Stare decisis and information abundance in a common law jurisdiction

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Abstract: In a common law jurisdiction, according to the principle of stare decisis judges are bound to interpret a constitutional or common law principle by applying authoritative cases already decided. Parties in disputes pending before the courts must find and assess the prior cases on which they can expect that judges will rely. Not very long ago, research for such precedent involved reviewing known cases and linking them to other cases using topical digests and citators. Success with this approach required a patient, persistent, thorough, and open-minded methodology. Modern information accessibility gives previously unimaginable quick access to cases, including with tools that promise to predict judicial tendencies. But this technological accessibility can have negative side effects, including a diminished research aptitude and a stilted capacity to synthesize information. It can also lead to an inadequate account of the human factors that often cause judges to depart from predictions based on logical inference from prior cases. This article considers the extent to which the identification of precedent is essential in legal analysis, yet is of limited value in predictability as a result of judges' unavoidably human perspectives. With examples from landmark cases, the article illustrates that judges sometimes make decisions

based on considerations that will not be revealed in a mechanistic application of precedent. The article considers how evolving legal research tools and methods give access to precedent that in some respects makes the process more scientific, but in other respects can obscure the realities of how cases are decided. The article also gives examples of this paradox as demonstrated by today's students who are learning how to do research, drawn from years of the authors' teaching experience.

1.   Introduction

In a common law jurisdiction, finding and assessing cases from the past is a foundation for understanding how judges are most likely to interpret a constitutional or statutory provision or common law principle. This foundation stems from the principle of stare decisis, which is Latin for "to stand by things decided"[1]. Not very long ago, research for precedent involved reviewing known cases and linking them to other cases using topical digests and citators. Success with this approach required a patient, persistent, thorough, and open-minded methodology, which led not only to potentially relevant cases, but also to a sense of how judges weighed them.

Now, the common way to do law research is much different. It is done with queries entered into search engines that use algorithms, which quickly produce lists of cases that match expectations based on known terms. In important ways the process is more efficient than prior research methods. It also tends to shortcut researchers' immersion in the humanistic element of judicial analysis and decision making.

This article describes the basic realities of stare decisis in a common law jurisdiction. It considers the extent to which the identification of precedent is essential in legal analysis, yet is of limited value in predictability as a result of judges' unavoidably human perspectives. With examples from landmark cases, the article illustrates that judges sometimes make decisions based on considerations that will not be revealed in a mechanistic application of precedent. The article next considers how evolving legal research tools and methods give access to precedent that in some respects makes the process more

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[1]   Bryan A. Garner, *Black's Law Dictionary*, 9th ed. (St. Paul, MN: West, 2009), 1537.

scientific, but in other respects can obscure the realities of how cases are decided. The article also gives examples of this paradox as demonstrated by students learning how to do case research, drawn from years of the authors' teaching experience.

2. The predictive function of case law: precedent and stare decisis

The notion that we understand current law by knowing about prior court cases is foundational in the U.S. legal system. As U.S. Supreme Court Justice Louis Brandeis wrote, "Stare decisis is usually the wise policy, because, in most matters, it is more important that the applicable rule of law be settled than that it be settled right"[2]. U.S. Supreme Court Justice Amy Coney Barrett explained when she was a law professor that "stare decisis has two basic forms: vertical stare decisis, a court's obligation to follow the precedent of a superior court, and horizontal stare decisis, a court's obligation to follow its own precedent. Vertical stare decisis is an inflexible rule that admits of no exception"[3]. Analysis of horizontal precedent begins with identifying potentially applicable cases. In a legal classic that is on recommended reading lists for new law students, law professor Edward Levi aptly framed the nature of this kind of research and analysis. He called it "reasoning by example," by which "similarity is seen between cases; next the rule of law inherent in the first case is announced; then the rule of law is made applicable to the second case"[4].

As Justice Coney Barrett also explained, "there is nothing inevitable about the shape of stare decisis"[5]. Judges can disagree about the extent to which they are bound to follow precedent and the legitimate reasons for departing from it. As the U.S. Supreme Court said more than a century ago, "The rule of stare decisis, though one tending to consistency and uniformity of decision, is not inflexible. Whether it shall be followed or departed from is a question entirely within the discretion of the court, which is again called upon to consider a question once decided"[6]. Justice Coney Barrett noted that

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[2]   Burnet v. Coronado Oil & Gas Co., 285 U.S. 393, 406 (1932) (Brandeis, J., dissenting).
[3]   Amy Coney Barrett, "Precedent and Jurisprudential Disagreement," *Texas Law Review* 91, no. 7 (2013): 1712.
[4]   Edward H. Levi, *An Introduction to Legal Reasoning* (Chicago: University of Chicago Press, 1949), 2.
[5]   Coney Barrett, "Precedent," 1713.
[6]   Hertz v. Woodman, 218 U. S. 205, 212 (1910).

some cases are especially well-settled precedent, which are sometimes called "super-precedent"[7]. As examples she included *Marbury v. Madison*[8], the foundation for the Supreme Court's power to hold an act of Congress to be unconstitutional, and *Brown v. Board of Education*[9], which held that states may not constitutionally maintain racially segregated public schools[10]. She also said that the force of such landmark cases stems from "the people, who have taken their validity off the Court's agenda. Litigants do not challenge them. If they did, no inferior federal court or state court would take them seriously, at least in the absence of any indicia that the broad consensus supporting a precedent was crumbling. … And without disagreement below about the precedent, the issue is unlikely to make it onto the Court's agenda"[11].

Considering what should guide this discretion has always been a central focus of legal analysis. Edward Levi, quoted above for his description of legal reasoning, stressed that legal research and analysis involves judgment from the start. He said that "the scope of a rule of law, and therefore its meaning, depends upon a determination of what facts will be considered similar to those present when the rule was announced. The finding of similarity or difference is the key step in the legal process"[12]. He also observed that legal analysis is more than finding the best analogy. As he said, "Legal reasoning has a logic of its own. Its structure fits it to give meaning to ambiguity and to test constantly whether the society has come to see new differences or similarities. Social theories and other changes in society will be relevant when the ambiguity has to be resolved for a particular case"[13].

More recently, federal judge and law scholar Richard A. Posner, while noting that "reasoning by analogy enjoys canonical status," also said that "what makes no sense is to try to determine which case the new one most closely 'resembles' without exploring policy, unless the cases are identical in the sense that the first case declared a rule that the second case is clearly

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[7]   Coney Barrett, "Precedent," 1734.

[8]   4 U.S. (1 Wheat.) 133 (1803),

[9]   47 U.S. 483 (1954).

[10]   Coney Barrett, "Precedent," 1734.

[11]   Ibid. 1735.

[12]   Levi, *Introduction to Legal Reasoning*, 2.

[13]   Ibid. 104.

governed by"[14]. These observations echo back to the 1881 classic *The Common Law*, in which U.S. Supreme Court Justice Oliver Wendell Holmes, Jr., wrote that to understand law "other tools are needed besides logic. It is something to show that the consistency of a system requires a particular result, but it is not all. The life of the law has not been logic; it has been experience. The felt necessities of the time, the prevalent moral and political theories, intuitions of public policy, avowed or unconscious, even the prejudices which judges share with their fellow men, have had a lot more to do than the syllogism in determining the rules by which men should be governed"[15].

Some scholars seem unwilling to accept the unpredictable nature of judicial decision making about which these legal icons have spoken. They propose "doctrines" of stare decisis to bring together judicial approaches that differ on principle[16]. Such differences have been particularly evident in application of stare decisis to statutory interpretation. When a statute is unclear the courts look to the legislature's intent, which is not something that logically varies with a judge's moral and political theories. But as law professors Evan Criddle and Glen Staszewski summarized, "A prominent theme in recent scholarship on statutory interpretation is that the federal judiciary's current methodology is too complicated, inconsistent, and unpredictable"[17]. It also undermines law's predictability. As Justice Neil Gorsuch wrote in the recent U.S. Supreme Court case in the interpretation of a federal statute prohibiting discrimination on the basis of sex, "If judges could add to, remodel, update, or detract from old statutory terms inspired only by extratextual sources and our own imaginations, we would risk amending statutes outside the legislative process reserved for the people's representatives"[18].

One mechanism that has been suggested for reducing variation in statutory interpretation is to derive methods for judges to more closely align their

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[14] Richard A. Posner, *How Judges Think* (Cambridge, MA: Harvard University Press, 2008), 181–183.

[15] Oliver Wendell Holmes, Jr., *The Common Law* (Boston: Little, Brown, 1881), 1.

[16] Randy J. Kozel, "Stare Decisis in the Second-Best World," *California Law Review* 103, no. 5 (2015): 1145–1155.

[17] Evan J. Criddle and Glen Staszewski, "Against Methodological Stare Decisis," *Georgetown Law Journal* 102, no. 5 (2014): 1576.

[18] Bostock v. Clayton County, Georgia, 140 S. Ct. 1731, 1738 (2020).

interpretations with what was expressed in the legislative drafting process[19]. However, such efforts have seemed to raise more questions than answers. For instance, the authors of one such effort noted, "not all of the canons may even be the same type of legal tools, as a jurisprudential matter, for the purpose of answering these questions"[20]. Criddle and Staszewski concluded that "it would be a serious mistake for courts to declare one approach to statutory interpretation—or one set of canons—as 'the winner' and freeze that approach into place through the application of stare decisis"[21].

While judges and scholars largely agree that the goal of statutory interpretation is to follow the legislature's intent, another aspect of judicial decision has been seen as more appropriate for judicial innovation: the common law itself. Common law is a matter of rules that judges develop when the legislature has not chosen to act, and judges therefore need not constrain their decisions within the expressions of constitutional framers or legislatures. Some state law fields are mostly based on common law, including such fundamental subjects as property ownership, contracts, and liability for personal injuries. California Supreme Court Justice Roger Traynor, known for common law decisions that created remedies for which there was no precedent, stated the case for innovation when he argued, "Courts have a creative job to do when they find that a rule has lost its touch with reality and should be abandoned or reformulated to meet new conditions and new moral values"[22].

The kind of creativity for which Justice Traynor argued is readily apparent in some aspects of the law, including liability for defective products. For example, in *Greenman v. Yuba Power Products, Inc.*,[23] in an opinion that Justice Traynor wrote, the California Supreme Court imposed strict liability on the manufacturer of a defective product without requiring the injured person to prove negligence according to established law. The court did this as a matter of policy. According to the opinion, "The purpose of such liability

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[19]   Abbe R. Gluck and Lisa Schultz Bressman, "Statutory Interpretation from the Inside-An Empirical Study of Congressional Drafting, Delegation and the Canons: Part 1," *Stanford Law Review* 65, no. 5 (2013): 901–1026.

[20]   Ibid. 1019.

[21]   Criddle and Staszewski, "Against Methodological Stare Decisis," 1590.

[22]   Roger J. Traynor, "Law and Social Change in a Democratic Society," *University of Illinois Law Forum* 1956, no. 2 (1956): 232.

[23]   59 Cal.2d 57 (1963).

is to insure that the costs of injuries resulting from defective products are borne by the manufacturers that put such products on the market rather than by the injured persons who are powerless to protect themselves"[24]. Justice Traynor invoked a policy choice for which he had earlier argued when concurring in an opinion in favour of a woman injured by an exploding soft drink bottle. In *Escola v. Coca Cola Bottling Co.*[25], he said, "In my opinion, it should now be recognized that a manufacturer incurs an absolute liability when an article that he had placed on the market, knowing that it is to be used without inspection, proves to have a defect that causes injury to human beings"[26]. For precedent, he relied on the 1916 opinion of a New York judge also known for making leaps in declaring new liability standards, Benjamin Cardozo, who, in *MacPherson v. Buick Motor Co.*[27], first held a manufacturer to be liable for a product defect without requiring a contractual relationship to the injured. Product liability of the sort adopted in *Greenman* has become entrenched in the common law throughout the country. It has also been the basis for other judicial innovation to impose liability where none previously existed. For example, in *Sindell v. Abbott Laboratories*[28], the California Supreme Court created a cause of action when a person claiming harm from a drug could not demonstrate that the party from whom compensation was claimed in fact manufactured the drug that was used. This was done based on a theory of "market-share liability," which enabled the claimant to recover in a percentage equal to the manufacturer's share among all who manufactured the drug. The court created this cause of action based on what it saw as fairness due to the manufacturer's superior information and control of the product. The extraordinary degree to which this judicially created cause of action departed from precedent is demonstrated by the refusal of most states to follow California's example[29].

These examples of judicial creativity have had a profound impact on the common law, but few judges have shown as much willingness as Justice

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[24]   Ibid. 63.
[25]   24 Cal. 2d 453 (1944).
[26]   Ibid. 461 (Traynor, J., concurring).
[27]   217 N.Y. 382 (1916).
[28]   26 Cal. 3d 588 (1980).
[29]   Andrew B. Nace, "Market Share Liability: A Current Assessment of a Decade-Old Doctrine," *Vanderbilt Law Review* 44, no. 2 (1991): 395–439.

Traynor to decide cases free from stare decisis. As U.S. Supreme Court Justice Oliver Wendell Holmes, Jr., once said, no judge is likely to feel at liberty to say a well-settled legal principle is "a bit of historical nonsense"[30]. As legal historian and law professor G. Edward White explained in a modern context, "Part of the burden of judicial opinion-writing, then, has been to show that a decision has not been grounded on other than 'legal' considerations, and that within that ambit it analyzes legal issues in an intelligible fashion. The legitimacy of a judicial decision in America is somehow linked with the degree to which it meets this requirement"[31]. U.S. Supreme Court Justice Coney Barrett also stressed the importance of stare decisis to the law's legitimacy. She said, "The gravitational pull of horizontal stare decisis is one means—and an important one—of encouraging stability. Even apart from that presumption, however, the system has features that temper the risk of swings in the Court's case law. These features also work toward ensuring that the law does not fluctuate simply because of the will of one justice, or even five, but because of an emerging sense among litigants and lower court judges that it might be time for the Court to change course"[32]. These observations show that while judicial decision making cannot be reduced to a mechanical application of stare decisis, neither should it be made without a solid grasp of precedent.

3.   Humanism and inescapable unpredictability

The importance of a humanistic factor in important cases is readily apparent in constitutional interpretation. Justice Louis Brandeis said that "in cases involving the Federal Constitution, where correction through legislative action is practically impossible, this court has often overruled its earlier decisions. The court bows to the lessons of experience and the force of better reasoning, recognizing that the process of trial and error, so fruitful in the physical sciences, is appropriate also in the judicial function"[33]. Understanding how courts decide cases therefore involves "the lessons of experience and the force of better reasoning", an analytical approach that is the focus of an American

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[30]   Southern Pacific Co. v. Jensen, 244 U.S. 205, 221 (1917) (Holmes, J., dissenting).
[31]   G. Edward White, *The American Judicial Tradition* (Oxford: Oxford University Press, 1988), 461.
[32]   Coney Barrett, "Precedent and Jurisprudential Disagreement," 1737.
[33]   Burnet v. Coronado Oil & Gas Co., 407–408.

law school education. In 1950, Harvard Law Professor Karl Llewellyn gave famous lectures describing this approach. He instructed that understanding how courts decide cases goes beyond "the realm of pure scientific observation and inference"[34]. He noted that pure logic can "give us no certainty as to *whether* the possibility embodied in the argument will be adopted by a given court"[35]. As to how to assess this possibility, he advised students of the law to "use all you know of individual judges, or of the trends in specific courts, or, indeed, of the trend in the line of business, or in the situation, or in the times at large—in anything you can expect to become apparent and important to the court in later cases"[36]. He warned that those who think precedent can be applied with certainty "simply do not know our system of precedent in which they live"[37]. The continuing truth in Professor Llewellyn's advice can be seen in examples from some of the most impactful U.S. Supreme Court cases.

The U.S. Supreme Court's 1965 majority opinion in *Griswold v. Connecticut*[38] set a foundation for later controversial cases about implied constitutional rights, including access to abortion. In *Griswold*, the Court considered the constitutionality of a state statute prohibiting advice about use of contraceptives. Although nearly all states had repealed such laws, the Connecticut state legislature and its courts repeatedly upheld its state's statute as a social policy choice within the power of the elected legislators, who were predominantly Catholic. At first blush, the issue seemed to be about free speech—the law prohibited medical providers from discussing contraception with their patients—and this was the primary argument made by counsel challenging the statute[39]. However, this was not the basis for the Court's decision. The majority opinion held that the statute violated a "right of privacy", which is nowhere mentioned in the Constitution. As for precedent, the opinion identified a variety of cases involving other express rights, and said, "The foregoing cases suggest that specific guarantees in the Bill of Rights have penumbras, formed by emanations from those guarantees that

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[34]   Karl N. Llewellyn, *The Bramble Bush* (Oxford: Oxford University Press, 2008), 63.

[35]   Ibid. (emphasis in original).

[36]   Ibid. 71.

[37]   Ibid.

[38]   381 U.S. 479 (1965).

[39]   John W. Johnson, Griswold v. Connecticut: *Birth Control and the Constitutional Right to Privacy* (Lawrence, KS: University Press of Kansas, 2005), 98.

help give them life and substance"[40]. In other words, the answer was to be found in an overall sense, not in any particular precedent.

The anti-formalist nature of the *Griswold* decision is reflected in the justice who wrote for the majority, William O. Douglas. He was sometimes called "Wild Bill" by his colleagues because of his reputation for personal life indiscretions, marriages to much younger women, and an inclination to forbid government from intrusions into what he deemed to be private matters[41]. Law Professor and Historian G. Edward White described Justice Douglas as "an anti-judge' in that he "rejected both of the principal twentieth-century devices designed to constrain subjective judicial lawmaking: fidelity to constitutional text or doctrine, and institutional deference"[42]. The majority who joined in his opinion showed they shared a basic sense of justice with Justice Douglas by agreeing to his loosely written opinion. Still, their unease was demonstrated when five of the six wrote concurring opinions pointing to what they saw as more solid precedent.

A second example of an impactful decision that was not neatly tied to precedent is a landmark case about use of race as a factor in university admissions policies, *Grutter v. Bollinger*[43]. In *Grutter*, a bare five-to-four majority of the U.S. Supreme Court justices rejected a white woman's challenge to an admission policy at the University of Michigan Law School that used race as a "plus factor". The Court's precedent, reviewed by Justice Sandra Day O'Connor in the majority opinion, required that racial classifications must be put to "strict scrutiny", which, the opinion said, "means that such classifications are unconstitutional only if they are narrowly tailored to further compelling governmental interests"[44]. As Justice O'Connor explained, "We apply strict scrutiny to all racial classifications to 'smoke out' illegitimate uses of race by assuring that [government] is pursuing a goal important enough to warrant use of a highly suspect tool"[45]. Despite this warning about the importance of being suspicious about motives when a state institution uses race

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[40]   381 U.S. 484.
[41]   Johnson, Griswold v. Connecticut, 130.
[42]   G. Edward White, "The Anti-Judge: William O. Douglas and the Ambiguities of Individuality," *Virginia Law Review* 74, no. 1 (1988): 18.
[43]   539 U.S. 306 (2003).
[44]   Ibid. 326.
[45]   Ibid. (quoting Richmond v. J. A. Croson Co., 488 U.S. 469, 493 (1989)).

in decision making, the majority accepted the university's "educational judgment" that race was an appropriate consideration based on what they said was a "tradition of giving a degree of deference to a university's academic decisions"[46]. This drew angry dissents from four justices, including Chief Justice William Rehnquist who said, "Although the Court recites the language of our strict scrutiny analysis, its application of that review is unprecedented in its deference"[47]. He pointed to the record showing the university's focus entirely on race to achieve a certain minimum number of minority applicants, which contradicted the university's claim that race was only one "plus factor" among many that contributed to a more diverse student body. The dissenting justices spoke harshly about the universities' claims to be acting in the public interest, to which the majority was deferring. What is not readily apparent is the extent to which Justice O'Connor, in writing an opinion that seemed unmoored from strict scrutiny precedent, considered broader, national concerns. The majority opinion noted a brief submitted by retired generals and admirals and former commandants of the service academies, which said, "'based on [their] decades of experience,' a 'highly qualified, racially diverse officer corps … is essential to the military's ability to fulfil its principle mission to provide national security'"[48]. The brief also said, "Currently, no alternative yet exists to the military's limited use of race-conscious recruiting and admissions policies to fulfil its compelling need for selectivity and diversity in its officer corps"[49]. While the majority's expressions of deference to an elite law school are subject to an understandable degree of disfavour, concerns about the nation's military leadership are of another order.

A final example of a case that was decided for reasons that were not logically predictable based on precedent is the recent controversial U.S. Supreme Court decision involving state law prohibitions against same-sex marriage, *Obergefell v. Hodges*[50]. For various reasons, most observers expected a split among eight of the nine justices, with Justice Anthony Kennedy to be

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[46]   Ibid. 328.

[47]   Ibid. 379 (Rehnquist, C.J., dissenting).

[48]   Ibid. 331.

[49]   Brief of Lt. Gen. Julius W. Becton, Jr. et al. as Amici Curiae in Support of Respondents (August 2012), 36, accessed October 22, 2021. https://www.scotusblog.com/wp-content/uploads/2016/08/11-345-respondent-amicus-becton.pdf.

[50]   576 U.S. 644 (2015).

the deciding vote. Justice Kennedy concluded that the same-sex marriage restrictions were unconstitutional, and wrote the five-to-four majority opinion. The majority acknowledged the usual deference to the democratic process for the pace of social change, but decided that same-sex marriage prohibitions violated rights in a general sense. The majority said same-sex couples have a right to marriage because marriage is an "institution at the center of so many facets of the legal and social order" in national life[51].

Justice Kennedy's opinion has compelling descriptions of the difficulties that same-sex marriage restrictions caused for couples and their children. The opinion is also conspicuous for the absence of compelling precedent. The dissenting justices did not argue about whether same-sex marriage was good policy. They saw the Court as not having the constitutional authority to overrule state law on the issue or having any precedential basis for declaring a right to marriage regardless of gender. As Chief Justice John Roberts said, those who founded the country "would never have imagined yielding that right on a question of social policy to unaccountable and unelected judges"[52]. Even those who applauded the majority decision noted the lack of clearly articulated legal analysis. Law Professor Matthew Coles, who was director of the American Civil Liberty Union's national LGBT Project, applauded the outcome of Justice Kennedy's opinion yet added: "But to be honest, there isn't much of a jurisprudential legacy here. The biggest disappointment has to be the Court's failure to tell us how courts should look at laws that single LGBT people out for different treatment. … Are laws that discriminate presumptively constitutional subject to rational basis review? Or are they to some degree suspect? We just don't know"[53].

In his own reflections about *Obergefell*, Justice Kennedy has not explained his opinion as following from stare decisis. When asked in an interview whether he thought his opinion surprised others, he said "the honest answer is it surprised me"[54] given his Catholic upbringing. Justice Kennedy also said he was undecided until just a few days before he wrote the opinion,

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[51]   Ibid. 670.
[52]   Ibid. 709 (Roberts, C.J., dissenting).
[53]   Matthew Coles, "The Profound Political but Elusive Legal Legacy of Justice Anthony Kennedy's LGBT Decisions," *Hastings Law Journal* 70, no. 5 (2019): 1201.
[54]   University of Virginia School of Law, "Retired Justice Kennedy Says His Gay Marriage Ruling 'Surprised' Him," November 28, 2018. https://www.youtube.com/watch?v=v8Ja8JKVYsA.

and became convinced to hold the marriage restriction unconstitutional when he thought about the plight of children whose parents were in a gay marriage that was not legally recognized[55]. Those who knew Justice Kennedy personally have commented on his noticeable tolerance for non-traditional relationships, even as they were inconsistent with his religious education as a one-time altar boy[56]. As Professor Coles described his view of Justice Kennedy's motivation, the opinion in *Obergefell* is among cases that "reflect the profound emotional commitment of a very decent human being to right a great historical wrong. For that moral commitment, one that likely overcame many of the values on which he was raised, we should respect and admire the man. I do"[57].

There can be serious, reasonable disagreement about the extent to which an individual judge should inject personal views about justice and social policy into deciding cases. Justice Antonin Scalia, in his dissent in *Obergefell*, warned of an existential threat to the constitutional framework. He said, "This practice of constitutional revision by an unelected committee of nine, always accompanied (as it is today) by extravagant praise of liberty, robs the People of the most important liberty they asserted in the Declaration of Independence and won in the Revolution of 1776: the freedom to govern themselves"[58]. Others see it as necessary to counter the tyranny of majorities, and to align generally expressed constitutional principles with contemporary society. What should not be a subject of disagreement is the influence of personal judgment on judges, especially in the most contentious cases. This is not something reducible to a predictive algorithm, nor should it be. Carl Sagan, a brilliant astronomer and physicist well-known for a rare ability to explain theoretical scientific principles in understandable terms, spoke and wrote about the threats to humanity from technology that can be turned to destructive ends. He once said, "Knowing a great deal is not the same as being smart; intelligence is not information alone but also judgment, the manner

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[55] Ibid.
[56] Sheryl Gay Stolberg, "Justice Anthony Kennedy's Tolerance Is Seen in His Sacramento Roots," *New York Times,* June 21, 2015. https://www.nytimes.com/2015/06/22/us/kennedys-gay-rights-rulings-seen-in-his-sacramento-roots.html
[57] Coles, "The Profound Political but Elusive Legal Legacy," 1205.
[58] 576 U.S. 714 (Scalia, J., dissenting).

in which information is collected and used"[59]. Judges entrusted with deciding our most important cases have good reasons to heed this warning and not withhold their human judgment from seeking and interpreting information that technology can so easily supply.

4. The utility and seductive lure of analytical tools

To understand the law, law students and legal professionals always have faced the harrowing reality of the massive scope of information necessary to appropriately research a legal matter and successfully synthesize the information into a valuable form. As described in the article above, the distinctly human component of the law, particularly judge-made common law, is also essential for legal professionals to consider to hopefully predict outcomes in court. With this mass of information, and since the law only grows in volume, not shrinks, researchers have had to develop ways of mechanizing legal research. The importance of some organizational structure for making sense of the law relates to a lawyer's obligation under rules of professional conduct to provide competent representation to a client[60], which includes, among other things, to be complete and up-to-date in research. Lawyers must confirm their arguments are, in fact, based in law that is "still good". What makes this task so difficult is the near impossibility for a researcher to know of every relevant case about a matter. This is where research tools like digests, controlled vocabularies, and citation indexes enter to assist in collecting and analyzing the complex web of law.

Citation indexes, or citators, are most useful in showing relationships between cases. Citation indexes provide historical information in two ways. Citators track the history of cases vertically, by showing how cases originated at the trial level and progressed upward through appellate courts. They also provide horizontal legal information, by showing how cases have been subsequently cited by other courts, with an indication of the nature of the citations. Scholars have recognized Simon Greenleaf's *A Collection of Cases Overruled, Doubted, or Limited in Their Application*, printed in 1821[61], as

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[59] Carl Sagan, *Cosmos* (New York: Random House, 1980), 270.
[60] American Bar Association, Rules of Professional Conduct Rule 1.1 (2020).
[61] Simon Greenleaf, *A Collection of Case Overruled, Doubted, or Limited in their Application* (Portland: Arthur Shirley, 1821).

the first true citator or citation index[62]. Greenleaf, an attorney, found it vital in his personal practice to keep track of rulings in his local court as well as rulings from other jurisdictions that would bind his arguments with jurisdictional precedent. His personal note-taking and case index is equivalent to the current dominating citators—LexisNexis's Shepard's Citations and Westlaw's KeyCite. Attorneys and legal researchers rely on these platforms to verify the currency of cases and search for countervailing authority. Legal professionals rely on citators to indicate jurisdictionally relevant court rulings. Citators note when courts cite prior rulings as persuasive authority, which are considered to be "positive" citations. Citators indicate "positive treatment" when a court has upheld the original court's ruling, followed it, or extended it. Positive treatment can be used to bolster reliance on a line of cases. Citators indicate "negative treatment" when a court has criticized the original court's ruling, narrowed it, or overruled it. Negative treatment in citation is also important for legal researchers because it signals potential use of a case to distinguish a prior decision that otherwise might be urged as precedent.

LexisNexis and Westlaw subscriptions are expensive, and therefore available, pragmatically, only to law firms and organizations with substantial budgets. Variations of these platforms have long been available to judges as research tools to supplement the authority cited in the advocates' briefs and otherwise identify possible precedent. The average individual does not have such access. Yet, these legal databases and their collections of primary legal materials play a strong role in guiding legal thought. Today's law professionals learn to craft arguments based on approaches embedded within LexisNexis or Westlaw. Citation indexes, classification schemes like headnotes and Westlaw Key Numbers, and supplementary annotations guide researchers in asking "the right questions", in a manner that expert indexers have structured for American common law. Their structure facilitates complex searching, using Boolean and other advanced operators to narrow results as well as natural language searching that aims at retrieving cases "about" a particular legal topic. Not only do these proprietary services help practitioners find the necessary cases for their pending matters, these services

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[62] Patti J. Ogden, "'Mastering the Lawless Science of Our Law': A Story of Legal Citation Indexes," *Law Library Journal* 85, no. 1 (1993): 39–40.

also provide case recommendations and supplemental content that is often serendipitously useful. Individuals who can afford to purchase these information platforms are given an advantage in legal research.

The influence of Westlaw's Key Number and KeyCite System and LexisNexis' Shepard's Citations transcend popularity and convenience. Law research information professional Daniel Dabney observed how these dominating legal information tools do not bring only "certain questions to the fore by including them in the scheme's classification logic. The system also has a role in determining what basic ideas one can ask questions about"[63]. He explained that if an attorney has an idea that does not comport with an established topic in the Westlaw Key Number System, the idea is essentially an "unthinkable thought". This system of meticulous classification helps streamline legal research and analysis. It also necessarily imposes restrictions on how questions are connected to information organized within the system.

Costly proprietary legal information platforms have changed immensely since Greenleaf's original citation index in ways jurists and counsellors likely could never have predicted in the nineteenth and majority of the twentieth centuries. These companies have gone beyond tracking relevant precedent in local, state, and federal jurisdictions. Now, they promote litigation analytics tools aimed to support practitioners in their trial preparation and other legal matters like negotiation, contract drafting, and advocacy work. LexisNexis and Westlaw even promise to provide insights that go beyond the historical tracking of a case. These two predominant legal information providers, and their smaller-in-scale competitors, are racing to offer new artificial intelligence-driven information that can help law researchers. For instance, platforms aver the ability to answer such questions as: What is the likely outcome of a case? How likely is a judge to grant a motion? What language does a judge find persuasive? What cases does a judge rely on most?[64] LexisNexis and Westlaw even boast their ability to answer more humanist questions such as: How has the court previously ruled on cases like mine and why? [65]

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[63]   Daniel Dabney, "The Universe of Thinking Thoughts: Literary Warrant and West's Key Number System," *Law Library Journal* 99, no. 2 (2007): 236.

[64]   "Lexis Advance vs. Westlaw Edge: Legal Analytics Comparison," LexisNexis, accessed November 11, 2021,http://www.lexisnexis.com/pdf/legal-analytics/Legal_Analytics_Comparison-LexisNexis_v_Westlaw.pdf.

[65]   Ibid.

These legal research platforms can draw upon information from a judge's entire bench career, and no doubt can provide insight about prior judicial analysis in a way far more efficient than traditional methods for collecting and studying cases. They also rely on presumptions that if not fully appreciated could lead to unjustified weight given to the result produced by research algorithms. Components of the question itself—"cases like mine"—are deceptively simplistic; to effectively retrieve "cases like mine", researchers must search using terms that match the way the information retrieval tool has categorized and termed items. Certain query terms may seem appropriate, but might give unhelpful results because the particular term was not used by the court or indexed similarly. Furthermore, assertions that analysis of prior reported cases and reveal *why* courts have ruled in one way or another invite important questions. Precedent aside, what else drives a judge to reach his or her decision? The discussion in this article above shows that even in the most important cases judges acknowledge that *they* would not have predicted how they would apply precedent.

5. The paradoxically narrowing effect of information abundance

> *The endless cycle of idea and action,*
> *Endless invention, endless experiment,*
> *Brings knowledge of motion, but not of stillness;*
> *Knowledge of speech, but not of silence;*
> *Knowledge of words, and ignorance of the Word.*
> *All our knowledge brings us nearer to our ignorance,*
> *All our ignorance brings us nearer to death,*
> *But nearness to death no nearer to God.*
> *Where is the Life we have lost in living?*
> *Where is the wisdom we have lost in knowledge?*
> *Where is the knowledge we have lost in information?*
>
> —T. S. Eliot, *The Rock*[66]

Information abundance is a blessing as well as a curse. In a matter of minutes, legal professionals can research case law, retrieve a statute, contact a county clerk for a recently filed complaint or other docketed documents, and

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[66]   T. S. Eliot, *The Rock* (New York: Harcourt, Brace, and Co., 1934), 7.

examine case analytics provided by legal information companies. But this modern information accessibility has negative side effects for users, including a diminished research aptitude and a stilted capacity to synthesize information for valuable use. The wealth of information that legal professionals have readily accessible can unfortunately lead to a blind trust of data gathered and organized by expert editors and artificial intelligence tools.

Bestselling author Nicholas Carr described changes in research and information-seeking behaviours as a result of affordances of modern technology in his book *The Shallows*[67]. Technological advances like hyperlinked digital materials and the browsing feature commonly referred to as "infinite scroll" foster speedy searching over methodical consumption and analysis of information. This browsing technology streamlines webpage loading in that users are fed information without the affirmative act of clicking to an entirely new webpage. Infinite scrolling allows for new content to be continuously added to the bottom of a search screen, hence the word "infinite." Users can hypothetically scroll forever, which is valuable to companies who wish to keep users' eye on their platforms for as long as possible. Intentional "deep-diving" into materials is rare, and behaviours of merely skimming the surface of the information waters have taken over[68]. Carr described how this feature takes advantage of humans' vital brain paths as paths of least resistance, which he said are "the paths that most of us will take most of the time, and the farther we proceed down them, the more difficult it becomes to turn back"[69]. Our brains stringently work to maintain habits; so, elasticity becomes less possible and less likely.

These common search capabilities provide a facade of ease and efficient search. This multimedia environment appearing on a single page or handheld screen results in "fragment[ing] content and disrupt[ing] our concentration" [with maybe] "a few chunks of text, a video or audio stream, a set of navigational tools, various advertisements, and several small software applications, or 'widgets', running in their own windows[70]. And these realities of research

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[67]   Nicholas Carr, *The Shallows*: *What the Internet is Doing to our Brains* (New York: W.W. Norton, and Co., 2010).

[68]   Nicholas Carr, "Is Google Making us Stupid?: What the Internet is Doing to our Brains," *The Atlantic* (July/August 2008): 2 and 8.

[69]   Carr, *The Shallows*, 34.

[70]   Ibid. 91.

behaviours are intimately tied to how well we make sense of information[71]. Digital search, especially search that involves artificial intelligence-created content and organization, grabs researchers' attention with intentional stimuli, but then negatively affects working memory for researchers. As Carr stated, "it becomes harder to distinguish relevant information from irrelevant information"[72].

Changes in research aptitude are also affected by the sheer volume of information being made available. Practitioner and scholar Anne Goulding wrote about information overload as being one of the prevailing concerns for the information science field. Prior to her article, she argued, the professional field focused on individuals' lack of access to information—what is called "information poverty". Goulding pointed to a newer phenomenon termed "information fatigue syndrome", which inhibits analytical ability and increases anxiety and self-doubt in decision making[73], which she characterized as much or more of a problem than information poverty. Individuals are unable to absorb the accumulation of information and, thus, result to heuristic judgments and artificial intelligence-driven rank ordered results to approach research.

The field of information science, which is most simply defined as the study of information, humans, and technology, is rich with discussion regarding elements of technology and how these aspects have affected human behaviour in information-seeking. For example, Professor of Social Studies of Science and Technology Sherry Turkle summarized how users gather information in this way: technology promotes what is easy. After giving examples of how most common platforms aim to offer effortless and trouble-free searching, she addressed some of the negatives. She stated that in "the technology-induced pressure for volume and velocity, we confront a paradox. We insist that our world is increasingly complex, yet we have created a communications culture that has decreased the time available for us to sit and

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[71] For a thorough definition and description of "sense-making", see Brenda Dervin, *"An overview of sense-making research: Concepts, methods and results." Paper presented at the annual meeting of the International Communication Association, Dallas, TX.* (1983).

[72] Carr, *The Shallows*, 125.

[73] Anne Goulding. "Information Poverty or Overload?", *Journal of Librarianship and Information Science* 33, no. 3 (2001): 109–111.

think uninterrupted"[74.] She further explained, "As we communicate in ways that ask for almost instantaneous responses, we don't allow sufficient space to consider complicated problems"[75]. Professional anthologist and acclaimed essayist Alberto Manguel has explained in depth the effect of information abundance and resulting behaviours of information-seekers in his novel *The Library at Night*[76]. He wrote that the current information environment accentuates "velocity over reflection and brevity over completion", highlights "news and bytes of facts over lengthy discussion and elaborate dossiers", and dilutes "informed opinion with reams of inane babble, ineffectual advice, inaccurate facts and trivial information"[77]. Essentially, information abundance causes the formation of perceptions and beliefs based on artificially-created "truths" and convincing data, and these perceptions and beliefs get reinforced over time, making change or reconsideration more difficult and taxing on the human brain. Understandably, faulty beliefs resulting from sloppy research habits become solidified and perpetuated.

The tendencies these scholars describe are particularly concerning for the legal field, in which teachers and expert practitioners have emphasized the importance of "thinking like a lawyer". The analytical thought and critical analysis required to think "like a lawyer" takes significant time and cognitive devotion. To look for shortcuts is a natural human tendency. Legal research platforms can offer the temptation of access to highly sophisticated organizers of the common law and sense-makers of legal thought. Yet, to believe that these artificial intelligence-driven tools can truly "get into the minds" of judges is a fool's errand. They can only provide information based on prior information, which is useful for that purpose. But the abundance of often artificial intelligence-generated data can blur the view of what also matters in legal analysis—the intellectually rigorous and logical investigation of precedent and other non-streamlined information, which is not accessible or categorized within proprietary systems.

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[74]   Sherry Turkle, *Alone Together: Why We Expect More from Technology and Less from Each Other* (New York: Basic Books, 2011), 166.

[75]   Ibid.

[76]   Alberto Manguel. *The Library at Night* (New Haven, CT: Yale University Press, 2009), 222–233.

[77]   Ibid. 227.

6.   Challenges in learning legal analysis

In his 1950 lecture about stare decisis, Professor Karl Llewellyn said, "Logic and science can tell us, and tell us with some certainty, what the *doctrinal possibilities* are"[78]. Those who want to understand the path of the law will need to research and analyse those possibilities. Professor Llewellyn pointed out that while there can never be complete certainty in outcome, "a skilled, experienced guess (though only a guess) is yet a better bet than the guess of the ignorant"[79]. As this article has discussed, case study must occur on more than one level. In addition to collecting reported cases, researchers must be attuned to the reality that cases often turn on humanistic factors that may not be readily apparent in the portrayal of precedent. Reliance on algorithmic answers, now possible through use of search engines, as if they are wholly predictive will give only an incomplete sense of how law develops. Consequently, those who are immersed in the conveniences of readily available answers may be ill-prepared for the kind of research that will reveal the considerations on which judges are most likely to focus. Recent experience in law research learning environments gives reason for this concern.

Both of the authors of this article have many years of experience teaching legal research to undergraduate, graduate, and law school students. The following discussion about the challenges in learning legal analysis relies upon these years of teaching experience and collegial discussions. Teaching how to identify and analyse relevant cases is among the most difficult challenges in these courses. In this experience, the authors have seen distinct trends among the students. In general, they increasingly tend to be ill-disposed to learning a way of approaching research that is different than that to which they are accustomed. They also tend to persist with known approaches even when evidence should alert them that something different is needed. The following briefly illustrates the basis for these observations.

The authors use assigned readings, lectures, and demonstrations to show how legal research is different than most other research. They also introduce some of the searchable databases of cases and other primary authority. Students have ample opportunity in class and individually to ask clarifying questions. To apply their learning, they must complete exercises that require

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[78]   Llewellyn, *The Bramble Bush*, 63 (emphasis in original).
[79]   Karl N. Llewellyn, *Common Law Tradition: Deciding Appeals* (Boston: Little, Brown, 1960), 17.

them to find specific cases or other primary authority based on information about an issue and the nature of the authority. However, the questions are phrased in a way that does not allow a simple term-match search. For example, the first part of a question requires a response to the following: "Within the past ten years, the U.S. Supreme Court held that a state statute setting a residency requirement for obtaining a license to sell liquor violated the U.S. Constitution". To give students a guidepost to know when they are completing the research successfully, for the second part of the question students must provide information found only by reading the authority found for the first part. For example, the second part to the previously quoted question is: "Give the citation to the state statute that was declared unconstitutional". Students who do not find this answer should realize that the authority they gave in response to the first part was incorrect, and resume the research.

Although most students eventually get most of the answers to the questions in the exercises, surprisingly some of them will give a wrong answer to the first part even though they do not find confirmation in the second part. That is, they stick with an apparently correct answer even when further study would disconfirm it. Tellingly, some students will give incorrect information in response to the second part even though they gave the correct citation in the first part. The regularity with which this happens reveals a basic impatience with carefully reading the authority. When asked how this happens, students give two reasons. One is that they did not read the entire authority for the exactly correct answer—instead they gave as an answer the first thing they thought was close enough to being correct. The second is that instead of taking the time to read the authority carefully, they did another search to find a possible answer. For example, when asked to give the statutory citation in the court case, they did a search of the statutes, rather than spend the time to read the whole opinion. These kinds of errors suggest a preference to rely on the quick and usual way to find answers, rather than to apply what seemed a more laborious approach that accounts for the uniqueness of legal authority.

Student feedback also suggests other tendencies that interfere with successful legal research. We stress that the goal is not to find *an answer*, but rather to find the *single best answer* as derived from a complete consideration of the applicable authority. For example, looking at a single passage in the case, without also studying its context within an opinion and its relation to other

authority applied or distinguished in the case, will lead to an incomplete and possibly misleading interpretation. Students new to legal research rarely apply this kind of thoroughness. This is evident even in straightforward statutory research. Students will commonly give the first statute they identify that seems relevant to a question, rather than methodically look at all possible applicable statutes. The authors warn students with the metaphor that "with legal research you cannot rely on being able to parachute into an answer". In this situation, the researcher must first learn about the possibly relevant topics and terminology, and based on what is revealed refine the research for what is possibly more directly applicable. The best way to find an applicable statutory provision, for example, may require identifying relevant topics, examining the components of chapters or subparts, and then piecing together individual provisions and their definitions, cross-references, and exceptions. To do this a researcher must be patient and methodical—traits that are not cultivated by use of the typical search techniques and platforms.

Another example of this tendency to take the shortest path to an answer is an assignment that asks students to choose a case of national importance and write an analysis of the completeness, fairness, and soundness of published reports about it. Even after students are urged to take time to choose a case of particular interest to them that might not be the most notorious, which has a good variety of competing published reports for critical analysis, most students will choose the same case—the one that is the first and most popular result in a Google search for "pending nationally important cases". Despite the readily apparent educational benefits of following a different path as stressed to them in the assignment instructions, the lure of taking a supplied answer, which has been the way they are accustomed to getting their information, seems too hard to resist.

Of course impatience is not limited to students of law. Faced with a mountain of unfamiliar information, students are prone to deploy corner-cutting behaviours to reduce the cognitive overload they are experiencing. For instance, with assignments in a variety of subjects that ask for well-developed analytical reasoning, both authors commonly have students submit assignments with bullet-pointed items as their main explanation of the assigned task. Students seem most comfortable with an approach of seizing upon results from search platforms and concluding "this must be good enough". Similarly, when students ask questions about assignments,

they often fixate on the question: "How many references are required?", as if the thoroughness of research is best demonstrated with itemization. Such a focus indicates a fundamental under-appreciation of the twists and turns of analytical exploration.

Today's students of legal research are fortunate that they have access to research tools that give them immediate access to a case that they can specifically identify, and that with artificial intelligence can produce a list of cases that most researchers would want to see in response to a well-phrased question. A challenge they face is that this ease of access does little to teach how there is much more to finding and analysing the true depth and breadth of legal authority.

7.   Conclusion

Those who have earnestly studied case law have learned two truths. One truth is that there is much to know when researching the precedent on which a court might base a decision. The other is that there are other factors besides precedent that may be decisive. Computer scientist Jaron Lanier was one of the creators of digital reality, and an influential critic of the manner in which culture embraces technology. He described the difficulty of measuring how well a computer can imitate human intellect when he said that when you think it has achieved that state, "You can't tell if a machine has gotten smarter or if you've just lowered your own standards of intelligence to such a degree that the machine seems smart"[80]. Unquestionably modern technologies offer previously unimaginable ease of access to abundant information that can help us answer our legal research questions. This comfort should not lure us into believing such ease relieves us from the effort it takes to try to understand the full scope of stare decisis and the human judgment that continues to be essential to a legitimate and just decision making.

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[80]   Jaron Lanier, *You Are Not a Gadget* (New York: Alfred A. Knopf, 2010), 32.

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