Analogy, Expertise, and Experience

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Traditional legal perspectives on analogical reasoning in law posit that legal reasoning involves the initial step of recognizing a similarity between the facts of some previous case and the facts of the instant case. And the recently widespread skeptical views see the claims of analogical reasoning in law as little more than a mask for unacknowledged judicial lawmaking. Against both of these views, we argue that analogical reasoning, in law and elsewhere, involves an initial perception of similarity, but a perception that is based on the knowledge, experience, training, and possibly the expertise of the person drawing the analogy. As a result, analogical reasoning in law differs from simple rulemaking or lawmaking, but does embody the categories embedded in the distinctively legal knowledge and experience that lawyers and judges bring to bear on the process of analogical reasoning.

INTRODUCTION

Analogy is central to legal reasoning, legal argument, and legal justification. Or so it is said. For many judges, scholars, and commentators, analogical reasoning lies at the core of the commonlaw process. Indeed, many of those same judges, scholars, and commentators believe that analogical reasoning is at the heart not only of common-law decision-making, but also of the very idea of distinctively *legal* reasoning. Yet for other judges, scholars, and commentators, the traditional celebration of analogical reasoning in law rests on shaky foundations, often (or inevitably) serving to mask the lawmaking dimensions of legal argument and legal decision-making. For this latter group, the traditional celebration of analogical reasoning is at best misguided, and at worst pernicious.

One goal of this Essay is to describe these debates about analogical reasoning in law, debates that include some number of variations on the major themes of celebration of, or skepticism about, the role of analogy in legal argument. But it turns out that both the celebratory and the skeptical positions are partly correct and significantly incorrect. The skeptics are correct in believing

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that drawing analogies requires the intermediation of the principles (or rules, in a broad sense¹) that are essential for the determination of similarity and difference. But the celebrants are just as correct in insisting that legal decision-makers might often not consciously perceive such principles, and thus that decision-makers understand themselves to be moving from particular to particular without the conscious intervention of principles guiding them in the determination of what is analogous to what.

Once we see that determining why one thing seems similar or analogous to another often occurs without conscious deliberation, we can begin to glimpse the role that the experiences of the analogizer play in drawing analogies and in distinguishing good analogies from poor ones. And because lawyers and judges have training and experience that diverge from the training and experience of others, analogical reasoning in law turns out to be different from analogical reasoning in everyday life. But this is not because lawyers and judges have some special facility in analogical reasoning. We believe that the existing body of psychological research strongly supports the conclusion that there are no experts in analogical reasoning.² But there are experts in law, and it is this legal expertise that plays a major role in the use of analogical reasoning in legal settings. As a result, analogical reasoning in law may differ from analogical reasoning in everyday life not because the fundamental process of analogizing is different in law from what it is in nonlegal settings, but because the informational and experiential background that is essential for drawing an analogy in the first place serves to distinguish legal analogizing from lay analogizing. Or so we argue here.

Not surprisingly, the techniques that lawyers use in making legal arguments and judges use in making and justifying legal decisions resurface in the context of external commentary on, and evaluation of, legal decisions or lines of legal doctrine.³ In keeping

¹ Unless otherwise noted, we use the terms "rules" and "principles," and sometimes "theories," interchangeably. At least for purposes of this Essay, all refer to overarching generalizations that make it possible to group otherwise-heterogeneous acts, events, or objects under the same heading.

² See Barbara A. Spellman, Judges, Expertise, and Analogy, in David Klein and Gregory Mitchell, eds, The Psychology of Judicial Decision Making 149, 162 (Oxford 2010); Barbara A. Spellman and Frederick Schauer, Legal Reasoning, in Keith J. Holyoak and Robert G. Morrison, eds, The Oxford Handbook of Thinking and Reasoning 719, 731 (Oxford 2012).

³ It need not be so, and perhaps it would be good if it were somewhat less so. Although much of academic commentary on legal doctrine uses the techniques of legal reasoning, including but not limited to the use of analogies, to criticize (and, rarely, to

with the theme of some of the contributions to this Symposium, therefore, we note that analogical argument is widespread in legal scholarship, as scholars use analogies to evaluate legal outcomes. Analogical reasoning can thus be understood as an existing approach to legal scholarship, and our conclusions about the nature of analogical reasoning *in* law should be understood to apply, *mutatis mutandis*, to analogical reasoning *about* law.

I. ANALOGICAL REASONING IN LAW—THE TRADITIONAL VIEW

Ever since Lord Coke exalted the "artificial reason" of the law,⁴ lawyers and judges, especially in the common-law world, have claimed that reasoning by analogy is a crucial component of the special facility of reasoning that these lawyers and judges employ when they argue and decide cases.⁵ According to this traditional picture, the legal reasoner perceives a relevant similarity between the situation involved in some previous decision and the situation at issue in the instant case,⁶ and then uses the analogy

endorse) legal doctrine and judicial decisions, there is no reason to believe that external commentary on decisions must mimic the methods used to make those decisions. Still, the use of analogical reasoning in legal scholarship is ubiquitous, and thus much that we say about analogical reasoning in law applies to the use of such reasoning in scholarship about the law as well.

 4 $\,$ $\,$ Prohibitions del Roy, 12 Co Rep 63, 65 (KB 1607) (Coke), reprinted in 77 Eng Rep 1342, 1343:

[T]rue it was, that God had endowed His Majesty with excellent science, and great endowments of nature; but His Majesty was not learned in the laws of his realm of England, and causes which concern the life, or inheritance, or goods, or fortunes of his subjects, are not to be decided by natural reason but by the artificial reason and judgment of law, which law is an act which requires long study and experience, before that a man can attain to the cognizance of it.

See also generally Jerome E. Bickenbach, *The 'Artificial Reason' of the Law*, 12 Informal Logic 23 (1990); Charles Fried, *The Artificial Reason of the Law or: What Lawyers Know*, 60 Tex L Rev 35 (1981).

- ⁵ See Kent Greenawalt, *Statutory and Common Law Interpretation* 188 (Oxford 2013) (observing that analogical argument is "thought by some to be the most distinctive aspect of legal reasoning").
- If we are thinking not about facts but about *questions*, then sometimes it turns out that a question of law now presented has been authoritatively answered on some previous occasion. For example, "May states make all abortions illegal?" is a question answered in the negative by *Roe v Wade*, 410 US 113, 163 (1973), and the operation of precedential constraint in subsequent cases or situations raising just that question is not an example of analogical reasoning. Just as "1989 Chevrolet" is identical and not analogous to "1989 Chevrolet," the precedential constraint offered by a previous answer to the identical question now presented is different from the questions presented by analogical reasoning, in which a previous set of facts is other than identical to the facts at issue in the instant case. See Frederick Schauer, *Why Precedent in Law (and Elsewhere) Is Not Totally (or Even Substantially) about Analogy*, 3 Persp Psychological Sci 454, 457–58 (2008). See also Richard

between the previous decision and the instant case to argue that the instant case ought to be decided in the same way as the previous one.⁷

The traditional view, which typically combines description with homage, has been expressed in many ways for many years.⁸ Professor Edward Levi, for example, whose views were more complex than the simple model just set forth would suggest, nevertheless described the first step in legal analogical reasoning as one in which a "similarity is seen between cases." Professor Lloyd Weinreb, among the strongest contemporary supporters of the traditional view, describes the process of analogical reasoning as one in which there is a comparison of examples, but in which the

A. Posner, How Judges Think 180 (Harvard 2008) ("[F]aced with a rule squarely applicable to the case before him, [the judge] has no need to gauge the similarity of his case to some other case."); Grant Lamond, Precedent and Analogy in Legal Reasoning (Stanford Encyclopedia of Philosophy, June 20, 2006), online at http://plato.stanford.edu/archives/spr2016/entries/legal-reas-prec (visited Oct 24, 2016) (Perma archive unavailable). Nevertheless, analogical reasoning becomes highly relevant when a previous decision on facts or questions not identical to the case now before some court is still thought to exert some variety of constraint. See Adam Rigoni, Common-Law Judicial Reasoning and Analogy, 20 Legal Theory 133, 139 (2014). See also Phoebe C. Ellsworth, Legal Reasoning, in Keith J. Holyoak and Robert G. Morrison, eds, The Cambridge Handbook of Thinking and Reasoning 685, 687–88, 692 (Cambridge 2005); John F. Horty, The Result Model of Precedent, 10 Legal Theory 19, 19–21 (2004).

- Analogies can be negative as well as positive. "This case is like Korematsu v United States, 323 US 214 (1944)," is no less an analogical argument than, "This case is like Brown v Board of Education of Topeka, 347 US 483 (1954)," even though the former argument is aimed at not repeating the mistakes of the past and the latter urges that the wise decisions of the past be considered controlling or instructive now. See generally Barbara A. Spellman and Keith J. Holyoak, If Saddam Is Hitler Then Who Is George Bush? Analogical Mapping between Systems of Social Roles, 62 J Personality & Soc Psychology 913 (1992). But analogies in this negative sense should be distinguished from simple disanalogies, in which the argument is that some difference between this case and a previous one argues for treating this case differently from the case in the past.
- ⁸ For an early analysis, see John Austin, Essays on Interpretation and Analogy, in John Austin, 2 Lectures on Jurisprudence or the Philosophy of Positive Law 989, 1001–20 (John Murray 5th ed 1885) (Robert Campbell, ed). See also William Markby, Elements of Law Considered with Reference to Principles of General Jurisprudence 44–45 (Clarendon 6th ed 1905).
- 9 Edward H. Levi, An Introduction to Legal Reasoning 2 (Chicago 2d ed 2013). One of the features that makes Levi's analysis more complex is that, in keeping with the legal realist approach that Levi exemplified, he believed that the field of potential similarity was wide, giving the advocates on both sides, as well as the judge, considerable freedom as to which similarities to stress and which to ignore. Nevertheless, Levi's description has been described, accurately we believe, as the "standard account." M.D.A. Freeman, Lloyd's Introduction to Jurisprudence 1409 (Sweet & Maxwell 7th ed 2001). For an account similar to Levi's in understanding analogical argument as starting with a direct perception of similarity, see Steven J. Burton, An Introduction to Law and Legal Reasoning 25–40 (Aspen 3d ed 2007); Steven J. Burton, Comment on "Empty Ideas": Logical Positivist Analyses of Equality and Rules, 91 Yale L J 1136, 1142–47 (1982).

comparison of examples neither presupposes nor states a general rule. ¹⁰ Much earlier, one commentator distinguished "analogy in the sense of likeness" from "analogy in the sense of an intellectual process," ¹¹ observing that the former was a common part of judicial technique in which the "judge derives [a] new rule from previous ones." ¹² For Justice Benjamin Cardozo, analogical reasoning, which he labeled "the method of philosophy," was different from syllogistic logical deduction, but was nevertheless the process by which "the professional experts who make up the lawyer class" could see when two cases were "the same" and when they were not. ¹³ And various other authors over the years have treated "analogical extension[]" ¹⁴ not only as a technique of "reasoning from common-law principles" ¹⁵ but also as a "source of judicial principles" themselves. ¹⁶

Although the traditional view has countless variants, and although at least some of the traditional commentators on analogical reasoning in law do recognize some of the traditional view's subtleties, complexities, and pitfalls, there remains a core position according to which the first move in the analogical process is the recognition of a relevant similarity between some previous set of facts and the set of facts that now calls for decision. Perceiving this similarity, those who make legal arguments or deliver legal judgments then proceed to identify the analogy and on that basis conclude that the outcome reached on the earlier facts is the outcome to be reached in the instant case. Expressing this process in the language of the psychological research on analogy, legal reasoners identify (or *retrieve*) some past decision or set of facts as the *source*, and then use the outcome produced for that source to argue for, justify, or guide (or control) the outcome for the present,

¹⁰ See Lloyd L. Weinreb, *Legal Reason: The Use of Analogy in Legal Argument* 111–12 (Cambridge 2005). See also Martin P. Golding, *Legal Reasoning* 44 (Knopf 1984) (discussing legal analogical reasoning as based on "assumed resemblances") (emphasis omitted). And Professor Melvin Aron Eisenberg, who rejects the traditional view, describes it as "consist[ing] simply of comparing similarities and differences between cases, or of reasoning by example." Melvin Aron Eisenberg, *The Nature of the Common Law* 83 (Harvard 1988).

¹¹ E.C. Clark, Practical Jurisprudence: A Comment on Austin 251 (Cambridge 1883).

 $^{^{12}}$ Id at 252.

¹³ Benjamin N. Cardozo, *The Nature of the Judicial Process* 31–34 (Yale 1921).

 $^{^{14}\,}$ John Salmond, Jurisprudence 193 (Sweet & Maxwell 10th ed 1947) (Glanville L. Williams, ed)

¹⁵ Roscoe Pound, 2 Jurisprudence 111 (West 1959).

¹⁶ Salmond, Jurisprudence at 193 (cited in note 14).

or *target*, situation.¹⁷ The move from the source to the target is technically known as *mapping*, and the traditional view of the importance of analogical reasoning in law appears to maintain that retrieval of the source and then mapping the source to the target is the central method of common-law reasoning.

II. CHALLENGING THE TRADITION

The traditional view just described—or perhaps caricatured—has been subject to strong challenge, especially in recent years. At the heart of the challenge put forth by Professor Larry Alexander, 18 Judge Richard Posner, 19 Professor Ronald Dworkin, 20 and others²¹ is the fact that retrieving the appropriate source analog requires determining a similarity between the previous facts or acts or events and the ones now at issue. But determinations of similarity—or resemblance, as John Austin and others put it²²—require some metric enabling the analogizer to assess which similarities are important and which are not. After all, any two items are similar in some respects and different in others. A green hat is similar to a green truck in its greenness, for example, but dissimilar in a host of other ways. And thus, say the skeptics, what appears to be an initial perception of similarity between some source and the target—the combination of retrieval and mapping—is in fact the product of a determination that one thing ought to be understood as similar to another. There is some hidden rule or principle, the skeptics say, that determines why under

¹⁷ See Keith J. Holyoak and Kyunghee Koh, Surface and Structural Similarity in Analogical Transfer, 15 Memory & Cognition 332, 332 (1987).

¹⁸ See Larry Alexander and Emily Sherwin, *Demystifying Legal Reasoning* 76–83 (Cambridge 2008) ("Similarities are infinite; therefore some rule or principle is necessary to identify important similarities."); Larry Alexander and Emily Sherwin, *The Rule of Rules: Morality, Rules, and the Dilemmas of Law* 128–35 (Duke 2001); Larry Alexander, *The Banality of Legal Reasoning*, 73 Notre Dame L Rev 517, 531 (1998); Larry Alexander, *Bad Beginnings*, 145 U Pa L Rev 57, 83 (1996).

¹⁹ Posner, *How Judges Think* at 180–91 (cited in note 6); Richard A. Posner, *The Problems of Jurisprudence* 91 (Harvard 1990) ("A set of cases can compose a pattern. But when lawyers or judges differ on what pattern it composes, their disagreement cannot be resolved [] by an appeal to an intuitive sense of pattern.").

 $^{^{20}\,}$ Ronald Dworkin, In Praise of Theory, 29 Ariz St L J 353, 371 (1997) (arguing that "[a]n analogy is a way of stating a conclusion, not a way of reaching one, and theory must do the real work").

See, for example, Eisenberg, *The Nature of the Common Law* at 86 (cited in note 10) ("Reason cannot be used to justify a normative conclusion on the basis of an example without first drawing a maxim or rule from the example."); Peter Westen, *On "Confusing Ideas"*: A Reply, 91 Yale L J 1153, 1162–64 (1982).

²² See Austin, Essays on Interpretation and Analogy at 1001–20 (cited in note 8).

some circumstances the greenness of the hat and the truck are relevant, and why in other circumstances the color would simply not matter.²³ Thus, if the question arises as to whether the decision in MacPherson v Buick Motor Co24 ought subsequently to be extended to Fords and Oldsmobiles, it is only by application of some rule or principle that the make of car becomes irrelevant, even though that very same fact might in other contexts, and by application of different rules or principles, be relevant. Thus, to be slightly more realistic, suppose the question arises whether the facts (and thus the outcome) in MacPherson are analogous to a subsequent situation in which a purchaser of canned artichokes at the supermarket becomes ill as a result of the artichokes being contaminated when purchased. If the consumer now wishes to sue the canner or the packager rather than the retail supermarket, the question cannot be answered by asking whether cars are similar to artichokes. What we want to know is which facts (and relationships) in *MacPherson* were normatively important in light of the holding in that case. Once we understand that the legally important fact in *MacPherson*, and the fact that Judge Cardozo used to justify refusing to require privity between the plaintiff and the alleged wrongdoer, was the fact that a negligently caused defect in an automobile could be expected to produce "danger,"25 then and only then do we see that cars and artichokes might indeed be similar in this respect.²⁶ Accordingly, say the skeptics, the determination of the analogy follows from, rather than produces, the underlying substantive rule and its policy justifications. The basic idea, therefore, is that only by application of some legal principle can we see why the target artichoke case is (or is not) analogous to the source Buick case, and thus it is the legal principle, and not some mysterious analogical facility or antecedent similarity, that is in fact doing the work.

²³ See, for example, Posner, *How Judges Think* at 183 (cited in note 6) (arguing that similar cases are distinguished—or not—by "whether the[ir] differences make the policy that informs the previous case inapplicable to the new one").

 $^{^{24}}$ $\,$ 111 NE 1050 (NY 1916). We emphasize that we use $\it MacPherson$ as an example of how a decision might subsequently be used, but not as an example of analogical reasoning itself.

 $^{^{25}}$ Id at 1053. As alternatively expressed, the basis for liability was the manufacture and sale of an item "reasonably certain to place life and limb in peril when negligently made." Id.

 $^{^{26}}$ Or not. We take no position on the question whether it would be "probable" that negligently canned or processed artichokes would cause danger. Our only point is that this is the inquiry seemingly mandated by MacPherson, and that for the skeptics such an inquiry is necessary for the determination of similarity.

A nice example of what annoys the skeptics is a brief case note from the Yale Law Journal in 1915.²⁷ The note was about a California case, Wilmarth v Pacific Mutual Life Insurance Co of California,²⁸ that had applied the principles of common carrier liability to the owner of an elevator, accordingly concluding that an elevator owner owed the highest degree of "care and diligence" to elevator passengers,²⁹ rather than mere ordinary or reasonable care. In reporting on the case, the note writer concluded as follows:

That the circumstances surrounding the owner of an elevator and the common carrier are *analogous* is evident when we consider that the safety and lives of those who avail themselves of either of these means of carriage must of necessity be intrusted in a great measure to the care of those who control and operate the cars. The law, recognizing this *analogy*, places similar duties upon both.³⁰

Plainly there are similarities between elevators and common carriers—both, for example, move people from one location to another. And plainly there are differences—elevators are located within a single building and are controlled by the building operator, while common carriers hold themselves out to all varieties of people and goods traveling to diverse places. But the note writer concluded that the two are analogous because the operators of both have the lives and safety of others in their control. This (more than plausible) policy conclusion thus produces the analogy, rather than the analogy constituting the first step in the analysis. The policy judgment is what identifies the relevant similarity, and it is the policy judgment that serves to discard various differences as irrelevant. The note writer may have talked of "recognizing" the "analogy," but all that was going on was the application of a legal rule or the application of some policy consideration.

Although the quotation above is a particularly stark example of the phenomenon, the skeptics see the same phenomenon in almost all (or, perhaps, all) cases of analogy. Some legal rule or policy outcome produces the analogy, and, so the skeptics say, often neither the rule nor its policy basis is stated. Rather, the similarity or the analogy is simply announced, leading, so the skeptics

²⁷ See generally Case Note, Carriers—Liabilities for Injuries—Owner of Elevator—Wilmarth v. Pacific Mutual Life Insurance Co. of California, 24 Yale L J 254 (1915).

²⁸ 143 P 780 (Cal 1914).

²⁹ Id at 783.

³⁰ Case Note, 24 Yale L J at 254 (cited in note 27) (emphases added).

³¹ Id

believe, to a regrettable state of affairs in which the announcement of an alleged antecedent similarity between the source (the first case or the first set of facts) and the target (the instant case or set of facts) disguises the fact that the similarity is a policy-based judgment and not a raw fact about the world.³² Moreover, the skeptics lament that describing the policy- or rule-generated outcome in the language of an antecedent analogy often disguises the fact that the court is ordinarily not simply mechanically applying the earlier case, but is instead making a policy judgment and making new law.

The skeptics are concerned with more than just the evils of masking the true basis for a legal decision, evils that are especially worrisome when the undisclosed foundation of an asserted analogy is a policy determination about which reasonable minds might differ. Even more of a concern for the skeptics, at least in the strongest version of the skeptical argument, is their belief that there is no important difference between application of a rule and the alleged discovery of an analogy. 33 Because it is necessary that there be some rule or principle enabling the decision-maker to distinguish the relevant from the irrelevant similarities, and to distinguish the relevant from the irrelevant differences, drawing an analogy seems to the skeptics scarcely different from just applying the rule or making a policy determination. But what the skeptics see as an unfortunate complication is that, although a court will sometimes explicitly say what rule or policy it is applying, in announcing an analogy the court is basing its conclusion on the existence of a rule—sometimes preexisting and sometimes newly created—that the court never bothers to state at all. Indeed, in the Wilmarth case described above, the Supreme Court of California spent much time and ink describing various previous cases that had reached allegedly similar results for trains and double indemnity, but never actually explained, as the note writer did, just what makes elevators and common carriers similar.³⁴ To the skeptics this is hardly unusual, and leads them to the conclusion that often (or necessarily) the process of drawing an analogy is little more than the application of a policy or a rule, one that is

³² See, for example, Posner, *How Judges Think* at 182 (cited in note 6) ("[T]o consult precedent when trying to decide a new case is to look for policy insights that might be applicable to the new case.").

³³ See, for example, Alexander and Sherwin, *Demystifying Legal Reasoning* at 88 (cited in note 18) ("[A]nalogical reasoning is not a special form of reasoning known to lawyers but an exercise in ordinary moral, empirical, and deductive reasoning.").

³⁴ See Wilmarth, 143 P at 783–86.

sometimes stated and sometimes unfortunately hidden in the background. 35

III. ATTEMPTS AT REHABILITATION

In the face of these skeptical arguments, several scholars have attempted to rescue the distinctiveness of analogical reasoning in law, while at the same time recognizing several complexities often lost in the traditional accounts. Two of these efforts are particularly noteworthy. In one, Professor Scott Brewer has argued that analogical reasoning in law can best be explained as a process of abductive reasoning. Abductive reasoning, different from both deductive and inductive reasoning, and very close to what others have analyzed as "inference to the best explanation," starts with an initial direct perception of similarity between one or more past events and the event now under discussion. But having perceived a similarity, the abductive reasoner, says Brewer, does not immediately come to a final conclusion, as the traditional view of analogical reasoning in law appears to suppose. Rather, she then attempts to construct the rule or principle

³⁵ One of the classic examples in the literature on analogical reasoning in law is Adams v New Jersey Steamboat Co, 45 NE 369 (NY 1896), in which the New York Court of Appeals was called upon to decide whether a sleeping compartment on a steamboat was more similar to an inn or instead to a sleeping berth on a train, for the purpose of determining the standard of care owed to a passenger whose billfold was stolen while he was sleeping. See generally id. Defenders of the distinctiveness of analogical reasoning, see, for example, Weinreb, Legal Reason at 111-12 (cited in note 10), believe that the determination of similarity or difference in this and other cases can ignore the underlying policy considerations, while the skeptics, again often discussing the same case, see, for example, Posner, How Judges Think at 180-86 (cited in note 6), insist that the conclusion in cases like Adams (the court referred to the steamboat as a "floating inn," Adams, 45 NE at 369), at least when there is no preexisting rule governing the exact situation, is necessarily a policy judgment. For a recent Supreme Court case resembling Adams insofar as the Court was required to determine, for purposes of admiralty jurisdiction, whether a houseboat was more like a house or more like a boat, see generally Lozman v City of Riviera Beach, Florida, 133 S Ct 735 (2013). For commentary on the analogical dimensions of Lozman, see generally Frederick Schauer, Analogy in the Supreme Court: Lozman v City of Riviera Beach, Florida, 2013 S Ct Rev 405.

³⁶ See generally Scott Brewer, Exemplary Reasoning: Semantics, Pragmatics, and the Rational Force of Legal Argument by Analogy, 109 Harv L Rev 923 (1996).

³⁷ See generally, for example, Peter Lipton, *Inference to the Best Explanation* (Routledge 2d ed 2004). The idea is not without controversy, see, for example, Bas C. van Fraassen, *Laws and Symmetry* 132–50 (Clarendon 1989), and there are ways in which the debates about inference to the best explanation in the philosophy of science resemble the debates about analogical reasoning, especially the claim of Professor Bas C. van Fraassen and others that inference to the best explanation is merely deductive reasoning in disguise. See, for example, id at 142–43.

that would explain the first perception.³⁸ In other words, instead of masking the rule that explains the similarity, as the skeptics claim is typical, the abductive reasoner not only articulates it, but tests it against the initial perception, going back and forth in a process that resembles, in a different context, Rawlsian reflective equilibrium.³⁹ Insofar as Brewer has accurately captured something about how analogical reasoning in law actually operates, he has succeeded in explaining the respective roles of the particular and the general in common-law legal reasoning. He has not, however, dispelled the worry that the analogical reasoner's initial perception may itself be based on an unexpressed policy or outcome preference, and the extent to which Brewer's account transcends this difficulty is a function of the extent to which the process of searching for a reflective equilibrium can be expected to produce a narrower range of outcomes than would be produced by direct application of a newly announced rule. If reflective equilibrium does not do this, then Brewer's account may not be sufficient to satisfy the skeptics, and may still not differ enough from a process best described as the application of a rule created in the process of deciding the present case.

Brewer's account rests heavily on the idea that the initial perception of similarity may play only a subordinate and introductory role. For him, it is the subsequently developed explanation—or the rule or principle—that does most of the work, even if the initial perception was necessary in the development of the principle.⁴⁰ The same cannot be said, however, of the explanation and defense of analogical reasoning in law offered by Professor Cass Sunstein.⁴¹ Like Brewer, Sunstein believes that the initial move in an analogical argument is largely based on an initial perception of the "particulars" of some controversy or state of affairs.⁴² But unlike Brewer,⁴³ Sunstein does not see the need for the advocate or the judge to strain to describe those particulars, or the relevant similarities between sets of particulars, at a higher level of abstraction or generality. Indeed, for Sunstein, the virtue of

See Brewer, 109 Harv L Rev at 962 (cited in note 36).

³⁹ See John Rawls, *A Theory of Justice* 48–50 (Belknap 1971). See also F.M. Kamm, *Theory and Analogy in Law*, 29 Ariz St L J 405, 412–14 (1997) (arguing that analogies can be important steps in reaching a conclusion, and that the conclusion, which is broader in scope than the analogy, need not precede the perception of the analogy).

⁴⁰ See Brewer, 109 Harv L Rev at 975 (cited in note 36).

⁴¹ See generally Cass R. Sunstein, On Analogical Reasoning, 106 Harv L Rev 741 (1993).

⁴² Id at 746.

⁴³ Or Professor Frances Kamm. See note 39.

analogical reasoning in law lies largely in the way in which an analogical argument "operates without a comprehensive theory,"44 thus enabling analogical argument to operate in small steps, accordingly delaying until absolutely necessary the task of setting forth broad or general rules and principles. Plainly, Sunstein's preference for decisions to be made "one case at a time" 45 is at work here, and Sunstein of course recognizes and acknowledges that his preference for judicial minimalism and for judicial lawmaking in small steps is a normative principle of institutional and judicial design.46 But like Brewer and like at least some of the traditional defenders of analogical reasoning in law, Sunstein believes that the largely "incompletely theorized" move from one set of particulars to another is in fact possible, and that the initial and incomplete perception of relevant similarity is not simply a mask for hidden lawmaking.47 And so, although Brewer and Sunstein differ as to what does or should take place after the initial flash of analogical insight, their mutual willingness to accept that such insight is possible—that there can be quick and undertheorized judgments of relevant similarity and difference—sets them apart from the strong skeptics, and places them among analogical reasoning's defenders rather than among its debunkers.

IV. ARE THERE EXPERTS IN ANALOGICAL REASONING?

At the heart of the debate between the celebrants and the skeptics is not only the question whether analogical reasoning, in law or elsewhere, is a distinctive form of reasoning, but also the question whether some people might be better at analogical reasoning than others. Almost everyone draws analogies, after all, and it is generally accepted that analogical reasoning is a core component of intelligence.⁴⁸ It should come as little surprise, therefore, that an offshoot of the traditional defense of analogical reasoning in law as a distinctive way of making arguments and

⁴⁴ Sunstein, 106 Harv L Rev at 747 (cited in note 41).

⁴⁵ See generally Cass R. Sunstein, *One Case at a Time: Judicial Minimalism on the Supreme Court* (Harvard 1999).

⁴⁶ See id at 3-6.

 $^{^{47}}$ Cass R. Sunstein, $Incompletely\ Theorized\ Agreements,\ 108\ Harv\ L\ Rev\ 1733,\ 1735-38\ (1995).$

⁴⁸ See, for example, Timothy A. Salthouse, *Effects of Aging on Reasoning*, in Holyoak and Morrison, eds, *The Cambridge Handbook of Thinking and Reasoning* 589, 589 (cited in note 6). See also generally Richard E. Snow, Patrick C. Kyllonen, and Brachia Marshalek, *The Topography of Ability and Learning Correlations*, in Robert J. Sternberg, ed, 2 *Advances in the Psychology of Human Intelligence* 47 (Lawrence Erlbaum 1984).

deciding cases is the view that training in analogical legal argument is an important component of "thinking like a lawyer."⁴⁹ Lawyers and judges, so the argument goes, have been trained to make analogical arguments, especially in common-law environments, and thus the class of lawyers and judges is characterized by a special expertise in analogical reasoning not possessed by those without legal training. Although Lord Coke did not explicitly refer to analogical reasoning in celebrating the artificial reason of the law, we can assume he would have been sympathetic to the idea that moving from case to case or from particulars to particulars with a distinctive proficiency was at least one of the components of law's artificial reason.

Despite the fact that expertise in analogical reasoning has long been touted as one of the talents of the good lawyer, there is in fact no evidence that analogical reasoning, as a domainindependent skill, can be the subject of expertise.⁵⁰ It is of course true, as we discuss in Part V, that experts in particular fields will see analogies that others do not and will see structural and relational similarities (and differences) when others see only surface similarities and differences. And because lawyers and judges are likely to be more intelligent than the average of the population at large, and because skill in analogical reasoning is a core component of intelligence, we would expect that lawyers and judges will, on average, be more adept at analogical reasoning than the average person. But this is not to say that lawyers and judges will be especially skilled at analogical reasoning—will be experts in the process of analogical reasoning—just by virtue of their training, experience, or self-selection as lawyers and judges. In other words, although expertise can strongly influence the identity of the source (or base) analogs identified—although lawyers and judges can have content-based expertise that influences the connections (the mapping) between the sources and the targetsthere is no indication that there are experts in analogical reasoning as such. Analogical reasoning is pervasive across fields and ages, but it appears unlikely that there is a group of people who are expert analogizers, and even more unlikely that, even were there a class of expert analogizers, it would consist largely of the class of those with legal training.

⁴⁹ Larry O. Natt Gantt II, Deconstructing Thinking like a Lawyer: Analyzing the Cognitive Components of the Analytical Mind, 29 Campbell L Rev 413, 459 (2007); Lloyd L. Weinreb, Legal Reason Redux, 57 J Legal Educ 600, 602 (2007).

⁵⁰ See text accompanying note 2.

The foregoing should not surprise. We believe, for example, that judges are not expert fact finders,⁵¹ nor expert at appropriately weighing evidence.⁵² And we know that experts, despite specialized skills and virtuoso performances, tend to make the same errors as nonexperts in all sorts of general reasoning tasks. In other words, the expertise of experts tends to be limited to their domain of detailed knowledge.⁵³ And this is true for judges as well as other experts.⁵⁴ So then the question would be whether analogical reasoning is in some way different, at least for lawyers and judges. In other words, does the fact that lawyers and judges are trained in analogical reasoning give them special expertise in this reasoning task that they do not appear to possess for other reasoning tasks, again controlling for intelligence?

It turns out that skill in analogical reasoning tends not to be especially transferable across domains. When experimental subjects have been exposed to a solution to a reasoning problem in one domain and are then given a problem with an analogous solution, their earlier exposure to an obvious analogy appears not to help them in the later problem.⁵⁵ We do know that teaching people to compare multiple analogs, to abstract from single analogs, and to learn the names of structural relations can be valuable in teaching content.⁵⁶ In other words, these forms of learning can help law students and lawyers not only to learn the content of the law, but also to see and to understand the structural, and not just the surface, similarities between different events. But all of this is to say that training can improve one's ability to retrieve

⁵¹ See Paul H. Robinson and Barbara A. Spellman, Sentencing Decisions: Matching the Decisionmaker to the Decision Nature, 105 Colum L Rev 1124, 1145 (2005).

 $^{^{52}~}$ See Barbara A. Spellman, On the Supposed Expertise of Judges in Evaluating Evidence, 156 U Pa L Rev PENNumbra 1, 6–9 (2007).

⁵³ See generally, for example, Amos Tversky and Daniel Kahneman, *Belief in the Law of Small Numbers*, 76 Psychological Bull 105 (1971).

See Chris Guthrie, Jeffrey J. Rachlinski, and Andrew J. Wistrich, Inside the Judicial Mind, 86 Cornell L Rev 777, 829 (2001) (finding that "judges rely on the same cognitive decision-making process as laypersons and other experts"); Andrew J. Wistrich, Chris Guthrie, and Jeffrey J. Rachlinski, Can Judges Ignore Inadmissible Information? The Difficulty of Deliberately Disregarding, 153 U Pa L Rev 1251, 1323–24 (2005).

⁵⁵ See Miriam Bassok, *Transfer of Domain-Specific Problem-Solving Procedures*, 16 J Experimental Psychology: Learning, Memory & Cognition 522, 531–32 (1990); Holyoak and Koh, 15 Memory & Cognition at 333 (cited in note 17) ("[O]ne could reasonably question whether there is any convincing experimental evidence that people notice analogies between problems presented in substantially remote contexts.").

 $^{^{56}~}$ See Bassok, 16 J Experimental Psychology: Learning, Memory & Cognition at 522 (cited in note 55).

the relevant source within a particular domain, and to see structural and not just surface similarities within that domain, but not necessarily to use analogical reasoning in general, or in other domains. In one study of law students, for example, it appeared that legal education had no statistically significant effect on verbal reasoning, when the verbal-reasoning tasks tested included analogical reasoning. So although it appears that training in seeing and drawing some legal analogies will help in seeing and drawing other legal analogies, there exists no evidence that legal training improves general analogical reasoning, or that the skill of lawyers and judges in retrieving source analogs and mapping analogies within the area of their specialized knowledge sets them apart from other experts who can do much the same thing in their own domains of expertise.

Indeed, there is some indication that the proclivity to analogize varies not directly but inversely with expertise. In at least some fields, greater expertise appears to predict increased reluctance to use analogical reasoning.⁵⁸ And although the research is far from extensive, this conclusion should not come as a surprise. Insofar as experts have greater knowledge of the theories—the rules, the principles, and the explanations—in their field, we would expect that they would be more likely to apply such theories directly, rather than relying on the theoretically thinner domain of analogical reasoning. The expert in torts, for example, will know that the principle of *Donoghue v Stevenson*, 59 the British counterpart of *MacPherson*, is focused in large part on the inability of a consumer or even a retailer to discover a defect in manufacture. 60 The torts expert will accordingly see that the question whether the purchaser of an automobile (in Great Britain) can sue the manufacturer for a defect in the automobile is covered by the aforesaid principle, without having to determine whether there is some theoretically thinner analogy between the sale of an automobile and the sale of a glass or a bottle of ginger beer, the

⁵⁷ See Darrin R. Lehman, Richard O. Lempert, and Richard E. Nisbett, *The Effects of Graduate Training on Reasoning: Formal Discipline and Thinking about Everyday-Life Events*, 43 Am Psychologist 431, 435–37 (1988).

⁵⁸ See Ozgu Ozkan and Fehmi Dogan, *Cognitive Strategies of Analogical Reasoning in Design: Differences between Expert and Novice Designers*, 34 Design Stud 161, 186–88 (2013) (finding that "in analogical reasoning expert [architects] . . . would be more focused on higher-level abstract relationships whereas novices would tend to be more fixated on the specific details of a source example").

⁵⁹ 1932 App Cases 562 (HL 1932).

 $^{^{60}}$ See id at 564.

item at issue in *Donoghue*. In a way that is consistent with Professor Sunstein's account described above, ⁶¹ the theoretically adept expert will have less use for analogical argument, and, conversely, those who are less theoretically adept, or who may wish to suppress the use of the theories of which they are aware, may find analogical reasoning more congenial.

V. THE ROLES OF EXPERIENCE AND EXPERTISE

Although it appears that there is little expertise in analogical reasoning as such, experts in various domains still do know things that nonexperts do not. And this fact, it turns out, is the key to understanding an important feature of analogical reasoning in law. More specifically, it may be precisely the immersion in law and legal categories—through study or practice or both—that enables the legal expert to retrieve source analogs that would be ignored by nonexperts, and to see connections—mappings—between source and target that might seem unfathomable to the nonexpert.

Consider the example just described of *Donoghue*, in which the defect was the presence of a decomposed snail in the bottle of ginger beer. 62 And consider again the possibility of subsequently applying the *Donoghue* holding to an automobile-defect case such as was presented in *MacPherson*. It is, to put it mildly, unlikely that a layperson would think of automobiles as being in any way analogous to decomposed snails or bottles of ginger beer. But for the genuine expert in the history and theory of tort law, the connections between the two will jump out immediately. When told of the facts in *MacPherson*, we expect that this expert would, even assuming the nonexistence yet of the actual decision in *MacPherson*, see almost immediately the similarity between the literal opacity of the ginger beer bottle in *Donoghue* and the figurative opacity of the workings of an automobile. The expert would thus likely retrieve and use an analogy that for others would be located beyond their grasp.

Consider also the similarities between Nazis and the civil rights demonstrators of the 1960s. To normal nonlawyers, the suggestion of any similarity between the two groups would be bizarre, even offensive. But to the lawyer steeped in American First Amendment free speech doctrine, the similarity—groups subject

⁶¹ See text accompanying notes 41–47.

 $^{^{62}}$ $\,$ $Donoghue,\,1932$ App Cases at 562–63.

to attempted viewpoint-based restrictions on their ability to march in public places⁶³—would again have seemed as obvious as the dissimilarity would seem to those outside of the First Amendment culture.⁶⁴

The lesson of these examples should be obvious. Given the virtually infinite number of similarities and differences between any two items, people with a certain kind of experience and training will likely pick out from this universe of similarities and differences ones that others will not see. And thus it is not that legal experts are, by virtue of that expertise, more adept at analogical reasoning. It is that legal experts are, by virtue of that expertise, more likely to see connections of a certain type, connections that will be beyond the appreciation of the nonexpert. And in this ability to see *legal* connections premised on *legal* categories we can see what it is that might support the view that analogical reasoning in law differs from analogical reasoning in other domains.

It is important to recognize that the claim here—that judges may choose relevant analogies as better or worse, applicable or inapplicable, because of their own preexisting knowledge—is different from the legal realist claim that judges pick their analogies based on some analogy-independent desire for a particular outcome or even a particular rule. Although judges, like lawyers advocating an outcome on behalf of a client, may indeed sometimes (or usually, according to the realists) choose their analogies on the basis of outcome preferences, the point here is that judges may still see legally infused analogies that others would ignore, and see those analogies precisely because of their legal training, legal experience, and legal expertise. Source analogs and mappings may indeed sometimes be selected in order to achieve certain goals, 66 but even absent outcome-based pragmatic goals the analogical reasoner may use her domain-specific expertise to recognize target analogs and mappings within that domain that nonexperts would not see.

 $^{^{63}}$ For the Nazis, see generally, for example, Collin v Smith, 578 F2d 1197 (7th Cir 1978); Village of Skokie v National Socialist Party of America, 373 NE2d 21 (Ill 1978) (per curiam). For the civil rights demonstrators, see generally, for example, Edwards v South Carolina, 372 US 229 (1963).

⁶⁴ And thus it was only to be expected that the opinion in *Collin*, the Nazi case, cited two different civil rights demonstration cases—*Edwards* and *Shuttlesworth v City of Birmingham*, 394 US 147 (1969)—in support of the court's ruling that the Nazis had a First Amendment right to march. *Collin*, 578 F2d at 1201.

⁶⁵ See Spellman, Judges, Expertise, and Analogy at 152 (cited in note 2).

⁶⁶ See Barbara A. Spellman and Keith J. Holyoak, Pragmatics in Analogical Mapping, 31 Cognitive Psychology 307, 341–44 (1996).

VI. ON THE POSSIBILITY OF ANALOGICAL LEAPS

As noted above, making the jumps from snails to cars and from Nazis to civil rights demonstrators plainly requires a theory. Without some overarching principle, rule, abstraction, or theory connecting the elements of each of these pairs, it would be impossible to see the separate elements as analogous. And because the analogy thus requires some principle making one analogous to the other, the skeptics are entirely correct.

There is a difference, however, between the existence of a principle and the actual conscious use (or recognition) of that principle. Insofar as the skeptical challenge claims that analogical reasoners are actually retrieving a principle and then using it to decide what is analogous to what, then it turns out that the skeptics, even if analytically correct about the logical necessity of a connecting principle, are empirically mistaken about the conscious retrieval and use of such a principle. The skeptics and the defenders alike acknowledge that some principle is necessary in order to determine what is analogous to what, and there is little debate about an analogy being the product of some principle rather than existing entirely independent of it.67 But the skeptics are mistaken in believing that retrieving and employing the principle is some sort of conscious process. Principles are necessary preconditions to analogizing, but the research strongly indicates that people who draw analogies make the mental move directly from particular to particular rather than moving from particular to principle and then from principle to analogous particular.68 What makes analogical reasoning distinctive is that although people who draw analogies see similarities that are necessarily based on principles or theories, these principles or theories are often so embedded in their thought processes that they are not consciously perceived.

The skeptics are thus correct in pointing out that analogies do not just exist. They are based on principles, rules, or goals that are necessary to support the conclusion that one thing is similar to another. But once we see that recognizing, understanding, and using these principles is often based on training and experience,

 $^{^{67}\,\,}$ See, for example, text accompanying notes 15 and 32.

⁶⁸ For recent neuroscientific research consistent with this conclusion, see, for example, Adam E. Green, et al, *Neural Correlates of Creativity in Analogical Reasoning*, 38 J Experimental Psychology: Learning, Memory & Cognition 264, 269–71 (2012); Adam E. Green, et al, *Connecting Long Distance: Semantic Distance in Analogical Reasoning Modulates Frontopolar Cortex Activity*, 20 Cerebral Cortex 70, 73 (2010).

there is no more reason to believe that the legal analogizer consciously retrieves these principles in drawing an analogy than there is reason to believe that the expert chess player consciously retrieves the principles of chess in making her next move, or that the expert musician consciously retrieves (or even understands) the principles of aural perception in hearing that a particular note is sharp or flat, harmonious or dissonant. That drawing analogies involves what in the psychological literature are called "mental leaps" is now well established, 69 and there is no reason to believe that legal leapers are less present than are leapers in other fields of endeavor. 70 But insofar as the mental leaps are based on a particular form of training, experience, and expertise, legal leaping remains different from other forms of leaping precisely because of the domain-specific knowledge that lawyers and judges possess, just as the domain-specific knowledge of experts in other domains allows them to see analogies that nonexperts do not. The legal analogizer is no better, controlling for intelligence and the like, than other analogizers, but the legal analogizer because of her legal knowledge will see and use analogies that those outside the law cannot comprehend.

CONCLUSION

That legal leaping is possible does not mean it is either necessary or ubiquitous. It is possible to go from a particular set of facts to a principle, and then consciously apply that principle to other sets of facts. To assume that analogical reasoning is possible and distinctive for the reasons described here, and to assume that legal analogical reasoning is therefore possible as well, is still not the same as saying that analogical reasoning, at least in law, is necessary, ubiquitous, or desirable. As the century-old case note quoted above indicates,⁷¹ legal decision-makers and commentators often describe as analogical reasoning a process that is in fact

⁶⁹ Keith J. Holyoak and Paul Thagard, Mental Leaps: Analogy in Creative Thought 7 (MIT 1999).

As we have noted above in the text accompanying notes 2 and 50, there is no indication that there are experts in analogical reasoning as such. Still, none of the existing research has focused on the possibility that people whose training is explicitly focused on analogical reasoning, as arguably legal education at times is, might be better at domain-independent analogical reasoning than others of equivalent intelligence. Examining this hypothesis could be an interesting and important research program, but in this context we can do no more than identify the possibility.

⁷¹ See text accompanying notes 27 and 30.

something else. But once we have recognized that analogical reasoning in law is possible, and once we have recognized the role of legal experience and expertise in shaping the analogies that lawyers and judges use, it remains to be seen just how often genuinely analogical reasoning takes place in legal argument and judicial decisions. That inquiry is of necessity empirical, but the largely conceptual foundations we have explored here are necessary so that any empirical inquiry can be properly designed.