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ESSAY

The Role of Non-Adjudicative Facts in Judicial Decisionmaking

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This article had its genesis in what is known as the Friedman Lecture on November 18, 2022, a lecture on appellate advocacy named in honor of Judge Daniel Friedman, who served for many years on our court, our predecessor court, and as Deputy Solicitor General. It is my honor to have known Judge Friedman and to have served with him on our court for eleven years. He is remembered with great affection and respect and is still influential both for his decisions and for the judicial model he set for others. In preparing this speech, I often wondered what he would have thought about this subject—the use of non-adjudicative facts by the judiciary. It is not a subject, as far as I know, on which he had an opportunity to opine. However, based on my work over many years with Judge Friedman, I think he might have shared some of my concerns.

Introduction

In federal courts, making the factual record and factfinding is done at the trial court or at an administrative agency. The relevant factual material is submitted to an appellate court in a neatly bound appendix. It would seem that nothing is better established than the rule that appellate courts do not receive new factual material on appeal or engage in factfinding. Rule 201 of the Federal Rules of Evidence allows for a limited exception related to judicial

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^{1.} As our court has stated "[i]t is, of course, axiomatic that an appellate court must not 'find its own facts.'" New Eng. Tank Indus. of N.H., Inc. v. United States, 865 F.2d 243, 245 (Fed. Cir. 1989) (order). See also, e.g., Zenith Radio Corp. v. Hazeltine Res., Inc., 395 U.S. 100, 123 (1969) ("[A]ppellate courts must constantly have in mind that their function is not to decide factual issues de novo."); Goland v. Cent. Intel. Agency, 607 F.2d 339, 371 (D.C. Cir. 1978) ("Factfinding and the creation of a record are the functions of the district court....").

notice of adjudicative facts. Rule 201 permits notice where a fact is generally known and its "accuracy cannot reasonably be questioned."²

This picture is not entirely accurate. The reality is that appellate courts, including the Supreme Court, regularly receive new factual material on appeal and engage in a form of factfinding, even where the facts are not clearly undisputed, to determine "legislative facts." Legislative facts are "those which have relevance to legal reasoning and the lawmaking process . . . in the formulation of a legal principle or ruling by a judge or court." The Notes accompanying Rule 201 recognize that "no rule deals with judicial notice of 'legislative' facts," but goes on to recognize that various established authorities acknowledge that the courts appropriately rely on "legislative facts," and that "this . . . view [that reliance is appropriate] . . . should govern judicial access to legislative facts." The Notes also recognize that the traditional fact-finding processes only apply to what Rule 201 labels "adjudicative facts," those facts "concerning the immediate parties" in the case, and not to legislative facts.

The advisory committee analogizes legislative factfinding to the way judges regularly analyze law:

[T]he judge is unrestricted in his investigation and conclusion. He may reject the propositions of either party or of both parties. He may consult the sources of pertinent data to which they refer, or he may refuse to do so. He may make an independent search for persuasive data or rest content with what he has or what the parties present [T]he parties do no more than to assist; they control no part of the process.⁶

Long before the promulgation of Rule 201 and the accompanying note, the framework for classifying facts as either "adjudicative" or "legislative" already had a long history in American legal scholarship.⁷ This terminology was first used in a famous 1942 article by Professor Kenneth Culp Davis.⁸ Beginning in

- 2. Fed. R. Evid. 201(a)(2).
- 3. Fed. R. Evid. 201 advisory committee's note.
- 4. Id.
- 5. *Id*.
- 6. Id. (quoting Edmund M. Morgan, Judicial Notice, 57 HARV. L. REV. 269, 270-71 (1944)).
- 7. See Caitlin E. Borgmann, Appellate Review of Social Facts in Constitutional Rights Cases, 101 CALIF. L. REV. 1185, 1192 (2013) (noting that "[m]any scholars have jumped in to fill the gaps left by the Court's failure to address the categories and treatment of different kinds of facts" and describing the classification of adjudicative and legislative facts beginning in 1942 as "[p]erhaps the most recognized" of these classifications); Dean M. Hashimoto, Science as Mythology in Constitutional Law, 76 OR. L. REV. 111, 116 (1997) (describing the history of classifying facts as adjudicative or legislative and characterizing this scholarship as "flow[ing] from the legal realist movement's reinterpretation of the law/fact distinction").
- 8. Kenneth Culp Davis, An Approach to Problems of Evidence in the Administrative Process, 55 HARV. L. REV. 364, 402-10 (1942).

this article, and further developed in scholarship over the course of his career, Professor Davis explained the distinction between adjudicative and legislative facts. Legislative facts are those which pertain to the "formulation of a legal principle or ruling by a judge or court or in the enactment of a legislative body." Adjudicative facts are those "which relate to the parties" in a case—"who did what, where, when, how, and with what motive or intent." 11

The use of the term "legislative facts" in the judicial context seems to be a misnomer. ¹² Of course, courts do not legislate, despite the role public policy may play in the development of legal doctrines. For this reason, it seems more appropriate in the judicial context to call these facts non-adjudicative facts rather than legislative facts. This difference in nomenclature does not affect the substance of the analysis.

The purpose of this article is not to question the reliance of courts on non-adjudicative facts. The use of non-adjudicative facts is legitimate, but there are problems with their use and potential solutions—issues that concern both advocates and judges. I address these problems later in this article.

I.

First, it is important to understand that the use of non-adjudicative facts in judicial decision-making has a long history, and that their use is far more widespread than might be assumed. The development of the common law itself was and still is shaped by significant conclusions of an empirical nature as to the advantages or disadvantages of a particular legal doctrine. The explicit recognition of the role of non-adjudicative facts has an equally long history

^{9.} See Kenneth Culp Davis, The Requirement of Opportunity to Be Heard in the Administrative Process, 51 Yale L.J. 1093 (1942); Kenneth Culp Davis, Official Notice, 62 Harv. L. Rev. 537 (1949); Kenneth Culp Davis, Judicial Notice, 55 Colum. L. Rev. 845 (1955); Kenneth Culp Davis, The Requirement of a Trial-Type Hearing, 70 Harv. L. Rev. 193 (1956); Kenneth Culp Davis, Administrative Law Treatise, 338-434 (1958); Kenneth Culp Davis, Ombudsmen in America: Officers to Criticize Administrative Action, 109 U. Pa. L. Rev. 1057 (1961); Kenneth Culp Davis, A System of Judicial Notice Based on Fairness and Convenience, in Perspectives of Law 69 (1964); Kenneth Culp Davis, Facts in Lawmaking, 80 Colum. L. Rev. 931 (1980); Kenneth Culp Davis, Judicial, Legislative, and Administrative Lawmaking: A Proposed Research Service for the Supreme Court, 71 Minn. L. Rev. 1 (1986).

^{10.} Fed. R. Evid. 201 advisory committee's note.

^{11.} Fed. R. Evid. 201 advisory committee's note (quoting DAVIS, ADMINISTRATIVE LAW TREATISE, *supra* note 9, at 353).

^{12.} One scholar recently described Davis's nomenclature as "somewhat confusing[]" because "[t]hese are not facts found by the legislature (or facts about legislatures) but rather background social facts about the world used to decide broad questions of law and policy." Clare Huntington, *The Empirical Turn in Family Law*, 118 COLUM. L. REV. 227, 264 (2018).

going back (at least) to the time of Lord Mansfield in the middle of the eighteenth century in the case of *Lewis v. Rucker*. He wrote that he had "endeavored to get what assistance [he] could by conversing with some gentlemen of experience in [the relevant area]." In other words, Lord Mansfield was basing his legal ruling on facts not discovered by the adjudicative process, but by his own independent research.

Commenting in the late nineteenth century on the development of the common law, Oliver Wendell Holmes recognized that:

[I]n substance the growth of the law is legislative The very considerations which judges most rarely mention, and always with an apology, are the secret root from which the law draws all the juices of life. I mean, of course, considerations of what is expedient for the community concerned. 14

Holmes famously concluded that "[t]he life of the law has not been logic: it has been experience." Here, Holmes was approving judicial use of "legislative facts" in the decision of cases.

Similarly, Samuel Warren and Louis Brandeis, writing in the late nineteenth century about the common law development of the right to privacy, also appreciated that the development of the common law has always been responsive to changing times: "Political, social, and economic changes entail the recognition of new rights, and the common law, in its eternal youth, grows to meet the demands of society." Here too, Warren and Brandeis recognized that legislative factfinding helps the courts to adapt the common law to "political, social, and economic changes." 17

In modern times, the explicit use of non-adjudicative facts became routine. This modern approach to non-adjudicative facts appears to have begun with the Brandeis brief and the doctrine of legal realism. Brandeis, then a lawyer in private practice, first presented such a brief to the Supreme Court in 1908 in

^{13. 2} Burr. 1167, 1172 (KB 1761). This approach was later authorized by statute. *See* R.S.C. Ord. 55, r. 19, taken from Court of Chancery Act, 1852, 15 & 16 VICT., c. 80, § 42 ("The judge in chambers may, in such way as he thinks fit, obtain the assistance of accountants, merchants, engineers, actuaries, and other scientific persons the better to enable any matter at once to be determined, and he may act upon the certificate of any such person.").

^{14.} OLIVER WENDELL HOLMES, JR., Lecture 1.-Early Forms of Liability, in THE COMMON LAW 1, 35 (1881).

^{15.} Id. at 1.

Samuel D. Warren & Louis D. Brandeis, The Right to Privacy, 4 HARV. L. REV. 193, 193 (1890).

¹⁷ Id

See John Monahan & Laurens Walker, Judicial Use of Social Science Research, 15 L. & HUM. BEHAV. 571, 572 (1991); Ben K. Grunwald, Suboptimal Social Science and Judicial Precedent, 161 U. PA. L. REV. 1409, 1414 (2013); Davis, An Approach to Problems of Evidence, supra note 8, at 403.

the landmark case *Muller v. Oregon.*¹⁹ The Brandeis brief sought to inform the Court about relevant facts of industrial life.²⁰ *Muller* dealt with the constitutionality of an Oregon law that limited the work day of women employed in certain industries.²¹ Brandeis submitted a 113-page brief in support of the legislation, which included "extracts from over ninety reports of committees, bureaus of statistics, commissioners of hygiene, inspectors of factories, both in this country and in Europe" that tended to show the damaging effects that working long hours had on women.²²

The Supreme Court upheld the legislation, relying on Brandeis's brief and stating that although the materials cited were not "technically speaking, authorities," they were "significant of a widespread belief" that legislation regulating working conditions for women was justified.²³ The Court further explained, "[W]hen a question of fact is debated and debatable it is worthy of consideration. We take judicial cognizance of all matters of general knowledge."²⁴

The inclusion of non-adjudicative facts in briefs and arguments, and the reliance on such facts in judicial opinions, became more common following *Muller*.²⁵ Not surprisingly, as a Justice, Brandeis himself relied on non-legal sources in his opinions.²⁶

This approach became prominent in the defense of New Deal legislation in the 1930s from constitutional challenges. During the Depression, the Supreme Court initially resisted taking notice of the prevailing economic conditions in considering New Deal legislation²⁷ but later became more receptive. For

^{19. 208} U.S. 412 (1908).

^{20.} A Brandeis brief is one "that makes use of social and economic studies in addition to legal principles and citations." *Brandeis Brief*, BLACK'S LAW DICTIONARY (11th ed. 2019).

^{21. 208} U.S. at 417.

^{22.} Id. at 420.

^{23.} Id. at 420-21.

^{24.} *Id*.

^{25.} See sources cited supra note 18.

^{26.} See, e.g., Jay Burns Baking Co. v. Bryan, 264 U.S. 504, 520 (1924) (Brandeis, J., dissenting) ("[I]n this case, we have merely to acquaint ourselves with the art of bread-making and the usages of the trade, with the devices by which buyers of bread are imposed upon and honest bakers or dealers are subjected by their dishonest fellows to unfair competition, with the problems which have confronted public officials charged with the enforcement of the laws prohibiting short weights, and with their experience in administering those laws."); St. Louis & O'Fallon Ry. Co. v. United States, 279 U.S. 461, 497-98 (1929) (Brandeis, J., dissenting) (relying on one Senator's statement in the Congressional Record to conclude that railroads' "property investment account in 1920 was about 19 billions of dollars").

^{27.} See, e.g., A.L.A. Schechter Poultry Corp v. United States, 295 U.S. 495, 528 (1935) (rejecting an argument that the Live Poultry Code promulgated under the National Industrial Recovery Act during the Great Depression "must be viewed in the light of footnote continued on next page

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example, the National Labor Relation Act's requirements for collective bargaining were challenged as not being within Congress's commerce power. The government argued that "[t]he paralyzing effect on interstate commerce of industrial disputes . . . is a matter of common knowledge." The government presented evidence of widespread Depression-era strikes as supporting the importance of collective bargaining, and the government's efforts to mandate it, as the solution. At oral argument, Solicitor General Reed urged:

The statistics on strikes over a period of years show clearly the great problem which strikes create They point out that strikes brought about because of a desire to organize or because of interference with organization make up a growing percentage of all the strikes [T]he Court is thoroughly familiar with the seriousness of the strike situation. 31

The Supreme Court's NLRA decisions include frequent references to this common knowledge.³² For example, in *Jones & Loughlin Steel Corp.* the Court cited recent "actual experience" and concluded:

Experience has abundantly demonstrated that the recognition of the right of employees to self-organization . . . is often an essential condition of industrial peace. Refusal to confer and negotiate has been one of the most prolific causes of strife. This is such an outstanding fact in the history of labor disturbances that it is proper subject of judicial notice and requires no citation of instances.³³

Perhaps the most famous example of the use of non-adjudicative facts came later in *Brown v. Board of Education*.³⁴ In *Brown*, the Black schoolchildren

the grave national crisis with which Congress was confronted" because "[e]xtraordinary conditions do not create or enlarge constitutional powers"); United States v. Butler, 297 U.S. 1, 74-75 (1936) (holding the Agricultural Adjustment Act of 1933 to have exceeded Congress's taxing power and explaining that "[i]t does not help to declare that local conditions throughout the nation have created a situation of national concern").

- See NLRB v. Jones & Laughlin Steel Corp., 301 U.S. 1, 25 (1937); NLRB v. Friedman-Harry Marks Clothing Co., 301 U.S. 58, 71 (1937); Wash., Va., & Md. Coach Co. v. NLRB, 301 U.S. 142, 144 (1937).
- 29. Brief for Petitioner at 21, NLRB v. Jones & Loughlin Steel Corp., 301 U.S. 1 (1937), reprinted in 33 LANDMARK BRIEFS AND ARGUMENTS OF THE SUPREME COURT OF THE UNITED STATES 224 (Philip B. Kurland & Gerhard Casper eds., 1975); see also Drew D. Hansen, The Sit-Down Strikes and the Switch in Time, 46 WAYNE L. REV. 49, 109 (2000).
- 30. See Hansen, supra note 29 at 108-14.
- 31. Transcript of Oral Argument, NLRB v. Jones & Loughlin Steel Corp., 301 U.S. 1 (1937), reprinted in 33 LANDMARK BRIEFS AND ARGUMENTS OF THE SUPREME COURT OF THE UNITED STATES 439, 452 (Philip B. Kurland & Gerhard Casper eds., 1975); see also Hansen, supra note 29, at 110-11.
- 32. See Hansen, supra note 29, at 118-21.
- 33. Jones & Loughlin Steel Corp., 301 U.S. at 42 (emphasis omitted); see also Hansen, supra note 29, at 120.
- 34. 347 U.S. 483 (1954); see Hashimoto, supra note 7, at 118 (describing the "famous" legislative fact relied on in Brown); Ann Woolhandler, Rethinking the Judicial Reception footnote continued on next page

relied on studies that segregation creates a sense of inferiority in Black children, including the so-called "Doll Study," in which Black children in segregated schools demonstrated a preference for white dolls over Black dolls. The Court relied heavily on these studies in finding a violation of the equal protection clause. The Court stated that "separat[ing] [Black children] from others of similar age and qualifications solely because of their race generates a feeling of inferiority as to their status in the community that may affect their hearts and minds in a way unlikely ever to be undone. The Court concluded that "[w]hatever may have been the extent of psychological knowledge at the time of *Plessy v. Ferguson*, this finding is amply supported by modern authority. In other words, the Court relied on psychological literature to find that separate was inherently unequal.

There have been countless cases after *Brown*, especially those dealing with constitutional issues, where the Supreme Court has relied on facts beyond the case record.³⁹ For example, the Court has relied on non-adjudicative facts to conclude that imposing criminal or civil penalties or other requirements, including overbroad laws regulating child pornography,⁴⁰ requirements for the disclosure of organizations' membership lists,⁴¹ and overbroad federal anticorruption laws, may chill activity.⁴²

- of Legislative Facts, 41 VAND. L. REV. 111, 111-12 (1988) (describing Brown and Muller as the "most commonly cited examples of legislative facts").
- 35. See William J. Rich, Betrayal of the Children with Dolls: The Broken Promise of Constitutional Protection for Victims of Race Discrimination, 90 CORNELL L. REV. 419, 419-20 (2005) (describing the doll study relied on in Brown).
- 36. Brown, 347 U.S. at 494 n.11; see also Edmond Cahn, Jurisprudence, 30 N.Y.U. L. Rev. 150, 157 (1955) ("In the months since the utterance of the Brown...opinio[n], the impression has grown that the outcome, either entirely or in major part, was caused by the testimony and opinions of the scientists....").
- 37. Brown, 347 U.S. at 494.
- 38. Id.
- 39. See Allison Orr Larsen, Confronting Supreme Court Fact Finding, 98 VA. L. REV. 1255, 1274 (2012) (noting that "90 of the 120 most salient Supreme Court decisions from 2000 to 2010 contained at least one assertion of legislative fact supported by citation" and "[o]f those 90, seventy-seven percent contain at least one authority for those facts that was not present in the briefs").
- 40. Ashcroft v. Free Speech Coalition, 535 U.S. 234, 244 (2002) ("With these severe penalties in force, few legitimate movie producers or book publishers, or few other speakers in any capacity, would risk distributing images in or near the uncertain reach of this law.").
- 41. NAACP v. Alabama, 357 U.S. 449, 462 (1958) ("[W]e think it apparent that compelled disclosure of petitioner's Alabama membership is likely to affect adversely the ability of petitioner and its members to pursue their collective effort to foster beliefs which they admittedly have the right to advocate, in that it may induce members to withdraw from the Association and dissuade others from joining it because of fear of exposure of footnote continued on next page

Other examples abound. In holding that prayer during a public school graduation violated the Establishment Clause, the Court concluded that psychological research supports the "common assumption that adolescents are often susceptible to pressure from their peers toward conformity"⁴³ In finding a five-member criminal jury unconstitutional, the Court cited social science studies regarding the effects of jury size on jury decision-making.⁴⁴ Similar uses of non-adjudicative facts are common in the courts of appeals and district courts in constitutional and other cases as well.⁴⁵

II.

The extensive use of non-adjudicative facts has not been without controversy, and a variety of problems with their use has been identified. I now turn to the problems associated with the development and use of non-adjudicative facts. As with any type of evidence, there have been issues raised as to the relevance, significance, and reliability of non-adjudicative facts.

Relevance. There is no question that non-adjudicative facts have been thought to be relevant in a variety of contexts, particularly in common law and constitutional cases. In common law cases, the role of non-adjudicative

- their beliefs shown through their associations and of the consequences of this exposure.").
- 42. McDonnell v. United States, 136 S. Ct. 2355, 2372 (2016) (explaining that White House counsel warned that the law at issue "would likely chill federal officials' interactions with the people they serve and thus damage their ability effectively to perform their duties").
- 43. Lee v. Weisman, 505 U.S. 577, 593 (1992).
- 44. Ballew v. Georgia, 435 U.S. 223, 232-33 (1978) ("[R]ecent empirical data suggest that progressively smaller juries are less likely to foster effective group deliberation. At some point, this decline leads to inaccurate fact-finding and incorrect application of the common sense of the community to facts.").
- 45. See, e.g., United States v. Hunt, 63 F.4th 1229, 1250 (10th Cir. 2023) ("Insisting on a cramped notion of what is part of the record is particularly in the present context [concerning studies containing legislative facts].... When the resolution of a dispute turns on legislative facts, courts regularly relax the restrictions on judicial inquiry."); United States v. Love, 20 F.4th 407, 412 (8th Cir. 2021) (noting that "judicially noticed legislative facts need not be submitted to the jury"); United States v. McElhiney, Case No. CR 02-938-GHK, 2007 WL 9676746, at *3 (C.D. Cal. Mar. 12, 2007) (noting "over 1,000 pages of legislative fact material" submitted as part of a motion and that a litigant "need not establish a record as to these legislative facts at the District Court level, since he may submit a declaration or other written material to the appellate courts along with his appellate brief"). For an early state-court example, see North End Foundry Co. v. Indus. Comm'n, 258 N.W. 439, 442 (Wisc. 1935) ("The court not only had the aid of counsel but the benefit of a conference with the Industrial Commission in an effort to find a workable rule.").

facts is undisputed.⁴⁶ Even advocates of constitutional originalism and textualism recognize that historical facts are relevant in some constitutional contexts, such as illuminating the original meaning of the Constitution.⁴⁷ The Supreme Court has explained that in the Second Amendment context, courts are required to consider whether a "regulation is consistent with this Nation's historical tradition of firearm regulation."⁴⁸ Recently, this led one district court judge to ask if he was supposed to employ a historian.⁴⁹ So too in constitutional adjudication there appears to be agreement that future consequences of legislation are properly considered, as is common in the First Amendment context.⁵⁰

However, there are differences among Justices and judges as to the relevance of non-adjudicative facts in many other contexts. In large part, this depends on their views as to the relevance of policy considerations in judicial decision-making. Not surprisingly, the extent to which non-adjudicative facts are relevant has been hotly debated. For example, Justice Breyer urged judges to "look to consequences, including 'contemporary conditions, social, industrial, and political, of the community to be affected." Others view non-adjudicative facts as less pertinent, at least in some contexts, in large part because of concerns about reliability. ⁵²

- 46. See supra notes 14-16 and accompanying text.
- 47. As Allison Orr Larsen has noted, "[h]istorical sources are at bottom factual ones" such that "[d]ebates over original intent are really factual disputes" relying on non-adjudicative facts. Larsen, *supra* note 39, at 1279; *see also* DAVID FAIGMAN, CONSTITUTIONAL FICTIONS: A UNIFIED THEORY OF CONSTITUTIONAL FACTS 46 (2008) ("[O]riginal intent, one of the most common bases for constitutional interpretation, is almost wholly fact based.").
- 48. N. Y. State Rifle & Pistol Ass'n, Inc. v. Bruen, 142 S. Ct. 2111, 2126 (2022).
- 49. Order, United States v. Bullock, 3:18-cr-00165-CWR-FKB, Docket No. 65, at 6 (S.D. Miss. Oct. 27, 2022) ("[T]he Court now asks the parties whether it should appoint a historian to serve as a consulting expert in this matter." (citing Fed. R. Evid. 706)).
- 50. See generally Brent Ferguson, Predictive Facts, 95 WASH. L. REV. 1621 (2020).
- 51. STEPHEN BREYER, ACTIVE LIBERTY: INTERPRETING OUR DEMOCRATIC CONSTITUTION 18 (2005).
- 52. See, e.g., Sykes v. United States, 564 U.S. 1, 31 (2011) (Scalia, J., dissenting) (criticizing the opinion of the Court authored by Justice Kennedy and a concurrence authored by Justice Thomas, which both relied on statistics regarding the dangers posed by vehicular flight, because "Supreme Court briefs are an inappropriate place to develop the key facts in a case"); Lee v. Weisman, 505 U.S. 577, 636 (1992) (Scalia, J., dissenting) ("But interior decorating is a rock-hard science compared to psychology practiced by amateurs."); McDonald v. Chicago, 561 U.S. 742, 903 (2010) (Stevens, J., dissenting) ("[T]his Court lacks both the technical capacity and the localized expertise to assess 'the wisdom, need, and propriety' of most gun-control measures." (quoting Griswold v. Connecticut, 381 U.S. 479, 482 (1965))); Tenn. Valley Auth. v. Hill, 437 U.S. 153, 196 (1978) (Powell, J., dissenting) ("It is not our province to rectify policy or political footnote continued on next page

When interpreting statutes, even textualist Justices often find it appropriate to consider the consequences of interpreting law in a particular case,⁵³ patent law being one of them, as I discuss later in Part III. And in crafting evidentiary rules, the Supreme Court necessarily makes judgments about future consequences. "The common law—as interpreted by United States courts in the light of reason and experience—[generally] governs a claim of [evidentiary] privilege "⁵⁴ Similarly, the Supreme Court concluded that the rule of spousal testimonial immunity was justified because "[a]dverse testimony given in a criminal proceeding would, we think, be likely to destroy any marriage."⁵⁵

Significance. Different Justices and judges often draw different conclusions as to the significance of non-adjudicatory evidence. A good example of this exists in Supreme Court decisions in the 1920s and 1930s concerning the constitutionality of legislation designed to protect working women. As mentioned earlier, in Muller, the Supreme Court upheld a maximum hours law protecting women. Less than twenty years later in Adkins v. Children's Hospital (involving a minimum wage law), the Court concluded that in light of modern circumstances, women did not need such protection. The Court ruled this way only to again reverse itself twenty years later in West Coast Hotel Co. v. Parrish, overruling Adkins and upholding a minimum wage law. In each case, the Court relied on its view of common knowledge and experience.

- judgments by the Legislative Branch, however egregiously they may disserve the public interest.").
- 53. Textualist Justices and judges commonly consider economic consequences, for example, in areas such as antitrust and environmental law. See Neil H. Buchanan & Michael C. Dorf, A Tale of Two Formalisms: How Law and Economics Mirrors Originalism and Textualism, 106 CORNELL L. REV. 591, 647-53 (2021) (discussing Justice Scalia's willingness to consider economic consequences).
- 54. Fed. R. Evid. 501.
- 55. Hawkins v. United States, 358 U.S. 74, 78 (1958). The concurrence suggested the majority's assumptions were naïve. The concurrence concluded that "[s]urely 'reason and experience' require that we do more than indulge in mere assumptions, perhaps naïve assumptions, as to the importance of this ancient rule to the interests of domestic tranquility." *Id.* at 81-82 (Stewart, J., concurring). The concurrence suggested that "[b]efore assuming that a change in the present rule would work such a wholesale disruption of domestic felicity as the Court's opinion implies, it would be helpful to know the experience in those jurisdictions where the rule has been abandoned or modified." *Id.* at 82 n.4.
- 56. See Muller v. Oregon, 208 U.S. 412, 423 (1908).
- 57. Adkins v. Children's Hospital, 261 U.S. 525, 552-53 (1923).
- 58. 300 U.S. 379, 400 (1937).
- 59. See Muller, 208 U.S. at 421 ("We take judicial cognizance of all matters of general knowledge."); Adkins, 261 U.S. at 553 ("In view of the great—not to say revolutionary—changes which have taken place since that utterance [in Muller], in the contractual, political, and civil status of women, culminating in the Nineteenth Amendment, it is footnote continued on next page

wheel has again come full circle in this century with Justice Ginsburg questioning the very premise of *Muller*—that women need special workplace protection.⁶⁰ Both times, the Justices were taking account of prevailing conditions (non-adjudicative facts), but adopted very different views as to what the non-adjudicative facts were and what conclusions they supported.

Reliability. It is difficult to generalize about issues of relevance and significance because of the differing views as to the proper role of non-adjudicative facts in appellate decision-making and the myriad fact situations that may arise. Opining on these issues presents particular problems for a sitting judge. We must avoid the appearance of opining on issues that may come before us in the future. However, it is possible to offer some thoughts about the problems of ascertaining non-adjudicative facts and ensuring that they are accurate reflections of the historical record, the underlying current situation, or likely future events. The problems here are substantial since courts generally eschew the usual adversarial process of determining these facts.

First, courts should be careful to distinguish between empirical or historical facts and predictive facts and recognize the potential for error. Empirical or historical facts are statements about current practice or historical events.⁶¹ In theory, studying the historical or present record can lead to the accurate determination of relevant facts. But theory and reality are not the same. Courts' findings of non-adjudicative empirical facts in practice can be erroneous. There has been heated debate about the correctness of the Supreme Court's view of the historical record in both the recent gun control⁶² and

not unreasonable to say that these differences [between men and women] have now come almost, if not quite, to the vanishing point To [subject women to restrictions that could not be imposed on men] would be to ignore all the implications to be drawn from the present day trend of legislation, as well as that of common thought and usage, by which woman is accorded emancipation from the old doctrine that she must be given special protection or be subjected to special restraint in her contractual and civil relationships."); *Parrish*, 300 U.S. at 399 ("It is unnecessary to cite official statistics [regarding working women] to establish what is of common knowledge through the length and breadth of the land. While in the instant case no factual brief has been presented, there is no reason to doubt that the state of Washington has encountered the same social problem that is present elsewhere.").

- 60. Ruth Bader Ginsburg, Muller v. Oregon: One Hundred Years Later, 45 WILLAMETTE L. REV. 359, 370 (2009).
- 61. See Ferguson, supra note 50, at 1631 ("The difference is that in the case of non-predictive factfinding, the court claims that a certain phenomenon already exists, and the court is simply identifying it; in the case of predictive factfinding, the court does not claim that the phenomenon exists, but prophesies that it will exist under certain circumstances.").
- 62. See, e.g., Order, United States v. Bullock, 3:18-cr-00165-CWR-FKB, Docket No. 65, at 3 (S.D. Miss. Oct. 27, 2022) ("In reviewing the briefing and authorities presented in this case, and after conducting its own research, this Court discovered a serious disconnect between the legal and historical communities.").

abortion decisions.⁶³ The concerns extend to other cases as well. A 2017 ProPublica report identified a number of factual errors in recent Supreme Court cases.⁶⁴ The report "found seven errors in a modest sampling of Supreme Court opinions from 2011 through 2015. In some cases, the errors were introduced by individual [J]ustices apparently doing their own research."⁶⁵ The report describes an error, in a 2002 opinion, in which a plurality of the Court wrote that "untreated sex offenders commit new sex crimes at a startling rate, 'estimated to be as high as 80 percent. '"⁶⁶ The report explained: "The statistic came from a magazine article, which did not provide a source. The article's author has admitted to legal scholars that the percentage was a guess. Studies of sex offenders indicate the true rate is a small fraction of the one . . . used [in the plurality]."⁶⁷

If there can be error in determining empirical or historical facts, there is an even greater possibility of error in determining predictive facts, that is, forecasts of future events framed as predictive judgments. Predictive facts involve judgments by the court as to future consequences, such as the fact that a particular rule will create problems in implementation or that the failure to adopt a particular rule will have adverse future consequences.⁶⁸ Unlike findings as to historical fact, predictions as to future consequences are generally not testable, and as a result, are far less reliable.⁶⁹ Justice Alito once questioned "how good [the] Court is about predicting the consequences of some of [its] decisions."⁷⁰

To be sure, predictive judgments are sometimes inherently logical and likely correct. For example, predicting that a prohibition on speech will inhibit future speech appears generally reliable. But often predictive judgments can be quite speculative, particularly when they are used to support a preconceived

^{63.} See, e.g., Patricia Cline Cohen, The Dobbs Decision Looks to History to Rescind Roe, WASH. POST (June 24, 2022), https://perma.cc/59E4-TJJQ ("Friday's Supreme Court ruling in Dobbs v. Jackson Women's Health Organization relies on history to rescind the constitutional right to a legal abortion established by Roe v. Wade in 1973. There's just one problem: the history it relies on is not correct.").

^{64.} Ryan Gabrielson, It's a Fact: Supreme Court Errors Aren't Hard to Find, PROPUBLICA (Oct. 17, 2017), https://perma.cc/PS5J-F6GB.

^{65.} Id.

^{66.} Id.

^{67.} Id.

^{68.} See Hashimoto, supra note 7 at 130 ("When the Court uses legislative facts, they are offered as predictions about the effects of legal rules and are inherently disputable."); Ferguson, supra note 50, at 1629 ("Predictive legislative facts seek to describe the world not as it is today, but as the predictor believes it will be in the future (or would be under some counterfactual scenario)").

^{69.} See id. at 1632-34 (describing some of the dangers of predictive factfinding by courts).

^{70.} Transcript of Oral Argument 97, Trump v. Vance, 140 S. Ct. 2412 (2020) (Alito, J.).

outcome, function as a form of window-dressing, or support rhetorical flourishes.⁷¹ In such circumstances, predictions are often wrong. A primary example of speculation can be found in *Clinton v. Jones*, where the Court predicted that requiring a president to respond to litigation would be "highly unlikely to occupy any substantial amount of [his] time,"⁷² a prediction that proved to be quite inaccurate.⁷³ Ironically, predictive judgments about the opposite conclusion—that a particular decision will open the floodgates to future litigation—are particularly common and speculative. As Justice Powell once wrote, "a 'floodgates' argument can be easy to make and difficult to rebut."⁷⁴ The point here is that courts should recognize the possibility of error in finding non-adjudicative facts and the inherent unreliability of predictions as to future events.

Second, for both empirical and predictive material, courts should pay particular attention to the source of the material. Courts should be wary of untested empirical statements and predictions provided by interested parties. In *Korematsu v. United States*, the Second World War case upholding the internment of Japanese Americans, the Court relied on representations by military authorities and Congress that Japanese-Americans were likely to be disloyal and "constitute a menace to the national defense and safety"⁷⁵ However, the Court did not require the submission of supporting evidence. In fact, at the request of the attorney general, the FBI had determined there was no evidence of alleged disloyalty by Japanese Americans at the time: The FBI concluded "every complaint in this regard has been investigated" and there was "no evidence" supporting espionage. Forty years later, in overturning Korematsu's conviction, the district court explained that "there was substantial credible evidence from a number of federal civilian and military agencies

^{71.} See Ferguson, supra note 50, at 1629.

^{72. 520} U.S. 681, 702 (1997).

^{73.} President Clinton spent considerable time in civil depositions and otherwise responding to the allegations that came out of the civil litigation against him, leading some to criticize the Supreme Court's prediction for its inaccuracy. See, e.g., Editorial, Snoop du Jour, St. Louis Post-Dispatch, Sept. 14, 1998, at B6 ("The Supreme Court's prediction that Paula Jones-style lawsuits against the president wouldn't disrupt the presidency, now looks foolishly shortsighted."); Robert Scheer, Scandal Is Not His Only Legacy, L.A. Times, Aug. 18, 1998, at B7 ("The ruling of the U.S. Supreme Court to permit the Paula Jones case to go forward on the grounds that it would not intrude on the work of the presidency will go down as the stupidest decision in the court's history.").

^{74.} Rummel v. Estelle, 445 U.S. 263, 304 (1980) (Powell, J., concurring).

^{75. 323} U.S. 214, 218 (1944).

^{76.} Koji F. Fukumura, When Our Legal System Failed: The Japanese Internment Camps of the 1940s, 44 LITIG. 4, 6-7 (2017).

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contradicting the report . . . that military necessity justified exclusion and internment." 77

As with interested parties, courts should be skeptical of empirical facts or predictions by self-interested amici. One article explains that with a record number of amicus briefs being filed at the Supreme Court, "the Court is inundated with eleventh-hour, untested, advocacy-motivated claims at factual expertise." And such "brief[s], rather than the underlying factual source[s], [are] cited as authority" by the Court. 79

Third, mistakes as to both predictive judgments and empirical assertions could be reduced if courts required parties to provide reliable empirical support, when possible, rather than relying on what Mark Lemley has called "faith-based" predictions or assertions.⁸⁰ Courts should consider whether a study was peer reviewed or whether it has been accepted and cited approvingly by experts in the field, considerations analogous to those applied under *Daubert*, the standard that governs the admissibly of scientific evidence at trial.⁸¹

Fourth, where direct empirical evidence is unavailable to support a particular predictive judgment, courts should test assumptions by looking to the presence or absence of past problems in the area or a related area as evidence that future difficulties may be likely or unlikely. For example, in one case the Supreme Court permitted a remedy for inadequate assistance of counsel. The state had "argue[d] that implementing a remedy ... w[ould] open the floodgates to litigation"83 The Supreme Court rejected this exaggeration: "Courts have recognized claims of this sort for over 30 years, and yet there is no indication that the system is overwhelmed by these types of suits"84 As the Court stated in another case: "We confronted a similar 'floodgates' concern in [a prior case]" and "[a] flood did not follow in that

^{77.} Korematsu v. United States, 584 F. Supp. 1406, 1416 (N.D. Cal. 1984).

^{78.} Allison Orr Larsen, The Trouble with Amicus Facts, 100 VA. L. REV. 1757, 1757 (2014).

^{79.} Id.

^{80.} See Mark A. Lemley, Faith-Based Intellectual Property, 62 U.C.L.A. L. REV. 1328, 1337 (2015) ("I call this retreat from evidence faith-based IP, both because adherents are taking the validity of the IP system on faith and because the rationale for doing so is a form of religious belief.").

^{81.} See Daubert v. Merrell Dow Pharms., Inc., 509 U.S. 579 (1993). Under Daubert, district courts consider four factors when assessing the reliability of scientific evidence: (1) whether the methodology has been tested or is capable of being tested, (2) whether the theory or technique has been subjected to peer review and publication, (3) whether there is a known or potential error rate of the methodology, and (4) whether the technique has been generally accepted in the relevant scientific community. See id. at 593-94.

^{82.} Lafler v. Cooper, 566 U.S. 156, 169 (2012).

^{83.} Id. at 172.

^{84.} Id. (citing Padilla v. Kentucky, 559 U.S. 356, 371 (2010)).

decision's wake."85 In the case of reporter's privilege, the Court concluded that failure to adopt a reporter's privilege would not significantly impair journalism given the historical experience of robust journalism when no such privilege was recognized.86 In these examples, the Court looked to past experience for guidance as to the reliability of future predictions. Courts should be reluctant to predict future consequences without either the support of inherent logic or the examination of past experience.

Fifth, process matters. With respect to empirical findings relevant to current and past events, it is important to afford counsel the opportunity to brief and argue issues of reliability. In our adversarial system, the very self-interest of the advocates encourages them to weed out errors.

The Committee Notes to Rule 201, though rejecting any formal requirements, acknowledged "those [procedures] already inherent in affording opportunity to hear and be heard and exchanging briefs." In *Brown*, for example, the studies about the effects of segregation on Black children had been briefed and argued by the lawyers on both sides.⁸⁸

It is also sometimes appropriate to require that non-adjudicative facts be developed in the trial court using adjudicative procedures. The Committee Notes to Rule 201 suggest the possibility of "introducing evidence through regular channels in appropriate situations."⁸⁹

Despite the availability of alternative procedures, courts often rely on their own empirical research to decide non-adjudicative facts, thereby eliminating testing by the adversarial process. As noted earlier when discussing Lord Mansfield and Justice Brandeis, such judicial research is not uncommon. ⁹⁰ In a more recent example, *Graham v. Florida*, the Supreme Court, relying on its own extensive fact finding, determined whether the Eighth Amendment

We are admonished that[a] refusal to provide a First Amendment reporter's privilege will undermine the freedom of the press to collect and disseminate news. But this is not the lesson history teaches us. As noted previously, the common law recognized no such privilege, and the constitutional argument was not even asserted until 1958. From the beginning of our country the press has operated without constitutional protection for press informants, and the press has flourished. The existing constitutional rules have not been a serious obstacle to either the development or retention of confidential news sources by the press.

Branzburg v. Hayes, 408 U.S. 665, 698-99 (1972).

^{85.} Padilla, 559 U.S. at 371.

^{86.} The Court explained:

^{87.} Fed. R. Evid. 201, advisory committee's note.

^{88.} See Rich, supra note 35, at 419-20. John W. Davis argued at the time on behalf of South Carolina, one of the defendants, that the Doll Study also showed that Black children in unsegregated northern states demonstrated a similar preference for white dolls over Black dolls. See id. at 419-20.

^{89.} Fed. R. Evid. 201 advisory committee's note.

^{90.} See supra notes 13-26 and accompanying text.

prohibited sentencing juveniles to life without parole for non-homicide offenses. ⁹¹ As evidence of a "national consensus," the Court relied in part on letters from different state departments of corrections sent directly to the Court that had not been presented by the parties or amici. ⁹² The Court explained, "[a]lthough in the first instance it is for the litigants to provide data to aid the Court, we have been able to supplement the . . . findings [of a study presented by the parties]."

Courts frequently cite non-legal sources that they have located on the internet or other sources that have not been peer reviewed or subject to any significant vetting, raising issues as to reliability. The Advisory Committee Notes to Rule 201 appear to sanction this approach. But courts should be careful about engaging in their own empirical research where no opportunity is provided for parties to respond, either in briefing and argument or in a formal factfinding process.

Sixth, in the area of statutory and regulatory interpretation, there is a debate as to whether courts making their own findings as to non-adjudicative facts should defer to other entities. It has been argued that non-adjudicative facts should generally be developed by the legislature or the relevant agency, not by the courts. It seems that there should be a preference for the development of such facts by legislatures or agencies rather than by courts. Not surprisingly, reliance on legislative or agency fact-finding in the courts is common. In one case, the Court gave deference to a congressional prediction about the threat posed by cable companies to free broadcast television, stating that the Court "must accord substantial deference to the predictive judgments of Congress," because "Congress is far better equipped than the judiciary" to evaluate complex data and "to anticipate the likely impact" of such data on future events. 95 Reliance on agency factfinding as to past experiences or agency predictions is common, particularly in rulemaking, and to some significant extent is compelled by SEC v. Chenery Corp., 96 which requires agency factfinding.⁹⁷ By countenancing a role in agency policy making, the Chevron⁹⁸

^{91. 560} U.S. 48, 63 (2010).

^{92.} Id. at 63-64.

^{93.} Id. at 63.

^{94.} See Ellie Margolis, Surfin' Safari—Why Competent Lawyers Should Research on the Web, 10 YALE J. L. & TECH. 82, 115-18 (2007).

^{95.} Turner Broadcast. Sys., Inc. v. FCC, 512 U.S. 622, 665 (1994).

^{96. 318} U.S. 80 (1943).

^{97.} See INS v. Orlando Ventura, 537 U.S. 12, 16 (2002) (per curiam) (noting that, where the law entrusts the agency to make a factual determination, a "judicial judgment cannot be made to do service for an administrative judgment" (quoting Chenery, 318 U.S. at 88)).

and Auer⁹⁹/Kisor¹⁰⁰ doctrines in their present forms, assume that agencies will have a role in developing the underlying non-adjudicative facts. On occasion, the Supreme Court has even relied on the absence of congressional or agency factfinding in adjudicating the constitutionality of legislation.¹⁰¹

III.

As mentioned earlier, there is some disagreement about the use of non-adjudicative facts in statutory interpretation. For me, the role of non-adjudicative facts in patent law is particularly interesting since it is so significant a part of our own jurisdiction. Reliance on non-adjudicative facts in patent cases is not a new phenomenon. ¹⁰²

The congressional design appears to sanction such an approach. While patent law is quite specific in some areas, in many it is not. In these less specific areas, Congress has permitted patent law to develop over the last 200 years as court-made doctrine. Broad statutory language seems to authorize the courts to develop a kind of common law of patents, and in some instances, that common law has been adopted as a legislative mandate. ¹⁰³ The Congressional delegation of the task of developing patent law to the courts assumes a judicial role in developing patent policy drawing from choices expressed in the legislation itself. That in turn appears to assume that the courts will develop and utilize non-adjudicative facts in determining whether these policies are served or disserved by a particular approach. In this respect, patent law is quite unlike tax law, where Congress has legislated in great detail, and the courts have been

^{98.} Chevron, U.S.A., Inc. v. Nat. Res. Def. Council, Inc., 467 U.S. 837 (1984) (deference to agency interpretations of statutes).

^{99.} Auer v. Robbins, 519 U.S. 452 (1997) (deference to agency interpretations of regulations).

Kisor v. Wilkie, 139 S. Ct. 2400 (2019) (deference to agency interpretations of regulations).

^{101.} See, e.g., United States v. Lopez, 514 U.S. 549, 563 (1995) ("[T]o the extent that congressional findings would enable us to evaluate the legislative judgment that the activity in question substantially affected interstate commerce, even though no such substantial effect was visible to the naked eye, they are lacking here.").

^{102.} In *Muller v. Oregon*, the Supreme Court pointed to the practice of raising prior art in patent cases to justify its consideration of the sources cited in Brandeis's brief. The Court explained: "[C]ounsel are apt to open the argument with a discussion of the state of the art. It may not be amiss, in the present case, before examining the constitutional question, to notice the course of legislation, as well as expressions of opinion from other than judicial sources." 208 U.S. 412, 419 (1908).

^{103.} For example, section 103 of the Patent Act of 1952 "was intended to codify judicial precedents" regarding obviousness. Graham v. John Deere Co., 383 U.S. 1, 3 (1966).

reluctant to recognize the relevance of policy considerations or non-adjudicative facts. 104

The examples of reliance on non-adjudicative facts in the patent law area are extensive. The Supreme Court's decisions in *Bilski v. Kappos* and *Alice Corporation Pty. Ltd. v. CLS Bank International* relied on empirical non-adjudicative facts to determine that particular activities were "fundamental economic practice[s] long prevalent in our system of commerce." ¹⁰⁵

Another example is Justice Kennedy's concurrence in *eBay Inc. v. MercExchange, L.L.C.*¹⁰⁶ He urged recognition of the potential adverse effects of injunctions:

An industry has developed in which firms use patents not as a basis for producing and selling goods but, instead, primarily for obtaining licensing fees. For these firms, an injunction . . . can be employed as a bargaining tool to charge exorbitant fees to companies that seek to buy licenses to practice the patent. ¹⁰⁷

There is also reliance on predictive facts. Under Section 101, defining patent eligible subject matter, the Supreme Court has recognized exceptions, created in part because the Court predicted that overbroad protection would inhibit future discoveries. ¹⁰⁸

In *Nautilus, Inc. v. Biosig Instruments, Inc.*, the Court noted that "absent a meaningful definiteness check, we are told, patent applicants face powerful incentives to inject ambiguity into their claims. Eliminating that temptation is in order"¹⁰⁹

In *Impression Prod, Inc. v. Lexmark Int'l, Inc.*, the Supreme Court, in interpreting the patent exhaustion requirement, concluded:

[The] smooth flow of commerce would sputter if companies that make the thousands of parts . . . could keep their patent rights after the first sale . . . [E]xtending the patent rights beyond the first sale would clog the channels of commerce And advances in technology, along with increasingly complex supply chains, magnify the problem. 110

Despite the prevalent use of non-adjudicative facts to make predictive judgments in patent law, their use still raises concerns. Many predictions are inherently logical, including perhaps each of the examples I have cited. But

^{104.} See, e.g., Gitlitz v. Comm'n, 531 U.S. 206, 220 (2001); Hillman v. IRS, 250 F.3d 228, 234 (4th Cir. 2001); Ball ex rel. Ball v. Comm'r, 742 F.3d 552, 562 (3rd Cir. 2014).

Alice Corp. Pty. Ltd. v. CLS Bank Int'l, 573 U.S. 208, 219 (2014) (quoting Bilski v. Kappos, 561 U.S. 593, 611 (2010)).

^{106. 547} U.S. 388 (2006).

^{107.} Id. at 396-97 (Kennedy, J., concurring).

^{108.} See Mayo Collab. Servs. v. Prometheus Labs, Inc., 566 U.S. 66, 85 (2012).

^{109. 572} U.S. 898, 910 (2014).

^{110. 581} U.S. 360, 372 (2017).

where this is not the case, courts should seek empirical support for statements of existing fact and predictions.

The problem in the patent cases is that there is a dearth of conclusive empirical research concerning the real-world effects of patent doctrines. Even for an issue as central as whether patents promote innovation, there is no definitive empirical answer. One economist concluded that "we still have essentially no credible empirical evidence on the seemingly simple question of whether stronger patent rights . . . encourage research investments into developing new technologies." My former clerk, Lisa Ouellette, now a professor at Stanford, has explained that at the time of her article in 2015 "none of these studies resolves whether patents have a net positive effect on innovation, much less their net welfare effect" 112

Even if empirical conclusions were possible with respect to the overall utility or lack of utility of issuing patents, the Constitution itself assumes the utility of patent protection, and any fundamental change in the patent system seems more properly addressed to future legislation by Congress than to interpretation of the current statute. What is missing here is research at a more granular level concerning doctrines where the courts have a role to play in doctrinal development—research into the utility of particular patent doctrines in spurring innovation, in limiting competition, or in achieving or undermining other congressional goals. What is also missing is more disinterested scholarship testing claims by interested parties as to the predicted effect of particular patent doctrines. In the area of antitrust, which presents similar questions about monopolies and competition, there is a rich body of scholarship.¹¹³ Perhaps there is simply not enough data to support similar scholarship concerning patent doctrine.

IV.

Reliance on non-adjudicative facts exists in the law generally and in patent law in particular. The reliance on such non-adjudicative facts is legitimate and common. Often courts' determination of non-adjudicative facts is routine and accurate, supporting reliable conclusions. But this is not always the case, and courts have not paid the necessary attention to the use of processes that will produce accurate non-adjudicative facts. Errors in non-adjudicative facts can

^{111.} Heidi Williams, How Do Patents Affect Research Investments, 9 ANN. REV. ECON. 441, 464 (2017).

^{112.} Lisa Larrimore Ouellette, Patent Experimentalism, 101 VA. L. REV. 65, 76 (2015).

^{113.} See generally Christopher S. Yoo, The Post-Chicago Antitrust Revolution: A Retrospective, 168 U. Pa. L. REV. 2145 (2020) (describing empiricism in modern antitrust law starting with early Chicago School scholarship).

have long-term consequences that are far more serious than errors in determining the adjudicative facts of a particular case.

How should courts deal with the problem of reliability? Courts certainly would benefit from a less casual attitude toward the issue of non-adjudicative facts. They would also benefit by being modest about the ability to predict future consequences, and by recognizing that rhetoric is not a substitute for logic or empirical fact. Where possible and appropriate, courts should seek reliable empirical evidence to support both predictive judgments and statements about existing circumstances and past events and eschew faith-based jurisprudence. Such empirical evidence should be tested by briefing and argument, and in some cases, through the trial fact-finding process. When courts rely on their own non-adjudicative facts, they should also consider supplemental briefing to ensure reliability. And if a decision is reached, and actual experience later refutes the predicted course of future events, the court should change its mind.

The open and candid discussion of these issues will contribute to better advocacy and decision-making by appellate courts.