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THE JURY TRIAL REINVENTED

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THE JURY TRIAL REINVENTED

Abstract

The Framers of the Sixth and Seventh Amendments to the United States Constitution recognized that jury trials were essential institutions for maintaining democratic legitimacy and avoiding epistemic crises. As an institution, the jury trial is purpose-built to engage citizens in the process of deliberative, participatory democracy with ground rules. The jury trial provides a carefully constructed setting aimed at sorting truth from falsehood.

Despite its value, the jury trial has been under assault for decades. Concededly, jury trials can sometimes be inefficient, unreliable, unpredictable, and impractical. The Covid-19 pandemic rendered most physical jury trials unworkable, but spurred some courts to begin using technology to transcend time and place restrictions. These reforms inspire more profound changes.

Rather than abolishing or cabining the jury trial, it should be reinvented with the benefit of modern science and technology. Features to be reconsidered include having local juries even for national civil cases, using unrepresentative groups of only six to twelve jurors, allowing attorneys to arbitrarily exclude jurors during *voir dire*, having synchronous and chronological presentations of cases over days or weeks, asking jurors to ignore inadmissible evidence and arguments, and facilitating secretive deliberations infected by implicit bias.

A reinvented, modernized jury institution can better serve its purposes by increasing citizen engagement; better fostering civic education and democratic deliberation; improving accuracy in sorting truth from falsehood; and enhancing efficiency in terms of both time and cost.

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INTRODUCTION

The 2020-2021 coronavirus crisis has shaken American institutions, including key hallmarks of the judiciary like the jury trial. This institutional stress has occurred at a time when Americans are suffering from epistemic and democratic crises. The epistemic crisis reflects a modern difficulty in sorting fact from falsehood.¹ A proliferation of conspiracy theories— involving everything from vaccine-efficacy, to “QAnon,” to the 2020 presidential election—reflects the anxiety-provoking uncertainty that many Americans feel. At the same time, the democratic crisis reflects a country riven by a toxic yet understandable populism, marked by distrust of elites and “their” institutions.² Targets of suspicion include Congress, administrative agencies (*aka* “the swamp” or “the deep state”), and especially state and federal courts, which were painted as corrupt or even malevolent after recent election controversies.³ A reinvented American jury presents a partial

¹ See generally, YOCHAI BENKLER, ROBERT FARIS & HAL ROBERTS, NETWORK PROPAGANDA: MANIPULATION, DISINFORMATION, AND RADICALIZATION IN AMERICAN POLITICS (2018).

² See Michael J. Klarman, *Foreword: The Degradation of American Democracy — and the Court*, 134 HARV. L. REV. 1, 16 (2020) (“[A]uthoritarian populists often attack the ruling elite as corrupt and promise to restore power to the people.”) (citation omitted).

³ See, e.g., Christopher D. Kromphardt & Michael F. Salamone, “Unpresidential!” or: *What Happens When the President Attacks the Federal Judiciary on Twitter*, J. INFO. TECH. & POL. 84 (2020); Adam Liptak, *Chief Justice Defends Judicial Independence After Trump*

solution to these epistemic and democratic crises, and the jolt of the coronavirus has loosened resistance to change. The necessity of, and opportunity to, reform jury trials has rarely been clearer.

Consider the structure of government absent a well-functioning jury institution. In distributing power horizontally (across the federal government's three branches) and vertically (via the powers reserved to the states), the Framers built many buttresses against populist rule.⁴ The Electoral College, for example, was largely designed "to ensure that elites directly picked the President."⁵ And even the less aristocratic, more democratic Framers—for example, those who championed the Seventh Amendment—failed to sufficiently anticipate the rise of political parties, which would eventually span all branches of government, consolidating power and undermining the common good.⁶ Because the existence of factions gives politicians strong incentives to fall in line, Congress can rarely

Attacks 'Obama Judge', N.Y. TIMES (Nov. 21, 2018), <https://www.nytimes.com/2018/11/21/us/politics/trump-chief-justice-roberts-rebuke.html>; Darren Samuelsohn & Josh Gerstein, *Federal Judge Rebukes Trump Over Roger Stone Jury Comments*, POLITICO (Feb. 25, 2020), <https://www.politico.com/news/2020/02/25/judge-rebuked-trump-roger-stone-jury-117442>.

⁴ Klarman, *supra* note 2, at 135 ("The Constitution's Framers wrestled with a perennial problem of representative government: how to prevent democratic majorities from redistributing property in their favor."); Daryl J. Levinson & Richard H. Pildes, *Separation of Parties, Not Powers*, 119 HARV. L. REV. 2311, 2313 (2006) ("[T]he separation of powers would harness political competition into a system of government that would effectively organize, check, balance, and diffuse power.").

⁵ Klarman, *supra* note 2, at 67.

⁶ Levinson & Pildes, *supra* note 4, at 2320.

be counted on to use powers like impeachment to check the President. Extreme partisanship has even given us reason to question the willingness of congressional partisans to reliably count Electoral College votes.

Nonetheless, the Constitution’s Framers—or at least those who rallied for a Bill of Rights—enshrined the right to trial by jury within the Sixth and Seventh Amendments. They had two purposes: (a) crafting a civic process capable of allowing citizens to conduct deliberative democracy unmediated by elites, and (b) creating an institution capable of reliably sorting truth from falsehood.⁷ As William Blackstone noted in 1783, the jury “preserves in the hands of the people that share which they ought to have in the administration of public justice, and prevents the encroachments of the more powerful and wealthy citizens.”⁸ With a robust jury, Americans need not rely on a corrupted political system to represent their interests; a (largely) random sample of everyday people does so directly and temporarily, averting problems of corruption and incumbency.⁹ And in the rarefied setting of the

⁷ See generally SUJA THOMAS, *THE MISSING AMERICAN JURY: RESTORING THE FUNDAMENTAL CONSTITUTIONAL ROLE OF THE CRIMINAL, CIVIL, AND GRAND JURIES* (2006).

⁸ WILLIAM BLACKSTONE, *COMMENTARIES ON THE LAWS OF ENGLAND* 683 (Nourse Publishing Co. 3d ed., 1959) (1783).

⁹ Compare LARRY LESSIG, *THEY DON’T REPRESENT US: RECLAIMING OUR DEMOCRACY* (2019) (describing institutional corruption in politics) with Christopher Robertson, *Blinding as a Solution to Institutional Corruption* 18 (Edmond J. Safra Center for Ethics, Working Paper No. 21, 2013), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2321353 (“The jury ‘represents’ the public from which it is drawn in a statistical sense, rather than via the

jury trial (unlike that of, say, social-media), citizens are empowered to deliberate at their best. Thanks to the Rules of Evidence, they are shielded (albeit imperfectly) from irrelevant, unreliable, and prejudicial information.¹⁰ It is not difficult to see why the procedure by which juries make decisions may increase not only their legitimacy and authoritativeness, but also that of the entire government.¹¹

Despite—or perhaps because of—its potential to foster democratic deliberation and increase epistemic legitimacy, the jury trial has been under assault for decades.¹² Juries now resolve fewer than one in twenty cases.¹³ As some call for the jury’s abolition and others work to stymie its impact, the Sixth and especially the Seventh Amendments face concerted, well-funded

political process of electoral representation.”); Michael Shammass, *Analysis: Do You Get a Jury Trial in Federal Condemnation Cases?*, CIV. JURY PROJECT, <https://civiljuryproject.law.nyu.edu/analysis-do-you-get-a-jury-trial-in-federal-condemnation-cases/> (last visited Feb. 12, 2021) (“Unlike experts (repeat players), jurors need not worry about their reputations, which in turn allows for greater honesty and more vigorous disagreement. . . . Disagreement heightens the likelihood that a group will come to an accurate conclusion.”); Michael H. O’Donnell, *Judge Extols Wisdom of Juries*, IDAHO ST. J. (Aug. 16, 2014), https://www.idahostatejournal.com/news/local/judge-extols-wisdom-of-juries/article_8dad172c-2521-11e4-8891-001a4bcf887a.html (similar); 2014].

¹⁰ Robertson, *supra* note 9, at 19; *see also* FED. R. EVID. §§ 401, 403.

¹¹ *See generally*, DAVID M. ESTLUND, *DEMOCRATIC AUTHORITY: A PHILOSOPHICAL FRAMEWORK* (2008); TOM TYLER, *WHY PEOPLE OBEY THE LAW* (2006).

¹² *See* William Young, *Vanishing Trials, Vanishing Juries, Vanishing Constitution*, 40 SUFFOLK U. L. REV. 67, 73 (2006) (quoting *United States v. Reid*, 214 F. Supp. 2d 84, 98 n. 11 (D. Mass., 2002)) (“[T]he American jury system is dying out—more rapidly on the civil than on the criminal side . . . and more rapidly in the federal than in the state courts—but dying nonetheless.”). Martin H. Redish, *The Seventh Amendment Right to Jury Trial*, 70 NW. U. L. REV. 486 (1975) (articulating a hostile view).

¹³ *See* Jeffrey Smith & Grant Macqueen, *Going, Going, But Not Quite Gone: Trials Continue to Decline in Federal and State Courts. Does it Matter?*, JUDICATURE, Winter 2017, at 28.

opposition.¹⁴ On the criminal side, plea bargaining makes trial by jury a rarity, generally invoked by only the least rational defendants—those willing to reject a much more favorable offer from the prosecutor, who holds almost total power over what crimes to charge and what sentences to recommend.¹⁵ On the civil side, advocated “reforms” include sending even more cases to arbitration¹⁶ or summarily adjudicating them before trial.¹⁷ Even after jury trials, judges sometimes flip outcomes or impose damage caps that contradict the jury’s determinations.¹⁸

¹⁴ See Gene Schaerr & Jed Brinton, *Business and Jury Trials: The Framers’ Vision Versus Modern Reality*, 71 OHIO ST. L.J. 1055, 1056 (2010) (arguing that “at least ninety percent” of the general counsel of Fortune 500 companies “would [if possible] vote to abolish the right to jury trial.”); Judson Phillips, *Trump Tort Reform Threatens the 7th Amendment*, WASH. TIMES (Mar. 2, 2017), <https://www.washingtontimes.com/news/2017/mar/2/trump-tort-reform-threatens-7th-amendment/> (arguing that the tort-reform movement threatens jury trials); Letter from Harold Kim, Chief Operating Officer, U.S. Chamber of Commerce, to Jerrod Nadler, Chairman, U.S. House of Representatives Committee on the Judiciary, and Doug Collins, Ranking Member, U.S. House of Representatives Committee on the Judiciary (Sept. 10, 2019), https://www.uschamber.com/sites/default/files/190910_h.r._1423_fairact_housejudiciary.pdf (advocating against the Forced Arbitration Injustice Repeal (FAIR) Act).

¹⁵ Christopher Slobogin, *Plea Bargaining and the Substantive and Procedural Goals of Criminal Justice: From Retribution and Adversarialism to Preventive Justice and Hybrid-Inquisitorialism*, 57 WM. & MARY L. REV. 1505, 1516-17 (2016).

¹⁶ See *AT&T Mobility v. Concepcion*, 563 U.S. 333 (2011). *But see*, *Sevier Cty. Sch. Fed. Credit Union v. Branch Banking & Tr. Co.*, --F.3d--, 2021 WL 834010 (6th Cir. 2021) (finding an arbitration agreement invalid, only where added by one party as a unilateral change in terms).

¹⁷ See Suja Thomas, *What Happened to the American Jury? Proposals for Revamping Plea Bargaining and Summary Judgment*, 43 LITIG. 25, 29-30 (2017); *see also* Sarah Sachs, *The Jury is Out: Mandating Pre-Treatment Arbitration Clauses in Patient Intake Contracts*, J. DISP. RESOL., Spring 2018, at 117; Jean Sternlight, *The Rise and Spread of Mandatory Arbitration as a Substitute for the Jury Trial*, 38 U.S.F. L. REV. 17, 17 (2003).

¹⁸ *See, e.g.*, *Saccameno v. U.S. Bank Nat’l Ass’n*, 943 F.3d 1071, 1088 (7th Cir. 2019). (reducing punitive damages to one-sixth what the jury awarded); CASS R. SUNSTEIN ET. AL., PUNITIVE DAMAGES: HOW JURIES DECIDE (2002).

Much dissatisfaction with civil juries stems from corporations who fear that juries empower the public to hold businesses accountable.¹⁹ But, of course, that is their key reason for existing.²⁰ Since the delegates to the Constitutional Convention were “for the most part, creditor-oriented nationalists,” they may have intentionally omitted a civil jury right, which is populist and potentially favors debtors.²¹ “The omission of the civil jury triggered a firestorm of protest.”²² To ensure that the judiciary served the economic interests of the many, anti-federalists insisted on the inclusion of the Seventh Amendment and related provisions in the Judiciary Act of 1789. The criminal jury right has a similar populist bent.²³

Some oppose jury trials for good-faith reasons. Given the small number of jurors on any panel, their decisions can be fairly criticized as being

¹⁹ “[I]t is fair to observe that for decades, business and insurance interests have disparaged our civil juries while the courts have failed to defend the single institution upon which their moral authority ultimately depends. As a result ... bipartisan majorities ... have restricted access to the ... jury severely.” Young, *supra* note 12, at 76 (citation omitted). See also NEIL VIDMAR & VALERIE P. HANS, AMERICAN JURIES 341(2007) (finding that juries hold corporate actors liable “because of their greater knowledge, resources, and potential for impact”).

²⁰ Paul D. Carrington, *The Civil Jury and American Democracy*, 13 DUKE J. COMP. & INT’L L. 79, 84 (2003) (“It is generally assumed, and not without reason, that juries are prone to favor civil litigants who are members of the community whom they represent.”).

²¹ Stephen Landsman, *The Civil Jury in America: Scenes from an Unappreciated History*, 44 HASTINGS L.J. 579, 597 (1992).

²² *Id.*, at 598.

²³ See *Duncan v. Louisiana*, 391 U. S. 145, 156 (1968) (“Providing an accused with the right to be tried by a jury of his peers gave him an inestimable safeguard against the corrupt or overzealous prosecutor and against the compliant, biased, or eccentric judge.”)

almost as unpredictable as a lottery.²⁴ Some argue that most juries are demographically unrepresentative—largely due to ethnic, racial, and class-based disparities in free-time—frustrating the ideal of judgment by one’s peers.²⁵ Relatedly, most Americans view compulsory jury service²⁶ as a huge imposition, especially when it conflicts with personal and professional obligations.²⁷ Even within the legal profession, overworked lawyers and judges often prefer quick and certain pleas or settlements to lengthy and uncertain jury trials.²⁸ The coronavirus pandemic only heightened concerns about jury trials, which entail convening six to twelve jurors in an enclosed courtroom before having them deliberate for hours, days, or even longer.²⁹

²⁴ See Kevin M. Clermont & Theodore Eisenberg, *Trial by Jury or Judge: Transcending Empiricism*, 77 CORNELL L. REV. 1124, 1125 (1991-1992) (collecting critiques of juries). the jury). See also Valerie P. Hans & Theodore Eisenberg, *The Predictability of Juries*, 60 DEPAUL L. REV. 375, 375 (2011) (“The jury is said to be the least predictable of the decision makers in the legal system.”).

²⁵ See HIROSHI FUKURAI, EDGAR W. BUTLER & RICHARD KROOTH, RACE AND THE JURY: RACIAL DISENFRANCHISEMENT AND THE SEARCH FOR JUSTICE (1993); Rob Walters, Michael Marin & Mark Curriden, *Are We Getting a Jury of our Peers?*, 68 TEX. B.J. 144, 144-46 (2005).

²⁶ See *Butler v. Perry*, 240 U.S. 328, 333 (1916) (the Thirteenth Amendment does not bar “enforcement of those duties which individuals owe to the state, such as services in the army, militia, or the jury”).

²⁷ See Andrew J. Bloeser, Carl McCurley & Jeffery J. Mondak, *Jury Service as Civic Engagement: Determinants of Jury Summons Compliance*, 40 AM. POL. RES. 179, 184-85 (2012); Thomas L. Fowler, *Filling the Box: Responding to Jury Duty Avoidance*, 23 N.C. CENT. L.J. 1, 1 nn. 4-5 (1997-1998).

²⁸ Christopher Slobogin, *The Case for a Federal Criminal Court System (and Sentencing Reform)*, 108 CALIF. L. REV. 941, 942 (2020) (noting that “the number of criminal and prisoner cases commenced in federal court has far outpaced increases in judgeships”); Arthur R. Miller, *The Pretrial Rush to Judgment: Are the “Litigation Explosion,” “Liability Crisis,” and Efficiency Clichés Eroding Our Day in Court and Jury Trial Commitments?*, 78 N.Y.U. L. REV. 982, 982 (2003); Darryl K. Brown, *The Perverse Effects of Efficiency in Criminal Process*, 100 VA. L. REV. 183, 183 (2014).

²⁹ See *infra* Part I.

Thus, juries can be inefficient and unpredictable. Rather than abolishing or cabining them, however, we should reinvent them so that they better serve their original purposes of democratic engagement and epistemic legitimacy.

Compare the carriages, bridges, and ships used for war and transportation in 1789 with the technologies used for such purposes today. The changes are profound. Scientific and technological advances revolutionized warfare and transportation; in doing so, they made both endeavors more convenient, more efficient, and more effective. Yet, aside from admitting a broader franchise of citizens, today's juries scarcely differ from their seventeenth-and-eighteenth-century counterparts. Given this stagnancy, it is not remotely surprising that the jury trial, finalized more than two-hundred years ago, is not optimally adapted to the modern world. The ships that Thomas Jefferson ordered in bombarding the Barbary Pirates would not be able to fulfill their purpose accurately or efficiently today, either.

Scientific advances, combined with the ease of long-distance communication, make one wonder what the jury might resemble if invented today. Given the rise of applied statistics and findings from political psychology (an emerging subfield of political science), behavioral economics, neuroscience, and other fields, would we stick to twelve or fewer

jurors? Would we still force jurors to sit through live, synchronous trials? Would we continue hoping that, when exposed to inadmissible evidence, merely instructing jurors to ignore that evidence can eliminate prejudice? Given the proliferation of inexpensive computers and internet, would we even require jurors to physically assemble at a courthouse? Would we conduct a trial of national importance, involving issues like patent infringement or products liability, with a jury chosen from just one local venire? In hindsight, the jury trial of 1789 seems quaint at best, and counterproductive at worst.

The familiar features of the jury are not essential; they are historical contingencies reflecting eighteenth-century scientific and technological realities.³⁰ Real-world innovations implemented during the coronavirus pandemic, including the increased use of online hearings and trials, suggest that modernizing the jury could yield profound improvements in performance, efficiency, and even accuracy. Key goals of both criminal and civil procedure might be strengthened, especially those articulated in the first Federal Rule of Civil Procedure—to promote the “just, speedy, and efficient”

³⁰ See *e.g.*, *Williams v. Florida*, 399 U.S. 78, 102-03 (1970) (quoting *Duncan v. Louisiana*, 391 U.S. 145, 182 (1968)) (“[T]he fact that the jury at common law was composed of precisely 12 is a historical accident, unnecessary to effect the purposes of the jury system and wholly without significance.”).

resolution of trials³¹—and the second Federal Rule of Criminal Procedure—
“to provide for the just determination of every criminal proceeding, to secure
simplicity in procedure and fairness in administration, and to eliminate
unjustifiable expense and delay.”³²

Ultimately, contemplating the “2021 jury trial” provides a roadmap
for reforming the jury system so that it better serves its essential functions
and, ultimately, “We the People.” This article proceeds in three parts. The
first Part discusses the effects of the coronavirus (or Covid-19) pandemic on
the judiciary throughout 2020 and 2021. We show that many of this paper’s
proposed reforms are no longer speculative but were wholly or partly
implemented in real cases. We also discuss some coronavirus-era caselaw
with implications for the constitutionality (or lack thereof) of online trials.
The second Part articulates six fundamental reforms aimed at bringing juries
into the 21st century. These include, in order: (1) increasing the number of
jurors, (2) increasing the use of video presentations, (3) loosening rules
around trial length and format, (4) divorcing trials from classic time and place
restrictions, (5) creating nationwide jury pools for national civil cases (and

³¹ FED. R. CIV. P. 1 (“These rules govern the procedure in all civil actions and proceedings in the United States district courts . . . [and] should be construed, administered, and employed by the court and the parties to secure *the just, speedy, and inexpensive determination* of every action and proceeding.”) (emphasis added).

³² FED. R. CRIM. P. 2 (“These rules are to be interpreted to provide for the just determination of every criminal proceeding, to secure simplicity in procedure and fairness in administration, and to eliminate unjustifiable expense and delay.”).

expanding criminal jury pools to the extent permitted by the Vicinage Clause), and (6) aggregating votes cast by individual jurors (doing away with interpersonal “deliberation” entirely). The third and final Part briefly reviews whether these reforms are likely to be held constitutional before gesturing towards several changes to the rules of civil and criminal procedure.

I. ONLINE JUDICIAL PROCEEDINGS DURING THE PANDEMIC

The 2020-2021 Covid-19 pandemic left no institution untouched. More than any recent tragedy with the potential exception of the September 11, 2001 attacks, the pandemic fundamentally altered our political, environmental, economic, and legal environments. Thus far, the institutions that have survived—and that may even thrive when the pandemic ends—are those that took a page from Darwin and adapted.

In this Part, we begin by briefly describing three 2020 online jury trials. We then review the judiciary’s response to the pandemic, while also detailing attempts by state and local governments and academic institutions to brainstorm “best practices” for online trials. Third, we detail constitutional concerns in the criminal context to argue that—if a pandemic such as Covid-19 continues longer than one year—online trials may be constitutionally necessary if defendants’ speedy-trial rights are to be respected. Even if online criminal jury trials violate the Sixth Amendment’s Confrontation Clause—a doubtful proposition—at a certain point, any concerns related to the

Confrontation Clause may be overridden by a criminal defendant's constitutional right to a speedy trial. Finally, we describe representative protocols and best practices created by state governments and academics, which were promulgated after Covid-19 with the aim of enabling fair and efficient online jury trials.

A. Online Jury Trials During the Pandemic

Although courts have generally hesitated to move jury trials online, there are signs that this hesitation began cracking because of the pandemic.

The nation's first pandemic-era online civil jury trial was held in a Texas state court on May 18, 2020.³³ Although the verdict was non-binding,³⁴ the trial was, nonetheless, notable because of how relatively smoothly it went. Texas blazed another path when, in August 2020, a "virtual jury trial ... brought about by the pandemic" was conducted by a state criminal court in Travis County, Texas.³⁵ Watched by approximately 1,000 viewers, the case involved "misdemeanor charges alleging excessive speed in a construction zone," and—after using a "private virtual room to review

³³ See Nate Raymond, *Texas Tries a Pandemic First: A Jury Trial by Zoom*, REUTERS (May 18, 2020, 7:19 AM), <https://reut.rs/3hKVqCs>. The verdict delivered in that trial was non-binding. See *id.*

³⁴ *Id.* ("[T]he abbreviated format and non-binding verdict make it ideal to test the viability of holding jury trials remotely, as they grapple with the more daunting challenge of how to conduct them safely in person during the pandemic")

³⁵ Herbert B. Dixon Jr., *Pandemic Potpourri: The Legal Profession's Rediscovery of Teleconferencing*, JUDGES' J., Fall 2020, at 37, 38.

the evidence and deliberate,” the jury returned a verdict of guilty on the speeding charge and not-guilty on the work-zone enhancement.”³⁶ A third online jury trial soon followed, this time in a federal court in Seattle, Washington, resulting in a verdict of \$1.35 million.³⁷ Together, the three jury trials—especially the latter two—are likely to be studied before online jury trials are “attempted by other courts.”³⁸

B. Covid-19’s Effect on the Judiciary’s Use of Technology

The idea of conducting trials online is not altogether new. With the emergence of video-editing technology and convenient video-conferencing software, it seems inevitable. The concept of online trials was discussed in law-review articles in 2006 and, briefly, in 1994.³⁹

That said, most pre-coronavirus scholarship on how the judiciary can incorporate the internet concerns hearings, depositions, and other functions

³⁶ *See id.* “Prosecutors and defense attorneys posted exhibits using the file-sharing service Box. The defendant’s counsel used a virtual breakout room to confer with their client.” *Id.* (internal citation omitted).

³⁷ *Id.*

³⁸ *Id.*; see also Justin Jouvenal, *Justice by Zoom: Frozen Video, a Cat – and Finally a Verdict*, WASH. POST. (Aug. 12, 2020), https://www.washingtonpost.com/local/legal-issues/justice-by-zoom-frozen-video-a-cat--and-finally-a-verdict/2020/08/12/3e073c56-dbd3-11ea-8051-d5f887d73381_story.html.

³⁹ Nancy S. Marder, *Cyberjuries: A New Role as Online Mock Juries*, 38 U. TOL. L. REV. 239, 239 (2006) (“[O]nline juries . . . could offer online group decision-making by laypersons in cases that do not require a traditional jury trial.”). See also Bernard H. Chao, Christopher T. Robertson, & David V. Vokum, *Crowdsourcing & Data Analytics: The New Settlement Tools*, 102 JUDICATURE 62 (Fall 2018) (arguing for online mock juries as an alternative to trials); Henry H. Perritt Jr., *Video Depositions, Transcripts and Trials*, 43 EMORY L. J. 1071, 1071-72 (1994) (suggesting the concept).

that involve judges and attorneys, but not jurors. Perhaps the first federal plan for safeguarding a functioning judiciary in the event of a pandemic was in March 2007, when the Bush administration urged the Department of Justice to release “Guidelines for Pandemic Emergency Preparedness Planning: A Road Map for Courts.”⁴⁰ The roadmap, which is far more useful logistically than legally, focused on providing guidance to state and local courts by crafting “federally supported guidelines” detailing step-by-step “best practices” for pandemic-response plans.⁴¹ Perhaps its most striking feature is its implicit acknowledgment that, in the case of a prolonged pandemic, adopting more internet usage might not only be useful but “*needed* [in order] to continue operations.”⁴² Unfortunately, though the document mentioned the necessity of increasing courts’ teleconferencing abilities, and despite writing that courts should “review alternative court sites and other

⁴⁰ See BUREAU OF JUSTICE ASSISTANCE, GUIDELINES FOR PANDEMIC EMERGENCY PREPAREDNESS PLANNING: A ROAD MAP FOR COURTS (2007), <https://bja.ojp.gov/library/publications/guidelines-pandemic-emergency-preparedness-planning-road-map-courts> (“[I]t is vital to develop a structured plan for preparing the courts to cope with a pandemic outbreak.”).

⁴¹ *Id.* (“[E]xisting legal authority relating to public health matters should be analyzed to ensure there is adequate legal foundation for any court actions. The planning process should include the following key components: [(1)] Formation of a planning committee ... [(4)] Review of constitutional provisions and pertinent authority under state law and [appropriate] regulations. . . ; [&] (5) *Consideration of technological and other capabilities....*”) (emphasis added).

⁴² *Id.* (emphasis added).

means by which to communicate with . . . participants,” the authors did not conduct an in-depth analysis of online jury or bench trials.⁴³

The judiciary’s initial response to Covid-19 was, like other institutions, to move as much business as possible from the courthouse to the internet. Its next move was to consider how to safely reopen courthouses, first for less crowded hearings such as arraignments, and (eventually) for jury trials. Although some courthouses were successfully reconfigured in a manner complying with CDC’s social-distancing guidelines, some courts found that their courthouses simply could not be physically reconfigured in manner that would enable safe jury trials.⁴⁴ Perhaps because, even if it were possible to physically reconfigure every courthouse, doing so might be cost-prohibitive,⁴⁵ courts increasingly moved several functions online.

Courts were far from first in moving to the internet. Schools and employers adapted first, moving lessons online and asking non-essential

⁴³ See BUREAU OF JUSTICE ASSISTANCE, GUIDELINES FOR PANDEMIC EMERGENCY PREPAREDNESS PLANNING: A ROAD MAP FOR COURTS 3, 11 (2007), https://bja.ojp.gov/sites/g/files/xyckuh186/files/Publications/Pandemic_Road_Map.pdf. Although not comprehensive, the Guidelines did discuss ways to preserve public access to courts. *Id.* at 11 (“Employing technology such as televised court proceedings, public access to computerized information systems, and simultaneous court transcription to provide participants and the public access to court proceedings may help remedy this issue. . . .”)

⁴⁴ See *infra*, note 62.

⁴⁵ Andrew S. Boutros, Jay R. Schleppenbach & Gregory T. Noorigan, *The Collision of the Speedy Trial Clock with the Coronavirus’s Slowdown Realities: Justice in the Time of COVID-19*, CRIM. JUST., Fall 2020, at 49, 53 (writing that despite an August 2020 felony trial in the Northern District of Illinois, “it remains to be seen whether the intense precautions taken there, which applied to every aspect of the jury’s experience from parking to security to deliberations, can be replicated on a widespread basis”).

employees to work from home. Federal and state legislatures were close behind. In fact, on May 15, 2020, only two months after one journalist wondered whether a “virtual Congress is possible,”⁴⁶ Congress answered in the affirmative.⁴⁷ This was no small change. Per the *New York Times*, “the coronavirus pandemic officially succeeded in doing what Philadelphia’s yellow fever outbreak of 1793, the Spanish influenza of 1918, the Sept. 11, 2001, attacks and generations of agitators for institutional change never could: untethering Congress from its mandate to come together physically.”⁴⁸ But if legislators can move online, why not judges? Similarly, if legislators can make law online, and judges can interpret law online, why would jurors be less capable of applying law online?

With its reliance on arguments from authority and its reverence for precedent, the judiciary can sometimes seem particularly traditionalist.⁴⁹ This may partly explain why some state judiciaries took surprisingly long to

⁴⁶ Evan Halper & Jennifer Haberkorn, *Congress May Move Online as Members Become Sick, Quarantined*, GOVERNING (Mar. 21, 2020), <https://www.governing.com/now/Congress-May-Move-Online-as-Members-Become-Sick-Quarantined.html>.

⁴⁷ Nicholas Fandos, *With Move to Remote Voting, House Alters What It Means for Congress to Meet*, N.Y. TIMES (May 15, 2020), <https://www.nytimes.com/2020/05/15/us/politics/remote-voting-house-coronavirus.html>.

⁴⁸ *Id.*

⁴⁹ Brad Taylor, *Law in the Time of Covid-19: Looking Backward While Moving Forward*, ILL. B.J., May 2020, at 26 (“The legal profession is, out of necessity, practicality, or sometimes sheer stubbornness, notoriously backward looking.”); see also JAMES E. MOLITERNO, *THE AMERICAN LEGAL PROFESSION IN CRISIS: RESISTANCE AND RESPONSES TO CHANGE* 215 (2013) (“In short, the legal profession is ponderous, backward looking, and self-preservationist.”).

respond to the pandemic.⁵⁰ For example, the Supreme Court of Arkansas did not suspend or otherwise substantially alter jury trials until November 20, 2020.⁵¹ This delay occurred even though the governor had announced a state of emergency on March 11, 2020,⁵² only two days before President Trump declared a national emergency.⁵³

Still, to their credit, judges soon joined legislators in recognizing the need to move online. The first online judicial proceedings were generally pre-trial hearings and depositions. For example, courts moved quickly to allow grand juries to deliberate online, especially after the Southern District of New York, citing the Federal Rules of Criminal Procedure, began allowing grand jurors to convene and deliberate via videoconference.⁵⁴ More controversially, another federal judge permitted a juror, during a trial of an Iranian banker, to deliberate “by FaceTime because the juror reported feeling unwell. In light of coronavirus, [the judge] stated the court was under ‘extraordinary circumstances’ and in ‘untested waters.’ After being assured

⁵⁰ See, e.g., *COVID-19 Roundup: Court Closures and Procedural Changes*, 2020 WL 1223450 (detailing up-to-date information about court closures and procedural changes, including several instances in which courts extended court shut-downs long after first anticipated).

⁵¹ *In re* Response to COVID-19 Pandemic, 2020 WL 6817802, at **1-2 (Ark. 2020).

⁵² *Id.*, at *1.

⁵³ Boutros, et al., *supra* note 45, at 49.

⁵⁴ The Federal Rules of Criminal Procedure do not require that a grand jury be physically together during deliberations. See FED. R. CRIM. P. 6.

the juror would be secluded in an apartment, [the judge] cautioned the juror, ‘You must think of yourself as present in the jury room.’”⁵⁵

Judges finally received federal guidance in March 31, 2020, when the Judicial Conference temporarily “approved . . . video and teleconferencing for certain criminal and civil proceedings.”⁵⁶ Importantly, “[t]his approval also” authorized judges to use “teleconferencing to provide the public and media audio access to court proceedings.”⁵⁷ The Judicial Conference’s action followed the March 27, 2020 passage of the Coronavirus Aid, Relief, and Economic Security (CARES) Act, which temporarily expanded videoconferencing and telephone conferencing for certain judicial proceedings.⁵⁸ The passage of the CARES Act prompted states to increase their use of videoconferencing in court proceedings.⁵⁹ Not coincidentally, then, March 2020 marked a turning-point, after which courts increasingly pondered the logistics of holding online trials and hearings during a pandemic.

For example, in an order staying jury trials, California’s Chief Justice noted that “[c]ourts may conduct such a trial at an [another] date, upon a finding of good cause shown or through the use of remote technology . . .”⁶⁰

⁵⁵ Richard Gabriel, *What Online Jury Trials Could Look Like*, LAW360 (Mar. 26, 2020), <https://www.law360.com/articles/1257185/what-online-jury-trials-could-look-like>.

⁵⁶ Dixon, *supra* note 35, at 38.

⁵⁷ *Id.*

⁵⁸ *Id.*

⁵⁹ *Id.*

⁶⁰ Tani G. Cantil-Sakauye, *Order*, FIRSTLEGAL (March 23, 2020), <https://www.firstlegal.com/judicial-council-of-california/>.

Citing such “good cause,” several cases found that, notwithstanding a party’s objections, Covid-19 constitutes “good cause” for remote video depositions.⁶¹

Online bench trials followed. In the first such trial, held April 22, 2020, a Houston, Texas judge oversaw a one-day trial over the Zoom videoconferencing platform.⁶² Despite its relatively boring subject-matter (attorneys’ fees), the case garnered substantial interest, with approximately 2,000 viewers tuning in.⁶³

Interestingly, in Alabama district court initially bucked the trend of delaying jury trials. It denied two pandemic-related motions for a continuance and set a trial date of June 1, 2020 in what “was set to be the first federal civil [jury] trial in the country after courts closed for the coronavirus pandemic.”⁶⁴ The court eventually concluded on its own motion that a continuance to limit viral spread was warranted.⁶⁵ Although Judge Andrew Brasher said he did “not take this action lightly,” he concluded that “[t]he public interest requires

⁶¹ *See, e.g.*, *Sonrai Systems, LLC v. Roman*, 2020 WL 3960441, at *3 (N.D. Ill. July 13, 2020) (“[H]ealth concerns ... create ‘good cause’ for the entry of an order requiring that Geotab’s experts’ depositions take place by remote videoconference.”); *SAP, LLC v. EZCare Clinic, Inc.*, 2020 WL 1923146, at *2 (E.D. La. Apr. 31, 2020) (“This court will not require parties to appear in person ... in the midst of the present pandemic.”).

⁶² Daniel Siegal, *Texas Court Pioneers Trial by Zoom in Atty Fee Dispute*, LAW360 (Apr. 22, 2020), <https://www.law360.com/articles/1265459/texas-court-pioneers-trial-by-zoom-in-atty-fee-dispute>.

⁶³ *Id.*

⁶⁴ *See Quinn v. City of Tuskegee*, 464 F. Supp. 3d 1262, 1263 (M.D. Ala. 2020).

⁶⁵ *Id.*

that this civil trial, like apparently every other [federal] civil [jury] trial in the country ... be continued.”⁶⁶ Judge Brasher acknowledged the public interest in preventing the spread of coronavirus; yet, crucially, he also acknowledged that the public interest means “[j]ury trials cannot remain stalled indefinitely.”⁶⁷

The criminal justice system was thrown into even more disarray after coronavirus than the civil one. A few ways states altered their usual criminal practice during Covid-19 included: (a) Restricting jury trials, usually indefinitely; (b) tolling statutes of limitations⁶⁸; (c) allowing state appellate courts (like federal appellate courts) to hear both criminal and civil oral arguments via audio or video⁶⁹; (d) releasing inmates early through parole or compassionate-release programs;⁷⁰ and (e) limiting visitation to prisons and jails.⁷¹

⁶⁶ *Id.* at 1264.

⁶⁷ *Id.* at 1263.

⁶⁸ See, e.g., *Covid-19 and the Criminal Justice System: A Guide for State Lawmakers*, NAT’L CONF. ST. LEGISLATORS (Aug. 18, 2020), <https://www.ncsl.org/research/civil-and-criminal-justice/covid-19-and-the-criminal-justice-system-a-guide-for-state-lawmakers.aspx> (“Ohio’s legislature enacted a law tolling statutes of limitations for criminal offenses, civil actions and administrative actions ... set to expire between March 9, 2020 and July 30, 2020.”).

⁶⁹ *Id.* “In the beginning of the pandemic, the U.S. Supreme Court postponed oral arguments and held oral arguments by telephone, making live audio of the arguments available to the public for the first time ever.” *Id.* In addition, Kansas allowed “the use of two-way electronic audio-visual communication in court proceedings.” *Id.*

⁷⁰ See *id.*

⁷¹ *Id.* (“At least 17 states and Washington, D.C., suspended all visitation and the remaining 33 states suspended normal visitation while allowing visits with attorneys.”).

C. Criminal Trials & the Speedy-Trial Guarantee

Lawyers, academics, and courts have spent substantial brainpower thinking through the issues caused by coronavirus's disruptions to the criminal justice system. "At one extreme, a wide range of constitutional rights are implicated at a criminal trial; and for that reason, no online felony trial has been conducted. At the other, at least one misdemeanor trial and several pre-trial proceedings, as well as appellate and post-conviction proceedings, have been conducted virtually."⁷² As with civil trials, criminal bench and jury trials alike largely stalled during the pandemic, especially "compared with proceedings like first appearances and plea colloquies, which consist of the bulk of caseloads."⁷³

For criminal cases, the pandemic created a double bind. On one hand, the speedy-trial guarantee presses courts to use video if necessary to clear cases, but the Confrontation Clause arguably suggests that only live trials would suffice.⁷⁴ Defense attorneys have begun questioning "how much delay is too much for the speedy-trial right, even when dealing with a global

⁷² Deniz Arıturk et. al., *Virtual Criminal Courts*, 2020 U. CHI. L. REV. ONLINE 57, 57-58.

⁷³ *Id.*

⁷⁴ See, e.g., Brandon Draper, *And Justice for None: How Covid-19 is Crippling the Criminal Jury Right*, 62 B.C. L. REV. I-1, I-3 (2020) (arguing that jury trial by video conference would be "inherently unconstitutional" in nature, but that it is necessary to move forward to preserve speedy trial rights).

pandemic.”⁷⁵ Concerned about speedy-trial rights, some have even begun emphasizing “the need for solutions like videoconferencing to avoid delay, if doing so is in their clients’ interests.”⁷⁶ Unfortunately, the March 2020 CARES Act accomplished little more than to signal that videoconferencing is permitted; it did not say *when* it is permissible, and it also did not “provide instructions, much less guidance, on defendants’ speedy-trial rights.”⁷⁷

A brief overview of the speedy-trial right suggests defense attorneys have a point. Since the “Constitution does not specifically define what it means for a trial to be ‘speedy,’” speedy-trial timelines were initially determined state-by-state.⁷⁸ But in 1974, Congress passed the Speedy Trial Act⁷⁹ to promote uniformity across jurisdictions. “Interestingly, the Act’s proponents did not focus solely on the rights of individual defendants, but also on a perceived need to obtain convictions quickly to reduce the risks of recidivism.”⁸⁰ As a result, although the Sixth Amendment’s speedy-trial provisions relate to defendant-oriented due-process concerns, the statutory framework has a broader focus.

⁷⁵ *Id.* at 50; John Eric Rapp & Ben Bigham, *Covid-19 v. Criminal Defendants*, J. KAN. B. ASS’N, Nov./Dec. 2020, at 32, 33.

⁷⁶ *Id.* at 54.

⁷⁷ Boutros, *et. al.*, *supra* note 46, at 51.

⁷⁸ *Id.*; *see also* CAL. PENAL CODE § 1382 (West 1970); ILL. REV. STAT. ch. 38, par. 103-5(a) (1973).

⁷⁹ Speedy Trial Act of 1974 § 101, 18 U.S.C. § 3161 (1976).

⁸⁰ Boutros, *et al.*, *supra* note 46, at 50 (citing H.R. REP. NO. 93-1508, at 8, 11 (1974)).

That framework establishes concrete time limits to complete federal criminal prosecutions. For instance, absent court-approved extensions, the period between arrest and indictment usually cannot exceed 30 days, while that between arraignment and trial cannot surpass 70.⁸¹ If these limits are violated, then, absent a recognized exclusion, “the complaint may be dismissed with or without prejudice depending upon the seriousness of the offense, the facts and circumstances that led to the dismissal, and the impact of re-prosecution.”⁸²

Federal courts have generally handled delays by invoking the “Judicial emergency and implementation” provision of an obscure 1975 statute. Under the statute, the chief judge of any judicial district may request from the judicial council of her circuit up to a one-year suspension of the Speedy Trial Act on grounds that the court is “unable to comply with” it “due to the status of its court calendars.”⁸³ What constitutes such a “judicial emergency” has never been clearly defined. Nonetheless, the Ninth Circuit relied on the statute to approve Covid-19 continuances imposed by three-fourths of California’s federal districts.

⁸¹ 18 U.S.C. § 3161(b)-(c).

⁸² See Boutros, *et al.*, *supra* note 46, at 50; *see also* 18 U.S.C. § 3162(a)(1)-(2).

⁸³ 18 U.S.C. § 3174(a).

A frequently invoked reason for excluding time under the Speedy Trial Act is that doing so furthers the “ends of justice.”⁸⁴ When conducting the Section 3161(h)(7)(A) analysis, a court must explicitly provide its justifications before granting a continuance. Statutory factors include: “(1) whether the failure to grant a continuance would likely make a continuation of such proceeding impossible, or result in a miscarriage of justice; (2) whether the case is so unusual or complex that it is unreasonable to expect adequate preparation for pretrial proceedings or for the trial itself within the usual time-frame; and (3) whether the failure to grant a continuance would deny the defendant reasonable time to obtain counsel, would unreasonably deny the defendant or the government continuity of counsel, or would unreasonably deny counsel the time necessary for effective preparation.”⁸⁵ A continuance is never granted merely “because of general congestion of the court’s calendar, lack of diligent preparation or” the government’s “failure to obtain available witnesses”⁸⁶

Although courts have, thus far, treated coronavirus-era “litigation continuances—even in criminal cases—as presumptively valid,” the same may not “hold true three, six, nine, 12, 18, or 24 months from now.”⁸⁷ This

⁸⁴ 18 U.S.C. § 3161(h)(7)(A).

⁸⁵ *See id.*

⁸⁶ 18 U.S.C. § 3161(h)(8).

⁸⁷ Boutros, *et al.*, *supra* note 46, at 54-55.

article is being drafted about a month before the March 13, 2020 “coronavirus emergency” anniversary, and we expect that more courts will deem “delays from Covid-19 ... presumptively unreasonable for speedy-trial purposes” when those delays “begin ... approach[ing] a year.”⁸⁸ Colorado’s Supreme Court has “already recognized that blanket continuances without individualized fact-finding offend speedy-trial rules,” and given the passage of time it will not be shocking if—an early inclination “to exclude coronavirus delays from the speedy-trial clock by citing the interests of justice” notwithstanding—other courts mirror or even build on that reasoning.⁸⁹ Thus, though courts certainly will not prohibit *all* Covid-19-related delays, they may very well find that the interests of justice are outweighed by the speedy-trial right when delays begin exceeding the one-year mark.⁹⁰

Ultimately, “it remains to be seen just how much delay can be tolerated under the Sixth Amendment and the Speedy Trial Act,”⁹¹ or (for that matter) under the Eighth Amendment.⁹² Absent widespread online trials, courts may be forced to triage cases in a manner wherein “only the most

⁸⁸ *Id.* at 53.

⁸⁹ *Id.* at 53-54.

⁹⁰ *Id.*

⁹¹ *Id.* at 54.

⁹² *See, e.g.*, *Wilson v. Williams*, 961 F.3d 829, 847 (6th Cir. 2020) (Cole, J. concurring) (The Board of Prison’s failure to mitigate coronavirus-spread at the petitioners’ prison ... “constitutes sufficient evidence for the district court to have found that petitioners were likely to succeed on their Eighth Amendment claim.”)

serious felony cases involving dangerous defendants who are detained pretrial and refuse to waive speedy trial deadlines [are] tried.”⁹³

Combined with the speedy-trial right, two other constitutional considerations—Fourth and Fifteenth Amendment due-process and the Eighth Amendment⁹⁴—could combine to require online criminal jury trials in cases where pandemic-like emergencies begin exceeding a year. Several defendants have already argued that holding their physical jury trials during the pandemic denied them due process and should have therefore yielded a mistrial; the defendants’ arguments failed because the juries were not sufficiently anxious or hurried to warrant a mistrial declaration, but the trial judges’ diligence in considering such arguments suggests that it is only a matter of time before a similar argument succeeds.⁹⁵ Aside from the “serious due-process concerns” that the research—which shows “three out of four jurors” were “nervous about attending a trial”—suggests, the fact “that people of color, Democrats, and older Americans [were] very concerned about contracting the virus,”⁹⁶ raises concerns about juror representativeness

⁹³ Melanie Wilson, *The Pandemic Juror*, 77 WASH. & LEE L. REV. ONLINE 65, 96 (2020).

⁹⁴ See generally Brandon Garrett and Lee Kovarsky, *Viral Injustice* (February 22, 2021), CALIFORNIA LAW REVIEW, <https://ssrn.com/abstract=3790859>.

⁹⁵ See, e.g., *United States v. Dermen*, 452 F. Supp. 3d 1259, 1264 (2020) (finding the defendant failed to establish a “manifest necessity” requiring the court to declare a mistrial because he failed to prove that the jury’s deliberations were less accurate merely because they occurred during the Covid-19 pandemic).

⁹⁶ Wilson, *supra* note 93, at 68.

because of the risk that these groups will be less likely to participate in trials during a pandemic.⁹⁷

Second, it is possible that long delays during pandemics may violate the Eighth Amendment's prohibition against cruel-and-unusual punishment, at least when the defendant's jail has an especially high transmission rate.⁹⁸ This consideration would heighten the importance of defendants' speedy-trial rights and, all things considered, would likely outweigh the Confrontation Clause concerns that some scholars cite in the context of online trials—at least during exigencies like a pandemic.⁹⁹

D. Best Practices: Academics & Courts

Several academic institutions and policymakers crafted protocols for online jury trials that were widely cited by courts, scholars, and the media

In June 2020, for example, NYU Law's Civil Jury Project enlisted dozens of judges, academics, and practitioners in order to craft protocols intended for online civil jury trials; it then tested the protocols in a mock jury trial.¹⁰⁰ The three protocols detailed best practices for online jury selection,

⁹⁷ *Id.* at 69.

⁹⁸ See Brenda Vose, Francis T. Cullen, and Heejin Lee. *Targeted release in the COVID-19 correctional crisis: using the RNR model to save lives*, 45 AM. J. CRIM. JUSTICE 769 (2020) (collecting cases alleging 8th Amendment violations due to the pandemic).

⁹⁹ For a more detailed discussion, see Part III.

¹⁰⁰ See, e.g., *Virtual Jury Trial Protocols*, CIV. JURY PROJECT, <https://civiljuryproject.law.nyu.edu/resources-2/protocols/> (last visited Feb. 12, 2021).

(b) trial, and (c) deliberation.¹⁰¹ The participants generally concluded that online civil jury trials, though challenging, are viable.¹⁰² The mock trial is available on YouTube.¹⁰³

Around the time, several jurisdictions began proposing their own protocols. The Yolo County Superior Court of California promulgated exemplary guidelines for jurors and attorneys aimed at minimizing viral spread.¹⁰⁴ Effectively, the county determined that only proceedings that cannot be constitutionally, practically, or confidentially (*e.g.*, jury deliberations) completed via videoconferencing should be conducted inside courthouses, and then only with commonsense safeguards like social distancing and spaced seating.

II. BRINGING JURY TRIALS INTO THE 21ST CENTURY

One lesson of Covid-19 was just how rapidly institutions, including the judiciary, can change when forced to do so. But changes need not be

¹⁰¹ *Id.*

¹⁰² *See, e.g.*, Michael Shammass, *The Verdict Is In: Online Jury Trials Are Possible*, CIV. JURY PROJECT, <https://civiljuryproject.law.nyu.edu/the-verdict-is-in-online-jury-trials-are-possible/> (June 1, 2020) (proposing “mixed trials” during the pandemic to preserve confidentiality, with some portions held online and other portions held in socially-spaced courtrooms).

¹⁰³ Civil Jury Project, *Highlights from the Civil Jury Project at NYU School of Law and CCCPC Virtual Mock Trial*, YOUTUBE (July 21, 2020), https://www.youtube.com/watch?v=7U_aVbklGpU&feature=youtu.be.

¹⁰⁴ *Id.*

merely reactive—limited to times of crisis—and a reform like increasing the use of video is merely the tip of the iceberg.

In this Part, we outline six ways to reinvent the jury trial. If adopted, we believe our reforms will increase juries' accuracy, efficiency, and democratic legitimacy, thereby furthering the jury's institutional functions. These reforms include empaneling more jurors, increasing the use of video, condensing and reorganizing trial presentation, changing the time and place where jurors serve, creating a nationwide jury pool for national civil cases while expanding the pool in criminal cases, and aggregating juror votes individually rather than forcing jurors to deliberate. In detailing each reform, we take care to review potential constitutional and legal barriers.

A. Larger Juries, Without Peremptory Challenges

Aristotle is credited with the notion of “the wisdom of the crowd,” where many eyes are better than one.¹⁰⁵ In recognizing that six or twelve minds are better than one, the Founders may very well have had this concept in mind while incorporating colonial-era jury provisions into the Constitution.¹⁰⁶ In 1785, French polymath Marquis de Condorcet published

¹⁰⁵ ARISTOTLE, *POLITICS* bk. III, 1281b (H. Rackham trans., Loeb Classical Library 1932).

¹⁰⁶ F. Galton, *Vox Populi*, 75 *NATURE* 450, 450-51 (1907); see also JAMES SUROWIECKI, *THE WISDOM OF CROWDS: WHY THE MANY ARE SMARTER THAN THE FEW AND HOW COLLECTIVE WISDOM SHAPES BUSINESS, ECONOMIES, SOCIETIES, AND NATIONS* (2004).

his famous Jury Theorem, which explained that, if jurors' rate of error regarding any given decision is not more than half, every additional juror will increase accuracy.¹⁰⁷

Our understanding of the “wisdom of the crowd” received a boost in 1906, when Sir Francis Galton—a rather elitist British statistician—witnessed a contest at a country fair in Massachusetts. The gathering was asked to estimate the weight of an oxen for prize money. The animal's actual weight was 1,198 pounds. Remarkably, the median guess of 1,207 pounds was accurate within one percent of the true value, and the average guess was 1,197 pounds. After replicating the test, Galton was forced to conclude that collective estimates are generally more accurate than individual ones. This contributed to the groundbreaking insight in cognitive science that a group's individual assessments can be modeled as a probability distribution of responses, with the median centered near the true value of the quantity to be estimated.

Had Galton instead randomly chosen only six to twelve of the group's guesses, the average guess would have been *much* less likely to represent the

¹⁰⁷ MARQUIS DE CONDORCET, *Essay on the Application of Mathematics to the Theory of Decision-Making*, in CONDORCET: SELECTED WRITINGS 33, 48-49 (Keith Michael Baker, ed., 1976). For a useful overview, see William P. Bottom et al., *Propagation of Individual Bias Through Group Judgment: Error in the Treatment of Asymmetrically Informative Signals*, 25 J. RISK & UNCERTAINTY 147, 152-54 (2002).

true value. Chance, not the laws of statistics, would have determined the outcome.

As we think about jury trials, this sort of randomness should concern us, just as it concerns the parties to such litigation, trying to estimate their exposure to liability or their chances of recovering from injuries.¹⁰⁸ If we thought that lotteries effectively dispensed justice, we could draw a ball from a hopper, or—even better—flip a coin, at much less cost than a jury trial. Heads, plaintiff wins; tails she loses.

Instead, jury trials aim at accuracy, conceived as the discovery of a case's facts followed by the application of the community's standards to those facts.¹⁰⁹ In this sense, jury decisions can be evaluated like the measurements of instruments used to estimate value, not unlike thermometers or bathroom scales.¹¹⁰ Like such instruments' measurements, jury verdicts are infected by two types of potential errors.

¹⁰⁸ See Bruce Hay & David Rosenberg, *"Sweetheart" and "Blackmail" Settlements in Class Actions: Reality and Remedy*, 75 NOTRE DAME L. REV. 1377, 1404 (2000) ("[S]uppose that the odds are fifty percent that a given jury will return a verdict for the defendant and fifty percent that it will return a verdict for the class; and suppose that if the verdict is for the class, the expected damages will be \$200 million.... In such a setting, a single class trial is a highly risky proposition for both sides.").

¹⁰⁹ See Christopher Tarver Robertson, *Blind Expertise*, 85 N.Y.U. L. REV. 174, 181 (2010) ("Both the procedure and substance of the American legal system are predicated on the assumption that, in any given case, there really is a fact of the matter. The elaborate procedures and evidentiary rules are designed 'to the end that the truth may be ascertained and proceedings justly determined.'") (quoting FED. R. EVID. 102). See also, *Tehan v. United States*, 382 U.S. 406, 416 (1966) (describing determination of truth as purpose of trials).

¹¹⁰ See Michael Saks and Peter Blanck, *Justice improved: The unrecognized benefits of aggregation and sampling in the trial of mass torts*. 44 STANFORD LAW REV. 815, 847 (1992) ("Think of the jury as a measuring instrument, like a thermometer or a bathroom scale.")

One source of error involves sampling.¹¹¹ If all jurors who saw a given case would rule the same way, then of course a jury of twelve or six, or even one, would be quite sufficient. Variation is the problem, which requires a sufficient sample to solve. Indeed, the very notion of the jury recognizes such heterogeneity; the jury is supposed to capture a “fair cross section of the community.”¹¹² Indeed, “as an institution deeply woven into the fabric of popular governance, the American jury is a central site for political representation: the political representation of citizens by citizens.”¹¹³ It is thus important to have the right people in the room.

As an example, suppose the actual population of potential jurors in a given locality is half male, and suppose, further, that gender is important to a civil case in that jurisdiction. With only six to twelve jurors, it would not be surprising to wind up with a panel that is entirely male.

In the 1940s, the Supreme Court said that it “would be impossible” to have a jury that “contain[s] representatives of all the economic, social, religious, racial, political and geographical groups of the community;

¹¹¹ See generally ROBERT LAWLESS, JENNIFER ROBBENHOLT & THOMAS ULEN, *EMPIRICAL METHODS IN LAW* 122 (2016) (discussing sampling bias).

¹¹² *Thiel v. S. Pac. Co.*, 328 U.S. 217, 220 (1946) (citing *Smith v. Texas*, 311 U.S. 128, 130 (1940)).

¹¹³ Leib, Ethan J., Michael Serota, and David L. Ponet, *Fiduciary Principles and the Jury*, 1109, 1147 (2014); but see, *Fleming v. Chi. Transit Auth.*, 397 Fed. App’x 249, 249 (7th Cir., 2010) (“The Supreme Court has not recognized a Constitutional mandate that jury pools in civil cases reflect a fair cross-section of the community.”).

frequently such complete representation would be impossible.”¹¹⁴ Yet, with modern technology, it is not clear that that impossibility remains in 2021. The way to get a representative jury is to increase the size of the sample.¹¹⁵

The second source of measurement error involves jurors making mistakes, whether from bad memory, inattention, incomprehension, distraction, or prejudice.¹¹⁶ The risk that a median juror will be voting based on one of those problems is greatest, when the jury is smallest.

For this concern that a juror may be biased and unable to impartially resolve the facts of the case, voir dire is the traditional solution.¹¹⁷ By questioning jurors, and then excluding some for cause or peremptorily, attorneys and judges are supposed to weed out bias. But research shows that prospective jurors are often incapable of accurately assessing their biases or reporting them to the court.¹¹⁸ Not even trial attorneys can reliably identify jurors who are likely to be adverse.¹¹⁹ Even worse, courts have recognized

¹¹⁴ *Thiel*, 328 U.S. at 220.

¹¹⁵ See generally Michael J. Saks & Mollie Weighner Marti, *A Meta-Analysis of the Effects of Jury Size*, 21 L. HUMAN BEHAVIOR 451 (1997).

¹¹⁶ See Matthew Blackwell et al., *A Unified Approach to Measurement Error and Missing Data: Overview and Applications*, 46 SOC. METHODS & RES. 303, 304 (2015).

¹¹⁷ *Rosales-Lopez v. United States*, 451 U.S. 182, 188 (1981) (“*Voir dire* plays a critical function in assuring the . . . right to an impartial jury will be honored.”); see also *Pointer v. United States*, 151 U.S. 396, 408-09 (1894) (affirming the importance of the opportunity to inspect jurors “for the due administration of justice”).

¹¹⁸ See David V. Yokum, Christopher Robertson & Matt Palmer, *The Inability of Jurors to Self-Diagnose Bias*, 96 DENVER L. REV. 869, 869 (2019).

¹¹⁹ See DENNIS DEVINE, *JURY DECISION MAKING* 46-48 (2012) (describing the “pessimistic” findings of empirical research on attorney juror-picking).

that voir dire *reduces* the petit jury's representativeness.¹²⁰ Although lawyers are not supposed to use race or gender in their peremptory challenges¹²¹, they need only give a pretextual justification for any particular decision to exclude a juror.¹²² No wonder peremptory challenges are facing increasing scrutiny.¹²³

The use of peremptory challenges in voir dire is a strange institution for the purported goal of representativeness.¹²⁴ Imagine if this purported method of weeding out bias were used in other contexts. Suppose a professional polling company such as Gallup has been asked to discern a given population's opinion on mask-wearing. Could a Gallup worker just toss out a certain number of respondents on nothing more than the intuition that they might be biased or unrepresentative? Rather than having lawyers use such a hunch to eliminate bias, a more scientific approach is to simply recruit a sample large enough to wash out outliers. Science even provides the tools to let us know when our sample is large enough.

¹²⁰ See e.g., *Holland v. Illinois*, 493 U.S. 474, 485 (1990) (“[M]any groups are regularly excluded from the petit jury through peremptory challenge.”).

¹²¹ *Batson v. Kentucky*, 476 U.S. 79 (1986).

¹²² See Robin Charlow, *Tolerating deception and discrimination after Batson*, STANFORD L. REV. 9 (1997); Jonathan Abel, *Batson's Appellate Appeal and Trial Tribulations*, 118 COLUMBIA L. REV. 713 (2018).

¹²³ See generally LaCrisha McAllister, *Closing the Loophole: A Critical Analysis of the Peremptory Challenge and Why it Should be Abolished*, 48 S.U.L. REV. (2021).

¹²⁴ See Eugene Tate, Ernest Hawrish, and Stanley Clark, *Communication variables in jury selection*, 24 J. COMMUNICATION 130, 131 (1974) (describing the very different approaches in Canada in Britain, especially in civil cases).

If these errors involve the minority of jurors, then the larger a jury, the smaller the chance that such mistakes will drive the outcome.¹²⁵ Using modern tools of retrospective power analyses and confidence intervals—scientists can estimate the range of values that cannot be reasonably rejected from the alternative hypothesis.¹²⁶ All of the values that fall within the confidence interval are considered consistent with the observed data. Values that fall outside the confidence interval can be rejected. Larger sample sizes yield more precise estimates because each additional observation reduces the chance that prior observations were merely due to lucky (or unlucky) draws from a background sample.

Determining an ideal confidence level turns on our tolerance for error.¹²⁷ If matters little how a case turns out, we might tolerate being right just 75% of the time. But if we want our legal system to send accurate deterrence signals to primary actors, and if we wish to use the state's coercive power to redistribute resources only when necessary, we might demand a much greater degree of accuracy—say, 99%. Scientists routinely use 95% as the confidence level, which means they tolerate being wrong in roughly one

¹²⁵ Carmen R. Wilson VanVoorhis & Betsy L. Morgan, *Understanding Power and Rules of Thumb for Determining Sample Sizes*, 3 TUTORIALS QUANTITATIVE METHODS FOR PSYCHOL. 43, 45-46 (2007); Condorcet *supra* note 107.

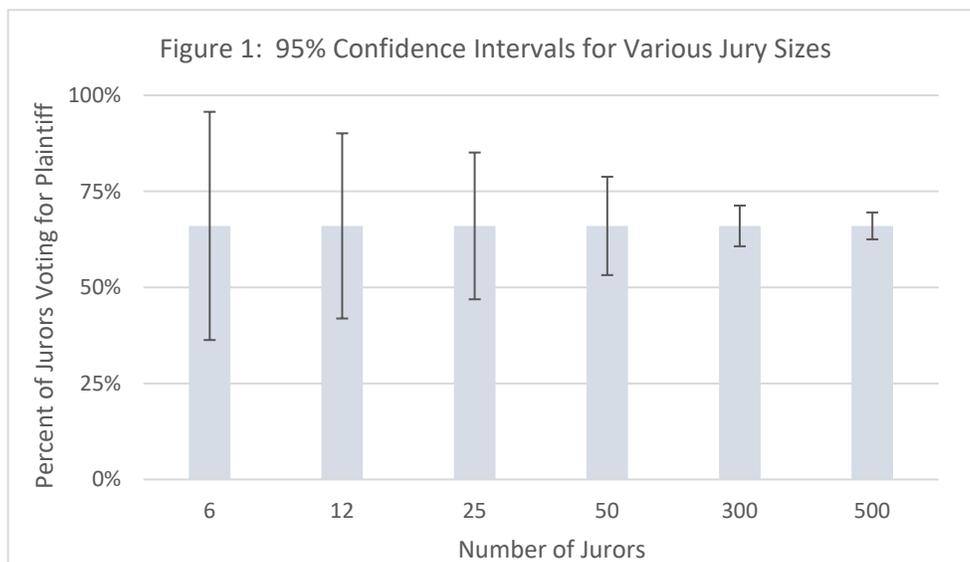
¹²⁶ This discussion could alternatively be had in terms of p-values or even Bayesian analysis, but confidence intervals help illustrate the dynamics at different sample sizes.

¹²⁷ Richard Posner, *An Economic Approach to the Law of Evidence*, 51 STAN. L. REV. 1477, 1511 (1999) (“There is no magic to the five-percent criterion.”).

of twenty cases. We use that same threshold here, presuming that our legal system as a whole should desire at least this level of accuracy when collectively affecting millions of lives and trillions of dollars.

Figure 1 illustrates the application of 95% confidence intervals to a binary outcome (*i.e.*, a verdict), with six or 12 jurors in the first columns, as in civil courts. With a hypothetical two-thirds of jurors agreeing that the defendant is liable, the confidence interval still overlaps 50%, meaning that we cannot reject the null hypothesis (*i.e.*, that most jurors would favor the other side). In the given case, at scientific levels of confidence, we cannot say that most potential jurors in the population would agree with the actual jurors assembled to hear the case. The outcome may be due to sheer chance.

The columns in Figure 1 show the possible effects of alternative jury sizes. More than doubling the sample to 25 jurors does not even raise the confidence interval above 50%. But with a 50-juror sample—assuming that



two-thirds will still vote for the plaintiff—our confidence interval increases such that we can predict that most others in the community will cast a similar vote. With a reasonable degree of scientific certainty, we can then eliminate the possibility that our observed verdict results from chance .

Courts could dynamically assign jury sizes to reach greater efficiencies. Larger juries are important where the stakes are particularly high because the costs of error are higher. It is obviously worse, from a social and individual point of view, to erroneously redistribute \$250 million than \$25,000. For this reason, the Food and Drug Administration (FDA) requires larger studies for more dangerous drugs than for less dangerous ones.

Larger juries are also especially advantageous in close cases. If only 55% of jurors ultimately believe the defendant is liable, then a much larger jury will be required to reject the null hypothesis than if 99% of jurors believe the defendant is liable. In the latter case, a relatively small jury will be sufficient to reject the alternative hypothesis that most jurors in the population would instead vote against liability. It is for this reason that social scientists often undertake pilot studies to inform the optimal sample size for their pivotal study. Such tests can be undertaken for civil trials, or sufficiently experienced judges can gauge how close a case may be before assigning an appropriately scaled jury.

Unless courts dynamically assign jury sizes, they would need a one-size-fits-all rule. It seems unlikely that six to twelve jurors are the optimal number, especially if we can reduce the costs of summoning more jurors (as our other reforms do). Given what we have seen, 50 jurors might be reasonable. However, if we desire sufficient precision on not only the binary liability outcomes but also the specific amount of awarded damages, even larger juries will be necessary, perhaps numbering in the hundreds or thousands. After all, jurors are notorious for their sometimes-wide-ranging damage assessments, especially regarding non-economic damages.¹²⁸ In one realistic experiment, for instance, the average juror award for pain and suffering was \$2.3 million, but the standard deviation was \$4.3 million.¹²⁹ Statistical mechanisms can be used to aggregate responses and compress variability, but larger numbers of jurors are necessary nonetheless in order to generate scientifically reasonable damage estimates.¹³⁰

Research suggests that jury service brings incidental benefits to jurors and society. Former jurors are more likely to vote and report improved civic

¹²⁸ Valerie F. Reyna et al., *The Gist of Juries: Testing a Model of Damage Award Decision Making*, 21 PSYCHOL. PUB. POL'Y & L. 280, 280 (2015).

¹²⁹ See Shari Seidman Diamond et al., *Juror Judgments About Liability and Damages: Sources of Variability and Ways to Increase Consistency*, 48 DEPAUL L. REV. 301, 315-16 (1998).

¹³⁰ See John Campbell, Bernard H. Chao, Christopher T. Robertson & David V. Yokum, *Countering the Plaintiff's Ancho: Jury Simulations to Evaluate Damages Arguments*, 101 IOWA L. REV. 543, 567 (2016).

engagement.¹³¹ Larger juries would increase these benefits. Of course, to the extent that jury service is burdensome, expanding juries *might* increase this societal burden, but only if none of our other reforms are implemented to reduce the burden-per-juror.

Considered alone, the prospect of larger juries raises several logistical questions. Where would 50 jurors sit? Who would pay the additional costs? How could they possibly deliberate? These problems dissolve if some or all of our complementary reforms are adopted.

B. Asynchronous Video Presentation

A trial is not unlike a play. The courthouse is the theater, the attorneys and witnesses the actors, the judge the director, and the jurors the audience. At the time the common-law jury was conceived by the Founders' British predecessors, such live, face-to-face entertainment was the norm. (The telegraph was not invented until 1844, the telephone until 1876, and the television until 1927, while radios did not see widespread use in the United States for entertainment and informational purposes until the 1930s.)

Although the raw technologies existed for decades, it was not until the advent of online video-streaming in the 2000s, following by its

¹³¹ John Gastil et al., *Jury Service and Electoral Participation: A Test of the Participation Hypothesis*, 70 J. POL. 351, 364 (2008); see also Valerie P. Hans et al., *Deliberative Democracy and the American Civil Jury*, 11 J. EMPIRICAL LEGAL STUD. 697, 697 (2014).

widespread diffusion in the 2010s, that it became practically and economically feasible to record and edit trials for juries to watch and decide individual cases. Now, every attorney has the tools to record high-definition video in his or her pocket (i.e., a mobile phone), not to mention the ability to edit it on standard computer equipment or, indeed, inexpensive phone software. At a slightly higher level of professionalism involving dedicated videographers and editors, it is now possible to produce quality video at a relatively low cost. Suppose that, instead of staging live trials, courts instead created high-quality videos including all the normal aspects of a “real” (i.e., live, in-person) trial, including opening arguments, testimonial and documentary evidence, closing arguments, and instructions from the judge.

Even before the onset of Covid-19, we had several precedents and proofs of concept. In extant civil litigation, it has long been routine to video-record depositions in all but the smallest civil cases. When a witness cannot attend a live trial, or when a party seeks to use prior testimony to impeach a witness, these videos are often edited and played at trial. These approaches are already used for jury research.¹³² As early as 1994, one scholar argued that the notion of the “video trial” was gaining support.¹³³ And—as the first section of this paper makes clear—the coronavirus pandemic has caused

¹³² Christopher T. Robertson & David V. Yokum, *The Effect of Blinded Experts on Juror Verdicts*, 9 J. EMPIRICAL LEGAL STUD. 765, 765 (2012).

¹³³ Perrit, *supra* note 39, at 1071-72.

interest in trial by videoconference to skyrocket, with some unwilling holdouts eventually concluding that they had no choice *but* to move trials online. Necessity is the mother of invention.

There are several potential advantages of video trials. First, video-editing allows evidentiary presentation to be more focused and condensed. The current debate on whether and how courts should limit trial time evinces jurors' frustrations with the status quo, revealing a perception that modern trials largely waste the time of the court and the jurors.¹³⁴ Indeed, trial testimony involves plenty of proverbial throat-clearing, parrying, dodging, and repeating. The use of video depositions in trials today shows how they can be condensed from raw material consuming seven hours or more to just an hour or so, including only the key testimony that each party designates as best representing its case.¹³⁵ This distillation obviously offers increased efficiency. It may also improve accuracy by improving juror attention and comprehension. Eliminating extraneous testimony lessens the risk that jurors

¹³⁴ See Stephen D. Susman & Richard L. Jolly, *An Empirical Study on Jury Trial Innovations*, CIV. JURY PROJECT, Feb. 2017, at 101, 103, https://civiljuryproject.law.nyu.edu/wp-content/uploads/2016/10/sds-rlj_Empirical-Study-on-Trial-Innovations.pdf (arguing for time limits on trials).

¹³⁵ See FED. R. CIV. P. 30(d)(1) (specifying time length of depositions); *Estate of Spear v. Comm'r*, 41 F.3d 103, 116 (3d Cir. 1994) (“Although live testimony is generally preferable to videotaped testimony, the absence of such testimony, even from a key witness, is only minimally prejudicial when that witness is adverse and when there is a videotaped deposition that can be introduced in lieu of live testimony.”).

will get bored, confused, or distracted. (This is not to demean jurors, but to acknowledge standard human limitations.)

Second, an edited video trial also allows the court to resolve objections to improper evidence or arguments in advance. In major cases, judges often use pre-trial *Daubert* hearings to similarly proscribe what experts may and may not say.¹³⁶ For many other issues, however, parties must object during trial, once a purportedly objectionable piece of evidence is offered, often in front of the jury but ideally at sidebar. This process wastes more jury time and risks contaminating the jury by exposing it to improper evidence. In contrast, in video trials objections can be resolved in advance and, if sustained, the improper material can simply be edited out. These procedures are already used for parties to designate and register objections to video depositions in standard trials. The technique could be expanded to cover a complete video trial.

The primary advantage of these approaches is to vindicate and reinforce the Rules of Evidence; with a properly edited video, we can virtually eliminate the risk that the jury will be exposed to inappropriate material that might cause it to make an erroneous decision. Decades of social-science research suggest that it is ineffective or even counterproductive to tell

¹³⁶ See e.g., *Carlson v. Bioremedi Therapeutic Sys., Inc.*, 822 F.3d 194, 201 (5th Cir. 2016) (reversing where “the district court disregarded its gatekeeping function to determine the admissibility of evidence outside of the presence of the jury”).

jurors to try to ignore material they have erroneously seen.¹³⁷ This ineffective technique could be rendered obsolete with video-editing. Even “live” online trials could include a five or so second delay—not unlike delays used today in live television broadcasting—to enable court staff to omit objections.

Third, a video trial would also allow jurors to simply rewind the video to refresh their memories when deciding cases. During deliberations, courts now sometimes provide trial transcripts or excerpts thereof, but these lack key markers of witness credibility (*e.g.*, physical demeanor), which is a primary characteristic for jurors to consider.¹³⁸ Indeed, courts regularly discourage juries from over-relying on transcripts: “The transcript is not authoritative. If you remember something different from what appears in the transcripts, your collective recollection is controlling.”¹³⁹ A huge body of research suggests that human memory is far from perfect, and arguably now obsolete when other technologies, such as video recording, are available.¹⁴⁰ (Imagine an eyewitness purporting to deny a fact that is clearly recorded on security video; the reliance on memory is superfluous.)

¹³⁷ See Nancy Steblay et al., *The Impact on Juror Verdicts of Judicial Instruction to Disregard Inadmissible Evidence: A Meta-Analysis*, 30 L. & HUM. BEHAV. 469, 477 (2006).

¹³⁸ *California v. Green*, 399 U.S. 149, 198 (1970) (Brennan, J., dissenting) (“No such determination of credibility is possible when the witness comes before the trial factfinder by the reading of a cold transcript.”); see also *Tennant v. Peoria & P. U. Ry. Co.*, 321 U.S. 29, 35 (1944).

¹³⁹ *United States v. Montgomery*, 150 F.3d 983, 999-1000 (9th Cir. 1998).

¹⁴⁰ See generally, Daniel L. Schacter & Elizabeth F. Loftus, *Memory and law: what can cognitive neuroscience contribute?* 16 NATURE NEUROSCIENCE 119 (2013).

Fourth, video-taped materials can be reused within the judicial system. Appellate courts often complain that they cannot evaluate aspects of a witness's demeanor at trial, and this is a primary basis that trial courts are "given much deference."¹⁴¹ Rather than poring through such "cold" transcripts¹⁴², courts of appeal can simply watch the videos, seeing exactly the same thing that the trial judge saw.

There may nonetheless be other reasons for deference to lower courts, but reversals will nonetheless sometimes be necessary. Video trials can dramatically reduce the costs of remanding to correct an error. For example, suppose that an appellate court determines that the trial judge erred by excluding certain testimony. The testimony can simply be reinserted, and the case played out before another set of jurors, rather than remanding the case and having the court conduct another jury trial, which might cost an additional year of time and millions of dollars.¹⁴³ Saving time would be

¹⁴¹ *Snyder v. Louisiana*, 552 U.S. 472, 479, 128 S. Ct. 1203, 1209, 170 L. Ed. 2d 175 (2008).

¹⁴² *See Rice v. Collins*, 546 U.S. 333, 343, 126 S. Ct. 969, 977, 163 L. Ed. 2d 824 (2006) ("Appellate judges cannot on the basis of a cold record easily second-guess a trial judge's decision."); *United States v. Shinderman*, 515 F.3d 5, 17 (1st Cir. 2008) ("Only rarely-and in extraordinarily compelling circumstances-will we, from the vista of a cold appellate record, reverse a district court's on-the-spot judgment concerning the relative weighing of probative value and unfair effect.") (quoting *Freeman v. Package Mach. Co.*, 865 F.2d 1331, 1340 (1st Cir.1988)).

¹⁴³ For a similar approach, *see* D. Alex Winkelman, David V. Yokum, Lisette C. Cole, Shelby C. Thompson, & Christopher T. Robertson, *An Empirical Method for Harmless Error*, 46 ARIZ. ST. L.J. 1405 (2014) (testing variations on the same trial to determine whether an error was harmless).

especially advantageous in criminal cases involving questions of wrongful imprisonment.

Or suppose that the case is part of a mass tort, involving hundreds or thousands of similarly situated plaintiffs. Notwithstanding the common issues (e.g., defendant conduct) each plaintiff may need to prove specific facts (e.g., whether they relied on the misrepresentation, or whether the chemical caused their specific injury). Accordingly, the main body of the case can be optimized in the video trial for reuse in every subsequent plaintiff's case, with a different module inserted for each plaintiff, involving the evidence specific to that plaintiff. This procedure would be much more efficient than conducting a live trial for each plaintiff.

One limitation of asynchronous video trials is that jurors will be unable to inject their own questions into the trial, an important innovation of trial practice.¹⁴⁴ The court, or litigants themselves, may instead generate and resolve such questions from mock jurors before finalizing the trial video, thereby ensuring the most common questions get answered. This limitation would not, of course, apply in live, online trials where video is merely offered to jurors *after* trial and during deliberation. Indeed, in live trials, jurors' abilities to submit questions will likely be *enhanced*, because they will be

¹⁴⁴ See Susman & Jolly, *supra* note 134, at 110-11.

able to non-intrusively type and submit their questions while watching the trial in a private manner that might cause them to hesitate less than they would in an in-person trial. Submitting questions to a court technician via the internet may be less intimidating for jurors as well.¹⁴⁵

Another potential limitation involves the risk of improper editing such that the videos the jurors see are not actually fair or representative of the evidence. This concern has already been surmounted in the use of video depositions at trial. The trial judge will review the video before allowing both parties to preview the materials to (a) submit objections to material that should properly be excluded (for example, their objections during the actual trial) or (b) ensure that portions of the trial were not improperly removed that could materially impact the case's outcome. Of course, such decisions will be subject to appellate review.

A final group of concerns are psychological. We have already mentioned one consideration: That unwatched jurors are less responsible jurors. There are several other considerations to consider.

First, video may be less engaging than live trials. The literature on online education is instructive, as educators have worked for decades to move classes from brick-and-mortar settings online. One recent review of the

¹⁴⁵ See Michael Shammas, *Thoughts on Optimizing Time & Attention in Virtual Trials*, CIV. JURY PROJECT (July 9, 2020), <https://civiljuryproject.law.nyu.edu/the-trial-of-counting-trials-2/>.

literature concludes that “[t]aken as a whole, there is robust evidence to suggest online learning is generally at least as effective as the traditional format.”¹⁴⁶ Thus, for the cognitive purpose of imparting understanding, it seems video is not an impediment.¹⁴⁷ The last year has provided further evidence that online teaching environments are effective, and that best practices that teachers use are sometimes transferable to judicial settings—especially for in presenting crucial yet sometimes-tedious monologues like jury instructions.

Educators have found that “spaced” learning is ideal.¹⁴⁸ Courts could release segments of trial videos in a pre-planned, timed manner to optimize focus and attention. Some research suggests that the ideal attention span is about twenty-five minutes, with five-minute breaks interspersed throughout to give the brain time to consolidate information.¹⁴⁹ Even if courts are

¹⁴⁶ Tuan Nguyen, *The Effectiveness of Online Learning: Beyond No Significant Difference and Future Horizons*, 11 MERLOT J. ONLINE LEARNING & TEACHING 309, 309 (2015).

¹⁴⁷ Another common-sense safeguard when crucial monologues like jury instructions are delivered virtually—aside from making them especially concise and clear—involves making trial video available so that daydreaming jurors can fill in gaps in their knowledge. It may also be advisable to send each juror a transcript of monologues such as jury instructions.

¹⁴⁸ Praveen Shrestha, *Ebbinghaus Forgetting Curve*, PSYCHESTUDY (Nov. 17, 2017), <https://www.psychestudy.com/cognitive/memory/ebbinghaus-forgetting-curve> (“Ebbinghaus forgetting curve describes the decrease in ability of the brain to retain memory over time.”).

¹⁴⁹ See ADAM GAZZALEY & LARRY D. ROSEN, *THE DISTRACTED MIND: ANCIENT BRAINS IN A HIGH-TECH WORLD* (2016); Loren Dunn, “The Pomodoro-Technique and 3 More Research-Backed Study Tips,” Apr. 26, 2016, <https://www.forbes.com/sites/noodleeducation/2016/04/26/the-pomodoro-technique-and-3->

unlikely to make live online sessions that short, judges should consider using frequent breaks in order to avoid “Zoom fatigue” during synchronous hearings and trials.¹⁵⁰

Second, video testimony may be less emotionally arousing than physical testimony. Whether live or asynchronous, it may therefore lack the affective impact of in-person trials. (Picture jurors sitting feet away from a sobbing plaintiff.) Summarizing the literature, Susan Bandes and Jessica Salerno write that “there is some evidence that videotaped testimony evokes less empathy than in-court testimony, though video also presents opportunities for close-ups and other artistry that might ameliorate the effect of the decision maker’s lack of proximity to the witness.”¹⁵¹

Still, videos can be quite emotionally arousing. After all, this is the rationale judges use today to exclude certain video presentations (for example, victim impact statements and day-in-the-life videos) that may be *too* emotionally arousing.¹⁵² Even if video does mute emotional arousal, it is

more-research-backed-study-tips/?sh=6257eeb85027; Alan Henry, *Productivity 101: A Primer to the Pomodoro Technique*, LIFEHACKER (Jul. 12, 2019), <https://lifehacker.com/productivity-101-a-primer-to-the-pomodoro-technique-1598992730>.

¹⁵⁰ Liz Fosslien & Mollie West Duffy, *How to Combat Zoom Fatigue*, HARV. BUS. REV. (Apr. 29, 2020), <https://hbr.org/2020/04/how-to-combat-zoom-fatigue>.

¹⁵¹ Susan Bandes & Jessica Salerno, *Emotion, Proof and Prejudice: The Cognitive Science of Gruesome Photos and Victim Impact Statements*, 46 ARIZ. ST. L.J. 1003, 1040 (2014).

¹⁵² *Id.* at 1040-41.

unclear this counts as a disadvantage.¹⁵³ The Supreme Court has said that “[t]he jury system is premised on the idea that rationality and careful regard for the court’s instructions will confine and exclude jurors’ raw emotions.”¹⁵⁴ Indeed, as Rule of Evidence 403’s distinction between the probative and the prejudicial reflects, emotion is a hallmark of unfair prejudice.¹⁵⁵ Video, especially carefully edited video, may facilitate an appropriate degree of dispassionate consideration of the evidence.

C. *Shorter, Edited Trial Presentations*

The 2019 Academy Award winner for best picture, *Green Book*, is 130-minutes. The 2018 winner, *The Shape of Water*, is 123-minutes. The 2017 winner, *Moonlight*, is nine minutes short of two hours. The success of these award-winning films suggests that a rich and comprehensive story can be told in a matter of hours.

We have suggested that one benefit of asynchronous video trials is that, by eliminating extraneous material, they facilitate somewhat shorter trials than live video trials, which themselves facilitates shorter trials than physical trials due to savings in travel time. This benefit might yield trials

¹⁵³ See generally THE PSYCHOLOGY OF JUDICIAL DECISION-MAKING (David Klein & Gregory Mitchell eds., 2010).

¹⁵⁴ *CSX Transp., Inc. v. Hensley*, 556 U.S. 838, 841 (2009).

¹⁵⁵ Bandes & Salerno, *supra* note 151, at 1006 (quoting Lisa Kern Griffin, *Narrative, Truth and Trial*, 101 GEO. L.J. 281, 314 n.181 (2012) and Victor J. Gold, *Federal Rule of Evidence 403: Observations on the Nature of Unfairly Prejudicial Evidence*, 58 WASH. L. REV. 497, 503 (1983)).

that are on average twenty or even forty-percent shorter than current trials. But it is worth considering whether the length and format of trials should be more profoundly changed by making substantive changes to typical trial procedure, potentially yielding something closer to a 90% reduction in time.

Currently, trials—criminal and civil—consist of each side giving an opening statement before calling witnesses, displaying documentary and physical evidence, and ultimately delivering a closing argument (often repetitive and tied to jury instructions that have already been specified by the presiding judge). All of this is followed by the judge’s then actually delivering those jury instructions. Under this time-honored format, key evidence is typically shared three times (through openings, testimonial and documentary evidence, and closings), and jury instructions are given at least twice (by both attorneys and the judge). Instead, what if an entire two-week trial were condensed into, say, a 130-minute video, including evidentiary highlights from each side (*e.g.*, video clips of testimony), and incorporating succinct yet clear jury instructions?

Litigators already give condensed closing arguments that integrate the court’s legal instructions and highlight key evidence, often in an hour or less. (Even in this compressed setting, jurors often complain about lawyerly rambling and repetition.) Whether juror accuracy is enhanced by watching the entire trial in addition to the closing arguments—which already concisely

tie the relevant evidence and the proper legal standard—is an open empirical question. Closing arguments alone may be sufficient.

Scholars have long advocated (and courts have recently experimented with) instructing jurors as to the elements of the legal cause of action earlier, long before trial ends.¹⁵⁶ This reform would help jurors make legal sense of the factual evidence they hear. Courts are also experimenting with letting litigants introduce witnesses in order to explain their testimony's relevance to the case. A closing argument inherently accomplishes both functions.

Research on decision-making suggests that people almost never withhold judgment until after they have carefully considered the relevant information.¹⁵⁷ They instead make an early assessment and, with the receipt of additional information, tend to selectively assimilate that information to accord with their initial judgment. This process makes it unlikely that adding a 131st minute, a 141st minute, or even hundreds more minutes could change the average juror's decision. Each additional minute yields diminishing marginal utility. At some point, more minutes—even ones featuring

¹⁵⁶ See Nancy S. Marder, *Bringing jury instructions into the twenty-first century*, 81 NOTRE DAME L. REV. 445 (2005): 449; Neil P. Cohen, *The timing of jury instructions*, 67 TENN. L. REV. 681 (1999).

¹⁵⁷ See Reid Hastie, *The role of stories in civil jury judgments* 32 U. MICH. JL REFORM 227 (1998): 227; Robert J. MacCoun, *Experimental research on jury decision-making*, 244 SCIENCE 1046 (1989).

completely novel, useful information—may exert negative effects, especially if they promote fatigue, distraction, boredom, or irritability.

Of course, complex cases will continue to require longer trials.¹⁵⁸ Common-sense suggests that trials featuring complex scientific or technological issues will usually be longer than average, as jurors may initially lack an understanding of the underlying patents or technology, and—therefore—of what facts are legally material. Videos created for such complex cases may optimally feature running times more akin to an epic—*Gandhi* (191 minutes) or *Gone with the Wind* (about 226 minutes)—than an action film. Nonetheless, our experience advising parties to complex cases or observing oral advocacy at the appellate and trial levels suggests that most litigants can make a coherent case within one hour.

Aside from efficiency and accuracy, due-process issues might also present challenges, especially where litigants wish to tell their own stories (as opposed to having them be excerpted in their attorney’s closing argument).¹⁵⁹ Such due-process considerations could arise, for example, in employment-discrimination cases, public-employment cases, and cases where a key issue

¹⁵⁸ Nora Engstrom, *The Diminished Trial*, 86 *FORDHAM L. REV.* 2131, 2134 (2018) (reviewing evidence that trials have become shorter in recent years, although a few protracted trials are still conducted every year).

¹⁵⁹ Compare John E. Rumel, *The Hourglass and Due Process: The Propriety of the Time Limits on Civil Trials*, 26 *U.S.F. L. REV.* 237, 238 (1992) and Nora Freeman Engstrom, *The Trouble with Trial Time Limits*, 106 *GEO. L.J.* 933, 933 (2018) (arguing against time limits on trials).

involves whether the plaintiff has a property interest in a government position or benefit that she was deprived of without adequate process. Nonetheless courts have for decades had and used the power to place reasonable limits on trial time.¹⁶⁰ The question is not whether to limit the video trial time, but rather what is the minimum necessary to do justice, for a given case?

One potential barrier is pragmatic: Lawyers may hesitate to readily embrace a reform that (on first glance) might reduce their billable hours. Do not worry, lawyers; you will still have plenty of work when preparing the condensed video presentation. Indeed, this new format may require even more legal acumen, forcing attorneys—like the director of a film—to tell complicated stories in an engaging, concise, and accurate manner. Besides, our legal system is not designed to please lawyers; it is supposed to achieve reasonably accurate outcomes with reasonable efficiency, while—ideally—providing a sense of due process.

D. Breaking Limitations Time and Place

If the foregoing reforms are implemented such that radically shortened trials are conducted by video, the geography of trials can be rethought. In contrast, when staging live trials, the lawyers, judge, witnesses, jurors, and court staff are forced to be in the exact same place at the exact

¹⁶⁰ FED. R. CIV. P. 16(c)(2)(O)

same time. Witnesses must travel from the opposite side of the world or may not even be subpoenaed to appear at all.¹⁶¹ In major cases, each side may bring dozens of personnel (including lawyers, presentation consultants, paralegals, and other support staff) to a trial site in a remote federal courthouse (*e.g.*, the Eastern District of Texas), living there for a month or longer. The practical difficulty of aligning all those schedules against professional and personal obligations, as well as exigent circumstances like health or weather emergencies, often causes trials to be cancelled or rescheduled for a later date (*i.e.*, “continued”).

Video potentially enhances efficiency—in terms of both travel costs and opportunity costs—reducing the delay that accompanies continuances. The attorneys, witnesses, and judge may perform their functions at various convenient times and places (for them), while the jurors can perform their functions at another relatively convenient time and place (their local courthouse, or perhaps elsewhere, as discussed).

Physically convening jurors entails substantial temporal and monetary costs. By contrast, if jurors serve from home, such costs disappear. Judges can utilize this increased efficiency to save even more time, lowering the typical day’s trial or hearing time to (say) four hours or less. Aside from

¹⁶¹ See FED. R. CIV. P. 45(c)(1)(A)-(B) (allowing witnesses to be subpoenaed if nearby).

optimizing attention, this change could secure a more representative jury, something that complements our other reforms. If jurors know that the court day has been shortened, a larger and more diverse cross-section of the community may be willing and able to serve.

Jurors will often prefer to serve at home or the office. It is less expensive in direct costs (*e.g.*, a bus fare), indirect costs (*e.g.*, childcare), and opportunity costs (*e.g.*, lost wages) than traveling to a courthouse. And they would prefer to schedule their service at a convenient time. Perhaps after dinner or during a slow morning at work?

Currently, thousands of potential jurors are excused for hardship, sometimes only after suffering the hardship of having to appear at court to plead with the judge.¹⁶² Many others serve despite some level of hardship that is nonetheless insufficient to warrant excusal.¹⁶³

Not long ago, Americans were required to head downtown for all manner of routine tasks, from exercising the franchise to renewing a license. Such tasks are increasingly completed remotely. Most states offer online

¹⁶² See generally Joanna Sobol, *Hardship Excuses and Occupational Exemptions: The Impairment of the Fair Cross-Section of the Community*, 69 S. CAL. L. REV. 155 (1995); see also H. Fukarai & E.W. Butler, *Organization, labor force, and jury representation: economic excuses and jury participation*, JURIMETRICS J., 32, 49 (1991).

¹⁶³ *Thiel*, 328 U.S. at 223-24 (1946) (holding that “[a] juror shall not be excused by a court for slight or trivial causes, or for hardship, or for inconvenience to said juror's business, but only when material injury or destruction to said juror's property or of property entrusted to said juror is threatened.”) (internal quotation marks and citation omitted); *cf. id.* (“[A] federal judge would be justified in excusing a daily wage earner for whom jury service would entail an undue financial hardship.”)

vehicle registration that are making trips to the DMV a thing of the past. Three states now conduct elections solely by mail; 39 permit qualified voters to cast mail-in ballots.¹⁶⁴

Though slow to adopt new technologies, in 2020, Covid-19 caused several courts to begin moving functions typically accomplished by mail online. For example, the Yolo County Superior Court permitted “potential jurors to respond to summons by Zoom or phone,” while also promulgating “easy step-by-step instructions” featuring “hyperlinked—quite large—buttons” for jurors to click in order to submit their reply to summons.¹⁶⁵ Courts that move to online trials or hearings might also benefit, from “creating a technological ‘Jury Service Staff’ available to answer questions by phone or email.”¹⁶⁶

With the high-speed internet, customized video can now be reliably delivered at little cost. Citizens can watch via a variety of devices including laptops, tablets, smartphones, and smart-home devices. A basic 7” tablet with video-streaming capabilities can be purchased for \$40—less than one day of

¹⁶⁴ *Voting Outside the Polling Place: Absentee, All-Mail, and Other Voting at Home Options*, NAT’L CONF. ST. LEGISLATORS (Sept. 24, 2020), <http://www.ncsl.org/research/elections-and-campaigns/absentee-and-early-voting.aspx>.

¹⁶⁵ Shammass, *supra* note 101.

¹⁶⁶ *Id.*

minimum-wage work. Nearly 60% of Americans now pay for video-streaming streaming services like Netflix.¹⁶⁷

A digital divide nonetheless persists. Poor and rural Americans disproportionately lack access to high-speed internet and network-ready devices.¹⁶⁸ These problems are not insurmountable; for example, such citizens might travel to their nearest public library or courthouse. Alternatively, there may be ways to mail them loaner devices with cellular data capabilities.

When jurors serve from home, it may be difficult to monitor whether jurors are having *ex parte* conversations or consulting extraneous materials in online trials. On the other hand, using larger sample sizes in concert with shorter trials may make other sorts of misconduct *more* difficult. For instance, our reforms make it largely infeasible for litigants to find—much less actually contact—jurors, whose service may be limited to an hour or two. Similarly, serving from home or the office creates a risk that jurors will be interrupted. Of course, for short interruptions, they can simply pause the video and resume

¹⁶⁷ Steve Liesman, *Nearly 60% of Americans Are Streaming and Most with Netflix: CNBC Survey*, CNBC, Mar. 29, 2018, <https://www.cnbc.com/2018/03/29/nearly-60-percent-of-americans-are-streaming-and-most-with-netflix-cnbc-survey.html>.

¹⁶⁸ A. Scheerder, *et. al*, *Determinants of Internet skills, uses and outcomes. A systematic review of the second and third-level digital divide*. 8 *TELEMATICS AND INFORMATICS* 34, pp. 1607-624 (2017).

when ready. Although interruptions are usually bad, due to spaced-learning, *intentional* interruptions could benefit overall accuracy.¹⁶⁹

A more general concern relates to the seriousness and solemnity of the trial.¹⁷⁰ Unless jurors are required to be physically present in a courthouse to view video or other digital evidence, they could feel a lack of gravity and tension that might conceivably translate not only to poorer attention, but also poorer accuracy, contradicting our reforms' intended purposes of *improving* the jury's essential functions, including accuracy. But does science suggest that reduced tension makes minds wander? Not exactly. Although many might assume that stress lowers performance, this is true only to a degree. Per the so-called Yerkes-Dodson law, performance generally "increases with physiological or mental arousal (stress) but only up to a point. When . . . stress becomes too high, performance decreases."¹⁷¹

This finding suggests that, if judges are unwilling to artificially shorten jury instructions during live online trials,¹⁷² they must take extra care to impart—in jargon-free language—the gravity of the situation facing jurors:

¹⁶⁹ Shrestha, *supra* note 169.

¹⁷⁰ Marder, *supra* note 38. At 264-65 (2006) ("The architecture of the courtroom, with actors in their designated places, the formality of the procedures, and the presence of the parties who will be affected by the jury's verdict, remind jurors of the seriousness of their task. An online mock juror lacks such a setting.").

¹⁷¹ Francesca Gino, *Are You Too Stressed to Be Productive? Or Not Stressed Enough?*, HARV. BUS. REV., Apr. 4, 2016, <https://hbr.org/2016/04/are-you-too-stressed-to-be-productive-or-not-stressed-enough>.

¹⁷² See Shammas, *supra* note 145.

To ensure justice is done. It also heightens the attention-based rationales for video-editing.

One way to minimize distractions even during asynchronous online trials would be for courts to ship jurors low-cost tablets, which prevent other tasks from being performed concurrently on the device and monitoring juror's presence and attention.¹⁷³ Going further, we expect that virtual-reality goggles will be the next frontier.¹⁷⁴ Already, the devices can detect when users remove their devices, and the virtuality-reality experience is substantially more engaging than video. Using a virtual-reality headset also eliminates (nearly completely) concerns that jurors might engage in distracting behavior during trial and deliberation, while lessening the risk of a juror impermissibly recording the trial. (This is because (1) unlike with a traditional screen, it is nearly impossible to use a phone or portable camera to record what is playing on a virtual-reality headset; and (2) courts could

¹⁷³ See Stephanie Francis Ward, *Amid Claims that the Online Bar Exam Went Well, Some Test-Takers Have a Different View*, ABA J., Oct. 20, 2020, <https://www.abajournal.com/web/article/amid-claims-that-online-bar-exam-went-well-some-test-takers-have-a-different-view>.

¹⁷⁴ See Anjanette H. Raymond & Scott J. Shackelford, *Jury Glasses: Wearable Technology and Its Role in Crowdsourcing Justice*, 17 CARDOZO J. CONFLICT RESOL. 115, 118 (2015) (arguing for reforms that "could reduce judicial backlogs, temper . . . attempts to avoid participation in dispute resolution, promote legal cognizance, and improve community participation, in addition to reducing the prevalence of personal bias in decision-making"). Natalie Salmanowitz, *Unconventional methods for a traditional setting: The use of virtual reality to reduce implicit racial bias in the courtroom.* 15 UNHL REV. 117 (2016).

prophylactically disable the recording functions on the virtual-reality devices.)

Our time-and-place reform can also be applied dynamically, in the much like jury sequestration is currently applied on a case-by-case basis. For most routine cases, and certainly for public proceedings, it may be harmless and efficient for jurors to serve at locations of their choosing. In the wake of Covid-19, Yolo County took care to include in its guidelines “that every hearing or proceeding that can be done virtually is done virtually, including jury orientation and hardship hearings.”¹⁷⁵

There is likely no plausible argument that allowing jurors to serve at a time and place of their choosing will enhance the jury’s chief functions: accuracy and democratic norm-setting. Except for exigencies—say, a pandemic—where the anxiety of proximity could distract or rush jurors,¹⁷⁶ this reform has value mostly in terms of efficiency. It is therefore our least important reform.

E. A National Jury Pool for National Civil Cases

The foregoing section suggests breaking the geographic link of jurors and the courthouse, taking advantage of online technologies, and thereby

¹⁷⁵ Shammas, *supra* note 111.

¹⁷⁶ Wilson, *supra* note 93, at 68 (noting that juries deliberating during coronavirus may have felt rushed and been less representative due to differential levels of concern about Covid-19 felt by different ethnicities and partisans).

allowing jurors to serve from their local courthouse, public library, office, or even bedroom. Not only might this increase convenience, but it could also allow greater jury representativeness by enabling national jury pools in cases of national importance, such as patent infringement or products liability cases.¹⁷⁷ When the alleged wrongdoing and harms are national, why should a jury be local?

In cases where a defendant is a national or multinational corporation—*e.g.*, Amtrak—a jury located in the Northeast may very well have biases different from ones located elsewhere, not only for demographic but also for pragmatic or utilitarian reasons related to the nature of the case.¹⁷⁸ (For example, jurors in some regions likely have more experience as train passengers than jurors in other regions.) Aside from increasing accuracy by ensuring knowledgeable jurors are included, allowing jurors throughout the country to participate in trials involving corporate defendants like Amtrak has

¹⁷⁷ See Laura G. Dooley, *National Juries for National Cases: Preserving Citizen Participation in Large-Scale Litigation*, 83 N.Y.U. L. REV. 411, 411 (2008) (advocating for national pools to “eliminate incentives for parties to forum-shop [that] would make the decisionmaking body representative of the population that will feel the effects of its decision”); see also Luke McCloud and David Rosenberg, *A Solution to the Choice of Law Problem of Differing State Laws in Class Actions: Average Law*, 79 GEO. WASH. L. REV. 374 (2010) (suggesting a similar solution for choice of law); Abbe R. Gluck & Elizabeth Chamblee Burch, *MDL Revolution*, N.Y.U. L. REV. (forthcoming 2021), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3737728.

¹⁷⁸ Compare *Wilmotte v. Nat’l R.R. Passenger Corp.*, 2020 WL 106744, at *1 (W.D. Wash., Jan. 9, 2020) (in which the jury awarded \$17 million in damages against Amtrak) with *Vanderburgh v. Nat’l R.R. Passenger Corp.*, 2007 WL 549740, at *1 (D. Conn. Feb. 16, 2007) (involving a jury’s rejection of claims that Amtrak was reckless).

the additional benefit of ensuring that the second function of juries—democratic norm-setting—functions as intended. After all, a norm appropriate in, say, North Dakota may be inappropriate in New York.

Scholars, courts, and litigants have express concern that “sympathetic local jury pools” are unrepresentative, and the incentives creating incentives for litigants to “forum shop” for favorable jurisdictions.¹⁷⁹ Major companies have even sought to exploit their repeat-player status by ingratiating themselves with the local jury pool through funding extravagant charitable works such as ice-skating rinks.¹⁸⁰

In other cases, the problem is flipped: A local jury is hostile to a litigant.¹⁸¹ Take the case of Jeffrey Skilling, former CEO of Enron, a Houston company that collapsed after a spectacular case of securities fraud. As it collapsed, many Houstonians lost their entire life savings in their company retirement accounts, and many potential jurors reported personally knowing people injured by Enron’s alleged fraud. Some argued that when

¹⁷⁹ Alisha Key Taylor, *What Does Forum Shopping in the Eastern District of Texas Mean for Patent Reform?*, 6 J. MARSHALL REV. INTELL. PROP. L. 570, 583 (2007). See also Andrei Iancu & Jay Chung, *Real Reasons the Eastern District of Texas Draws Patent Cases – Beyond Lore and Anecdote*, 14 SCI. & TECH. L. REV. 299, 301-02 (“One of the oft-cited reasons for the District’s popularity, as well as its undeserved reputation, has been the allegedly ‘plaintiff-friendly juries’ who are ‘predisposed to find for plaintiffs and award large damages.’”)

¹⁸⁰ See Anthony Zurcher, *Why a small town in Texas had Samsung’s ear*, BBC, May 27, 2017, <https://www.bbc.com/news/world-us-canada-40021491>.

¹⁸¹ See Victor E. Schwartz, Sherman Joyce, and Cary Silverman. *West Virginia as a Judicial Hellhole: Why Businesses Fear Litigating in State Courts*. 111 W. VA. L. REV. 757 (2008).

”the local population [has] a vested interest in the outcome of the case [a] presumption of bias should extend to the entire community.“¹⁸² Despite this concern, the Supreme Court ultimately affirmed Skilling’s conviction; its decision relied almost entirely on jurors’ reassurance, rendered under pressure from the trial judge, that they could be “fair and impartial.”¹⁸³

With the findings of modern psychology, this practice seems medieval, and—with modern communications technology—completely unnecessary.¹⁸⁴ Because of the Sixth Amendment’s Vicinage Clause, which requires that (in federal criminal cases) juries be drawn from the state or federal district where the crime was committed, we acknowledge that using national jury pools for criminal cases may be more difficult than in civil cases. For such cases, however, federal criminal juries should at the very least become district or state-wide, because the Federal Rule of Criminal Procedure implementing the Vicinage Clause is much narrower than the Sixth Amendment requires.¹⁸⁵

¹⁸² Jordan Gross, *If Skilling Can’t Get A Change Of Venue, Who Can? Salvaging Common Law Implied Bias Principles from the Wreckage of the Constitutional Pretrial Publicity Standard*, 85 *TEMPLE LAW REV.* 575, 620 (2013).

¹⁸³ *Skilling v. United States*, 561 U.S. 358, 367-68 (2010).

¹⁸⁴ See Yokum, Robertson, & Palmer, *supra* note 118 (detailing the failure of self-diagnosis).

¹⁸⁵ See Part III.

F. Vote-Aggregation without Deliberation

The book and movie *12 Angry Men* popularized the notion that a minority of jurors, or even one heroic holdout, can save a jury from an unjust verdict. The reality is quite different. Jurors in the numerical minority at the beginning of deliberation are usually overridden by the end, due in no small part to peer pressure. As Harry Kalvin, Jr. and Hans Zeisel argue based on their collected data from actual juries and trial judges, the “deliberation process might be likened to what the developer does for an exposed film: it brings out the picture, but the outcome is pre-determined.”¹⁸⁶ Indeed, far from empowering holdouts as in *12 Angry Men*, the function of jury deliberations is to (eventually) enable the majority to outvote the minority, under the classic Condorcetian notion that they are probably wrong.¹⁸⁷

The literature on group deliberation is revealing. In a now-classic 1950s experiment, Solomon Ash demonstrated a “conformity” effect.¹⁸⁸ A group of participants were tasked with publicly estimating which of three lines matched the length of a separate line. The task was repeated several times. Unbeknownst to one person—the actual subject—all other group-members were hired staff, or “confederates.” These confederates publicly

¹⁸⁶ HARRY KALVEN, JR. & HANS ZEISEL, *THE AMERICAN JURY* 489 (1966).

¹⁸⁷ CONDORCET, *supra* note 107.

¹⁸⁸ Solomon E. Asch, *Studies of Independence and Conformity: A Minority of One Against a Unanimous Majority*, 70 *PSYCHOL. MONOGRAPHS* 1, 3 (1956).

gave their answers—which were clearly incorrect—before the research participant was asked to answer. Three of four participants eventually began parroting the confederates.

Descriptively, social scientists have examined a range of predictors of post-deliberation verdicts. Shari Diamond and Jonathan Casper conclude that, among measures they studied, “the median [individual juror award pre-deliberation] is the best single predictor of the jury’s final verdict.”¹⁸⁹ Consistent with Kalven and Zeisel’s findings from the 1960s, this more recent work suggests that jury deliberations do little more than consume time—hours, days, and sometimes even weeks—while delaying an inevitable outcome that could have been gleaned by a simple mathematical aggregation of each juror’s individual vote. Indeed, courts might do well to do away with deliberation in favor of using the mathematical median of individual juror votes, as leading jury scholars routinely do with mock jurors.¹⁹⁰

¹⁸⁹ Shari Seidman Diamond & Jonathan D. Casper, *Blindfolding the Jury to Verdict Consequences: Damages, Experts, and the Civil Jury*, 26 L. & SOC’Y REV. 513, 546 (1992); accord S. Femi Sonaike, *The Influence of Jury Deliberation on Juror Perception of Trial, Credibility, and Damage Awards*, 1978 BYU L. REV. 889, 902 (finding that the median was better than the mean).

¹⁹⁰ See, e.g., NEIL VIDMAR, *MEDICAL MALPRACTICE AND THE AMERICAN JURY: CONFRONTING THE MYTHS ABOUT JURY INCOMPETENCE, DEEP POCKETS, AND OUTRAGEOUS DAMAGE AWARDS* 197 (1995); Campbell, Chao, Robertson & Yokum, *supra* note 130, at 557. But see David Schkade et al., *Deliberating About Dollars: The Severity Shift*, 100 COLUM. L. REV. 1139, 1152-53 (2000) (finding higher punitive damages awards compared to the median of individual votes); Daniel Kahneman et al., *Shared Outrage and Erratic Awards: The Psychology of Punitive Damages*, 16 J. RISK & UNCERTAINTY 49, 72-75 (1998).

To the extent that deliberating jurors do accomplish something other than settle on the median juror vote, as Condorcet theorized, it is unclear that that even vigorous deliberation enhances accuracy. There exists a rich social-science literature on group deliberation, which can only be gestured towards here.¹⁹¹ Its implications are not promising. As Sunstein writes:

If individual jurors are biased because of pretrial publicity that misleadingly implicates the defendant, or even because of the defendant's unappealing physical appearance, juries are likely to amplify rather than correct those biases. Groups have been found to ...be more affected by the biasing effect of spurious arguments from lawyers; to be more susceptible to the "sunk cost fallacy"; and to be more subject to choice-rank preference reversals.¹⁹²

Simply putting people together for a discussion is, thus, no panacea for human cognitive failures.

To be fair, some research does find that deliberation is useful. For example, Jessica Salerno and Michael McCauley exposed fifty-five undergraduate mock-trial participants to testimony given by both low and

¹⁹¹ See e.g., Michael C. Delli Carpini et al., *Public Deliberation, Discursive Participation, and Citizen Engagement: A Review of the Empirical Literature*, 7 ANN. REV. POL. SCI. 315, 324 (2004); Mathew D. McCubbins & Daniel B. Rodriguez, *When Does Deliberating Improve Decisionmaking?*, 15 J. CONTEMP. LEGAL ISSUES 9, 12 (2006) (presenting experiments with "results which indicate that deliberation, even when attempted under ideal conditions, does not improve social welfare, and, in all but rare circumstances, may decrease it").

¹⁹² Cass R. Sunstein, *Deliberating Groups Versus Prediction Markets (or Hayek's Challenge to Habermas)*, 3 EPISTEME 192, 198 (2006).

high-quality experts. They found that the mock jurors were more discerning of quality after deliberating than before deliberating.¹⁹³

One additional claim cited in favor of juries is the view that deliberation enhances jurors' memories by opening space for fellow jurors to fill in gaps in their colleagues' memories. We have already suggested that reliance on sheer memory should become obsolete, especially if we implement much shorter trial presentations and utilize rewindable video presentations. However, even there, scholars have found that the jurors who verbally dominate deliberations do not necessarily have the most accurate memories.¹⁹⁴ In fact, those who change their recollections are not the least accurate ones, but the least confident ones.¹⁹⁵ This parallels the Dunning-Kruger effect, which generally proposes that confidence and knowledge are inversely correlated.¹⁹⁶

As for why those with more accurate views tend not to lead deliberations, Lynn M. Sanders observes that “[w]hen Americans assemble

¹⁹³ Jessica Salerno & Michelle McCauley, *Mock Jurors' Judgments About Opposing Scientific Experts: Do Cross-examination, Deliberation, and Need for Cognition Matter?*, 27 AM. J. FORENSIC PSYCHOL. 37 (2009).

¹⁹⁴ MaryPritchard & Janice Keenan, *Does Jury Deliberation Really Improve Jurors' Memories?*, 16 APPLIED COGNITIVE PSYCHOL. 589, 589 (2002).

¹⁹⁵ As Yeats once wrote, “[t]he best lack all conviction,” while “the worst are full of passionate intensity.” Scott Simon, *Opinion: Reading William Butler Yeats 100 Years Later*, NPR, Nov. 28, 2020, <https://www.npr.org/2020/11/28/939561949/opinion-reading-william-butler-yeats-100-years-later>.

¹⁹⁶ See Gordon Pennycook, *et al.*, *Dunning-Kruger Effects in Reasoning: Theoretical Implications of the Failure to Recognize Incompetence*, 24 PSYCHONOMICS BULL. & REV. 1774, 1774 (2017).

in juries, they do not leave behind the status, power, and privileges that they hold in the outside world.”¹⁹⁷ Thus, deliberation can squelch the viewpoints of women, minorities, and other disadvantaged groups. Indeed, white men with college degrees are disproportionately chosen as forepersons,¹⁹⁸ and when women speak, their words are perceived differently than identical words articulated by men.¹⁹⁹

The fact that disparities in the willingness of some jurors to speak track disparities in societal goods heightens the importance of ensuring that juries are not only demographically representative, but also that their discussions are not monopolized by more privileged jurors.²⁰² Of course, these issues would not be nearly so disconcerting to the Framers, who systematically excluded women and blacks from jury service in the first place.

Today, a mathematical aggregation of individual votes may in fact give diverse perspectives their proper weight. Alternatively, even live online juries might increase the representativeness of deliberation, as the lessened tension on Zoom relative to, say, a courtroom may empower some jurors. Associations that black Americans, especially, have with courtrooms—ones

¹⁹⁷ Lynn Sanders, *Against Deliberation*, 25 POL. THEORY 347, 364 (1997).

¹⁹⁸ VALERIE HANS & NEIL VIDMAR, *JUDGING THE JURY* (1986).

¹⁹⁹ Jessica Salerno & Liana Peter-Hagene, *One Angry Woman: Anger Expression Increases Influence for Men, but Decreases Influence for Women, During Group Deliberation*, 39 L. & HUM. BEHAV. 581, 581 (2015)

that might be less positive than those held by their white peers—might mean that black jurors will feel less anxiety about speaking during online deliberations than “real” deliberations.

An additional risk of deliberation involves the possibility that more outspoken jurors will utilize personal anecdotes and expertise (or, at least, assumed expertise). Both can be very influential during deliberation. For example, in research on mock jurors deliberating on a case involving lower-back pain, individual jurors habitually cited purported knowledge, either personal or through acquaintances, of ideal clinical practice.²⁰⁰ Fellow jurors may also use rhetoric, repetition, and outright demagoguery that would not be permitted of a trial witness or attorney in closing arguments. It is rather odd that the trial judge works so hard to ensure that jurors are not exposed to inadmissible material *during* the trial, but—between the jurors *after* trial—anything goes!

Although one might counter that deliberation will cause jurors to mitigate biases and stereotypes. The literature is mixed. Deliberation may generally mitigate pre-existing stereotypes; however, if the stereotype is

²⁰⁰ Megan S. Wright, Christopher T. Robertson & David Yokum, *Mock Juror and Jury Assessments of Blinded Expert Witnesses*, in *BLINDING AS A SOLUTION TO BIAS: STRENGTHENING BIOMEDICAL SCIENCE, FORENSIC SCIENCE, AND LAW* 195, 202-04 (Christopher T. Robertson & Aaron Kesselheim eds., 2016).

activated during trial, deliberating magnifies its effects.²⁰¹ Sunstein has highlighted a tendency of groups towards not compromise but *polarization*. Even when there is diversity of initial viewpoints, people usually focus on points of agreement—a tendency known as shared information bias.²⁰² Discussion, in turn, highlights agreed-upon positions, which reinforces confidence in those beliefs. Occasionally, the group’s position emerges as more extreme than that of *any* single individual.²⁰³

We here suggest that rather than deliberate as a group, jurors simply vote, which is a pragmatic solution, especially if juries become larger. One downside of using mathematical aggregation rather than deliberation is that the latter may yield certain incidental benefits, such as increasing a sense of political efficacy and democratic engagement.²⁰⁴ On the other hand, scholars have concluded that “real-life deliberation can fan emotions unproductively, can exacerbate rather than diminish power differentials . . . , can make people feel frustrated with the system that made them deliberate, is ill-suited to many

²⁰¹ Tamara M. Haegerich, Jessica M. Salerno & Bette L. Bottoms, *Are the Effects of Juvenile Offender Stereotypes Maximized or Minimized by Jury Deliberation?*, 19 PSYCHOL. PUB. POL’Y & L. 81, 81 (2013).

²⁰² Gwen M. Wittenbaum, *The Bias Toward Discussing Shared Information: Why Are High-Status Group Members Immune?*, 27 COMM. RES. 379, 393 (2000) (highlighting how decision-making groups “fail to disseminate effectively their unshared information”).

²⁰³ Cass R. Sunstein, *The Law of Group Polarization*, 10 J. POL. PHIL. 175, 176 (2002).

²⁰⁴ See generally Michael E. Morrell, *Deliberation, Democratic Decision-making and Internal Political Efficacy*, 27 POL. BEHAV. 49 (2005).

issues, and can lead to worse decisions than would have occurred if no deliberation had taken place.”²⁰⁵

If doing away with deliberation is held to be unconstitutional, a potential alternative would involve using parallel juries, where groups of, say, twelve jurors deliberate together and then the jury votes (rather than the juror votes) are aggregated to reach a verdict.²⁰⁶ Another possibility would involve having multiple juries decide different parts of a given case (*e.g.*, liability and damages) concurrently.²⁰⁷

III. CONSTITUTIONALITY AND LEGAL REFORMS

This Part reviews our proposed reforms’ constitutionality and legality. Our assessment analyzes the Constitution’s commitment to public trials, the Sixth and Seventh Amendment jury-trial guarantees, and, for criminal cases, the Confrontation Clause.

In approaching the constitutional questions, it is useful to recall that some Founders criticized traditionalists like Edmund Burke for preferencing practice to pragmatism and the past to the present. Cass Sunstein highlights

²⁰⁵ JOHN R. HIBBING & ELIZABETH THEISS-MORSE, *STEALTH DEMOCRACY: AMERICANS’ BELIEFS ABOUT HOW GOVERNMENT SHOULD WORK* 191 (2002).

²⁰⁶ *See* Campbell, Chao, Robertson & Yokum, *supra* note 130, at 557 (using such a method for research purposes).

²⁰⁷ *See* Saks and Blanck, *supra* note 110 (discussing *Cimino v. Raymark Indus.*, 751 F. Supp. 649 (E.D. Tex. 1990), which used two juries in a mass-tort context); Byron G. Stier, *Jackpot Justice: Verdict Variability and the Mass Tort Class Action*, 80 *Temp. L. Rev.* 1013 (2007) (arguing for the use of multiple juries in individual cases).

Madison's preference for "reflection and choice" over "accident and force."²⁰⁸ Sunstein explains that they held that "current generations have more experience than past generations," on which to draw.²⁰⁹

To be sure, nothing in the Constitution explicitly forbids more jurors or, for that matter, any of our other advocated reforms.²¹⁰ If the Framers wanted to prevent a jury of three hundred from convening, or if they wanted to explicitly require secretive deliberations, they could have done so. It is, therefore, useful to utilize a functional and purposive analysis that determines what goals the Founders sought to achieve with the jury institution, and, consequently, which reforms could help further these goals.²¹¹ As we wrote in the Introduction, those objectives include democratic engagement and the accurate sorting of truth from falsity. The foregoing sections demonstrate how those purposes can be better achieved with contemporary science and technology.

²⁰⁸ Cass R. Sunstein, *Burkean Minimalism*, 105 MICH. L. REV. 353, 398 (2006).

²⁰⁹ *Id.* (cleaned up) (internal citations omitted).

²¹⁰ The Court has held that there is a minimum limit of six jurors in civil cases, *see generally* *Colgrove v. Battin*, 413 U.S. 149 (1973), but has not suggested a maximum limit. *See generally* Allen R. Kamp, *Constitutional Interpretation and Technological Change*, 49 NEW ENG. L. REV. 2019 (2014).

²¹¹ *See* Richard H. Fallon, Jr., *A constructivist coherence theory of constitutional interpretation*. 100 HARVARD L. REV 1189, 1200 (1987) (describing an approach to constitutional interpretation analyzing the relevant "values, purposes, or political theory in light of which the Constitution or certain elements of its language and structure are most intelligible.").

After concluding that our reforms are constitutional, we analyze the permissibility of videoconferencing under the current Federal Rules of Criminal and Civil Procedure to examine the procedural implications necessary to actualize them.

A. The Sixth and Seventh Amendments

The Seventh Amendment guarantees the right to trial by jury for most civil cases. The substance of the amendment has never been incorporated, but most states comply with the jury trial requirement anyway.²¹² Although not applicable to all cases and waivable by the parties, the right “is preserved to the parties *inviolable*.”²¹³ Similarly, the most fundamental rights that American criminal defendants are articulated in relation to the Sixth Amendment’s jury trial guarantee.²¹⁴

Yet the Sixth and Seventh Amendments are, on their face, silent on all the proposals here presented.²¹⁵ Although the Constitution, on its face, similarly lacks a unanimity requirement, in *Ramos v. Louisiana*, the Supreme Court recently held, due to racial-equity concerns, that jury verdicts in both

²¹² See generally, Charles W. Wolfram, *The Constitutional History of the Seventh Amendment*, 57 MINN. L. REV. 639 (1972).

²¹³ Justin Sarno & Jayme Long, *Social Distancing & Right to Jury Trial Must be Reconciled*, LAW360 (Apr. 12, 2020), <https://www.law360.com/articles/1261476/social-distancing-and-right-to-jury-trial-must-be-reconciled>.

²¹⁴ U.S. CONST. amend. VI.

²¹⁵ See Ian Ayres, *Pregnant with Embarrassments: An Incomplete Theory of the Seventh Amendment*, 26 VAL. L. REV. 385, 387 (1991) (arguing that a significant typo in an amendment indicates that the framers’ text is fallible).

state and federal criminal cases must be unanimous under the Sixth Amendment.²¹⁶ Although one scholar argues that the Court’s reasoning would render most online criminal jury trials unconstitutional, this conclusion—as the author later acknowledges—seems contrary to answers offered by even the most conservative constitutional theory.²¹⁷ This is because the inquiry into “whether jury trials must be in person ostensibly falls in what originalists [call] the ‘construction zone’—where legal practitioners are afforded greater (albeit not unlimited) latitude in adjusting constitutional rights,” but the Sixth Amendment is silent on unanimity.²¹⁸

The Supreme Court rarely finds the Constitution’s mere silence on a given issue to be dispositive, and has rejected that argument in several high-profile cases, such as *United States v. Nixon*.²¹⁹ And, in cases challenging the use of new technologies for alleged violations of the Constitution, originalists typically infer little to nothing from mere silence. They instead use what

²¹⁶ *Ramos v. Louisiana*, 140 S. Ct. 1390, 1391 (2020) (a Louisiana jury had voted ten to two in favor of conviction. Louisiana and Oregon, unlike other states, permitted convictions by nonunanimous juries.)

²¹⁷ Justin D. Rattey, *Gap Filling: Assessing the Constitutionality of Virtual Criminal Trials in Light of Ramos v. Louisiana*, 125 PENN ST. L. REV. PENN STATIM 1, 3 (2020).

²¹⁸ *Id.*

²¹⁹ “The Special Prosecutor argues that there is no provision in the Constitution for a Presidential privilege as to the President’s communications corresponding to the privilege of Members of Congress under the Speech or Debate Clause. *But the silence of the Constitution on this score is not dispositive.*” *United States v. Nixon*, 418 U.S. 683, 706 n. 16 (1974) (emphasis added).

resembles a functionalist²²⁰ approach to discern what sorts of technological use or misuse are unconstitutional.²²¹

The Sixth and Seventh Amendment’s relative silence on how juries should be structured suggests that the constitutionality of some of our more profound reforms—for example, asynchronous video trials or aggregating votes—largely turns on whether the proposed procedures serve the jury’s intended purpose. As the Supreme Court has said, “[t]his purpose is [in large part] attained by the participation of the community in determinations of guilt and by the application of the common sense of laymen who, as jurors, consider the case.”²²² The Sixth Amendment’s Confrontation Clause will likely be the biggest point of contention if our reforms are adopted.

In 2001, Justice Scalia in *Kyllo v. United States* concluded that the police’s use of thermal-imaging technology to peek through a home’s is was a “search” under the Fourth Amendment, even though its use does not require that police physically enter a home.²²³ Thus, like any other governmental intrusion into a home, the majority found that using such technology is

²²⁰ See *infra* note 216.

²²¹ As early as 1925, the Supreme Court wrote that “[t]he Fourth Amendment is to be construed *in the light of what was deemed an unreasonable search and seizure when it was adopted*, and in a manner which will conserve public interests as well as the interests and rights of individual citizens.” *Kyllo v. United States*, 533 U.S. 27, 40 (2001) (quoting *Carroll v. United States*, 267 U.S. 132, 149 (1925)) (emphasis added).

²²² *Ballew v. Georgia*, 435 US 223, 229 (1978).

²²³ *Id.* at 39-40.

presumptively unreasonable absent a warrant.²²⁴ Tellingly, Justice Scalia conceded that the majority’s originalist or textualist approach, compared to “[t]he dissent’s proposed standard—whether the technology offers the ‘functional equivalent of actual presence in the area being searched,’ would seem quite similar to our own,” at least “at first blush.”²²⁵

In 2018, Justice Gorsuch—another originalist—issued a dissent in *Carpenter v. United States*, which like *Kyllo* concluded that police use of a new technology (here, enabling mass acquisition of cell-site records) was a “search.”²²⁶ Despite dissenting, Justice Gorsuch’s opinion resembled a concurrence; he agreed with the majority’s conclusion that law-enforcement needs a warrant to obtain cell-phone data, but disagreed with its functional “reasonable expectation of privacy” test.²²⁷ Although ostensibly analyzing constitutionality by focusing on the Fourth Amendment’s “original meaning,” his textualist analysis was essentially functionalist, turning on his conclusion that the Fourth Amendment “grants you the right to invoke its guarantees whenever one of your protected things (your person, your house, your papers, or your effects) is unreasonably searched or seized.”²²⁸

²²⁴ *Id.* at 40.

²²⁵ *Id.* at 39; *see also supra*, note 213.

²²⁶ *See generally* *Carpenter v. United States*, 138 S. Ct. 2206 (2018); *see also* Bernard Chao, Ian Farrell, Catherine Durso, and Christopher T Robertson, *Why Courts Fail to Protect Privacy: Race, Age, Bias, and Technology* (February 23, 2017). 106 CALIFORNIA LAW REVIEW 263 (2018).

²²⁷ *Id.* at 2261 (Gorsuch, J., dissenting).

²²⁸ *Id.* at 2264.

Together, *Carpenter* and *Kyllo* suggest that tradition has little place in constitutional interpretation where the Constitution is silent.

Since courts in other contexts apply balancing tests—for example, weighing whether “good cause” for video depositions exists during pre-trial discovery²²⁹—some scholars, in the first weeks of the pandemic, guessed that a similar approach would be used for online jury trials.²³⁰ Their predictions were accurate.²³¹ Of course, online jury trials may be constitutionally *necessary* during exigencies like pandemics if a defendant’s right to an impartial trial is to be respected.²³² As discussed in Part I, they may also be necessary in cases where criminal defendants’ speedy-trial rights are at risk.²³³ Moving our analysis beyond the pandemic context requires a more nuanced analysis, but the caselaw provides some guidance.

With that framework in mind, we analyze the effect of our reforms on the ideal of public trials, then analyze the constitutionality of our reforms

²²⁹ See 1 JAY E. GRENIG & WILLIAM C. GLEISNER, III, *EDISCOVERY & DIGITAL EVIDENCE* § 18:13 (2020).

²³⁰ Michael Shammass & Michael Pressman, *The Permissibility & Constitutionality of Jury Trial by Videoconference*, JURY MATTERS, (Civil Jury Project, New York, N.Y.), May 2020, <https://myemail.constantcontact.com/May-Newsletter-of-the-Civil-Jury-Project.html?soid=1127815376566&aid=CVq1WlqBpgU>.

²³¹ See Boutros, *et al*, *supra* note 45, at 53.

²³² See Wilson, *supra* note Surveys show that seventy-five percent of jurors are at least a little nervous about jury duty, and that people of color, Democrats, and older Americans are even more nervous than the general population. Such findings suggest that pandemic-era juries will be less representative of the community in ways that could negatively affect defendants. See Wilson, *supra* note 93.

²³³ Boutros, *et al*, *supra* note 46, at 50.

under the Constitution's requirements involving impartiality, confrontation, and vicinage.

B. Public Justice

American justice is public justice.²³⁴ As the Supreme Court has written, public criminal trials are “essential” since “the presence of interested spectators ... keep [a defendant's] triers keenly alive to a sense of their responsibility and to the importance of their functions.”²³⁵ Courts have since clarified that civil trials should generally be just as public as criminal ones. The California Supreme Court's rationale is representative: “[T]he public has an interest, in *all* civil cases, in observing and assessing the performance of its judicial system.”²³⁶

Public trials are also valuable for a less obvious reason. Like an Athenian *agora*, a courtroom is more than a public space. It is also a school, one where the general public assumes the role of “students” auditing free “lectures” about law and politics, and where jurors become not only students but also temporary policymakers. Less melodramatically, jury service provides an opportunity to cooperatively evaluate crucial societal issues, and

²³⁴ See Judith Resnik, *Bring Back Bentham: “Open Courts,” “Terror Trials,” and Public Sphere(s)*, 5 L. & ETHICS HUM. RES. 1, 1 (2011).

²³⁵ *Waller v. Georgia*, 467 U.S. 39, 46 (1984) (quoting *In re Oliver*, 333 U.S. 257, 270 (1948)).

²³⁶ *NBC Subsidiary (KNBC-TV), Inc. v. Superior Court*, 20 Cal. 4th 1178, 1210 (1999) (emphasis added).

to do so in a manner that is increasingly less common in our age where so much debate occurs in partisan news or social-media bubbles. John Stuart Mill mirrored this point in *Considerations on Representative Government*, where he cited the jury's ability to prepare citizens to live in a democracy by teaching them to evaluate and therefore respect norms.²³⁷

The well-documented decline in the percentage of trials may render the right to a public trial even more important today than in Mill's time.²³⁸ On this front, there is little conflict between online justice and public justice and increasing use of the former may help actualize the latter. In addition to streaming public hearings on their websites, several states during the coronavirus pandemic decided to make hearings available for citizens who lack internet access by setting up viewing rooms in courthouses with spaced seating.²³⁹ After coronavirus ends, public libraries, local and state legislatures, and other communal buildings could continue coordinating with courts to ensure that every citizen, whether jurors or spectators, can watch online trials. Oddly, some courts—especially before the coronavirus—

²³⁷ JOHN STUART MILL, *CONSIDERATIONS ON REPRESENTATIVE GOVERNMENT* 78-79 (Prometheus Books 1991) (1861).

²³⁸ See, e.g., Jocelyn Simonson, *The Criminal Court Audience in a Post-Trial World*, 127 HARV. L. REV. 2173, 2177 (2014).

²³⁹ See, e.g., Jamiles Lartey, *The Judge Will See You on Zoom, But the Public is Mostly Left Out*, MARSHALL PROJECT (Apr. 13, 2020), <https://www.themarshallproject.org/2020/04/13/the-judge-will-see-you-on-zoom-but-the-public-is-mostly-left-out>.

resisted video broadcast of trials and hearings, as if that would be *too* public, while permitting audio broadcasts.²⁴⁰

Especially if courts post our proposed asynchronous trial videos online, the internet will vastly increase the numbers of people able to watch trials. As noted earlier, we have witnessed the potential of live online hearing during the coronavirus pandemic, including in April 2020,²⁴¹ when about 2,000 viewers watched a one-day Zoom bench trial.²⁴² It is likely that making video a more permanent feature of our justice system, especially in criminal cases, will *increase* the number of jury trials conducted by (1) reducing the number of plea deals (through disincentivizing prosecutorial overreach) and (2) making jury trials substantially less expensive, and (thus) reducing parties' incentives to settle. Finally, it is not clear that, in the civil context, other alternatives to physical, live jury trials—mandatory arbitration, for example—harm democracy less than online trials.

C. *The Confrontation Clause*

The Confrontation Clause provides that “in all criminal prosecutions, the accused shall enjoy the right . . . to be confronted with the witnesses

²⁴⁰ See Mary Flood, *Windows Opening and Doors Closing-How the Internet is Changing Courtrooms and Media Coverage of Criminal Trials*, 59 SYRACUSE L. REV. 429 (2008).

²⁴¹ Siegal, *supra* note 62.

²⁴² *Id.*

against him.”²⁴³ Some scholars have written that the Confrontation Clause would prevent criminal trials, bench or jury, from being held entirely online unless a defendant consents. But the exact meaning of “confrontation” remains an open question. In addition, even if confrontation *does* require defendants to be in the same room as their accusers, it is difficult to see why it would also require jurors be present.

We have yet to receive a firm answer from the Supreme Court on whether online trials violate the Sixth Amendment’s Confrontation Clause, but given the rate of technological advance it seems likely the Court will eventually uphold the practice, at least in live trials conducted with secure videoconferencing software.²⁴⁴ Several cases address rights provided by the Confrontation Clause.²⁴⁵ A subcategory of such cases—involving witness testimony against the accused via closed-circuit television—are useful in discerning how courts would treat confrontation issues in online,

²⁴³ U.S. CONST. AMEND. VI.

²⁴⁴ *See, e.g.,* Dixon, *supra* note 35, at 37 (“In 2013, I predicted that judges and lawyers would initially resist the idea of remote video hearings but would nevertheless relent because of the impressive nature of high-definition video displays. *I also predicted that the Supreme Court would find the Constitution’s Sixth Amendment Confrontation Clause satisfied by remote witness appearances, but maybe not within my lifetime.*”) (emphasis added).

²⁴⁵ *See, e.g.,* Kentucky v. Stincer, 482 U.S. 730, 745 (1987) (“The Court has assumed that [the defendant] has a due process right . . . to be present at any stage of the criminal proceeding that is critical to its outcome if his presence would contribute to the fairness of the procedure.”); Illinois v. Allen, 397 U.S. 337, 338 (1970) (“One of the most basic of the rights guaranteed by the Confrontation Clause is the accused’s right to be present in the courtroom at every stage of his trial.”).

synchronous criminal jury trials conducted via Zoom or another videoconferencing platform.²⁴⁶

In *Maryland v. Craig*, the Court held that the Confrontation Clause does not categorically forbid child-abuse victims from testifying against defendants via *one-way* closed-circuit television.²⁴⁷ In deciding the key issue—whether the physical presence of the defendant before his accuser was necessary—Justice O’Connor wrote that “the Confrontation Clause does not prohibit [the] use of a procedure that, despite the absence of face-to-face confrontation, ensures the reliability of the evidence by subjecting it to rigorous adversarial testing and thereby preserves the essence of effective confrontation.”²⁴⁸ When a sufficient state interest justifies virtual instead of physical confrontation, the Court implied that three conditions must be met to make one-way testimony constitutionally permissible. First, witnesses must testify under oath; second, they must be subject to “full cross-examination”; and third, they must be visible to “the judge, jury, and defendant” when testifying.²⁴⁹ If one-way video using pre-1990s technology can be constitutional given a sufficient state interest, then two-way video

²⁴⁶ *Maryland v. Craig*, 497 U.S. 836, 857 (1990).

²⁴⁷ *Id.*

²⁴⁸ *Id.*

²⁴⁹ *Id.* (“Because there is no dispute that the child witnesses in this case testified under oath, were subject to full cross-examination, and were able to be observed by the judge, jury, and defendant as they testified, we conclude that, to the extent a proper finding of necessity has been made, the admission of such testimony would be consonant with the Confrontation Clause.”) (emphasis added).

using today's technology may well meet constitutional muster.²⁵⁰ For this reason, several scholars have recently rallied around the idea of using two-way video to satisfy the Confrontation Clause.²⁵¹

State analogues to the federal Confrontation Clause vary. Some state's constitutions categorically bar the use of videoconferencing in criminal jury trials. Massachusetts, for example, requires "face to face" confrontation.²⁵² But others allow digital testimony.²⁵³ For example, in *People v. Wrotten*, the New York Court of Appeals ruled in 2009 that—absent a statutory proscription—trial courts are free to order two-way video testimony when circumstances (here, an ill witness) require it.²⁵⁴ It cited several state and federal cases to render its decision.²⁵⁵ More importantly, the court used logic that could apply even absent exigent circumstances, writing that, "live two-way video may preserve the essential safeguards of

²⁵⁰ See *United States v. Gigante*, 166 F.3d 75, 81 (2d Cir.1999) (not applying the *Craig* standard because the trial court's use of two-way video "preserved the face-to-face confrontation").

²⁵¹ See Will Resnik, *Get with the Times: Why the Use of Live Two-Way Video Testimony Does Not Violate the Confrontation Clause.*, 45 AM. J. CRIM. L. 461 (2018); Hadley Perry, *Virtually Face-to-Face: The Confrontation Clause and the Use of Two-Way Video Testimony* 13 ROGER WILLIAMS UL REV. 565 (2008); Benjamin Aguiñaga, *Confronting Confrontation in a FaceTime Generation: A Substantial Public Policy Standard to Determine the Constitutionality of Two-Way Live Video Testimony in Criminal Trials*, 75 LA. L. REV. 175 (2014).

²⁵² *Commonwealth v. Bergstrom*, 524 N.E.2d 366, 371 (1988); see also *People v. Fitzpatrick*, 158 Ill. 2d 360, 365 (1994) (interpreting the Illinois Constitution's confrontation clause).

²⁵³ See, e.g., *People v. Phillips*, 315 P.3d 136, 152 (2012) (citing *Craig* and holding that neither the Colorado nor federal constitution render CCTV testimony unconstitutional).

²⁵⁴ *People v. Wrotten*, 14 N.Y.3d 33, 40, 923 N.E.2d 1099, 1103 (2009).

²⁵⁵ *Id.* at 39-40 (citing cases).

testimonial reliability, and so satisfy the Confrontation Clause’s primary concern with ‘ensur[ing] the reliability of the evidence against a criminal defendant by subjecting it to rigorous testing in the context of an adversary proceeding before the trier of fact.’”²⁵⁶

Some of our suggestions that could provide the most benefit to defendants, such as increasing the number of jurors and thereby improving accuracy, will almost certainly require that the logic in cases like *Wrotten* be expanded to allow for videoconferencing even absent exigent circumstances. Given the choice, innocent defendants confronted with the research suggesting that larger groups make more accurate decisions may rationally choose an online jury, even if it means viewing witnesses and jurors by video.

D. *The Implications for Procedural Rules*

If our reforms in Part II are adopted, key goals of both criminal and civil juries might be strengthened, especially those articulated in the first Federal Rule of Civil Procedure—to promote the “just, speedy, and efficient” resolution of trials²⁵⁷—and the second Federal Rule of Criminal Procedure—“to provide for the just determination of every criminal proceeding, to secure

²⁵⁶ *Id.* at 39 (citation omitted) (emphasis added).

²⁵⁷ FED. R. CIV. P. 1.

simplicity in procedure and fairness in administration, and to eliminate unjustifiable expense and delay.”²⁵⁸

During the Covid-19 pandemic, several states quickly acted to allow grand juries to deliberate virtually and to permit arraignments by video. But lawyers and judges soon complained about a lack of guidance from policymakers. Even if jury trials remain physical as a general matter, it would be irresponsible not to even discuss the procedural implications of online trials—especially given the probability of another pandemic. Below, we briefly analyze how, if online jury trials are to become a reality, state and federal procedures might need to change. We use the Federal Rules of Procedure as jumping-off points.

The changes that would need to be made to the Federal Rules of Criminal Procedure are not insignificant. For instance, Fed. R. Crim. P. 1—detailing definitions and scope—would need to include more thorough definitions for “video,” “videoconference,” “place of prosecution and trial,” and ubiquitous words like “before”; when a later rule stipulates that a defendant must appear “before” a magistrate judge, for example, the Rules should clarify if “before” requires a physical presence.

²⁵⁸ FED. R. CRIM. P. 2.

Since before coronavirus the rules allowed for video evidence in limited (generally pre-trial) circumstances, a second useful change could involve adapting existing provisions to jury trials. For example, Fed. R. Crim. P. 5(f), concerning initial appearances, stipulates that “video teleconferencing may be used to conduct an appearance ... if the defendant consents.”²⁵⁹ Fed. R. Crim. P. 10 likewise allows for videoconferencing during arraignments if consent is given.²⁶⁰

Interestingly, the 2002 Committee Notes permitting videoconferencing noted that “[t]he Committee was satisfied that the technology has progressed to the point that video teleconferencing can address the concerns raised in the past about the ability of the court and the defendant to see each other and for the defendant and counsel to be in contact with each other, either at the same location or by a secure remote connection.”²⁶¹ This supports the notion that online trials can satisfy not only the Confrontation Clause, but also the right to effective counsel, so long as reliability concerns articulated in cases like *Craig* are addressed. A third, less explicit change would involve updating the 2002 Committee Notes to reflect modern technology.

²⁵⁹ FED. R. CRIM. P. 5(F).

²⁶⁰ FED. R. CRIM P. 10(c).

²⁶¹ *Id.*

Fourth, Fed. R. Crim. P. 18 should be updated to ensure that, in implementing our reforms, it continues to accord with the Sixth Amendment's Vicinage Clause.²⁶² Under the current rule, "[u]nless a statute or these rules permit otherwise, the government must prosecute [the] offense" in the location where the crime was committed and in a timely manner.²⁶³ This rule, however, is ostensibly narrower than what the Sixth Amendment actually requires. The Committee should reconsider its current language considering evidence tying more jurors to increased accuracy and impartiality, as well as problems of bias reflected in controversial local trials like the Enron case.²⁶⁴ Because the Vicinage Clause is satisfied if the jury is from "the State and district wherein the crime was committed,"²⁶⁵ Fed. 18 should be expanded to allow potential jurors to be drawn from entire districts. Importantly, at least three circuits²⁶⁶ have held the Clause does not apply to the states,

A fifth change might involve creating an entirely new rule detailing how online jury trials should be conducted, not unlike the Federal Rules of Civil Procedure's stipulations regarding best-practices for out-of-court

²⁶² "In all criminal prosecutions, the accused shall enjoy the right to a speedy and public trial, *by an impartial jury of the State and district wherein the crime [was] committed.*" U.S. Const. Amend. VI (emphasis added).

²⁶³ FED. R. CRIM. P. 18.

²⁶⁴ See Part II.

²⁶⁵ *Supra* note 263.

²⁶⁶ See, e.g., *Caudill v. Scott*, 857 F.2d 344 (6th Cir. 1988); *Cook v. Morrill*, 783 F.2d 593 (5th Cir. 1986); *Zicarelli v. Dietz*, 633 F.2d 312 (3d Cir. 1980).

witness testimony, discussed below. The rule’s drafters might benefit from examining several of the coronavirus-era protocols mentioned earlier.²⁶⁷

The Federal Rules of Civil Procedure and state analogues would not require changes as far-reaching as those required for criminal-procedure rules. Most would *involve* merely modifying definitions. That said, one key change that policymakers should consider would involve implementing—in whatever new rule is created to allow for online jury trials—the considerations already detailed in Fed. R. Civ. P. 43(a),²⁶⁸ such as the requirement of “appropriate safeguards” for video testimony.²⁶⁹

Interestingly, Rule 43(a) has been used as a threshold in criminal trials. In *United States v. Guild*, the court decided that “because of the importance of live testimony in a criminal trial *and the fact that the Confrontation Clause is not implicated by this testimony*,” Rule 43(a) should serve as a threshold.²⁷⁰ Although not *directly* relevant to scenarios where jurors (as opposed to witnesses) participate via videoconference, the issue—involving concerns like economic and temporal efficiency, pragmatism, and the ease of credibility determinations—overlaps with factors relevant to jury

²⁶⁷ See *supra* note 99.

²⁶⁸ FED. R. CIV. P. 43(a) (describing when testimony need not be taken in “open court” and can instead be taken by video).

²⁶⁹ *Id.*

²⁷⁰ *United States v. Guild*, 2008 WL 191184, at *3 (E.D. Va. Jan. 17, 2008) (emphasis added).

trials as well. For example, “the relative cost of transporting” witnesses to court, as well as the ability of the court to “subpoena witnesses”—both factors in Rule 43(a)—could in analogous fashion be used to suggest best practices for online juries, especially in evaluating courts’ abilities to empanel a representative jury.²⁷¹

Rule 43(a) exemplifies the experience judges already have with videoconferencing in civil matters. Because state rules already mirror 43(a)—for example, Maine’s, which like 43(a) usually requires that testimony be in “open court” but allows “contemporaneous transmission from a different location” upon a demonstration of “good cause”²⁷²—state policymakers could also use Rule 43(a) a guide.²⁷³

Ultimately, notwithstanding the need to reconsider procedural rules, adopting our reforms should generally *lessen* complexity. For example, several of the most debated procedural rules that our proposals implicate—

²⁷¹ See DANIEL DEVOE & SARITA FRATTAROLI, VIDEOCONFERENCING IN THE COURTROOM: BENEFITS, CONCERNS, AND HOW TO MOVE FORWARD 8-9 (2009), <http://sociallaw.com/docs/default-source/judge-william-g.-young/judging-in-the-american-legal-system/04devoe-sarita-paper.pdf>. Though it focuses on courts ability to use their subpoena power over proposed witnesses, in the context of an online jury trial, a similar test—the ability of the court to bring jurors to court—seems pertinent. *Id.*

²⁷² ME. R. CIV. P. 43 (emphasis added).

²⁷³ See *Guild*, 2008 WL 191184, at *3 (“Recognizing both the importance of live testimony in a criminal trial and the fact that the Confrontation Clause is not implicated by this testimony, the Court will use Federal Rule of Civil Procedure 43(a) as the threshold showing for the use of videoconferencing.”).

venue rules, for instance²⁷⁴—may become *less* convoluted, because our national jury pool reform reduces forum-shopping incentives.

CONCLUSION

The Founders would not recognize how we build bridges, treat cancers, and transport ourselves. Yet the modern jury trial would be oddly familiar. The stagnation would disappoint them. As James Madison remarked: “Is it not the glory of the people of America that, whilst [Americans] have paid a decent regard to the opinions of former times and other nations, [they have] not suffered a blind veneration for antiquity, for custom, or for names, to overrule ... experience?”²⁷⁵

We have suggested that, if invented today—after the peculiar experience of coronavirus and with 232 years of scientific, political, and social experience—the jury trial would look quite different. Since the institution is supposed to accomplish its essential functions of facilitating democratic deliberation and efficiently resolving issues of public importance, it *should* look quite different.²⁷⁶ Under a new social contract, we might convene fifty or more jurors; utilize condensed videos to integrating evidence, argument, and jury instructions; and even allow jurors to render

²⁷⁴ 28 U.S.C.A. § 1391.

²⁷⁵ THE FEDERALIST NO. 14, at 72 (James Madison) (Clinton Rossiter ed., 1999)).

²⁷⁶ See *supra*, Part I.

individual, mathematically aggregated decisions privately, in a time and place of their choosing. Alternatively, we might opt for more moderate reforms—conducting more online jury trials to enable larger jury pools or aggregating the decisions of several parallel juries instead of several individual jurors, thereby preserving deliberation while retaining the benefits of aggregation.

Together, these features may greatly increase the purposes of accuracy and efficiency. Although some reforms *seem* radical, this is only because of how radically static the institution has remained despite scientific and social developments since 1789. Our reforms are no more radical than overused alternatives to physical jury trials like mandatory arbitration, and are probably more constitutional. Online jury trials are surely less offensive to the Seventh Amendment than the increasing use of contracts of adhesion that incorporate a combination of class-action waivers and arbitration agreements to effectively nullify the right to a civil jury trial.²⁷⁷

Ultimately, our reforms enhance the jury trial's ability to achieve its essential goals: Giving the people—not elites—the ability²⁷⁸ to accurately decide cases and determine societal norms.

²⁷⁷ See, e.g., *Sevier*, --F.3d--, 2021 WL at *4-7 (listing cases). Nonetheless, unless a change-of-terms provision's scope is unreasonably exceeded, courts rarely find that unilateral arbitration agreements are unconscionable, especially after *AT&T Mobility v. Concepcion*, 563 U.S. 333 (2011).

²⁷⁸ See Blackstone, *supra* note 8.