death provision modeled on the 1940 USDA, some courts have determined that the simultaneous death act has been implicitly repealed.\textsuperscript{210}

Double administration results in additional death taxes and the passing of the property directly to unintended beneficiaries.\textsuperscript{211} The Restatement suggests that the policy behind the rule is “to ensure that a decedent’s property passes to a beneficiary who can personally benefit, as opposed to a beneficiary who became deceased a short time later, meaning that the property would ultimately pass to that beneficiary’s heirs.”\textsuperscript{212} The period of required survival, however, is only five days, so

\textsuperscript{199} Id.
\textsuperscript{200} Id. at 903.
\textsuperscript{201} Halbach & Waggoner, supra note 3, at 1095.
\textsuperscript{203} Id. § 2-702.
\textsuperscript{204} Id. § 2-104.
\textsuperscript{205} See, e.g., 20 PA. CONS. STAT. ANN. § 2104(10) (West 2015) (intestacy statute).
\textsuperscript{206} See, e.g., KY. REV. STAT. ANN. § 397.1002 (West 2015); MICH. COMP. LAWS ANN. § 700.2104 (West 2015); NEB. REV. STAT. ANN. § 30-2304 (West 2015); id. § 30-2339; N.J. REV. STAT. ANN. § 3B:3-32 (West 2015); 20 PA. CONS. STAT. ANN. § 2104(10).
\textsuperscript{207} N.Y. EST. TRUSTS & POWERS LAW § 2-1.6 (McKinney 2015).
\textsuperscript{208} See In re Estate of Martelle, 32 P.3d 758, 762 (Mont. 2001).
\textsuperscript{209} UNIF. PROBATE CODE § 2-702(b) (amended 2010) (UNIF. LAW COMM’N 1969).
\textsuperscript{210} See, e.g., UNUM Life Ins. Co. of Am. v. Craig, 26 P.3d 510, 516 (Ariz. 2001) (holding that 120-hour statute implicitly repealed earlier simultaneous death statute).
\textsuperscript{211} Effland, supra note 22, at 342.
\textsuperscript{212} In re Leete Estate, 803 N.W.2d 889, 901 (Mich. Ct. App. 2010) (citing RESTATEMENT (THIRD) OF PROP.: WILLS AND OTHER DONATIVE TRANSFERS § 1.2 (AM. LAW INST. 1999)).
the personal benefit rationale seems a bit far-fetched. Some states, though, impose longer periods of required survival time,213 and, of course, a testator is free to provide for an even longer time in her will. In one case, for example, the period of survival required by the will was thirty days. Because the beneficiary survived longer than thirty days, the testator’s property was ultimately distributed to that beneficiary’s heirs at law, rather than the alternate beneficiaries named in the will.214

The legal effect of the failure of a beneficiary to survive for the required amount of time is that the beneficiary is deemed to have predeceased the testator.215 As with anti-lapse provisions, if the will shows a contrary intention, the statute does not apply. In addition, as with anti-lapse statutes, the problems that stem from the application of this rule have largely to do with whether the testator has taken sufficient steps to indicate that he does not want the rule to apply to a particular devise. The testator’s contrary intention216 might take the form of requiring the beneficiary to survive a specific event. But finding a contrary intention can be particularly tricky if the will in question is not quite so specific, for example, if it contains an explicit survivorship provision but does not specify any specific duration of survivorship.

III. LAPSE AND INTENTION

The arbitrariness of the lapse doctrine has found it few defenders. Nonetheless, the doctrine has never received the thorough criticism it deserves. Commentators have chosen largely to deplore how it disadvantages the testator’s close relations or to quibble about the details of the narrow statutory alterations to it that today we find embodied in anti-lapse legislation.217 The main problem remains determining whether anti-lapse principles do an adequate job of tempering the perceived inadequacies of the lapse doctrine.

One way of addressing this question is to focus on the role of anti-lapse statutes in promoting testamentary intent. Carrying out the testator’s actual intent is, after all, the “polestar” of wills law and the primary inspiration for the tenet that “no will has a brother.”218 Given the vagar-

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217 Cooley, supra note 43, at 374.
218 Hammons v. Hammons, 327 S.W.3d 444, 448 (Ky. 2010); see also In re Corrigan, 358
ies of testamentary preferences that stem from the relationships testators have actually experienced, the search for a testator’s actual intent can feel like a “search after a phantom.” The reality is that, as Mechem has commented, “[p]robably no such thing exists.” This may be why the primary tools for ascertaining a testator’s actual intent, the plain meaning rule and the admission of extrinsic evidence, are frequently inadequate to the task at hand and why the law of wills as a result is so replete with presumptions of what a reasonable person would intend. We would do well to admit, as Fellows has, that the law does not do a particularly good job of discovering a deceased person’s preferences where none have been expressed. Left with doubts about a testator’s actual intent, courts are left to conjure the “average actual intent” or probable intent of reasonable testators. Legislators are left to speculate on what most people would want under the circumstances and to develop guideposts to help decision makers come as close to the intent of the testator as the evidence before them will allow. Anti-lapse statutes play a part in this interpretive alchemy through their supposed reasonable approximation of a testator’s “probable wishes.”

Anti-lapse statutes are blunt, as Susan French has theorized, precisely because the intent-discerning enterprise is so prone to error. But in another sense, anti-lapse statutes are not blunt enough. They are so narrow as to seem tentative. And their relentless emphasis on consanguineous succession imports principles of intestate succession into the construction of a will in a manner that seems incongruous if not indeed intent-defeating. In Mark Ascher’s estimation, “[M]ost testators expect their wills to dispose of their property completely—without interference from a statute of which they have never even heard.” To borrow so heavily from intestacy to fill what we perceive to be gaps in wills

219 In re Chalmers’ Will, 190 N.E. 476, 478 (N.Y. 1934).
220 Mechem, supra note 65, at 2.
221 Fellows, supra note 66, at 637.
222 Casner, supra note 118, at 751.
223 See Mechem, supra note 65, at 2 (noting that it is impossible to secure data as to average actual intent).
224 Cooley, supra note 43, at 374.
225 See French, supra note 5, at 348.
226 Cooley, supra note 43, at 394 (“A liberal admixture of public policy in favor of direct issue of testators must be read into this decision to obscure the fact that any such generality will manifestly interfere with the intent of many testators who were fully apprised of the state of their families when they made their wills.”).
seems short-sighted and imprecise. To be fair, as Verner Chaffin has put it, “No anti-lapse statute can ever be expected to reach desirable results in all cases, since legislation of necessity must pour everyone into the same mould and cannot hope to meet the varying needs and desires of different individuals under infinitely varying circumstances.” There is no justification, however, for making intestate distribution the default setting in cases in which the testator’s will is not incomplete; he has given no indication that he desires the beneficiary to have actual possession of the bequest, and he exhibits his understanding of the importance of wills by drafting one in the first place. Seen in this light, the traditional approach to anti-lapse legislation seems less geared to ascertaining testators’ reasonable intent than it does to resolving doubtful cases quickly and efficiently. An emphasis on efficiency would explain why anti-lapse statutes rely so heavily on the preference for consanguineous succession we find in intestacy law.

Fashioning an appropriate rule to address lapse will require us to define with more clarity what we mean when we speak of the intention of a testator. Given the insistence that finding and carrying out the intention of the testator are what wills law strives toward above all, it is no wonder that the dominant message about the importance of intention has obscured the primary drivers of testamentary transfers, the desires and expectations of the testator and the actions taken by both the testator and the executor or administrator of the estate. A will is essentially a set of declarations laying out what the testator desires to become of his property when he dies. A will can serve other purposes, too, of course, such as expressing the testator’s values or giving voice to other matters. But when we speak of testamentary intentions, we mean primarily the testator’s desired disposition of his property. In addition to expressing the testator’s desires, a will also embodies a testator’s expectation that the law will uphold his wishes through the probate process after he dies. Thus, the action of a testator in executing a will and the actions he expects his directions will bring about after his death are both essential to realizing a testator’s individually crafted estate plan.

228 Chaffin, supra note 11, at 309–10.


230 Jane Baron, Intention and Stories, 42 Duke L.J. 630, 633 (1992); Anti-Lapse Statutes, supra note 78, at 1219 (describing the coordination of “testamentary desire with legal effect”). Of course the law does refrain from carrying out provisions in wills that are against public policy. See, e.g., Girard Tr. Co. v. Schmitz, 20 A.2d 21, 36 (N.J. Ch. 1941) (provision would sow discord in family).

231 See John R. Searle, Intentionality: An Essay in the Philosophy of Mind 80,
Intestacy, by contrast, since it is an estate plan by operation of law or by default, is premised not on the testator’s action but her inaction. The agent appointed to distribute an intestate’s property after his death carries out the estate plan the state has enacted to take effect in default of a valid will. Although “[a] person can intentionally refrain from action without trying to do so[,]” it is generally believed that decedents die without wills because they fear death and the cost of executing wills, not because they prefer the default estate plan crafted by the state.

What we have come to call intention in wills is a convenient but clumsy shorthand for a formalized expression of desire, a “faded form of intention,” as John Searle puts it, “with the Intentional causation bleached out.” Firm distinctions have been drawn between desire and intention in the criminal law, but in speaking of wills, by desire I do not mean to suggest that the testator must experience pleasure or satisfaction or harbor some benevolent motive in picturing the property in the hands of the beneficiary. I mean merely that she “aims at” the property being within the beneficiary’s control. When a testator devises Blackacre to X, for example, she may be motivated to benefit or burden X, but what is certain is that X’s control of Blackacre is her aim. It matters little whether the testator expresses her desire with “I desire that X have Blackacre” or “I want Blackacre to go to X” or “I direct my executor to convey Blackacre to X.” The testator wants X to have Blackacre and by embodying this expression of her desire in her will directs that that result be brought about upon her death. Thus, despite the theory that Blackacre will vest in X immediately upon death of the testator, the testator does not actually intend to give Blackacre to X but desires that Blackacre be given to her. The testator acts to make his wishes known in a correctly executed document, but the actions he envisions occurring with respect to his property are by definition ones that he will not be present to bring about. An agent, usually named in the will, will be responsible for putting its provisions into action. In essence, then, the will is a set of directions to an agent, perhaps the one the testator has named in the will but

92 (1983).

232 Peter Cane, Mens Rea in Tort Law, in INTENTION IN LAW AND PHILOSOPHY 129, 131 (Ngaire Naffine et al. eds., 2001).


234 SEARLE, supra note 231, at 36.


236 G.E.M. ANSCOMBE, INTENTION, 18 (2d ed. 1985); Cane, supra note 232, at 131.

237 In re Estate of Fitzsimmons, 86 A.3d 1026, 1035 (Vt. 2013) (referring to “the rule of immediate passage”).
certainly the one a court will appoint. The law encourages the expectation a testator has that some agent will take control of carrying out her desires after he has passed away.238

Some will object to my definition of intention in terms of desire by pointing out that the testator’s declarations must be sufficiently directive so as to carry them beyond mere precatory language. The words must show testamentary intent, not merely a request or entreaty that stops short of a command or direction.239 In practice, precatory language rarely gets in the way of discerning a testator’s testamentary aims because it is invariably used in connection with a gift outright that is in no way ambiguous. In other words, when the words are meant to govern conduct they are an “expression of testamentary desire” but when they are a mere “expression of opinion or offering of advice” they can be construed as “nothing more.”240 The statement “I desire A to have Blackacre” would be considered precatory if mentioned in conversation or scribbled on a to-do list.241 It would be considered testamentary if embodied in a validly executed will.242 The proper execution of the will is sufficient to carry what would otherwise be considered precatory language into the realm of testamentary intent.

The real question raised about the use of precatory language in wills is whether the testator intended to impose a condition on a beneficiary’s use of the property.243 The classic example of precatory language is one where the testator bequeaths Blackacre outright “to [A] and it is my wish and desire that [B] should be able to live on the land during her life.”244 The testator intends that A receive Blackacre but does not intend to make it compulsory for A to allow B to live there. She is merely making a request.245 In other words, X wants to leave it up to A to decide how to behave toward B but wants A to know her preferences in the

238 See 96 C.J.S. Wills § 902 (2016).
240 See GARDNER, supra note 122, at 33.
241 See, e.g., In re Henry’s Estate, 248 N.W. 853, 855 (Mich. 1933) (holding document was not a will but a letter requesting assistance with modifying a will).
244 DUKEMINIER & JOHANSON, supra note 33, at 456.
245 See, e.g., Byars, 182 S.W.2d at 364; Banks v. Banks, 262 S.W.2d 119, 121 (Tex. Civ. App. 1953).
matter. 246 If T makes a monetary bequest “to C with the hope that C will care for D,” she wants C to decide whether he will use the money to care for D and hopes he will. None of the precatory language in these examples makes the gifts to A and C conditional; it thus does not get in the way of A and C’s obtaining control of the property. In both cases, the testator has stated what she wants carried out by her agent and what she wants left to the discretion of A and C. 247

These reflections on the meaning of testamentary intentions establish that they are desires formalized as directions to an agent. As mentioned above, testamentary intentions reflect the testator’s wills-mindedness, a state of mind focused on providing a mechanism by which testamentary desires can be carried out. These understandings tell us little about what a testator wants to happen to his property if his chosen beneficiary predeceases him. Since wills law is committed above all to carrying out the testator’s intent, it seems anomalous to revert so automatically to a regime resembling intestate distribution, the embodiment of the absence of testamentary intent. Such an approach completely eliminates the testator’s wills-mindedness from the equation, substituting for it an outcome that seems above all aimed at easing the administration of estates. In this posture, the state is deciding what the testator’s intentions should be rather than doing its utmost to honor his expectations. Since the usual testamentary bequest aims to place property within the control of the beneficiary, it would be more in keeping with the testator’s wills-mindedness to allow the property to be controlled by the predeceased beneficiary’s will. Where the beneficiary has a will of her own, she has demonstrated a wills-mindedness with which the testator can directly identify. The traditional defenses of the rule of lapse and the anti-lapse regimes that have arisen to temper its ills completely ignore the likelihood that in choosing a particular beneficiary a testator is not seeking to benefit his issue, whether or not the beneficiary is a close family member and whether or not the beneficiary dies first. Instead, unless the testator places specific conditions on the testamentary gift, he wishes the beneficiary to assume control of the property to the extent of allowing a predeceased beneficiary’s own will to direct the disposition of it.

My proposal, then, is for amending the currently prevailing anti-lapse provisions that are reflections of intestate distribution norms. The

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246 See, e.g., Lux v. Lux, 288 A.2d 701, 703 (R.I. 1972) (expressing “desire” that real estate be sold to a member of her family in the event that such property is sold to pay estate’s debts).

247 See, e.g., In re Oliver’s Will, 42 N.Y.S.2d 865, 870 (Sur. Ct. 1943).
new default rule should be that a bequest does not lapse when the predeceased beneficiary’s estate is disposed of through a validly executed will and the beneficiary died within one year of the testator. The will of the beneficiary should be probated,248 in order to remove all doubt about the beneficiary’s intentions and the enforceability of his will’s provisions. The default rule favoring the beneficiary’s will could be overridden where the will itself requires that the beneficiary survive the testator or provides that a gift lapses on the death of a beneficiary before distribution of the estate.249 Such provisions would indicate that the testator did not want a predeceased beneficiary’s estate plan to control the disposition of the property, probably because she desired the beneficiary to have actual possession of the property. The rule would not apply where the predeceasing devisee died intestate. Intestacy may be an estate plan by operation of law, but it is unlikely that those who have died without a will have consciously elected the scheme designed for them by the state. To distribute the property to the predeceasing devisee’s heirs at law in such cases would, in the words of the Supreme Court of Alabama, implicate the court in making a will for her.250 In such circumstances, “[t]he court cannot say what would have been the wish of the testatrix had she had a chance to express it.”251 If the beneficiary is one of the testator’s heirs at law, however, the property should be distributed to the beneficiary’s heirs.

This is not the first proposal for expanding anti-lapse, though prior ones have perhaps not been quite as far-reaching.252 I believe, though, that there is good reason for broadening anti-lapse provisions. First, as we have seen above, the lapse doctrine is difficult to square with a testator’s intention. Second, anti-lapse statutes are tepid attempts to address this problem and rely, in a wills context, on intestacy law’s preference for consanguineous succession. NCCUSL’s move to expand the class of

248 By statute, wills are supposed to be presented and filed in the clerk’s office. See, e.g., FLA. STAT. ANN. § 732.901(1) (West 2015); TEX. EST. CODE ANN. § 252.201 (West 2015). But not every will is probated, as in cases where a surviving spouse is already in possession of the property in the estate and simply continues in possession. See, e.g., In re Estate of Zimmerman, 485 P.2d 215, 217 (Kan. 1971); Wetzel v. Watson, 328 S.E.2d 526, 528 (W. Va. 1985).
249 See, e.g., Estate of Hampe, 193 P.2d 133, 135 (Cal. 1948) (discussing a will requiring a beneficiary to survive the issuance of the decree of distribution); In re Greacen, 54 N.Y.S.2d 426, 427 (Sur. Ct. 1945).
251 Id.
252 See, e.g., Chaffin, supra note 11, at 287, 294 (advocating expansion of Georgia’s anti-lapse statute to class gifts where one or all of the class die either before or after the execution of the will but before the testator).
legatees to which anti-lapse applies is a step in the right direction, but it
does not go far enough. The real problem is that substituting issue does
not appear to be in keeping with the policy for carving exceptions out of
the lapse rule in the first place.

Currently, only one jurisdiction in the United States distributes
lapsed property to the predeceased beneficiary’s heirs or devisees. The
Maryland statute substitutes the beneficiary’s heirs if she died intestate
and her legatees if she died testate.253 A more complete abrogation of the
default lapse doctrine can scarcely be imagined. As Eugene Scoles put it,
“How, if at all, is Maryland’s lapse statute different from simply reject-
ing the basic lapse rule that requires the devisee to survive the testa-
tor?”254 As noted above, this approach is based on the legal theory of fic-
titious survivorship, a theory that the standard American anti-lapse
statute rejects in favor of substituting the issue of the predeceased lega-
tee.

Maryland’s anti-lapse statute is not without its problems. Simpson
v. Piscano,255 the first case in which Maryland’s high court first co-
strued the statute, involved the reciprocal wills of a husband and wife,
wherein the estate of each was devised to the other. Bernard predeceased
his wife Leona by a little over a year. Upon Leona’s death, the quandary
was that Bernard’s will directed his lapsed legacy back to Leona.256 A
court applying an anti-lapse provision that does not rely upon the prin-
ciple of intestacy law that property is never distributed to or through the
estate of a predeceasing heir257 will eventually confront a case where the
beneficiary of the predeceased beneficiary’s estate will also have prede-
ceased the testator. This is not a problem per se, of course. In Simpson,
the real problem was that the beneficiary’s will directed the property
back to its source, the testator herself.258 The superior court sensibly
concluded that under those specific circumstances, the anti-lapse statute
becomes inoperative.259 Since Bernard died testate, the statute directed

253 MD. CODE ANN., EST. & TRUSTS § 4-403(b) (West 2015).
254 SCOLES ET AL., supra note 25, at 405.
255 419 A.2d 1059 (Md. 1980).
256 Id. at 1061–62.
257 Case law and commentary are clear that the issue or heirs entitled to take under an an-
ti-lapse provision are those who survive the testator, not the legatee. See, e.g., McAllister v.
McAllister, 167 N.W. 78, 81 (Iowa 1918) (only heirs of predeceased legatee who survived
testator were entitled to take); Anti-Lapse Statutes, supra note 78, at 1218 (“[I]f the legatee
dies intestate, his heirs take not by substitution but by descent from the legatee, and are deter-
mined as of the date of the legatee’s notional death, immediately after that of the testator.”).
258 Simpson, 419 A.2d at 1061.
259 Id. (“[W]hen the property arrives back at the starting gate . . . the anti-lapse statute
becomes ineffective . . . .”).
the terms of his will to control the disposition.\textsuperscript{260} It was not until Bernard’s will was found to bequeath the property to Leona, that the statute could no longer be applied.\textsuperscript{261} Instead of having the property bounce back and forth between the two estates, the court’s approach was to take the statute as far as it would go, and the result was as if Leona had died intestate.\textsuperscript{262} The Maryland Court of Appeals affirmed this result.\textsuperscript{263}

The question of the application of Maryland’s statute to reciprocal wills is perhaps easier to resolve than is the hypothetical posed by the dissent in Simpson. If Leona’s will had devised her estate to X who predeceased her, and X’s will had bequeathed everything to Y, who also predeceased Leona, “[w]hen does the chain end?”\textsuperscript{264} The dissent found it “ludicrous” and “absurd” “to apply a fiction which would place beneficiaries in a chain composed of persons whom the testatrix would have no intention to benefit and who were strangers.”\textsuperscript{265} In fairness, this is precisely what the statute appears to contemplate. What the dissent misconstrues is that the testamentary mindset of a testator may well be to benefit the strangers whom her named beneficiary wished to benefit. When a beneficiary does outlive the testator, the testator understands quite well that the beneficiary has the power to benefit strangers with gifts of the property and certainly intends “to pass the power of testamentary disposal along with her gift.”\textsuperscript{266} That is why my proposal is limited to situations where the predeceased beneficiary also has a will. I would limit the breadth of anti-lapse reform to cases where the beneficiary has also acted with testamentary intentionality. I am not at all convinced, for the reasons given above, that the same rationale applies where the beneficiary has died intestate and would even be more opposed to the property’s being distributed through successive intestate estates. I am also convinced that, in cases where a beneficiary has died more than one year before the testator, the testator’s wills-mindedness should lead her to revisit her will and make clear that she wants the predeceased beneficiary’s beneficiaries to receive the bequest if in fact she does.

In further defense of the Maryland statute, it bears repeating that the provision does not distribute the property to the predeceased beneficiary’s estate but merely substitutes, in the testator’s estate, the benefi-
ciaries named in his will. Indeed, under a traditional anti-lapse statute, it has been emphasized many times that the property does not pass to the representative of the predeceasing legatee or under his will but under the will of the testator such that they become devisees in that will by substitution. As was also mentioned previously, an anti-lapse statute based on the model we find in Maryland is not a statute that requires the reopening of probate of an estate that has already been closed. The statute merely tells us where to locate the evidence necessary to complete the disposition of the testator’s estate. In this way, it allows us to move beyond old notions about expectancies and one’s estate being capable of disposing only of property he possesses upon his death. Furthermore, referring to the terms of the legatee’s will to make the distribution in no way runs the risk of engaging in a “double probate.” Further support for this approach to lapse is documented in the section that follows.

IV. **DOCTRINAL SUPPORT FOR A REVISED APPROACH TO ANTI-LAPSE**

The analysis above establishes that when a testator bequeaths property to a beneficiary who predeceases the testator leaving a valid will, the more likely scenario is that the testator intends for the beneficiary’s will to control the lapsed gift. In this section, I discuss two doctrines relating to the interpretation of wills and an estate planning device all of which offer some support for my analysis.

A. **Acts of Independent Significance and Extrinsic Evidence**

Wills act as a mean to combat fraud by requiring that testamentary transfers satisfy certain formal requirements. It is believed that formalities such as signing the will at the end and having witnesses attest have evidentiary and cautionary functions that counterbalance the ease with which potential heirs can make statements of self-interest that the testator cannot be present to contradict. Although the primary purpose of such acts may be to combat the fraud of self-seeking heirs, they place a

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267 Mechem, supra note 65, at 21 (citing cases).
268 R.I. GEN. LAWS ANN. § 33-6-19 (West 2015) (“[S]uch devise or bequest shall not lapse, but shall take effect and operate as a devise or bequest from the testator to that issue . . . .”); In re Conner’s Estate, 36 N.W.2d 833, 841 (Iowa 1949); Chaffin, supra note 11, at 272, 276.
heavy burden on testators as well. Since their estate plans must be fully embodied in a properly executed writing, the law circumscribes the ability of testators to change their estate plans informally. It would not be adequate, for example, for a will to direct that property be distributed according to a memorandum that was prepared after the execution of the will.  

Once a testator has executed his will, he cannot make an enforceable testamentary decision that alters the disposition of his probatable estate beyond revoking it entirely or in part without formally executing a codicil or a new will.  

This is not to suggest that wills law is devoid of flexible rules of interpretation. The doctrine of independent significance or nontestamentary acts refers to beneficiary or property designations in wills that are determined by “acts or events that have a lifetime motive and significance apart from their effect on the will.”  

“Lifetime motive” refers to a motive of the testator, not someone else; otherwise, the doctrine would be swallowed by the necessity in almost every construction of a will to resort to extrinsic facts. Take class gifts, for example. In a gift to A’s children, the children of A living at the time of the testator’s death will take the property. A may have predeceased the execution of the testator’s will, in which case there will be no additional children of A than exist at that time. If A outlives the execution, A may begin having children or have additional children before the testator’s death. Since A’s decision to have children or not to have them is not a “lifetime motive” of the testator, we would not say that A’s having children is an act of independent significance. Likewise, the direction to “give ten dollars to each of the members of my family whose name is recorded in the family Bible kept by my Uncle Ned” refers to the acts of Uncle Ned and not of the testator. The misnomer “acts of independent significance” leads us to believe that any fact that helps determine the identi-

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273 This might not be completely accurate in the context of holographic wills. There are cases that allow the testator to change the will in his handwriting without signing it again. See, e.g., Stanley v. Henderson, 162 S.W.2d 95, 97 (Tex. Comm’n App. 1942).  
274 DUKEMINIER ET AL., supra note 12, at 323.  
275 SCOLES ET AL., supra note 25, at 160 (referring to acts “peculiarly within the control of the testator”).  
276 See id.; see also WAGGNER ET AL., supra note 69, at 281 (citing Stubbs v. Sargon, 40 Eng. Rep. 1022, 1024 (Ch. 1838)).  
277 This example is taken from SHAFFER & MOONEY, supra note 46, at 86.  
278 See, e.g., Tierce v. Macedonia United Methodist Church, 519 So. 2d 451, 456 (Ala. 1987); MCGOVERN ET AL., supra note 15, at 249; SCOLES ET AL., supra note 25, at 160; SHAFFER & MOONEY, supra note 46, at 86. The term “acts of independent significance” may be confusing to some who are familiar with this term from insurance law. In that body of law,
ty of the takers or the property under the will is a fact of independent significance. This may be true as a matter of will construction, where courts use extrinsic evidence to identify the property and the takers of it, but referring to this process as involving facts of independent significance distracts us from the purpose of the doctrine which is to determine what acts of the testator beyond the execution of the will can be given effect in a distribution of the estate.

“Lifetime motive and significance” refers, in addition, to nontestamentary purposes and effects, that is, “not be[ing] solely for the purpose of supplementing the will.” The concern is that the testator may be altering his estate plan (beyond revocation) without the required formalities. Many of the testator’s decisions regarding his property will affect what the beneficiaries ultimately take but will have little or nothing to do with a desire to alter his estate plan. We should be satisfied that such actions need not be the subject of testamentary formalities as long as they “have a substantial significance apart from their impact on the will.”

What if, instead of a gift to A’s children, the testator’s will contains gifts of “‘the automobile that I own at my death’” to “my children” and of $1,000 “‘to each person who shall be in my employ at my death?’” As long as we are satisfied that the decisions regarding what automobile to own or whom to employ have to do with matters apart from modifying the estate plan, there should be no objection to allowing them to influence the final disposition of the property. For example, the identity of the employees, the children, and the car the testator drives likely lie in the testator’s desire to drive a particular car, his wanting a family of a certain size, and his convictions about how he should run his business rather than how he wants his estate distributed. They are “the kind of thing that would occur without regard to their effect on the will.” We have faith in the use of these events because they are performed “for some reason other than the effect it would have on the testamentary disposition, notwithstanding that it might occur or be done, or did occur or was done, for the purpose of affecting the testamentary disposition.”


279 See In re Tipler, 10 S.W.3d 244, 246–47 (Tenn. Ct. App. 1998) (citing SCOTT ON TRUSTS § 54.2 (4th ed. 1987)).

280 Tierce, 519 So. 2d at 456.

281 SCOLES ET AL., supra note 25, at 160 (emphasis omitted).

282 This example is taken from DUKEMINIER ET AL., supra note 12, at 323–24, and is slightly altered from the original.

283 SCOLES ET AL., supra note 25, at 160.

284 RESTATEMENT (THIRD) OF PROP.: WILLS AND OTHER DONATIVE TRANSFERS § 3.7
Even what the residue consists of may be influenced by many actions of
the testator after the will’s execution.\textsuperscript{285} Bequests of “contents” are no
different.\textsuperscript{286} The cases decided and the statutes passed to make clear that
such bequests do not include cash or “titled property”—e.g., property
evidenced by deeds or bank passbooks—arise less from a concern that
the testator has engaged in a nonformalized testamentary act than from
the conviction that his intent in describing the contents of a drawer or
box in so pedestrian a way could not have encompassed such items.\textsuperscript{287}

Cases involving wills that direct that the estate be distributed using
someone else’s estate plan bear some resemblance to my proposal that a
predeceased beneficiary’s will control the lapsed devise. Such a case
was \textit{In re Tipler}.\textsuperscript{288} In this case, Gladys Tipler’s will directed that her es-
tate be distributed to the beneficiaries named in her husband James’s
will if James predeceased her. He did, having executed a will several
years after she did. Tipler’s heirs challenged the provision because
James’s will was not yet in existence when she executed her will.\textsuperscript{289} The
court upheld the devise as a proper exercise of the doctrine of indepen-
dent significance.\textsuperscript{290} The \textit{Tipler} decision cites a number of other cases
where wills that direct the distribution of property in accordance with the
will of another were upheld as legitimate exercises of the independent
significance doctrine.

Despite the court’s analysis in \textit{Tipler}, it is important to recognize
that it technically is not a case involving acts of independent signif-
cance. This is because James’s will was his act, not Gladys’s. The case is
no different from one construing a will that gives property to “my sur-
viving sisters” or “the current mayor of New York City.” All that is re-
quired in such cases is extrinsic evidence to clarify the identity of the
beneficiary. Indeed, the court in \textit{Tipler} appears unsure whether the case
presents a simple matter of identifying the beneficiaries through extrin-
sic evidence or whether it might be akin to a power of appointment or
some looser form of incorporation by reference.\textsuperscript{291} But this case has
nothing to do with incorporating unattested material into the testator’s
will. Nor does it involve a testator’s giving someone the right to “finish”
his estate plan via a power of appointment. The testamentary signifi-

\begin{itemize}
  \item \textsuperscript{285} \textit{Scoles et al.}, supra note 25, at 160.
  \item \textsuperscript{286} See, e.g., Old Colony Tr. Co. v. Hale, 18 N.E.2d 432, 433 (Mass. 1939).
  \item \textsuperscript{287} See, e.g., Creamer v. Harris, 106 N.E. 967, 968 (Ohio 1914).
  \item \textsuperscript{288} 10 S.W.3d 244 (Tenn. Ct. App. 1998).
  \item \textsuperscript{289} \textit{Id.} at 245–46.
  \item \textsuperscript{290} \textit{Id.} at 249.
  \item \textsuperscript{291} \textit{See id.} at 247–48.
\end{itemize}
cance of the beneficiary’s will makes this a simple matter of extrinsic evidence. The use of the beneficiary’s will would simply be to identify the beneficiaries named therein, and there would be no need to reopen the estate of the beneficiary.292 For this reason, the creditors of the deceased beneficiary would have no interest in the property as they would if the gift were a gift to the beneficiary’s estate.293

B. Powers of Appointment

Another legal theory that bears some resemblance to my proposal is the general testamentary power of appointment. A power is the grant of authority to dispose of the property of another. Although it is not itself a property right, in its broadest sense a power allows the donee of the power “to do any act which the donor himself or herself might lawfully perform.”294 This would include the donee’s appointment of the property to himself.295 But a power can also be narrower, crafted so that the donee of the power may appoint the property only to someone within a defined class of persons or may appoint the property only at a certain time, for example only during his lifetime or only at his death.296 In effect, a testator may appoint someone to “finish” his estate plan via provisions in the will of the donee of the power. The two wills are then construed together.

Does a testator, contemplating lapse, intend “to pass the power of testamentary disposal along with” whatever bequests he has made to predeceased legatees?297 Under current law, a legatee who survives the testator has precisely this power. But in most jurisdictions, the mere fact that the legatee has not outlived the testator is, under the dominant American approach to anti-lapse, a justification for depriving him of it. Nonetheless, there are at least two senses in which the power-of-appointment device reflects my proposal.

First, “[u]nder certain circumstances, the will of the testator and the will of another may be construed together.”298 A will conferring a power

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292 RESTATEMENT (THIRD) OF PROP.: WILLS AND OTHER DONATIVE TRANSFERS § 1.1 cmt. b, illus. 16 (AM. LAW INST. 1999); Id. § 1.2 cmt. g; cf. Id. § 16.1 cmt. c (class gift to "heirs").
293 See Md. CODE ANN., EST. & TRUSTS § 4-403(c) (West 2015); McGovern et al., supra note 15, at 421 (“They would take directly from the testator, so the bequest would not be taxed in Alice’s estate or subject to claims of her spouse or creditors.”).
294 72 C.J.S. Powers § 1 (2016).
295 Id. § 8.
296 Id.
297 Anti-Lapse Statutes, supra note 78, at 1220.
of appointment by will and the will of the donee exercising such power is one such instance.\footnote{Republic Nat’l Bank of Dallas v. Fredericks, 274 S.W.2d 431, 440 (Tex. Civ. App. 1954), rev’d on other grounds, 283 S.W.2d 39 (Tex. 1955).} The result is that “the interests or estates created by the exercise of a power of appointment take effect as if created by the instrument creating the power, and the appointee or beneficiary takes title under the donor of the power and not under the donee.”\footnote{72 C.J.S. Powers § 29 (2005).} Under my proposal, as with powers of appointments, the provisions made by a predeceased beneficiary under a will would also be read into the will of the testator.\footnote{Second Nat’l Bank of New Haven v. Harris Tr. & Sav. Bank, 283 A.2d 226, 228 (Conn. Super. Ct. 1971); Dukeminier & Johanson, supra note 33 at 708; Waggoner et al., supra note 69, at 989.} Reading the wills together in this way would allay the concern that distributing lapsed property to the beneficiaries named in the legatee’s will would necessitate two probates.

Second, if we analogize a predeceased beneficiary to the donee of a power and her will to the exercise of that power, then, as with powers of appointment, if the legatee fails to execute a will or it is invalid, the power would be deemed ineffectively exercised. In such a case, the property would be distributed as it would pursuant to the failure to exercise a power.\footnote{See 72 C.J.S. Powers § 30 (2005).} The “default takers” in a case of lapse would be the testator’s residuary legatees or his heirs at law or, if applicable, the substituted takers under the relevant anti-lapse provision. In short, if the predeceasing beneficiary had no valid will, then my proposed rule would not apply.

Although the power-of-appointment theory supports my proposal to change the contours of the typical anti-lapse statute, several characteristics of valid powers of appointment conspire to make this theory less supportive of my proposal than the principles of will interpretation discussed above. The primary problem with this theory is that a power of appointment cannot simply be read into a will that contains a lapsed legacy but must expressly be created by the donor of the power.\footnote{In re Estate of Krokowski, 896 P.2d 247, 250–51 (Ala. 1995); McCuddy v. Citizens Fidelity Bank & Tr. Co., 505 S.W.2d 766, 767 (Ky. 1974); In re Estate of Kohler, 344 A.2d 469, 471 (Pa. 1975).} Of course, the proposal I am making is one that has to do with wills that have no such language. I am certainly not proposing that, to avoid lapse, a testator would be required to direct that a gift to a predeceased beneficiary be distributed in accordance with that beneficiary’s will. On the contrary, I am proposing a default measure that would apply in the ab-
sence of a specific intent to override it. The rule that a power must expressly be created to exist at all does not support this proposal.

Another difficulty is that, like the creation of powers, the exercise of a power of appointment must also be unequivocal.\(^\text{304}\) In other words, the instrument claimed as an exercise of the power must actually manifest an intention to exercise the power the donee has been given. Since the type of power that could serve as a model for my proposal is necessarily general, then a general residuary clause would have to be sufficient to exercise the power.\(^\text{305}\) But a general residuary clause is sufficient to exercise a power of appointment in only a minority of jurisdictions.\(^\text{306}\) The requirement that the exercise of the power by the beneficiary must be executed with specificity cannot be carried out by a beneficiary who is not aware that her will will serve to “appoint” lapsed property from the will of the testator. The rules governing the creation and exercise of powers of appointment, then, do not support my proposal to reform anti-lapse principles.

For the foregoing reasons, the power of appointment resembles my proposal only superficially. The donor and the donee of the power need to demonstrate too much intentionality to create and to exercise it. My proposal would operate by law and would not involve the affirmative acts of the testator in creating and exercising interests resembling a power of appointment or require the beneficiary to make affirmative statements in a will regarding devises to himself that lapse.

Given how embedded the principles of lapse and anti-lapse are in the law of wills, existing doctrine offers only limited support for my proposal to reform them. Although there are sound reasons for the reform I propose, as was true of the wave of anti-lapse legislation that currently holds sway within the American law of wills, such a reform will have to await the action of state legislatures.

V. CONCLUSION

Although the common law doctrine of lapse seems a harsh way to

\(^{304}\) See Hartford-Conn. Tr. Co. v. Thayer, 134 A. 155, 159 (Conn. 1926).


address cases in which a will beneficiary predeceases a testator, it remains a foundational principle of the law of wills. The policy rationale for the doctrine is a matter of some speculation, with some commentators suggesting it reflects the fact that the dead cannot own property and others suggesting that it reflects sensible estate planning. Rules that govern the disposition of property in cases of simultaneous death and that dictate that a beneficiary must survive the testator for a certain period of time help refine our understanding of how survival is established in the wills context, but they do not otherwise alter the common law of lapse.

The law of lapse appears to be a legal engine doing very little to advance wills law’s primary goal—finding and carrying out the testator’s intention. It acts as a default rule, operating in the absence of a stated intention to the contrary. The desirability of an alternative to the traditional disposition of property in lapse cases is firmly in evidence. Anti-lapse statutes exist in almost every state. They purport to remedy the remorselessness of the lapse doctrine by presuming that a testator would prefer his testamentary gift to a close family member to go to that relative’s issue in the event of lapse. Anti-lapse rules operate in a manner familiar from intestacy law, favoring lines of consanguinity and descendants over ancestors.

We have little cause to believe that the reasonable testator, having taken the time to draft a will in the first place, would prefer lapsed devises to close relatives to be disposed of in a fashion so closely resembling what the state dictates should become of the property of those who die without wills. Instead, being wills-minded, a testator would likely prefer the valid testamentary plan of a predeceased beneficiary to control the disposition of the property if the beneficiary had predeceased her within a relatively short period of time. This new approach to lapse does not find support in the device it might at first blush resemble, the power of appointment, but it does find support in will interpretation principles and in the fact that an estate is just as valid a testamentary beneficiary as a living person. As an antidote not only to the law of lapse but to the narrow anti-lapse statutes that currently serve as exceptions to it, a wills-minded approach to lapse will prevent us from making the preferences of the state for efficiency and ease of administration serve as stand-ins for what the law of wills is supposed to promote above all else.
THE UNRELIABLE CASE AGAINST THE RELIABILITY OF EYEWITNESS IDENTIFICATIONS: A RESPONSE TO JUDGE ALEX KOZINSKI

Laurie N. Feldman*

INTRODUCTION

The reliability of eyewitness identifications has come under intensifying attack. Espoused and repeated by the defense bar, the Innocence Project, many social scientists, legal academics, the media, and an increasing number of courts, claims that juries pervasively accept unreliable eyewitness evidence purport to be grounded in the rigorous testing of social science. In reality, however, they receive much of their authority from the form of persuasion by which an assertion is repeated so often that people come to believe that everyone knows it is true.1 Some players in this enterprise appear to have unstated stakes in debunking reliance on eyewitnesses that are unrelated to truth. While reasonably warranted steps should always be taken to avoid erroneous convictions, criminal justice reform should not be conducted in an echo chamber.

Judge Alex Kozinski is a respected and influential federal appellate judge, and, for this reason, it is particularly regrettable that he has now endorsed this movement debunking the reliability of eyewitnesses. The lead-off claim in his far-reaching critique of our criminal justice system posits that the “so-called wisdom” that “eyewitnesses are highly reliable” has been “undermined” by social scientific research showing that eyewitnesses are, in fact, “highly unreliable.”2 This conclusion itself,

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1 See AUSTIN J. FREELEY, ARGUMENTATION AND DEBATE: CRITICAL THINKING FOR REASONED DECISION MAKING 165 (7th ed. 1990); see also LEWIS CARROLL, LOGICAL NONSENSE: THE WORKS OF LEWIS CARROLL 279, 281 (1934).

2 Hon. Alex Kozinski, Criminal Law 2.0, 44 GEO. L.J. ANN. REV. CRIM. PROC. iii, iii–xliv (2015). Undoubtedly some of Judge Kozinski’s hard-hitting critiques have merit, and I
however, is highly unreliable. Social scientific research regarding eyewitness identifications is far less reliable and settled than Judge Kozinski supposes.

1. There Is No Reliable Evidence that Jurors Routinely Over-Rely on Eyewitness Evidence

Judge Kozinski’s treatment of eyewitness evidence turns on the contention that eyewitnesses are much less reliable than jurors think. There are certainly regrettable instances of jurors accepting flimsy eyewitness identifications. Although it is possible that jurors typically overrate eyewitness evidence, such an assumption should not masquerade as a scientifically established fact. There is little or no scientific proof that jurors generally over-rely on eyewitness testimony. Professor Elizabeth Loftus’s oft-quoted and purportedly scientific summation on the subject is this: “All the evidence points rather strikingly to the conclusion that there is almost nothing more convincing than a live human being who takes the stand, points a finger at the defendant, and says ‘That’s the one!’” Yet, Loftus supports this assertion with anecdotes about a few wrongful convictions and citations to studies that are distantly related at best. Likewise, in a more recent study co-authored by especially hope that his concerns about prosecutorial misconduct will be taken seriously. I focus here only on his criticisms of eyewitness evidence.

3 Kozinski, supra note 2, at iii–iv.
4 See BRANDON L. GARRETT, CONVICTING THE INNOCENT: WHERE CRIMINAL PROSECUTIONS GO WRONG 48–49, 64–70 (2011) (assessing trial records of DNA exoneration cases: in many cases, eyewitnesses had little opportunity to observe perpetrators and were initially uncertain of their identifications).

There are also regular instances of jurors rejecting eyewitness evidence. We know this was so in earlier times because acquittals were recorded. See, e.g., John H. Langbein, The Criminal Trial Before the Lawyers, 45 U. CHI. L. REV. 263, 290–91 (1978) (quoting two instances of rejections of eyewitness identifications in same Old Bailey session). Nowadays, though, rejections of eyewitness testimony usually lead to unreported acquittals that are largely invisible to appellate judges.

5 ELIZABETH F. LOFTUS, EYEWITNESS TESTIMONY 19 (1979).
6 See id. at 8–17. Professor Loftus admits the impossibility of conducting a scientific controlled study of how a real jury would decide the same case with and without eyewitness evidence. Id. at 9. She relies instead on results of laboratory studies such as one of her own in which college students read brief paragraphs of invented evidence in a pretend “trial” and voted on whether the defendant was “guilty.” Id. at 9–10. Her results, even within this contrived method of testing, have not been uniformly replicated. See Bernard E. Whitley, Jr., The Effects of Discredited Eyewitness Testimony: A Meta-Analysis, 127 J. SOC. PSYCHOL. 209, 209–14 (1986) (noting that “the use of written materials [as in the Loftus study] may . . . be an especially unreliable method of stimulus presentation”). Moreover, experts admit that “little is known about the empirical effect of trial simulation versus actual trials.” People v. Smith, 784 N.Y.S.2d 923 (Sup. Ct. 2004) (quoting defense expert testimony). As for evidence about
Loftus, the opening abstract announces that its results “demonstrate that jurors misunderstand . . . how particular factors . . . affect the accuracy of eyewitness testimony” and recommends policy changes as a result.7 The methodology used to reach this conclusion, however, turns out to be a multiple-choice telephone survey of random non-jurors.8 As even the study’s authors eventually admit in a footnote, this methodology cannot tell us how real jurors behave in a real trial.9

2. There Is No Reliable Basis in Social Science for Generalizations About Eyewitness Identifications Being Unreliable

Nor is Judge Kozinski’s new wisdom that eyewitnesses are in fact “highly unreliable” grounded in reliable social scientific evidence. To the limited extent that eyewitness laboratory research has useful application to real crimes, it is evolving and is nuanced in ways not captured in Judge Kozinski’s conclusions or in the twenty-year-old law review article on which he relies.10 That article correctly asserted that—at the time—contemporary studies suggested little or no correlation between eyewitness confidence and accuracy.11 This finding has long been a rallying point for prominent social science advocates and legal reformers, who have called for the United States Supreme Court to overrule its decisions in Neil v. Biggers12 and Manson v. Brathwaite,13 to the extent that they include eyewitness confidence as a factor for courts to consider when assessing the reliability of identifications.14 As it turns out, Big-

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8 Id. at 194–95.
9 Id. at 194 n.72.
11 Handberg, supra note 10, at 1022.
14 E.g., J. Alexander Tanford, The Limits of a Scientific Jurisprudence: The Supreme Court and Psychology, 66 Ind. L.J. 137, 140 (1990); Neil Vidmar et al., Rethinking Reliance

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gers and Brathwaite were ahead of their time.

In the eyewitness memory literature, . . . it was long thought that the relationship between confidence and accuracy is weak. . . . However, when confidence ratings are taken at the time a positive identification is first made from a lineup, the relationship between confidence and accuracy is now known to be quite strong.15

Not only are findings in flux, but generalizations about eyewitness reliability miss key nuances. For instance, some scientists who endorsed the idea that confidence does not correlate with accuracy failed to disaggregate eyewitnesses who were confident about their identification from those who were confident that the suspect was not in the lineup.16 Later separation of these variables showed that eyewitnesses who confidently make an identification are significantly more reliable than those who confidently do not17—a finding that should be reassuring with regard to the incidence of wrongful convictions. Studies also show a higher degree of accuracy when confidence is expressed immediately after an identification than when it is not expressed until after the witness re-

15 Laura Mickes et al., Receiver Operating Characteristic Analysis of Eyewitness Memory: Comparing the Diagnostic Accuracy of Simultaneous Versus Sequential Lineups, 18 J. EXPERIMENTAL PSYCHOL. APPLIED 361, 364–66 (2012); see also Neil Brewer & Nathan Weber, Eyewitness Confidence and Latency: Indices of Memory Processes Not Just Markers of Accuracy, 22 APPLIED COGNITIVE PSYCHOL. 827, 832 (2008) (“[C]onfidence is probably more informative than any other variable about the likelihood of an identification being accurate . . . .”); John T. Wixted et al, Initial Eyewitness Confidence Reliably Predicts Eyewitness Identification Accuracy, 70 AM. PSYCHOLOGIST 515, 516 (2015) (“[T]he combined weight of theory, empirical evidence, and revelations from DNA exoneration cases converge on the conclusion that initial eyewitness IDs are far more reliable than they have been portrayed in the literature. . . . [E]yewitness certainty at the time of the initial ID is diagnostic of guilt . . . .”); Benjamin Ryan, Eyewitness Testimony Is Unreliable… Or Is It?, MARSHALL PROJECT (Oct. 30, 2015), https://www.themarshallproject.org/2015/10/30/eyewitness-testimony-is-unreliable-or-is-it (“[A]cademics in the field of general memory research ‘have known for decades that under most conditions confidence is reliably associated with recognition accuracy.’”). For some history of the misguided research on eyewitness confidence, see Brewer & Weber, supra, at 829–32; see also Neil Brewer et al., Eyewitness Identification, in PSYCHOLOGY AND LAW: AN EMPIRICAL PERSPECTIVE 177, 207–09 (Neil Brewer & Kipling D. Williams eds., 2005); John T. Wixted et al., supra, at 516–19.


17 Id. at 12–14; see also Brewer et al., supra note 15, at 209.
ceives confirmatory feedback. A case in point is Jennifer Thompson-Cannino, Judge Kozinski’s example of an eyewitness whose mistaken identification had tragic consequences. Thompson-Camino’s certainty at trial emerged only after pronounced uncertainty at multiple initial procedures, during which she wrongly—and hesitantly—identified Ronald Cotton and received strong positive feedback from police. Strikingly, however, her misidentification came to light because her initial description of the perpetrator was so accurate that the resulting police composite drawing enabled the wrongly-convicted Cotton to recognize the true offender in prison. While categorical rejection of eyewitnesses who are initially uncertain would not be a good policy, most jurisdictions have adopted the sensible practice of having police obtain eyewitnesses’ confidence statements at the time of their first identification procedure. Judge Kozinski does not note this reliability-enhancing trend.

At the same time, Judge Kozinski uncritically accepts another tenuous claim—that the stress of violent crimes makes identifications unreliable. Case law is replete with examples of eyewitnesses who were uncertain, or unable to make an initial identification due to caution or difficulty recognizing assailants from often dated police headshot photographs. For example, People v. Hoiland, 22 Cal. App. 3d 530, 542 (1971) (Witness’ “failure to identify the photo . . . and his insistence on an in-person view are evidence of the conscientious and serious way in which he shouldered his responsibility.”); Lee v. State, 367 S.E.2d 115, 116–17, 333 (Ga. Ct. App. 1988) (noting victim unable to recognize defendant from old photo but instantly identified him in live lineup); State v. Buchanan, 36 So. 3d 1076, 1082 (La. Ct App. 3 Cir. 2010) (One witness “explained that she could identify [the defendant] in person but not in a picture,” whereas three other eyewitnesses identified the same defendant in both formats.).

As of 2013, more than 80% of police departments reported that they obtain contemporaneous confidence statements from eyewitnesses when using identification procedures such as photo lineups or showups. POLICE EXEC. RES. FORUM, A NATIONAL SURVEY OF EYEWITNESS IDENTIFICATION PROCEDURES IN LAW ENFORCEMENT AGENCIES 53 (2013). Some states have enacted statutory requirements for taking confidence statements during identification procedures. E.g., CONN. GEN. STAT. ANN. § 54-1p(c)(15)(A) (West 2015); N.C. GEN. STAT. ANN. § 15A-284.52(b)(12) (West 2015); OHIO REV. CODE ANN. § 2933.83(B)(4)(a) (West 2015); VT. STAT. ANN. tit. 13, § 5581(b)(5) (West 2015).
able. While some social scientists trumpet this generalization, “30 years of data have not as yet yielded a clear picture of whether heightened stress has a positive, negative, or null effect on eyewitness memory.” Here is a prime example of the shakiness of the whole eyewitness-debunking enterprise—the inability of research to simulate real crimes, for ethical and other reasons. As a rule, “eyewitness memory studies most commonly study . . . noncriminal activities presented in videotape to college students.” Furthermore, because researchers must try to isolate variables, they do not recreate the complex matrix of factors affecting real crimes.

Thus, researchers themselves admit that they cannot answer many questions about the reliability (or the statistical significance) of their laboratory studies as applied to real crimes, real eyewitnesses under oath, and real jurors. For these reasons, some researchers have gone outside

24 Kozinski, supra note 2, at iii–iv.
26 Heather D. Flowe et al., Limitations of Expert Psychology Testimony on Eyewitness Identification, in EXPERT TESTIMONY ON THE PSYCHOLOGY OF EYEWITNESS IDENTIFICATION 208 (Brian L. Cutler ed., 2009). See also Curt A. Carlson & Maria A. Carlson, A Distinctiveness-Driven Reversal of the Weapon-Focus Effect, 8 APPLIED PSYCHOL. CRIM. JUST. 36, 49 (2012) (“[O]ur findings should not be applied directly to real world situations . . . , especially because we could not replicate (nor did we want to, due to ethical constraints) the kind of fear and stress inherent to real eyewitness situations involving a weapon. Additionally, our participants were college students, primarily female, Caucasian, and from the Midwest.”); John C. Yuille et al., Expert Testimony on Laboratory Witnesses, 10 J. FORENSIC PSYCHOL. PRACTICE 238, 240 (2010) (“[T]he nature of events witnessed by laboratory witnesses limits the application of results to the criminal justice system.”).
27 “Interactions between and among these variables have not been addressed systematically by researchers.” COMM. ON LAW AND JUSTICE, supra note 20, at 64. For example, studies on the effect of stress have failed to isolate it from co-factors such as close vantage point and length of time the victim first saw the perpetrator before the stressful event, which might offset negative impacts on accuracy. See Flowe, supra note 26, at 203–04; see also Penny S. Woolnough & Malcolm D. MacLeod, Watching the Birdie Watching You: Eyewitness Memory for Actions using CCTV Recordings of Actual Crimes, 15 APPLIED COGNITIVE PSYCHOL. 395, 407 (2001) (“The findings in the present study . . . suggest that any detrimental effect of arousal on eyewitness performance may be counterbalanced by the novelty of the situation and the need to maintain a high state of awareness.”).
the lab and tested eyewitnesses’ memories of actual crimes that happened to be captured on videotape. The results suggest that eyewitnesses are much more reliable than Judge Kozinski appears to believe. Studies found that directly-involved eyewitnesses accurately recall between 84% and 96% of details months after crimes, that stress has a positive or a null effect on accuracy, and that witnesses who experience higher levels of stress recall more details.29 One study, conducted three months after a three-minute robbery, compared the surveillance tape to the data that witnesses recalled and found that 84% of the recalled data was accurate, including descriptions of the robbers.30 Witnesses were “significantly more confident” about correct than incorrect recollections.31 An inaccurate television re-creation did not influence witnesses’ memories, leading the authors to find that “an original memory record of a significant event is not easily altered by seeing a staged reconstruction of the event.”32 And, although many of the witnesses underwent psychotherapy, those who were more emotionally impacted had more accurate recall.33 In another study comparing footage of a real crime to eyewitness statements, the authors concluded, “Perhaps the most striking feature of the data presented here is the high level of accuracy of eyewitness memory.”34 Eyewitnesses “were performing at virtually ceiling level[s]” of 96% accuracy in recalling details.35 The crime witnesses’ recall was unaffected by violence.36

Another fact that mitigates concerns about erroneous identifications in research studies—but is rarely recognized by eyewitness debunkers—is that the percentage of mistaken eyewitnesses in studies greatly exceeds the percentage of mistaken eyewitnesses who testify at trials. Police and prosecutors do not proceed against wrongly identified “fillers” whom police have placed in lineups along with their suspect, or generally rely on eyewitnesses who identify them. Thus, many erroneous eyewitnesses are weeded out of the system before charges are even filed.37
3. Eyewitness Identification Scholarship Is Often Distorted by Agenda-Driven Advocacy

Beyond the limitations discussed above, to an alarming extent, eyewitness identification scholarship is in fact eyewitness-reform advocacy. The National Academy of Sciences recently concluded that none of the meta-analyses it reviewed regarding eyewitnesses “met all current standards for conducting and reporting systematic reviews, and few even met a majority of these standards,” and concluded that study findings were subject to “unintended biases and the conclusions [were] less credible than was hoped.”

Some eyewitness researchers have contrived and overstated consensus in favor of their positions. For instance, a widely cited 2001 study purported to show agreement on eyewitness issues—based on the results of a mail-in survey. According to one expert’s later testimony, moreo-
ver, this survey was mailed to a small sampling of the thousands of researchers in the field, excluded skeptics, had only a 34.4% response rate, and even among responders did not show uniformly strong acceptance of putative consensus positions.\footnote{People v. Smith, 784 N.Y.S.2d 923 (Sup. Ct. 2004) (summarizing testimony regarding the Kassin survey methodology).}

Far from welcoming the self-correcting process of scientific inquiry, many eyewitness researchers ignore or attack results that refute their pet causes. For instance, in the confidence/accuracy controversy, an early study suggested that, under a proper methodological approach used for decades in other areas of research, the relationship between confidence and accuracy was positive and linear.\footnote{See Brewer & Weber, supra note 15, at 827–40.} Yet, this finding was at first largely ignored, “perhaps because eyewitness researchers had already decided their position . . . or maybe because of the substantial numbers of participants required to pursue this approach properly.”\footnote{Id. at 832. See also Daniel L. Schacter et al., Policy Forum: Studying Eyewitness Investigations in the Field, 32 L. & HUM. BEHAV. 3, 4 (2007) (“[P]artisan[s] on both sides of the debate . . . have unfairly dismissed some criticism and praise” of study with unconventional findings.).}

And, although selective disclosure of data and study results is anathema to the scientific model, in a meta-analysis in another area of eyewitness advocacy, nearly half of the completed studies were unpublished. Those studies that were published tended to support the reform position, while the unpublished papers did not.\footnote{Dawn McQuiston-Surrett et al., Sequential vs. Simultaneous Lineups: A Review of Methods, Data, and Theory, 12 PSYCHOL. PUB. POL’Y & L. 137, 139 (2006).} What is more, virtually all of the published studies supporting the reform position “were conducted in a single laboratory, which may raise questions about the independence of studies selected for review.”\footnote{Id. at 140.} On the other hand, studies from other researchers, which were not selected for review and publication, did not show this result.\footnote{Id. at 140–41.} The process of peer review, often assumed to ensure scientific rigor, sometimes compounds the problems, due both to “submission and to reviewer biases.”\footnote{See also Cordelia Fine, Opinion, Biased But Brilliant, N.Y. TIMES (July 30, 2011), http://www.nytimes.com/2011/07/31/opinion/sunday/biased-but-brilliant-science-embraces-pigheadedness.html (noting peer reviewers shown to rate submissions “significantly more favorably when the paper happened to offer results consistent with their own theoretical stance” and less favorably when it did not).}
4. Exonerations do not show that eyewitnesses are generally unreliable

Judge Kozinski relies equally uncritically on the other primary source for claims of eyewitness unreliability: exonerations. Referring to the National Exoneration Registry, he writes that “mistaken eyewitness testimony was a factor in more than a third of wrongful conviction cases.”49 But that registry is not restricted to cases of actual innocence. The registry counts as “exonerations” every case in which “a defendant who was convicted of a crime was later relieved of all legal consequences of that conviction through a decision by a prosecutor, a governor or a court, after new evidence of his or her innocence was discovered.”50 In fact, many of the “exonerations” are appellate reversals on grounds from which one cannot deduce that the defendant was actually innocent.51

49 Kozinski, supra note 2, at iv.

In the registry’s “mistaken witness ID” category of concern to Judge Kozinski, “mistaken” is misleading in that, again, “exoneration” is not necessarily proof of innocence. For example, in the case of Chamar Avery, the defendant was “exonerated” after the Sixth Circuit concluded that his trial counsel was ineffective in failing to investigate an alibi defense—despite the post-conviction court’s finding that a purported alibi witness’ testimony was “totally incredible.” See Avery v. Prelesnik, 548 F.3d 434, 436 (6th Cir. 2008); see also Maurice Possley, Chamar Avery, NAT’L REGISTRY EXONERATIONS, http://www.law.umich.edu/special/exoneration/Pages/casedetail.aspx?caseid=3825 (last visited Nov. 8, 2015). In another case, in which several of the defendant’s acquaintances identified
Even the subset of exonerations based on DNA testing does not begin to show that eyewitnesses as a whole are unreliable. The Innocence Project claims that eyewitness misidentification played a role in 72% of exonerations, or 235 convictions that were overturned based on DNA testing. But the Innocence Project has not published data showing the number of cases involving defendants identified by eyewitnesses in which DNA testing confirmed guilt, or the percentage of cases in which guilt was confirmed by DNA testing that involved eyewitness evidence. If, hypothetically, eyewitnesses also testified in 72% of the cases in which guilt was confirmed, the 72% statistic in the exoneration cases would suggest that eyewitness identifications are no less reliable than other probative evidence that routinely leads to convictions.

Even within the framework of the given statistics, according to the only estimate this author has found (which dates to 1989) “at least 80,000 eyewitnesses make identifications of suspects in criminal investigations each year.” Using this to construct a rough estimate, during the 37-year time span of exoneration cases, approximately 2,960,000 eyewitnesses made identifications. On that premise, the 235 mistaken identifications would represent .0079% of the identifications that occurred. To be sure, not all wrongful convictions are necessarily discoverable, and all reasonable steps to avoid wrongful convictions should be taken. But where the only available evidence is more consistent with a

him at trial as the perpetrator, a habeas court overturned his conviction based on failure of his trial counsel to present evidence in support of his alibi. His claim against the state for wrongful conviction was denied, however, because he failed to present clear and convincing proof of innocence. Maurice Possley, Arthur Stewart, NAT’L REGISTRY EXONERATIONS, https://www.law.umich.edu/special/exoneration/Pages/casedetail.aspx?caseid=3664 (last visited Nov. 8, 2015).

Given the liberal use of the word “exoneration” in the registry and elsewhere, there is no support for Judge Kozinski’s assumption that “exonervations” necessarily involve innocent people. Consequently, an “exoneration” in a case in which the conviction rested in part on an eyewitness identification may or may not discredit that identification.

53 The Innocence Project is an advocacy group. Notwithstanding the good it has done, there is mounting evidence that not only are its media bites misleading, but some of its “exonervations” come from the very tactics it purports to fight. In an alarming example, Alstory Simon was freed from prison after fifteen years upon discovery that his confession was coerced by the Innocence Project so that the Innocence Project could then “exonerate” another person who had previously been convicted and use that “exoneration” to advocate (successfully) for abolition of the death penalty in Illinois. Beth Ethier, Lawsuit Claims Innocence Project Professor Conspired to Frame Man for Double Murder, SLATE (Feb. 17, 2015), http://www.slate.com/blogs/the_slatest/2015/02/17/alstory_simon_lawsuit_claims_david_prot ess_of_the_innocence_project_conspired.html.
54 COMM. ON LAW AND JUSTICE, supra note 20, at 7.
conclusion that eyewitness identifications are highly reliable than the reverse, drastic changes should not be recommended based on incomplete data presented out of context.

5. Courts Have Uncritically Adopted Measures of Questionable Benefit

Nevertheless, Judge Kozinski charges that “courts have been slow in allowing defendants to present expert evidence on the fallibility of eyewitnesses[,]”55 But two of the cases he cites were decided decades ago, and the most recent among them is over 15 years old.56 In recent years, “courts are increasingly permitting experts to testify about the inaccuracy of eyewitness . . . evidence.”57 In 2012, the Connecticut Supreme Court approved expert testimony regarding eyewitness fallibility, finding that it satisfies the threshold scientific reliability requirement for admissibility in eight, non-exclusive, areas.58 Far from blazing a trail in so doing, the Connecticut Supreme Court followed “federal and state courts around the country” in concluding that cross-examination and closing argument are not adequate defense tools to combat eyewitness evidence.59 It must be noted, nonetheless, that opening the door to such expert testimony creates problems to which Judge Kozinski does not allude. Jurors will be asked to sort through the shifting sands of politicized positions in areas of dubious scientific validity.60 Furthermore, by acting as consultants in adversarial roles, such as providing paid testimony for the defense at criminal trials, social scientists further compromise their ability to work with the legal system as scientists.61

Judge Kozinski again skirts the hard questions when he writes, “Few, if any, courts instruct juries on the pitfalls of eyewitness identifi-

55 Kozinski, supra note 2, at iv.
56 Id. at n.10 (citing cases from 1984–1999).
58 State v. Guilbert, 49 A.3d 705 (Conn. 2012).
59 Id. at 725.
60 In some of the areas in which State v. Guilbert permits expert testimony based on a purported scientific consensus, including the confidence/accuracy, stress effect, blind administrator and simultaneous/sequential questions discussed herein, the absence of a valid scientific consensus has become clear in the years since the decision.
61 See Flowe et al., supra note 26, at 202; Yuille et al. supra note 26, at 241–45 (noting that on the current state of research, eyewitness expert witnesses ethically obligated to “inform the court that laboratory witness research may not be of value to understanding [real] eyewitnesses”—but many fail to do so); cf. Clark, supra note 39, at 282 (arguing social scientists should avoid advocating policy positions regarding eyewitness testimony).
cation or caution them to be skeptical of eyewitness testimony." The New Jersey Supreme Court has issued special focused instructions for all cases involving eyewitnesses, and other courts are on the same track. Good intentions, however, may have unintended consequences. As the National Academy of Sciences has noted, because eyewitness research is unsettled and nuanced, "[b]rief instructions may not . . . provide sufficient guidance to explain the relevant scientific evidence to the jury, but lengthy instructions may be cumbersome and complex." Worse, New Jersey’s focused instructions have been found to cause jurors to undervalue strongly probative identification evidence, potentially letting guilty parties go free.

6. Reliable Social Science Does Not Support Adoption of Trendy “Reforms”

As troubling as his unfounded claims about the pitfalls of eyewitness identifications are Judge Kozinski’s “potential reforms.” In particular, he urges other jurisdictions to follow the example of North Carolina’s Eyewitness Identification Reform Act. I will focus on two of that statute’s most debatable provisions—the pros and cons of which Judge Kozinski does not discuss.

The first provision requires that lineups be conducted by an independent or “blind” administrator, meaning an officer who does not know who the suspect is and therefore cannot intentionally or unintentionally

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Kozinski, supra note 2, at iv.


COMM. ON LAW AND JUSTICE, supra note 20, at 43.

Id. The authors of one study concluded,

The failure to find an interaction of the enhanced [New Jersey] instruction with the quality of the eyewitness testimony contradicts the hypothesis that the New Jersey instruction increases sensitivity, improving the abilities of jurors to discern the difference between a strong and a weak identification. Instead, when jurors are confronted with a catalog of the foibles of human memory and the extra risks posed by unduly suggestive lineup procedures, they indiscriminately discount any and all eyewitness identification testimony.


Kozinski, supra note 2, at xxviii.
communicate cues to eyewitnesses. Such a requirement appeals to the common-sense intuition that fairness is best served when the administrator cannot influence the result. This policy comes at a cost, though, especially for small police departments that must dedicate officers with no knowledge of the case to every lineup throughout the course of the investigation. Its benefits might outweigh the reallocation of resources. But it should give one pause that prominent social scientists advocate for this change while acknowledging that no studies support it.

Even more problematic is Judge Kozinski’s endorsement of the requirement that each photo be presented to witnesses seriatim, or “sequentially,” rather than simultaneously, as was traditionally done. Social science advocates long pushed for this change, claiming that there was a consensus on the greater reliability of sequential lineup results. Every study that has come out in the past several years, however, has shown a simultaneous lineup advantage, with participants making fewer false choices and more correct ones. Judge Frank Easterbrook, writing

68 Gary L. Wells et al., Eyewitness Identification Procedures: Recommendations for Lineups and Photospreads, 22 L. & HUM. BEHAV. 603, 628 (1998) (suggesting that the recommendation should “be taken somewhat on face value”); see also Sarah M. Greathouse & Margaret B. Kovera, Instruction Bias and Lineup Presentation Moderate the Effects of Administrator Knowledge on Eyewitness Identification, 33 L. & HUM. BEHAV. 70, 71–72 (2009) (noting advocates rely on analogy rather than scientific data in eyewitness context to push for reform). Says one expert concerned about advocacy by social scientists, “The principle is good. Data would be better. The history of science is filled with seemingly good ideas that had unintended and unexpected consequences.” Clark, supra note 39, at 282.

69 Kozinski, supra note 2, at xxviii.


for the Seventh Circuit Court of Appeals, which had previously accepted the studies claiming the superiority of sequential lineups, has now acknowledged that those findings are in doubt. Indeed, a committee recently appointed by the National Academy of Sciences to study the issue has concluded that the recent studies that suggest that the simultaneous method is superior employ a more nuanced and promising approach than the approach that had suggested a sequential method advantage, but more research needs to be done. Accordingly, the committee recommends that “caution and care be used when considering changes to any existing lineup procedure, until such time as there is clear evidence for the advantages of doing so.” Judge Kozinski’s unqualified recommendation, mere months after issuance of this caution, is perplexing.

CONCLUSION

Science, at its best and over the long run, is a “self-correcting exercise.” The drumbeat of claims against the reliability of eyewitness identifications epitomizes the dangers of relying on trendy social science without scrutinizing it, particularly in an environment that discourages dissent. At best, the findings of eyewitness studies are dynamic, nuanced, and limited in their application to real crimes; at worst, they are policy preferences masquerading as science. Reflexive calls for reforms—dressed up with the imprimatur of science and in the name of justice—can have grave, unjust, and unintended consequences: for crime

Showups Versus Lineups: An Evaluation Using ROC Analysis, 1 J. APPLIED RES. MEMORY & COGNITION 221 (2012); Laura Mickes et al., Receiver Operating Characteristic Analysis of Eyewitness Memory: Comparing the Diagnostic Accuracy of Simultaneous Versus Sequential Lineups, 18 J. EXPERIMENTAL PSYCHOL. APPLIED 361 (2012); Caren M. Rotello et al., When More Data Steer Us Wrong: Replications With The Wrong Dependent Measure Perpetuate Erroneous Conclusions, 22 PSYCHONOMIC BULL. & REV. 944, 945–46 (2015); John T. Wixted et al, Estimating the Reliability of Eyewitness identifications from Police Lineups, 113 PROC. NAT’L ACAD. SCI 304 (2016), http://www.pnas.org/content/early/2015/12/17/1516814112.abstract (field study of real robbery cases showing “simultaneous lineups were, if anything, diagnostically superior to sequential lineups”).

United States v. Johnson, 745 F.3d 227, 229 (7th Cir. 2014).
73 COMM. ON LAW AND JUSTICE, supra note 20, at 53–63, 80–81.
74 Id. at 118.
75 Id. at 13.
76 “When one will force public life to be conducted in a particular way, according to certain principles and procedures, there is a responsibility to be sure that the principles have merit and substance and the procedures have the effects claimed. We do not believe that the program of research required to reach such conclusions has been carried out in the case of sequential lineup advocacy.” Roy S. Malpass et al., Public Policy and Sequential Lineups, 14 LEGAL & CRIMINOLOGICAL PSYCHOL. 1, 3 (2009).
victims and witnesses who want their accounts considered and their victimizers convicted; for jurors, who are asked to find the facts and need to consider what is often the most relevant and important evidence available; and for citizens, who want offenders identified and prevented from re-offending.

In his effort to identify troublesome aspects of our criminal justice system, Judge Kozinski appears to have been misled by specious criticisms of eyewitness identifications popularized by the criminal defense bar and its academic supporters. I hope Judge Kozinski will reconsider his position and use his influence to foster greater rigor and skepticism in the debate over the reliability of eyewitness identifications.
Book Review

CAMUS AND DAOUD: A BROTHERHOOD IN TRUTH

William E. McSweeney*

It was said that for a book to be banned in Boston was the surest guarantee of its success.1 Banned by Islamists—worse, its author is the target of a fatwa2—Kamel Daoud’s gripping The Meursault Investigation has accordingly been an international success, a finalist for the Prix Goncourt in France.

Why the call for a fatwa? Daoud’s protagonist, Harun, an Algerian atheist, dares in all matters, chief among them religion, to go it alone, to be a free-thinker. As to minarets, he doesn’t like anything that rises to heaven, I only like things affected by gravity. I’ll go so far as to say I abhor religions. All of them! Because they falsify the weight of the world. Sometimes I feel like busting through the wall that separates me from my neighbor, grabbing him by the throat, and yelling at him to quit reciting his sniveling prayers, accept the world, open his eyes to his own strength, his own dignity, and stop running after a father who has absconded to heaven and is never coming back. Have a look at that group passing by, over there. Notice the little girl with the veil on her head, even though she’s not old enough to know what a body is, or what desire is. What can you do with such people? Eh?3

Meursault has alternatively been called a rebuke4 to Albert Ca-

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4 Elisabeth Zerofsky, An Algerian Rebuke to “The Stranger,” NEW YORKER (Mar. 13,
Camus’s *l’Étranger*, published some 70 years ago, and—contradictorily—*un hommage* to thereto. I certainly see it as *un hommage*, both to Camus’s most famous novel and to the Nobel laureate himself. Seeing it as such can logically flow from the fact of the two authors’ commonalities: an upbringing in Algeria; a grounding in daily journalism; the use of French as their principal language, Camus having been brought up in it, Daoud having been formally instructed in it—and choosing it as his means of written communication; on each author’s part, the writing of a prose marked by an unexampled eloquence.

In further support of *Meursault as hommage* is the clear inference that Daoud has read Camus’s *œuvre*, evidenced by the structure of his—Daoud’s—novel, wherein Harun narrates at a bar over many days his life in the aftermath of the murder of his brother, Musa; the narration is given to a new-found barroom acquaintance (the reader’s surrogate). The device recalls the café confessions of *le juge-pénitent* of Camus’s *La Chute* (*The Fall*)—the judge harbors regret for a long-ago deadly omission to act; Harun harbors remorse for a long-ago deadly commission of an act. The device creates an intimacy between reader and writer. (“What can you do with such people? Eh?”)

“You live elsewhere,” Harun tells his auditor, “you can’t imagine what an old man has to put up with when he doesn’t believe in God, doesn’t go to the mosque, has neither wife nor children, and parades his freedom around like a provocation.”

Such words—certainly the spirit underlying them—connect their speaker, Harun, and their author, Daoud, to the Existentialists, those who feel that human freedom means the forging of individual values and choices, a forging that disregards any collective coercion, be it by the state or by religion. Blind, imposed obedience to any determining outside force, to any orthodoxy—Jean-Paul Sartre’s *mauvaise foi* (“bad faith”)—can’t redeem the individual as he wrestles with the meaning-

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8 DAOUD, *supra* note 3, at 140.

lessness, the absurdity, of human existence. The only redemption for the Existentialist lies in accepting—and acting upon—his individual responsibilities.

Engagement is the principal redeemer. Historical exemplars have been those who enlisted themselves in the political cause of resistance to fascism and imperialism: Sartre; Camus; Ignazio Silone; Arthur Koestler; George Orwell. And now, joining them, is Kamel Daoud, whose Harun resists all orthodoxies. Indeed, Daoud reincarnates Orwell, who wrote, “[T]he mere sound of words ending in –ism seems to bring with it the smell of propaganda.” 10

To Daoud’s Harun, his brother Musa is a man worthy of love and emulation; to the author of l’Étranger, in counterpoint, Musa is the unnamed, depersonalized “Arab” murdered by the Frenchman Meursault. It bears mentioning that Daoud’s novel in the French is entitled Meursault, contre enquête, and Harun’s mission is to mount a counter-investigation into that case depicted in l’Étranger. Principally, Harun rails against the absence of attention to the victim in Camus’s novel; even that man’s name isn’t given, but he is instead characterized—25 times over the course of the book—as the anonymous “Arab.” To Harun, this anonymity holds a bitter point: “You can’t easily kill a man,” he asserts, “when he has a given name.” 11

Yet Harun’s anger is as nothing when compared with that of his mother, whose elder son is dead, whose life has been shorn of meaning, whose life consists of a vengeful search for instigators of, or witnesses to, the crime. Her conscripted aide-de-camp in this endeavor is the boy Harun.

As I told you before, Musa’s body was never found. Consequently, my mother imposed on me a strict duty of reincarnation. For instance, as soon as I grew a little, she made me wear my dead brother’s clothes, even though they were still too big for me—his undershirts, his dress shirts, his shoes—and that went on until I wore them out. I was forbidden to wander away from her, to walk by myself, to sleep in unknown places, and, while we were still in Algiers, to venture anywhere near the beach. And the sea was off-limits. Mama taught me to fear its mildest suction—so effectively that even today, when I’m walking on the shoreline where the waves die, the sensation of the sand giving way under


11 DAOUD, supra note 3, at 53.
my feet remains associated with the beginning of drowning.\textsuperscript{12}

For long years Harun and his mother opportunistically seek out someone—anyone—who can die at their hands in a retributive murder, someone whose death can serve to expiate their guilt over their pro-longed impotence in the face of Musa’s murder. One day after Algerian independence is proclaimed—the timing is fateful—they come upon a Frenchman fleeing from a band of Algerians; rather than protect him, they themselves murder him, thus compounding the pointlessness, the madness, that underlay the murder of Musa.

Harun is investigated, incarcerated, ultimately released. He has evaded state-imposed punishment, but he hasn’t evaded self-imposed punishment; he is haunted thereafter for having blood on his hands, as he lives out his life alone, isolated, with no one to remember or celebrate his time on earth. In his dotage he reflects on the absurdity of the matter: had he killed two days earlier he would not have been seen as a suspected murderer, but as a heralded hero in the cause of independence. (You’ll recall the absurdity of the Meursault trial: no body recovered, no weapon recovered, no confession, no witnesses. This lack of evidence was nonetheless no bar to conviction. Meursault was adjudged as guilty solely because of a judicially perceived indifference to his mother’s death!)

The one relief, the one happy season Harun recalls, is the one which came in his young manhood, and which involved Meriem, the only woman

who found the patience to love me and to lead me back to life. It wasn’t quite summer yet when I met her, in 1963. Everyone was riding the wave of post-Independence enthusiasm, and I can still remember her wild hair and her passionate eyes, which come and visit me sometimes in insistent dreams.\textsuperscript{13}

Yet the romance is short-lived. Meriem falls out of touch with Harun, possibly having joined with those women who

would get themselves out of my way, they’d make, so to speak, a detour, as if they could instinctively tell I was another woman’s son and not a potential companion. . . . I’m talking about what a woman divines or desires in a man. Women have an intuition about what’s unfinished and avoid men who cling to their youthful doubts too long.\textsuperscript{14}

\textsuperscript{12} Id. at 41.
\textsuperscript{13} Id. at 67.
\textsuperscript{14} Id.
Meriem comes to him in “insistent dreams,” but she is also on his mind when he recalls the attempted “comfort” extended to him by the imam as he—Harun—sat in a cell and awaited the outcome of the investigation into the death of the anonymous Frenchman. “[The imam] seemed so sure of himself,” Daoud writes; “And yet none of his certainties was worth one hair on the head of the woman I loved.” The parallel to Camus’s Meursault, with his railing against the priest who visits him in his cell, is clear in the words of Harun. More, the words—“one hair on the head of the woman I loved”—suggest, collaterally, a profound hommage to Camus the author and the man, the good son of the mother he loved, the illiterate house-cleaner who stayed behind in a banlieue of Algiers, and they bring to mind the political polemic generated by his post-Nobel press conference in 1957.

A young Algerian in attendance challenged Camus to come down on one side—preferably the side of the Front de libération nationale (“FLN”)—or the other, that being a continued French colonialism. Camus’s words were thoughtful, considered: “En ce moment on lance des bombes dans les tramways d’Alger. Ma mère peut se trouver dans un de ces tramways. Si c’est cela la justice, je préfère ma mère.”: “At this moment they (the FLN) are planting bombs in the tramways of Algiers. My mother can find herself in one of these tramways. If this is justice, I prefer my mother.” Note the conditional “if,” note the scorn in “this”; Camus was making clear his intolerance for bloodshed, no matter the political movement shedding it.

Algerian polemicists seized on his answer, bastardized it, merrily translated it to read, “Entre la justice et ma mère, Je choisis ma mère.”: “Between justice and my mother, I choose my mother.” Camus was thus depicted as a traitor to the cause of Algerian independence. Quaere: Had he spoken his purported “inflammatory” words today, would he also be the target of a fatwa?

Camus was a believer in the French concept of liberté, égalité, fraternité, and a proponent of the concept’s transplantation to Algeria. He wasn’t a believer in violence, but an advocate of the conference table. Tables can be pounded, they can be overturned, but they can thereafter be set aright; an overturned table doesn’t have the finality of death. To Camus, the conference table was the place where both sides could argue their positions en bonne foi ("in good faith"), listen to each other, and

15 DAOUD, supra note 3, at 141.
17 Id.
reach an accord.

Such was the polemic Camus advanced directly; by indirection, by implication, such is the polemic Daoud advances. Camus and Daoud: their most important commonality?

Each author has an independent voice, one which stresses the need for the individual to find his own way, to resist the crowd’s thinking, to accept the consequences of one’s acts.

Meursault’s narrative plays with time. It jumps back and forth in sequence—consistent with a sustained barroom monologue—but the narrative is always compelling, and its message is clear: one’s mindless following of any orthodoxy, without allowing for “the other” and his preferences, without any tolerance for the other’s individualism, invariably leads to unending strife and suffering.

Camus’s polemic, piercing in its truth, is Daoud’s truth. What Orwell summarized as to Gandhi could apply as well to each author: “[H]ow clean a smell he has managed to leave behind!”18 Yet the politics of history at work in 1957 remains the same in 2016. The politics of intolerance seems never to change.

Notes

PRIVATIZATION AS A POTENTIAL DRINKING WATER REFORM

Michael J. Tone, Jr.*

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The analysis and recommendations included in this Note should not be interpreted as reflecting the views of my past, current, or future employers. Those employers may or may not agree with some or all of the analysis I have included here.
Access to clean and safe drinking water is viewed as a fundamental human right, and is “one of the most crucial components of any water law and policy framework ... due to the intrinsic link with the ... human right to water.” In 2009, former U.S. Environmental Protection Agency (“EPA”) Assistant Administrator, Cynthia Giles, quoted then EPA Commissioner Lisa Jackson as stating “clean and safe water is the lifeblood of healthy communities and healthy economies.” The re-
cent algal blooms in Toledo, Ohio, the chemical leak in Kanawha County, West Virginia, and the lead contamination in Flint, Michigan, demonstrate, however, that drinking water nationwide is far from clean or safe.

Contamination is not isolated to communities downstream of coalmines or large agricultural centers. In 2012, Connecticut public water systems (“PWS”) reported a total of 331 health-based violations of the Safe Drinking Water Act. In 2013, there were 244 health-based violations. In that same year, however, few formal enforcement actions were initiated. Therefore, it is apparent that violations of drinking water regulations are occurring both in Connecticut and nationwide, and there appears to be a lack of formal enforcement against the violators.

This Note explores drinking water regulation and enforcement under the Safe Drinking Water Act (“SDWA” or “the Act”), and uses the State of Connecticut to illustrate the need for stricter health-based regulations and greater formal enforcement of such health-based regulations of the SDWA in order to effectively protect the public health. Part II of this Note outlines the purpose and scope of the SDWA and the relevant statutory framework. Part II also discusses the corresponding Connecticut regulations and the division of regulatory authority within the state. Part III addresses Connecticut’s compliance with the drinking water regulations and recent violations of the health-based standards. Part IV ana-
alyzes the regulation and enforcement deficiencies in the SDWA. In particular, Part IV focuses on whether the SDWA regulations are sufficient in scope and strength, and whether federal implementation of the EPA’s Enforcement Response Policy serves the purpose of the SDWA: to protect the public health. Part V hypothesizes whether enforcement of the SDWA may be improved by the privatization of drinking water services, and concludes that, in certain geographic, demographic, and regulatory environments—such as Connecticut—expanded privatization may enhance enforcement of the SDWA for the protection of the public health.9

II. SAFE DRINKING WATER ACT

A. Purpose and Scope

The SDWA was enacted in 1974.10 The Act is designed to protect the public health through regulation of public water systems, as well as surface and groundwater sources, from which PWS draw water.11 Regarding PWS regulation, the Act governs the more than 170,000 PWS in the U.S., and authorizes the EPA to set national health-based standards to protect against contaminants in public drinking water.12 Therefore, because the SDWA aims to protect the public health through either regulation of every PWS or through the protection of surface or groundwater sources, every citizen who benefits from a PWS is impacted by the protections provided by the SDWA.

In contrast, the Clean Water Act (“CWA”) aims to protect “the chemical, physical, and biological integrity of [surface and groundwater].”13 Even though the CWA “protect[s] the sources of drinking wa-

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9 This Note does not discuss in detail unregulated drinking water contaminants, monitoring or reporting violations, or source water protection programs. Future research could consider in-depth these other aspects of the SDWA, or how the regulation of the SDWA may be improved.


12 See 42 U.S.C. § 300f(4)(A) (2012) (defining “public water system” as a “system for the provision to the public of water for human consumption through pipes or other constructed conveyances, if such system has at least fifteen service connections or regularly serves at least twenty-five individuals”); see also UNDERSTANDING THE SAFE DRINKING WATER ACT, supra note 10.

ter[, ... [it] do[es] not regulate drinking water quality directly.”

If a surface or groundwater source is impaired by a regulated contaminant in excess of the maximum contaminant level promulgated under the SDWA, however, it may also be that the chemical, physical, or biological integrity of the source water is impaired. Therefore, even though there is a natural overlap between the two federal statutes, since all public drinking water must draw from a surface or groundwater source, the SDWA and CWA serve different purposes.

B. National Primary Drinking Water Regulations

Public water systems in every state are required to comply with the National Primary Drinking Water Regulations ("NPDWR") that are promulgated by the EPA. When identifying potential contaminants to regulate, the EPA is required to select contaminants that present the greatest concern to human health. Once a particular contaminant has been identified, the NPDWR establish health-based standards “based on sound science to protect against health risk, considering available technology and costs.” These health-based standards apply to every PWS for each regulated contaminant, if economically and technologically feasible, to determine the level of such contaminant in the system. If it is not economically or technologically feasible to determine the level of a contaminant in the system, then the EPA may impose a treatment tech-

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15 42 U.S.C. § 300g (2012) (excluding public water systems that “(1) [] consist[] only of distribution and storage facilities (and do not have any collection and treatment facilities); (2) [] obtain[] all of its water from, but is not owned or operated by, a public water system to which such regulations apply; (3) [] do[] not sell water to any person; and (4) [] [are] not a carrier which conveys passengers in interstate commerce”).

16 See generally 42 U.S.C. § 300g-1(b)(1)(C).

17 UNDERSTANDING THE SAFE DRINKING WATER ACT, supra note 10.

18 42 U.S.C. §§ 300g-1(a)(3), 300g-1(b)(1)(A), 300g-1(b)(4)(B); see also id. § 300g-1(b)(4)(D) (defining “feasible” as considering “the use of the best technology, treatment techniques and other means which the Administrator finds, after examination for efficacy under field conditions and not solely under laboratory conditions, are available (taking cost into consideration)”); see also James R. Wedeking, Maximum Contaminant Levels and Environmental Injuries, 28 J. CONTEMP. HEALTH L. & POL’Y 183, 189 (2012), (“Under the SDWA’s definition of feasibility, with EPA’s liberal interpretation, the MCL may be higher than its corresponding [maximum contaminant level goal ("MCLG")]) only when no treatment technology exists to reduce a contaminant down to the MCLG, existing treatment techniques are exorbitantly expensive, or if field monitoring and analysis methods cannot detect contaminants at levels as low as the MCLG.”).
nique to reduce a particular contaminant. In addition, the EPA is required to publish a list every five years outlining unregulated contaminants that are known or anticipated to occur in PWS and that may require regulation for the benefit of public health. The EPA’s decision to regulate a contaminant is not subject to judicial review.

Those contaminants that are currently regulated are highly dangerous and are capable of causing a number of adverse health effects. These effects include: increased risk of cancer, kidney disease, anemia, liver problems, gastrointestinal illnesses, nervous-system damage, immune-system compromise, and mental or physical developmental disorders. Of course, these effects may be more pronounced, or occur with greater frequency in high-risk segments of the population including infants, children, pregnant women, the elderly, and the disabled.

A contaminant is defined as “any physical, chemical, biological, or radiological substance or matter in water.” If the EPA Administrator determines that a contaminant—which may have an adverse effect on public health—is known to occur, or there is a substantial likelihood that the contaminant will occur in the PWS with a frequency and at levels of concern to public health, and the regulation of such contaminant presents a meaningful opportunity for health risk reduction, then the EPA shall establish a maximum contaminant level goal and a NPDWR for that contaminant.

A maximum contaminant level goal is defined as “the level at which no known or anticipated adverse effects on the health of persons occur,” allowing for a margin of safety. In addition to the maximum contaminant level goal, the EPA must also establish “a maximum contaminant level . . . which is as close to the maximum contaminant level goal as is feasible.” Therefore, the maximum contaminant level (“MCL”) may exceed the contamination goal. A MCL and NPDWR have been established for ninety-four contaminants. This list of regu-

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19 42 U.S.C. § 300g-1(b)(7)(A).
20 Id. § 300g-1(b)(1)(B)(i)(I).
21 Id. § 300g-1(b)(1)(B)(i)(III).
23 See UNDERSTANDING THE SAFE DRINKING WATER ACT, supra note 10.
24 42 U.S.C. § 300f(6).
25 Id. § 300g-1(b)(1)(A).
26 Id. § 300g-1(b)(4)(A).
27 Id. § 300g-1(b)(4)(B) & (D).
28 See Regulation Timeline: Contaminants Regulated Under the Safe Drinking Water Act, ENVTL. PROTECTION AGENCY (last updated Sept. 2015),
lated contaminants includes: chemical contaminants, biological microorganisms, disinfectants, disinfectant by-products,\textsuperscript{29} and radionuclides.\textsuperscript{30} Therefore, each PWS must achieve the promulgated MCL in order to be compliant with the SDWA.

The EPA, however, has wide discretion in establishing MCL. If the Agency shows that the feasible MCL would result in an increased health risk—through either an increased concentration of other contaminants or interference with the efficacy of treatment techniques—then the EPA can adopt a MCL at a level other than the feasible level.\textsuperscript{31} Alternatively, if the EPA determines that the health benefits of a MCL would not justify the costs of compliance, then it may establish a MCL that maximizes “health risk reduction benefits” at a justifiable cost.\textsuperscript{32}

If the EPA determines that a MCL is not economically or technologically feasible, the Agency must specify each treatment technique that leads to a reduction in the level of the contaminant sufficient, to the extent feasible, to prevent harm from consumption of the water.\textsuperscript{33} Current treatment techniques include disinfection, filtration, and water storage.\textsuperscript{34}

Even though the EPA is responsible for reviewing and considering the addition of new contaminants to the regulated list,\textsuperscript{35} no contaminant has been added to the regulated list in more than seven years.\textsuperscript{36} Every five years, the EPA must publish a list of unregulated contaminants that “are known or anticipated to occur in public water systems” and may require regulation.\textsuperscript{37} In selecting which contaminants require a MCL and NPDWR, “the Administrator shall select contaminants that present the greatest public health concern.”\textsuperscript{38} Finally, the Administrator has sole discretion whether to select an unregulated contaminant for consideration or regulation.\textsuperscript{39}

\begin{itemize}
\item \textsuperscript{29} Disinfectants are used to treat drinking water and remove biological microorganisms, and some potentially harmful by-products result from these treatments. CHLORINE CHEMISTRY COUNCIL, DRINKING WATER CHLORINATION 15 (2003), http://www.waterandhealth.org/drinkingwater/dwwp.pdf.
\item \textsuperscript{30} Id.
\item \textsuperscript{31} 42 U.S.C. § 300g-1(b)(5)(A).
\item \textsuperscript{32} Id. § 300g-1(b)(6)(A).
\item \textsuperscript{33} Id. § 300g-1(b)(7)(A).
\item \textsuperscript{34} ENVTL. PROT. AGENCY, DRINKING WATER TREATMENT (2004).
\item \textsuperscript{35} 42 U.S.C. § 300g-1(b)(9) (requiring EPA to also “review and revise, as appropriate,” each NPDWR).
\item \textsuperscript{36} See Regulation Timeline, supra note 28.
\item \textsuperscript{37} 42 U.S.C. § 300g-1(b)(1)(B)(I).
\item \textsuperscript{38} Id. § 300g-1(b)(1)(C).
\item \textsuperscript{39} See id. § 300g-1(b)(1)(B)(III).
\end{itemize}
C. National Secondary Drinking Water Regulations

In contrast to the NPDWR, the National Secondary Drinking Water Regulations (“NSDWR”) are non-binding guidelines for contaminants that may cause cosmetic or aesthetic effects in drinking water. Even though the EPA recommends standards for these secondary contaminants, the established levels are non-binding. Primacy states, however, may adopt binding MCL for these contaminants.

D. EPA Enforcement Mechanisms

The SDWA takes a two-prong approach to protect the public health and ensure clean and safe drinking water. The first prong authorizes the EPA and state governments to adopt regulations and conduct informal and formal enforcement actions against non-compliant PWS. Enforcement begins once a PWS is identified as non-compliant. At that
point, the EPA is required to notify the primacy state and the non-compliant PWS and provide such advice and technical assistance as may be appropriate to bring the system into compliance in the earliest feasible time.\footnote{45} If the state has not initiated appropriate enforcement action within thirty days of notification, then the EPA may commence formal enforcement actions requiring the PWS to comply with the applicable regulation.\footnote{46}

1. Formal Enforcement Mechanisms

The EPA defines a formal action as “one which requires specific actions necessary for the violator to return to compliance, is based on a specific violation, and is independently enforceable without having to prove the original violation.”\footnote{47} The purpose of a formal action is to return a non-compliant PWS to compliance within a certain time through an enforceable consequence, a civil suit, or a monetary penalty, if the schedule is not met.\footnote{48}

Between 1974 and 1986, the first twelve years after the SDWA’s enactment, the EPA did not emphasize enforcement as a means for achieving PWS compliance. Instead, “[e]nforcement actions were reserved for the most recalcitrant violators.”\footnote{49} Before the SDWA amendments of 1986, “the only [formal] enforcement authority available to EPA was the civil judicial action.”\footnote{50} Following the 1986 amendments, however, the EPA’s authority was expanded to allow the Agency to compel compliance through administrative orders.\footnote{51} The 1996 amendments further strengthened the EPA’s enforcement authority under the SDWA, and “streamlined the process for issuing federal administrative orders, increased administrative penalty amounts, made more sections of the act clearly subject to EPA enforcement, and required states . . . to

\begin{footnotes}
\footnotetext[45]{45} 42 U.S.C. § 300g-3(a)(1)(A)(ii) (2012).\footnotetext[46]{46} Id. § 300g-3(a)(1)(B).\footnotetext[47]{47} Memorandum, Guidance for FY1987 PWSS Enforcement Agreements, from Michael B. Cook, Dir., Office of Drinking Water to Reg’l Water Div. Dirs. (Aug. 8, 1986) (available at https://echo.epa.gov/help/sdwa-faqs/#Q8 (last accessed May 18, 2016)).\footnotetext[48]{48} See id.\footnotetext[49]{49} Devlin, \textit{supra} note 14, at 8.\footnotetext[50]{50} Id. at 7.\footnotetext[51]{51} Id. (noting that after a three-step enforcement process the EPA may assess an administrative penalty limited to $5,000, only if the final administrative order is violated, and that the EPA may also initiate a civil action and seek injunctive and pecuniary relief up to $25,000 per day per violation).}


have administrative penalty authority."  

Today, even though the EPA has provided forty-nine states with primacy to oversee and enforce the SDWA, the Agency maintains concurrent authority and the ability to take formal enforcement action if any state fails to do so.  

2. Informal Enforcement Mechanisms

Despite the availability of formal enforcement mechanisms, the EPA has instead relied on informal enforcement mechanisms, such as the Public Water System Supervision ("PWSS") Grant Program, technical assistance, and administrative guidance. The purpose of informal enforcement mechanisms has been to work with the states and non-compliant PWS to return such systems to compliance without imposing burdensome penalties or engaging in costly litigation.

The PWSS Grant Program is intended to help states "develop and implement a PWSS program adequate to enforce the requirements of the SDWA and ensure that water systems comply with the [NPDWR]." Since 1996, Congress has appropriated $100 million annually for the EPA to approve grants to states for the purposes of administering the PWSS program; the EPA is directed to allocate the grants among the primacy states based on "population, geographical area, number of public water systems, and other relevant factors." The EPA may also provide technical assistance to facilitate compliance and resolve violations. Therefore, states are empowered to work with the EPA to obtain funding for improvements and technical assistance to return a PWS to compliance.

Administrative guidance documents have been the most important informal mechanism for administering the SDWA. In 1990, the EPA published the first significant administrative guidance document focused on.

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53 42 U.S.C. § 300g-3(b) (2012).

54 See id. § 300j-2.

55 See id. § 300j-1(e).


58 TIEMANN, supra note 52, at 6.
on health-based violations of the NPDWR. This document introduced a three-tiered approach to address violations of the NPDWR with the goal of “strengthen[ing] the enforcement component of the PWSS program.” In addition to the three-tiered approach, the guidance also considered the type of contaminant causing the violation, the potential effect on public health, the population served by the system in violation, and the population’s susceptibility to health-based risks. The Water Supply Guidance 53 memorandum, written by then Director of the EPA Office of Drinking Water, Michael B. Cook, states that, “[b]y the time the public water system becomes a [significant non-complier], the opportunity to deal with the system’s violations through informal measures has passed. The system should be [addressed] in accord with the PWSS ‘timely and appropriate guidance.’” At this point, an appropriate escalation of formal response includes: (1) a “[b]ilateral compliance agreement (signed by both parties; containing interim milestones),” (2) a “State or Federal administrative order;” (3) a “State or Federal civil referral;” and (4) a “State or Federal criminal case.”

Even with such enforcement guidance in place, however, non-compliance continued nationwide. In late 2009, New York Times reporter Charles Duhigg was in the midst of a series of investigative reports on the nationwide public health risks posed by drinking water contamination. Concurrent with the publication of this series, the U.S. Senate Committee on Environment and Public Works convened a hearing of
EPA Administrators to question the SWDA’s effectiveness in “protect[ing] public health by regulating the Nation’s drinking water supply.” The increase in national scrutiny prompted the EPA to issue “a new enforcement approach designed to help our nation’s public water systems comply with the requirements of the Safe Drinking Water Act.”

The express purpose of the 2009 Enforcement Response Policy was to replace the “existing contaminant by contaminant compliance strategy” with a new strategy designed to identify those PWS that had reached a level of significant non-compliance. As opposed to the former rule-based approach, this new holistic approach focused on systems with the most serious health-based violations—as well as systems with repeated violations involving multiple contaminants—to return those systems to compliance.

Under the prior enforcement response policy, significant non-complier status was assigned based on a system’s “failure to comply with individual drinking water rules[,]” and all PWS in significant non-compliance status were treated equally “without regard to the gravity of the violation and without considering other violations a system may have that are not identified as [significant non-compliance].” For example, if a PWS had a level of arsenic double the MCL, that system would be in significant non-compliance, and the system would be categorized as a higher priority than facilities below the threshold. EPA experts have stated that the prior system was confusing, made it difficult to track which facilities were having problems, and lacked a clear time frame for when commencement of an escalating response was required.

Under the 2009 Enforcement Response Policy, the EPA takes a comprehensive view of non-compliance across all the NPDWR, “without using the rule-based [significant non-compliance] definitions.” The

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64 See generally Oversight Hearing on Federal Drinking Water Programs, supra note 3.
66 Id.
67 See id.
70 Note that while implemented on a trial basis, the 2009 Enforcement Response Policy remains in effect as of early 2015.
71 Compare Pollins Memorandum, supra note 68, at 3; with Cook Memorandum, supra.
policy utilizes an Enforcement Targeting Tool (“ETT”), which assigns each violation a weighted score “based on the assigned threat to public health.” Each PWS then receives a total score based on all of its violations. If the score exceeds the threshold, then that system is identified as a priority. Systems specifically identified by the ETT as priorities must return to compliance upon notification from the primacy state. If such system does not return to compliance following notice and informal enforcement, the EPA expects the primacy state to escalate the response mechanism through formal enforcement action.

By aiming to achieve a “return to compliance,” rather than simply “addressing a violation,” the EPA intended to increase the SDWA’s efficacy in protecting public health by improving a system’s holistic compliance. Furthermore, EPA experts have stated that the new policy allows the EPA and states to identify trends in PWS violations, more effectively prioritize enforcement, and establish a clear six-month time frame for states to attempt informal enforcement procedures before resorting to formal enforcement. Therefore, the EPA has utilized both formal and informal mechanisms to enforce the health-based requirements of the SDWA, as evident by the escalated enforcement concept. Seeking judicial economy, however, the Agency has expressly relied more on informal mechanisms to compel the states to work with non-compliant PWS to achieve a return to compliance.

E. Citizen Suit Enforcement Mechanism

In addition to administrative enforcement mechanisms, the SDWA authorizes citizen suits when the EPA or state has failed to enforce a regulation. A citizen suit allows a person to initiate a civil action against any other person, including any state or federal government or...
agency, “who is alleged to be in violation of any requirement prescribed by or under [the SDWA].”79 Additionally, a citizen suit may be brought against the EPA Administrator for failure to perform any non-discretionary duty under the SDWA.80 Affected citizens are limited, however, to enforcing the SDWA by “pursuing a civil action pursuant to [the] SDWA’s citizens’ suits [provision].”81

Even though some environmental statutes have been successfully enforced through citizen suits, the citizen suit provision of the SDWA has failed to yield such results.82 Christine Rideout argued that the inclusion of a citizen suit provision in environmental protection laws, in general, has been successful in resulting in judicial action to enforce those laws.83 In support of her argument, Rideout noted that the “Senate Committee on Environment and Public Works recognized that ‘citizen suits are a proven enforcement tool. They operate as Congress intended—to both spur and supplement . . . government enforcement actions. They have deterred violators and achieved significant compliance gains.’”84 In fact, between January 1995 and December 2000, citizens brought 287 enforcement actions under environmental statutes.85 During the same time period, however, no citizen suits were brought to enforce the SDWA.86 This remains true to this day. This may be in part because, under the SDWA, citizen suits result in injunctive relief instead of civil penalties.87 Therefore, even though identical citizen suit provisions have

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79 See 42 U.S.C. § 300j-8(a) (2012); see also Vinal, supra note 78, § 33. The “alleged to be in violation” language is intended only to allow citizens to commence an action for an existing or future violation. Cf. Gwaltney of Smithfield, Ltd. v. Chesapeake Bay Found., Inc., 484 U.S. 49 (1987) (interpreting identical language in the Clean Water Act).

80 See 42 U.S.C. § 300j-8(a); see also Vinal, supra note 78, § 33.

81 See Vinal, supra note 78, at § 33. (noting that procedural requirements and subject matter jurisdiction limitations must be followed prior to and during citizen suit action). For all of the requirements for a citizen suit, see id. §§ 34–49.


83 Rideout, supra note 11, at 677.

84 Id. (quoting Jeffrey G. Miller, Overlooked Issues in the “Diligent Prosecution” Citizen Suit Preclusion, 10 WIDENER L. REV. 63, 72 (2003)).

85 Id. at 679.

86 Id.

served as a successful enforcement tool for other environmental statutes, the current citizen suit provision under the SDWA has not yet served as an effective enforcement mechanism.

III. CONNECTICUT’S PRIMARY ENFORCEMENT AUTHORITY

This Part will discuss the scope and extent of Connecticut’s primacy under the SDWA. Then, this Part will explore the Connecticut Department of Public Health’s available formal and informal enforcement actions against PWS found in violation of health-based drinking water regulations.

A. Delegation of Authority and Scope

Under the SDWA, the EPA and states are expected to share responsibility for the cleanliness and safety of our drinking water. The EPA may grant primacy to a state if the EPA is satisfied that the state has developed a sufficient plan for SDWA enforcement. As authorized under the SDWA, the EPA has delegated primary enforcement authority to Connecticut. As a primacy state, Connecticut is responsible for adopting binding regulations at least as stringent as the NPDWR, ensuring that PWS monitor and report for regulated contaminants, reviewing plans for infrastructure improvements, conducting inspections and sanitary surveys, providing operator training and technical assistance, and enforcing the binding regulations against non-compliant PWS.

B. Division of Authority

Because of a division of regulatory authority, it is not precisely clear which state agency is responsible for protection of safe drinking water and enforcement as water flow from source to tap. Much like the

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89 See 42 U.S.C. § 300g-2(a) (2012); see also 40 C.F.R. § 142.10 (2015).


91 UNDERSTANDING THE SAFE DRINKING WATER ACT, supra note 10. Connecticut regulates more than 2,540 PWS. CONN. PUBLIC WATER SYSTEMS REPORT 2012, supra note 6, at 3.
federal division of authority between the SDWA and the CWA, responsibility for the cleanliness and safety of Connecticut water is divided.

Responsibility is divided among the Department of Energy and Environmental Protection (“DEEP”), the Public Utilities Regulatory Authority (“PURA”), and the Department of Public Health (“DPH”). In Connecticut, the DEEP is responsible for the protection and restoration of surface and groundwater for each source’s designated use. The PURA is responsible for the regulation of rates and services for Connecticut’s water companies, and is responsible for balancing “the public’s right to safe, adequate, and reliable utility service at reasonable rates with the provider’s right to a reasonable return on its investment.”

The DPH governs Connecticut PWS, and is responsible for drinking water quality standards, minimum treatment methods, and the requirements for the design and operation of treatment works and water sources. This division of authority illustrates the complexity of drinking water regulation and enforcement at the state level.

The DEEP has enacted water quality standards intended to “restore or maintain the chemical, physical and biological integrity” of surface and groundwater sources to their natural quality and designated use. The DEEP also classifies surface and groundwater sources suitable for drinking.

Ground water is deemed suitable for drinking and other domestic uses without treatment when: no pollutant exceeds a MCL as determined by DPH; no carcinogen is present at such a concentration to create an excess risk of cancer; no non-carcinogen is present at a concentration that exceeds levels safe for human exposure without an appreciable risk of adverse health effects over the course of a lifetime; or no pollutant exceeds a level determined to render the groundwater so aesthetically impaired that it would be unreasonable to expect a person to use it. Therefore, if a water source is threatened, or becomes unsuitable for drinking, then DEEP has authority to take action to protect and restore the water source.

While the DEEP has authority over source water protection and res-

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95 Id. §§ 22a-426-4(a)(1), 22a-426-7(a)(1).
96 Id. §§ 22a-426-7(a)(4)(C), 22a-426-7(b)(1)(A) & (b)(2)(A)–(B), 22a-426-7(d)(1)(A), 22a-426-9(a).
97 Id. § 22a-426-7(a)(3)(A)–(D).
toration, PURA is responsible for water utility rate schedules, billing, and consumer reporting of investor-owned water utilities.\(^\text{98}\) PURA regulates ten investor-owned water utilities.\(^\text{99}\)

The DPH is responsible for establishing drinking water quality standards, minimum treatment methods, and the requirements for every PWS.\(^\text{100}\) The DPH oversees more than 2,540 PWS in Connecticut.\(^\text{101}\) Drinking water quality standards are set and enforced by the Drinking Water Section (“DWS”) of the DPH, the goal of which “is to oversee the return of PWS to compliance as quickly as possible. The DWS remains committed to continuing its positive working relationship with the PWS for the express purpose of protecting public health by minimizing violations.”\(^\text{102}\) A natural overlap exists between the protection and enforcement of drinking water standards, yet each agency also has independent authority over Connecticut drinking water as it flows from source to tap.

C. Connecticut Department of Public Health Drinking Water Standards

All Connecticut PWS are explicitly regulated by the Public Health Code section 19-13-B102, “Standards for Quality of Public Drinking Water.”\(^\text{103}\) Within the Public Health Code, the DPH has adopted the MCL for each contaminant established by the NPDWR. The Connecticut Public Health Code promulgates the MCLs for microorganisms, inorganic chemicals, organic chemicals, disinfectants, disinfectant by-products, and radionuclides.\(^\text{104}\) Each provision of the Public Health Code sets the monitoring and testing requirements for each regulated contaminant.\(^\text{105}\) Frequency of monitoring is determined based on the size of the population served by the system, not the size or geographic location of the source water.\(^\text{106}\) Each PWS must routinely submit monitoring reports to the DPH.\(^\text{107}\) The DPH then determines which systems are non-
compliant with the health-based requirements.  

D. Enforcement

Connecticut and the EPA have entered into an enforcement agreement “which set[s] out the types of violations to which enforcement priority will be given, and the manner in which enforcement will be taken.” Similar to the EPA structure of formal and informal enforcement outlined above, the DPH Drinking Water Section employs both formal and informal enforcement mechanisms to ensure system compliance.

1. Formal Enforcement Mechanisms

A formal mechanism selected by the State must “[c]ontain a description of the non-compliant violation, a citation to the applicable State . . . or federal law . . ., a statement of what is required to return to compliance, and a compliance schedule; and . . . provide the State with authority to impose penalties for violation of the State’s enforcement document.”

Connecticut utilizes two formal enforcement mechanisms—Administrative Orders and Consent Orders. Administrative Orders are unilateral requirements issued by the DPH against the non-compliant PWS. Consent Orders are bilateral agreements in which the DPH and a non-compliant PWS mutually agree to achieve compliance by a scheduled date. Unlike some primacy states, Connecticut’s Consent Orders are judicially enforceable.

Generally, Connecticut’s formal enforcement action may progress by “offer[ing] a Consent Order to the non-compliant public water system with compliance dates that are negotiated.” If the PWS fails to comply with the Consent Order and fails to coordinate with the DPH, then the DPH may “issue an Administrative Order. If the system fails to comply with the [Administrative] Order or a Consent Order[,] the Department can refer the Order to the Office of [the] Attorney General for enforce-

108 Id.
109 Smith & Koorse, supra note 87, at 10426.
110 CONN. PUBLIC WATER SYSTEMS REPORT 2013, supra note 8, at 6.
111 See Memorandum from U.S. Envtl. Protection Agency, supra note 68, at 8.
112 E-mail from Gary Johnson, Supervising Envtl. Analyst, Enf’t Unit Dep’t of Pub. Health, Drinking Water Section, to author (Mar. 11, 2015, 3:40 pm EDT) (on file with author).
113 Id.
114 Id.
115 Id.
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ment in Superior Court.” 116 Using this escalated response policy, Connecticut aims to work with PWS that have violated a health-based regulations “and come up with a mutually agreed upon compliance schedule which is formalized in a Consent Order.” 117 Administrative Orders, on the other hand, will be issued only if the DPH is unable to reach an agreement with the PWS. 118

2. Informal Enforcement Mechanism

Like many other primacy states, Connecticut’s informal enforcement begins with the issuance of a notice of violation to the non-compliant PWS. Similar to formal enforcement mechanisms, the goal of informal enforcement is for the state to work with the PWS to “take corrective actions to return to compliance. Such corrective actions include[:] identification and removal of the suspected source of contamination, replacing the contaminated source of supply with a better protected source[,] or by identifying and installing treatment specifically designed to reduce the level of the contaminant in the water.” 119 If the PWS fails to return to compliance through these actions, the state may issue a civil penalty. While the state may issue civil penalties for health-based violations, “99% of the penalties . . . impose[d] are for monitoring and reporting violations.” 120

E. Analogies for Other State Governance Structures

Primacy states may adopt different governance structures and implementation strategies for the SDWA. Some states oversee the SDWA through the environmental protection or conservation agency. Connecticut, however, may serve as an analog for those other states that oversee the SDWA through the Department of Public Health or corresponding agencies.

IV. CONNECTICUT PUBLIC WATER SYSTEM COMPLIANCE WITH HEALTH BASED REGULATIONS

This Part discusses the number of and type of drinking water violations in Connecticut in 2012 and 2013, and recent formal enforcement

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116 E-mail from Gary Johnson, supra note 112.
117 Id.
118 Id.
119 CONN. PUBLIC WATER SYSTEMS REPORT 2013, supra note 8, at 5.
120 E-mail from Gary Johnson, supra note 112.
actions that have proceeded from the EPA’s publication of the revised Enforcement Response Policy in 2009.

A. Health-Based Violations

Connecticut is required to publish and submit to the EPA an annual report of violations of the health-based standards. In 2012, there were more than 2,400 reports of significant violations of MCLs or treatment techniques. Four types of violations are reported in the annual compliance report: (1) exceedance of a MCL, (2) violation of a treatment technique (“TT”), (3) significant monitoring violations, and (4) failure to comply with the consumer confidence reporting and public notification requirements.

In 2013, the Connecticut DPH issued “240 violations to 155 PWS for MCL violations.” These violations include 199 Total Coliform Rule violations, 9 acute Total Coliform Rule violations, 17 violations for MCL exceedance of regulated chemicals, 9 violations for exceedance of radionuclides, and 6 violations for MCL exceedances of Total Trihalomethanes—a disinfectant by-product. The numerous and reoccurring health-based violations in Connecticut’s PWS illustrate how the SDWA is incapable of completely protecting the public health and supports the position that “[c]ompliance with federal regulations, while high, has been declining in recent years.”

In response to these health-based violations, in 2013 alone, the DPH entered into 17 consent orders and assessed more than 60 administrative penalties. The DPH, however, has not enacted any Administra-

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121 42 U.S.C. § 300g-3(c)(3) (2012).
123 A significant monitoring violation is defined by the EPA as “a PWS’s failure to collect a required sample or submit a required water test result to the DWS”. See CONN. PUBLIC WATER SYSTEMS REPORT 2012, supra note 7, at 4.
124 Id. “For calendar year 2012, the DPH issued 299 formal enforcement actions to PWS. The actions taken included: 11 Consent Orders and 123 formal Notices of Violation and 165 administrative penalties assessed.” Id.
125 CONN. PUBLIC WATER SYSTEMS REPORT 2013, supra note 8, at 4.
126 Id. at 4–5. “An acute total coliform violation occurs when fecal coliform or E. coli bacteria is detected in the system’s water.” Id. at 5.
127 Id. Disinfectants are used to kill microbial pathogens such as Giardia, but such disinfectants may react with naturally-occurring materials to form by-products, which, if consumed in excess of the regulated standard over many years, may lead to increased health risks. CONN. PUBLIC WATER SYSTEMS REPORT 2013, supra note 8, at 5.
128 Devlin, supra note 14, at 6.
129 CONN. PUBLIC WATER SYSTEMS REPORT 2013, supra note 8, at 4.
tive Orders or referred violations to the Office of Attorney General for civil enforcement. Therefore, the Department has not progressed enforcement beyond the early stages of the Enforcement Response Policy, despite continued and reoccurring violations.

V. SHORTCOMINGS IN CURRENT STRUCTURE

This Part will first address the potential public health effects of regulated and unregulated contaminants. Then, it will address the two categorical deficiencies of the SDWA: regulatory and enforcement. In order to adequately protect the public health, it is necessary that the scope and strength of the current regulations be enhanced. Without enforcement of the current health-based regulations, however, the SDWA and state regulations fail at protecting the public health and providing consumers with clean and safe drinking water.

A. Potential Public Health Effects

Based on differences in population and complicating factors, some contaminants may not be regulated at levels strict enough to adequately protect the public health. For example, the public health effects of contaminated drinking water may not be readily apparent or traceable to an individual contaminant, since the signs and symptoms of contamination may appear differently based on an individual’s risk, sensitivity, length of exposure, and may be complicated by other environmental factors. The EPA listing of regulated contaminants demonstrates, however, the diversity of potential health effects from long-term exposure above the promulgated MCLs or without proper treatment techniques.130 Furthermore, some currently unregulated contaminants may pose health risks, even though available data may be inadequate to determine the precise potential health risks of long-term exposure necessary to establish a NPDWR.

Lead is one example of a contaminant that may not be sufficiently regulated to protect the public health. As permitted by the SDWA, the EPA has chosen to promulgate a treatment technique for lead contaminants in place of a MCL.131 The EPA warns, however, that long-term

exposure to lead in drinking water in excess of 15 parts per billion ("ppb") may result in developmental delays in children and kidney problems and hypertension in adults. The most common source of lead in drinking water is from plumbing. Even though lead plumbing was banned under the 1986 Amendments, lead-free plumbing may still contain trace amounts and lead based plumbing may still be present in systems installed prior to 1986. If lead is present in plumbing, the corrosivity of the water may cause the lead to leach into the drinking water.

Currently, the lead treatment technique requires PWS “to control the corrosivity of the water . . . [and] to collect tap samples from sites served by the system that are more likely to have plumbing materials containing lead.” Since many old plumbing systems may contain lead, the EPA recommends that individual consumers test their drinking water for lead. The EPA advises that “[s]ince you cannot see, taste, or smell lead dissolved in water, testing is the only sure way of telling whether there are harmful quantities of lead in your drinking water. You should be particularly suspicious if your home has lead pipes . . . or if you see signs of corrosion.” Despite these regulations and warnings, it is unlikely that the average consumer will be aware of signs of lead contamination or have the means to regularly test for lead. As a result, the public health may be at risk because lead may be present—but undetected—in drinking water. Without strict enforcement of the current health-based regulations for lead and other similarly regulated contaminants, the SDWA fails in the aim of protecting the public health and providing clean and safe drinking water.

Methyl tertiary-butyl ether ("MTBE") is an example of an unregulated contaminant, for which data may be inadequate to determine the exact public health risks, but that may still pose risks to the public health. The EPA has recognized that scientific evidence supports the

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132 Id.
133 Id. ("[L]ead free’ means that solders and flux may not contain more than 0.2 percent lead, and that pipes and pipe fittings may not contain more than 8.0 percent lead.")
134 Id. In Connecticut, there were 5 violations of the Lead and Copper Rule in 2012 and 4 violations in 2013. CONN. PUBLIC WATER SYSTEMS REPORT 2012, supra note 6, at 5; CONN. PUBLIC WATER SYSTEMS REPORT 2013, supra note 8, at 6.
135 See Basic Information About Lead in Drinking Water, supra note 131. If lead is found in excess of 15 ppb in more than 10% of samples, then additional action is required. Id.
136 Id.
137 Id.
conclusion that MTBE is a potential human carcinogen. In 1997, the EPA issued a guidance document that recommended concentrations of MTBE be kept at 20–40 ppb or below to avoid an “unpleasant taste and odor [f]or most people.” Several studies, however, have examined the potential health effects from long-term exposure to MTBE; some have found that exposure to high levels of MTBE caused tumors of the kidneys, liver, testicles, and other organs in lab animals. The EPA has recognized that the evidence supports the conclusion that MTBE is a potential human carcinogen at high exposure levels. Yet, it argues that the data currently available is inadequate to determine the potential health risks of MTBE at low exposure levels in drinking water. Consequently, MTBE remains unregulated even though evidence suggests that long-term exposure to high levels poses a carcinogenic risk. In Connecticut, the DPH has established an enforceable MTBE action level of 70 µg/l, since the Department determined there is insufficient data on the potential adverse human health effects from MTBE in drinking water. The DPH recommends that consumers “should not drink water if it is above the Action Level [of 70 µg/l] to make sure that [they] have an adequate margin of safety.” Therefore, MTBE remains an unregulated contaminant since scientific evidence is insufficient to prove its negative health effects at low exposure levels. If the purpose of the SDWA is to adequately protect the public health, however, the EPA should expand the current regulations to include potentially harmful contaminants such as MTBE.

B. Regulation Deficiencies

The regulatory deficiencies in the SDWA are twofold. First, the number of contaminants for which a NPDWR and MCL has been prom-

138 ENVTL. HEALTH SECTION, CONN. DEP’T OF PUB. HEALTH, PUB. NO. 15, PRIVATE DRINKING WATER IN CONNECTICUT: MTBE (METHYL TERTIARY-BUTYL ETHER) IN PRIVATE DRINKING WELLS 1 (Apr. 2009) [hereinafter MTBE IN PRIVATE DRINKING WELLS], http://www.ct.gov/dph/lib/dph/environmental_health/pdf/15_MTBE_in_PDWW.pdf. MTBE is a volatile organic chemical that has been used as a gasoline oxygenate since the 1970’s. “MTBE is very soluble in water and small amounts of MTBE in drinking water cause unpleasant taste and odor. EPA considers MTBE a possible human carcinogen. Releases of MTBE to the environment can occur wherever fuel is stored and transferred.”


141 Id. Determining causation is often difficult, since “[p]eople who might have been exposed to MTBE at work often have also been exposed to a number of other chemicals.”

142 MTBE IN PRIVATE DRINKING WELLS, supra note 138, at 1.

143 Id. at 2.
ulgated is insufficient to adequately protect the public health. Second, the allowance of a cost-benefit analysis when determining whether to promulgate a MCL or treatment technique fails to uphold the purpose of the SDWA.

1. Scope of Regulated Contaminants

The first deficiency in the SDWA is the limited scope of regulated contaminants. Currently, only 94 contaminants are regulated under the SDWA. Although the EPA is required to consider new contaminants for regulation every five years, no new contaminants have been added to that list since 2006.

As with MTBE, even though the public health is likely negatively impacted by unregulated contaminants, the EPA has cited a lack of sufficient data to promulgate a NPDWR. This lack of data may be attributed to a number of factors. First, consumers may utilize water from a number of PWS in an average day, and potential contamination may be difficult to attribute to one system. Second, consumers may have different sensitivity to contaminant levels, and contamination may not be readily apparent, or appear with the same signs and symptoms, across a population using one PWS. Third, the health effects may be too attenuated. Fourth, the health effects may be the result of cumulative exposure to contaminants, and therefore cannot be attributed to a single unregulated contaminant.

Prior authors have identified and discussed potential barriers to more exhaustive regulation. The SDWA, however, was enacted with the purpose of protecting the public health through regulation of the public drinking water supply. For the benefit of public health, the EPA should enhance its efforts to add contaminants to the regulated list. Absent more comprehensive regulation, the SDWA lacks the scope necessary to adequately protect the public from potential adverse health-effects.

2. Validity of a Cost-Benefit Analysis

A second regulatory deficiency is the EPA’s discretion to employ a

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144 See Regulation Timeline: Contaminants Regulated Under the Safe Drinking Water Act, supra note 28.
145 Id.
146 See Rideout, supra note 11, at 669–75.
cost-benefit analysis to decide whether to promulgate a treatment technique in place of a MCL. When the EPA proposes a NPDWR, the Agency is required to “publish a determination as to whether the benefits of the maximum contaminant level justify, or do not justify, the costs[.]”\textsuperscript{148} This discretion raises two issues: the assumption about consumers’ willingness to bear the burden of health protection, and substitution of a treatment technique that can prevent adverse health effects to a “feasible” extent.

First, in performing the cost-benefit assessment, the EPA may consider “consumer willingness to pay for reductions in health risks from drinking water contaminants.”\textsuperscript{149} Consumer notice of the health risks posed by unregulated contaminants, however, may be a first step in influencing consumer opinion that regulation is necessary even if this would mean high costs.\textsuperscript{150} Without adequate consumer notice, how can the EPA accurately estimate consumer willingness? Therefore, consumer notice may lead to education and willingness to accept the costs of stricter regulation.

Second, the use of a feasibility analysis for establishing a treatment technique assumes that treatment technology will not improve over time. The EPA may promulgate a treatment technique if the Agency determines that it is not economically or technologically possible to accurately determine the level of a contaminant.\textsuperscript{151} In such a case, the EPA must require a treatment technique that “would prevent known or anticipated adverse effects on the health of persons to the extent feasible.”\textsuperscript{152} Feasible is defined as possible within the use of the best technology, treatment techniques, and other means available, taking cost into consideration.\textsuperscript{153} The assumption that health-based regulations may be based on currently available treatment technology and not set at aspirational levels does not adequately protect public health if such technology does not eliminate the health risks of contamination. Further, setting regulations based on currently available technology removes any requirement or incentive for

\textsuperscript{148} 42 U.S.C. § 300g-1(b)(4)(C) (2012).
\textsuperscript{149}  Id. § 300g-1(b)(3)(C)(iii).
\textsuperscript{150} Cf. Henry McDonald, Introduction of Water Charges in Ireland Cause Widespread Street Protests, GUARDIAN (Oct. 31, 2014), http://www.theguardian.com/world/2014/oct/31/water-charges-ireland-cause-protests (reporting that the imposition of fees for water service provoked protests in Ireland). In the U.S., however, consumers are currently charged for water service. Therefore, since consumers are already accustomed to paying for service, a rate increase aimed at protecting the public health may not provoke as much opposition as in Ireland.
\textsuperscript{151} 42 U.S.C. § 300g-1(b)(7)(A).
\textsuperscript{152} Id. (emphasis added).
\textsuperscript{153} Id. § 300g-1(b)(4)(D).
a PWS to improve their treatment techniques and further reduce health risks.

C. Enforcement Deficiencies

Irrespective of whether standards are toughened, the current regulations will remain an ineffective measure to protect the public health if health-based violations are not timely and adequately enforced through formal mechanisms at either the federal or state level. First, informal enforcement through the PWSS Grant Program is inadequate because the federal government has allocated insufficient funding to the PWSS Grant Program for infrastructure upgrades. Second, even though the EPA’s Enforcement Response Policy has enabled the Agency and states to prioritize violations and ensure an escalating response, informal enforcement mechanisms may nevertheless result in delaying a state from imposing an injunction or assisting a PWS in achieving return to compliance. Third, formal enforcement actions—administrative orders, consent decrees, and civil suits—have not adequately penalized recalcitrant violators.

First, there is insufficient federal funding for informal enforcement and infrastructure improvements and repairs through the PWSS Grant Program. Even though Congress continues to allocate funding for states’ PWSS Programs, under the SDWA, the PWSS grant can provide no more than 75% of the state costs necessary to carry out its PWSS program. Therefore, the individual states are required to fund much of their own enforcement programs. In Connecticut, the DPH receives “anywhere from between $700,000 to $1,000,000 annually” in federal funding for the PWSS Grant Program, which in the opinion of DPH experts, is likely less than half of the funding necessary to carry out the program. Further, state funding varies and, as of yet, has not matched more than 35% of the federal funding received. The lack of adequate federal funding is not made up by Connecticut state funding. DPH experts have stated, “[T]he biggest challenge is insufficient funding in enforcing the SDWA and state regulations against approximately 2,500 public water systems. New federal rules continue to be promulgated without additional funds to enforce them. The additional funding is needed to be protective of public health . . . .”

154 Id. § 300j-2(a)(3).
155 E-mail from Gary Johnson, supra note 112.
156 Id.
157 Id.
In addition to the insufficient funding for enforcing regulations, there is also insufficient funding for repairing and improving infrastructure. In 2010, “[t]he Obama administration ha[d] secured just $6 billion for repairs that the EPA estimate[d] would cost $300 billion.”¹⁵⁸ More recently, the EPA estimated the total cost would be $384 billion over two decades.¹⁵⁹ Therefore, federal funding for the PWSS Grant Program and for infrastructure improvements and repairs is insufficient.

Second, the reliance on administrative guidance as an informal enforcement mechanism is inadequate since the Enforcement Response Policy allows too much time to elapse before formal actions are taken against a non-compliant PWS. Under the current policy, the PWS is required to conduct testing and voluntarily report monitoring results to the states.¹⁶⁰ The state then must initiate informal mechanisms to return a system to compliance within six months. Only after those time periods have elapsed will the EPA push the state to take formal action.¹⁶¹ During this time frame, the PWS may remain non-compliant and still pose a risk to the public health. For example, in Connecticut, even though the DPH states that “100% [of PWS in violation] eventually return to compliance[,] [d]epending on the severity of the violation and the complexity of the correction needed[,] it can take anywhere from 30 days to 3 years from the initial date of the violation.”¹⁶² Consequently, even though the EPA and states work together under the Enforcement Response Policy, formal enforcement and return to compliance may not be timely enough to protect the public health.

Third, the lack of monetary penalties for reoccurring violations indicates that, even when a formal enforcement action is brought against a PWS, the consequences will likely not deter future non-compliance. For example, Connecticut has imposed a total of only $367,000 in civil penalties “[f]rom 1993 when [the state] first started issuing civil penalties up through 2014.”¹⁶³ Therefore, even though there are formal mechanisms in place, they have not been used to adequately police the PWS and im-

¹⁶⁰ TIEMANN, supra note 52.
¹⁶¹ E-mail from Gary Johnson, supra note 112.
¹⁶² Id.
¹⁶³ Id. The majority of penalties have been issued for “failure to monitor and report water quality data. However, several years ago [the state] did impose a $19,000 civil penalty against a Non-transient Non-Community public water system for failure to issue a Tier 1 public notice to its customers for having E.coli in the water.” Id.
pose monetary penalties for those systems that are non-compliant with the health-based regulations.

VI. PRIVATIZATION OF PUBLIC DRINKING WATER

The number of identified health-based violations and the absence of adequate funding or response mechanisms to enforce violations indicate that the current system is inadequate as a mechanism for protecting the public health. This Part addresses the potential barriers to reform of the current drinking water system. Then, this Part hypothesizes whether privatization of drinking water systems may improve the enforcement of the SDWA.\textsuperscript{164} Finally, this Part provides examples of privatization and addresses potential arguments against privatization.

A. Barriers to Drinking Water Reform

Two important categorical barriers to drinking water reform exist: economic constraints and social costs. Economic constraints include the fact that public utility systems are natural monopolies, and the high costs necessary to replace and repair the aging water supply infrastructure. The social costs concern how rate increases may disproportionately affect low-income consumers and communities.

The first categorical barrier to drinking water reform is economic constraints. Public water systems, like other public utilities, are a natural monopoly.\textsuperscript{165} The consumer does not have a choice of service provider—there is no competition. When a publicly owned natural monopoly is privatized, it simply becomes a private monopoly. Nevertheless, market-based incentives can be injected into privatization through competitive bidding processes and contract provisions, such as term lengths and service quality standards necessary for contract renewal.

Additionally, the high capital costs associated with the public drinking water industry (i.e., capital necessary to maintain and repair pipelines or to operate water treatment centers) may be a deterrent for private entities to invest in the industry because the infrastructure of water sys-

\textsuperscript{164} Throughout this note, privatization means sale of a PWS to a private entity, or a contractual public-private partnership. Future research should consider whether privatization may serve to improve upon the regulatory deficiencies of the SDWA.

\textsuperscript{165} CORP. ACCOUNTABILITY INTL., SHUTTING THE SPIGOT ON PRIVATE WATER: THE CASE FOR THE WORLD BANK TO DIVERSE 3 (Apr. 2012). A natural monopoly typically occurs where there are high capital costs and thus high barriers to entry. See Natural Monopoly, INVESTOPEDIA, http://www.investopedia.com/terms/n/natural_monopoly.asp (last visited Apr. 6, 2016).
tems may, for example, require expensive improvements, which would thereby make investment riskier. As discussed above, federal funding for repairs is lacking.\(^{166}\) Further, most PWS infrastructure was built in the early twentieth century, “and more than 6 billion gallons of water are lost to leaky pipes” every year.\(^{167}\) Therefore, any entity that acquires such infrastructure will likely need to invest in infrastructure repairs in order to improve efficiency of service. Absent the ability to create economies of scale, the investment risks would likely outweigh the potential rewards. The high capital costs of the market may be overcome, however, by creating economies of scale. Allowing private entities to acquire numerous water systems in order to spread fixed costs across many consumers may create such economies of scale. Therefore, even though the risk associated with high capital costs may deter initial private investment in the industry, creating economies of scale could create the potential profits needed to incentivize investment, while the government could include contractual provisions in a lease or public-private partnership in order to protect against monopolistic behavior.

A second barrier to reform is the social costs, which is closely related to the economic constraints. Stricter and more comprehensive regulation and formal enforcement would result in rate increases. “Dozens of studies have found that even with steep rate hikes, consumers tend to reduce water consumption by only a little, and that even in the worst cases, the crunch is disproportionately shouldered by the poor.”\(^{168}\) If the supply of drinking water were privatized, private entities would likely raise rates, and—since rate increases have not been shown to shift consumer demand—lower income consumers are likely to experience a larger burden, either by being forced to reduce consumption or by paying a proportionally larger amount of their income for a basic utility.

B. Privatization: One Potential Enforcement Improvement

As identified above, the deficiencies in the SDWA enforcement include a lack of federal funding and insufficient formal enforcement action. Here, this section hypothesizes whether privatization may serve as a systemic change to improve enforcement of the SDWA. Beyond enforcement improvements, this section hypothesizes whether privatization may have economic, social, and environmental benefits.

Even though “privatization is [currently] the least common ap-

\(^{166}\) Interlandi, \textit{supra} note 158.
\(^{167}\) Id.
\(^{168}\) Id.
proach to water service delivery among US local governments[169] it has once again become an increasingly common mechanism for drinking water service worldwide. Indeed, water privatization was common throughout the U.S. and Europe in the nineteenth century.170 Beginning in the 1990’s, the World Bank began to require some borrower countries to privatize water as a condition of loan agreements, in attempts to improve access to clean and safe water.171 In fact, according to a World Bank report, private investment in the water industry was projected to double between 2009 and 2014, with a 20% growth in the water-supply market alone.172

1. Informal Enforcement

In the U.S., privatization may correct the deficit in funding of informal enforcement—the PWSS Grant Program—and infrastructure improvements. Since the goal of a private entity is to realize profits for shareholders, private water suppliers would have an additional incentive to ensure compliance with the regulations of the SDWA. If a private supplier violates an SDWA regulation, the entity would be subject to both government and shareholder action. Unlike public-sector systems, for private entities, the threat of government action and costly litigation would negatively impact profits and may lead shareholders to then replace the entity’s management. In order to prevent the costly impact of a violation, a private entity may be inclined to reinvest profits in order to develop system improvements and achieve return to compliance in a timely manner. The entity’s management would direct the reinvestment, allowing for system-specific improvements. Profits might also be directed toward research and development for improved water treatment, infrastructure improvements, or other system efficiencies. Therefore, the possibility of shareholder action provides an additional informal incentive for compliance, while the duty to maximize shareholder returns creates incentives to innovate and maximize system efficiencies. Therefore, privatization may correct for the deficit in funding of informal enforcement and infrastructure improvements through informal shareholder action and reinvestment of profits for system-specific improvements.

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170 See CORP. ACCOUNTABILITY INTL., supra note 165, at 7.
171 See id.
172 See Interlandi, supra note 158.
2. Formal Enforcement

Even if shareholder action and profit reinvestment proved insufficient to achieve compliance with the SDWA regulations, privatization may overcome the relative absence of formal enforcement actions, since it would remove a structural barrier of enforcement and may promote citizen suits.

Since public water systems are government-owned entities, if the EPA or states bring a formal enforcement action against a PWS, any costs would ultimately harm the state and local government. On the other hand, because a private, profit-driven entity has its own capital at risk, formal enforcement will more fully serve a deterrent function. As a result, the EPA and states would be able to enforce the regulations through formal action, and may be more likely to bring a civil action under the SDWA because the costs would be borne by the private entity, not by the public sector.

Additionally, even though consumers may be hesitant to bring formal enforcement against a PWS under the citizen suit provision of the SDWA, privatization would allow for formal enforcement against a private entity beyond the SDWA. If consumers were a party to the service contract, they may also have a claim in contract law. Provided that a consumer pays the water bill, a contract claim would certainly protect the consumer from interruption of water service. Additionally, consumers may have tort law claims for negligence and possibly intentionally tortious conduct, if a provider knowingly violated a health-based regulation. Further, the states may criminally prosecute individuals responsible for violations that cause harm to the public health. Therefore, even though no citizens’ suits have been brought under the SDWA, privatization would provide additional avenues for consumers and states to bring formal enforcement actions against providers in violation of the SDWA regulations.

3. Economic Benefit

Beyond the informal and formal enforcement mechanisms, privatization may provide economic benefits, including the creation of a competitive market and reduction of the economic burden on state and federal budgets.

Even though water service is recognized as a natural monopoly, privatization may create a competitive market where corporations are incentivized to keep rates at the market-clearing price. If privatized, it is likely that water rates would initially rise to reflect the private entity’s cost of entry. Using competitive bidding and short-term contracts in a competitive market, however, may help to stabilize rates at the market-clearing price. Further, to ensure longer-term rate stabilization, contract provisions could prevent private corporations from setting rates that discriminate against low-income consumers, which may occur if a private entity is permitted to set consumption prices that inhibit low-income consumers’ right to water.

Privatization may also reduce the budgetary burden on the federal and state governments, since privatization would allow for water systems to issue equity to fund their operational and capital needs, thereby providing new sources of funding. Since much of the nation’s water infrastructure is approaching or has already reached the end of its useful life, the demand for government funding will only continue to rise if the water systems remain public enterprises. From the early 1970s to the present, however, federal funding for improvements to drinking water has decreased by 80%. In 2013, federal funding accounted for only 3% of the total costs, down from 78% of the total costs thirty-five years earlier. Clearly, the decrease in the government expenditures for water systems and the increasing need for infrastructure improvements has created a significant budget gap. Even though some government fund-
ing has been allocated to water system improvements, privatization would enable systems to access new sources of funding to close budgetary gaps and perhaps reduce dependence on federal funding.

Beyond the strict contractual provisions, federal and state regulations could simultaneously ensure compliance with health-based regulations and prevent behaviors such as price-fixing. Because corporations would need to own numerous systems to make privatization appealing for corporate owners, it is possible that anti-competitive behaviors would develop. In fact, “[t]he nation’s massive infrastructure needs may only make this worse as water corporations consolidate for greater access to capital to finance improvement projects.”\(^\text{180}\) To protect against monopolistic behaviors, federal and state governments could regulate corporate actions in regard to quality-control and price-fixing. Additionally, as noted above, formal enforcement actions and the strict monetary or criminal penalties could be imposed against entities that harm consumers through actions such as shutting off water service.

4. Social Benefit

Privatization may provide the social benefit of improved access to clean and safe water through infrastructure improvements, while any potential inequities may be compensated for by after-tax government subsidies for low-income consumers. If private entities create economies of scale and strict government regulations protect against monopolistic behavior, then the profit-seeking nature of private corporations would lead to operational efficiencies that would benefit a broad population. Since contractual provisions and government regulations would address water quality and rate-setting, entities would search for operational efficiencies through technological and infrastructure improvements. Such system-wide improvements would benefit the broad consumer base. Further, where consumers are burdened by rate increases resulting in social inequity, low-income consumers could be compensated through after-tax government subsidies. Therefore, even though the high capital costs necessary for entry might result in initial rate increases, consumers would likely realize widespread improvements and broad access to clean and safe water, while potential inequities could be mitigated.

the EPA in 2013, does so by “steering communities toward public-private partnerships.” Id.

5. Environmental Benefit

Finally, privatization may provide environmental benefits through short-term conservation and long-term planning.\(^{181}\) Even though studies have shown that water demand is inelastic to price increases at current rates,\(^{182}\) and therefore a rate increase may only result in a small change in consumption, private entities could enact programs to incentivize consumer conservation. Currently, “no public utility anywhere prices water based on how scarce it is or how much it costs to deliver, and that, privatization proponents argue, is the root cause of such rampant overuse.”\(^{183}\) Conservation programming might include rates that shift depending on time of day to incentivize off-peak use. In addition, collaborative public-private sector marketing campaigns might serve to educate consumers about the importance of conservation. Therefore, even though studies have shown that demand for water is generally not responsive to price, private entities could experiment with variable rates and large-scale marketing campaigns.

Beyond short-term pricing mechanisms, long-term infrastructure improvements and recycling programs may be implemented for long-term efficiency improvements and conservation. As noted above, more than six billion gallons of drinking water are lost in the U.S. each year through leaky pipes.\(^{184}\) The same enforcement incentives that may lead a private entity to search for system efficiencies may also lead to investment in aging infrastructure. Recycling programs may also be implemented. For example, the San Diego City Council recently approved a plan to recycle sewage into drinking water, which is projected to supply more than one-third of the city’s water requirements by 2035.\(^{185}\) While San Diego’s measures have been initiated by a local government, it does

\(^{181}\) It is widely accepted that clean and safe fresh water is becoming a scarce resource. In fact, it is estimated that by 2040, demand will exceed supply by more than 30%. See Interlandi, supra note 158.


\(^{183}\) See Interlandi, supra note 158.

\(^{184}\) Id.

\(^{185}\) See David Garrick, SD OKs Landmark Water Recycling, SAN DIEGO UNION TRIB. (Nov. 18, 2014), http://www.sandiegotribune.com/news/2014/nov/18/water-recycling-sewer-tap-council-approves;/ see also California’s Water Series: Water Recycling Imitates Nature, ASS’N CAL. WATER AGENCIES, http://www.acwa.com/content/water-recycling/californias-water-water-recycling-imitates-nature (last visited Mar. 27, 2016) (noting that California has many large water-recycling programs in place, most of which have been previously used for irrigation, industrial, and other non-drinking water uses, but the demand for drinking water has led to implementation of new techniques for treatment and purification of drinking water).
present one example of water treatment that might in the future be delegated by municipalities to private operators. Therefore, privatization presents the opportunity to provide environmental benefits through short-term conservation measures, and long-term infrastructure and recycling programs.

C. Examples of Drinking Water Privatization

Over the past twenty years the privatized drinking water industry has experienced significant growth both domestically and internationally. Domestically, municipalities have used privatization to relieve strained budgets and improve infrastructure. Internationally, the World Bank has played a large role in privatization in attempts to improve quality and access to water in many of the poorest communities. These privatization actions, however, have drawn significant criticism. Some argue that “privatization has neither benefited the world’s poorest people, nor proven economically viable.” 186 Currently, the market for private water service is estimated at $400 billion worldwide, yet privatization represents less than a 10% share. 187 As the demand for clean and safe drinking water increases while funding for infrastructure decreases, private corporations may enter the drinking water industry and take advantage of the unclaimed market share.

1. International Privatization Failures

Among the most notable failures of privatization efforts is the privatization of Bolivia’s drinking water during the late 1990s. At that time, the World Bank imposed private contracts as a requirement of continued loans, and twenty-year contracts were entered into with subsidiaries of two international water corporations, Suez and Bechtel. 188 The results of the privatization have been dramatized in the movie, También La Lluvia, which depicts the water riots in Cochabamba, Bolivia, in 2000 that resulted from discontinued service and unimproved infrastructure. 189 By 2008, the private contracts were terminated and the water systems of La

186 CORP. ACCOUNTABILITY INTL., supra note 165, at 2.
187 Id. at 32.
188 Id. at 7–8.
Paz and Cochabamba were remunicipalized.190

Similarly, in 1997, the World Bank directed the privatization of water systems in Manila, Philippines.191 The privatization, however, has resulted in declining water quality and limited access to clean water with “[h]undreds of communities [being left] without safe water, and the cost of a connection, even where available, is unaffordable for many of the city’s residents.”192 There, the World Bank divided Manila into two sectors and awarded contracts to separate corporations to provide service in each area.193 Both contracts have been highly scrutinized. Critics argue that the contracts resulted from unfair bidding practices, and the World Bank’s investment division created a conflict of interest by taking a large equity share in one of the companies.194 The private operations resulted in more than fivefold rate increases, decreases in the workforce, failure to reinvest profits in infrastructure improvements, and decreased water quality.195 In fact, in October 2003, six hundred residents fell ill and eight residents died when one service area experienced E. coli in excess of seven times the national limit.196 Despite widespread opposition, the World Bank extended one of the service contracts through 2037.197

2. Domestic Privatization Failures

Privatization failures have also occurred domestically. The most notable domestic failure was in the city of Atlanta, which entered into a twenty-year privatization contract with United Water Resources, Inc. in 1999 and subsequently terminated the contract in 2003.198 “Before privatization operating costs ran about $50 million a year with poor service and a major need for modernization.”199 Despite public opinion against privatization, the city entered into the long-term contract through 2019.200 By the summer of 2002, the city notified United Water that it

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190 Finnegan, supra note 189.
191 CORP. ACCOUNTABILITY INTL., supra note 165, at 9.
192 Id.
193 Id. at 9.
194 Id. at 9–10.
195 CORP. ACCOUNTABILITY INTL., supra note 165, at 10.
196 Id.
197 Id.
199 Segal, supra note 198.
200 Id.
had ninety days to comply with four areas: maintenance, bill collection, meter installation, and an improper letter of credit. Soon thereafter, the decision was made to remunicipalize the city’s water service. Unfortunately for Atlanta, remunicipalization resulted in water service that was “more costly to ratepayers than the one it replace[d]” and an “arrangement [that] offer[ed] no clear way to pay for extensive water-system repairs, estimated to cost $800 million” as of 2003. The officials who decided to remunicipalize defended the change on the grounds that “almost any change seem[ed] preferable to existing service [that was called] poor, unresponsive and fraught with breakdowns, including an epidemic of water-main breaks and occasional ‘boil only’ alerts caused by brown water pouring from city taps.”

Atlanta’s privatization experience is not typical, however, as “[s]atisfaction with water and wastewater privatization has been very high, with over 90 percent of communities choosing to continue privatization at renewal time.” Still, Atlanta’s privatization and subsequent remunicipalization provides several lessons for future domestic privatization efforts. First, Atlanta’s city managers were not well informed of the municipality’s water system issues. Second, as with Bolivia and Manila, long-term contracts eliminate competition and disincentivize system improvements. Third, it is important that municipalities maintain some control through the contractual agreement, including: rates and terms of service, water quality, and monitoring, reporting, and remediation requirements.

3. International Privatization Successes

Although privatization efforts in England and Wales have been criticized for excessive profit margins, the strict regulatory control on pricing and quality, as well as the long-term stability of the private industry, indicate that privatization in the United Kingdom has been successful. Under the Water Act of 1989, England and Wales leased entire water systems, as well as the associated properties of the former regional water authorities. The contracts were twenty-five year agreements for sanitation and water supply, with protections against competition during the
contractual period.\textsuperscript{206} Even though significant price increases were realized soon after privatization, such increases were combined with cost savings above estimates.\textsuperscript{207} Enhanced regulation through the Water Services Regulation Authority ("OFWAT")—an agency responsible for "ensuring that the companies were profitable . . . and for encouraging efficiency"—has enabled gradual improvements of quality and infrastructure.\textsuperscript{208} OFWAT has recognized that twenty-five years after privatization, the water industry still needs to evolve, and "[s]table, independent economic regulation," is crucial to improved service.\textsuperscript{209} Part of OFWAT's emphasis has been on setting price-caps, and pushing the private corporations to enhance customer service, promote competition, and increase sustainable development.\textsuperscript{210}

4. Domestic Privatization Successes

Indianapolis, Indiana, transferred its water systems to a non-profit charitable trust in 2011.\textsuperscript{211} Under the terms of the contract, Indianapolis transferred the debts of its two water systems to Citizens Energy Group in exchange for more than $425 million, which the City has used to fund municipal infrastructure improvements.\textsuperscript{212} Since the charitable trust is only a few years old, more time will likely be required to develop a full understanding of the successes and challenges presented by such an arrangement. We can look, however, to Indianapolis’s privatization of wastewater treatment in the 1990’s for clues as to how public-private partnership may affect the city’s drinking water service.

In the 1990s, Indianapolis sought ways to improve the operation, maintenance, and management of two wastewater treatment systems "while cutting costs and generating revenue for system improvements."\textsuperscript{213} After consideration of its options and proposals, the city chose to create a public-private partnership, through which it would "retain[] the tax advantages of public ownership and gain[] savings via pri-
vate sector efficiencies.”214 Within ten months, and at a cost of less than $300,000 for implementation, the city had reached a five-year contractual agreement.215 This public-private partnership realized operational efficiencies and significant cost-savings for the city. The private entity’s proposal guaranteed 38% savings over the prior year’s budget, and the contract required the entity to meet environmental regulations and pay for any penalties resulting from violations.216 Between 1993 and 1994, the private operation realized a cost-savings of $13 million, which Indianapolis used to establish a fund to improve the city’s sewer infrastructure.217 In total, the city realized a cost-savings of $78 million over the five-year contract period.218 The public-private partnership also realized a reduction in environmental violations from untreated wastewater runoff.219 Social benefits included a 91% decrease in on-the-job accidents in the first two-years of the partnership and a 99% reduction in employee grievances, while employee wages rose between 9% and 28%.220

Indianapolis’s successful public-private partnership demonstrates that, with careful planning and a short-term contract reached through a competitive bidding process, system-wide improvements can be achieved. The city realized operational efficiencies, a reduction in regulatory violations, and environmental and social benefits. In fact, after only three years of the first contract, the city decided to extend the contract for another ten years, with a projected cost-savings of $250 million, which the city was then able to apply to infrastructure improvements and rate reductions.221 The model established by Indianapolis’s public-private partnership model may guide other municipalities seeking to privatize drinking water.

D. Arguments Against Privatization

Despite the success of municipalities like Indianapolis, there is still opposition to further privatizing water systems in the U.S. The arguments against privatization include: it does not yield a cost savings, corporate profits are placed above quality and access improvements, it results in a loss of regulatory control, perceived operational efficiencies

214 Id.
215 Id.
216 Id.
217 Segal, supra note 198.
218 Id.
219 Id.
220 Id.
221 Segal, supra note 198.
are only reductions in non-revenue operations, and it transforms a public natural monopoly into a private monopoly.

First, empirical evidence from privatization case studies from the U.S. and U.K. demonstrates that these measures do not yield a cost-savings because of problems related to competition, high transaction costs, and high water quality protection costs. In a meta-analysis of worldwide large-scale water collection studies, Warner and Bel found “no difference in costs between public and private production” for the majority of studies. Further, Warner argues that the four neoclassical theories of economics—the public choice theory, property rights theory, transaction costs theory, and industrial organizations theory—do not support privatization of water. Under the public choice theory, an expectation of cost savings derives primarily from increased competition; but in the case of water service, privatization substitutes a public monopoly for a private one. Under the property rights theory, private corporations should be incentivized to innovate and improve infrastructure. As was seen in Manila, “[h]owever, the theory also predicts that private owners will reduce quality in order to enhance profits, unless careful regulatory oversight is ensured.” Therefore, strict regulation is likely to lead to similar, or higher costs, and the absence of strict regulation will likely result in a reduction in quality. Under the transaction costs theory, items such as drinking water are not ideal services for privatization because the tangential transaction costs are higher than the cost of product delivery. Finally, under the industrial organization theory, which looks to the whole industry structure, the rate of reversal from experimental private operation back to public operation indicates that a municipality considering privatization should choose to remain public. Thus, evidence demonstrates that privatization does not lead to a cost-savings.

Second, even with contractual promises to improve infrastructure and quality, private water corporations place corporate profits above quality and access improvements. As seen in Manila, once the city’s water was privatized, rates increased fivefold, public employees were laid

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223 See Warner, supra note 169, at 2 (emphasis in original).
224 Id.
225 Id.
226 Id.
227 See Warner, supra note 169, at 3.
228 Id.
off, contaminants such as \textit{E. coli} appeared, and the promised $7.5 billion infrastructure improvement was not realized.\footnote{CORP. ACCOUNTABILITY INTL., \textit{supra} note 170, at 10.} Therefore, privatization has been shown to result in a reduction of equitable access to clean and safe water despite rate increases and promises of infrastructure improvements.

Third, privatization may result in a loss of regulatory control and decreased transparency. For example, in Manila, privatization resulted in concessions for rate hikes, failure of the private corporations to meet contractually agreed upon targets for expanded access, and no additional information was provided to the public.\footnote{\textit{Id.} at 10–12.} There, however, the Public Works Secretary was a former executive officer of one of the private corporations, which led many to believe there was impropriety in rate-setting and the contractual agreements.\footnote{\textit{Id.} at 10.} Further, the partial ownership of the World Bank resulted in “conflicts in corporate ownership by a development institution.”\footnote{\textit{Id.} at 11.} Therefore, in instances where privatization is accompanied by the involvement of a development organization, like the World Bank, it may present conflicts of interest or a decrease in regulatory control. Nevertheless, a public-private partnership is not likely to result in either of these issues. In a public-private partnership, the state and federal governments may maintain regulatory control and enforcement mechanisms, whereas the World Bank lacked regulatory authority in the situations discussed, and may even implement stricter monitoring and reporting requirements in order to enhance transparency and public information. The government may also impose strict penalties to dissuade potential conflicted-interest transactions, including criminal sanctions for knowing or willing behavior that poses a threat to public health.

Fourth, privatization may not result in the desired system efficiencies and system improvements. As noted in Manila, operational efficiency “amount[ed] to little more than reducing ‘non-revenue’ water by enforcing bill collections and cutting off unpaid or unauthorized connections, pushing up prices and downsizing the workforce.”\footnote{CORP. ACCOUNTABILITY INTL., \textit{supra} note 170, at 15.} There, the communities did not realize any system improvements.\footnote{\textit{Id.} at 9.} Instead, the private corporations sought to grow revenue through reduction of non-revenue expenses.\footnote{\textit{Id.} at 15.} Accordingly, unless there is careful oversight and enforcement of contractual agreements, desired system efficiencies
and improvements may not be realized.

Finally, privatization only substitutes a natural public monopoly with a private monopoly, and private monopolies—which seek a short-term return—have little incentive to invest in long-term management. A profit-seeking corporation “cannot squeeze a profit from long-term infrastructure investment[.]”236 “[W]ater infrastructure investment is vital to economic growth and public health[,] [yet] [p]rivate water corporations fail time and again to make the necessary investments.”237 For example, when the World Bank prompted privatization in Ghana, the failure of the private corporation to invest in water system infrastructure resulted in the development of retail water kiosk systems. Instead of investing in infrastructure to deliver water to consumers at their residences, the “humanitarian technology [has been] ‘exploited for profit by global corporations.’”238 Because there is a lack of competition where private monopolies exist, such corporations have little incentive to invest in long-term infrastructure improvements.

Therefore, some arguments against privatization of drinking water exist based on economic evidence and illustrative examples from around the world. These arguments include: privatization does not yield a cost savings, corporate profits are placed above quality and access improvements, privatization results in a loss of regulatory control, perceived operational efficiencies are nothing more than reductions in non-revenue operations, and privatization simply transforms a natural public monopoly into a private monopoly.

E. Response to Arguments Against Privatization

Even though domestic and international efforts at privatization have received criticism and have resulted in remunicipalization, Connecticut and similarly situated states may still benefit from privatization or the formation of public-private partnerships. In environments where fresh water is abundant, access is almost universal, and government regulations are already in place, privatization may allow for: federal and state governments to focus on regulatory control and enforcement (including rate-setting and formal enforcement actions), competitive investment in infrastructure, and access improvements.

As discussed, regulation and enforcement remain issues for the provision of clean and safe drinking water. If drinking water service is

236 Id. at 47.
237 CORPORATE ACCOUNTABILITY INTL., supra note 170, at 35.
238 Id. at 28 (internal quotation marks omitted).
privatized, then state and local governments, in conjunction with the EPA, could more appropriately serve as independent regulators. First, water quality regulations could be strictly enforced through formal mechanisms. Second, state government could help regulate maximum profit margins, rate agreements, and prohibit corporations from passing costs onto the consumers. Therefore, separation of service and regulation may provide a means to improve quality, and it may also preserve social and economic equity.

Additionally, state and local governments that privatize, or enter public-private partnerships, can create competition in the market through competitive bidding practices for short-term contracts, as seen in Indianapolis. First, short-term contracts will prevent a loss of regulatory control, since the municipality will retain the power to re-negotiate or entertain new bids every few years. Second, by creating competitive bidding, the municipalities can alleviate concerns of transforming drinking water services into private monopolies. Third, since private contractors will seek to maximize profits, it is likely that privatization will incentivize innovation in order to achieve operational efficiencies and contract renewals. As was the case in Indianapolis, public-private partnerships may create operational efficiencies that provide additional funding for infrastructure improvements and rate reductions. Therefore, through the use of short-term contracts and competitive bidding, privatization may result in operational efficiencies, investment in infrastructure, and access improvements without a loss of regulatory control.

Finally, private entities may have more resources to commit to social and environmental programming, including implementation of conservation, long-term infrastructure, and recycling programs. Again, this serves as an opportunity to incentivize innovation and competition that will benefit large consumer bases. Such programs may result in social and economic benefits without burdening federal and state budgets.

VII. CONCLUSION

Based on evidence from prior efforts in the privatization of drinking water, it may serve as one measure of drinking water reform. Privatization may be most effective in jurisdictions where regulations are already in place, and the one methodology for enacting privatization may be a bidding process whereby a private entity may acquire the right to enter into a limited-term provider contract. Municipalities considering privatization should seek a competitive bidding process in pursuit of short-term public-private partnerships, with contract terms that ensure municipal
control over rate-setting, quality, and access. Following privatization, the EPA and primacy states can focus resources on enforcement of current regulations and take swift formal action against PWS that fail to comply. Private entities will also face the possibility of shareholder dissatisfaction, which may further incentivize compliance. Higher rates and conservation measures may ensure the longevity of drinking water, while any realized cost-savings could be reinvested in local infrastructure improvements to ensure equitable access. Therefore, expanded privatization is a potential avenue to improve enforcement of the SDWA and allow for more effective protection of the public health through the provision of clean and safe drinking water.
A CALL TO (CYBER) ARMS:
APPLICABLE STATUTES AND SUGGESTED COURSES OF ACTION FOR THE CELEBRITY ICLOUD HACKING SCANDAL

Christopher Satti*

I. INTRODUCTION

Imagine you wake up one morning to hundreds of missed calls and text messages because there is social media craze that there are private photos of you on the Internet. Shocked, you might ask yourself, “How can that be? I have the photos on my cell phone and saved on the iCloud, and only I have the password to access them.” On September 1, 2014, this exact situation occurred for Jennifer Lawrence,1 Kate Upton,2 Kirsten Dunst, and almost a hundred other celebrities.3

The news of the celebrities’ hacking first came to light when a “4chan”4 user, from an alleged underground Internet ring, posted the ce-

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* J.D. 2015, Quinnipiac University School of Law; M.B.A. 2015, Quinnipiac University School of Business; B.S. 2012, Arizona State University. Special thanks to my family for their love and support during the writing of this Note.

Further, this Note was written before the capture, detainment, and pleading of Ryan Collins, one of the hackers. Ryan Collins pleaded guilty under the “without authorization” prong of the CFAA. However, this Note analyzes the hacking from both a “without authorization” and “exceeding authorization” perspectives.


2 Incidentally, Kate Upton’s uncle, Fred Upton, is a Congressman from Michigan, and a spokesman for the House Energy and Commerce Committee. In regards to the celebrity hacking, Congressman Upton said the committee “is continuing to monitor these latest breaches.” Julian Hattem, ’Next Time it Won’t be Celebrity Secrets,’ Warns Democrat on Privacy Hack, Hill (Sept. 2, 2014) [hereinafter Democrat on Privacy Hack], http://thehill.com/policy/technology/216446-next-time-it-wont-be-celebrity-secrets-dem-warns.


4 See generally 4chan, WIKIPEDIA (last modified Oct. 22, 2015), http://en.wikipedia.org/wiki/4chan#.2Fb.2F_imageboard, (“4chan is an English-language im-
celebrities’ private photos to the Internet in an attempt to gain bitcoins. The post from the “4chan” user春boarded other members of the underground ring to flood the Internet with their collections of celebrities’ illegally obtained private photos. Lawrence, along with the other celebrities who were hacked, asserted that the hacking was a “sex crime.”

The resulting aftermath has been a large public outcry due to the hacking of the iCloud and the distribution of the celebrities’ private photos on the Internet. The hacked celebrities are calling for new legislation that will make the release of sensitive and private photos a “sex crime.” The celebrities’ call for legislative action has led to responses from several politicians. Senator Ed Markey (D-Mass.) warned, “Next time it won’t be celebrity secrets . . . .” Senator Markey, along with Senator Orrin Hatch (R-Utah), already proposed new legislation for cyber-hacking. The senators alluded to the fact that future legislation is

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6 Chung, supra note 5. McKayla Maroney, who was one of the celebrities hacked, was reportedly underage when her nude photos were taken. This could be considered child pornography, which is a felony under 18 U.S.C. § 2252 (2012). Stephanie Marcus, McKayla Maroney Was Reportedly Underage In Hacked Nude Photos, HUFFINGTON POST (Sept. 3, 2014), http://www.huffingtonpost.com/2014/09/02/mckayla-maroney-underage-nude-photos_n_5755600.html.

7 Cover Exclusive: Jennifer Lawrence Calls Photo Hacking a “Sex Crime,” VANITY FAIR (Nov. 2014) [hereinafter VANITY FAIR], http://www.vanityfair.com/vf-hollywood/2014/10/jennifer-lawrence-cover. Jennifer Lawrence stated, “The law needs to be changed, and we need to change. That’s why these Web sites are responsible.” Id.

8 See Chung, supra note 5 (noting that many celebrities took to Facebook and Twitter to voice their disgust with the hackers and those viewing the photos on the Internet).


10 Democrat on Privacy Hack, supra note 2.

11 Id. See Julian Hattem, Senators Unveil Bill to Protect Student Privacy, HILL (July 30, 2014) [hereinafter Student Privacy Bill], http://thehill.com/policy/technology/213794-senators-look-for-safeguards-on-student-tech. The proposed legislation by Senators Markey, Hatch, Kirk, and Walsh is not for celebrities or even all citizens, however. The proposed bill is for student privacy, which seeks to compel “companies to put in place data security safeguards that protect information they house.” Democrat on Privacy Hack, supra note 2. Although it is not sweeping legislation that criminalizes hacking and leaking private photos to the
needed for all citizens who are in “cyber-space,” but the celebrities request justice now.12

The celebrity hacking and leaking to the Internet of private photos leads many to ponder the question, “Was the hacking of private photos a ‘sex crime’?”13 The simple answer is—no. The hacking and leaking of private photos to the Internet is not a sex crime because the actions do not satisfy state statutory requirements for sex crimes.14 Although the hacking and leaking of private photos to the Internet is not a sex crime, alternative actions may be sought against the celebrities’ hackers15 for criminal and civil liability.16

The situation arising out of the iCloud hack is hazy because it re-

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12 Democrat on Privacy Hack, supra note 2.
13 “Sex crime” is put in quotations because society uses the term loosely for any inappropriate behavior that has sexual association linked to it. It is important to note that the celebrities understanding of what is a “sex crime” does not satisfy statutory requirements. Although they may feel that they were violated because of the illicit and sexual connotation of the photos, that alone does not constitute a “sex crime.”
14 Although celebrities, like Jennifer Lawrence, are stating the hacking is a “sex crime,” the hacking lacks the essential element of physical contact generally required for most sex crimes by almost every state. See, e.g., CAL. PENAL CODE §§ 243.4, 261, 261.6, 261.7, 263, 266c, 286, 289 (West 2015).
15 The term “hacker” is used loosely because it is still unknown whether the hacking was a group or individual effort. Therefore, this Note will use the terms “hacker” and “hackers” interchangeably. See Eric J. Sinrod & William P. Reilly, Cybercrimes: A Practical Approach to the Application of Federal Computer Crime Laws, 16 SANTA CLARA COMPUTER & HIGH TECH. L.J., 177, 181–83 (2000).
16 See Gail Sullivan, Six Things the Jennifer Lawrence Photo Hack Could Be Other than A ‘Sex Crime,’ WASH. POST (Oct. 8, 2014), http://www.washingtonpost.com/news/morning-mix/wp/2014/10/08/six-things-the-jennifer-lawrence-photo-hack-could-be-other-than-a-sex-crime/. The Washington Post article stated that hacking the photos could implicate six violations other than a “sex crime” including: (1) wiretapping; (2) torts of public disclosure of a private fact and intentional infliction of emotional distress; (3) disorderly conduct, (4) invasion of privacy, (5) revenge porn, and (6) a copyright infringement. The article is not wrong, although some causes of actions are better than others.
mains unclear precisely what was hacked. The photos were taken with the celebrities’ Apple devices, which had the iCloud software, yet, it is unclear which specific object was hacked. As a result, this Note will analyze the Apple devices and iCloud as interrelated, and discuss the most effective arguments that can be made by the celebrities, due to the novelty of the technology coupled with the application of cybercrime law.

This Note will discuss the various criminal and civil, actions and remedies that may be pursued against the celebrities’ hackers under federal and state law. Part II of this note will discuss the applicable federal cybercrime statutes, and will analyze the advantages and disadvantages of current federal cybercrime legislation. Part III will address state cybercrime statutes and highlight the strongest and weakest state statutes while addressing the benefits and impediments of relying on state action for cybercrime adjudication. Part IV will discuss additional common law remedies that may be afforded to the celebrities.

II. FEDERAL STATUTES

The federal government has criminalized certain computer-related activities since 1986. First, Congress passed the Computer Fraud and Abuse Act (“CFAA”)17 in which the “computer”18 was, itself, the offended subject of the illegal act.19 Congress has since amended the CFAA to criminalize various types of activities in relation to “computers” and computer-like systems in an effort to adapt to the rapidly changing technology landscape.20 Second, around the same time Congress enacted the CFAA, Congress enacted the Stored Communications Act (“SCA”) to protect stored e-mails and voicemails.21 This Part will begin the discussion with the former.

A. CFAA

The CFAA is a complicated statute; it details many different viola-

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17 18 U.S.C. § 1030 (2012); See Facebook, Inc. v. Grunin, 77 F. Supp. 3d 965, 971 (N.D. Cal. 2015) (“The [CFAA] was enacted to enhance the government’s ability to prosecute computer crimes and to ‘target hackers who accessed computers to steal information or to disrupt or destroy computer functionality, as well as criminals who possessed the capacity to access and control high technology processes vital to our everyday lives.’” (quoting LVRC Holdings v. Brekka, 581 F.3d 1127, 1130 (9th Cir. 2009))).
18 The term “computer” is placed in quotations because the federal statutes have different meanings than the traditional colloquial definition of computer. See 18 U.S.C. § 1030(e)(1).
20 Id.
tions, some of which overlap. Therefore, a careful discussion of the statute is warranted. First, this section will list the unlawful enumerated acts proscribed by Congress. Second, the section will highlight the various criminal penalties and sentences. Third, it will discuss the civil causes of action available to victims—which was addressed in the 1994 amendments to the CFAA—because many of the remedies provided by the Act depend on the severity of the damage or loss to the victim. Fourth, this section will address how federal courts have ruled on loss or damage under the CFAA (as will be explained, a perpetrator’s criminal and civil liability is dependent on how much loss or damage occurred or whether the damage even satisfies the requirements of the Act). Fifth, this section will provide context for how the CFAA should be interpreted and specific examples of illegal computer-related activity. Finally, it will break down the CFAA into four elements. Due to the CFAA’s complexity, this Note will highlight, in the last part of Section II.A., the most essential burdens and steps that must be satisfied in order to successfully make out a CFAA claim.

1. Background

Over the past few years, cybercrimes have garnered widespread attention from various politicians and government officials. Most notably, President Obama addressed the issue of cybercrime in two of his recent State of the Union addresses.22 President Obama called for increased cybercrime legislation to protect against identity theft and our citizens’ private information.23 The President stated that the country’s economy and infrastructure are vulnerable to cyber-attacks.24 Accordingly, the President called upon Congress to pass new legislation to combat the new threat of cybercrime and “to give our government a greater capacity to secure our networks and deter attacks.”25

23 See Swarts, supra note 23.
24 See Swarts, supra note 23.
a. CFAA’s Enumerated Unlawful Acts

As previously mentioned, the CFAA is complex legislation with several different enumerated offenses that apply to government entities, private entities, and private citizens. The CFAA enumerates seven “computer” related crimes. The CFAA makes it a crime to:

(1) [K]nowingly access[] a computer without authorization or exceeding authorized access . . . to communicate, deliver, [or] transmit [information of national security];

(2) [I]ntentionally access[] a computer without authorization or exceed[] authorized access [to] obtain[] information [from] a financial institution, . . . any department or agency of the United States[, or information from any protected computer];

(3) [I]ntentionally without authorization [] access any nonpublic computer of a department or agency of the United States, access[] such a computer . . . ;

(4) [K]nowingly and with intent to defraud access[] a protected computer without authorization, or exceed[] authorized access, . . . [to] obtain[] anything of value . . . [that is] more than $5,000 in any 1one-year period;

(5) [K]nowingly causes the transmission of a program, information, code, or command, [thereby] intentionally caus[ing] damage without authorization to a protected computer; recklessly cause[] damage; or cause[] damage and loss;


27 Id. § 1030(a)(2).
28 Id. § 1030(a)(3).
29 Id. § 1030(a)(4).
30 18 U.S.C. § 1030(a)(5)(A). The fifth enumerated act has two subdivisions based on the intent of the hacker, both dealing with the intentional unauthorized access of a “protected computer.”

The term ‘program, information, code, or command’ broadly covers all transmissions that are capable of having an effect on a computer’s operation. This includes software code (such as a worm), software commands (such as an instruction to delete information), and network packets designed to flood a network connection or exploit system vulnerabilities.


31 18 U.S.C. § 1030(a)(5)(A). The CFAA defines “damage[s]” as “any impairment to the integrity or availability of data, a program, a system or information.” Id. § 1030(e)(8).
32 Id. §§ 1030(a)(5)(B)–(C). Loss is defined as,
[A]ny reasonable cost to any victim, including the cost of responding to an offense, conducting a damage assessment, and restoring the data, program, system, or information to its condition prior to the offense, and any revenue lost, cost incurred, or other consequential damages incurred because of interruption of service.
Id. § 1030(e)(11). See United States v. Middleton, 231 F.3d 1207, 1213 (9th Cir. 2000).
(6) [K]nowingly and with intent to defraud traffic[33] in any password or similar information[34][that must affect] a “protected computer . . .” [used in] interstate or foreign commerce, or such computer is used by or for the Government of the United States Government;[35] [or]

(7) [W]ith intent to extort from any person any money or other thing of value, transmit[3] in interstate or foreign commerce any communication containing any threat to cause damage to a protected computer; threat to obtain information from a protected computer without authorization . . .; or demand or request . . . money or other thing of value in retaliation to damage a protected computer, where such damage was caused to facilitate the extortion.36

Individual sections of the CFAA explicitly apply only to certain entities and private citizens. Sections 1030(a)(1) and 1030(a)(3) pertain to government entities.37 For that reason, citizens and private entities must rely on the remaining sections for civil and criminal recourse.38 As a result, a culpable act can present the victim with several possible CFAA violations.

The 1996 amendments also altered the definition of damage . . . [from $1,000 to] “loss aggregating at least $5,000 in value during any 1-year period to one or more individuals.” . . . “[L]oss” means any monetary loss [] sustained as a result of any damage to [] computer data, program, system or information that you find occurred[,] . . . natural and foreseeable result of any damage . . . [;] and] in determining the amount of losses, you may consider what measures were reasonably necessary to restore the data, program, system, or information that you find was damaged or what measures were reasonably necessary to resecure the data, program, system, or information from further damage.

Id. at 1212–13 (first quoting 18 U.S.C. § 1030(e)(8)(A) and then quoting the district court’s jury instruction).33 The Department of Justice provides the following elaboration on the meaning of “traffic”:

The term “traffic” in section 1030(a)(6) is defined by reference to the definition of the same term in 18 U.S.C. § 1029, which means “transfer, or otherwise dispose of, to another, or obtain control of with intent to transfer or dispose of.” A profit motive is not required. However, the definition excludes mere possession of passwords if the defendant lacks the intent to transfer or dispose of them. Similarly, personal use of an unauthorized password is not a violation of section 1030(a)(6), although it may be a violation of other provisions under section 1030 that apply to unauthorized access to computers or of section 1029.

PROSECUTING CYBER CRIMES MANUAL, supra note 30, at 50 (citations omitted).

18 U.S.C. § 1030(a)(6). The defrauding conduct must affect a computer used in interstate or foreign commerce, or used by the United States Government.

Id. § 1030(a)(6)(A)–(B).

Id. § 1030(a)(6)(A)–(B).

36 Section 1030(a)(2) pertains to financial institutions as well as government agencies.

b. Criminal Violations Under the CFAA and Corresponding Sentences

The CFAA proscribes a broad range of penalties depending on the crime, intent, damage incurred, and whether the defendant is a repeat offender. The CFAA criminal penalties are as follows:

<table>
<thead>
<tr>
<th>Offense</th>
<th>Section</th>
<th>Sentence*(years)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Obtaining National Security Information</td>
<td>§ 1030(a)(1)</td>
<td>10 (20) felony</td>
</tr>
<tr>
<td>Accessing a Computer and Obtaining Information</td>
<td>§ 1030(a)(2)</td>
<td>1 or 5 (10) felony</td>
</tr>
<tr>
<td>Trespassing in a Government Computer</td>
<td>§ 1030(a)(3)</td>
<td>1 (10)</td>
</tr>
<tr>
<td>Accessing a Computer to Defraud &amp; Obtain Value</td>
<td>§ 1030(a)(4)</td>
<td>5 (10)</td>
</tr>
<tr>
<td>Intentionally Damaging by Knowing Transmission</td>
<td>§ 1030(a)(5)(A)</td>
<td>1 or 10 (20)</td>
</tr>
<tr>
<td>Recklessly Damaging by Intentional Access</td>
<td>§ 1030(a)(5)(B)</td>
<td>1 or 5 (20)</td>
</tr>
<tr>
<td>Negligently Causing Damage &amp; Loss</td>
<td>§ 1030(a)(5)(C)</td>
<td>1 (10)</td>
</tr>
<tr>
<td>Trafficking in Passwords</td>
<td>§ 1030(a)(6)</td>
<td>1 (10)</td>
</tr>
<tr>
<td>Extortion Involving Computers</td>
<td>§ 1030(a)(7)</td>
<td>5 (10)</td>
</tr>
</tbody>
</table>

*First time offenses’ minimum and maximum sentences are not in parentheses. The maximum prison sentences for second convictions are noted in parentheses. First time offenses are misdemeanors unless explicitly stated as a felony or there is the presence of certain aggravating factors, described below.

Meanwhile, a felony conviction depends on the culpable act and whether certain aggravating factors are present. A felony conviction under the CFAA requires that the crime must result in a loss of $5,000 in a one-year period. The value of loss raises a misdemeanor to a felony violation for first time offenses. For instance, Sections 1030(a)(1), 1030(a)(4), and 1030(a)(7) are automatic felonies, whereas Sections 1030(a)(2) and 1030(a)(5) become felonies if the crime contains certain aggravating factors. Further, Section 1030(a)(2) applies in as many sit-

39 PROSECUTING COMPUTER CRIMES MANUAL, supra note 30, at 3.
41 PROSECUTING COMPUTER CRIMES MANUAL, supra note 30, at 16. The aggravating factors that will raise a § 1030(a)(2) misdemeanor to a felony include instances where: (i) the crime is committed for commercial advantage or private financial gain; (ii) the crime is committed in furtherance of any criminal or tortious act; or (iii) the information value exceeded $5,000. Id. The aggravating factors for a § 1030(a)(5) claim are where the damage: (i) results in a loss of $5,000 or greater during one year; (ii) modifies medical care of a person; (iii) causes physical injury; (iv) threatens public health or safety; (v) inhibits systems used by or
uations as a Section 1030(a)(3) violation. As a result, a Section 1030(a)(2) claim is more favorable than a Section 1030(a)(3) claim because it is a felony if the aforementioned aggravating factors are satisfied. A Section 1030(a)(6) violation, however, is always a misdemeanor and cannot be raised to a felony.

c. **Civil Recourse Under the CFAA**

The CFAA provides civil recourse, despite the fact it was enacted as a criminal statute. In 1994, Congress created a private right of action for victims of CFAA violations. The CFAA allows victims who suffer a specific type of loss or damage to maintain a civil action against the violator for compensatory damages, injunctive relief, or other equitable remedies. The civil loss or damage monetary threshold is the same as

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42 Id. at 23.

43 PROSECUTING COMPUTER CRIMES MANUAL, supra note 30, at 23. Prosecutors rarely charge section 1030(a)(3) and few cases interpret it, probably because section 1030(a)(2) applies in many of the same cases in which section 1030(a)(3) could be charged. In such cases, section 1030(a)(2) may be the preferred charge because statutory sentencing enhancements may allow section 1030(a)(2) to be charged as a felony on the first offense. A violation of section 1030(a)(3), on the other hand, is only a misdemeanor for a first offense.


45 18 U.S.C. § 1030(g). The general standard for injunctive relief is: (1) the party seeking the injunction has a reasonable likelihood of success on the merits, (2) there is no adequate remedy at law, (3) irreparable harm will occur without the injunction, (4) the harm that will occur to the moving party if no injunction issues outweighs the harm the injunction will cause to the nonmoving party, and (5) the injunction will not harm the public interest.


46 18 U.S.C. § 1030(g); A civil action for a violation of this section may be brought only if the conduct involves 1 of the factors set forth in subclauses (I), (II), (III), (IV), or (V) of § 1030(c)(4)(A)(i): (I) loss to one or more person during any 1-year period aggregating at least $5,000 in value; (II) the modification or impairment, or potential modification or impairment, of the medical examination, diagnosis, treatment, or care of 1 or more individuals; (III) physical injury to any person; (IV) threat to public health or safety; (V) damage affecting 10 or more computers during any 1-year period. 18 U.S.C. § 1030(c)(4)(A)(i)–(V). See
felonious acts of $5,000 aggregating in a one-year period.47

d. **What Constitutes Loss or Damage Under the CFAA?**

It is important to understand the meaning of the terms “loss” and “damage” when applying the statute; “damage focuses on the actual harm caused to a machine, software or content, [and] loss relates to the economic consequences.”48 Courts, however, have often confused these terms and have used them interchangeably.49 Courts have interpreted loss or damage to mean “the reasonably foreseeable pecuniary harm that resulted from the offense.”50 And reasonably foreseeable pecuniary harm is harm that “the defendant knew or, under the circumstances, reasonably should have known, was a potential result of the offense.”51 The courts, further, extend loss from the resulting harm to include harm to persons who do not own the “computer” or computer system.52

Courts’ interpretations of loss or damage have varied. Generally, loss has been limited to remedial measures taken by the victim in response to the violating act.53 Most courts, for example, award damages for only identifiable economic damages, i.e., money spent to fix the

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48 Id.
49 Different provisions of the CFAA require showings of damage, loss, damage or loss or damage and loss. To state a civil claim, a plaintiff must show damage or loss. Damage must be shown for criminal or civil prosecutions under sections 1030(a)(5)(A), 1030(a)(5)(B), 1030(a)(7)(A), 1030(a)(7)(C), 1030(c)(4)(A)(i)(V) and 1030(c)(4)(A)(i)(VI). Damage and loss must be shown for a claim under section 1030(a)(5)(C). Further, as noted earlier, $5,000 in aggregate loss must be shown to state a claim under subpart 1030(c)(4)(A)(i)(I), and where a civil claim is brought under that subsection only economic damages, not all damage, is compensable.
50 Id. (emphasis in original) (footnotes omitted).
51 See id.
52 United States v. Willis, 476 F.3d 1121, 1128 (10th Cir. 2007) (citation omitted) (finding defendant knew passwords and usernames were valuable because he exchanged them to a drug dealer for cheaper price of meth).
53 Id. (citation omitted).
54 United States v. Millet, 433 F.3d 1057, 1061 (8th Cir. 2006) (“[T]he statute does not restrict consideration of losses to only the person who owns the computer system . . . .”); Theofel v. Farcy-Jones, 359 F.3d 1066, 1078 (9th Cir. 2004) (finding third parties can have civil damages claim because individuals other than the owner of the computer may be harmed).
Some courts, however, have gone further to include goodwill and reputational harm as economic damages. Finally, when determining total losses, the losses may be aggregated from multiple or different violations affecting multiple persons in a one-year period.

**e. How the CFAA Should be Interpreted, and Examples of Illegal Computer-Related Conduct**

The CFAA is to be construed liberally because it “proscribes a broad range of computer-related conduct.” The statute criminalizes specific acts that pertain to “protected computers,” whereby the hacker “knowingly accessed a computer without authorization or exceeding authorized access.” Given this language, the CFAA should be interpreted to apply to at least the following examples of specific types of computer-related attacks: (1) Spam, (2) Viruses, (3) Worms, (4) Trojan Horses, (5) Logic Bombs, (6) Sniffers, (7) Denial of Service Attacks, (8) Web Bots, and (9) Spiders. This list is not exhaustive, as other computer-related...

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54 See, e.g., Creative Computing v. Getloaded.com LLC, 386 F.3d 930, 935 (9th Cir. 2004).

55 See, e.g., id. (finding that business goodwill is an economic damage); see also Am. Online, Inc. v. LCGM, Inc., 46 F. Supp. 2d 444, 449, 451, 452-53 (E.D. Va. 1998) (suggesting damage to reputation and goodwill counted toward damage threshold); but see In re DoubleClick Inc. Privacy Litig., 154 F. Supp. 2d 497, 525, n. 34 (S.D.N.Y. 2001) (criticizing Am. Online, Inc. for suggesting that damage to goodwill could count toward damage threshold).

56 Creative Computing, 386 F.3d at 934-35 (finding that CFAA contained no single-act loss requirement); DoubleClick Inc. Privacy Litig., 154 F. Supp. at 523 (holding plaintiffs could aggregate loss across victims over one year for single act); see also Computer Fraud and Abuse Act of 1986, In General, supra note 46.


58 A “protected computer” is defined as a computer—

(A) exclusively for the use of a financial institution or the United States Government, or, in the case of a computer not exclusively for such use, used by or for a financial institution or the United States Government and the conduct constituting the offense affects that use by or for the financial institution or the Government; or

(B) which is used in or affecting interstate or foreign commerce or communication, including a computer located outside the United States that is used in a manner that affects interstate or foreign commerce or communication of the United States . . . .


59 18 U.S.C. § 1030(a)(1). As a practical matter, it is not difficult to determine which individuals lack authorization to access a computer. “The legislative history of the CFAA reflects an expectation that persons who ‘exceed authorized access’ will be insiders (e.g., employees using a victim’s corporate computer network), while persons who access computers ‘without authorization’ will typically be outsiders (e.g., hackers).” PROSECUTING COMPUTER CRIMES MANUAL, supra note 30, at 5.

60 Galicki et al., supra note 19, at 879. This list is not exhaustive as hackers are inventing new methods to defeat the latest software safeguards—the cyber-arms race.
attacks will continue to be developed.

*f. Elements of a CFAA Violation*

Many of the enumerated acts, coupled with the interpretations for damages or losses, are overlapping, and the overlaps add to the complexity involved in interpreting and applying the statute. For simplicity, and for the celebrities’ cases, the CFAA can be broken down into elements. Breaking the CFAA down into elements provides clarity on what an individual needs to establish in order to successfully prevail on a CFAA claim. First, the act must involve a “computer.” Second, the “computer” must be classified as a “protected computer.” Third, the perpetrator must access the “protected computer” either “without authorization” or by “exceeding authorization.” Collectively the first three elements establish that a “hack” has occurred. Fourth, the hacked computer must be involved in interstate or foreign commerce (“IFCC”) and the perpetrator must have obtained something of value from the hack. Each element must be satisfied in order to successfully prevail on a criminal or civil action under the CFAA.

i. First Element: What constitutes a “computer” under the CFAA?

The CFAA defines “computer” as:

> [A]n electronic, magnetic, optical, electrochemical, or other high speed data processing device performing logical, arithmetic, or storage functions, and includes any data storage facility or communications facility directly related to or operating in conjunction with such device, but such term does not include an automated typewriter or typesetter, a portable hand held calculator, or other similar device . . . .

What does this definition mean? The only clarity the legislature provided is that a “computer” is not an automated typewriter, calculator, or other similar device. It is self-evident that a personal computer and laptop meet this definition of “computer.” But what other similar devices meet this definition? As explained below, the technical, yet broad, definition of “computer” under the CFAA has left room for judicial interpretation.

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62 *Id.*
1) Federal courts have interpreted the definition of “computer” broadly

Specific examples of “computers” are absent from the plain text of the statute, leaving the federal courts with the task of interpreting the definition. Over the years, the courts have broadened the statutory meaning of “computer” to incorporate computer-like devices. The court in United States v. Kramer, for example, addressed the issue of whether basic cell phones were “computers” under the CFAA. The Kramer court held that cell phones, and other similar devices, were “computers” within the broad language of 18 U.S.C. § 1030(e)(1), despite the fact that they are not connected to the Internet. In conducting its analysis, the court found that “cellular phones are not excluded by [the CFAA’s] language,” although cell phones do not fit into the colloquial definition of “computer.” The court in Kramer interpreted the statute to include devices like cell phones—even if not connected to the Internet—because cell phones are dissimilar to the devices that were explicitly excluded from coverage by the statute—i.e., automated typewriters, and hand-held calculators. Plainly stated, “computers” include computer-like devices and do not have to be connected to the Internet in order to fall within the ambit of the CFAA. While cellphones qualify as a computer under the CFAA, they must additionally meet the definition of a “protected computer” to be protected by the CFAA.

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63 631 F.3d 900 (8th Cir. 2011).
64 United States v. Kramer, 631 F.3d 900, 902–03 (8th Cir. 2011); see also United States v. Mathis, 77 F.3d 1264, 1283 (11th Cir. 2014) (concluding that a cell phone is a “computer” within the statutory definition of § 1030(e)(1)); United States v. Shamsud-Din, 580 F. App’x. 468, 472 (7th Cir. 2014) (citing the holding in Kramer) (decided on other grounds); United States v. Mayo, 642 F.3d 628, 632 (8th Cir. 2011) (taking notice of the holding in Kramer that many everyday objects, including a cell phone, can meet the definition of computer under the § 1030(e)(1)); Kindrick v. United States, No. 4:09–CR–00331–FJG–1, 2013 WL 3491392, at *2 (W.D. Mo. July 11, 2013) (finding as a matter of law that cell phone is a “computer” and instrumentality of interstate commerce).
65 Kramer, 631 F.3d at 902–03 (“Just think of the common household items that include microchips and electronic storage devices, and thus will satisfy the statutory definition of ‘computer.’ That category can include coffeemakers, microwave ovens, watches, telephones, children’s toys, MP3 players, refrigerators, heating and air-conditioning units, radios, alarm clocks, televisions, and DVD players, in addition to more traditional computers like laptops or desktop computers.” (quoting Orin S. Kerr, Vagueness Challenges to the Computer Fraud and Abuse Act, 94 MINN. L. REV. 1561, 1577 (2010))).
66 Id.
ii. Second Element: What is a “protected computer” under the CFAA?

It is not enough that a device be deemed a “computer” to satisfy a CFAA claim. The second statutory requirement is that the “computer” must be a “protected computer” to come under the CFAA’s protection. The definition of “protected computer” was changed by Congress’s 2008 amendments. Much like the federal courts have broadened the statutory meaning of “computer,” using the full extent of Congress’s commerce powers, Congress broadened the definition of “protected computers.” Accordingly, a “protected computer” is a computer:

(A) exclusively for the use of a financial institution or the United States Government, or, in the case of a computer not exclusively for such use, used by or for a financial institution or the United States Government and the conduct constituting the offense affects that use by or for the financial institution or the Government; or
(B) which is used in or affecting interstate or foreign commerce or communication [hereinafter “IFCC”], including a computer located outside the United States that is used in a manner that affects [IFCC] of the United States.

More simply stated, a “protected computer” is a “computer” that belongs to a government entity or financial institution, or is involved in IFCC.

1) Judicial interpretation of a “protected computer”

In interpreting the meaning of “protected computer,” federal courts found that any “computer” that is accessible via the Internet is a “protected computer.” The court in *Patrick Patterson Custom Homes, Inc.*
v. Bach addressed the issue of whether a “computer” used to manage a business from a home office constituted a “protected computer” under the CFAA. 73 In Custom Homes, the defendant transferred electronic funds, via the Internet, to a Wells Fargo Bank account. 74 The court found that the conduct was sufficient to establish IFCC, thereby qualifying for protection under the CFAA. 75 It is highly probable that other courts—following the precedent of Custom Homes—will view smartphones as “protected computers” because they, too, are connected to the Internet and are involved in interstate commerce and communication. 76 The next element is that the “protected computer” must be improperly accessed.

iii. Third Element: “Without or exceeding authorization” to a “protected computer”

“Without or exceeding authorization” interpretations and analysis are extremely complex. This subsection is broken down as follows: First, it will provide a brief overview and discuss issues that have arisen regarding the language “without authorization” or “exceeding authorization.” Second, it will discuss “without authorization,” judicial interpretations, and the split of authority. Third, it will address “exceeding authorization,” judicial interpretation, and the split of authority. Finally, it will address courts’ interpretations of IFCC and the effects of Congress’s 2008 amendments on IFCC.

1) A brief overview and issues of “without and exceeding authorization”

After establishing that the accessed “computer” was a “protected computer,” a party seeking to invoke CFAA’s protections must establish some level of unauthorized access. “Several of the criminal offenses of the CFAA require that the defendant access a computer ‘without authorization.’” 77 The other offenses can be “without authorization” or “ex-
ceeding authorization.”

There are several issues, however, regarding the applicability of the authority for “without authorization” and “exceeding authorized access” when directly applied to the celebrities’ situations. The foremost interpretive authority is derived from civil case law, which is not particularly beneficial to the celebrities who call for criminal prosecution. And, as in the celebrities’ circumstances, it appears beyond dispute that the celebrities’ hackers were “without authorization.” Therefore, the following provides a brief explanation of courts’ interpretations of “without authorization” and “exceeding authorization” for contextual purposes, and with the presumption that such authority will be a suitable foundation for criminal prosecution.

2) Accessing a “protected computer” “without authorization” and the relative split of authority

There is limited criminal case law interpreting “without authorization.” But, it should be simple to know who is “without authorization,” notwithstanding the fact that the statute does not define the term. The CFAA legislative history supports the presumption that “persons who access computers ‘without authorization’ will typically be outsiders (e.g., hackers).”

Despite the notion that it is easy to know who is “without authorization,” however, there is a circuit split on how broadly to construe “without authorization” and, consequently, difficulties applying the interpretations to criminal cases. The First, Fifth, Seventh, and Eleventh Circuits broadly interpret “without authorization” to include acts that vi-

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78 See id.
79 See Orin S. Kerr, Cybercrime’s Scope: Interpreting “Access” and “Authorization” in Computer Misuse Statutes, 78 N.Y.U. L. Rev. 1596, 1599 (2003) (“These [cases] have arisen in the civil context, and have not yet been applied to criminal cases.”). See also PROSECUTING COMPUTER CRIMES MANUAL, supra note 30, at 6–8.
80 Kerr, supra note 79, at 1599.
81 See id.
82 PROSECUTING COMPUTER CRIMES MANUAL, supra note 30, at 6.
83 Id. at 5.
84 Galicki et al., supra note 19, at 893.

Insiders, who are authorized to access a computer, face criminal liability only if they intend to cause damage to the computer, not for recklessly or negligently causing damage. By contrast, outside intruders who break into a computer could be punished for any intentional, reckless, or other damage they cause by their trespass. Id. at 5–6. (citing S. Rep. No. 99-432, at 10 (1986), reprinted in 1986 U.S.C.C.A.N. 2479); see also United States v. Ivanov, 175 F. Supp. 2d 367, 369 (D. Conn. 2001) (Russian hacker accessed victim company’s computers without authorization).
olate an employer’s terms of service or computer use policy. 85 In contrast, the Fourth and Ninth Circuits have dismissed such broad interpretation of the CFAA and construed “without authorization” more narrowly. 86 The more difficult issue is whether someone with some authorization to access the “computer” can ever act “without authorization.” 87 As a result, “[p]rosecutors rarely argue that a [person] accessed a computer ‘without authorization’ when the [person] had some [form of prior authority].” 88

On the other hand, courts may still find a person was “without authorization” when the person had prior authority. Typically, courts have analyzed “the scope of a user’s authorization to access a protected computer on the basis of the expected norms of intended use, or the nature of the relationship established between the computer owner and the user.” 89

The case law is foggy regarding whether a person can act “without authorization” after previously having authorization. 90 Generally, civil cases have involved an employer-employee relationship, and, as a result, the courts used common law duties of agency and loyalty to analyze “without authorization” after previously having authorization. 91 There are two lines of opinions based on the defendant’s prior authority from the authorizing party: (1) the defendant loses authorization when they breach their duty of loyalty to the authorizing party, although the authorizing party was unaware of the breach; 92 and (2) the user’s authorization depends on the authorizing party’s actions, and not the user’s duty of loyalty. 93 A thorough analysis, however, of the discrepancies between the judicial interpretations of “without authorization” are beyond the scope of this Note because the interpreting opinions are civil cases that deal with employer-employee common law duties, and the celebrities’ hackers were “without authorization.” 94

85 Id.
86 Id.
87 PROSECUTING COMPUTER CRIMES MANUAL, supra note 5, at 6.
88 Id.
89 United States v. Phillips, 477 F.3d 215, 219 (5th Cir. 2007).
90 PROSECUTING COMPUTER CRIMES MANUAL, supra note 30, at 6.
91 See id. at 6–8.
92 See id. at 6–7 (noting “several civil cases have held that defendants lost their authorization . . . when they breached a duty of loyalty”). These are commonly referred to as the Citrin/Shurgard line of authority. Id. (“The Citrin/Shurgard line of cases has been criticized by courts adopting the view that, under the CFAA, an authorized user of a computer cannot access the computer “without authorization” unless and until the authorization is revoked.”).
93 See LVRC Holdings LLC v. Brekka, 81 F.3d 1127, 1133-34 (9th Cir. 2009) (rejecting Citrin’s interpretation of “without authorization”).
94 See PROSECUTING COMPUTER CRIMES MANUAL, supra note 30, at 6–8.
3) “Exceeding authorization” for a “protected computer” and the relative split of authority

The courts’ interpretations regarding the issue of when an individual or individuals are “exceeding authorized access” are just as convoluted as the interpretations of “without authorization.” Similar to “without authorization” case law, “exceeding authorized access” mainly involves an employer-employee relationship. Although criminal liability is available for “exceeding authorization,” the majority of cases are for civil damages and injunctive relief and not criminal prosecution.

Unlike “without authorization,” which is left undefined by the CFAA, “exceeds authorized access” is defined by the CFAA. The definition of “exceeds authorized access” is: “to access a computer with authorization and to use such access to obtain or alter information in the computer that the accesser is not entitled so to obtain or alter.”

“The legislative history of the CFAA reflects an expectation that ‘persons who ‘exceed authorized access’ will be insiders (e.g., employees using a victim’s corporate computer network) . . . ’”

As with the “without authorization” case law, the judicial interpretation of “exceeding authorized access” is primarily civil, and the circuits are divided as to “whether limits on authorized access can be reasonably inferred from the circumstances in cases where no explicit or implicit restrictions on access existed.” Accordingly, to prove “exceeds authorized access,” a prosecutor would have to show how the person’s authority to access the “computer” was limited—by, for example, “terms of service, a computer access policy, a website notice, or an employment agreement or similar contract”—and how the person exceeded those limitations thereby obtaining or altering the information.

iv. IFCC, Congress’s 2008 amendments, and judicial interpretation for “without and exceeding authorization”

Congress’s 2008 amendments changed the requirements for IFCC.

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95 See id. at 8–11.
96 See id. at 11.
97 Id. at 8–12 (collecting cases).
100 Id. at 9 (comparing EF Cultural Travel BV v. Zefer Corp., 318 F.3d 58 (1st Cir. 2003) with United States v. Phillips, 477 F.3d 215, 219 (5th Cir. 2007)).
101 Id. at 8–9.
Prior to the 2008 amendments, the CFAA required that the illegally obtained information be involved in IFCC for all “without or exceeding authorization” acts.102 The courts further broadened the reach of the statute by interpreting the IFCC requirement to be aimed at the conduct of the hacker and not at the obtained information.103 Congress’s 2008 amendments, however, changed the IFCC requirement for § 1030(a)(2)(c).104 The 2008 amendments expanded the “jurisdiction for [crimes] involving theft of information from computers” by eliminating the requirement that the theft occur through IFCC.105 Nevertheless, IFCC is needed for some remaining enumerated crimes.106

v. Fourth Element: Damage or loss resulted from the hack

The last element is that damage or loss resulted from the “without or exceeding authorization” access. For the discussion and meaning of these terms, please see Part II.A.1.iv.

2. Legal Analysis

Given the CFAA interpretations explained above, the celebrities’ hackers should be prosecuted and held accountable under the CFAA. First, it can be inferred that the hackers were “without authorization,” when they obtained the private photos. Second, cell phones are “computers” under the Act. Third, cell phones are “protected computers” because they are involved in IFCC by virtue of the fact that they are connected to the Internet. Last, the CFAA would provide the celebrities with a civil recourse for losses to their goodwill and harm to business reputation.

a. Courts Should Apply the CFAA to the Celebrities’ Cases as the Court in Chaney Did

The circumstances leading to the federal prosecution of Christopher Chaney are essentially identical to the circumstances of the celebrities’ hacking, and his case provides a good precedent that other courts should

102 See id. at 3–4.
104 PROSECUTING COMPUTER CRIMES MANUAL, supra note 30, at 2.
105 Id.
follow.107

The hacking was known as “Operation Hackerazzi,” to which Chaney pleaded guilty for violating sections 1030(a)(5) and 1030(a)(2)(C) of the CFAA.109 Chaney, a Florida resident, hacked into the e-mail accounts of celebrities Scarlett Johansson, Mila Kunis, Christina Aguilera, and Renee Olstead, in addition to some non-celebrities to obtain private photos that he then posted to the Internet.110

During sentencing, the court found that Chaney caused the celebrities’ economic damages as well as severe emotional distress.111 The federal judge sentenced Chaney to the maximum sentence of ten years in federal prison and ordered him to pay $76,179 total in restitution including, attorneys’ fees and public relation costs.112 The Assistant Director in Charge of the FBI’s Los Angeles Field Office noted that Chaney’s actions “were tantamount to breaking and entering of [the celebrities’] private homes by a thief in the night.”113 The court had found that Chaney shared the sensitive photos with sites that he knew would “publish the information to the world, causing severe emotional distress to those victims.”114 In conclusion, the Los Angeles Field Office Assistant Director warned that people should be vigilant towards the growing cybercrime threat, and that with the prosecution of Chaney “[t]he message has to be sent to persons who---computer hackers who engage in this type of conduct that serious sentences will be imposed if this conduct occurs.”115

The celebrities’ hackers should be held accountable for their actions, as in Chaney. Federal courts should follow the example of the Chaney court by finding that the hacking and releasing of private photos of celebrities is sufficient damage for criminal and civil liability under

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109 Chaney Transcript, supra note 107, at 19–20.


111 Chaney Transcript, supra note 107, at 50–55 (the record indicated that Olstead had attempted suicide after the discovery of her photos on the Internet).

112 Id. at 64–71. The court noted that damages were more form than substance because as a practical matter Chaney would be unable to repay victims in any meaningful way. Id. at 14.

113 Press Release, supra note 110.

114 Chaney Transcript, supra note 107, at 71.

115 Id. at 40.
the CFAA. In the celebrities’ cases, the hacker knew the photos were valuable because he originally attempted to sell them for bitcoin. In addition, as in Chaney, the hacker intentionally released the photos to the Internet and, one can presume, knew the photos would be shown to the world. The hacker’s actions led to severe emotional distress and harm to the celebrities’ business reputation. The courts should sentence the hacker to the maximum sentence with additional restitution; by doing so, the courts will deter future criminal acts.

b. Advantages to Applying the CFAA to the Celebrities’ Cases

i. Cell phones and the iCloud are “protected computers” that are afforded protection from the CFAA

Following the interpretations of the CFAA discussed in Part II.A.1, federal courts concluded cell phones are “computers” within the CFAA’s statutory definition. Likewise, cell phones are “protected computers” because they are involved in IFCC and connected to the Internet via Wi-Fi or carrier service plan. For example, the hacker violated the CFAA because he was “without authorization” to Jennifer Lawrence’s cell phone, which was connected to the Internet and contained the private photos. Therefore, it is highly probable that courts will view smartphones as “protected computers” because they are connected to the Internet, and involved in IFCC.

116 Chung, supra note 5. See also United States v. Willis, 476 F.3d 1121, 1128 (10th Cir. 2007) (noting that the defendant’s attempt to exchange illegally obtained information for a reduced price on methamphetamine is circumstantial evidence that the defendant was aware that the information had value).


118 See generally Duke, supra note 3.


120 See generally United States v. Mitra, 405 F.3d 492, 495 (7th Cir. 2005); see also United States v. Kramer, 631 F.3d. 900, 902–03 (8th Cir. 2011). See also supra, notes 65, 76 and accompanying text.
The courts, furthermore, are likely to find that the iCloud—the hacked system—is also a “protected computer” under the statute. The iCloud, *inter alia*, is a system involved in IFCC, and it performs algorithmic functions through its persistent data connection to the smartphone.\(^{121}\) The iCloud continuously backs-up all data from the cell phone, thereby sustaining a constant connection between the “computer”—the iPhone—and the remote computer system—the iCloud.\(^{122}\)

ii. **The CFAA allows for criminal prosecution of the hackers**

The intention of the CFAA is to deter hackers by enhancing “the government’s ability to prosecute computer crimes.”\(^{123}\) The CFAA prescribes strong penalties for violations. The CFAA deems most access “without authorization” to be a felony.\(^{124}\) It can be argued that the celebrities’ losses or damages exceeded the $5,000 monetary threshold. The celebrities have likely incurred costs associated with remedying the harm—attorneys’ fees and public relation costs.\(^{125}\) If the celebrities are seeking justice, a CFAA “unauthorized access” argument is the strongest one to make.

iii. **The celebrities can seek civil damages for harm to business reputation and injunctive relief**

In addition to criminal prosecution, the CFAA provides civil recourse for the celebrities. Like Chaney, the hackers may be required to pay damages in addition to jail time.\(^{126}\) Most important to the celebrities’ interests, the CFAA allows for injunctive relief.\(^{127}\) This is an important

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\(^{121}\) *iCloud*, APPLE, https://www.apple.com/icloud/ (last visited Mar. 19, 2015), (“iCloud connects you and your Apple devices in amazing ways. iCloud Photo Library and iCloud Drive keep all your photos, videos, and documents stored securely and updated everywhere. Family Sharing lets you easily share music, movies, photos, and more with everyone in your family. Find My iPhone even helps you find your device if you lose it. With iCloud, you always have what’s most important to you on whatever device you have in hand. And it’s all done automatically. Just like that.”).

\(^{122}\) *Id.* at 64–65.

\(^{123}\) See *Facebook, Inc. v. Grunin*, 77 F. Supp. 3d 965, 971 (N.D. Cal. 2015).

\(^{124}\) See *PROSECUTING COMPUTER CRIMES MANUAL*, supra note 30, at 47–48.

\(^{125}\) *Chaney* Transcript, *supra* note 107, at 7.

\(^{126}\) *Id.* at 64–65.

consideration because the celebrities are attempting to have the private photos removed from the Internet. \(^\text{128}\)

The celebrities can use the CFAA for injunctive relief to have the photos removed from Internet search engines. Many of the celebrities have threatened to sue Google for failure to remove the illegally obtained private photos. \(^\text{129}\) Google’s removal policies acknowledge “some content on the web is sensitive or not appropriate for everyone to see.” \(^\text{130}\) Google’s policies further state,

> We do our best to remove offensive images and videos or hide them in search results. . . . We may remove images or videos, or prevent them from showing in search results if the content contains: Pornography, including search queries with multiple meanings and search queries that are not offensive but could have offensive results. \(^\text{131}\)

In addition to the fact that the photos may be pornographic, the harm to the celebrities’ reputations may be more than offensive. The celebrities will be required to show and quantify the intangible loss or damage, which is very difficult to calculate. For instance, Jennifer Lawrence will have to show that there was harm to her goodwill or business reputation. \(^\text{132}\) The celebrities have an argument for harm to goodwill because their value is based on their reputation and marketability. \(^\text{133}\) The leaked private photos have to some extent harmed that reputa-

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\(^\text{128}\) *Nude Hack*, supra note 9.

Many of the victims of the hack have threatened to sue Google for $100 million, claiming that the Web search giant did not do enough to quickly take the images down. “Google is making millions and profiting from the victimization of women,” lawyer Martin Singer wrote in a letter to Google. “Google’s ‘Don’t be evil’ motto is a sham.”

*Id.* See also David Nield, *Google Deleted Thousands of Images After Celebrity Hacking Scandal*, DIGITALTRENDS.COM (Oct. 5, 2014), http://www.digitaltrends.com/computing/google-deleted-thousands-images-celebrity-hacking-scandal/ (“In the wake of a $100 million lawsuit related to the pictures, Google says it deleted ‘tens of thousands’ of the images as they appeared online.”).

\(^\text{129}\) *Nude Hack*, supra note 9; Neild, *supra* note 128.


\(^\text{131}\) *Id.*

\(^\text{132}\) See *Facebook, Inc. v. Power Ventures, Inc.*, No. 08-CV-5780-LHK, 2013 WL 5372341, at *15 (N.D. Cal. Sept. 25, 2013) (stating that reason for injunctive relief is because awarding monetary damages alone is inadequate to prevent defendant from committing future harm).

\(^\text{133}\) Cf. Chaney Transcript, *supra* note 107, at 7 (noting that Ms. Olstead suffered economic damages as a result of the hacking and publication of the sensitive photos to the Internet sites open to the public, “because there were certain obligations [Ms. Olstead] had in terms of her contract . . . with Disney that she could not meet, and therefore she suffered additional
tion in the public’s eye.\textsuperscript{134}

c. Potential Obstacles the Celebrities May Have in Pursuing a CFAA Claim

A CFAA claim, however, has limitations. The celebrities have issues with regards to the damage committed. In addition, the celebrities will have trouble calculating damages as well as jurisdictional hurdles.

The federal courts are split on whether harm to goodwill or business reputation constitutes loss under the CFAA.\textsuperscript{135} Only a few federal courts have ruled that harm to goodwill or business reputation is remediable.\textsuperscript{136}

Traditionally, federal courts have ruled that only actions taken to remedy and react to the breach may be included in damages.\textsuperscript{137} It will be very difficult to calculate loss to goodwill especially in the celebrities’ situations because, as the saying goes, “no press is bad press.”

A permanent injunction to remove the private photos may be impractical. Suffice it to say complete removal of all the photos is impossible. It will be very difficult to compel every website to remove the private photos or be subject to litigation. Attempting to remove every private photo from every Internet website would flood federal courts with thousands of claims, which would be time consuming, and financially burdensome to both courts and litigators.

There are additional jurisdictional hurdles the celebrities will have to pass in order to obtain the equitable relief they desire. The Internet is an international web connection involving every country in the world. It seems highly improbable that U.S. courts will be able to compel foreign websites to remove the photos, unless there is a treaty with that foreign nation. One of the only advantages the celebrities may have is that most significant economic damages”).


\textsuperscript{135} PROSECUTING COMPUTER CRIMES MANUAL, supra note 30, at 34, 134–35. See also C.H. Robinson Worldwide, Inc. v. XPO Logistics, Inc., No. 27-CV-12-16003, 2013 Minn. Dist. LEXIS 43, *72 (Minn. Dist. Ct. 2013) (following the narrow interpretation of damages and losses under CFAA).


\textsuperscript{137} See, e.g., EF Cultural Travel BV v. Explorica, Inc., 274 F.3d 577, 585 (1st Cir. 2001) (allowing consulting fees to evaluate the extent, if any, of damage to website resulting from defendant’s alleged conduct).
of the major search engines—for example, Google, Yahoo!, and Bing—are U.S. corporations. The federal courts could compel U.S. search engines to ban websites that provide the private photos, but such a demand would seem like a feeble and inequitable argument since there may be constitutional hurdles, such as First Amendment issues, that, presumably, need to be addressed in order to succeed in the removal of the sensitive photos.\(^{138}\)

d. Solutions to the Potential Obstacles and Arguments for why Congress Should Consider Enhancing the Remedies and Penalties Under the CFAA

In accordance with President Obama’s State of the Union Address, public policy weighs heavily on the legislature and judiciary’s actions for broader protection and criminal and civil liability. The federal courts should continue to construe the CFAA broadly to protect citizens from cyber-hacking as a matter of public policy. Currently, there are 5.2 billion cellphones in use worldwide.\(^{139}\) It is important for the legal system to keep up with growing technology and the crimes that evolve with it.\(^{140}\) As recently as 2014, a report from the U.S. Department of Justice “found a 62% increase in the number of breaches over the previous year, resulting in over half a billion identities [sic] exposed—a 368% increase. The global cost of cybercrime is estimated to exceed $100 billion.”\(^{141}\)

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138 It is worth noting that there are possible copyright infringements by all who reproduce the photos because the celebrities “own the copyright to self-authored images, or ‘selfies,’ regardless of their intention to share them.” Amanda L. Cecil, Note, Taking Back the Internet: Imposing Civil Liability on Interactive Computer Services in an Attempt to Provide an Adequate Remedy to Victims of Nonconsensual Pornography, 71 WASH. & LEE L. REV. 2513, 2526 (2014).

139 Tomi T. Ahonen, The Annual Mobile Industry Numbers and Stats Blog—Yep, this year we will hit the Mobile Moment, COMMUNITIES-DOMINATE BRANDS BLOG (Mar. 6, 2013), http://communities-dominate.blogs.com/brands/2013/03/the-annual-mobile-industry-numbers-and-stats-blog-yep-this-year-we-will-hit-the-mobile-moment.html. Twenty-six percent of people have two phones. Id.

140 See generally Richard Harrington, 90% of People Have Only Taken Photos on a Camera Phone vs. A Camera, PHOTOFOCUS (Nov. 10, 2013), http://photofocus.com/2013/11/10/90-of-people-have-only-taken-a-photo-with-a-camera-phone-in-their-lifetime/ (discussing the increased use in camera phones). In addition, [A] report released earlier this year points out that there are 5.2 Billion mobile phones on the planet for a population of 4.3 Billion users (yes, some people have multiple phones). 83% of all phones have cameras. The survey cites that 90% of all people who take pictures have only done so on a camera phone.

Id.

As a matter of public policy, courts may be more willing to find that greater protection should be afforded to cell phones and other mobile devices under the CFAA, due to the fact that people keep additional private and sensitive information on such devices. For instance, today, people conduct online banking on their cell phones and mobile devices.\textsuperscript{142} Banks have created “apps” that make it relatively easy and efficient for cell phone users to do all types of banking activities, which were not considered at the statute’s enactment and in only the purview of Congress’s 2008 amendments.\textsuperscript{143} The banking culture and industry are moving towards online banking via computers and mobile devices connected to the Internet; whether they are connected to the Internet through Wi-Fi or their carriers’ provided service, the risks are present.\textsuperscript{144} Additionally, there are online-only banks that perform the same functions as a traditional bank.\textsuperscript{145} The result of online banking is that more confidential and sensitive information will be on cell phones and backed-up to cloud storage such as iCloud.\textsuperscript{146}

The federal legislature should increase the penalty for crimes under the CFAA because “prevention may be less difficult than apprehending and prosecuting computer criminals.”\textsuperscript{147} There are multiple programs and sites that hide the identities of hackers, and the Internet is already considered anonymous without such programs.\textsuperscript{148} Because it is so diff-

\textsuperscript{142} See generally Matt Egan, Bill & Melinda Gates’ Next Target: Banking, CNN Money (Jan. 22, 2015), http://money.cnn.com/2015/01/22/investing/bill-gates-mobile-banking/ (discussing the increase in use of mobile banking and the Gates’ belief that mobile banking will help lift millions out of poverty).

\textsuperscript{143} See generally Virginia C. McGuire, NerdWallet’s Best Banks and Credit Unions for Mobile Banking, NERDWALLET.COM, http://www.nerdwallet.com/blog/banking/mobile-banking/ (last visited Nov. 8, 2015). The federal government should be concerned because USAA, Navy Federal Credit Union, and Pentagon Federal Credit Union serve current and former federal employees. See also Elizabeth Weise, Apple Pay to Launch Monday, USA Today (Oct. 16, 2014), http://www.usatoday.com/story/tech/2014/10/16/apple-ipay/17308389/ (“We think it is going to be profound. It’s going to change the way we pay for things.” (quoting Apple CEO, Tim Cook)).

\textsuperscript{144} Fifteen of the largest U.S. financial institutions have mobile-banking apps. These apps are compatible with iPhones, Androids, iPads, and Android tablets. The mobile-banking apps allow customers to: deposit checks, pay bills, and transfer money between accounts and other individuals. McGuire, supra note 143.


\textsuperscript{146} See id. “While online-only banks are gaining in popularity, security remains a concern for many potential customers.” Id.

\textsuperscript{147} Lauren Eisenberg et al., Computer Crimes, 50 AM. CRIM. L. REV. 681, 723 (2013).

cult to catch hackers, the punishment should be greater so that harsh sentences will act as deterrence. It would alter the risk calculation of the would-be hackers who currently perceive a sense of impunity. This sense of impunity is unsurprising given the amount of cybercrime that is occurring with almost no criminal accountability. The risks and consequences of cyber-hacking have become pervasive in today’s society.

Presently, the most prolific hackers are organized criminal syndicates. For example, a Russian cyber-gang has become infamous within the past year for stealing an estimated 1.2 billion usernames and passwords, and 500 million email addresses. The victims of the hack were sophisticated Fortune 500 companies, many of which are still vulnerable to hacking. Just because hackers are not seen does not mean they do not exist. Congress should heed the President’s warning and consider passing new legislation to protect citizens from future cyber-crimes.

Lastly, it is worth noting that the European Union (“EU”) has enacted a digital “right to be forgotten.” The law compels websites and search engines to delete and remove any information an individual has published, once removal of such information has been requested. The law applies to any foreign and domestic websites that are used by EU citizens.

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151 See Goldstein, supra note 149.

152 Id.

153 Id.

154 Galicki et al., supra note 19, at 922.

155 Id. See also Matt Warman, Digital ‘Right to be Forgotten’ Will Be Made EU Law, TELEGRAPH (Jan. 25, 2012), http://www.telegraph.co.uk/technology/news/9038589/Digital-right-to-be-forgotten-will-be-made-EU-law.html. Additionally, the law will fine corporations up to two percent of their global turnover if they violate the law. Possibly, the celebrities could use the EU’s new law to have their photos removed in Europe. Id.
citizens. Congress may want to follow the EU’s approach if it truly intends to protect U.S. citizens’ privacy.

B. SCA

1. Background

The SCA, also known as the Unlawful Access to Stored Communications Act, is a federal criminal statute that protects the privacy of stored “wire or electronic communications.” The SCA was part of the Electronic Communications Privacy Act (“ECPA”). Congress incorporated the SCA into the ECPA in order to extend privacy protections that were “already afforded to postal mail and private telephone conversations” because “the advent of the Internet presented a host of potential privacy breaches that the Fourth Amendment does not address.” The SCA “creates a set of Fourth Amendment-like privacy protections.”

a. The Four Elements of an SCA Violation

While the SCA enumerates fewer culpable acts than the CFAA, its breadth reaches just as far. The SCA can be broken down into four elements:

1. Intentional access;
2. “Without authorization . . . or . . . [in excess of] authorization”; of
3. “A facility through which an electronic communication service” (“ECS” or a remote computing services

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156 See Galicki et al., supra note 19, at 922.
158 See Galicki et al., supra note 19, at 907 (discussing origins of the act).
159 Christopher J. Borchert et al., Reasonable Expectations of Privacy Settings: Social Media and the Stored Communications Act, 13 DUKE L. & TECH. REV. 36, 40 (Jan. 6, 2015).
161 See id. at 972.
163 18 U.S.C. § 2701(a). The SCA’s “without or in excess of authorization” element mirrors the CFAA. PROSECUTING COMPUTER CRIMES MANUAL, supra note 30, at 90.
164 18 U.S.C. § 2701(a). “ECS” is “any service which provides to users thereof the ability to send or receive wire or electronic communications.” Id. § 2510(15). Section 2701 incorporates that definition. See Id. § 2701(1) (“The terms defined in section 2510 of this title have, respectively, the definitions given such terms in that section . . . .”). See also PROSECUTING
4. Thereby obtains, alters, or prevents authorized access to a “wire or electronic communication while it is in electronic storage.”

Although the SCA is less complex than the CFAA, further explanation and illustration of the elements are still needed to explore its possible application in this context.

b. Important Definitions, General Examples, and the Courts’ Interpretations

The following definitions and general examples will help decipher this quite technical legislation. One of the most difficult aspects of understanding the SCA are the different meanings of “wire and electronic communications,” “electronic storage,” and backups.

i. “Wire and electronic communications”

The terms “access” and “wire and electronic communications” are crucial to understanding the SCA. Like the CFAA, the SCA does not define “access,” which is left to judicial artistry. On the other hand, the act does define “wire communications” and “electronic communications.” “Wire communications” are “communications containing the human voice that are transmitted in part by a wire or other similar method.” Like the CFAA, one caveat to the definitional requirements of

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**COMPUTER CRIMES MANUAL**, supra note 30, at 90–91 (“[T]elephone companies and electronic mail companies’ generally act as providers of electronic communication services.” (citations omitted)). Examples of ECS providers are Google and Yahoo! when they provide e-mail services. Borchert et al., supra note 160, at 42.


167 Id. § 2701(a).

168 See United States v. Smith, 155 F.3d 1051, 1058 (9th Cir. 1998) (“[T]he word ‘access’ merely involves being in position to acquire the contents of a communication.” (emphasis original)). The Merriam-Webster Dictionary defines “access” as “permission or the right to enter, get near, or make use of something or to have contact with someone.” Definition of Access, MERRIAM-WEBSTER, http://www.merriam-webster.com/dictionary/access (last visited Nov. 8, 2015).

169 PROSECUTING COMPUTER CRIMES MANUAL, supra note 30, at 92 (citing 18 U.S.C. [Section number]...
“wire communication” is that the communication must affect IFCC. 170 In addition, “electronic communication” is defined broadly to include most electric or electronic signals that do not constitute as “wire communications.” 171 For example, “voicemail is a wire communication, while e-mail and other typical Internet communications which do not contain the human voice are “electronic communications.” 172

ii.  “Electronic storage”

In addition to being a “wire or electronic communication,” the communication must be “electronically stored.” 173 The statute narrowly defines “electronic storage.” 174 “Electronic storage means “(A) any temporary, intermediate storage (“TI storage”) of a wire or electronic communication incidental to the electronic transmission thereof; and (B) any storage of such communication by an electronic communication service for purposes of backup protection of such communication.” 175

The definition of “electronic storage” is broken-up into two parts. The first part of the definition explicitly requires that the communication must be in TI storage made in the course of transmission by an electronic communication provider. 176 “For example, a copy of an e-mail or voicemail is in ‘electronic storage’ only at the intermediate point between transmission and receipt.” 177

The second part of the statute’s definition of “electronic storage” applies to stored backups of such communication. 178 But there is very little guidance for what is a backup, because “[n]either the statute nor the legislative history provides a definition for the term ‘purposes of backup protection,’ and, consequently, courts have struggled with its interpretation.” 179 For instance, a mere retained copy of the communication is not in “electronic storage” because it is not in “[TI] storage . . . incidental

§ 2510(1) & (18)).  
171 Id. “[E]lectronic communication” is defined broadly in 18 U.S.C. § 2510(12) and includes most electric or electronic signals that are not wire communications.” PROSECUTING COMPUTER CRIMES MANUAL, supra note 30, at 92.  
172 Id.  
173 § 2510(17).  
174 Id.  
176 Id.  
177 Borchert et al., supra note 160, at 44.
to . . . electronic transmission,' and neither is it a backup of such a communication.”

iii. The courts struggle with applying TI storage to backups

The more difficult issue is whether TI storage applies to backups enumerated in paragraph (B). Illustrating this difficulty is the fact that courts are split on how to apply TI storage to backups. The traditional, narrow approach is that backups are only in TI storage when the message has been sent, but is pending delivery and has not been received by the recipient. Therefore, the statute under the narrow view does not protect long-term backups, because the transmissions have been received and are no longer in temporary storage. For example, e-mails in an individual’s inbox are not backups once opened, even though they are technically being stored.

In contrast, the Ninth Circuit explicitly rejected the narrow interpretation in the seminal case Theofel v. Farey-Jones. The Ninth Circuit in Theofel held that e-mails were in “electronic storage” regardless of whether they were previously delivered. The Theofel court noted that previous courts assumed that the definition of “electronic storage” only applied to unopened e-mails. The court found that “[i]n contrast to subsection (A), subsection (B) does not distinguish between intermediate

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182 PROSECUTING COMPUTER CRIMES MANUAL, supra note 30, at 93 (“Recent lower court decisions addressing the scope of ‘electronic storage’ have split between the traditional interpretation and the Theofel approach.”).
183 Fraser, 135 F. Supp. 2d at 636 (“[F]or purposes of backup protection of such communication’ in the statutory definition makes clear that messages that are in post-transmission storage, after transmission is complete, are not covered by part (B) of the definition of ‘electronic storage’.”). On appeal the Third Circuit balked on the issue of whether post-transmission storage is covered under the SCA. Fraser v. Nationwide Mut. Ins. Co., 352 F.3d 107, 114 (3d Cir. 2003), as amended (Jan. 20, 2004) (finding the e-mails in question were not wrongfully seized by the defendant because the defendant fell within the exception found in § 2701(c)(1)). “Therefore, while we affirm the District Court, we do so through a different analytical path, assuming without deciding that the e-mail in question was in backup storage.” Id.
184 Fraser, 135 F. Supp. 2d at 635–36.
185 359 F.3d 1066, 1075 (9th Cir. 2004) (“We reject this view as contrary to the plain language of the Act.”); but see United States v. Weaver, 636 F. Supp. 2d 769, 770, 773 (C.D. Ill. 2009) (holding opened e-mails that were 181 days old were not in “electronic storage”).
186 Theofel, 359 F.3d at 1077.
187 Id. at 1075.
and post-transmission storage.”\textsuperscript{188} The court in \textit{Theofel} concluded that the e-mails were backups regardless of whether the e-mails satisfied the TI requirement in subsection (A), thus complying with the statutory definition.\textsuperscript{189} The Ninth Circuit, however, noted that a backup is not in indefinite storage, and that “permanent copies of temporary messages could not fairly be described as ‘backing up’ those messages [protected by the SCA].”\textsuperscript{190}

c. **Penalties Under the SCA**

The Act’s penalties depend on the type of violation and whether the perpetrator is a first-time or repeat offender.\textsuperscript{191} The following are the SCA criminal penalties:\textsuperscript{192}

<table>
<thead>
<tr>
<th>Offense</th>
<th>Section</th>
<th>Sentence</th>
</tr>
</thead>
<tbody>
<tr>
<td>First-time violations not committed for specified purpose</td>
<td>§§ 2701(b)(2)(A), 3571(b)(5)</td>
<td>Max: 1 year and $100,000 fine</td>
</tr>
<tr>
<td>Repeat violations not committed for specified purpose or first-time violations committed for an improper purpose</td>
<td>§§ 2701(b)(1)(A), (b)(2)(B), 3571(b)(3)</td>
<td>Max: 5 years and $250,000 fine</td>
</tr>
</tbody>
</table>

Misdemeanor:
- Intentional Access;
- Without or In Excess of Authorization;
- A Facility That Provided an Electronic Communication Service;
- Obtained, Altered, or Prevented Authorized Access to a Communication in Electronic Storage

Felony:
- For Commercial Advantage, Malicious Destruction or Damage, Private Commercial Gain, or in Furtherance of a Criminal or Tortious Act

\textsuperscript{188} Id.
\textsuperscript{189} Id. at 1076.
\textsuperscript{190} \textit{Theofel}, 359 F.3d at 1076 (“[T]he lifespan of a backup is necessarily tied to that of the underlying message. Where the underlying message has expired in the normal course, any copy is no longer performing any backup function.”).
\textsuperscript{191} See Galicki et al., supra note 19, at 908.
\textsuperscript{192} \textit{PROSECUTING COMPUTER CRIMES MANUAL}, supra note 30, at 95.
d. Exceptions to the SCA

There are three exceptions to the SCA. First, the Act does not apply to the entity or person providing the service. Second, the SCA does not apply to an authorized user with respect to the user’s electronic communication. Lastly, Section 2701 does not apply to conduct authorized by the SCA or the Wire Tap Act.

2. Legal Analysis

The hackers could be prosecuted under the SCA if the photos fall within the meaning of “electronic communications” that were backups in “electronic storage.” First, photo messages are “electronic communications.” The celebrities, further, have strong arguments that the hacker’s actions satisfied the first two elements for an SCA claim: (i) intentional access, and (ii) “without authorization.” As was true for the CFAA, a strong inference can be made that the hackers intentionally accessed the celebrities’ private photos “without authorization.” The celebrities, however, will have to prove that the photo text messages were “electronic communications” for which the SCA is meant to protect. Second, the iCloud may be an RCS provider that stores backups of electronic communications. The most uncertain areas of the celebrities’ claims would be whether the iCloud or cell phones were a facility that provided an ECS or RCS, as discussed below. Finally, a felony conviction will be difficult to obtain in the celebrities’ situations because the celebrities will have to show that the hackers obtained financial gain or acted with malice. First, however, the threshold issue of whether the photo messages were “electronic communication” must be addressed.

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194 Id. See United States v. Councilman, 418 F.3d 67, 81 (1st Cir. 2004) (quoting exception in § 2701(c)(1)).
195 18. U.S.C. § 2701(c)(2); see Konop v. Hawaiian Airlines, Inc., 302 F.3d 868, 880 (9th Cir. 2002) (interpreting “user” narrowly to exclude someone who was properly authorized to access an electronic bulletin board, but who had not actually done so).
197 See PROSECUTING COMPUTER CRIMES MANUAL, supra note 30, at 92.
199 See Duke, supra note 3.
a. Whether Photo Messages Are “Electronic Communications” and Potential Issues in the Celebrities’ Cases

Courts will likely find that photo messages are “electronic communications” under the SCA. The SCA was intended to protect “electronic communications ‘not intended to be available to the public.’”\(^ {200} \) In the present scenario, the celebrities contend that their photos were not intended for public consumption.\(^ {201} \) Without substantial evidence to the contrary, the hackers would have great difficulty refuting this point.

The courts, further, should analogize the celebrities’ photo messages to e-mails to afford such messages the same protection that e-mails are provided. First, text messages are essentially a form of email. Second, while the SCA failed to expressly provide protection for text messages, such failure is likely due to the SCA having been enacted three decades ago, prior to the emergence of texting and multimedia messaging.\(^ {202} \) In addition, the courts could rely upon the legislature’s use of broad language in drafting the statute, to determine that photo messages are within the meaning of “electronic communications.”\(^ {203} \) The messages are wirelessly transmitted by electromagnetic radiation sine waves, which would fall within the plain language of the definition of “electronic signals.”\(^ {204} \)

The celebrities, however, will have difficulty proving that the photo messages were backups in “electronic storage.” Jennifer Lawrence, and the other hacked celebrities would have to prove that the photos were transmitted via the cell phone, thereby constituting an “electronic communication” and as a backup in “electronic storage.”\(^ {205} \) This argument is tenuous because we must assume that if the photo was sent then it was delivered, received, and opened, which would mean the messages were

\(^ {200} \) Borchert et al., supra note 160, at 53 (citation omitted).
\(^ {201} \) Chung, supra note 5 (describing celebrities’ reactions to hacking).
\(^ {202} \) Borchert et al., supra note 179, at 56. See, e.g., Warshak v. United States, 532 F.3d 521, 523 (6th Cir. 2008) (holding that the statutory definition of an ECS provider includes basic e-mail services).
\(^ {203} \) See 18 U.S.C. § 2510(12).
\(^ {204} \) See generally How Cell-phone Radiation Works, HOWSTUFFWORKS, http://electronics.howstuffworks.com/cell-phone-radiation1.htm (last visited Mar. 19) (describing how cell phones work: “[t]he radio waves that send the encoded signal are made up of electromagnetic radiation propagated by the antenna”). See 18 U.S.C. § 2510(12) (defining an electronic communication as a transfer “transmitted in whole or in part by a wire, radio, electromagnetic, photoelectronic or photooptical system” (emphasis added)).
\(^ {205} \) See generally Duke, supra note 3.
The issue would be whether courts follow the traditional view of backups.

b. The iCloud Is an RCS Provider that Stored Backups for Safekeeping

Next, it must find that the “electronic communication” was accessed through an ECS or RCS. The iCloud could constitute an RCS provider because it is a backup system, presuming text messages are “electronic communications.” An example of an RCS provider is Amazon because “Amazon acts as an RCS provider when a user employs Amazon Cloud Drive to store data remotely for long-term safekeeping.” The iCloud is identical to the Amazon Cloud Drive because it performs the same functions.

The courts could rule that the iCloud is an RCS provider. Consistent with Theofel, which held that the e-mails were backups although not in TI storage, the courts could follow suit to find that the iCloud provides backup storage because that is its primary function. The iCloud “maintains the information ‘solely for the purpose of providing storage or computer processing services to [the] subscriber or customer.’”

The federal judiciary could further follow the rationale in Theofel that the text messages were in “electronic storage.” In doing so, a court could conclude that the private photos were in “electronic storage” regardless of whether they were received by the recipient because they were backups on the iCloud. The photos, moreover, were simply not a

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206 See generally Derek Johnson, SMS Open Rates Exceed 99%, TATANGO (Apr. 10, 2013), http://www.tatango.com/blog/sms-open-rates-exceed-99/ (stating 99% of SMS messages are opened and 90% are read within the first three minutes of being received). Messages on phones are sent almost instantaneously. Presuming that the celebrities had iPhones or iPads, furthermore, the sender may have been notified that the message was delivered to the receiver. Apple devices transmit messages through what is called iMessage. The iMessage has many additional features compared to the traditional text message. iMessage can tell the sender that the iMessage was sent and that it was delivered to the recipient. Additionally, iMessage can notify the sender of the time the recipient opened the message. The feature to see what time the recipient opened the message can be turned on or off by the recipient. Thus, the recipient of the message would have to have that feature turned on in the recipient’s phone settings to allow the sender to be notified that the message was opened.


208 Id.

209 See Theofel v. Farey-Jones, 359 F.3d 1066, 1071 (9th Cir. 2004).


211 PROSECUTING COMPUTER CRIMES MANUAL, supra note 30, at 93.
retained copy of the communication, but “electronic communications” themselves.213

On the other hand the federal courts may follow the traditional view of backups, which are not afforded protection under the SCA. As previously mentioned, the circuits are split on whether to follow Theofel, or the traditional view of “electronic storage.” The federal courts may reject the broad approach in Theofel to find that the private photos were not in “electronic storage” because they were received, opened, and no longer in “‘temporary, intermediate storage . . . incidental to . . . electronic transmission.’”214 Therefore, the courts following the traditional view of “electronic storage” would likely find that the text messages were no longer in TI storage.

c. Issues Regarding Felony Claims Under the SCA

The celebrities may have difficulty getting felony charges brought against the hackers. Felony charges require proof of certain aggravating factors. The hacker must have acted “for purposes of commercial advantage, malicious destruction or damage, or private commercial gain, or in furtherance of any criminal or tortious act.”215 In the celebrities’ cases, it does not seem that there was any “malicious destruction or damage,” which would elevate the crime to a felony under the statute. It is debatable whether the celebrities could make claims for “commercial advantage” (when the hacker attempted to trade the photos for bitcoins), or “furtherance of a criminal or tortious act”, which would raise the crime to a felony.216

It could be argued, however, that the celebrities’ CFAA claim could be “in furtherance of a criminal act” raising the charge to a felony standard.217 In addition, their common law tort claims could ascend the crime to a felony. These arguments, however, are highly speculative with many unknown variables.

214 Id.
215 18 U.S.C. § 2701(b)(1) (2012); see PROSECUTING COMPUTER CRIMES MANUAL, supra note 30, at 94 (“[T]he wording ‘in furtherance of any criminal or tortious act’ means an act other than the unlawful access to stored communications itself.”).
216 Id.
217 See discussion supra Part II.A.
This Part will first provide a brief history and summary of general approaches and penalties adopted by states since the inception of the first state cybercrime statute. This Part will illustrate the benefits of strong state statutes and the limitations of weak state statutes, because analyzing all fifty state cybercrime statutes is best left for another note.

A. The Disparities Amongst State Cybercrime Statutes

States have passed various types of cybercrime legislation since the inception of the computer. Some states modeled their cybercrime statutes on the CFAA and others on the Federal Computer Systems Privacy Act (“FCSPA”). The penalties and remedies, however, vary from state to state.

Beginning with Arizona in 1978, every state has passed legislation criminalizing specific computer-related acts. Every state has made

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218 ALA. CODE § 13A-8-110 et seq. (West 2015); ALASKA STAT. ANN. § 11.46.740 (West 2015); ARIZ. REV. STAT. ANN. § 13–2316 et seq. (West 2015); ARK. CODE ANN. § 5-41-201 et seq. (West 2015); CAL. PENAL CODE § 502 (West 2015); COLO. REV. STAT. ANN. § 18-5.5-101 et seq. (West 2015); CONN. GEN. STAT. ANN. § 53a-250 et seq. (2015); DEL. CODE ANN. tit. 11, § 2421 et seq. (West 2015); FLA. STAT. ANN. § 815.01 et seq. (West 2015); GA. CODE ANN. § 16-9-90 et seq. (West 2015); HAW. REV. STAT. ANN. § 708-890 et seq. (West 2015); IDAHO CODE ANN. § 18-2201 et seq. (West 2015); ILL. COMP. STAT. ANN. 5/17-50 et seq. (West 2015); IND. CODE ANN. § 35-43-2-3 (West 2015); IOWA CODE ANN. § 716.6B (West 2015); KAN. STAT. ANN. § 21-5839 (West 2015); KY. REV. STAT. ANN. § 434.840 et seq. (West 2015); LA. REV. STAT. ANN. § 14:73.1 et seq. (West 2015); ME. REV. STAT. ANN. tit. 17-A, § 431 et seq. (West 2015); MD. CODE ANN., CRIM. LAW § 7-302 (West 2015); MASS. GEN. LAWS ANN. ch. 266, § 120F (West 2015); MICH. COMP. LAWS ANN. § 752.792 et seq. (West 2015); MIN. STAT. ANN. § 609.87 et seq. (West 2015); MISS. CODE ANN. § 97-45-1 et seq. (West 2015); MO. ANN. STAT. § 569.095 et seq. (West 2015); MONT. CODE ANN. § 45-6-310 et seq. (West 2015); NEB. REV. STAT. ANN. § 28-1341 et seq. (West 2015); NEV. REV. STAT. ANN. § 205.473 et seq. (West 2015); N.H. REV. STAT. ANN. § 638:16 et seq. (West 2015); N.J. STAT. ANN. §§ 2A:38A-1 et seq., 2C:20-23 et seq. (West 2015); N.M. STAT. ANN. § 30-45-1 et seq. (West 2015); N.Y. PENAL LAW § 156.00 et seq. (McKinney 2015); N.C. GEN. STAT. ANN. § 14-453 et seq. (West 2015); N.D. CENT. CODE ANN. § 12.1-06.1-08 (West 2015); OHIO REV. CODE ANN. § 2913.04 (West 2015); OKLA. STAT. ANN. tit. 21, § 1951 et seq. (West 2015); OR. REV. STAT. ANN. § 164.377 (West 2015); PA. STAT. AND CONS. STAT. ANN. §§ 5741 et seq., 7601 et seq. (West 2015); R.I. GEN. LAWS ANN. § 11-52-1 et seq. (West 2015); S.C. CODE ANN. § 16-16-10 et seq. (West 2015); S.D. CODIFIED LAWS § 43-43B-1 et seq. (West 2015); TENN. CODE ANN. § 39-14-601 et seq. (West 2015); TEX. PENAL CODE ANN. § 33.01 et seq. (West 2015); UTAH CODE ANN. § 76-6-701 et seq. (West 2015); VT. STAT. ANN. tit. 13, § 4101 et seq. (West 2015); VA. CODE ANN. § 18.2-152.1 et seq. (West 2015); WASH. REV. CODE ANN. § 9A.52.110 et seq. (West 2015); W. VA. CODE ANN. § 61-3C-1 et seq. (West 2015); WIS. STAT. ANN. § 943.70 (West 2015); WYO. STAT. ANN. §§ 6-3-501 et seq., 40-25-101 (West 2015).
cyber-hacking or “unauthorized access” a criminal offense. Accordingly, “like the federal statutes, many of the state statutes divide computer crimes into the same three categories: [(i)] crimes where a computer is the target, [(ii)] crimes where a computer is a tool of the crime, and [(iii)] crimes where a computer is incidental.”

Roughly half of the states modeled their computer-crime legislation on the proposed FCSPA. For instance, states like Arkansas took a specialized approach and expanded upon the broad FCSPA criminalizing acts with greater specificity. The remaining states “enacted [legislation] that was less closely related to the [FCSPA]”

Some states very closely modeled their legislation after the CFAA. For example, California, Nevada, Pennsylvania, and West Virginia statutes mirror the CFAA. These statutes make it a crime for anyone who accesses a computer “without authorization” or “exceeding authorization.”

The penalties and remedies under these statutes vary from state to state, depending on the specific conduct of the hacker. The majority of the states classify certain cyber-hacking crimes as misdemeanors and other cyber-hacking crimes as felonies. A small minority of states, however, classify all computer crimes as felonies.

Lastly, a minority of states provide civil remedies in addition to criminal prosecution. The majority of civil relief is for economic or compensatory damages. An even smaller minority of states, provides injunctive relief in addition to damages. In addition, a few states have long-arm statutes making the illegal act in the location of the “computer”

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219 See statutes cited supra note 218.
220 Eisenberg et al., supra note 147, at 722 (footnote omitted).
221 Galicki et al., supra note 19, at 916. The FCSPA was proposed in 1977 with a subsequent version proposed in 1979. See id. at 916 n.385.
222 See, e.g., ARK. CODE ANN. § 5-41-206 (computer password disclosure); id. § 5-41-205 (unlawful act involving electronic mail).
223 Galicki et al., supra note 19, at 916.
224 See state statutes cited supra note 218.
225 Id.
226 Alaska, Arizona, Hawaii, and New Jersey make all cybercrimes felonies. In addition, an interesting fact is that Louisiana has hard labor as a punishment for committing a felony, which might be most appealing to victims of cybercrimes. See State statutes cited supra note 218.
227 See state statutes cited supra, note 218.
228 See, e.g., CONN. GEN. STAT. ANN. § 52-570b (West 2015); FLA. STAT. ANN. § 815.06(5)(a) (West 2015).
229 See state statutes cited supra note 218.
that was accessed “without or in excess of authorization.” 231 States recognize that the apprehension of hackers is not likely to occur, therefore, civil remedies encourage victims of computer crimes to report the crimes to the prosecuting authorities. 232

B. Benefits of Applying State Statutes to the Celebrities’ Cases

The celebrities may have greater benefits pursuing state actions. The majority of states have harsh penalties for computer crimes, in addition to civil recourse. Many states have broad statutes that can encompass many computer crimes that are prevalent today. Finally, specialized state statutes are beneficial because they address unique issues.

1. Advantages of State Statutes and Reliance on State Courts

Many states have the ability to prosecute the hackers. In addition to prosecution, some states provide civil remedies for victims. Also, state courts could be relied upon for cybercrime prosecution and civil adjudication as a practical matter.

Many states would be able to prosecute the hackers for “unauthorized access.” State statutes, like California’s, are pertinent for future prosecution because they provide that the crime was committed in the location of the “computer” regardless of whether the hacker was in the state when they accessed the “computer.” 233 Unlike the CFAA or SCA claims, which require aggravating circumstances or satisfaction of a damages threshold for the culpable conduct to constitute a felony, the state statutes provide that the mere act of “unauthorized access” to a “computer” rises to the level of a felony; the risk of committing a felony should deter prospective hackers. 234 Lastly, some states have long-arm statutes that provide victims similar opportunities as provided under the federal legislation to seek civil recourse for damages caused. 235

State courts, moreover, are the workhorses of the judicial system, which can provide the celebrities and citizens with the appropriate reme-

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231 For example, California, Connecticut, Maine, Mississippi, New Hampshire, New Jersey, North Carolina, North Dakota, Oklahoma, Washington and West Virginia statutes state that a computer crime was committed in the location of the computer that was accessed without authorization. See state statutes cited supra note 218.
232 Eisenberg et al., supra note 147, at 723.
233 CAL. PENAL CODE § 502(j).
234 Eisenberg et al., supra note 147, at 724.
235 See supra note 228 and accompanying text.
dies faster than federal courts. Cybercrime prosecution has been rapidly increasing over the past decade. For example, a Bureau of Justice Statistics ("BJS") report found that "[i]n 2005, sixty percent of prosecutors’ offices reported prosecuting either felony or misdemeanor computer-related crimes under their state’s computer statutes." The BJS additionally found that "eighty-nineteen percent of offices serving populations of one million or more reported conducting such prosecutions." The states are better suited than the federal courts to handle the mass quantity of cases alleging cybercrimes, which is a growing concern since cybercrimes are becoming more prevalent due to the Internet and the minimal effort that is required to commit the crime.

Lastly, some state statutes have a lower monetary damage threshold, or none at all, than that required by the CFAA. Having a lower monetary damage requirement would simplify prosecution because calculating damages can be very difficult, especially in the celebrities’ cases that deal with goodwill and harm to reputation.

2. Broadly Drafted State Statutes such as California’s Are Strong Statutes with Certain Advantages

California has one of the strongest statutes against cybercrimes because it has broad applicability and severe penalties. In October 2015,  


237 See Galicki et al., supra note 19, at 919.

238 Id. (citing RAMONA R. RANTALA, BUREAU OF JUSTICE STATISTICS, CYBERCRIME AGAINST BUSINESSES, 2005 (Oct. 27, 2008)). Half of businesses detected at least one incident in the same year. Galicki et al., supra note 19, at 878.


241 See, e.g., statutes cited supra note 218. Alaska, Arizona, and Massachusetts have no monetary damage threshold. Colorado’s threshold is less than fifty dollars for a petty offense. New Hampshire has less than one thousand dollars as a monetary threshold. New Mexico has a five-hundred dollar threshold for a fourth degree felony.


243 Eisenberg et al., supra note 147, at 724. California’s proactive approach to harsh penalties for cybercrimes is probably due, at least in part, to the fact that Silicon Valley contains the world’s largest technology corporations, e.g., Apple, Google, Facebook, etc.
the California legislature amended Cal. Penal Code Section 502(d)(1) to make intentional “unauthorized access” to a “computer” or computer system whereby the person alters, deletes, obtains, or disrupts any data, “computer,” computer system, or computer network a felony.244 Despite the breadth of the statute, which is nearly identical to the CFAA, the California legislature attempted to expand the scope of the statute further.

In response to the celebrity hacking scandal, the California State Legislature proposed a new bill. The bill made certain cybercrimes a felony, which would make it a felony for crimes that “involve[] acquiring, copying, or distributing a digital image of a person that displays an intimate body part . . . of the person [that is] punishable by a fine not exceeding $10,000 per each digital image acquired, copied, or distributed.”245 The state legislature found it pertinent that “protection of the integrity of all types and forms of lawfully created . . . computer data is vital to the protection of the privacy of individuals[.]”246 The legislature ultimately struck the provision, but the proposal is evidence of a radical new view toward cybercrimes of this nature.

3. The Advantages of Specialized State Statutes that Were Narrowly Tailored Towards Specific Crimes

The remaining issue is which type of statute, broad or narrow, provides the best protection for citizens. An argument can be made that narrowly tailored statutes not based on the proposed federal legislation provide greater advantages.247 The specifically tailored state statutes may be more advantageous over the broad statutes because of the “precise definitions and penalties in [the] specialized provisions . . . explicitly addressing the unique issues posed by computer crimes, thereby promoting computer security, enhancing deterrence, and facilitating prosecution.”248 For example, Oklahoma provides that proof of unauthorized access shall constitute a prima facie showing of a willful violation of the act; such minimal criteria for a prima facie case should make prosecu-

244 2015 Cal. Legis. Serv. ch. 614 (West).
245 AB 32, 2015 Cal. Assemb., Reg. Sess. (Cal. 2015-2016) [hereinafter “AB 32”] (An act to amend Sections 502 and 803 of the Penal Code, relating to computer crimes). The distribution of the sensitive photos to the Internet is most analogous to that of “revenge porn” that many statutes have passed laws criminalizing. See generally Cecil, supra note 138, at 2526.
246 A.B. 32, supra note 245.
247 See Galicki et al., supra note 19, at 916.
248 Id. at 916–17.
tion easier,\(^{249}\) unlike the difficulties with a SCA claim. In addition, twenty-three states criminalize the publication of the illegally obtained information, which is the precise violation that was committed against the celebrities.\(^{250}\)

C. Limitations and Weaknesses of Relying on State Law Action

Notwithstanding the advantages certain state laws may provide, there are limitations to state action. The majority of state statutes are ill equipped to provide appropriate justice for cybercrimes. “The dormant Commerce Clause limits states’ abilities to regulate [the] Internet” because of the kinds of burdens such state regulation place on a self-evidently interstate activity.\(^{251}\) Accordingly, states can only proscribe crimes similar to those of the CFAA.\(^{252}\)

In addition, approximately half of the state statutes were not modeled after the FCSPA with broad applicability.\(^{253}\) Notwithstanding the fact that there are benefits to narrow statutes with precise definitions and penalties, legal loopholes remain because of the challenges in proving the narrowly-drawn elements of the substantive offense.\(^{254}\)

Some states’ penalties and remedies, furthermore, are inadequate to deter cyber-hacking, because they do not reflect the actual damage being caused.\(^{255}\) For example, Massachusetts has the most lenient penalties for “unauthorized access.” Massachusetts’s penalty for “unauthorized access” is imprisonment for not more than thirty days, or a fine of not more than $1,000, or both.\(^{256}\)

\(^{249}\) OKLA. STAT. ANN. tit. 21, § 1954 (West 2015).

\(^{250}\) For example, Nevada and New Jersey make it illegal to disclose, publish, transfer or use information illegally obtained. See NEV. REV. STAT. ANN. § 205.4765 (West 2015); N.J. STAT. ANN. § 2C:20-31 (West 2015).


\(^{252}\) Id.

\(^{253}\) See Eisenberg et al., supra note 147, at 721–22.

\(^{254}\) Washington’s statute requires that computer trespass involve unauthorized access and intent to commit another crime or violation that involves a computer or database maintained by a government agency, thereby imposing a challenging element to prove: intent to commit other crimes. See WASH. REV. CODE ANN. § 9A.52.110 (West 2015).

\(^{255}\) “The collective impact is staggering. Billions of dollars are lost every year repairing systems hit by such attacks. Some take down vital systems, disrupting and sometimes disabling the work of hospitals, banks, and 9-1-1 services around the country.” Cyber Crime, Computer Intrusions, FED. BUREAU INVESTIGATION https://www.fbi.gov/about-us/investigate/cyber/computer-intrusions (last visited Sept. 12, 2015).

\(^{256}\) MASS. GEN. LAWS ANN. ch. 266, § 120F (West 2015). See Commonwealth v. Piersall, 853 N.E.2d 210, 215 n.7 (Mass. App. Ct. 2006) (noting defendant was sentenced to one year administrative probation for unauthorized access to wife’s email during divorce); see also
Lastly, the state laws may be inadequate to provide the celebrities with the appropriate remedies for their situations. Less than half of the states provide civil remedies and, of those states that have civil liability, only a small minority provides injunctive relief for injured parties.\footnote{See State v. Riley, 988 A.2d 1252, 1265 (N.J. Super. Ct. Ch. Div. 2009) (“Someone might well anticipate some civil consequences for violating internal workplace computer use policies. However, it is unlikely that one would anticipate third degree sanctions, or worse, a mandatory five-year prison sentence if the violation occurs in the exercise of a public servant’s duties, and the criminal computer access forms the basis of an official misconduct charge. That severe punishment supports a narrow construction of the law.”); see also Briggs v. State, 704 A.2d 904, 911 (Md. 1998) (“If the law is to be broadened to include Briggs’s conduct, it should be modified by the Legislature, not by this Court.”); Marinos v. Poirot, No. HHDCV095029718S, 2011 WL 783607, at *5 (Conn. Super. Ct. Feb. 10, 2011) (“[A]ny expense paid by the plaintiff to recover the allegedly deleted data cannot be considered actual damages, and the plaintiff is not entitled to recover those costs.”); but see People v. Childs, 164 Cal. Rptr. 3d 287, 303 (2013), (holding statute not to be read narrowly and state did not have to show defendant’s access was unauthorized).}

It is not clear if states would be able to provide damages or injunctive relief for harm to goodwill like the federal courts.\footnote{Cf. Chaney Transcript, supra note 107, at 74.} Federal courts have interpreted the CFAA to include goodwill as an economic damage, whereas such judicial precedent is absent from state case law. Many states, furthermore, do not have long-arm provisions like California; as a result, these states will be unable to provide victims like the celebrities the justice they seek. Unless the states broaden and adapt their cybercrime statutes to encompass the ever-evolving conduct that constitutes cybercrimes, cybercrime prosecution may be best suited for the federal government.

IV. COMMON LAW TORTS

The celebrities may bring civil common law tort actions against the hackers, in addition to the civil remedies available from the federal statutes or other applicable state statutes. The celebrities have several possible common law tort claims; this Part addresses the most promising claims the celebrities might pursue: intentional infliction of emotional distress (“IIED”)\footnote{Restatement (Second) of Torts § 822B (Am. Law Inst. 1977) (unreasonable intrusion upon the seclu-} and invasion of privacy.\footnote{Restatement (Second) of Torts § 652A (Am. Law Inst. 1977); Restatement (Second) of Torts § 652B (Am. Law Inst. 1977) (unreasonable intrusion upon the seclu-}
A. A Claim for IIED

The celebrities may have a claim for IIED. “To recover damages . . . , a plaintiff must prove: (1) the defendant acted intentionally or recklessly; (2) the conduct was extreme and outrageous; (3) the actions of the defendant caused the plaintiff emotional distress; and (4) the resulting emotional distress was severe.” Accordingly, the emotional distress must be “the intended or primary consequence of the defendant’s conduct.”

A recent federal court decision addressed an IIED predicated on the posting of private photos to the Internet. In 2012, a federal court in the District of Colorado awarded a plaintiff $155,000 and injunctive relief for IIED and public disclosure of private facts. In *Doe*, the woman’s boyfriend created a blog on the Internet to post private photos of the woman without her consent. The defendant distributed the photos to third parties who further redistributed and publicized the photos.

The court awarded the plaintiff compensatory and punitive damages for “the severe emotional distress, pain, suffering, trauma, and anguish” caused by the posting of the photos to the Internet. The *Doe* court, moreover, enjoined the defendant from posting or publishing any references to images depicting the plaintiff via any medium. Additionally, the court ordered the defendant to erase or destroy all images of the plaintiff. Lastly, the defendant was enjoined from employing a third party to do any of the above mentioned enjoined acts.

The celebrities could have a claim for IIED based on the *Doe* court’s analysis. An argument can be made that the incident has caused

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261 GTE Sw., Inc. v. Bruce, 998 S.W.2d 605, 611 (Tex. 1999).
262 *Id.*
265 *Id.* at *3.
266 *Doe*, 2012 WL 3398316, at *2.
267 *Id.* (“[I]ncluding but not limited to internet blogs, online forums and social media sites.”).
268 *Id.*
269 *Id.*
the celebrities emotional distress because they feel that they were violated.\textsuperscript{270} Whether the act arose to the proper level of severity is arguable.

The celebrities, however, would have a formidable task to prove IIED. First, the celebrities will have difficulty proving the hacker’s intent to cause severe emotional distress.\textsuperscript{271} In addition, the celebrities’ harm must have been “severely disabling emotional response or undurable distress[,]” and that such harm was the hacker’s intent; proving both would be a tall order.\textsuperscript{272} In Lawrence’s instance, it appeared that the hacker was attempting to trade the photos for bitcoin rather than intentionally causing harm, although all the facts as to the motivations behind the hacking are unclear.\textsuperscript{273} Notwithstanding the unknowns of the celebrities’ cases, an argument can be made for IIED.

\subsection*{B. Invasion of Privacy}

The second common law claim would be for invasion of privacy. The tort for invasion of privacy has a relatively low standard of proof.\textsuperscript{274} A plaintiff would have to show that they had a reasonable expectation of privacy in the images to succeed to satisfy an invasion of privacy tort.\textsuperscript{275}

In order to meet the standard, the celebrities could argue that the photos were only intended for the people they were sent to, i.e., only the person receiving the photo message. The same logic follows for sent text messages with attached photos. An individual expects the photo to be received and seen by only that person.\textsuperscript{276} The celebrities certainly did not

\begin{footnotes}
\textsuperscript{270} See \textit{Vanity Fair}, supra note 7 (“I was just so afraid. I didn’t know how this would affect my career.”).
\textsuperscript{271} See Chung, supra note 5 (“[Hacker] was selling over 60 naked photos of Lawrence in an attempt to earn bitcoins.”). It should be noted that Olstead could have a claim for IIED against Chaney because she attempted suicide. \textit{Chaney} Transcript, supra note 107, at 50.
\textsuperscript{272} Cecil, supra note 138, at 2530 (internal quotation marks omitted); see id. at 2530 (“[A] Fifth Circuit case held that persistent sexual and physical harassment resulting in anger, humiliation, and embarrassment failed to meet the [severe disabling emotional response or undurable distress] requirement. Victims . . . therefore, may struggle to prove that their own humiliation qualifies as severe emotional harm under the law.” (footnotes omitted)).
\textsuperscript{273} See Duke, supra note 3.
\textsuperscript{275} Cecil, supra note 138, at 2530. Georgia, Maine, Virginia, and West Virginia criminalize computer invasion of privacy. See GA. CODE ANN. § 16-9-93 (West 2015); ME. REV. STAT. ANN. tit. 17-A, § 432 (West 2015); VA. CODE ANN. § 18.2-152.5 (West 2015); W. VA. CODE ANN. § 61-3C-12 (West 2015).
\textsuperscript{276} The individual could have even sent photos in a group text to share with multiple people—even so the group text is limited to the people in the intended group. See generally Andrea Vettori, \textit{Group Text!}, APPLE (updated Sept. 3, 2014),
\end{footnotes}
intend for the whole world to see their private photos.²⁷⁷

An invasion of privacy claim, however, may be difficult because the celebrities shared the photos with their spouses or romantic partners.²⁷⁸ Society is critical of the hacked celebrities for texting the photos to their spouses or partners, to which a court may agree.²⁷⁹ The courts may assume that the celebrities intended the private photos to be distributed, and that the celebrities had no reasonable expectation of privacy.²⁸⁰ It is uncertain how the courts will rule on such a highly contentious issue.

V. CONCLUSION

The celebrities have to contend with various practical considerations in regards to their cases. Because the perpetrators committed such morally opprobrious acts with impunity and their actions caused serious harm—tantamount to a sexual violation or “sex crime” as Jennifer Lawrence has claimed—new laws must be passed that will protect all citizens. This Note explored potential current remedies for the celebrities, but the remedies are merely a Band-Aid for an open wound. Action by the federal government (and/or the states) to address the particular hacking issues on which this Note focused will inure to the benefit of regular

https://itunes.apple.com/us/app/group-text!/id377826584?mt=8 (“With Group Text! you can easily send mass texts (on iPhone) or mass iMessages (on all devices) to groups, to hand-picked set of contacts or to distribution lists. Once you create a list, you no longer have to select contacts one-by-one for a group message. You can also easily attach a photo.”).

²⁷⁷ See VANITY FAIR, supra note 7 (quoting Jennifer Lawrence, “Just because I’m a public figure, just because I’m an actress, does not mean that I asked for this,’ she says. ‘It does not mean that it comes with the territory. It’s my body, and it should be my choice, and the fact that it is not my choice is absolutely disgusting. I can’t believe that we even live in that kind of world.”).

²⁷⁸ Cecil, supra note 138, at 2530.

²⁷⁹ See Palmer, supra note 134 (“The New York Times tech columnist Nick Bilton echoed this sentiment when he tweeted, ‘Put together a list of tips for celebs after latest leaks: 1. Don’t take nude selfies 2. Don’t take nude selfies 3. Don’t take nude selfies.’ These two were not alone. . . . [E]very third comment chastises the celebrities for being foolish enough to take a nude picture of themselves in the first place. . . . [I]n our society victim blaming is not uncommon.”); see also Amanda Hess, “Don’t Take Nude Selfies,” and Other Gross Advice for Hacked Celebs, SLATE (Sept. 2, 2014), http://www.slate.com/blogs/xx_factor/2014/09/02/jennifer_lawrence_and_other_celebrity_hacking_victims_should_not_have_to.html (“[S]ome commentators are still putting the onus on victims themselves to prevent their exploitation by modifying their own behavior.”).

²⁸⁰ See Cecil, supra note 138, at 2530; see also Galanty Miller, If You Don’t Want People To Steal Your Nude Photographs, Then Don’t Be Nude (or: The Sociology of the Celebrity Cell Phone Hacking Scandal), HUFFINGTON POST (Sept. 8, 2014), http://www.huffingtonpost.com/galanty-miller/if-you-dont-want-people-t_b_5785592.html. (“[B]laming women for their sexuality is pretty much a national pastime.”).
people, as well as celebrities. The President has made the call-to-arms, but who will heed that call and will it be enough to protect the nation and its citizens?