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Concurrent Damages

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CONCURRENT DAMAGES

Bert I. Huang[*]

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> *[I]f one multiplies the maximum statutory damages award ($150,000) by approximately 10,000 [copyrighted] works, Defendants face a potential award of* over a billion dollars *in statutory damages alone.*
>
> *Arista Records LLC v. Lime Grp. LLC*[1]

INTRODUCTION

IMAGINE that a hacker is working for a university official secretly spying on faculty members—say, to find out who has been leaking information to the press about internal disciplinary matters.[2] The injuries to a given victim of the hacking might follow a classic learning curve: The first few intrusions into her e-mail account reveal a storehouse of personal secrets, but further break-ins yield less and less new information. One might say there is *diminishing marginal harm*.[3]

There is no such leveling off, however, in the compensation that would be awarded to that victim. The electronic privacy law that bars such hacking provides for statutory damages of a given amount per violation,[4] and each unauthorized intrusion is considered a separate

[1] 784 F. Supp. 2d 313, 317 (S.D.N.Y. 2011). In this file-sharing copyright case, the plaintiffs pressed for more than the mere $1.5 billion. As the judge further noted, "If Plaintiffs were able to pursue a statutory damage theory predicated on the number of direct infringers per work, Defendants' damages could reach into the *trillions*." Id. This, the judge observed, would be "more money than the entire music industry has made since Edison's invention of the phonograph in 1877." Id. (quoting Defendant's Memorandum) (internal quotation marks omitted).

[2] This scenario might bring to mind the recent scandal at Harvard University, in which administrators secretly monitored the e-mails of the college's resident deans in order to identify leakers. See Further Undisclosed E-mail Investigations Revealed at Harvard, Harv. Mag. (Apr. 2, 2013), http://harvardmagazine.com/2013/04/harvard-college-cheating-update (detailing the e-mail account investigations).

[3] Of course, it is also easy to imagine different facts under which the additional harms might *not* diminish. Such variation is a central motivation for this Article's proposal. See Part I for an analysis of both diminishing marginal harm and the parallel possibility of *increasing marginal harm*.

[4] The statutory damages provision of Title II of the Electronic Communications Privacy Act of 1986 ("ECPA"), see Stored Communications Act, 18 U.S.C. § 2707(c) (2012), and its recent cases provide the basis for this illustration. These cases and variations of this hypothetical are explored in Part II.

count.[5] Thus every break-in increases the award by the same amount. The statutory damages add up linearly, even when the actual harms do not.

Or consider this variation: Suppose that the true harm turns on the number of people being monitored for a given length of time, no matter how many times their e-mail accounts are accessed in the process. The statutory damages are then pegged to the wrong unit, and the resulting nominal counts can be quite arbitrary. For example, what if the e-mail software being hacked is set for each user (variously) to log itself out every night, or every five minutes, or never? For any given victim of one week's spying, the number of statutory damages awards (pegged to the number of log-ins) could range from a single count to two thousand counts.

If these were criminal penalties, of course, the judge could readily neutralize such inaccuracy and arbitrariness by running the formal counts *concurrently*, grouped in sensible ways.[6] But in the civil context, damages always seem to run *consecutively* (one might say); there appears to be no regular practice of collapsing nominal counts, even when doing so may be the most intuitive and direct means for reducing redundancy or for better matching damages to harm.[7]

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[5] Id. (minimum of $1,000 per violation); Pure Power Boot Camp v. Warrior Fitness Boot Camp, 759 F. Supp. 2d 417, 428–30 (S.D.N.Y. 2010) (finding that each intrusion counts as a distinct violation).

[6] For a brief survey of how current state laws treat concurrent and consecutive sentencing, see *Oregon v. Ice*, 129 S. Ct. 711, 714 (2009) (noting that "[m]ost States continue the common-law tradition" of entrusting concurrent sentencing "to judges' unfettered discretion"). In the federal sentencing guidelines—which take a "real offense" approach—much of the work once done by judges using concurrent sentencing in their own discretion is now automatic: Redundancy is mostly contained by the initial "grouping" of acts, which serves "to limit the significance of the formal charging decision and to prevent multiple punishment for substantially identical offense conduct . . . . In essence, counts that are grouped together are treated as constituting a single offense . . . ." U.S. Sentencing Guidelines Manual ch. 3, pt. D, introductory cmt. (2013).

[7] The analysis here will focus on the harm-based remedial aims of compensation and "optimal" deterrence (internalization of harm) because statutory damages often serve as a substitute for proving actual damages. Where suitable, the analysis will also address complete or "absolute" deterrence (erasing the actor's gains), which entails damages amounts that one might also relate to disgorgement or to unjust enrichment. It goes without saying, however, that these are not the only possible purposes that a damages regime can be designed to serve. In principle, the concurrent damages device proposed here can be useful in serving a wide range of damages theories, not only those motivated by notions of compensation, deterrence, or unjust enrichment. Concurrence can be useful as long as the given theory entails its own criteria for the "right" amount of damages, disfavors redundancy, or can find some use in a

This Article explores the possibility of allowing courts to run civil damages awards concurrently.[8] In the hacker's case, for example, why not give the judge the option of running those redundant counts concurrently by victim? Or in the original scenario, why not allow the use of concurrent damages to help fit the award to diminishing marginal harm? The operation of such a device would already be familiar to generalist courts: As with concurrent criminal sentences, the judge would recognize every act of violation, but then have the option of grouping or collapsing those nominal counts, if need be, so that the real penalties do not stack up arbitrarily.[9]

Whether required by statute[10] or entrenched in judicial practice,[11] the usual linear approach to assessing damages does make sense—sometimes. In some cases, harm *is* linear. Besides, the approach is utterly intuitive: What could be more natural than counting up all the violations, and then imposing a set penalty for each? Other apparent ad-

court's expression of the nature of the "real offense." The reason for such flexibility in application is that the proposed device provides an *option* for the court—just as it does in criminal sentencing. It can be used or forgone in any given case. Moreover, as explained in Part I, it is not an all-or-nothing device; the extent of its use can also be calibrated for each case.

[8] No doubt this possibility has crossed many minds, given how familiar concurrent criminal sentencing is. Yet there appears to be no sustained analysis in the academic literature thus far. Maybe this is due to a generic assumption that civil damages are discretionary anyway (statutory damages aside), and so concurrence is not needed. But that would be too quick a dismissal. In fact, discretionary damages may well be the most ready area of application for a "concurrent damages" rubric. See infra Conclusion.

[9] Notably, not only prison terms but also monetary fines can be run concurrently in criminal sentencing. See, e.g., United States v. Canova, 412 F.3d 331, 343–44 (2d Cir. 2005) ("[O]n each of the four counts of conviction, the district court sentenced Canova to one year of probation, a $1,000 fine, and a $100 special assessment, the sentences to run concurrently as to the probation term and fine, consecutively as to the special assessment . . . ."); United States v. Butler, No. 08-CR-370, 2011 WL 4073672, at *3 (E.D.N.Y. Sept. 13, 2011) (running multiple fines of $500,000 concurrently, along with another fine of $5 million).

[10] The statutory damages considered in this Article include those under the Copyright Act of 1976, 17 U.S.C. § 504 (2012); Wiretap Act (or Title III of the ECPA), 18 U.S.C. § 2520 (2012); Stored Communications Act (or Title II of the ECPA), 18 U.S.C. § 2707(c) (2012); False Claims Act, 31 U.S.C. § 3729 (2006); and Clean Water Act, 33 U.S.C. § 1319(d) (2006). Other examples include the Lanham Act, 15 U.S.C. § 1117(c) (2012) (addressing counterfeiting); Fair Credit Reporting Act, 15 U.S.C. § 1681n (2012); Driver Privacy Protection Act, 18 U.S.C. § 2724 (2012); Telephone Consumer Protection Act, 47 U.S.C. § 227 (2006); and many state statutes.

[11] To take just one example: The courts of the Second Circuit have adopted a linear $50-per-patron heuristic (an innovation not in the statute) for assessing damages in pay-per-view piracy cases. See Kingvision Pay-Per-View Ltd. v. Autar, 426 F. Supp. 2d 59, 63–64 (E.D.N.Y. 2006); Time Warner Cable v. Googies Luncheonette, Inc., 77 F. Supp. 2d 485, 489–90 (S.D.N.Y. 1999).

vantages include more salient notice to potential violators, as well as easy application by the courts.[12] Little surprise, then, that linearity in damages is so common.

Yet this familiar default also suffers often from a structural flaw: inflexibility, both in how violations are counted and in how the awards per violation add up. Courts have struggled against these dual rigidities, most famously in statutory damages contexts where linearity is compounded by high statutory ranges—leading to massive potential awards.[13] Think of the court's exclamation above ("*a billion dollars*") about Copyright Act damages in a file-sharing case. Or consider the False Claims Act case in which the judge wrestled against a statutory command to impose a mandatory minimum penalty for each of the 9000-plus invoices from a contractor—amounting to over $50 million in statutory damages—under a single tainted government contract worth only $3 million.[14]

Some courts straining against the inflexible design of these provisions have voiced their frustration. As one judge put it in a copyright case involving an individual file-sharing user who was assessed the "astronomical" penalty of $675,000 for downloading thirty songs: "[This Court] urges—no implores—Congress to amend the statute to reflect the reali-

[12] A variety of common motivations for the use and design of statutory damages are treated more fully in a separate analysis exploring applications of concurrent damages beyond relieving the linearity problem (as is emphasized here). See Bert I. Huang, Surprisingly Punitive Damages, 100 Va. L. Rev. (forthcoming Sept. 2014).

[13] Although intuition may say that the statutory *minimum* must be the culprit driving up excessive awards due to linearity, in practice it is often the entire range that matters—perhaps due to an anchoring effect of the statutory *maximum*. Some striking awards have been well inside the range. See Sony BMG Music Entm't v. Tenenbaum, Civil Action No. 07-11446-RWZ, 2012 WL 3639053, at *1 & n.1, *6 (D. Mass. Aug. 23, 2012) (imposing a $22,500-per-song verdict, where the statutory range is $750 to $150,000). Indeed, this middle-ness may insulate some awards against reversal or remittitur. See id. at *6.

[14] The damages amount is also more than 300 times the contractor's profit (roughly $150,000). The judge's opinion is notable in detailing his frustrating efforts to find a way around the absurd result. See United States ex rel. Bunk v. Birkart Globistics GmbH & Co., Nos. 1:02cv1168 (AJT/TRJ), 1:07cv1198 (AJT/TRJ), 2012 WL 488256, at *10–11 (E.D. Va. Feb. 14, 2012). The full story of *Birkart* and those of similar cases are examined in Part I.

ties of file sharing."[15] The appeals court echoed the trial judge's concern, even while vacating her remittitur of that award.[16]

Soaring damages, however, are not the whole story. As eye-catching as they may be, they are only one variant of the more general problems of inaccuracy and noise entailed by linearity. The rigidly linear approach can *underdeter* as well as overdeter; it can compensate too *little* as well as too much. It can result in arbitrary outcomes for victims seeking compensation, while scrambling regulatory incentives by adding pure noise.[17]

Consider the contractor's case above, and suppose that those 9000-plus invoices were sent over the course of two years. What if this contractor had happened to bill the government only twice a year? (Only four violations, then.) How about monthly? (Some twenty-four violations.) In fact, the judge noted that he would have counted only *one* violation—based on the single underlying contract—if the statute had allowed him to do so.[18] One might as well insert a lottery into the damages award.

This basic design defect continues to vex the courts.[19] Notably, the usual judicial devices for dealing with *excessive* damages (such as due

[15] Sony BMG Music Entm't v. Tenenbaum, 672 F. Supp. 2d 217, 237 (D. Mass. 2010) (Gertner, J.). This court remitted the jury's award by a factor of ten to $67,500 on due process grounds. But after appeal and remand, the original jury award was upheld against both common law remittitur and the due process challenge. See Sony BMG Music Entm't v. Tenenbaum, 719 F.3d 67, 69–70 (1st Cir. 2013).

[16] Sony BMG Music Entm't v. Tenenbaum, 660 F.3d 487, 490 (1st Cir. 2011) ("We comment that this case raises concerns about application of the Copyright Act which Congress may wish to examine.").

[17] For both the optimal deterrence and absolute deterrence approaches, accuracy in damages is useful—not least because of the familiar need to set *marginal* deterrence correctly. See George Stigler, The Optimum Enforcement of Laws, 78 J. Pol. Econ. 526, 527 (1970) ("If the offender will be executed for a minor assault and for a murder, there is no marginal deterrence to murder."). A further familiar reason to avoid excessive penalties, even when absolute deterrence is the aim, is to reduce the "chilling" effect on related but permitted conduct.

[18] In the end, the judge awarded nothing at all—a last-ditch solution he believed to be the only way to satisfy the Excessive Fines Clause, given the unforgiving statutory damages formula. *Birkart*, 2012 WL 488256, at *15.

[19] The root structural problems raised here—of linearity and rigidity in counting—have yet to receive systematic analysis. Most related commentary has focused on the need to limit excessive awards. See, e.g., Pamela Samuelson & Tara Wheatland, Statutory Damages in Copyright Law: A Remedy in Need of Reform, 51 Wm. & Mary L. Rev. 439, 471–73 (2009) (urging tighter constitutional limits on excessive awards); Sheila Scheuerman, Due Process Forgotten: The Problem of Statutory Damages and Class Actions, 74 Mo. L. Rev. 103, 106–

process or excessive fines constraints,[20] or common law remittitur[21]) can only be lopsided solutions at best—and in operation, they turn out to be overly blunt instruments. Furthermore, the very workarounds or "fudges" that may seem an easy way out—such as artificially lowering the per-count award when the count is high—can themselves generate inaccuracy and noise: Think of the inadequate award in the next case, or the underdeterrence for the next potential violator, if that fictionally low price per violation comes to be seen as a benchmark.[22]

At the most general level, the trouble is that linearity may be right for some individual cases but work badly in others, even under the same statute or body of law. Flexibility is needed to allow case-by-case tailoring of the *structure* of how damages accumulate. Yet simply reverting to freestyle discretionary damages would lose the benefits of the count-based default approach that motivated the statutory design.[23]

---

07 (2009) (same). But the parallel potential for *inadequate* compensation and deterrence, also due to rigid linearity, has received less attention.

[20] The familiar substantive due process limitations for *punitive* damages under the *BMW v. Gore* and *State Farm* line of cases have not been applied to *statutory* damages; instead, courts have leaned on an old railroad case, *Williams*, which upheld a triple-digits ratio of statutory damages to actual harm. Compare BMW of N. Am., Inc. v. Gore, 517 U.S. 559, 585–86 (1996), and State Farm Mut. Auto. Ins. Co. v. Campbell, 538 U.S. 408, 425 (2003) (finding a presumptive limitation to single-digit multipliers), with St. Louis, Iron Mountain & S. Ry. Co. v. Williams, 251 U.S. 63, 64, 67 (1919) (upholding an award of $75 plus fees when a passenger's fare overcharge was $0.66). See also *Sony*, 719 F.3d at 69–70 (rejecting the *Gore* standard while upholding copyright damages of $22,500 per song under *Williams*). Meanwhile, the excessive fines constraint applies only to penalties payable to the government. See infra Subsection I.C.2.

[21] Common law remittitur typically requires the award to be "grossly excessive" or "shocking to the conscience," and some courts are not easily shocked. See, e.g., Sony BMG Music Entm't v. Tenenbaum, Civil Action No. 07-11446-RWZ, 2012 WL 3639053, at *1, *2, *6 (D. Mass. Aug. 23, 2012) (citation omitted) (upholding $675,000 copyright award for thirty songs on remand).

[22] For examples of benchmarking on past awards, see *Craigslist, Inc. v. Mesiab*, No. C 08-5064 CW (MEJ), 2010 WL 5300883, at *12 (N.D. Cal. Nov. 15, 2010) (awarding $400 per violation under the Digital Millennium Copyright Act based on a prior case that awarded the same amount), and *Universal City Studios Prod., LLLP v. Howell*, No. 3:06-cv-395-J-33TEM, 2007 WL 853471, at *2, *4 (M.D. Fla. Mar. 16, 2007) (approving a $6000 award under the Copyright Act and citing multiple other cases also awarding $6000). A more dramatic case is the court that awarded $583,039,500 based on "$50 for each of the estimated 11,660,790 [spam] lottery e-mails," observing that "[t]his decision is consistent with the approach of other courts" also awarding $50 per violation under the CAN-SPAM Act. Yahoo! v. XYZ Cos., 872 F. Supp. 2d 300, 308–09 (S.D.N.Y. 2011). Note that in all these cases, the per-count amount was above the statutory minimum.

[23] Whatever the merits of the count-based approach may be, it is clear that statutory damages of this form are here to stay. In fact, they may well be spreading globally. See Pamela

The concurrent damages device offers a new balancing point in the tradeoff between structure and flexibility. Any device that introduces a degree of judicial freedom entails a risk of bias or variability in outcomes, of course, plus a danger that institutional competence may run out.[24] It makes sense to be wary of abandoning otherwise useful constraints merely for the sake of occasional fine-tuning.[25] But that is not the proposal here. Rigid linearity can cause not just minor imprecision, but errors of compensation and of deterrence on the scale of multiples or even orders of magnitude.[26] Moreover, with concurrent damages (as with concurrent criminal sentencing), the intuitive act-based method of counting is retained as a starting point. The extra degree of freedom is

Samuelson, Phil Hill & Tara Wheatland, Statutory Damages: A Rarity in Copyright Laws Internationally, but for How Long?, 60 J. Copyright Soc'y 529, 532 (2013) (describing the promotion of statutory damages abroad by U.S. trade authorities).

[24] Note, however, that it is *not* an argument for denying courts a concurrence option to say that in some cases actual harm may be hard to show. (Much less is it an argument for *mandatory* linearity.) Judges and juries already must assign a per-count amount under existing linear statutory damages. Creating a concurrence option does not make that job any harder; rather, it has the potential to make the job easier. Moreover, judges may wish to get the structure of the damages right (reflecting the structure of the harm) even if they have no strong sense of what the total amount should be; many of the expressive and procedural advantages detailed in Part I will still apply. Often a judge can easily see that linear damages would be inappropriate—even if actual damages might be hard to prove to the satisfaction of the fact finder.

[25] To emphasize: It is not assumed here that judges generally have such great precision in their knowledge of true harms (in areas of law where statutory damages are used) that they should be given free rein to fine-tune those damages. Rather, the usefulness of concurrence only requires either that judges sometimes have a good sense of the *structure* of the harm or of the right *unit* for counting injuries—just as they do when they use concurrent criminal sentencing on "real offense" grounds—or else that they sometimes have enough of a ballpark sense of the total harm to know that a linearly calculated statutory award is way off. (If one believed the courts were always able to fine-tune damages in a given area of law, then the best solution would probably be to make those damages altogether discretionary, as is typical in the common law.) The proposal here is intended for those second-best realms in which linearity is entrenched or even desirable at times (as a starting point for calculating damages), for practical reasons of administrative ease, expressive salience, and so forth. And these tend to be the realms in which statutory damages are common.

[26] How linearity or concurrence relates to the familiar prices-versus-sanctions insight (that the discontinuity of a liability threshold like negligence can sometimes lessen the ills of inaccurate damages) is an intriguing question saved for future work. But note that such comfort about inaccuracy may be more apt for relatively modest errors in penalty amounts, rather than the order-of-magnitude errors that can arise from unsuitable linearity in damages. See Robert Cooter, Prices and Sanctions, 84 Colum. L. Rev. 1523, 1524 (1984) (stating that "modest errors in the level of sanctions will have little effect upon behavior" when liability drops to zero at the threshold for permitted behavior).

added only where it belongs: in matching how the damages accumulate to how the harms do.[27]

The distributional consequences of introducing such an option are not what they may seem at first blush. It is worth emphasizing that (just as in criminal justice) the introduction of a concurrence option does *not* imply a more defendant-friendly regime overall—for the obvious reason that the set statutory awards can be recalibrated to account for the potential use of concurrence.[28] Moreover, judges will no longer be using fictionally reduced per-count awards as a workaround to linearity. What a concurrence option does imply is the potential to achieve better-tailored awards in individual cases—tailoring that sometimes favors plaintiffs and sometimes defendants, relative to the blunt outcomes compelled by mandatory linearity.

Three areas of potential application are explored in this Article,[29] and they are not created equal. The analysis aims to assess the potential good that can (or cannot) be done in each area by introducing this "structured" form of flexibility.[30] Part I will focus on two types of situations in which linearity is especially inapt. The first is that of *overdetermined harm*, in which multiple acts occur that are each sufficient to cause the single resultant harm. (Think of a single lie being repeated in ten e-mail messages to the same recipient: Any one of the e-mails is enough to convey the misinformation.) The second is that of *diminishing marginal harm*, as already suggested by the learning curve of the hacker. (Less intuitive

[27] The following shorthand may be useful for keeping clear what is meant by "matching": *that one more or one less count would affect the damages award in the same way as it affects the true harm*.

[28] That is, statutory damages awards may well be set *higher* ex ante if the legislature understands that judges will sometimes reduce the effective sum ex post, using concurrence. Such equilibrium adjustments would *improve* accuracy when used in conjunction with concurrence. They would not defeat the purpose, but rather serve it.

[29] Throughout most of this Article's analysis, the hypothesized uses of concurrent damages will be assumed to be formally authorized—such as through new legislation or amendment to existing statutory damage provisions. (The exception is the Conclusion, which describes how the approach has immediate use, without any law change, as a framework for setting and articulating *common law* damages.) Thus, questions about whether judges might ever have the power to use this approach for statutory damages, absent express authorization, are set aside for now.

[30] Cf. United States v. Allegheny Ludlum Corp., 366 F.3d 164, 189 (3d Cir. 2004) ("[T]he best we can do in view of the muddled state of affairs [given the case law under the Clean Water Act] is to follow *Gwaltney* on the question of the statutory maximum, and to use it as a framework, but to give guidance structuring the way in which a district court is to exercise its discretion in setting an actual penalty.").

may be cases in which the victim is able to adapt: Think of spam filters that learn over time.[31]) Harm levels off eventually, but the linear damages do not.

For these types of mismatch, the concurrent damages approach offers integrity and sincerity advantages over the sorts of ad hoc "fudges" that courts might otherwise use to reach a sensible result in a given case.[32] Not least, its rationale is simple for a judge to articulate and easily understandable to a jury and to the public,[33] especially as it mirrors the most intuitive function of concurrent sentencing in criminal law.[34] By contrast, how easy is it to imagine a judge instructing a jury that "the *higher* the number of violations you find, the *lower* the award you should assign to each one"?

Part II will address the problems that arise when the true unit of harm varies from case to case (for example, whether in a copyright case the right unit is per song, per album, or per artist). Unit-of-prosecution problems are not new to the task of common law judging.[35] And yet, when

[31] Contrast that structure of harm with the linearity of the federal anti-spam statute's damages. See Yahoo! v. XYZ Cos., 872 F. Supp. 2d 300, 308–09 (S.D.N.Y. 2011) (awarding damages of $583,039,500 based on $50 per spam e-mail); Facebook v. Wallace, No. C 09-798 JF (RS), 2009 WL 3617789, at *2 (N.D. Cal. Oct. 29, 2009) (awarding $50 per violation for a total of $710,737,650).

[32] There are also procedural advantages, such as avoiding the strange distortions that can occur if some counts are overturned on appeal. See infra Subsection I.C.3.

[33] Current law requires a jury to decide statutory damages in the federal courts on Seventh Amendment grounds (unless waived). See Feltner v. Columbia Pictures Television, 523 U.S. 340, 353–55 (1998). But the expressive advantages also apply when judges are deciding the award (in jury-waived cases) or remitting a jury's award.

[34] The "totality" principle in criminal sentencing captures this intuition:

> [W]hen . . . cases of multiplicity of offences come before the court, the court must not content itself by doing the arithmetic and passing the sentence which the arithmetic produces. It must look at the totality of the criminal behaviour and ask itself what is the appropriate sentence for all the offences.

David A. Thomas, Principles of Sentencing 56–57 (2d ed. 1979). For discussion of the "bulk discounts" and "collapsing desert" concepts in criminal law theory, see infra Subsection I.B.1.

[35] As one appeals judge colorfully noted:

> Five punches to a victim's face without provocation. One battery or five? Same result if the punches were hours apart? The financial officer of a corporation with 10,000 shareholders submits a false report to the Securities and Exchange Commission. One fraud or 10,000? These "unit-of-prosecution" questions have vexed state and federal courts. . . .
>
> Similar problems have dogged civil enforcement proceedings.

Nat'l Ass'n of Home Builders v. Occupational Safety & Health Admin., 602 F.3d 464, 465 (D.C. Cir. 2010) (Randolph, J.).

the unit appears as a statutory term, some courts fall back on rigid readings even when anomalies are sure to result. In such cases, it is easy to see how noise, distorted incentives, and manipulative gaming might occur.[36] (Think again of our contractor who faces anywhere from one award to thousands of awards—for essentially the same injury.) But the alternative of stretching statutory terms ad hoc has obvious problems of its own.[37] What the use of concurrent damages can do is allow courts to tailor the *effective* unit, case by case, without disturbing the statutory meaning.[38]

More generally, the concurrent damages option shifts legal argumentation (and judicial reasoning) toward the realities of the case and away from semantics. The presence of an option to run damages concurrently presses judges to ask, "What is the conduct that is truly generating the harm?"[39] It is a familiar sort of inquiry, similar to those that judges already perform when they use concurrent criminal sentencing.

No doubt this step creates more work for judges—though it might also be *less* of a strain than deploying one of the "fudges" already in use. But such an information cost must be compared with the benefits of both more accurate damages and more useful judicial expression. What gets articulated by a court considering concurrence is neither semantics nor creative accounting but *reasoning*—about why diminishing marginal

[36] Consider the leading case that interpreted the Wiretap Act's rather vague "per day of violation" unit to mean that only a single count is possible on any given day—firmly proclaiming it "irrelevant in calculating statutory damages that 100 violations of the Act might occur on one day, 50 on a second, and only 2 on a third day." Desilets v. Wal-Mart Stores, 171 F.3d 711, 714 (1st Cir. 1999).

[37] One might think that the use of more fluid statutory terms could allow the needed flexibility. Part II explains why this has not been a promising approach in reality.

[38] In criminal sentencing, one analogue for using concurrence to adjust the effective unit can be found in the Illinois statute providing that the court shall not impose consecutive sentences for offenses which were "committed as part of a single course of conduct during which there was no substantial change in the nature of the criminal objective." 730 Ill. Comp. Stat. 5/5-8-4 (2014). Similarly, the federal sentencing guidelines approach collapses multiple convictions by pre-grouping them into a single offense when they "involve the same victim or the same act or transaction" or share a "common criminal objective or constitut[e] part of a common scheme or plan," or "if the offense behavior is ongoing or continuous in nature . . . ." U.S. Sentencing Guidelines Manual § 3D1.2(a)–(d) (2013).

[39] Or, if the regulatory aim is absolute deterrence, the presence of the concurrence device option presses the judge to ask, "What is the conduct that is truly generating the *gains*?" Some statutory damages provisions do refer to the violator's profit, but, of course, that is only one form of possible gains (and not always relevant). See, e.g., Wiretap Act, 18 U.S.C. § 2520 (2012). In some circumstances, courts may assess damages based on actual damages and violator's profits, so long as they are no less than the statutory minimum per violation.

harm is a fair assumption on the facts of a given case, or why a certain unit of prosecution is most suitable for measuring the true injuries that have occurred.[40]

Such articulation benefits may well reach remedies over which the courts have fuller discretion, such as damages for common law violations. Although this Article focuses on statutory damages,[41] where the problems of rigidity are more salient, the Conclusion will propose a more immediately achievable role for the concurrent damages approach: as a compact and familiar rubric for judges to use in laying out the true structure of their *discretionary* awards, thereby conveying sharper and more accurate signals to the public and to future courts.

I. STRUCTURES OF HARM

The standard design of statutory damages—stacking up awards of the same amount for each violation—may mirror how harm adds up in some situations, yet surely not in others. When this simplistic linear-harm assumption does not reflect reality, the results include windfalls and inadequate recoveries, over- and underdeterrence, and more generally, noise in both compensation and incentives.

[40] The accumulation of such reasoning and of actual practice may also come to feed back usefully into policymaking by legislators or regulators (including in establishing guidelines for the courts). See James S. Liebman, Slow Dancing with Death: The Supreme Court and Capital Punishment, 1963–2006, 107 Colum. L. Rev. 1, 116–18 (2007) (detailing such feedback in the capital sentencing context).

[41] In separate work, I address the further problems with linear statutory damages that can arise when enforcement choices are influenced by the volume of counts: What if cases with higher counts attract more enforcement attention or more avid plaintiffs, for example? Or what if such cases are simply easier to prove? The analysis also considers the dilemmas that arise when actors' perceptions of their expected penalties misalign with reality. For instance, what if a statute's high per-count award ranges, along with their linear structure, are intended as extra *in terrorem* deterrents for those actors who *misperceive* their chances of liability as being low? See Bert I. Huang, Surprisingly Punitive Damages, 100 Va. L. Rev. (forthcoming Sept. 2014). The complex problem of setting deterrence multipliers when enforcement probabilities can change is introduced in Richard Craswell, Deterrence and Damages: The Multiplier Principle and Its Alternatives, 97 Mich. L. Rev. 2185, 2193–98 (1999). A related and promising field for future work concerns the potential uses of concurrent damages for addressing other forms of possible redundancy, such as overlapping enforcement by multiple agencies. See, e.g., Jody Freeman & Jim Rossi, Agency Coordination in Shared Regulatory Space, 125 Harv. L. Rev. 1131, 1134–35 (2012).

Consider a water pollution law that provides for the court to assess an award of statutory damages to be applied "per discharge."[42] Assume for now that the standard per-discharge award accurately captures the harm caused by a single discharge by a given type of factory.[43] In a case involving multiple discharges, each might well cause the same harm as the first, but it is also easy to think of scenarios where they would not.

For instance, in a fast-flowing river, each successive discharge may contaminate the river water in essentially the same way (say, temporarily raising the concentration of contaminants from zero to a certain amount). Or in a lake, if the harm at issue is the water authority's cost of decontamination, and this cost is constant for each gallon of waste removed, then again each discharge may raise the cognizable harm by the same amount. Generally, if the harm in a given case is linearly related to the number of discharges, then it seems natural that a linear per-count way of stacking up awards may be well-suited for capturing such harm.

A. Overdetermined Harm

Yet harms do not always add up in this way. Think again of the lake, and now suppose that the harm at issue is tied to the health of the fish in the lake. Imagine if the contaminant is toxic enough that a single discharge would kill all the fish. If this outcome is the only harm at issue, then the same harm is accomplished by any number of discharges—whether one or many. More discharges do not cause more harm.

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[42] Consider, for example, under the Clean Water Act, one court's calculation of a $29 million award in the case of a concrete factory's discharging contaminants, due to rain overflow, into the Feather River running through Paradise, California:

> Each significant rain event itemized in Attachment A resulted in 6 violations (as alleged in the complaint) per event. The civil penalty was calculated as follows: 15 dates x 6 violations/date x $32,500/violation (for each violation occurring between 2004 and January 12, 2009) = $2,925,000 plus 120 dates x 6 violations/date x $37,500/violation (for each violation occurring after January 12, 2009) = $27,000,000.

Cal. Sportfishing Prot. Alliance v. Callaway, No. 2:12-cv-0843, 2012 WL 3561968, at *1 n.3 (E.D. Cal. Aug. 17, 2012) (discussing civil penalties under 33 U.S.C. § 1319(d), as adjusted for inflation). Such a linear damages structure is fairly typical in the pollution context. See, e.g., Wash. Rev. Code § 90.48.144 (2010) (imposing "a penalty in an amount of up to ten thousand dollars a day" for every violation of clean water law).

[43] Internalizing harm is, of course, an archetypal aim of pollution penalties in theory (after all, pollution is the classic illustration of externalities) and also in application. See, e.g., Tull v. United States, 481 U.S. 412, 423 (1987) (noting that under the Clean Water Act, a court "may also seek to deter future violations by basing the penalty on its economic impact").

This can be seen as a classic case of an "overdetermined" harm—one with multiple sufficient causes. (This illustration in fact is borrowed from the commentary on causation in the Restatement (Third) of Torts.[44]) Suppose the polluter dumps its waste in five spots around the lake.[45] Any one of these five discharges would have killed all the fish—but because these five discharges amount to a single discharge's worth of harm, the damages for efficiently deterring the five-discharge polluter should be the same as for a single discharge, given that the same amount of harm is to be internalized by the polluter. Likewise, the amount of compensation should be the same, given that the same harm is done.

In this scenario, harm levels off—and yet statutory damages continue to increase linearly as more violations are committed.[46] The result is inaccuracy of compensation and of deterrence. If the set amount of damages per discharge is determined correctly for the first discharge, then a multiplier of five would overdeter this polluter, as the expected award overshoots by a factor of five the harm to be internalized.[47]

Furthermore, consider the potential for distorted *marginal* deterrence. Suppose this polluter can choose to dump its five discharges all in one lake, or else to dump those same discharges in two different lakes. Clearly, the least harm is done by ruining only one lake rather than two. But with the linear damages scheme, the penalties are the same either way. The polluter thus thinks that it "might as well" dump in both lakes (if it were slightly more convenient to do so).[48]

[44] Restatement (Third) of Torts: Liab. for Physical and Emotional Harm § 27 cmt. f, illus. 4 (2010). For further discussion of multiple sufficient causation, and why causation doctrine does not address such redundancy, see infra note 55 and accompanying text.

[45] For simplicity, assume for now that the polluter dumps its waste in all five locations at the same time; later iterations of the pollution illustration will turn to the possibility of discharging on separate occasions. See infra Section I.B.

[46] One might think of the linear damages under the National Marine Sanctuaries Act, which imposes "a civil penalty of not more than $100,000 for each . . . violation." 16 U.S.C. § 1437(d)(1) (2012). Or, as noted above, the federal Clean Water Act has also been read in this linear way. See Borden Ranch P'ship v. U.S. Army Corps of Eng'rs, 261 F.3d 810, 817–18 (9th Cir. 2001) (determining that damages should be counted per discharge).

[47] For simplicity, the possibility of ad hoc manipulation of the per-discharge amount is ruled out for now; the perverse results of this sort of "fictional pricing" will be examined in depth in Subsection I.C.1.

[48] A point of connection between this Part's analysis (overdetermined harm) and that of Part II (the unit-of-prosecution problem) is easily seen in the current illustration, which can also be characterized as a problem of choosing the right unit (discharges or ruined lakes?) for counting awards—which is also to say, choosing the margin of behavior on which regulatory incentives should be applied. See infra Section II.A.

What if the statutory award is revised to one-fifth of its current level, so that the total damages are now correct for the five-discharge polluter? Now, another polluter who seeks to discharge only once would be underdeterred, internalizing only one-fifth of the harm that would result. Meanwhile, a ten-discharge polluter would still be overdeterred. Even if the five-discharge polluter were a prevalent or "average" type,[49] there may be other cases in which the damages would be way off.

This tradeoff persists, of course, no matter which polluter is chosen in calibrating the award. Figure 1 shows the true harm curve at the lake with the fish (the solid line that levels off). It also shows two possible linear damages curves (the dashed lines), one with a higher and one with a lower per-count award. As the Figure depicts, the higher schedule sometimes results in damages less than true harm (when the number of counts, *N*, is less than *H*), and sometimes in damages greater than harm (when *N* is higher than *H*). Only when *N* is equal to *H* does the schedule produce damages reflecting true harm.[50] Lowering the per-count award simply trades off less overshooting (when *N* is higher than *L*) for more undershooting (when *N* is lower than *L*).

To be clear about what is meant here by overdeterrence (or underdeterrence): The total damages award at the given *N* is too high (or too low) relative to the internalization of harm.[51] This does not mean that every potential violator facing a too-high award will refrain from acting,

[49] This phrase is used loosely, as the policymaker may wish to calibrate the per-count amount based on a typical or modal number of counts, rather than on a mean or median value.

[50] In other words, polluters acting at this level of *N*, where the linear damages schedule intersects the harm curve, are (the only) actors for whom the award is calibrated correctly.

[51] This exposition focuses on "optimal" deterrence (internalization of harm) for two reasons: first, due to the focus on harm in many statutory damages provisions; and second, because the analysis for "absolute" deterrence is simpler (as it considers only the violator's gains, but not harm). See, e.g., A. Mitchell Polinsky & Steven Shavell, Punitive Damages, *in* 2 Encyclopedia of Law and Economics: Civil Law and Economics 764, 770 (Boudewijn Bouckaert & Gerrit De Geest eds., 2000) (discussing approach of deterring "completely" by erasing the injurer's gains); Robert D. Cooter, Punitive Damages, Social Norms, and Economic Analysis, 60 Law & Contemp. Probs. 73, 77–78 (1997) (explaining that absolute deterrence entails pegging damages to gains, not harms); Alex Raskolnikov, Irredeemably Inefficient Acts: A Threat to Markets, Firms, and the Fisc, 102 Geo. L.J. 1133, 1169–70 (2014) (exploring acts that should always be deterred even under efficiency approach); cf. Douglas Laycock, The Scope and Significance of Restitution, 67 Tex. L. Rev. 1277, 1289 (1989) ("Courts award all profits to deter the underlying wrong by removing the possibility of profit" but "less than all profits when they are willing to tolerate the wrong if defendant pays for it.").

or that everyone facing a too-low award will act. The polluter's decision depends on its gains as well as on the penalty. The "overdeterred" ten-discharge polluter might yet act—if its gains are high enough. But the point is that the threshold for the qualifying gains is too high, and thus there may be *some* such parties who should take the action but will not. Likewise, in any range of *N* where the threshold is too low, there may be *some* parties who should not act but who will. In Figure 1, assuming the higher linear damages schedule, parties with gains in region U_H would pollute due to underdeterrence; and those with gains in region O_H would refrain from polluting due to overdeterrence. (Likewise, for parties with gains in regions U_L and O_L respectively, if the lower damages schedule were in use.)

To see this in a simple illustration: Figure 2 traces out a single linear damages scheme (dashed line), and again the true harm curve (the solid line) at the lake with the fish. Consider two polluters: Factory A, with per-discharge gains slightly greater than the per-discharge damages; and Factory B, with gains that are slightly less.[52] For each, it is efficient to pollute at high enough levels of *N*, where their gains surpass the actual harm. Yet linear damages create incentives that are quite off the mark: The high-gains factory would find it worthwhile to pollute at *any* level of *N*. And yet it should not pollute at the lower levels marked by the left arrow (that is, when *N* is less than *A*), as its gains there are less than the harm entailed. Meanwhile, the low-gains factory *never* finds it worth the damages to pollute, although it should only refrain at lower levels (but not when *N* is greater than *B*, as marked by the right arrow).[53] From these Figures, it is easy to see why the standard, linear design of statutory damages is poorly suited for capturing overdetermined harm.

1. The Role of Concurrent Damages

Cases of overdetermined harm are ideally suited for the use of concurrent damages. The court will in effect be mirroring what has happened in reality: "The defendant committed *N* violations, each one meriting the full award of damages because each is a sufficient cause of the harm reflected in that amount; but to reflect their causal redundancy and

[52] The possibility of other (non-linear) shapes for the gains curve is introduced and analyzed below in the parallel discussion in Subsection I.B.3.

[53] To relate these points to Figure 1: When *N* is less than *A*, Factory A's gains are in the region corresponding to the *U* regions in Figure 1. When *N* is greater than *B*, Factory B's gains are in the region corresponding to the *O* regions in Figure 1.

the single harm that in fact resulted, these *N* awards should run concurrently."

This articulation (and accounting) of the damages award establishes the correct amount of compensation. It is also true to the reality of the relationship between the harm and the polluter's acts. As such, it is also suitably insensitive to the number of violations: The identical articulation—and the same effective penalty for the polluter—would apply whether *N* is five or ten or only one. Like the harm itself, one might say that the amount of the award is also overdetermined.

Information demands. — This same quality implies a further advantage: When concurrent damages are an option, there is no need to guess at the likely number of counts when establishing the damages scheme initially. By contrast, for linearly increasing damages, an attempt at accuracy in the "average" case would require lawmakers to guess at some typical number of counts.[54] Here, the tradeoff in information demands—requiring the courts to assess the structure of harms in each case, but reducing anticipatory guesswork by the legislature—may tend to be a favorable one. The benefit is especially salient when the distribution of *N* is hard to know or the average is tricky to assess (for instance, if *N* has no obvious upper limit).

Causation and the statutory damages gap. — Note that under standard doctrines of causation, each of the discharges would be considered a cause-in-fact. For common law damages, such redundant causation does not lead inexorably to the overmultiplying of damages: In essence, factual causation doctrine overcounts in order to prevent gaps in liability, and it falls on remedies doctrine to limit damages to compensatory levels.[55] For statutory damages, however, overcounting *does* directly lead to overmultiplying of the award. This notable lacuna in remedies design

[54] A still more careful legal designer might want to optimize the per-count amount, which would further require knowing how many future actors would be overdeterred and underdeterred at any given amount.

[55] Note also that multiple sufficient causation analysis is usually concerned with multiple actors—the main question being who among them can be held liable. By contrast, in the present analysis, the prototypical case is of a *single* actor taking multiple actions—the question being how those acts should translate into total damages. For further discussion of how multiple sufficient causation relates to remedies doctrines, see Mark P. Gergen, Causation in Disgorgement, 92 B.U. L. Rev. 827, 832–35 (2012), and David W. Robertson, Causation in the *Restatement (Third) of Torts*: Three Arguable Mistakes, 44 Wake Forest L. Rev. 1007, 1016–18 (2009).

would be mended by creating an option to run statutory damages concurrently.[56]

2. Variations: Overproof

Cases of overdetermined harm often have these dual features: a binary nature of harm (think of the fish: dead or alive) and arbitrary multiplication of counts. A wider variety of situations may fit this category than might be apparent at first glance.

One variation arises when the additional counts result from overproving or overcharging by the enforcer or the plaintiff. Most obviously, given an award schedule that increases with the count of violations, a private plaintiff may seek to prove the maximum plausible count. One can also understand why public enforcers (such as a regulatory agency) might overcharge with a similar motivation, or at least to gain early settlement leverage.

Yet even a public enforcer aiming for optimal deterrence may seek to prove more counts than would accurately represent the harm, if such an enforcer is unsure about its ability to convince the fact finder of the necessary number of counts.[57] An environmental agency enforcing the water pollution law, for instance, may seek to prove all five discharges even if the harm is overdetermined.

Running damages concurrently can neutralize the effect of these forms of overcounting of statutory damages awards—just as in criminal prosecution, overcharging that may lead to redundant counts of convic-

[56] Again, throughout this analysis, it is assumed that the option of concurrent damages is made possible by new legislation or amendment to existing statutory damages provisions.

[57] For an example of judicial resistance to a public enforcer's seeking a lower total award, despite having proved more violations (possibly due to the overproof motivations noted above), consider the judge's statement in *United States ex rel. Bunk v. Birkart Globistics GmbH & Co.*:

> [T]he government takes the position that the Court can, and should, impose a civil penalty of $24 million, because the government, in the exercise of its "prosecutorial discretion," only seeks a civil penalty in that amount. . . . Left unexplained is how the government, through the exercise of "prosecutorial discretion," can require the Court to impose a civil penalty it is not authorized by statute to impose, since the $24 million civil penalty does not result from any principled application of the FCA, as it is not a multiple of 9,136 and any number within the statutory range of $5,500 and $11,000.

Nos. 1:02cv1168 (AJT/TRJ), 1:07cv1198 (AJT/TRJ), 2012 WL 488256, at *14 n.19 (E.D. Va. Feb. 14, 2012).

tion can be neutralized by the use of concurrent sentencing.[58] (This fact is not lost on criminal prosecutors.[59])

Creating the concurrence option plainly gives judges more flexibility, with an attendant risk of uneven or biased application;[60] but any analysis of the tradeoffs must also weigh the device's capacity to serve as a check on potential arbitrariness or manipulation elsewhere in the system, such as in enforcement choices. This is a benefit well understood by analysts of criminal sentencing[61]—and one worthy of renewed attention in the civil damages context.

3. Variations: Binaries and Contagions

Things that can die, break, be ruined, or become impure—fragile binaries like these tend to entail the sharp leveling-off of the harm curve that characterizes overdetermined harm. Once all the fish are dead or an ecosystem is devastated, once an encryption is broken or a reputation is ruined, no more harm is done by repetitions of the same act.[62]

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[58] As Chief Judge Bazelon observed (in the pre-Guidelines days):

> Neither can we assume that Congress wanted separate punishment simply because it created separate crimes. To do so would be to allow the prosecutor and the trial judge almost unfettered discretion to multiply punishment since often it takes nothing more than a fertile imagination to spin several crimes out of a single transaction.

Irby v. United States, 390 F.2d 432, 439 (D.C. Cir. 1967) (Bazelon, C.J., dissenting).

[59] As the United States Attorneys' Manual candidly instructs, as to multiple false statements under 18 U.S.C. § 1001:

> If the false statements are contained in one document, however, it is preferable to indict only one count for the entire document. This preferred course of action is in response to expressed judicial displeasure on multi-count indictments based on one document. . . . Further, little is to be gained by multi-count charges in such cases, because in most cases the United States Sentencing Guidelines will embrace and punish all relevant conduct.

U.S. Dep't of Justice, United States Attorneys' Manual tit. 9, Criminal Resource Manual § 919 (1997), available at http://www.justice.gov/usao/eousa/foia_reading_room/usam/title9/crm00919.htm.

[60] Although the drawbacks of increasing judicial discretion are familiar and need not be rehearsed here, it should be emphasized that the extra discretion added by a concurrence option is limited. It is *not* freestyle discretion of the sort that judges exercise in setting or remitting common law damages. Moreover, the use of discretion through concurrence entails at least an implicit (if not express) explanation of its rationale.

[61] For one crisp articulation, see William J. Stuntz, The Political Constitution of Criminal Justice, 119 Harv. L. Rev. 780, 825–26 (2006), which recognizes that "[m]ore discretionary power for trial judges means more outcome disparity," but argues this risk is outweighed by the advantages of checking enforcer discretion and possibly inducing a better equilibrium.

[62] For most of the illustrations in this Section, of course, it is easy to imagine how further repetitions might have *some* additional effect. That possibility is covered in the following

But there is also a less intuitive class of fragile binaries, which we might refer to as "contagions": Sending out a computer virus just once is enough. Because it self-replicates, the amount of harm done by a hacker in sending out the virus once may be roughly the same as if the hacker sent it twice or twenty times. Misinformation may also have this quality, and the same goes for some forms of identity theft (such as stealing credit card numbers or passwords and sharing them on a hacker bulletin board).[63] Or, to bring the metaphor back to its roots: Releasing invasive species or patented seeds into the wild may also have this "once is enough" character. In each scenario, the total resulting harm is the same whether the original violator repeated the action or did it only once. In this sense, the number of her further repetitions is an arbitrary count, once the binary has been switched on.

B. Diminishing Marginal Harm

In many situations, of course, there is likely to be at least *some* further harm from each violation. Think again of the story of pollution in the lake: Further harm may result beyond the first discharge—whether because one discharge alone does not kill all the fish, or because the harm asserted in a given case covers ecological concerns beyond survival of the fish.

A more general, and thus more common, category is that of "diminishing marginal harm": Each further violation causes more harm, but not as much additional harm as the prior violation. That is, the harm curve rises but levels off—maybe gradually or maybe sharply. The problem of overdetermined harm may also be seen as a subset at one extreme of this broader class of cases. (In the fish tale above, the harm curve levels off abruptly and completely, after the first discharge.)

To supply a simplistic example of a more gradually changing curve: Suppose that in a given case, the further harm of the second discharge might be two-thirds as much as the first, and of the third discharge, only one-third as much; and at that point, the cognizable harm levels off.

Section's discussion of diminishing marginal harm (of which the extreme leveling-off assumed here may be seen as a special case).

[63] Cf. Lior Jacob Strahilevitz, Reunifying Privacy Law, 98 Calif. L. Rev. 2007, 2026–27 (2010) (arguing that there is no extra harm in government disclosure of information already available to the public).

Thus, twice the harm of a single discharge results from any number of discharges three or higher.

Again, the standard linear design of statutory damages is ill-suited to address these situations. It assumes precisely a *non*-diminishing marginal harm from each further violation. Figure 3 shows this contrast between the ideal damages curve (matching the harm) and the linear damages schedule.

As in the overdetermined harm situation, raising or lowering the statutory per-count amount—say, in an effort to get the right amount "on average"—inevitably trades off overdeterring some parties (those with higher violation counts, *N*) against underdeterring others (those with lower *N*). Likewise, it trades off windfalls for some victims against inadequate compensation for others.

1. The Role of Concurrent Damages

Concurrent damages have an intuitive role to play here as well—and it may seem especially natural because this usage is a common view of what concurrent criminal sentencing does. Theorists of criminal sentencing have noted the need for, and the common practice of, sentencing for multiple acts less than linearly by applying a "bulk discount" as recognition of "collapsing desert."[64] (The analogy should be drawn with care, however, as criminal sentencing is not commonly thought to serve com-

[64] See Richard L. Lippke, Retributive Sentencing, Multiple Offenders, and Bulk Discounts, *in* Retributivism: Essays on Theory and Policy 212, 212–13 (Mark D. White ed., 2011); Kevin R. Reitz, The Illusion of Proportionality: Desert and Repeat Offenders, *in* Previous Convictions at Sentencing: Theoretical and Applied Perspectives 137, 138, 141 (Julian V. Roberts & Andrew von Hirsch eds., 2010) (explaining that "[w]hen plural offending manifests as multiple counts of conviction, the quantum of punishment for successive crimes tends to collapse in severity," and terming this phenomenon "collapsing desert"). The U.S. Sentencing Commission has described the problem thus:

> The difficulty is that when a defendant engages in conduct that causes several harms, each additional harm, even if it increases the extent to which punishment is warranted, does not necessarily warrant a proportionate increase in punishment. . . . [Otherwise,] many of the simplest offenses, for reasons that are often fortuitous, would lead to sentences of life imprisonment—sentences that neither just deserts nor crime control theories of punishment would justify.

U.S. Sentencing Guidelines Manual ch. 1, pt. A, introductory cmt. (2012). For further analysis, see U.S. Sentencing Comm'n, Staff Discussion Paper: Multiple Counts (1996), available at http://www.ussc.gov/Research/Working_Group_Reports/Simplification/MULTIPLE.PDF.

pensation or optimal deterrence, but rather other aims such as just desert, retribution, or perhaps absolute deterrence.[65])

In the civil damages context, concurrent sentencing can allow the court to reach a better approximation of the true harm. Although its result is often a sort of "rough justice" (rather than the more exact mirroring of harm that is possible in an overdetermined harm case), its structure will still be considerably more true-to-life—and thus entail more accurate internalization for a wider range of potential violators—than what a linearly increasing damages schedule would prescribe.

To return to the lake illustration, suppose there are ten discharges that together cause double the harm of a single discharge. Using concurrence, a court recognizing this fact can again articulate what is happening in a way that reflects reality.[66] The message would be: "Each of the ten counts merits the basic statutory award (for a single violation) because each is sufficient to cause the harm reflected in that award. But because all the discharges beyond the first are redundant in causing a second harm of the same amount, all the awards beyond the first should run concurrently."[67]

2. Increasing Marginal Harm?

In fact, even *increasing* marginal harm or critical-mass types of harm can be roughly approximated in a similar way: Concurrence can in effect flatten the damages curve for the *lower* counts, where the harm is level or has a low slope; and as the counts reach the threshold where the harm

[65] Note that "collapsing desert" is conceptually closer to diminishing marginal *blameworthiness* than diminishing marginal harm. Also telling is the description of bulk discounts in practice as reflecting not diminishing marginal harm (as a factual matter), but rather "diminishing marginal significance of harm" (as a matter of punishment), even as actual harm increases—the observation being that typically "sentences increase with increasing harms, but in less than proportional amounts." Aaron J. Rappaport, Rationalizing the Commission: The Philosophical Premises of the U.S. Sentencing Guidelines, 52 Emory L.J. 557, 609–10 (2003).

[66] It is of course possible that a court may be unable to recognize that harm levels off this way, but the likelihood that such evidence will be offered (and contested) is surely higher if concurrence is an available option (and known to be so) at the damages phase.

[67] Or in shorthand, "Because only two single-violations' worth of harm resulted, these ten counts will run concurrently as effectively two awards." But what if the ten discharges caused 2.4 times the harm of a single discharge? The compression to two (or arguably three) awards is the best that concurrence can do. Generally, the "rough justice" achievable through concurrent damages is limited by such natural number approximations. (The same problem attends the use of concurrent criminal sentencing, of course.)

curve turns upward, concurrence can be forgone for further counts, thus allowing linearity to generate a matching increase in damages.[68] Although one might readily imagine settings in which increasing marginal harm is likely at certain levels of activity (say, if the toxicity in the lake hits a tipping point at *N* discharges), in most contexts it seems implausible that the accumulation of harm can continue to accelerate indefinitely. The concept is raised here mainly as a further illustration of how concurrence can reshape damages curves. The remainder of this Section returns our focus to cases of diminishing marginal harm.

3. The Violator's Gains

The beauty of a damages schedule that better approximates harm is that it also lightens the information demands, on both the legal designer and the courts, concerning the violator's other incentives. As is true for cases of overdetermined harm, the proposed use of concurrent damages in the more general category of diminishing marginal harms "works" in theory for any potential violator simply by causing internalization of (an approximation of) harm.

But for answering the policy question of how much good is done by adopting the concurrent damages device in the first place, it *is* useful to assess how much behavior would be changed by a more true-to-life reflection of harm in the penalties. (For simplicity's sake, let us focus on changes in activity levels, rather than in levels of care.[69]) We can begin by asking: When does the inaccuracy of linear damages have the worst bite, actually causing the regulated parties to change their behaviors in the wrong way?

The answer depends in large part on how the parties' *gains* vary with *N*: Is the gains curve linear? Is it flat? Does it have some other structure—for instance, are there diminishing marginal gains? How badly a linear damages scheme fares depends on how the gains curve relates to

[68] Such an approach assumes that the statutory range includes high enough per-count amounts for linearity to capture the rise adequately; including such a high amount in the range is justifiable because it reflects the true marginal harm that can potentially be caused by a single extra count.

[69] In other words, all behaviors considered here fall short of the applicable care standard, if any. The negligence-versus-strict liability divide is thus set aside for future consideration (although the discussion below concerning distortionary substitutions can be considered a variation on adjusting levels of care). For a classic exposition of the discontinuity of incentives at such a care threshold, see Cooter, supra note 26, at 1526–27.

the harms curve. One particularly vivid and important contrast is illustrated in Figures 4 through 6.

First, let us consider when the contemplated action would be efficient: If the gains curve diminishes more quickly (that is, levels off faster) than the harm curve does, then the action will be efficient (if ever) only at lower levels of *N*. (See Figure 4.) But if the reverse is true, and the harms curve diminishes more quickly, then the action will be efficient (if ever) only at higher levels of *N*. (See Figure 5.) Next, let us consider when the potential violator would choose to act, under a linear damages scheme: The diminishing marginal gains can only outpace the linearly rising penalty (if ever) at lower levels of *N*. (See Figure 6.)

Comparing these observations yields a simple but striking heuristic. Linear damages will tend to serve especially poorly—even perversely—when the harms curve diminishes more quickly than the gains curve. This is evident in Figure 6. The action is efficient only at higher levels of *N*, and yet that is exactly where the action is *less* likely to be taken, due to deterrence by the damages. Likewise, where the action is *more* likely to be taken (at lower levels of *N*) is precisely where the action is less likely to be efficient.[70]

One important category that qualifies for this condition is that of overdetermined harm, as those harm curves level off immediately. In those cases, for *any* gains curve that increases with *N*, there can only be efficient action (if ever) at levels of *N* that are higher than the levels for which the action is inefficient. And yet, for a gains curve that eventually levels off, under linear damages the action will be taken (if ever) only at lower levels of *N*—exactly the opposite of what is desired.

4. Variations: Learning Curves

Informational harms are a category in which diminishing marginal harm may be an especially common structure. First, think back to the original illustration in the Introduction, about the snooping university official who is monitoring other people's e-mails. There the learning curve straightforwardly defines how gains and harms diminish.[71] Second, the informational "contagions" suggested as a variant of overdetermined

[70] Where exactly the curves cross, and where the damages line crosses them, will determine the ranges of *N* where action occurs and where it should occur, and thus the extent to which these ranges overlap (or do not).

[71] The possibility that harms and gains are decoupled, so that one diminishes but the other does not, is considered in illustrations in Part II.

harm may in some instances entail marginal harms that diminish, but not immediately. (Each public repetition of a lie or a libel may still have *some* further effect, even if it has already taken on a life of its own.)

A subtler source of diminishing marginal harms might occur when the *victim* is able to adapt or mitigate better as the number of violations increases. Think of spam filters that learn over time.[72] (Or, to take a page from history, think of telemarketing calls or blast faxes coming from the same caller number, which the recipient can block.[73]) A far more controversial possibility is that of hedonic adaptation to repetitious harms occurring over time.[74]

It is certainly possible to imagine scenarios in which adaptation is not likely—or theories of harm that do not allow for a victim's adaptation to be considered (think of dignitary harms, for example, or a wholesale rejection of hedonic adaptation as a consideration).[75] But such variety is very much the point: The *option* to run damages concurrently enables the flexibility to accommodate each type of case (or theory of harm) under an otherwise rigid damages scheme.

[72] In contrast, consider the strict linearity of the damages under the CAN-SPAM Act in both its public and private enforcer provisions. See 15 U.S.C. § 7706(f)(3)(A)–(C) (2012) (awarding up to $250 for each message, which may be increased if willful); see also supra note 31 (citing cases applying linear damages under the federal anti-spam law).

[73] Likewise, note the strict linearity of the Telephone Consumer Protection Act's statutory damages. 47 U.S.C. § 227(b)(3), (c)(5), (f)(1) (2006) (awarding $500 for each call, or $1500 if willful).

[74] See, e.g., Samuel R. Bagenstos & Margo Schlanger, Hedonic Damages, Hedonic Adaptation, and Disability, 60 Vand. L. Rev. 745, 747–49 (2007) (suggesting the law should reject hedonic damages in tort compensation as it relates to disability); John Bronsteen, Christopher Buccafusco & Jonathan S. Masur, Hedonic Adaptation and the Settlement of Civil Lawsuits, 108 Colum. L. Rev. 1516, 1538–40 (2008) (describing hedonic adaptation).

[75] In addition, one might easily imagine how the amount of potential damages may also influence the victim's own mitigating (or precautionary) behaviors. For simplicity, the present analysis abstracts away from the interesting questions of feedback into victims' ex ante contributory behaviors.

C. Advantages over Alternatives

Why not simply choose the right *total* award and then divide it by the number of counts, in any given case?[76] Or why not artificially undercount by stretching the statute, or simply drop counts even if they have been proved?

Other ways to adjust damages awards can coexist with the concurrent damages device, of course. In criminal law, the judge's discretion to use concurrent sentencing coexists with the judge's discretion over the sentence length for each count. We do not say that one is unnecessary because the other exists.[77] Moreover, it would be bizarre to suggest that two ten-year sentences for armed robbery, running concurrently, are just another name for two five-year sentences for armed robbery, running consecutively.[78]

The concurrent damages approach is superior to certain other adjustments, however, and one principal benefit is precisely to relieve the pressure on courts to use those workarounds. Existing court decisions dealing with extremely high statutory damages or civil penalties (some

[76] One obvious limitation in many cases is that the statutory minimum may preclude a pro-rata amount that is low enough. See, e.g., United States ex rel. Bunk v. Birkart Globistics GmbH & Co., Nos. 1:02cv1168 (AJT/TRJ), 1:07cv1198 (AJT/TRJ), 2012 WL 488256, at *12 (E.D. Va. Feb. 14, 2012) ("[T]he [False Claims Act] authorizes a court to set the amount of the penalty within a certain range, but does not grant the court authority to impose a total penalty below the amount derived after the exercise of that discretion within the prescribed range."). This Section focuses on more general reasons that such pro-rata artificial averaging is ill-advised. But note that these objections are only to the pro-rata mechanism, and not to the broader approach of starting with total damages and then fitting a structure to it. Rather, when such a structured articulation of damages also matches the structure of harm, it is a useful public communication—one whose value extends, as the Conclusion explains, even to fully discretionary regimes such as typical common law damages.

[77] Indeed, the discretion to run sentences concurrently is seen as a foundational judicial power. See, e.g., Setser v. United States, 132 S. Ct. 1463, 1468–70 (2012); Oregon v. Ice, 129 S. Ct. 711, 714 (2009).

[78] Quite the contrary. Consider the care with which one British appeals court managed the use of these dual sources of discretion: The lower court had imposed a sentence of eight years for conspiracy running consecutively with six years for manslaughter (running concurrently on fifty-eight counts) for a total of fourteen years, in effect. The appeals court adjusted upward the per-count sentence for manslaughter to fourteen years (running those fifty-eight counts concurrently with the conspiracy count, so that the effective sentence remained the same at fourteen years), explaining that "this method of sentencing . . . will be more readily understood by the public . . . [and] will not give the appearance, as may have occurred in this case, of devaluing the loss of life." R v. Wacker, [2002] EWCA (Crim) 1944, [53], [2003] Q.B. 1207 [1220] (Eng.).

balking at the seeming absurdity of an award,[79] and others testing it against the Excessive Fines Clause[80]) illustrate the sorts of "fudges" already in use. These decisions also reveal judicial ambivalence about using them, for good reason: Arbitrary or unreasoned undercounting; fictional pricing of the harm; stretching the meaning of statutory terms; ad hoc raising standards of proof or moving the line of liability—these sorts of fudges can warp precedent and create legal uncertainty. Such alternatives, though aimed at achieving a better result in a specific case, run the risk of being both disingenuous and destabilizing in the long run.

By contrast, the use of concurrent damages brings the advantages of clear articulation: reporting not only the total award, but also the true number of violations, a per-count valuation that reflects a true measure of the potential harm that one act can do, and the structure of how the harms (and thus how the awards) accumulate. How much good is done by such expressions may vary by context.[81] But at least in some circumstances, even when accurate compensation and deterrence can be achieved using other devices, the concurrent damages approach may still be preferable due to its expressive advantages. These include benefits of a more procedural sort: enabling more accurate review on appeal;[82] making the outcome more "robust" against the overturning of individual

[79] See, e.g., Arista Records LLC v. Lime Grp., LLC, 784 F. Supp. 2d 313, 317 (S.D.N.Y. 2011) ("As Defendants note, Plaintiffs are suggesting an award that is 'more money than the entire music recording industry has made since Edison's invention of the phonograph in 1877.' . . . The absurdity of this result is one of the factors that has motivated other courts to reject Plaintiffs' damages theory."). As noted in the Introduction, this court accordingly chose the interpretation that would allow "*a billion dollars*" of damages rather than one that would allow "*trillions*." Id. (emphasis in original).

[80] See infra Subsection I.C.2.

[81] At the most general level, a concurrent damages articulation is "truest" in cases of overdetermined harm (where concurrent penalties reflect the fact that the harm is also "concurrent," in a sense). In cases of diminishing marginal harm, as already noted, concurrent damages are inexact approximations (unless fractions of counts can be run concurrently). But their message about the true structure of harm may still be quite evident, thanks to familiarity with the use of concurrent criminal sentencing to reflect diminishing marginal "desert." See Reitz, supra note 64, at 141.

[82] Even if it may be possible for the appeals court to "back out" the underlying parameters, the express reporting of those parameters would reduce the information demands on the appeals court, eliminating guesswork and improving the chance of accuracy. See, e.g., In re DVC Indus. v. Flacke, 447 N.Y.S.2d 523, 523 (N.Y. App. Div. 1982) (upholding a penalty of $18,000 against a "record of more than 18 separate violations," but observing "that it would be preferable for the respondent to set forth with specificity the fine for each individual violation").

counts on appeal; and more generally, being easier to articulate as the reasoning for the outcome in a given case.

1. Fictional Pricing

When a court runs damages concurrently, how the resulting total award reflects the actual structure of harm will often be self-evident. The court's articulation will also include a true valuation of the potential harm that a single violation can cause. Each expression—of structure and of valuation—informs not only later courts (and settlements), but also primary actors. The advantage of reporting them accurately may be easily seen through a contrast with the most obvious workaround for a court constrained by linearity: artificially lowering the per-count award.

Artificial averaging. — Suppose that in a given case, ten counts cause a single overdetermined harm of $2000. For instance, consider a fraud case in which just one e-mail with the misinformation suffices to mislead (causing the harm of $2000); the fact that there were ten e-mails repeating that same lie has no further harmful effect and thus should not alter the optimal award. Using concurrent damages, a court can achieve this ideal structure by running concurrently a $2000 award for each of the ten counts, for a de facto total award of $2000.

But without using concurrent damages, and facing a rigidly linear damages schedule, the best a court can do is to aim for the right total award. It can achieve this award of $2000, in effect, by assigning each of the ten counts a pro-rata share of $200.[83] This is what we might call an "artificial averaging" approach: Figure out the right total, and then divide it by the number of counts. The defendant will be liable for $2000 for the ten counts, just as it would under concurrent damages.

This approach can reach the right award in the given case at hand, but it does so by inventing a fictional number, thereby creating misleading perceptions. The artificial averaging has produced a per-count award of $200. But this amount has no real meaning. It is a fiction. None of the ten counts actually merits a $200 award; they each merit $2000 or else zero.[84] The sole reason for announcing the award this way is the rigidity

[83] This assumes, of course, that the statutory range goes as low as $200.

[84] Similarly, in the lake pollution example above, with five discharges, the harm caused by one discharge would be nothing close to the fictional pro-rata amount of "killing one-fifth of all the fish"—rather, one discharge kills *all* the fish.

of the linear damages scheme. And that is the very rigidity that the use of concurrent damages circumvents.

Statutory damages regimes with a rigidly linear design, but with a flexible range of awards per count, thus put pressure on an unsuitable choice variable. The statutory award range may be needed to accommodate truly differing harms for different types of violations, but it should not be used as a fudge to get around linearity. Creating an option to run damages concurrently adds needed flexibility precisely where it belongs: in configuring the structure of the award to reflect the structure of harm.

Salience, guidance, and notice. — Consider the misperceptions and uncertainty that artificial averaging can cause. In the example above, the $200 would be seen as a mysterious or arbitrary amount without meaning, at best. At worst, the observer may mistakenly take away a doubly distorted impression: the apparent award per e-mail of $200, as well as the message that each repetition of the lie is deemed as harmful as the last. (Think then of the future actor who therefore believes he can afford the legal risk of telling the lie, as long as he does so in only one e-mail. Or think of one who recognizes the artificial averaging, and yet believes that a later court—in his own case—will nonetheless follow the earlier court's per-count award as a benchmark.)

By contrast, the explicit structure of concurrent damages makes clear that the deterrence is really directed at the overdetermined harm (the lie itself) and not at the actions that the statute formally requires counting (the ten e-mails all conveying the same lie).[85] The observer will also recognize the true sanction for that lie—$2000—as well as the court's warning that this harm and this award can result from even a single e-mail.

It is possible, of course, that a more sophisticated observer will suspect artificial averaging and thus avoid misperceptions about valuation and structure. But avoiding misinformation is not the same as having the right information. Sorting out the true award structure would still impose daunting information demands. For one thing, how could an observer be

[85] It may thus also help to counter a psychological tendency to "anchor" on the original count, *N*. Cf. Sony BMG Music Entm't v. Tenenbaum, 719 F.3d 67, 71 (1st Cir. 2013) (upholding an award of $22,500 for each of thirty songs, based in part on recognition that "thousands of songs" were in fact downloaded and shared); United States v. Mackby, 339 F.3d 1013, 1015 (9th Cir. 2003) (upholding a False Claims Act award against an excessiveness challenge by comparing the award for the 111 claims actually prosecuted to the hypothetical maximum award for the 8499 claims involved).

sure that artificial averaging is happening? And even if she were sure, how would she unpack the total award?

To consider just one form of the possible confusion, suppose that in the illustration, the single lie affected two people. Even if an observer knows that the number of e-mails is not really what is driving the award, how would she know if the total award of $2000 reflects $1000 for each of the two people deceived, or instead $2000 for the single lie? To put it more generally, she still needs to know which incentive margin is the one actually being targeted.

In the concurrent damages scenario, by contrast, a sophisticated observer may more easily infer what the right margin is: If the award is $2000 running concurrently for all ten e-mails, it is clear that the margin being targeted is the lying. But if the sanction is $1000 running concurrently for the seven e-mails that went to one recipient, plus $1000 running concurrently for three e-mails to the other recipient, then it becomes clear that the margin being targeted is the number of people deceived.

This clarity—both about structure and valuation—offers richer guidance for the public and for courts in future cases.[86] (This expressive benefit has been noticed in concurrent criminal sentencing.[87]) Meanwhile, for the potential violator, these signals not only help to set correct incentives, but may also provide sharper notice.

Artificial inconsistency. — The artificial averaging approach can also upset guidance for future courts and notice for future actors in a more systemic way by generating "noise" in the per-count award.[88] Wide vari-

[86] In fact, even plaintiffs may look to per-count awards as a benchmark for their own damages requests. See Plaintiffs' Motion for Entry of Final Default Judgment Against Defendants and Related Order at 13–16, Coach, Inc. & Coach Servs., Inc. v. Handbag Haven & LS Jr., No. 7:11-cv-00011, 2011 WL 6092374, at *9–11 (W.D. Tex. Oct. 24, 2011).

[87] The true-expression advantage enabled by concurrent sentencing is nicely articulated in the *Regina v. Wacker* case. See supra note 78.

[88] Noise (if perceived ex ante) can have its own independent effects on deterrence; most obviously, for the risk-averse, it imposes the cost of the risk premium. But subtler effects are also possible, depending on the nature of liability. See John E. Calfee & Richard Craswell, Some Effects of Uncertainty on Compliance with Legal Standards, 70 Va. L. Rev. 965, 966–67 (1984) (analyzing uncertainty effects under negligence as well as strict liability). Moreover, in some cases there may be further distortions (for wide swings in damages) due to changing marginal dis-utilities of the penalties. See John Collins Coffee, Jr., Corporate Crime and Punishment: A Non-Chicago View of the Economics of Criminal Sanctions, 17 Am. Crim. L. Rev. 419, 430 (1980) (discussing the changing utility of money). For simplicity of exposition, this analysis abstracts away from such nuances. Also, it should go without

ation is possible when multiple benchmarks are set by cases with varying counts. To continue the prior illustration with the single lie (sent to one recipient), imagine that artificial averaging is used in another case that is identical in all relevant aspects—except that there are one hundred counts, not ten. The correct total award remains $2000, as that is still the harm done. Thus the fictional per-count price is $20 for each of the one hundred counts, as opposed to $200 in the case with only ten counts.

This difference, moreover, is driven by an irrelevant factor; in this scenario, the number of counts does not otherwise matter and thus should not affect the award amounts or what they convey. Yet although the total award remains the same, what is conveyed by the per-count award has changed in the case with one hundred counts.

By contrast, the concurrent damages approach sends stable signals: In both cases it announces the same structure, the same per-count award amount, and the same total amount. Whether there are one hundred or only ten counts, the per-count award is $2000, and all counts run concurrently.

Notice the unavoidable tradeoff in the case of linear damages: Either one must accept noise in the total amount (by fixing the per-count award), or else one must accept noise in the per-count award (to reach the same total), if cases have varying numbers of counts. This tradeoff is avoided by the use of concurrent damages.

Finally, note that it may be quite hard to convey, in a way that seems fair or just, the reason for artificial averaging. Just think of the judge having to explain: "In this case with one hundred violations, I must award *less* per violation than in the case with ten violations." Thus, even though concurrent damages may seem more complicated than a strictly linear scheme, its operation may well be easier to explain just because it makes more sense. A further convenience is that the idea of running penalties concurrently is already quite familiar from criminal law and readily understandable to the public.

saying that nothing here is meant to suggest that linearity is the only source of noise or uncertainty in liability or damages.

2. Fudging the Count

Beyond the avoidance of fictional pricing, the use of concurrent damages also displaces several ways of "fudging the law"—in order to reduce the number of counts—that may otherwise be used to avoid excessive damages. Accurate reporting of the number of counts is valuable even when not all those counts directly affect the concurrent award, not least for integrity reasons and for procedural reasons.[89] But a further value is the analytical clarity offered by the very articulation that those counts are running concurrently. Such a reason-revealing mode of decision is easily preferable to unexplained or even embarrassed fudging of the numbers.

One such fudge is the deliberate overlooking of certain counts. Several courts have taken this approach in the context of the False Claims Act—albeit only when facing the Excessive Fines Clause, and thus armed with constitutional avoidance canons and an overriding external rationale. In one case, although each of 686 invoices submitted under a contract was a separate false claim for which the Act mandated statutory damages, the court chose to impose the penalty for only seventy-three claims, which was the number of "types of tools" provided by the contractor.[90] In another, a landlord faced liability for fifty-eight false claims, fifty-one of which arose from endorsing rent checks; the court nullified the awards for those endorsements, leaving only seven counts (for other false statements).[91]

Uncertainty in fudging. — Such ad hoc undercounting creates variability in compensation and uncertainty in deterrence, in two ways. First, it might not be predictable whether a future court would be willing to use a given fudge. Even under constitutional pressure, not all courts have been willing to drop counts arbitrarily.[92] Second, the extent of the

[89] These are explained in more detail below. See infra Subsection I.C.3.

[90] United States v. Advance Tool Co., 902 F. Supp. 1011, 1018 (W.D. Mo. 1995). The court chose this odd route only after considering but rejecting the possibility of leeway under the statute to reduce the award in other ways. Id.

[91] United States ex rel. Smith v. Gilbert Realty Co., 840 F. Supp. 71, 75 (E.D. Mich. 1993).

[92] See United States ex rel. Bunk v. Birkart Globistics GmbH & Co., Nos. 1:02cv1168 (AJT/TRJ), 1:07cv1198 (AJT/TRJ), 2012 WL 488256, at *4 (E.D. Va. Feb. 14, 2012) ("The Court is therefore obligated to assess a civil penalty of no less than $5,500 and no more than $11,000 for each of 9,136 false claims, which amounts to no less than $50,248,000 and no more than $100,496,000."). Yet other courts have been more willing to drop counts—even to make order-of-magnitude leaps. See, e.g., United States ex rel. Oliver v. The Parsons Corp.,

undercounting might also be unpredictable when it relies on such accidents as having subcategories that can be entirely dropped.[93]

Still greater uncertainty and variation are entailed by the binary, all-or-nothing nature of other fudges. Consider a case in which the court faced such a binary and chose zero:

> For the reasons stated herein, the Court concludes that the mandatory civil penalty of at least $50,248,000 constitutes an unconstitutionally excessive fine in violation of the Eighth Amendment and, having made that determination, further concludes that it does not have the discretion to fashion some other civil penalty that would be within constitutional limits; *and therefore no civil penalty will be imposed*.[94]

Even without constitutional pressure, some courts have read statutory damages provisions to allow courts to decline to award damages altogether, such as under the Wiretap Act.[95] A somewhat subtler on-off switch is the judicially created criterion that some indicia of "actual harm" be proved before any statutory damages can be awarded, such as under the Stored Communications Act.[96]

Uncertainty about the very availability of this fudge compounds the problem: Consider that the reading of Wiretap Act damages as discretionary is contested, and the actual-harm prerequisite under the Stored Communications Act is inconsistently applied.[97] Seemingly analogous case law, even construing similar language, may also be a poor guide.[98]

498 F. Supp. 2d 1260, 1292 (C.D. Cal. 2006) (dropping the asserted 4056 counts to only two counts).

[93] See *Gilbert Realty*, 840 F. Supp. at 75.

[94] *Birkart*, 2012 WL 488256, at *1 (emphasis added).

[95] 18 U.S.C. §§ 2510–2522 (2012). A longstanding circuit split on this question has yet to be resolved. Compare Nalley v. Nalley, 53 F.3d 649, 650 (4th Cir. 1995) (court may decline), and Reynolds v. Spears, 93 F.3d 428, 436 (8th Cir. 1996) (same), with Rodgers v. Wood, 910 F.2d 444, 448 (7th Cir. 1990) (court must award).

[96] Compare Van Alstyne v. Elec. Scriptorium, 560 F.3d 199, 202 (4th Cir. 2009) (must prove actual harm), with In re Hawaiian Airlines, 355 B.R. 225, 230 (D. Haw. 2006) (need not prove actual harm). Cf. Cedar Hill Assocs. v. Paget, No. 04 C 0557, 2005 WL 3430562, at *3 (N.D. Ill. Dec. 9, 2005) (discussing the Electronic Communications Privacy Act); Strahilevitz, supra note 63, at 2029–30 (describing the similar "second best" use of "actual damages" criterion in the leading privacy case of *Doe v. Chao*, 540 U.S. 614 (2004)).

[97] See supra notes 95–96.

[98] For instance, consider the similarly phrased penalty provisions in the Clean Water Act and in New York's corresponding state statute. Compare 33 U.S.C. § 1319(d) (2006) (mandating that a violator "shall be subject to a civil penalty" under the statute), with N.Y. Envtl. Conserv. Law § 71-1929 (Consol. 2013) (mandating that a violator "shall be liable to a pen-

These are hardly robust solutions to noise in compensation and deterrence.

Precedent and fidelity. — Where such distortions occur *sotto voce*, accountability is lost and accuracy may thus also be put at risk. But where these devices are more loudly articulated, the problem may be even worse: Transparency may translate into a bad influence on other cases. "Fudging the law" and undercounting may be troubling not only as individual instances of playing fast-and-loose, but because they may exert a pull on other cases and on the case law.[99] Natural byproducts may include splits of authority or other sticky inconsistencies;[100] such conflicts, moreover, would not be promising signs for the hope of statutory fidelity.

The adoption of a concurrent damages device in the design of a statutory scheme would relieve the pressures generating such distortion and variation.[101] It would do so by decoupling the formal count of infractions from the de facto amount of damages to be paid. There would no longer be any need to suppress the formal count. Statutes written to include a concurrence option might thus enjoy greater fidelity, as they would have the anti-fudging property embedded in their very design.

3. Procedural Advantages

Robustness. — A principle procedural advantage of concurrent damages is what we might call the "robustness" of the award. In the simplest sense, the award is robust because it survives even if some of the concurrent counts are overturned. This property has been recognized in the

alty" under the statute). While courts interpreting the Clean Water Act have found it to be a mandatory penalty provision, at least one state court in New York has found that the analogous New York statute does not mandate such penalties. Compare United States v. Egan Marine Corp., No. 08 C 3160, 2011 WL 8144393, at *6 (N.D. Ill. Oct. 12, 2011) ("This Court is inclined to follow the approach of the Fourth, Ninth, and Eleventh Circuits and conclude that the civil penalty is mandatory."), with State v. Town of Wallkill, 572 N.Y.S.2d 758, 760 (N.Y. App. Div. 1991) (holding that a civil penalty is not mandatory).

[99] Such a phenomenon, of courts distorting substantive rights in order to avoid imposing certain remedies, has been called "remedial deterrence" in constitutional scholarship. Daryl J. Levinson, Rights Essentialism and Remedial Equilibration, 99 Colum. L. Rev. 857, 884–85 (1999).

[100] The current split about whether courts have discretion to decline statutory damages under the Wiretap Act is one example; another is inconsistency in applying the "actual harm" requirement. See supra note 95.

[101] Again, throughout the bulk of this Article's analysis, the use of concurrent damages is assumed to be formally authorized (such as by statutory revision or by new legislation).

criminal appeals context; as one judge put it, "Concurrent sentences have the additional advantage of obviating consequences of any legal error at the trial pertaining to one but not both judgments."[102]

Consider again the illustration with the ten e-mail messages repeating a single lie. Assume again that the statute pegs damages to the number of e-mails, and that the court mirrors the true harm structure of $2000 for the single lie by running concurrently the $2000 awards for all ten counts. What would happen to the award if, on appeal, four of the ten counts are thrown out? It remains $2000 (running concurrently among the remaining six counts), and this would be the correct result.[103]

To see robustness at work in a fuller way, consider the variation in which seven of the e-mails went to one recipient and three went to another, with each recipient suffering $1000 of harm (hence the total of $2000). The court approximates this harm structure by running seven counts concurrently at $1000, and the other three the same way. Suppose now that the appeals court throws out all three counts related to the second recipient. What happens to the total award? It falls to $1000, as it should under the ideal penalty structure (as only one victim of the deception remains). But suppose instead that the appeals court throws out three different counts, one among the e-mails to the first recipient and two among the e-mails to the second. Now the award remains at $2000, as it should.

The effective award is thus properly unaffected by alterations to the number of counts, whenever the altered counts are also ones that should not matter under the ideal damages schedule. Just as importantly, when the counts that *do* matter are altered, the concurrent damages award also changes along with it. When they are used to match the harm structure, concurrent damages are sensitive to factual changes in the right way.

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[102] Irby v. United States, 390 F.2d 432, 439 (D.C. Cir. 1967) (Leventhal, J., concurring). Moreover, under the traditional "concurrent sentence doctrine," appellate courts could turn away challenges to counts that are running concurrently with others, unless all of them were contested. The idea was that overturning only a subset of counts would not affect the overall sentence. See Benton v. Maryland, 395 U.S. 784, 788 (1968) (discussing historical origins of "concurrent sentence doctrine" and tracing it to Chief Justice Marshall's opinion in *Locke v. United States*, 11 U.S. (7 Cranch) 339 (1813)).

[103] One implication is that the defendant may then have less incentive to appeal unless she expects to get all ten counts reversed. In a case of overdetermined harm, that is arguably a more appropriate incentive than the alternative of exaggerated motivation to appeal (due to artificial averaging among counts).

The pro-rata difficulty. — The robustness of concurrent damages stands in especially sharp relief when set against the failings of the artificial averaging alternative. Recall that even without using concurrent damages, a court could still achieve the correct total award of $2000 by dividing it among the ten counts pro rata, at $200 each. But what would happen on appeal under this alternative approach? Consider again the variation in which one count is overturned among the e-mails to the first recipient, and two counts are overturned as to the other. Given the structure of the findings below ($200 for each of ten counts), the appeals court would reduce the award pro rata by three counts' worth of damages, or $600, leaving a total of $1400 for the seven counts remaining intact. This result is wrong because it is based on a false award structure. The artificial per-count award of $200 is a number without any real meaning, and so is the final reduced award. (The real harm remains $2000.) The odd $1400 figure results from the mistake of altering the award pro rata, due to the misimpression created by artificial averaging.[104]

This may be a tricky problem for an appeals court to overcome. Like the sophisticated observer, the appeals court may suspect artificial averaging and yet not know enough about the true underlying structure motivating the trial court's decision to make the proper adjustment. Moreover, the appeals court may be hemmed in by the findings of fact as expressed in the trial court's decision: Though reflecting nothing real, the very articulation of the per-count award makes it hard to uproot.

The best the appeals court could do might be to remand the case. Even so, the trial court on remand (despite knowing the right result) might also be constrained by its own prior articulation in the same way. Consider how the trial judge would need to articulate its adjustment: "Now that some violations have been overturned on appeal, I think the penalty per violation should be *increased*."

Reversibility. — A complementary procedural benefit is the ease of appellate review (and of reversal, as needed). Should an appeals court decide that the damages should not run concurrently, or should run concurrently in a different grouping, the raw count will still be available to use in reconfiguring the award. In the simplest case, if the appeals court

[104] Likewise, in the variation in which all three overturned counts concerned the second recipient, the pro-rata result of $1400 remaining in damages is again incorrect (as it should be $1000).

decides that the linear structure is suitable after all, then it could award damages that way, based on the number of counts, *N*. Or the appeals court could recombine the basic counts to run concurrently, along other dimensions: With the necessary findings at hand ("one lie, ten e-mails, seven for one recipient and three for the other"), the appeals court could decide that the damages should run concurrently based on a different unit ("by lie") than the one chosen by the trial court ("by recipient"). The needed facts about the number and nature of violations will already have been declared by the fact finder.

II. VARYING UNITS OF HARM

> *[I]t is irrelevant in calculating [per-day-of-violation] statutory damages that 100 violations of the Act might occur on one day, 50 on a second, and only 2 on a third day.*
>
> *Desilets v. Wal-Mart Stores*[105]

A. The Need for Tailoring

Thus far, our analysis has assumed that the statutorily defined unit for counting the number of awards is a sensible one. But even within a given statutory domain, there is no guarantee that the right unit will be constant across cases. When it is not, and when courts nonetheless interpret statutory terms rigidly, anomalies in damages and perverse effects may arise.

Consider the hardline position taken by the circuit court quoted above, in interpreting the term "per day of violation" to mean one and only one award per day. The opportunities for manipulation that this choice of unit creates are easy to see. In fact, such concerns were cited by another circuit court as a reason to take the contrary position on a similar question under a different statute: Such a definition "would encourage individuals to stack all their violations into one 'Pollution Day,' in which innumerable offenses could occur, subject only to the [same] maximum."[106]

[105] 171 F.3d 711, 714 (1st Cir. 1999) (interpreting the phrase "per day of violation" in the statutory damages provision of the Stored Communications Act, noting that "[f]or each day on which any violation occurs, or multiple violations occur, the [same] liquidated sum . . . must be paid by the violator").

[106] Borden Ranch P'ship v. U.S. Army Corps of Eng'rs, 261 F.3d 810, 817–18 (9th Cir. 2001) (interpreting the phrase "per day for each violation" in a penalties provision under the

Yet adhering rigidly to the opposite choice is hardly any better. In a given case, it may be that counting days is most suitable, reflecting a type of harm that accumulates steadily day by day—while in another case, under the same statute, the harm done may depend on how many violations occurred on each day. Again, what is needed is the flexibility to tailor the choice of unit to how harms in fact accumulate.

1. Illustration: Copyright

The federal Copyright Act assigns statutory damages per "work."[107] Assume that case law has established that each episode of a television series is a single work.[108] Now imagine an avid television viewer who illegally downloads entire seasons of her favorite dramas. Because the storylines are the key to the enjoyment of these shows, she is only interested in downloading seasons as a whole (which she watches in marathon fashion, besides). Likewise, the studios that produce these shows typically sell them packaged by season.[109] Let us assume for now that the proper measure of copyright harm is the lost sales,[110] and that this viewer gets the same benefit per season, regardless of the number of episodes.

Imagine her downloading two shows with the same price per season and the same viewing time per season—one with ten one-hour episodes and the other with twenty half-hour episodes—both of which she enjoys equally. In a copyright infringement suit by a studio against her, howev-

Clean Water Act, noting approvingly that "[t]he focus is clearly on *each* violation, and courts have consistently rejected attempts to limit civil penalties to the number of days in which violations occur").

[107] 17 U.S.C. § 504(c) (2012). There are complications discussed below, chiefly that a group of works may be viewed as a "compilation" counting as only one work for statutory damages purposes. Note also that, although a prerequisite for demanding statutory damages for a given work is registration of the copyright, the fact of multiple registrations does not imply multiple works.

[108] Several leading cases have taken this approach under the Copyright Act. See MCA Television v. Feltner, 89 F.3d 766, 770 (11th Cir. 1996); Gamma Audio & Video v. Ean-Chea, 11 F.3d 1106, 1119 (1st Cir. 1993); Twin Peaks Prods. v. Publ'ns Int'l, 996 F.2d 1366, 1380–81 (2d Cir. 1993).

[109] Or think of the recent Netflix strategy of releasing all episodes of a new drama series simultaneously (most famously, *House of Cards*). See Brian Stelter, New Way to Deliver a Drama: All 13 Episodes in One Sitting, N.Y. Times (Jan. 31, 2013), http://www.nytimes.com/2013/02/01/business/media/netflix-to-deliver-all-13-episodes-of-house-of-cards-on-one-day.html.

[110] There are, of course, other ways to conceive of copyright harms (for instance, as a dignitary harm to the author); this possibility is considered below.

er, the number of counts will be pegged to the number of episodes. This measure corresponds neither to the (per-season) benefits of the violator, nor to the (per-season) harm suffered by the studios. Even supposing that the amount of the fictional per-episode award can be calibrated to fit some "typical" number of episodes per season, infringers can still end up paying—and plaintiffs can receive—widely varying damages for essentially the same quantum of harm.[111]

Inaccuracy. — The result is over- and underdeterrence in tandem, and if enforcement occurs, over- and undercompensation. Viewers whose favorite shows happen to be broken down into twenty half-hour episodes per season will be more deterred, while those favoring shows with ten one-hour episodes per season will be less deterred. Likewise, studios whose shows use the half-hour format will be more compensated, and those using the hour-long format will be less compensated.

Moreover, if the potential violator can choose among behaviors, then setting damages based on the wrong unit induces distortionary substitution. Here, the downloader may shift toward those shows that happen to have fewer episodes per season, and away from those with more episodes (even if total viewing times are the same and the per-season prices are the same). Such substitution does not reduce harm; its only role is sanctions-avoidance.[112] In essence, the regulatory error is in applying incentives to the wrong margin of behavior.

Noise. — The most salient distributional consequence is that the studios' recoveries will depend on a factor irrelevant to the harm done. But the viewer paying those damages also faces this same arbitrariness. If the viewer is not legally savvy and is not paying attention to the number of episodes (why would she?), then the arbitrary difference in the damages realized upon enforcement can also be seen as an undesirable distributional consequence.[113] One might call it a sort of "moral luck," though it is arguably worse.[114] The usual moral luck concern is that identical acts can result in varying amounts of realized harm (and thus liabil-

[111] Fudging the per-count amount by raising it when there are fewer episodes, and lowering it when there are more, raises the difficulties discussed at length in Part I. This alternative is omitted from the illustration.

[112] It may well be wasteful, from an efficiency perspective, if the substituted shows are not as enjoyable as the ones she would have otherwise picked.

[113] In other contexts, the actor may not be able to observe the unit to which damages are pegged; this problem, which we might call a "blind margin," is discussed below.

[114] See Dana K. Nelkin, Moral Luck, *in* Stanford Encyclopedia of Philosophy (Edward N. Zalta ed., 2013), http://plato.stanford.edu/archives/sum2013/entries/moral-luck/.

ity). By contrast, here the same amount of harm is assumed; thus the variation in damages is still more arbitrary and harder to rationalize. It is *pure* noise.[115]

Statutory revision? — One solution might seem to lie in revising the statutory unit or its interpretation to reflect the realities of how harms accumulate.[116] Here, one might think that a season of a television show could be counted as a single "work" in a revised statute. But then imagine that our same television viewer also downloads entire seasons of comedies (in addition to the dramas). In her enjoyment of the comedies, they *do* count episode by episode. There is no storyline to speak of, and she watches them as individual episodes, say, during a workout or during breaks. Moreover, knowing their audience, the studios sell these shows on iTunes episode by episode.[117] The statutory unit of violation (now assumed to be per season) is again unsuited to either how harm or gains accumulate. And as before, when the number of episodes per season varies across shows, then noise and distortions in incentives may occur (now a savvy viewer will tend to download seasons with more episodes and avoid the ones with fewer), along with ex post inconsistency of sanctions—and of compensation—for similar harms.

What is needed is *not* a uniquely "correct" unit, the one margin of behavior towards which the sanctions should always be directed. Rather, the need is for flexibility, allowing damages to reflect case-by-case differences in how harms (or gains) actually add up. It may be especially desirable for very general statutes, in which the term defining the unit (say, "works") must cover a wide range of possible objects (say, from songs to architectural designs to fictional characters).[118]

But the need does not arise only from statutory breadth. Even for narrower statutes, the appropriate unit of harm may still vary among cases along many dimensions: by type of victim-plaintiff, by type of actor-defendant, even by theory of harm (for instance, economic loss versus dignitary harms). Moreover, the degree of distortions to compensation

[115] That is the view from the ex post perspective. If anticipated, noise may also have distortionary effects on ex ante incentives. See Calfee & Craswell, supra note 88.

[116] Or, such a revision could reflect how gains stack up, if the aim of the damages award is absolute deterrence.

[117] Assume (as before) that the sales price is the measure of harm.

[118] See, e.g., Walt Disney Co. v. Powell, 897 F.2d 565, 570 (D.C. Cir. 1990) (acknowledging that "Mickey and Minnie are certainly distinct" but noting that "Mickey is still Mickey whether he is smiling, frowning, running or walking, waving his left hand or his right").

and incentives may depend on unanticipated situational factors, as the next illustration suggests.

2. Illustration: Electronic Privacy

Consider again the privacy statute that regulates unauthorized access to electronic communications, such as hacking into someone else's e-mail account.[119] Assume that the statutory damages are pegged, under governing case law, to each access or login.[120] It might make good sense—in some cases—to assume that each unauthorized login causes the same degree of harm. (Or to speak in terms of absolute deterrence, one can imagine *gains* that accumulate linearly, such as for a hacker who is paid by the job.)

But what if the amount of harm done, in another case, depends on a different unit of measurement—such as the number of e-mails opened and read, or the number of accounts hacked? Think again of the snooping employer, illegally monitoring employee e-mails. An employer who reads 1000 e-mails in an employee's account might have logged in only once, or five times, or one-hundred times. Whether the correct unit of harm is per e-mail or per employee's account, counting the raw number of logins for damages purposes would create noisy incentives—not to mention the distributional consequences of vast inconsistency in awards, possibly by orders of magnitude.[121]

The dual rigidities of linearity and inflexible units are not dissolved by rewriting the statute (or by revising precedent) to choose a different unit—only again to have a fixed definition. Suppose instead that the statute is written or read to grant one statutory award per "user account" (not per login).[122] For some cases, the new unit might make better sense.

[119] As in the Introduction, these hypotheticals are based on the ECPA and specifically the remedies provision of Title II. See Stored Communications Act, 18 U.S.C. § 2707(c) (2006).

[120] See Pure Power Boot Camp v. Warrior Fitness Boot Camp, 759 F. Supp. 2d 417, 428–30 (S.D.N.Y. 2010) (using a per-intrusion measurement); United Labs. v. Rukin, No. 98-C-602, 1999 WL 608712, at *5 (N.D. Ill. Aug. 4, 1999) (counting each of at least 200 unauthorized accesses of plaintiff's voicemail as a separate violation, resulting in at least $200,000 of damages because of the $1000 minimum per violation).

[121] Or think back to the False Claims Act case of *Birkart*, with 9000-plus invoices each garnering a separate minimum award of $5000, though the judge said he would have counted it all as a single violation if the statute had allowed. See supra note 92.

[122] Under the ECPA, one court has in fact used this unit of measurement, but only because it did not have enough evidence of the number of total intrusions, which it took to be the correct unit. *Pure Power Boot Camp*, 759 F. Supp. 2d at 428–30.

But what if the harm in another case depends on the number of people whose e-mails were read, that is, not only the hacked accountholder but also those with whom she corresponded?

3. The Role of Concurrent Damages

Creating an option to run damages concurrently brings in the needed flexibility.[123] It allows courts to collapse smaller units into larger ones, in effect, for purposes of assessing damages—thus tailoring the unit of violation case by case. The statute can set the unit of initial counting to be the smallest unit of likely concern and allow the court to adopt larger de facto units, as the need arises. Thus the option of concurrent damages also relieves pressure to stretch statutory terms to cover the right unit for a given case; it does so by introducing flexibility elsewhere in the process.

For an illustration of its use, consider our initial story about the viewer downloading the television drama series, where the count of statutory damages awards is based on the number of episodes, *N*, but the true count of harms is by season. In that case, the court should run the resulting *N* awards concurrently by season. Any season will amount to a single award, in effect (whether it has twenty half-hour or ten full-hour episodes).[124] The result is elimination of the noise and distortions arising from the arbitrariness in the number of episodes per season. Likewise, in the story of the employer monitoring its employees, the court can shift

[123] As is true throughout the Article (except for the Conclusion), the analysis here assumes a concurrent damages option that is formally created via statutory revision or inclusion in a new statute.

[124] Naturally, the award should be set to reflect the per-season harm. Because the concurrent structure is clearly articulated by the judge in the per-season case, that per-count amount will be understood by observers (including future courts and primary actors) as calibrated to reflect one season's worth of harm. Note that the analysis here generally assumes that the statutory range for the per-unit award (if any) is wide enough to include the amount that reflects the harm (or desired damages amount under another remedial theory) for the appropriate effective unit. To the extent that the statutory range is too narrow, that fact would *not* be an argument in favor of linearity—much less against a concurrence option. Rather, it would be an argument for an amendment that extends either the statutory minimum or maximum. Absent such a revision, however, a judge may well face a case in which the aims of getting the structure right and getting the total amount right are in tension; if so, then the concurrence option allows the judge to choose which aim takes priority.

the effective unit of liability to per-user-account simply by running the per-login awards concurrently by user account.[125]

But what if the formal count *is* the true unit of harm in a given case? The court can simply decline to run the damages concurrently. In the case of the copyrighted television comedies (rather than the drama series), the court should decline to run the awards concurrently, as the harm there does depend on the number of episodes. The availability of concurrence creates an option, not a command.

Information demands. — Notably, the court's solution is the same—"all counts run concurrently by user account"—whether the arbitrary multiplier happens to be one or one hundred in a given case. The information demands on the court are thus relatively light, compared with trying to calibrate awards to be correct "in the average case" (when stuck with the wrong unit). Once the court decides on the right unit, that unit naturally serves as the grouping by which the awards should be concurrently run.

Moreover, the device relieves lawmakers of the need to enumerate (and to anticipate) the wide range of the possible variations that may arise in new cases. Think of the possible contrasts in how harm might accumulate for songwriters as opposed to copyright "trolls"; or in how harm might be caused by individual downloaders as opposed to file-sharing services. The type of victim, the type of injurer, the basic nature of the invasive act—how harms add up may vary along many dimensions, from case to case.

And then there are the future variations that legal designers cannot easily anticipate. Would snooping on e-mail in the "cloud" be counted as access to one "facility" under the relevant statute[126]—or to dozens or hundreds, whatever the number of servers may be? It is easy to see why statutory enumeration of unit definitions (or even of the dimensions of potential variation) may be infeasible.

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[125] And the award should be set to reflect the per-account harm. In addition to being easy to understand as such because concurrence has been articulated, this amount also may make intuitive sense because it reflects the fact that a single login would suffice to cause that amount of harm.

[126] See Stored Communications Act, 18 U.S.C. § 2701(a)(1) (2012) (specifying punishment for a person who "intentionally accesses without authorization a *facility* through which an electronic communication service is provided") (emphasis added); cf. *Pure Power Boot Camp*, 759 F. Supp. 2d at 428 (emphasizing "facility" as a key statutory term in rejecting per-e-mail unit of counting).

Theories of harm and remedies. — More fundamentally, the concurrent damages option also allows for some tailoring, case by case, to different conceptions of harm: In one copyright case, the loss could be seen as purely economic (say, the lost sale of a season boxed set); yet in the next case, it could be seen as something closer to dignitary harm (an offense to the writer of each episode).

Varying aims of regulation, or theories of remedies, can also be accommodated: What may be the right unit of harm to be internalized in a given case, for optimal deterrence purposes (say, the message-by-message offensiveness of having one's e-mail read by a third party), might differ from the right unit of gains to be wiped out, for absolute deterrence purposes (the employer's learning curve about personal secrets).

More generally, it is worth emphasizing that the device proposed here is an *option* that can be used or forgone in any given case, in service of whatever remedial aims the judge finds to be most appropriate to that case (including but not limited to familiar notions of compensation, deterrence, punishment, or unjust enrichment). Such an option is useful as long as a judge can discern, under her chosen remedial theory, what unit of prosecution best reflects the real offense, or what would amount to under- or overcounting, or how much total damages would be inadequate or excessive. Moreover, to the extent that such criteria are in tension in a given case (for example, if overcounting may actually help to reach a desired level of deterrence because the statutory per-count maximum has been set too low), then again the option allows the judge to choose which purpose takes priority.

B. Flexibility Without Vagueness

Can the same degree of tailoring also be achieved through more elastic statutory drafting or interpretation—such as through the use of stretchy language? One might think that using generic terms (such as "works" or "violations") or permitting alternative groupings (such as "compilations") in statutory drafting could do some of the work.

Yet recent experience suggests that rigidity can emerge nonetheless, due to the reluctance of some judges to make use of such elasticity and due to the ossification of judicial constructions into case law. The lifespan of textual elasticity may be no more than one case. If so, then introducing another (and more judge-friendly) method of tailoring would not be redundant, but essential.

1. Inelastic Terms

Consider first the terms "work" and "compilation" in the Copyright Act. One might have imagined that, even beyond the elasticity in the words themselves, their co-existence might offer a convenient option in cases involving a group of multiple works: A court seeking to tailor the damages award could functionally choose one or the other term, as suits the structure of the harm in a given case.

Yet the leading case of *Bryant v. Media Right Productions*[127] suggests how readily some courts will give away such flexibility. The *Bryant* court held that all of the songs on a music album must be grouped together as a "compilation" (and thus as a single count for statutory damages purposes) if they were originally issued together as an album. Disapproving of other circuits that have leaned more functionally (taking as a touchstone whether the smaller unit has independent economic value, such as being sold individually), the *Bryant* court rejected any such approach.[128] It did so without reservation: "This [statutory] language provides no exception for a part of a compilation that has independent economic value, and the Court will not create such an exception."[129]

In another striking judicial articulation, in a Wiretap Act case, a court noticed the anomalies that would arise from a rigid reading of vague statutory language—and yet stuck to it nonetheless.[130] There, the statutory damages awards were pegged to the unit "each day of violation."[131] It seems fair to wonder if this language is capacious enough to allow counting of "each day of violation" *for each violation* when it makes sense to do so. But this leading case (about employer snooping, as it happens) emphatically ruled out such an option: "[I]t is irrelevant in calculating statutory damages that 100 violations of the Act might occur on

[127] 603 F.3d 135 (2d Cir. 2010).

[128] Id. at 142 ("At least three other courts have adopted the 'independent economic value' test. . . . [W]e decline to do so in this case.").

[129] Id. Meanwhile, a leading case concerning television episodes set down a stake at the opposite pole. Twin Peaks Prods. v. Publ'ns Int'l, 996 F.2d 1366, 1381 (2d Cir. 1993) (explaining that "[t]he author of eight scripts for eight television episodes is not limited to one award of statutory damages just because he or she can continue the plot line from one episode to the next and hold the viewers' interest without furnishing a resolution"). The tension between these two rigid poles, in two distinct contexts, should not be mistaken for case-to-case flexibility *within* each context. Think again of our illustration about the viewer who downloads both drama and comedy television series.

[130] Desilets v. Wal-Mart Stores, 171 F.3d 711, 714 (1st Cir. 1999).

[131] 18 U.S.C. § 2520(c)(2)(B) (2012).

one day, 50 on a second, and only 2 on a third day."[132] Every day counts for a single award.[133]

Although acknowledging that "[c]ertainly, each interception separately injures a victim, as does each disclosure, and each intentional use of intercepted conversations," the court dismissed the reading that would seem to follow: "[W]hile a plausible argument can be made that providing separate minimum damage awards for each *type* of violation would better serve the Act's purposes, that is an argument that must be presented to Congress."[134] In following this lead, another circuit court also took comfort in attributing the anomaly to Congress: "While measuring damages by days of violation does create the possibility of treating different defendants similarly (since single and multiple violations on any given day both count as one), at least this imbalance arises from the plain language of [the statute]."[135]

It thus appears that some courts will tend to use statutory text, even when it is vague, as a source of rigidity rather than flexibility.[136] Of course, in some contexts it may be good legal design to define the statutory unit narrowly, while complementing that rigidity by adding flexibility elsewhere. Rigid definitions do have their uses—for example, putting potential violators on notice or clarifying what must be proved in enforcement. On this view, one reason to add a concurrent damages option is precisely to *avoid* the need to stretch statutory terms.

Yet even when courts *are* willing to make use of textual elasticity in choosing the unit for counting damage awards, there may still be reason to prefer using concurrent damages to do so. Different sites of discretion can coexist—and should, if they serve different purposes. Each then relieves the pressure to use another as a second-best.[137]

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[132] *Desilets*, 171 F.3d at 714.

[133] This, despite the obvious potential for manipulation—as recognized by another court in the epigraph about piling violations into a "Pollution Day." See Borden Ranch P'ship v. U.S. Army Corps of Eng'rs, 261 F.3d 810, 817 (9th Cir. 2001).

[134] *Desilets*, 171 F.3d at 714, 716.

[135] Smoot v. United Transp. Union, 246 F.3d 633, 645–46 (6th Cir. 2001).

[136] This is hardly news. One court made a point of citing a venerable (and highly quotable) exemplar: "As Justice Holmes wrote in a civil case raising a unit-of-prosecution issue, 'the real question is simply what the statute means.'" Nat'l Ass'n of Home Builders v. Occupational Safety & Health Admin., 602 F.3d 464, 467 (D.C. Cir. 2010) (quoting Mo., Kan. & Tex. Ry. v. United States, 231 U.S. 112, 119 (1913)).

[137] In criminal law, for example, judges use concurrent sentencing alongside many other tools of flexibility (not least, sentence length). Consider again the public communication

2. Reason-Forcing

The option of concurrent damages serves, moreover, as a *reason-forcing* device for the courts. It adds a new decision point, one that demands attention to the question of what actually happened—rather like the "real offense" approach of some criminal sentencing guidelines.[138] Whatever the statutory unit is taken to mean, the presence of the option of running damages concurrently will still lead judges to ask the further question: "What kind of act is the harm really coming from, and how do the harms add up?"[139]

The option thus shifts the focus away from textual manipulation. Positive spillovers for the development of case law may result. The judicial articulations entailed in running damages concurrently can produce more useful precedent than, say, various ways of stretching a generic statutory term. What collects as guidance for future courts are the earlier courts' *reasons* about when and why concurrence is (or is not) suitable and about how to choose the ideal unit of violation for a given sort of case. Instead of sticky semantics, what sticks is useful reasoning.

3. Statutory Feedback

One self-evident limitation remains, however. This newly added flexibility is one-sided. The use of concurrence can cluster smaller units, but it cannot break larger units down. (This same limitation is familiar from criminal sentencing.) What about those cases in which the statutory unit is already too large or too aggregated?

Creating the option of concurrence should encourage statutory drafters (or judges interpreting terms as a matter of first impression) to choose finer-grained units of measurement than they otherwise might.[140]

benefits made possible by carefully managing their use, jointly, as demonstrated in the sentencing adjustment in *Regina v. Wacker*. See supra note 78.

[138] At the same time, it offers more structure (and entails lower information demands) than the total discretion over damages that courts exercise in other contexts.

[139] That is the formulation for optimal deterrence; for absolute deterrence, the question would focus on the source and structure of the actor's gains.

[140] A leading case under the Clean Water Act—in the same spirit as the "smallest atom" principle noted here—expressly sought to increase the courts' discretion by interpreting an opaque penalty provision in a way that maximized the number of counts (where there was no per-count minimum award). See Chesapeake Bay Found. v. Gwaltney of Smithfield, Ltd., 791 F.2d 304, 314 (4th Cir. 1986) (noting the aim of "providing a district court a framework within which it will have sufficient flexibility to assess penalties that suit the particular circumstances of each case"), vacated, 484 U.S. 49 (1987); id. at 315 ("Again, what is im-

In the copyright story, for instance, courts can more comfortably interpret "works" as per-song or per-episode (or even per-segment, as might be suitable for NPR newscasts or *Saturday Night Live*), knowing that they will have an option to collapse the resulting count or to aggregate into larger units as needed, in future cases.[141]

The flexibility gained by introducing concurrence is greatest, in fact, when the initial counting unit is set as the "smallest atom" of action that can cause cognizable harm. Concurrence can always regroup those counts into larger units. Going the other way, by contrast, is infeasible: Concurrence cannot break down larger units into finer ones. Nor would readjustments from larger to smaller units be desirable as a practical matter; for reasons of notice, it may be better to lean in favor of a stricter warning at the outset—"every little invoice" or "every little song"—even if the actual award later ends up collapsed into fewer counts.

One might think that existing statutory damages are already pegged to the smallest atom, but that is not generally true. Several prominent statutory schemes currently use medium-sized units (rather than smaller but also plausible units). In each, there is room to shift closer to the smallest atom design. And although the political economy of any given statutory choice is outside the scope of this analysis, it seems fair to assume that such a shift can be eased by (and packaged together with) a proposal for a device allowing the judicial reduction of effective counts in a given case.

Best known among such already-grouped units may be the use of "works" (rather than "infringements") as the unit of counting for statutory damages purposes in the Copyright Act: No matter how many infringements of a given work occur, all such infringements of the same work only qualify (collectively) for a single statutory damages award.[142]

portant is to adopt an approach that will give district courts the continuity of possibilities necessary for them to assess appropriate sanctions in every case.").

[141] In *Gwaltney*, the court assumed that the problem of harsh and anomalous results "dissipates when one recalls that § 1319(d) serves only to set a *maximum* penalty"—and thus a court may lower the per-violation penalty as needed. *Gwaltney*, 791 F.2d at 315. This Article has already argued against such ad hoc fictional pricing in Part I, but the point about hydraulics is similar: Adding flexibility in one place enables rigidity elsewhere.

[142] See, e.g., Twin Peaks Prods. v. Publ'ns Int'l, 996 F.2d 1366, 1381 (2d Cir. 1993) ("The current statute shifts the unit of damages inquiry from number of infringements to number of works."); Arista Records LLC v. Lime Grp. LLC, 784 F. Supp. 2d 313, 320 (S.D.N.Y. 2011) ("The Court thus finds that Plaintiffs are entitled to a single statutory damage award from Defendants per work infringed, regardless of how many individual users directly infringed that particular work.").

Adding a back-end option of running damages concurrently may ease a legislative return to finer units representing individual infringements, such as per copy or per performance.[143] Similarly, under the Lanham Act, statutory damages for counterfeit goods are now pegged to each "type of goods or services";[144] one natural smaller unit would be the actual number of goods or services, rather than their types.

In the Stored Communications Act, adding the option of concurrent damages may encourage resizing the basic unit to be "per communication" or another finer measure. (As it happens, this may already be a possible interpretation under the current phrasing of the ECPA.[145]) If so, then a court may start with the number of e-mail messages as the initial count, *N*, and then run those awards concurrently as needed—thereby tailoring the effective unit for a given case. And under the Wiretap Act, as noted, the courts have insisted on reading "for each day of violation" as encompassing all violations on a given day within one award.[146] One obvious alternative would be to count each violation separately, if more than one occurred on a given day.

C. Harms or Gains?

Thus far, we have been assuming that the unit of gain is the same as the unit of harm, but this is not always true. Consider our television viewer who downloads comedy series, enjoying them episode by episode—but suppose now that the studios sell these shows only by the season.[147] The unit of gains is per episode, as before, but the unit of harm is per season. (And these units are not consistent proxies for each other

[143] The Copyright Act of 1909 did in fact use these units (for example, "every infringing copy" and "every infringing performance"). Ch. 305, § 25, 35 Stat. 1060, 1070–71 (repealed 1978). The earliest federal copyright act set damages of fifty cents "for every sheet." Copyright Act of 1790, ch. 15, § 2, 1 Stat. 124 (repealed 1831).

[144] 15 U.S.C. § 1117(c) (2012) (pegging damages at "not less than $1,000 or more than $200,000 per counterfeit mark per type of goods or services sold, offered for sale, or distributed, as the court considers just" or $2,000,000 if willful).

[145] The ECPA provision refers twice to the electronic "communication," arguably an alternative unit of violation. It is reported that some trial courts have tried this approach, but no appeals court has approved it. See, e.g., Van Alstyne v. Elec. Scriptorium, 560 F.3d 199, 201–02 (4th Cir. 2009) (vacating the trial court's statutory damage award of $150,000 for 150 violations, apparently a per-message count).

[146] See, e.g., Desilets v. Wal-Mart Stores, 171 F.3d 711, 714 (1st Cir. 1999).

[147] As before, also assume that each season of any show is sold for the same price (and that this is the measure of harm). Think of selling only boxed sets or of restrictions against the sale of individual episodes on iTunes.

because different shows will vary in the number of episodes per season.) Should the damages be pegged to per episode or per season?

New considerations arise for the choice of the unit of liability, and for the use of concurrent damages, when the units of harms and of gains are not aligned. The following illustrations will lead into a more general analysis of an array of possible configurations—as well as an intriguing set of exceptions to the familiar heuristic that, for optimal deterrence, damages should be pegged to the same unit as the harm.

1. Differing Units

Imagine an employer monitoring his employees, without permission, using software that continuously feeds him whatever is happening on employee computers.[148] The relevant statute is a wiretap law prohibiting such real-time interceptions of wire or electronic signals.[149] This wiretap law provides for statutory damages pegged to a "per day" unit.[150] Measuring continuous monitoring in units of time seems intuitive; and in many cases this "per day" unit may well be a sensible way to count the harms done to the employees. (You might feel that each day you are being monitored is a privacy offense of the same degree.) The employer's gain from monitoring may also be roughly the same day to day. Here, the unit of harms and the unit of gains are aligned. They also match the statutory unit of liability.

But now imagine that the snooping employer is seeking particular information—say, to see who has been leaking confidential information to the press.[151] Here, the employer's gains from snooping follow a learning

[148] Another possibility is the use of keylogging software. See Brahmana v. Lembo, No. C-09-00106 RMW, 2009 WL 1424438, at *4 (N.D. Cal. May 20, 2009) (denying motion to dismiss under Wiretap Act).

[149] Title III of the ECPA, known as the Wiretap Act, deals with interceptions in real time, see 18 U.S.C. § 2511 (2012), whereas Title II, known as the Stored Communications Act, deals with hacking stored e-mails, see 18 U.S.C. § 2701 (2012). As reflected in the illustrations, each title has a different statutory damages structure. See also Wiretap Act: Omnibus Crime Control and Safe Streets Act of 1968, Pub. L. No. 90-351, tit. III, 82 Stat. 212 (codified as amended at 18 U.S.C. §§ 2510–2522 (2012)); Stored Communications Act: Electronic Communications Privacy Act of 1986, Pub. L. No. 99-508, tit. II, 100 Stat. 1848 (codified as amended at 18 U.S.C. §§ 2701–2712 (2012)).

[150] In the federal Wiretap Act component of the ECPA, the statutory damages are set at "$100 a day for each day of violation." 18 U.S.C. § 2520(c)(B)(2)(B) (2012). There is a starting bid, so to speak: a minimum of $10,000 (or 100 days' worth). Id. This complication is ignored in the hypothetical.

[151] Recall the recent Harvard College scandal. See supra note 2.

curve; if any clues are to be found, they should become apparent early on. Yet the harms—the loss of privacy—may still add up day by day for the individual affected. The unit of gains is a certain amount of information, but the unit of harm is an amount of time. They are not aligned.[152]

Next, consider instead a hacker who is targeting a rival corporation, seeking insider knowledge of its business strategies and tracking that company's Internet traffic in real time. As with the snooping employer, this hacker's (or the client's) gains might follow a classic learning curve.[153] Yet, unlike the individual whose privacy is violated day after day, the corporation being hacked might not especially care about the raw duration of the offense; instead, it may care only about the informational advantage it has lost (mirroring its rival's learning curve). Here, the unit of harm and the unit of gains are again aligned with each other[154]—and *neither* is aligned with the statutory unit.

2. The Role of Concurrence

In assessing the potential role of concurrent damages, the central question is whether the statutory unit aligns with the unit of harms, the unit of gains, both, or neither. If optimal deterrence (internalization of harm) is the aim, then the general heuristic is to use the concurrence option to peg damages to the unit of harm. This also corresponds to the aims of compensation, of course. But, if absolute deterrence (eliminating gains) is the aim, then the peg should be the unit of the violator's gains.

The Chart below details the possible configurations of the relevant units for harms and for gains, as well as the unit of liability for which damages are initially pegged by law; and it identifies the likely effects on behavior under varying conditions of knowledge and control by the actor. In its notation, *C* denotes the larger, collective unit (say, seasons of a show), and *N* denotes the smaller unit (episodes). The following analysis will focus on the compensation and the optimal deterrence aims because the corresponding analysis for absolute deterrence is far simpler (because the unit of harm is then irrelevant).

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[152] Due to the diminishing marginal gains, they are also not easily convertible proxies for each other: Harm increases linearly per day, but gains do not.

[153] It is just as easy to imagine a scenario like this in which the learning curve would *not* level off (or only a little)—and such variety of harm structures is precisely the point.

[154] They are aligned whether articulated as per-unit-of-time (and diminishing marginally) or as per-amount-of-information.

Many of these situations are already familiar from the illustrations. The *C*-*C*-*N* configuration is the classic case for the use of concurrent damages: In our original story of the television viewer, the unit of both harms and gains is per season, and yet the statute has pegged damages to the wrong unit (per episode).[155] The court should run damages concurrently by season (*C*-*C*-*C*, in effect). Leaving damages pegged to *N* would tend to undercompensate and underdeter behaviors with a low *N*-to-*C* ratio (such as downloading seasons with the ten one-hour episodes), while overcompensating and overdeterring high-ratio behaviors (seasons with twenty half-hour episodes). And if our viewer does not observe *N* before acting,[156] then she would face noisy ex post realizations of damages awards.

The *C*-*N*-*N* case corresponds to the new variation of the story, in which the unit of harm is per season but the unit of gains is per episode. For compensation and optimal deterrence, the desired result is *C*-*N*-*C*, again achieved by running damages concurrently by season. But doesn't this just encourage the downloader to shift toward seasons with more episodes? Although such substitution was deemed distortionary above, here the shift to a higher *N*-to-*C* ratio is efficient: She gets more episodes to enjoy, without causing more harm to the studios.[157]

Consider now the lower part of the Chart, where the unit of harm is the *smaller* unit *N*. Pegging damages to *N* would then generally be correct. But what if our television viewer lives in a jurisdiction that pegs damages to the collective unit *C* instead? (Perhaps the case law requires collapsing multiple works into a "compilation" whenever possible.[158]) The statutory unit is then misaligned with the unit of harm, and there again arise the possibilities of over- and undercompensation, over- and underdeterrence, distortionary substitution, and noise.

Concurrence cannot break down this larger unit, however. Again, what is needed is legislative or case law revision recognizing that the initial peg should be episodes, not seasons, given that harms are measured per episode—in at least *some* cases. One might then hope that, as

[155] For discussion of the original illustration, see supra text accompanying notes 108–12.

[156] One might imagine her downloading shows without inspecting the number of episodes per season.

[157] Again, it is assumed that the studios only sell the show by season, that prices are the same among shows, and that the sales price is assumed to be the measure of harm.

[158] See the discussion of *Bryant v. Media Right Productions*, supra Subsection II.B.1.

suggested above, the very availability of the concurrent damages option would ease such a complementary shift.[159]

FORM OF MISMATCH			**EFFECTS ON DETERRENCE**			**ROLE FOR CONCURRENT DAMAGES (GROUPING BY C)**
Unit of harm	*Unit of gains*	*Formal unit of liability*	*If actor does not observe unit of liability*	*If actor observes but cannot control unit of liability*	*If actor can control unit of liability*	
C	C	N	Pure noise	Overdeterrence (if high N/C) Underdeterrence (if low N/C)	Distortionary substitution	Ideal use
C	N	N	—	—	Overdeterrence (if low gains) Underdeterrence (if high gains)	Ideal use
C	N	C	Blind margin?	Efficient deterrence	Efficient substitution	—
N	N	C	Pure noise	Overdeterrence (if low N/C) Underdeterrence (if high N/C)	Distortionary substitution	—
N	C	C	—	—	Overdeterrence (if low gains) Underdeterrence (if high gains)	—
N	C	N	Blind margin?	Efficient deterrence	Efficient substitution	Only if blind margin

D. The Blind Margin

There is one potential use of concurrent damages, however, that at times runs against the standard heuristic that for optimal deterrence, the unit of violation should be pegged to the unit of harm. This situation arises when incentives applied to the harm margin (say, *N*) simply can-

[159] Recall the similar shift in *Gwaltney*, the Clean Water Act case. See supra note 140.

not affect behavior because that margin is invisible to the actor. We might call this a "blind" margin.

Imagine a casual music listener who illegally downloads his friends' playlists from time to time, enjoying them as a way to try out well-curated music by independent artists of a variety of styles. For this listener, the salient unit for his subjective gains is the number of playlists he gets to try, not the raw number of songs he accumulates. In fact, he rarely bothers to check the number of songs on any playlist he downloads.[160] But assume that from the copyright-holding musicians' perspective, the harm is nonetheless measured per song—perhaps on a dignitary theory of harm to the creative artists.[161]

If the statutory unit is per song, then it matches the unit of harm (suitably, for compensation and optimal deterrence). The problem is that this unit is not salient to the infringer, who essentially ignores how many songs are on any of the playlists he is downloading. It is not his unit of gains (nor the margin along which he makes his decisions). Should this unit nonetheless be used for assessing damages? Or should concurrent damages be used to collapse counts by playlist to better reflect how this downloader thinks?

Attention-forcing. — The answer is relatively easy if this downloader can be made to pay attention to the number of songs (rather than ignoring it) by the courts' adherence to a per-song counting method. If such attention-forcing is possible, then the dilemma dissipates.[162] He might then shift toward downloading playlists with fewer songs. And in this case, the shift would be a move toward efficiency.

But what if such attention-forcing is unlikely, or even impossible? If the downloader cannot readily be brought to pay attention to the number of songs on the playlists he is collecting, then it may do little good to apply external incentives on this margin. It may even be meaningless, as he cannot make sense of regulatory incentives pegged to a number he does not observe.

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[160] If it helps the imagination, one might suppose that each playlist is long enough that there are always more songs than the downloader cares to listen to.

[161] Or, to offer a more pragmatic variation, imagine that each song's presence on his listening device means it can be used by others, even if he himself never gets around to hearing it.

[162] It is not a trivial assumption that a listener would have any idea what courts are doing. But it is perhaps more plausible today, given the recent high-profile *Sony* and *Capitol Records* cases with massive statutory damage awards for relatively few songs. Sony BMG Music Entm't v. Tenenbaum, 660 F.3d 487, 489–90 (1st Cir. 2011); Capitol Records, Inc. v. Thomas, 579 F. Supp. 2d 1210, 1227–28 (D. Minn. 2008).

The second-best. — If attention-forcing is infeasible, then the decoupling of the unit of liability from the unit of harm may be required. What the actor *does* observe may need to become the target of external pressure. (Notably, however, such a shift would separate the pursuit of optimal deterrence from the pursuit of accurate compensation.)

In the story of the corporate hacker, the gains and harms are aligned. But what if she does not have any good guess as to how much information she will turn up for each day of monitoring? The proper unit—a measure of information—would be a blind margin. Regulatory incentives may then need to be applied to a margin she *can* observe, such as the amount of time she continues monitoring.

In this second-best approach, noise in the realization of the actual awards would be inevitable, but at least the ex ante incentives will be more salient and understandable. How useful it is to shift from a first-best (but blind) margin to a second-best (but observable) margin will vary, of course. Blindness may be a matter of degree. But at the extreme, if the unit of harm is a measure that is unknowable for the actor, or if the actor has no ability to translate those units into what he does observe, then basing damages on the unit of harm may simply be futile—virtually meaningless to the actor's choices.

This analysis of the blind margin suggests a further need for flexibility, as cases governed by the same statute may vary along this dimension as well. And again, tailoring can be achieved through the use of concurrent damages: For *this* downloader, the courts can shift the incentives from the blind margin (number of songs) to the margin the actor does respond to, by running counts concurrently by playlist. For *this* hacker, the courts can keep the incentives trained on the observable margin (number of days) by declining to run counts concurrently by the unit of harm.

CONCLUSION: COMMON LAW

The most immediate, ready-to-use role for a concurrent damages approach is found in what may seem to be a surprising context: common law damages. Much of this Article's analysis has focused on statutory damages, for the basic reason that they require strict linearity. Yet it is worth a few closing words to consider why, even where damages are unconstrained, the concept of concurrent damages can be a useful rubric for the courts to adopt in explaining their *discretionary* awards.

The easy but incomplete answer is that formal flexibility may entail rigidities in practice.[163] Linearity is a natural tendency, due to the convenience of simply stacking up awards, and benchmarking is commonplace.[164] Proof may even be structured in this way (proving separately the number of violations and the harm per violation). Or, once the amount of harm for a given count is established, it may be extrapolated to other counts. A court may be unwilling to depart from such defaults, absent a clear way to say what it is doing and why—and the concurrent damages vocabulary offers precisely that. But what about contexts not encrusted with de facto rigidities, where damages truly are discretionary even in practice?

When damages are discretionary, reaching the optimal award may be easier *done* than *said*. Recall the earlier point that a concurrent damages framework may be useful, for reasons of judicial articulation, even if accuracy of damages can be achieved in other ways.[165] The expressive benefits here mirror those in the statutory setting. First, using the rubric of concurrence instantly makes clear how a *nominal* count of violative acts translates into an *effective* count of injuries. Second, it can prevent a variant of the fictional-pricing problem: When a judge or jury gives no explanation for a discretionary award, future courts and other observers may nonetheless back out artificial averages for use as benchmarks.

Moreover, the procedural advantages of a concurrent damages approach for appellate review may be especially useful in a discretionary setting where total damages would otherwise be reported as a single number without explanation. Consider an appeals court trying to reverse engineer the reasons for such an award. Contrast that difficulty with the clear reporting of counts, amounts, *and* structure that comes with a concurrent damages articulation. As a practical matter, such a method of reporting would be uncontroversial. Judges are free to explain an award as

[163] For a discussion of possible psychological reasons for such tendencies, see Frederick Schauer, The Tyranny of Choice and the Rulification of Standards, 14 J. Contemp. Legal Issues 803, 806 (2005).

[164] Judge Posner famously noticed one instance of linear damages thinking (calling it out as "arbitrary") in the jury award of common law punitive damages in the hotel bedbugs case of *Mathias v. Accor Econ. Lodging*, 347 F.3d 672, 678 (7th Cir. 2003), noting, "It is probably not a coincidence that $5,000 + $186,000 = $191,000/191 = $1,000: i.e., $1,000 per room in the hotel." Benchmarking on past awards is discussed above. See supra text accompanying note 22.

[165] See supra text accompanying note 138.

they see fit—including by referencing the logic of concurrent damages (just as they have articulated other formulas).

Beyond such expressive advantages, concurrent damages thinking may well impose some actual discipline on discretionary damages, much as it introduces needed flexibility into statutory damages.[166] For example, the judge can instruct a jury to assess damages—and to report its findings—in this more systematic way.[167] And the familiarity of the concurrence concept should make such instructions easy for a jury to follow. (By contrast, think again of the awkward alternative: "If you, the jury, find *more* violations, you should award *less* in damages for each one.") How closely juries will follow damages instructions is debatable[168]—but it seems fair to assume that they are more likely to follow those that make more sense.[169]

For dealing with the anomalies created by strict linearity in statutory damages schemes, a new concurrent damages option may need to be introduced through legislation. But let's not forget: In those arenas where the courts already have free rein, no formal reform is needed—the articulation benefits of a concurrent damages approach are readily in reach.

[166] The point applies also to discretionary awards *within* a statutory setting.

[167] See *Sony*, 660 F.3d at 503 n.17 ("District courts have considerable discretion about the formulation, nature, and scope of the issues on a special verdict form." (quoting Uphoff Figueroa v. Alejandro, 597 F.3d 423, 434 (1st Cir. 2010)) (internal quotation marks omitted)).

[168] See Cass R. Sunstein, David Schkade & Daniel Kahneman, Do People Want Optimal Deterrence?, 29 J. Legal Stud. 237, 250 (2000) (explaining that mock jury experiments show resistance to certain damages instructions); Catherine M. Sharkey, Economic Analysis of Punitive Damages: Theory, Empirics, and Doctrine, *in* Research Handbook on the Economics of Torts 486, 504–05 (Jennifer Arlen ed., 2013) (citing Jennifer H. Arlen & Eric L. Talley, Experimental Law and Economics, at xxxiii–xxxiv, xxxvii (2008)) (questioning the external validity of such mock jury experiments).

[169] Moreover, judges have ways of monitoring adherence—including the use of special verdict forms, with JNOV (or renewed judgment as a matter of law) available should a jury's coloring-outside-the-lines be evident from the answers.

Figure 1:

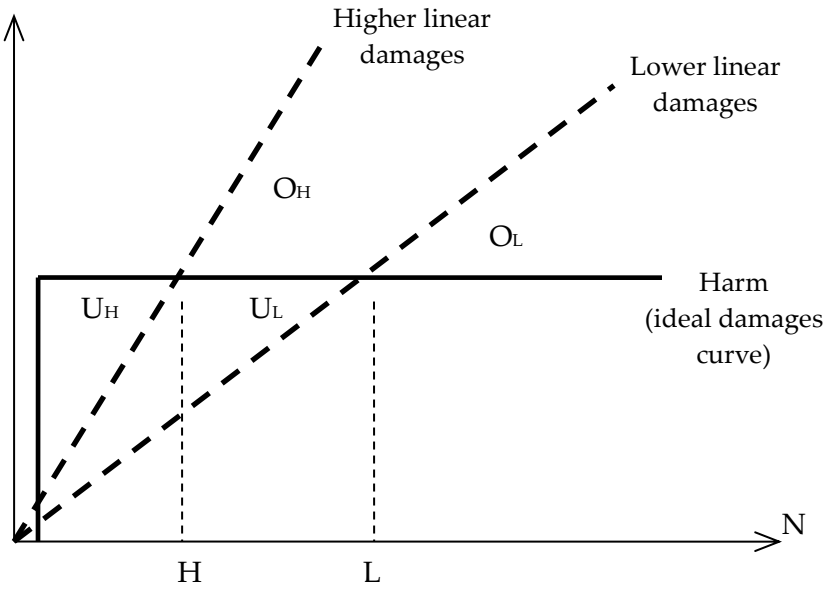

Figure 2:

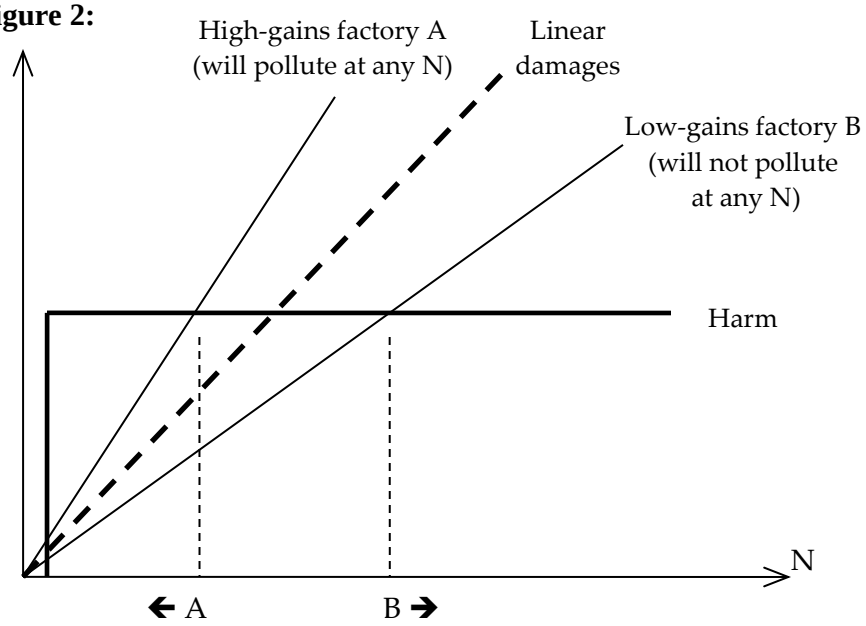

Figure 3:

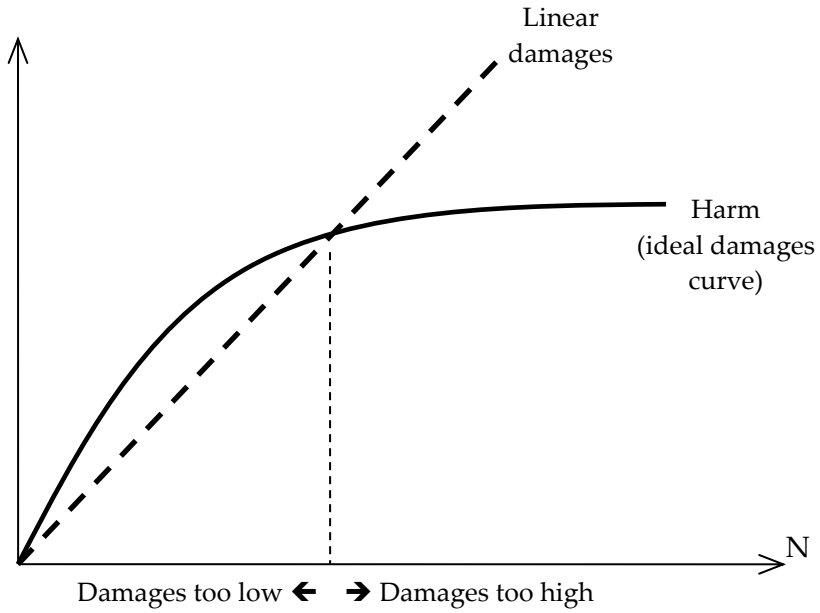

Figure 4:

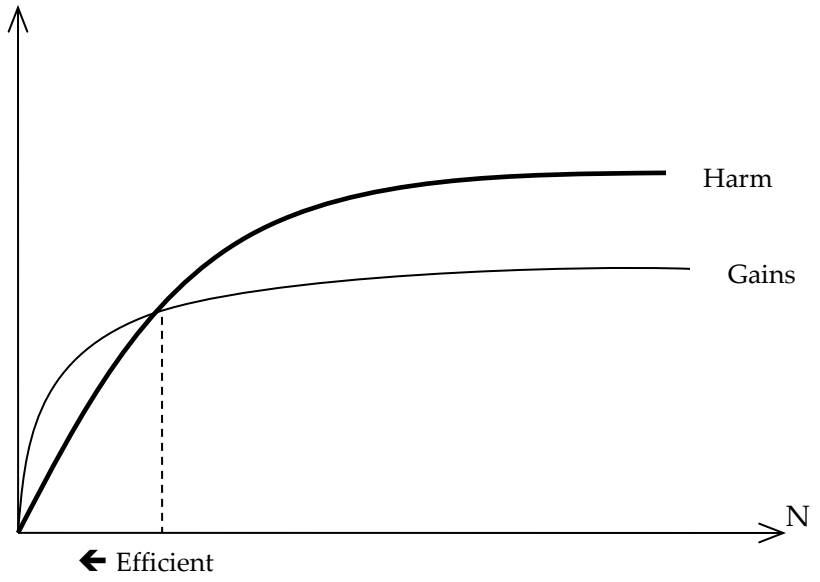

Figure 5:

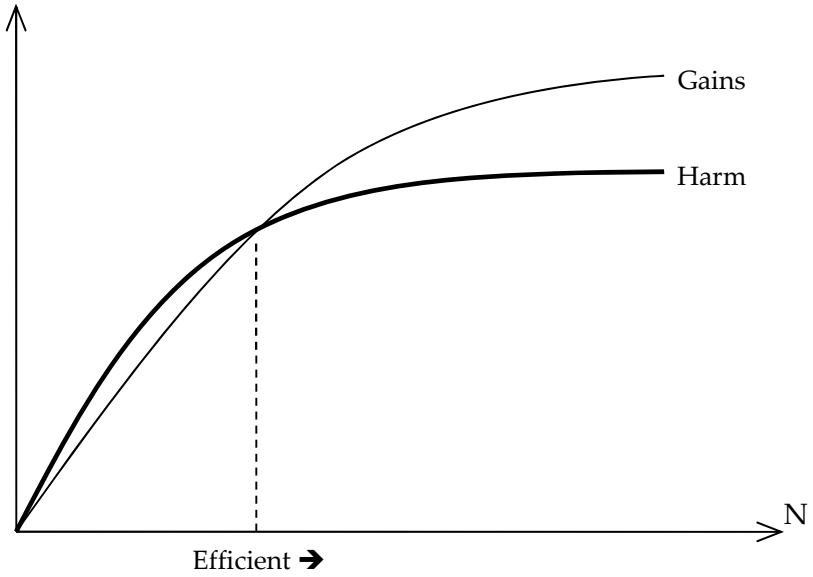
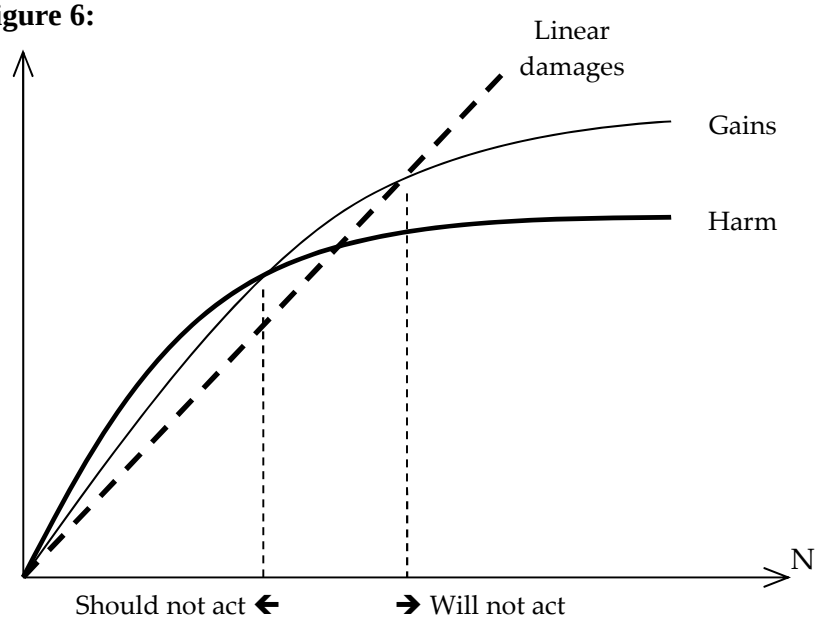
Figure 6: