Baseline Framing in Sentencing

**ABSTRACT.** When judges sentence criminal offenders, they begin their analysis with a baseline sentence established by statutes or guidelines. Cognitive biases will likely cause this initial baseline to frame judges' thought processes, such that judges will impose different sentences in identical cases depending on the baseline sentence from which the judge's analysis begins. This Note shows that baseline framing will lead to disproportionately low sentences in a floor baseline regime, disproportionately high sentences in a ceiling baseline regime, and sentences disproportionately clustered around the typical sentence in a typical crime baseline regime.

In order to design the most just sentencing procedures, policymakers must consider baseline framing effects. This Note suggests that policymakers who want to minimize the number of sentences skewed by cognitive error should implement a typical crime baseline. In contrast, policymakers who want to err against inflicting unreasoned punishment should implement Tennessee's quasi-floor baseline.

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INTRODUCTION

Under indeterminate sentencing regimes, judges use their discretion to impose sentences that best fulfill the goals of sentencing and are within a given statutory range. Sentencing statutes and guidelines provide a framework to ensure that judges fairly determine an offender's punishment. However, legislatures and sentencing commissions do not account for the effects of cognitive biases when establishing sentencing procedures. This Note shows that the postconviction sentence with which a judge begins her analysis—the sentencing baseline—affects the sentence imposed, even when the law, the facts, and the judge are held constant. The thrust of this Note is that policymakers should account for this baseline framing when designing sentencing guidelines.

Part I introduces the concept of sentencing baselines. Part II surveys psychological research about cognitive biases and explores how sentencing baselines frame judicial analysis. It concludes that, in general, baseline framing causes judges to impose sentences closer to the sentencing baseline than those judges would impose if their decisions were unaffected by cognitive biases. Part III discusses baseline framing’s implications for designing a normatively preferable sentencing regime. Every cent of a fine and every minute of incarceration should be the result of conscious, rational decisionmaking, and no component of a crime should go unpunished. But, unreasoned increases and decreases in criminal sanctions caused by cognitive error are inevitable under any sentencing regime. Policymakers must consider baseline framing when designing sentencing guidelines in order to create the most just procedures. Those who want to minimize the number of sentences skewed by cognitive error should implement a typical crime baseline. However, this Note

1. See Apprendi v. New Jersey, 530 U.S. 466, 481 (2000) ("[N]othing in [common law] history suggests that it is impermissible for judges to exercise discretion—taking into consideration various factors relating both to offense and offender—in imposing a judgment within the range prescribed by statute." (emphasis omitted)); see also United States v. Booker, 543 U.S. 220, 245-46 (2005) (modifying the Sentencing Reform Act of 1984 to make the Federal Sentencing Guidelines "effectively advisory" and explaining that the Act "permits the court to tailor the sentence in light of other statutory concerns").

2. See 28 U.S.C. § 991(b)(1)(B) (2006) (establishing that one of the goals of the United States Sentencing Commission is to "provide certainty and fairness in meeting the purposes of sentencing"); Gall v. United States, 552 U.S. 38, 51 (2007) (explaining that it is impermissible for federal judges to improperly calculate the Federal Sentencing Guideline range, treat the Guideline range as mandatory, fail to consider the goals of sentencing, base the sentence on clearly erroneous facts, or fail to explain the reasoning behind the sentence).

3. See discussion infra Section I.C for a description of typical crime baselines.
suggests that Tennessee's quasi-floor baseline\(^4\) best reflects the United States' conception of justice because, like the "beyond a reasonable doubt" standard for conviction, it errs against undeserved deprivation of life, liberty, or property.

This Note is not an argument for lenity; in fact, as discussed in Section III.C, implementing a quasi-floor baseline may result in higher sentences, rather than lower sentences, overall. Instead, it is a plea for legislatures and sentencing commissions to consider baseline framing when designing sentencing guidelines.

I. BASELINES AND PERSPECTIVES

The sentencing baseline is the sentence with which a judge begins her sentencing analysis.\(^5\) In the federal system, the sentencing baseline is a crime's base offense level.\(^6\) Using the base offense level as a starting point, federal judges adjust the offense level based on enumerated sentencing factors, then rely on the adjusted offense level and the offender's criminal history category to calculate the Guideline range.\(^7\) Judges use the advisory Guideline range to

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\(^4\) See discussion \textit{infra} Section I.B for a description of Tennessee's baseline.

\(^5\) The concept of baselines is adapted from Seth Kreimer's 1984 article, \textit{Allocational Sanctions: The Problem of Negative Rights in a Positive State}, in which Kreimer argues that the baselines for governmental allocations determine the constitutionality of allocational sanctions. Seth F. Kreimer, \textit{Allocational Sanctions: The Problem of Negative Rights in a Positive State}, 132 \textit{U. PA. L. REV.} 1293, 1352 (1984). Kreimer explains, "[T]he distinction between liberty-expanding offers and liberty-reducing threats turns on the establishment of an acceptable baseline against which to measure a person's position after imposition of an allocation." \textit{Id.} Kreimer disavowed his baseline analysis for criminal sanctions because "[a] criminal sanction is in most cases an unambiguous threat, for the normal course of events in the absence of such a sanction is not incarceration or payment of a fine." \textit{Id.} at 1355.

Although the normal course of events in the absence of a conviction is the absence of a sanction, this observation merely identifies the binary nature of convolution. Kreimer does not consider the postconviction stage of criminal proceedings when the judge selects a sentence from within a statutory range. Once guilt is established, a sentence at the ceiling of the statutory range may be viewed as the default and a reduction in the sentence as a benefit (similar to the provision of a governmental allocation). Alternatively, a sentence at the floor of the statutory range may be viewed as the default and an increase in the sentence as a heightened sanction. These differing perspectives reflect different baselines.


\(^7\) \textit{Id.} § 1B1.1(a)(2)–(8).
assist in determining "a sentence sufficient, but not greater than necessary, to comply with the purposes [of sentencing]."  

Sentencing baselines play a pivotal role in framing which components of a crime are aggravating factors and which components are mitigating factors. For example, under the current Federal Sentencing Guidelines, a defendant who “recklessly created a substantial risk of death or serious bodily injury to another person in the course of fleeing from a law enforcement officer” receives a two-level increase in his offense level. Alternatively, if the offender’s base offense level were two levels higher, the Guidelines could call for a decrease of two offense levels if the offender did not recklessly create a substantial risk while fleeing. This hypothetical alternative and the federal Guidelines should, in theory, lead to equivalent sentences when applied to the same set of facts. The only difference between the two is that “flight” is an aggravating factor in the actual guidelines and “not flight” is a mitigating factor in the hypothetical guidelines. The choice between these guidelines would be insignificant if judges imposed the same sentence under both regimes. However, if baseline framing causes judges to impose different sentences for the same offender depending on the guidelines used, then choosing the most just alternative becomes critical.

Part II focuses on the interaction between cognitive biases and baselines, while the remainder of Part I presents three baselines to help structure our discussion: (1) the ceiling baseline, (2) the floor baseline, and (3) the typical crime baseline. This Part concludes by briefly describing Virginia’s hybrid sentencing regime, which contains components of all three baselines at different points in the sentencing analysis.

8. 18 U.S.C. § 3553(a) (2006); see also United States v. Booker, 543 U.S. 220, 245-46 (2005) (holding that mandatory sentencing guidelines would be unconstitutional); U.S. SENTENCING COMM’N, supra note 6, § 1B1.1(b) (requiring judges to consider identified offender characteristics, policy statements and commentary, and other factors when imposing sentences); id. § 1B1.1(c) (requiring federal judges to consider the purposes of sentencing codified in 18 U.S.C. § 3553(a)). The purposes set forth in 18 U.S.C. § 3553 include

- the need for the sentence imposed—(A) to reflect the seriousness of the offense, to promote respect for the law, and to provide just punishment for the offense; (B) to afford adequate deterrence to criminal conduct; (C) to protect the public from further crimes of the defendant; and (D) to provide the defendant with needed educational or vocational training, medical care, or other correctional treatment in the most effective manner.


9. U.S. SENTENCING COMM’N, supra note 6, § 3C1.2.
A. Ceiling Baselines

Using a ceiling baseline, a judge begins her sentencing analysis with the maximum sentence permitted by law. The judge may reduce the sentence because of mitigating factors. Oregon’s recidivism statute for sex offenders is an example of this approach. It provides that “[t]he presumptive sentence for a sex crime that is a felony is life imprisonment without the possibility of release or parole if the defendant has been sentenced for sex crimes that are felonies at least two times prior to the current sentence.” The court may downwardly depart from the presumptive sentence “upon findings of substantial and compelling reasons.” The presumptive sentence is a ceiling baseline because life imprisonment without the possibility of release or parole is the maximum sentence available for a felony in Oregon, except for aggravated murder, for which capital punishment is available.

B. Floor Baselines

Under a floor baseline regime, the judge begins her sentencing consideration with the sentence appropriate for the least culpable violation of the law and then increases the sentence based on aggravating factors. Tennessee establishes a quasi-floor baseline, which is located near the floor but is not the lowest sentence that could be imposed. In Tennessee, “[t]he minimum sentence within the range of punishment is the sentence that should be imposed, because the general assembly set the minimum length of sentence for each felony class to reflect the relative seriousness of each criminal offense in the felony classifications.” The judge adjusts the sentence from the presumptive minimum length after considering relevant factors. If no aggravating factors are present in the offender’s case, the Tennessee Code advises that the offender receive the statutory minimum sentence.

11. Id. § 137.719(2). Mitigating factors justifying departure include, inter alia, diminished mental capacity, duress, or compulsion; a finding that the offender’s role was minor or passive; cooperation with the State; and a finding that the harm of the crime is significantly less than typical. OR. ADMIN. R. 213-008-0002 (2011).
12. OR. REV. STAT. § 163.150.
14. Id. § 40-35-210(c)(2).
15. Aggravating factors include prior criminal history, possession of a firearm, and damage sustained by the victim. Id. §§ 40-35-113 to -114.
However, Tennessee law only establishes a quasi-floor baseline because the Tennessee Code provides that “[i]f the court finds the defendant an especially mitigated offender, the court shall reduce the defendant’s statutory Range I minimum sentence by ten percent . . . or reduce the release eligibility date to twenty percent . . . of the sentence, or [apply] both reductions.” Therefore, the statutory minimum is not the floor. Rather, the floor is 10% below the statutory minimum, with a release eligibility date of 20% of the sentence.

C. Typical Crime Baselines

Using the typical crime baseline, the judge begins her sentencing analysis with the customary sentence given to a crime’s “typical offender.” The judge may adjust the sentence based on aggravating and mitigating factors. Many jurisdictions have instituted typical crime or quasi-typical crime baselines. Alaska, for example, established presumptive sentences for felonies that “represent[] the legislature’s judgment as to the appropriate sentence for a typical felony offender (i.e., an offender with the specified number of prior felony convictions, and with a typical background) who commits a typical act within the definition of the offense.” In other words, Alaska’s presumptive sentences reflect the typical crime level.

Meanwhile, the Federal Sentencing Guidelines create a quasi-typical crime baseline. Recall that under the federal Guidelines, the base offense level is the sentencing baseline. Judges consider sentencing factors to adjust the base offense level to a final offense level, which determines the Guideline range.

According to the Federal Sentencing Commission, the Commission “intends
the sentencing courts to treat each guideline as carving out a ‘heartland,’ a set of typical cases embodying the conduct that each guideline describes.” The Guideline range, not the base offense level, is intended to reflect the heartland of cases. If the base offense level were a true typical crime baseline, then it, too, would reflect the heartland of cases. For both the Guideline range and the base offense level to reflect a typical crime level, the mitigating and aggravating sentencing factors would have to balance each other out so that the final and base offense levels would be equal, on average. If, in practice, the final and base offense levels are normally different, then the base offense levels do not reflect the typical crime level, which is instead captured by the final offense level and the Guideline range. As only the final Guideline range is intended to reflect the heartland of cases, this Note identifies the federal baseline as a quasi-typical crime baseline, because the base offense levels are likely only near the typical crime level.

Moreover, empirical evidence suggests that even the Guideline ranges do not actually reflect the heartland of cases. From 2000 to 2010, fewer than 2% of sentences from the District of Massachusetts were upward departures from the Guideline range, whereas the downward departure rate ranged from 5.5% to 16.9%. If the Guidelines captured the appropriate sentence for a typical offense, one would expect the number of upward and downward departures to be equal. Thus, the Guideline range for some offenses is likely higher than the typical crime level.

D. Hybrid Baselines

Although there can only be one sentencing baseline, jurisdictions may contain additional baselines at different stages of sentencing. In Virginia, judges begin with a typical crime baseline after conviction. Once an initial sentence is determined, judges proceed to the risk assessment stage of sentencing for nonviolent offenders and sex offenders, at which point the initial sentence becomes the risk assessment baseline. The risk assessment baseline is a ceiling for nonviolent offenders and a floor for sex offenders.

The Virginia Criminal Sentencing Commission (VCSC) used historical sentencing data to establish a typical crime baseline for the “initial

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20. Id.
21. Ryan W. Scott, Inter-Judge Sentencing Disparity After Booker: A First Look, 63 STAN. L. REV. 1, 17 (2010). The District of Massachusetts is the only federal court that makes the sentencing documents needed for empirical research publicly available. Id. at 1.
recommended sentencing range." The Virginia Guidelines' departure rates evidence that the initial range is at the typical crime level. One would expect equal upward and downward departure rates with a typical crime baseline, and in 2002, 9.4% of Virginia's sentences departed upward and 9.4% departed downward. After determining the initial sentence for a nonviolent offender, the judge refers to the nonviolent offender risk assessment instrument to decide whether to convert the sentence from incarceration to an alternative punishment. The incarceration sentence serves as the new ceiling baseline for the judge's analysis because it is the highest sentence that the judge can impose.

For sex offenders, the judge refers to the sex offender risk assessment instrument after selecting an initial sentence. The instrument recommends increasing sentences for sex offenders who score above a certain threshold. This risk assessment baseline is at the floor level because the initial sentence is the lowest sentence that a judge can impose.

22. The Code of Virginia explains how the initial ranges were calculated:

The initial recommended sentencing range for each felony offense shall be determined first, by computing the actual time-served distribution for similarly situated offenders, in terms of their conviction offense and prior criminal history, released from incarceration during the base period of calendar years 1988 through 1992, increased by 13.4 percent, and second, by eliminating from this range the upper and lower quartiles. The midpoint of each initial recommended sentencing range shall be the median time served for the middle two quartiles . . . .

VA. CODE ANN. § 17.1-805(A) (2010). The Code required the VCSC to increase the midpoint of the initial recommended sentence for certain crimes. Id. § 17.1-805(A)(1)-(4).


24. See VA. CODE ANN. § 17.1-803(5)-(6); BRIAN J. OSTMOR ET AL., OFFENDER RISK ASSESSMENT IN VIRGINIA 1, 26 (2002) ("The VCSC designed the risk assessment instrument to identify, from among eligible larceny, fraud, and drug offenders who would otherwise be recommended for incarceration by state sentencing guidelines, offenders with the lowest probability of being reconvicted of a felony crime, and divert them to some form of alternative punishment.").


26. VCSC, ASSESSING RISK, supra note 25, at 10. The recommended increases are: (1) 300% for offenders who score forty-four or more, (2) 100% for offenders who score between thirty-four and forty-three points; and (3) 50% for offenders who score between twenty-eight and thirty-three points. Id.
In sum, Virginia’s sentencing baseline is a typical crime baseline, and its risk assessment baselines are ceiling and floor baselines depending on the offense.

II. FRAMING EFFECTS AND COGNITIVE BIASES

This Part explains how sentencing baselines create framing effects that lead to distortions in judicial decisionmaking. People rely on heuristics and biases to “reduce the complex tasks of assessing probabilities and predicting values to simpler judgmental operations.”27 Such cognitive error is pervasive and has been observed in judges.28 Although these mental shortcuts can be beneficial, they may also “lead to severe and systemic errors.”29


28. See, e.g., Birte Englich, Thomas Mussweiler & Fritz Strack, The Last Word in Court—A Hidden Disadvantage for the Defense, 29 LAW & HUM. BEHAV. 705, 717-18 (2005) [hereinafter Englich et al., Last Word] (asserting that prosecutors in Germany have an unintended advantage in litigation because their sentencing demand establishes the initial anchor for sentencing decisions); Birte Englich, Thomas Mussweiler & Fritz Strack, Playing Dice with Criminal Sentences: The Influence of Irrelevant Anchors on Experts’ Judicial Decisionmaking, 32 PERSONALITY & SOC. PSYCHOL. BULL. 188, 196 (2006) [hereinafter Englich et al., Playing Dice] (finding that legal professionals are influenced by random numerical anchors); Birte Englich & Thomas Mussweiler, Sentencing Under Uncertainty: Anchoring Effects in the Courtroom, 31 J. APPLIED SOC. PSYCHOL. 1535, 1538, 1545-46 (2001) (showing that German trial judges exhibit anchoring bias); Chris Guthrie, Jeffrey J. Rachlinski & Andrew J. Wistrich, Inside the Judicial Mind, 86 CORNELL L. REV. 777, 778 (2001) (concluding that federal magistrate judges’ decisions are affected by anchoring, framing, hindsight bias, the representativeness heuristic, and egocentric biases); Robert A. Prentice & Jonathan J. Kochler, A Normality Bias in Legal Decision Making, 88 CORNELL L. REV. 583, 638-39 (2003) (contending that stare decisis is an example of the omission bias); Tversky & Kahneman, supra note 27, at 1128 (presenting influential experiments on cognitive biases); see also Reid Hastie & W. Kip Viscusi, What Juries Can’t Do Well: The Jury’s Performance as a Risk Manager, 40 ARIZ. L. REV. 901, 906 (1998) (explaining that judges are susceptible to hindsight bias, though they exhibit this bias far less than do mock jurors); Jeffrey J. Rachlinski, Chris Guthrie & Andrew J. Wistrich, Inside the Bankruptcy Judge’s Mind, 86 B.U. L. REV. 1227 (2006) (finding that bankruptcy judges succumb to anchoring and framing effects, but not the omission bias); W. Kip Viscusi, How Do Judges Think About Risk?, 1 AM. L. & ECON. REV. 26, 58-60 (1999) (identifying that state judges (1) exhibit the hindsight bias, though less so than mock juries, (2) share the common biases of overestimating small risks and underestimating large risks, but are not noticeably affected when assessing substantial risks, and (3) exhibit risk ambiguity aversion—“favor[ing] well-known, established risks to smaller but more uncertain risks”).

29. Tversky & Kahneman, supra note 27, at 1124.
How one frames a question should not affect that question's answer. The "principle of invariance" states that "one's choices ought to depend on the situation itself, not on the way it is described." Yet subjects of psychology experiments tend to violate this principle. These violations are called "framing effects, because the choice made is dependent on how the situation is presented, or 'framed.'"

Amos Tversky and Daniel Kahneman have conducted many experiments demonstrating framing effects. In one experiment, they presented a group of subjects with the following problem: "Imagine that you have decided to see a play where admission is $10 per ticket. As you enter the theater you discover that you have lost a $10 bill. Would you still pay $10 for a ticket to the play?" Eighty-eight percent of subjects answered that they would, and 12% said that they would not. A second group of subjects was given the following problem: "Imagine that you have decided to see a play and paid the admission price of $10 per ticket. As you enter the theater you discover that you have lost the ticket. The seat was not marked and the ticket cannot be recovered. Would you pay $10 for another ticket?" For this problem, only 46% of subjects answered that they would buy another ticket.

The sizeable difference between the groups' responses demonstrates a violation of the principle of invariance. Each subject had the choice to buy a ticket to see the play after having lost ten dollars of value. Merely framing the ten dollars as a dollar bill or a ticket does not alter the fundamental question and should have no effect on the response.

30. BARON, supra note 27, at 264-65 (emphasis omitted).
31. See generally M. Allais, Le Comportement de l'Homme Rationnel Devant le Risque: Critique des Postulats et Axiomes de L'Ecole Américaine, 21 ECONOMETRICA 503, 527 (1953) (Fr.) (introducing the Allais Paradox, a classic problem that lays the groundwork for many experiments testing framing effects). For an English description of Allais's paradox, see LEONARD J. SAVAGE, THE FOUNDATIONS OF STATISTICS 101-02 (1954).
32. BARON, supra note 27, at 265. Chris Guthrie et al. use the term "framing effects" to describe a narrower category of cognitive error. Their term is limited to violations of the principle of invariance caused by "categoriz[ing] . . . decision options as potential gains or losses from a salient reference point such as the status quo." Guthrie et al., supra note 28, at 794, 796.
34. Id.
35. Id.
36. Id.
37. Tversky and Kahneman refer to this type of framing effect as "psychological accounting." Id.
Framing effects have been observed in judges, as well. Building on Tversky and Kahneman’s work, Chris Guthrie, Jeffrey J. Rachlinski, and Andrew J. Wistrich conducted an experiment using 167 federal magistrate judges that tested the effects of describing “options as potential gains or losses from a salient reference point.” In the Guthrie et al. study, the judges were presented with a hypothetical copyright action in which the plaintiff had a 50% chance of recovering $200,000 and a 50% chance of recovering nothing. Half of the judges were told, “You have learned that the defendant intends to offer to pay the plaintiff $60,000 to settle the case. Do you believe that the plaintiff should be willing to accept $60,000 to settle the case?” The other half of the judges were told, “You have learned that the plaintiff intends to offer to accept $140,000 to settle the case. Do you believe that the defendant should be willing to pay $140,000 to settle the case?” Nearly 40% of the judges presented with the plaintiff-gains condition said the plaintiff should accept the settlement offer, but only 25% of the judges presented with the defendant-loses condition thought that the defendant should accept the offer. The two conditions involved equivalent settlements: in each case, the judges were asked whether

38. Guthrie et al. based their experiment on the “Asian Disease Problem,” in which Tversky and Kahneman gave subjects the following problem:

Imagine that the U.S. is preparing for the outbreak of an unusual Asian disease, which is expected to kill 600 people. Two alternative programs to combat the disease have been proposed. Assume that the exact scientific estimate of the consequences of the programs are as follows:

If Program A is adopted, 200 people will be saved. . . .
If Program B is adopted, there is 1/3 probability that 600 people will be saved, and 2/3 probability that no people will be saved. . . .

Which of the two programs would you favor?

Id. at 453. Tversky and Kahneman gave a second group of subjects the same problem, with the results of the programs framed differently: “If Program C is adopted 400 people will die. . . . If Program D is adopted there is 1/3 probability that nobody will die, and 2/3 probability that 600 people will die. . . . Which of the two programs would you favor?” Id.

Even though Program A is identical to Program C and Program B is identical to Program D, 72% of the subjects in the first group chose Program A and 28% chose Program B, whereas 78% of the subjects in the second group chose Program D and 22% chose Program C. Id.


40. Id. at 794.

41. Id. at 796.

42. Id. at 796–97 (internal quotation marks omitted).

43. Id. at 797 (internal quotation marks omitted).

44. Id.
the party should be willing to settle for $40,000 less than the expected value of litigation. Because the difference between the judges' responses was statistically significant, Guthrie et al. concluded that "[t]he framing of the settlement decision affected judges in [the] study."\(^{45}\)

Similar to Guthrie et al.'s framing effects, baseline framing effects will arise from classifying sentencing factors as aggravating or mitigating. All sentencing factors may be presented as either mitigating or aggravating depending on the initial baseline. Not reducing a sentence because a defendant fled the arresting officer and increasing a sentence because a defendant fled the officer both result in higher sentences for the offender who fled. Whether a judge uses aggravating factors to increase a sentence from a floor baseline or uses mitigating factors to decrease a sentence from a ceiling baseline, the judge should impose the same sentence, according to the principle of invariance. However, when a judge is uncertain whether particular factors apply, she will likely vary her sentencing analysis depending on how the baseline frames the sentencing factors, just as Guthrie et al.'s framing affected the judges in the copyright settlement study.

The remainder of Part II explores the cognitive biases that interact with sentencing baselines to cause framing effects. There are dozens of cognitive biases that affect decisionmaking.\(^{46}\) Some of these cognitive errors are unrelated to the sentencing analysis,\(^{47}\) and many others likely do affect sentencing analyses but are more strongly influenced by which sentencing factors are considered than by the sentencing baseline.\(^{48}\) This Note focuses on

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\(^{45}\) Id.

\(^{46}\) See Baron, supra note 27, at 56-57 (listing fifty-three distinct cognitive biases).

\(^{47}\) For example, it is doubtful that the congruence bias and logical biases, such as syllogistic errors and the four-card problem, play a prominent role in sentencing. Cf. Jonathan Baron, Jane Beattie & John C. Hershey, Heuristics and Biases in Diagnostic Reasoning: II. Congruence, Information, and Certainty, 42 Org. Behav. & Hum. Decision Processes 88, 89 (1988) (defining the congruence bias as the use of mechanisms to test hypotheses that are congruent with presupposed hypotheses); P.C. Wason, Reasoning About a Rule, 20 Q.J. Experimental Psychol. 273, 273-77 (1968) (describing the classic four-card experiment, which demonstrates logical reasoning errors).

\(^{48}\) Such biases include, inter alia: the availability heuristic, Amos Tversky & Daniel Kahneman, Availability: A Heuristic for Judging Frequency and Probability, 5 Cognitive Psychol. 207, 208 (1973) (defining the availability heuristic as the estimation of probability or frequency by "assessing the ease with which the relevant mental operation of retrieval, construction, or association can be carried out"); selective exposure, Baron, supra note 27, at 219 (describing selective exposure as the interaction with information reinforcing one's beliefs and the neglect of information challenging one's beliefs); attentional bias, id. at 188 (defining attentional bias as the "failure to consider alternative possibilities"); and cognitive dissonance, Leon Festinger, A Theory of Cognitive Dissonance 3 (1957) (presenting the theory of cognitive dissonance, which states that persons will try to avoid psychological
three cognitive biases—anchoring, the omission bias, and the status quo bias—because these biases appear to have the strongest relationship to sentencing baselines. This Note hypothesizes that anchoring and the omission bias cause judges to impose sentences nearer to the initial reference point—the sentencing baseline—than those that would be imposed if judges were not influenced by these biases. Similarly, the status quo bias will reinforce the effects of anchoring and the omission bias by causing judges to vary suboptimally from the sentences that the judges typically impose.

A. Anchoring

Scholars have observed anchoring in judicial decisionmaking and identified sentencing guidelines and prosecutorial sentencing demands as influential anchors. Anchoring is overreliance on an initial numerical reference point that causes “absolute judgments [to] assimilate[] toward” the initial value. When anchoring affects decisionmaking, “different starting points yield different estimates, which are biased toward the initial values.” To test the influence of anchors, Tversky and Kahneman conducted a series of experiments, which found anchoring in decisions regarding civil damages.

Experiments have also found anchoring in decisions regarding criminal damages. See, e.g., Michael M. O’Hear, Explaining Sentences, 36 FLA. ST. U. L. REV. 459, 475 (2009) (reasoning that cognitive dissonance leads to overreliance on sentencing guidelines).

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Englich et al., Playing Dice, supra note 28, at 188; see also Tversky & Kahneman, supra note 27, at 1128-29 (discussing anchoring as a form of insufficient adjustment from an initial reference point).

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Tversky & Kahneman, supra note 27, at 1128.
experiments in which participants were told they would have to estimate a quantity, such as the percentage of African states in the United Nations. The experimenters then spun a wheel, generating a number between zero and one hundred. After seeing the generated number, the subjects were asked to estimate the percentages. The randomly generated number, the “anchor,” notably affected the subjects’ estimates. The median estimate for the percentage of African countries in the United Nations was 25% for subjects with an anchor of ten and 45% for subjects with an anchor of sixty-five.

Researchers have uncovered anchoring in judges, too. Birte Englich and Thomas Mussweiler conducted experiments with German trial judges in which the judges were asked to sentence a hypothetical defendant. The judges received the same hypothetical facts, but the prosecutorial sentencing demands differed among the judges. Englich and Mussweiler found that the sentencing demands anchored the judges’ thought processes, making the final sentences closer to the demands. Englich and Mussweiler concluded that their “research has demonstrated that judgmental anchoring has a strong influence on criminal sentencing decisions.”

Guthrie et al. conducted a similar study with American federal magistrate judges. Guthrie et al. presented the judges with a hypothetical personal injury lawsuit. Judges with the no-anchor condition were asked how much they would award in compensatory damages. Judges with the anchor condition were told that “[t]he defendant has moved for dismissal of the case, arguing that it does not meet the jurisdictional minimum for a diversity case of $75,000.” These judges were asked how they would rule on the motion and how much they would award in compensatory damages. The fact pattern was constructed such that “the plaintiff clearly had incurred damages greater than $75,000,” making the motion meritless. Nevertheless, the judges with the

52. Id.
53. Id.
54. Id.
55. Id.
57. Id. at 1545.
58. Id. at 1547.
59. Guthrie et al., supra note 28, at 790.
60. Id. at 790-91.
61. Id. at 791 (internal quotation marks omitted).
62. Id.
63. Id.

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no-anchor condition gave an average award of $1,249,000, and the judges with the anchor condition awarded the plaintiff an average of $882,000.64 The difference between the two groups is statistically significant.65 Guthrie et al. concluded that “[t]he judges in [the] study relied on an anchor—the $75,000 jurisdictional minimum raised by the motion to dismiss—to estimate [the] damage awards.”66 In a similar experiment conducted by the same scholars, anchors were found to affect bankruptcy judges, too.67

This Section has shown that anchoring has a robust and pervasive effect on judicial decisionmaking, including sentencing. Moreover, as Judge Nancy Gertner explains, “[T]he 300-odd page [United States] Guideline Manual provides ready-made anchors.”68 The most significant of those anchors is the sentencing baseline, as the baseline is the initial reference point from which all other sentencing inquiries are conducted. Because anchoring causes judges to inadequately adjust their decisions from the initial reference point, this bias will cause more severe sentences if there is a ceiling baseline, less severe sentences if there is a floor baseline, and a disproportionate number of typical sentences if there is a typical crime baseline.

The federal Guidelines contain other anchors, too, created by the numerical adjustments recommended for offense-specific characteristics and general offense characteristics (such as the offender’s role in the offense, obstruction of justice, and acceptance of responsibility).69 Whereas the numerical values for sentencing factors anchor the judge’s valuation of those specific factors, the baseline anchors the entire analysis, serving as the reference point from which those sentencing factors increase or decrease the sentence. Furthermore, the sentencing baseline likely accounts for the majority of an offender’s sentence (and thus is the most meaningful anchor), whereas the sentencing-factor anchors account for smaller components of an offender’s final sentence.

Ryan Scott questions whether the federal Guidelines anchor sentencing. First, he contends that “the anchoring explanation seems strained because the Guidelines are supposed to serve as an anchor. . . . Not only is it rational for judges to give consideration to the guideline range, but it is legally

64. Id.
65. Id.
66. Id. at 792.
67. Rachlinski et al., supra note 28, at 1236.
69. See generally U.S. SENTENCING COMM’N, supra note 6, § 1B1.1 (discussing the specific and general Guideline calculation adjustments).
compelled.” However, Scott’s analysis elides a crucial distinction: guidelines are supposed to be actively considered in determining the appropriate sentence; they are not supposed to encourage irrational decisionmaking. Under federal law, “[e]ven where a district court has properly calculated the Guidelines, it may not presume that a Guidelines sentence is reasonable for any particular defendant, and accordingly, must conduct its own independent review of the [codified sentencing factors].” Judges are legally compelled to consciously consider the Guideline range, not to be influenced by cognitive biases. Although empirically it would be difficult to distinguish between anchoring and the Guidelines’ reasonable persuasiveness, such cognitive error is nonetheless offensive to procedural justice and to many jurisdictions’ criminal statutes, as discussed in Part III. Minimizing anchoring would not limit the Guidelines’ legally compelled, appropriate influence on sentencing decisions.

Second, Scott challenges the focus on guidelines’ anchoring effects, given that other sources of information also anchor a judge’s sentencing decision:

[T]o the extent the guideline range operates as an irrational “anchor” just because it supplies some initial numbers, its effects likely are offset by other anchors tugging in different directions. In every criminal case, competing “starting point” numbers may be offered by defense counsel, prosecutors, the probation office, victim impact testimony, and the statutory sentencing range.\(^73\)

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71. United States v. Dorvee, 616 F.3d 174, 182 (2d Cir. 2010); see also Gall v. United States, 552 U.S. 38, 50 (2007) (“[The district court judge] may not presume that the Guidelines range is reasonable. He must make an individualized assessment based on the facts presented.” (internal citation omitted)).

72. See supra notes 7-8 and accompanying text.

73. Scott, supra note 21, at 46; cf. Englich & Mussweiler, supra note 28, at 1538-39, 1545 (finding that German prosecutors’ sentencing demands anchored German trial judges).
Presentence reports prepared by probation officers74 and the sentences recommended by prosecutors and defense attorneys75 likely do serve as additional anchors. However, instead of crowding the baseline framing effects, as Scott purports, these anchors would provide second-order baseline anchoring effects. In a study of the anchoring effects of prosecutorial sentencing demands, Englich et al. found that, “rather than working against the prosecutor’s initial demand, defense attorneys assimilate their own sentencing demand to it.”76 This suggests that sophisticated legal actors anchor their own sentencing analyses toward initial reference points even when they have the objective of obtaining lenient sentences for their clients. Probation officers and attorneys use guideline manuals to develop presentence reports and sentencing memoranda, and, as suggested by Englich’s work, cognitive biases will skew their sentencing recommendations toward the sentencing baseline provided by those manuals. Thus, not only do sentencing baselines directly frame judges’ sentencing decisions, but they also create indirect anchoring effects because the other sentencing anchors—the recommendations of probation officers and attorneys—are also anchored by the sentencing baseline.

74. See, e.g., FED. R. CRIM. P. 32(c)(1)(A) (providing that, with few exceptions, “[t]he probation officer must conduct a pre-sentence investigation and submit a report to the court before it imposes [a] sentence”); IND. CODE § 35-38-1-8(a) (2010) (“[A] defendant convicted of a felony may not be sentenced before a written presentence report is prepared by a probation officer and considered by the sentencing court.”); MONT. CODE ANN. § 46-18-112 (2009) (establishing that, when necessary, probation officers must prepare a presentence report for the court); TENN. CODE ANN. § 40-35-205 (2010) (requiring the court to direct a presentence service officer to prepare a presentence report for felony convictions and giving judges discretion to request such reports for misdemeanors); ARIZ. R. CRIM. P. 26.4 (requiring a presentence report unless the court cannot impose a penalty of more than one year).

75. See, e.g., FED. R. CRIM. P. 32(i)(1)(C) (providing that the court “must allow the parties’ attorneys to comment on the probation officer’s determinations and other matters relating to an appropriate sentence”); N.Y. CRIM. PROC. LAW § 390.40 (McKinney 2005) (stating that attorneys may submit presentence memoranda to the court); N.C. COMM’N ON INDIGENT DEF. SERVS., PERFORMANCE GUIDELINES FOR INDIGENT DEFENSE REPRESENTATION IN NON-CAPITAL CRIMINAL CASES AT THE TRIAL LEVEL, Guideline 8.6 (2004) (detailing the information that attorneys may include in a defense sentencing presentation or memorandum).

76. Englich et al., Last Word, supra note 28, at 712.
B. Omission Bias

Like anchoring, the omission bias (or default bias) causes decisionmakers to favor an initial reference point. However, whereas anchoring is tied to the use of numbers, the omission bias affects all sentencing regimes, even those that do not quantify sentencing factors. Ilana Ritov and Jonathan Baron explain, "Since people are loss averse, losses are weighed more heavily than gains." Accordingly, decisionmakers overvalue the negatives of taking an action compared to the positives.

The omission bias has influenced major governmental decisions. England and Japan allowed vaccination requirements for whooping cough to lapse after the vaccine was reported to have caused a few cases of brain damage, although death rates are higher without vaccination. Government officials believed the harm from their action (requiring vaccination) was worse than the harm from their omission (not requiring vaccination). The omission bias has been replicated in laboratory experiments, too. In one study, subjects were presented with the hypothetical choice between giving a child a vaccine that has a risk of causing death and leaving the child vulnerable to a disease with a greater probability of death. The majority of subjects chose not to vaccinate. Generally, subjects explained that actively causing harm was morally worse than causing harm by omission. Psychologists have also observed the omission bias in experiments involving decisions about monetary investments, life-and-death situations, and medical decisions.

77. The terms "omission bias" and "default bias" are often used interchangeably. BARON, supra note 27, at 300. However, as originally conceived, the omission bias was "the preference for harm caused by omissions over equal or lesser harm caused by acts." Jonathan Baron & Ilana Ritov, Omission Bias, Individual Differences, and Normality, 94 ORG. BEHAV. & HUM. DECISION PROCESSES 74, 74 (2004); see also Ilana Ritov & Jonathan Baron, Reluctance To Vaccinate: Omission Bias and Ambiguity, 3 J. BEHAV. DECISION MAKING 263, 263 (1990) [hereinafter Ritov & Baron, Reluctance To Vaccinate] (defining omission bias as "the tendency to favor omissions . . . over otherwise equivalent commissions"). Meanwhile, the default bias was "used more generally for a bias toward the default." BARON, supra note 27, at 300.


79. BARON, supra note 27, at 514.

80. Id.

81. Ritov & Baron, Reluctance To Vaccinate, supra note 77, at 275.

82. Id.

83. See Jonathan Baron & Ilana Ritov, Reference Points and Omission Bias, 59 ORG. BEHAV. & HUM. DECISION PROCESSES 475 (1994) (observing the omission bias in experiments about
In the context of sentencing, the omission bias may cause judges to inadequately adjust sentences from the baseline, because judges may prefer the harms caused by passively applying the default sentence over the harms caused by actively altering it. Sentencing involves myriad harms that a judge must consider, including: (1) harm experienced directly by the convicted person, (2) future crimes committed by the convicted person after his sentence is completed, (3) future crimes committed because the sentence failed to accomplish general deterrence, (4) harm experienced by the victim and third parties because of unfulfilled retributivist desires and fear, and (5) fiscal costs associated with incarceration and other forms of punishment.

Under the Federal Sentencing Guidelines, “Reckless Endangerment During Flight” is an aggravating factor, so a judge’s default is not to apply a higher sentence due to flight. Including the culpability of flight in the Guideline calculation requires active judicial decisionmaking. If there is uncertainty as to whether the defendant fled, created a substantial risk, or had the mens rea required for recklessness, the omission bias would cause the judge to favor the lower sentence under the Guidelines. Were the base offense level higher and were lack-of-flight a mitigating factor, the default sentence would reflect the increased culpability of flight, and the omission bias would lead judges to prefer passively applying the higher sentence.

There are no studies of the omission bias in generalist judges, and the one study of the omission bias in specialist judges found that it did not affect the judges’ decisions. However, this study, conducted by Jeffrey J. Rachlinski et al., tested the omission bias in a context very different from sentencing. In the Rachlinski et al. study, bankruptcy judges were asked whether they would discharge $25,000 in credit card debt for a seventy-one-year-old widower who had spent the credit on living expenses. Under the “commission condition,”

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84. U.S. SENTENCING COMM’N, *supra* note 6, § 3C1.2.
85. *Id.*
86. Rachlinski et al., *supra* note 28, at 1244.
87. *Id.* at 1243.
the judges were told that the widower had lost a $50,000 inheritance that he had invested in stock. Under the "omission condition," the judges were told the widower received the $50,000 inheritance as stock and failed to sell it; the stock subsequently lost all value. Rachlinski et al. found that the omission/commission distinction had no effect on the judges' responses.

Rachlinski et al. explain:

"Our problem did not require the judges to assess the culpability of the act or omission that dissipated the debtor's savings. Rather, the problem required the judges to assess the debtor's state of mind when he incurred the credit card debt. Here, the omission or commission does not speak to that state of mind, but to the causes of the bankruptcy itself. Nevertheless, we think that if the omission bias plays a role in judges' thinking, it should have played a role in this problem."

The Rachlinski et al. study merely shows that judges are able to overcome the commission/omission distinction when evaluating a party's state of mind; it does not speak to the judges' ability to overcome their own preference for passively causing harm over actively causing harm. While the Rachlinski et al. study did not test whether judges prefer harms resulting from their omissions rather than commissions, the studies about monetary investments, life-and-death situations, and medical decisions do examine the effects of the subjects' own commissions and omissions. In these arguably more relevant cases, the nonjudicial subjects exhibited the omission bias.

In sum, where uncertainty exists regarding a sentencing factor, the pervasiveness of the omission bias suggests that a judge would prefer to make an omission rather than a commission; she would prefer to refrain from adjusting a sentence based on an uncertain factor. The omission bias, like anchoring, would thus cause judges to violate the principle of invariance by imposing sentences closer to the initial reference point, the baseline. The omission bias and anchoring, therefore, will likely lead to disproportionately low sentences in a floor baseline regime, disproportionately high sentences in a ceiling baseline regime, and sentences disproportionately clustered around the typical sentence in a typical crime baseline regime.

88. Id.
89. Id.
90. Id. at 1244.
91. Id. at 1244-45.
92. See sources cited supra note 83.
93. See sources cited supra note 83.
C. Status Quo Bias

Unlike anchoring and the omission bias, the status quo bias skews sentencing toward the normal course of events—typical sentences—not toward the sentencing baseline. When provided with new options, “decision makers often stick with the status quo alternative, for example, to follow customary company policy, to elect an incumbent to still another term in office, to purchase the same product brands, or to stay in the same job.”

William Samuelson and Richard Zeckhauser observed the status quo bias in subjects to whom they provided questionnaires containing a series of decision problems; the experiment varied the framing of the decisions. In the neutral framing variation, alternative choices were presented with no labels, and in the status quo framing variation, one of the choices was placed in a status quo position. The “status quo framing was found to have predictable and significant effects on subjects’ decisionmaking”; it caused the subjects to strongly favor the status quo option. Many legal scholars have noted a similar status quo bias in judges, as well.


95. Id.

96. Id.

97. See Douglas A. Berman, Rita, Reasoned Sentencing, and Resistance to Change, 85 Denv. U. L. Rev. 7, 19-20 (2007) (identifying the status quo bias as a major force in the Federal Sentencing Guidelines’ influence after they became advisory in 2005, and asserting that “the modern history of federal sentencing reforms provides interesting and diverse examples of status quo biases at work”); Jelani Jefferson Exum, The More Things Change: A Psychological Case Against Allowing the Federal Sentencing Guidelines To Stay the Same in Light of Gall, Kimbrough, and New Understandings of Reasonableness Review, 58 Cath. U. L. Rev. 115, 145 (2008) (“If the only justification for the continued requirement that the Guidelines range be calculated and considered is that the Court, because of its status quo bias, is hesitant to let go of a familiar sentencing instrument, then it hardly seems a reasonable aspect of reasonableness review.”); Marybeth Herald, Deceptive Appearances: Judges, Cognitive Bias, and Dress Codes, 41 U.S.F. L. Rev. 299, 306 (2007) (“When courts interpret laws, the judges’ status quo bias may undermine the implementation of laws dictating change. . . . A preference for the comfort of the familiar heavily influences a reading of [Title VII’s protection against discrimination on the basis of sex] that is at odds with its language and purpose.”); Goutam U. Jois, Stare Decisis Is Cognitive Error, 75 Brook. L. Rev. 63, 98 (2009) (arguing that the status quo bias contributes to judicial reliance on stare decisis and explaining that “[w]hen given a pre-existing set of legal rules, judges will be hesitant to move away from the status quo (status quo bias) and will overvalue the intrinsic worth of the existing rules (endowment effect)”); Gregory N. Mandel, Patently Non-Obvious: Empirical Demonstration That the Hindsight Bias Renders Patent Decisions Irrational, 67 Ohio St. L.J. 1391, 1446 n.244 (2006) (“The primary additional bias that may apply in patent
Whereas anchoring and the omission bias skew sentencing toward an artificial reference point, the status quo bias draws decisionmaking toward the normal course of events. Although often correlated with the omission bias, the status quo bias may work against reference point biases. For example, New Jersey and Pennsylvania drivers were given the choice between insurance with lower rates and limited rights to bring legal actions and insurance with higher rates and more opportunities to bring legal actions in 1988 and 1990, respectively. Both states had the higher-price options as the status quo, but New Jersey drivers would automatically receive the lower-price option unless they explicitly requested the higher-priced option, whereas Pennsylvania drivers had to opt-in to receive the lower-priced option. Eighty-three percent of New Jersey drivers chose the lower-priced option, and the majority of Pennsylvania drivers chose the higher-priced option. In this real world experiment, the bias toward inaction, the default bias, overpowered the status quo bias.

Accordingly, the status quo bias may either strengthen the reference point biases or mitigate their effects, depending on the culpability of the offender. In a floor baseline regime, anchoring and the omission bias tend to skew sentences toward the floor of the sentencing range; thus, the "normal course of events" sentences are more lenient than in the absence of cognitive error. By the same reasoning, sentences are harsher in a ceiling baseline regime and skewed toward the typical sentence in a typical crime baseline regime. The status quo bias will, generally, reinforce the baseline framing effects because the normal course of events already reflects such framing. However, because the status quo bias pulls judicial decisionmaking away from the extremes and toward the typical, the status quo bias may cause the least culpable defendants sentenced under a floor baseline regime to receive harsher sentences than they would in the absence of the status quo bias. Similarly, the most culpable defendants sentenced in a ceiling baseline regime may receive more lenient sentences than they would if the status quo bias did not affect sentencing.

cases is the status quo bias . . . .

98. BARON, supra note 27, at 299.
99. Id.
100. Id.
D. Summary of Baseline Framing Effects

Although framing effects have not been tested in a courtroom setting, the laboratory experiments discussed in Part II show that judges are affected by the framing of legal questions outside of the courtroom. It is unlikely that scholars will be able to run courtroom experiments for ethical reasons, so we must base our analysis of judicial cognitive biases on laboratory results. The laboratory experiments provide a strong basis for predicting that judges commit decisionmaking errors while performing their official duties. Guthrie et al. observed:

To the extent that the methods used in this study have identified thought processes that judges use, the conclusions apply in the courtroom. After all, increased motivation and incentives “do not operate by magic: they work by focusing attention and by prolonging deliberation.” Only if increased attention and greater deliberation enable judges to abandon the heuristics that they are otherwise inclined to rely upon can they avoid the illusions of judgment that these heuristics produce. This does not seem likely. “The corrective power of incentives depends on the nature of the particular error and cannot be taken for granted.”101

The robust research on cognitive biases and framing effects suggests that judges do commit cognitive errors while sentencing and that sentencing baselines anchor sentences. If this is the case, baseline framing effects caused by the omission bias and anchoring would generate harsher sentences in a ceiling baseline regime, lower sentences in a floor baseline regime, and a disproportionate number of typical sentences in a typical crime baseline regime. The status quo bias would enhance these framing effects for most offenders, but it would counterbalance the framing effects for the least culpable offenders sentenced with a floor baseline and the most culpable offenders sentenced with a ceiling baseline by pulling decisionmakers toward the typical sentence. In sum, if judges succumb to cognitive biases, baseline framing results in the imposition of sentences closer to the sentencing baseline than those that would be applied if judges were not affected by cognitive error.

III. IMPLICATIONS FOR SENTENCING GUIDELINES

Baseline framing interferes with a judge's ability to impose the most just sentence because cognitive biases cause unreasoned increases and decreases in criminal sanctions—that is, increases and decreases not justified by the purposes of sentencing. The following Section discusses the significance of reasoned sentencing—sentencing wholly justified by valid reasons—for procedural justice. Relying on an analogy to the burden of proof for conviction, Section III.B observes that unreasoned increases may offend the United States' conception of justice more than unreasoned decreases and proposes that Tennessee's quasi-floor baseline best reflects this American conception of justice.

A. Reasoned Sentencing and Procedural Justice

Judges are legally and morally compelled to impose "[t]he least restrictive (punitive) sanction necessary to achieve defined social purposes"—the parsimonious sentence. However, even without cognitive error, parsimony is unachievable because there is always uncertainty about the offense and the effects of punishment, and the purposes of sentencing often conflict with each other. The inevitable uncertainty about a sentence's substantive justice

102. NORVAL MORRIS, THE FUTURE OF IMPRISONMENT 59 (1974); see also, e.g., 18 U.S.C. § 3553(a) (2006) ("The court shall impose a sentence sufficient, but not greater than necessary, to comply with the purposes [of sentencing] . . . ."); TENN. CODE ANN. § 40-35-103(2) (2010) ("The sentence imposed should be no greater than that deserved for the offense committed."); Pears v. State, 698 P.2d 1198, 1205 (Alaska 1985) ("The defendant's liberty should be restrained only to the minimum extent necessary to achieve the objectives of sentencing."); JEREMY BENTHAM, THE RATIONALE OF PUNISHMENT 63 (James T. McHugh ed., Prometheus Books 2009) (1830) ("All punishment being in itself evil, upon the principle of utility, . . . it ought only to be admitted in as far as it promises to exclude some greater evil."); MORRIS, supra, at 61 ("T[he] [parsimony] principle is utilitarian and humanitarian; its justification is somewhat obvious since any punitive suffering beyond societal need is, in the context of imprisonment, what defines cruelty.").

103. Richard S. Frase, Punishment Purposes, 58 STAN. L. REV. 67, 75-76 (2005) (contending that sentencing principles "often conflict with each other" and analyzing those conflicts); see, e.g., 18 U.S.C. § 3553(a)(2) (2006) (codifying the purposes of sentencing as "the need for the sentence imposed—(A) to reflect the seriousness of the offense, to promote respect for the law, and to provide just punishment for the offense; (B) to afford adequate deterrence to criminal conduct; (C) to protect the public from further crimes of the defendant; and (D) to provide the defendant with needed educational or vocational training, medical care, or other correctional treatment in the most effective manner"); BARON, supra note 27, at 56 (listing "punishment without deterrence" as a cognitive bias); BENTHAM, supra note 102, at 63 (arguing that the goal of sentencing should be deterrence); SANDFORD H. KADISH ET AL.,
strengthens the significance of procedural justice. Because there are no verifiable accurate sentences, fair procedures are the only way to ensure that the law is administered equally and that sentences are not imposed based on arbitrary considerations.\textsuperscript{104}

Reasoned sentencing is essential for procedural justice. Marvin Frankel, "the father of sentencing reform,"\textsuperscript{105} explained that "the requirement of stated reasons [for sentences] is a powerful safeguard against rash and arbitrary decisions."\textsuperscript{106} Similarly, in his seminal article "Some Kind of Hearing," Judge Henry Friendly identified eleven attributes fundamental to a fair hearing, including the right to have the decision based only on the evidence presented (element six) and the making of a statement of reasons (element nine).\textsuperscript{107} The latter attribute requires judicial decisions to be reasoned, and the former

\begin{footnotesize}
\begin{enumerate}
\item BMARVIN E. FRANKEL, CRIMINAL SENTENCES: LAW WITHOUT ORDER 5 (1973) (describing unchecked sentencing authority as "terrifying and intolerable for a society that professes devotion to the rule of law").
\item FRANKEL, supra note 104, at 41.
\end{enumerate}
\end{footnotesize}
attribute implies that factors not presented to the court, like cognitive biases, have no place in a judge's final decision.

The federal government and several states have codified the requirement that sentences be justified by valid reasons and that those reasons be presented to the public. For example, under federal law, "[t]he court, at the time of sentencing, shall state in open court the reasons for its imposition of the particular sentence."\textsuperscript{108} Similarly, in Pennsylvania, "the court shall make as a part of the record, and disclose in open court at the time of sentencing, a statement of the reason or reasons for the sentence imposed."\textsuperscript{109}

The Supreme Court explained, "After settling on the appropriate sentence, [the judge] must adequately explain the chosen sentence to allow for meaningful appellate review and to promote the perception of fair sentencing."\textsuperscript{110} No reasonable person would find baseline framing to be a valid reason for a particular sentence or a mechanism for promoting the "perception of fair sentencing." Yet, any sentencing guidelines that contain baselines will create baseline framing effects that cause unreasoned punishment or unreasoned lenity. The next Section discusses how policymakers might fairly account for baseline framing when designing sentencing guidelines.

\textbf{B. Choosing a Baseline}

Unreasoned sentencing caused by baseline framing could be avoided by implementing sentencing regimes with little procedural guidance that lack baselines.\textsuperscript{111} However, the harm caused by baseline framing pales in comparison to the arbitrariness and disparity caused by unbounded discretion.\textsuperscript{112} Criticizing federal sentencing before the Federal Sentencing Guidelines were promulgated, Frankel warned, "[T]he almost wholly unchecked and sweeping powers we give to judges in the fashioning of

\textsuperscript{108} 18 U.S.C. § 3553(c).
\textsuperscript{109} 42 Pa. Cons. Stat. § 9721(b) (Supp. 2010); see also 730 Ill. Comp. Stat. 5/5-4-1(c) (2010) (requiring trial judges imposing sentences for particular offenses to "specify on the record the particular evidence, information, factors in mitigation and aggravation or other reasons that led to [their] sentencing determination"); Or. Rev. Stat. § 137.120(1) (2009) ("The court shall state on the record the reasons for the sentence imposed.").
\textsuperscript{110} Gall v. United States, 552 U.S. 38, 50 (2007).
\textsuperscript{111} Connecticut, for example, provides judges only with broad statutory sentencing ranges for felonies and no starting point for their sentencing analysis. Conn. Gen. Stat. § 53a-35a (2011).
\textsuperscript{112} See FRANKEL, supra note 104 (igniting the sentencing reform movement in order to reduce sentencing arbitrariness by implementing sentencing guidelines).
sentences are terrifying and intolerable for a society that professes devotion to the rule of law." Moreover, eliminating baseline framing would not avoid all cognitive biases. Biases would still be generated by other anchors, like attorneys’ sentencing recommendations and journalists’ suggestions, which would become more influential if there were no baseline to initially anchor the sentencing analysis. Accordingly, this Note does not advise eliminating sentencing guidelines. Instead, it urges legislatures and sentencing commissions to improve sentencing guidelines by selecting baselines in light of baseline framing effects.

Policymakers who want to minimize the number of sentences skewed by cognitive error should implement a typical crime baseline. The typical crime baseline anchors sentences for typical offenders to the sentences they would receive if there were no baseline framing. Thus, under a typical crime baseline, baseline framing would not cause judges to adjust typical offenders’ sentences. This will also occur for the most culpable offenders sentenced under a ceiling baseline regime and the least culpable offenders sentenced under a floor baseline regime, but there are more typical offenders than highly or minimally culpable offenders.

On the other hand, policymakers may prefer accepting a greater number of unreasoned sentences overall in order to better limit the number of unreasoned increases in sentences. If so, they should implement a baseline lower than the typical crime baseline.

As discussed in Section III.A, judges and policymakers have no way to identify the parsimonious sentence, nor have they agreed on which factors should determine which sentence is parsimonious. Instead, trial judges are entrusted to determine which sentence is parsimonious. A judge’s reasoned sentences best reflect her judgment of parsimony because these sentences are

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113. Id. at 5.
114. Birte Englich, Blind or Biased? Justitia’s Susceptibility to Anchoring Effects in the Courtroom Based on Given Numerical Representations, 28 LAW & POL’Y 497, 510-11 (2006) (noting that the order in which attorneys present their sentencing demands affects the fairness of judicial decisions because of anchoring effects); Englich & Mussweiler, supra note 28, at 1538-39, 1545 (finding that prosecutorial sentencing demands affect imposed sentences in Germany); Guthrie et al., supra note 28, at 794 (“[T]he influence on judges of biased or misleading anchors, such as prosecutor or defense attorney sentencing recommendations, can produce biased criminal sentences.”).
115. Englich et al., Playing Dice, supra note 28, at 191 (discussing anchoring effects observed when legal professionals were presented with a journalist’s suggested sentence for an alleged rape before being asked to make a sentencing decision).
116. See supra note 103 and accompanying text.
117. See supra note 102 and accompanying text.
unaffected by cognitive biases; therefore, when choosing a sentencing baseline policymakers should treat reasoned sentences as the best approximation of parsimonious sentences. This Section proceeds by treating reasoned sentences as substitutes for parsimonious sentences.

Generally, judges may err by imposing a sentence that is higher or lower than the reasoned sentence. If the reasoned sentence for a particular offender is ten years, then an eleven-year sentence and a nine-year sentence are both “inaccurate” by one year. This Note will refer to the eleven-year sentence and other sentencing increases that do not fulfill the purposes of sentencing as Type I errors, and it will refer to the nine-year sentence and other failures to increase sentences as Type II errors.

For questions of guilt and innocence, U.S. criminal law accepts a greater number of errors overall in order to better avoid Type I errors (convicting innocent defendants). As the Supreme Court has explained, “The principle that there is a presumption of innocence in favor of the accused is the undoubted law, axiomatic and elementary, and its enforcement lies at the foundation of the administration of our criminal law.” The presumption of innocence is only overcome by proof beyond a reasonable doubt, which results in a high number of Type II errors (acquitting guilty defendants) but limits the number of Type I errors.

Type I errors at conviction and sentencing both result in undeserved punishment, and Type II errors at both stages result in inadequate punishment. Because errors at conviction and sentencing cause similar harm, legal theorists’ moral judgments about the fairest ratio between Type I and Type II errors at conviction are helpful in determining the most just ratio of Type I to Type II errors for sentencing. Intuitively, convicting an innocent person.offends justice significantly more than sentencing a guilty person to more time than he deserves. Similarly, a guilty person going unpunished offends justice more than a guilty person receiving a lighter sentence than he deserves. Although the magnitude of Type I and Type II errors differs between conviction and sentencing, the ratio of their harm may possibly remain constant.

19. Allen v. United States, 164 U.S. 492, 500 (1896) (“[The presumption of innocence] is driven out of the case when the evidence shows, beyond a reasonable doubt, that the crime as charged has been committed . . . .”); see also Apprendi v. New Jersey, 530 U.S. 466, 490 (2000) (“Other than the fact of a prior conviction, any fact that increases the penalty for a crime beyond the prescribed statutory maximum must be submitted to a jury, and proved beyond a reasonable doubt.”).
American law’s “beyond a reasonable doubt” standard is rooted in William Blackstone’s maxim that it is “better that ten guilty persons escape, than that one innocent suffer.” Judge Richard Posner reasons that “because the cost to an innocent defendant of criminal punishment may well exceed the social benefit of one more conviction of a guilty person . . . , type I errors are more serious than type II errors in criminal cases.” Many legal theorists have shared Blackstone’s and Posner’s preference for Type II errors over Type I errors, including Benjamin Franklin (“[i]t is better a hundred guilty persons should escape than that one innocent person should suffer”); Judge Benjamin Cardozo (“[i]t is better five guilty persons should escape unpunished than one innocent person should die”); Judge Henry Friendly (“[i]t is better to allow a considerable number of guilty persons to go free than to convict any appreciable number of innocent men”); and many others. The preference for mistaken innocence over mistaken guilt is expressed in Scripture, as well, when Abraham pleads with God to spare Sodom:

Abraham drew near, and said, Wilt thou also destroy the righteous with the wicked?

Peradventure there be fifty righteous within the city: wilt thou also destroy and not spare the place for the fifty righteous that are therein?

120. 4 WILLIAM BLACKSTONE, COMMENTARIES *352; see also Alexander Volokh, n Guilty Men, 146 U. PA. L. REV. 173, 174, 210 (1997) (tracing legal and moral thought about the ideal ratio between Type I and Type II errors for guilt and innocence).


125. See generally Volokh, supra note 120, at 187-90 (cataloging dozens of legal theorists who prefer Type I errors). But see Louis Kaplow, Burden of Proof, 121 YALE L.J. (forthcoming Jan. 2012) (hypothesizing that the “fix[ation] on mistaken convictions of the innocent” is a result of framing effects and cognitive error); Volokh, supra note 120, at 195-97 (noting that Jeremy Bentham, Otto von Bismarck, and others have expressed skepticism about the maxim that it is better to acquit the guilty than convict the innocent).
That be far from thee to do after this manner, to slay the righteous with the wicked: and that the righteous should be as the wicked, that be far from thee: Shall not the Judge of all the earth do right?

And the LORD said, If I find in Sodom fifty righteous within the city, then I will spare all the place for their sakes.126

After further negotiation, Abraham said, "Oh let not the Lord be angry, and I will speak yet but this once: Peradventure ten shall be found there. And he said, I will not destroy it for ten's sake."127 The Jewish philosopher Maimonides interpreted God and Abraham's debate to be even more disapproving of Type I errors, explaining, "[I]t is better and more satisfactory to acquit a thousand guilty persons than to put a single innocent man to death once in a way."128

American law has embraced Blackstone's preference for Type II errors over Type I errors,129 and this preference counsels in favor of implementing a baseline that better prevents Type I errors caused by baseline framing. Of the baselines that could feasibly be implemented, Tennessee's quasi-floor baseline best approaches Blackstone's ten-to-one ratio. As discussed in Section I.B, Tennessee's sentencing baseline is at the statutory minimum for offenders who are not "especially mitigated."130 When baseline framing alters sentences in Tennessee, it will cause unreasoned decreases in punishment for the majority of convicted felons (those not especially mitigated), and it will cause unreasoned increases for especially mitigated offenders. Therefore, just as the "beyond a reasonable doubt" standard creates a Blackstonian ratio for conviction (a greater number of Type II errors for every Type I error), the quasi-floor baseline creates a Blackstonian ratio for sentencing.

C. Ratcheting Up and the Quasi-Floor Baseline

This Note suggests that policymakers who want to avoid Type I errors should prefer quasi-floor baseline regimes because they reduce the amount of unreasoned punishment, not because they result in lower sentences. In fact,
quasi-floor baselines might lead to higher sentences overall. Legislatures and their constituents may perceive lower baselines as weakening criminal sanctions, inclining legislatures to raise criminal penalties. Several leading scholars have observed that criminal law legislation tends to be a “one-way ratchet.” Similarly, prosecutors may bring heftier charges and seek harsher punishments to correct for any perceived decrease in punishment.131

Legislative and prosecutorial ratcheting up informs judges about society’s substantive views about punishment without affecting the fairness of sentencing procedures. Thus, quasi-floor baselines could make sentencing procedures more just by minimizing unreasoned increases in punishment while, at the same time, leading to higher reasoned sentences.

CONCLUSION

Judges have a great deal of autonomy in making life-altering decisions during the sentencing phase of criminal proceedings. Chief Justice John Marshall wrote, “[A] motion to [the discretion of the court] is a motion, not to its inclination, but to its judgment; and its judgment is to be guided by sound legal principles.” Where baseline framing increases a defendant’s sentence, the judge deprives a person of life, liberty, and/or property based on her inclination, not her judgment. This Note suggests that Tennessee’s quasi-floor baseline best reflects the United States’ preference for avoiding Type I errors, even though the quasi-floor baseline may result in a greater total number of errors. Policymakers, however, might value avoiding Type I and Type II errors equally, in which case a typical crime baseline would be desirable because that baseline results in the lowest amount of unreasoned sentencing overall.134


132. Cf. Stuntz, supra note 131, at 509 (“As criminal law expands, both lawmaking and adjudication pass into the hands of police and prosecutors; law enforcers, not the law, determine who goes to prison and for how long.”).


134. See supra Section III.B (explaining why the typical crime baseline best limits unreasoned sentencing); see also Volokh, supra note 120, 187 n.98, 188 n.104, 189 nn.118 & 124 (citing a
Whichever ratio legislatures and sentencing commissions deem fairest, it is essential that they consider baseline framing effects when designing sentencing guidelines in order to establish the most just sentencing procedures.