

Legal Realism Explains Nothing

Anthony D'Amato*

I. JUDICIAL FREEDOM VARIES INVERSELY WITH PERSONAL FREEDOM

I argue that American legal realism as derived from Oliver Wendell Holmes's prediction theory of law was misinterpreted, and that a deeper examination of law-as-prediction might help to reduce the pathology of judicial lawmaking that has been the unfortunate consequence of legal realism.

Legal realism is the theory that judges may decide cases by taking into account factors other than preexisting law.¹ Judge Richard A. Posner recently extended the theory to its limits by announcing that there is no such thing as preexisting law:

[L]aw is the activity of licensed persons, the judges, rather than a body of concepts (rules, principles, whatever) The law is not a thing they discover; it is the name of their activity. They do not act in accordance with something called "law"—they just act as best they can.²

Like the Lord High Chancellor in *Iolanthe*,³ Judge Posner embodies the law. Why are we not shocked by this grandiose claim? Perhaps it is because we have lost our collective memory of what it must have been like for people in the past to believe that law existed independently of judges. It is hard for us today to

* Leighton Professor of Law, Northwestern University.

¹ For further discussion, see Anthony D'Amato, *The Limits of Legal Realism*, 87 YALE L.J. 468 (1978).

² RICHARD A. POSNER, *THE PROBLEMS OF JURISPRUDENCE* 21, 225 (1990) [hereinafter POSNER, *THE PROBLEMS OF JURISPRUDENCE*].

³ GILBERT & SULLIVAN, *IOLANTHE* (D'Oyly Carte Opera Co. 1960).

think that law is anything other than what judges decide it to be. The judge's gavel signifies the brute finality of the court's determination of the law. One does not cavil with a gavel.

Yet a little over a hundred years ago the climate of opinion was exactly the opposite. Hardly anyone thought that judges made the law or were entitled to make it. Instead, law was believed to be a body of concepts (as Posner says) that judges had to study, understand, respect, and apply. Or as Oliver Wendell Holmes Jr. later caricatured it, law was a "brooding omnipresence in the sky."⁴ Of course people back then knew that judges had the power to make final decisions, but they believed that judges were only functioning as law-appliers. Like umpires in a baseball game, judges could call the plays but could not change the rules. Judges could find the law but not make it. Since judges also believed that they were finding the law, the people were right. Courtroom lawyers invariably argued that law was an objective concept waiting to be found by the careful judge.

The idea that a judge could occasionally misapply the law was part of that climate of opinion. By contrast, Posner's notion of embodiment entails the impossibility of today's judge making a legal mistake—in the Wittgensteinian sense of the impossibility of being mistaken that one is in pain. But in the mid-nineteenth century no one would have suggested that judges were incapable of error. A judicial mistake was considered a temporary aberration waiting to be corrected either by a higher court or by another judge in an analogous case. The gavel was not infallible. In fact, the popular as well as the academic belief that judges occasionally got the law wrong was the descendant of an even stricter tradition in the common law of England that allowed a losing party to sue the judge for making a decision that wrongfully and illegally deprived him of his property or rights. No judge in those formative days could credibly deny that other judges made mistakes of law. To shield themselves from personal liability for wrongful decisions, they instituted a new tribunal, the court of appeals, wherein the losing party had an automatic right to be heard on the sole issue of whether the trial judge had made a legal error.

When we are reminded of those old views about law, they look decidedly naïve. We pride ourselves on being legal realists.

⁴ *S. Pac. v. Jensen*, 244 U.S. 205, 222 (1917) (Holmes, J., dissenting).

We can affirm with confidence that law itself had no greater corporeal existence a few centuries ago than it has today—namely, zero. Indeed, one might argue that the only difference between the old and modern views is psychological. Maybe nothing has changed except the way we describe the legal process. We may have only become more sophisticated, casting off “omnipresences”⁵ in the sky. Posner himself conceded in his eighth year on the bench that a judicial opinion, written in formal language and citing precedents, might be designed to give decisions “the pretense of certitude and neutrality.”⁶ He added that they might just be a way of “pulling the wool over the public’s eyes.”⁷

However, the objection that changes in community conceptions of law are irrelevant is easily met. Granted law does not exist in the physical world; law is nothing but a shared mental construct. Because law is a construct, psychology is in the driver’s seat. Law is what we (collectively) believe it to be. And if we go back one recursive step, we believe that law is what judges believe it to be. A judge who *feels* constrained by existing law is likely to *be* constrained by it. Although the constraint is only psychological, only psychological constraints can do any work at all when the decisional process is purely ideational. More pragmatically, the judge who *finds* law can be criticized by the legal community for failing to look hard enough or in the right place. As a result, the judge may improve her performance the next time around. In contrast, the judge who *makes* law cannot be criticized from a legal standpoint and is not likely to change his ways.⁸

The importance of psychological factors can be attested by judges’ awareness of their own motivations (excluding of course the subconscious ones of which no one is aware). They may hear an internal whisper advising them to judge cases according to

⁵ See *id.* and accompanying text.

⁶ Richard A Posner, *The Jurisprudence of Skepticism*, 86 MICH. L. REV. 827, 865 (1988).

⁷ *Id.*

⁸ A lawmaking judge may, however, be criticized from a political standpoint for not making the best law—in the same way that a Congressperson might be criticized. To be sure, there is a great deal of legal criticism of judicial decisions in the law reviews and law journals, but most of it is so contentious (and self-canceling) that it is largely ignored by the judiciary.

preexisting law. Like Judge Posner, judges are free to overrule weak interior voices. Posner, as we have seen, declares that he does not act “in accordance with something called ‘law.’”⁹ Although not all judges agree, or admit they agree, with Posner, prevailing judicial attitudes seem to be going in his direction. The Supreme Court itself increasingly seems to be acting like a super-legislature, which partly explains the microscopic (if tedious) attention now being paid to the policy preferences of the President’s nominees to the Court. A century ago judges were not supposed to have policy preferences, and if judges had policy preferences they were forgotten as soon as they ascended the bench.

Judge Posner’s declaration of independence from the law self-confers upon him several degrees of freedom to decide cases as he wishes. He writes that “judges are not *bound* by the rules to do anything,”¹⁰ implying that there is no cost to deciding cases without adhering to the rules. But although free-wheeling decision making may be costless to him, the real costs are externalized in a lessening of public confidence in the rule of law. Judicial freedom varies inversely with our personal freedom. On the one hand, if judges, unlike Posner, feel constrained by existing law, the web of law becomes more ascertainable. People obey the law because they know that an unforgiving judge is waiting at the end of the line to apply the law to them. On the other hand, when Posnerian judges feel unconstrained by existing law, then at the end of the line there is nothing but judicial whim. This whim feeds back to us in the form of the threat of punishment for obeying legal rules. For whenever a judge makes a new rule, the party who relied upon and obeyed an existing rule is punished. As more judges—especially appellate and Supreme Court judges—invent law under a sense of *noblesse oblige* to society (exclusive of the litigants), the more their activity tends to quash entrepreneurial spirit, diminish societal freedom, and undermine our faith in democratic institutions. It also encourages marginally illegal behavior by the police, who are the first to know when judges play fast and loose with the law. It tends to prematurely turn many law students into cynics. In the longer run, lawmaking degrades the judiciary as a whole and invites the public to regard judges as no better than dissembling politicians.

Freedom and law are most often complementary. People

⁹ POSNER, *THE PROBLEMS OF JURISPRUDENCE*, *supra* note 2, at 225.

¹⁰ *Id.* at 47.

usually feel that they are better able to act freely when they know and can consider the legal sanctions to alternative courses of action. The state and its citizens are on the same side of the fence in this matter. The state wants people to conform their behavior to the rules the state itself has promulgated rather than to some other rule awaiting creation in a courtroom. And most people want to obey the law that the state has promulgated.¹¹ Our personal freedom varies directly with the knowability and fixity of legal rules—at least until the rules themselves become too dense and overbearing.¹² There are two prominent reasons that support a symbiosis between law and freedom. First, as already suggested, when we know or can learn what the legal rules are, and what punishments the state attaches to them, we are free to obey or disobey them depending on our calculation of the costs of incurring the prescribed punishment discounted by the likelihood of its being imposed.¹³ Second, the punishment attached to the rules is desirable from our collective standpoint because coercive rules are the best way to overcome free riding. The state once again is on our side. Since there are always enough people in any society who are sufficiently self-serving to absorb the fruits of everyone else's cooperation, societies must resort to rules to promote socially altruistic behavior and make free riding prohibitively expensive. The stark alternative is anarchy.

The next part of this essay addresses the circumstances and effects of the remarkable turn in the public's attitude toward law. The tipping point was in 1897 when Holmes announced his

¹¹ Even those who break the law do not necessarily favor law-breaking. What they usually want is a free ride for themselves. Diderot in his *Encyclopedia* mentioned the thief who wants the law to protect his exclusive ownership of the property he has just stolen. Far from being opposed to the law that safeguards personal property, the thief only desires a temporary exemption for himself.

¹² If legal rules become too dense, the curve of personal freedom may begin to decline. This can happen when a constant external threat to the survival of the society results in an excess of rule-making. For example, the tribes of Israel and Judea in Biblical times, under a constant threat of attack, had extremely dense internal rules (for example, detailed dietary restrictions) which helped crowd out individual desires for free riding and thus made the tribes more internally cohesive. The result was an improvement in their fitness as efficient fighting units.

¹³ People ordinarily do not make this austere calculation. Most rules of law are obeyed out of a sense of morality, justice, fairness, civic obligation, or plain habit.

prediction theory.¹⁴ I will argue that although Holmes's statement was misinterpreted, its received meaning ushered in a new movement called American legal realism. The enticement and simplicity of legal realism conquered the mind of the legal community, paving the way for judges to reconstitute themselves from being our law-applying servants into becoming our law-making masters. This reconstitution has eroded our freedom—even if the process has been too gradual and diffuse for most people to notice.

There are two preliminary matters I would like to dispense with here. First, I am not making the standard democratic complaint that law-making has shifted from elected legislators to unelected judges. Rather, the distinction I wish to draw is between legal rules made prior to a person's conduct and those made *ex post facto* by judges. A judge who invents a rule and applies it retroactively to conduct that has already occurred seems to be engaging in a kind of reverse legislation. If in doing so the judge changes the law retroactively, then indeed it would be reverse-perverse legislation—penalizing a party for failure to obey a rule that the judge has just invented. But if the judge just finds the law as it existed when the facts of the case arose, then the judge is not making new law but only taking a picture of the old—the same picture the litigants could have taken when their case arose.¹⁵

Secondly, I am not arguing that judges are making too much law. Perhaps this is true of Supreme Court justices these days, but that's another story. The diminution of our personal freedom that I allege is not a function of the quantity of judge-made law but of the fact that judges feel free to make law at all. The person on the street may not notice the effect, but if a transaction involving her rights or property is litigated, she will notice it quickly enough.

¹⁴ See *infra* note 15 and accompanying text.

¹⁵ It may occur to some readers that if a judge makes new law prospectively—meaning that the new rule will apply in the future but not to the litigants in the case at bar—then there would be no unfairness to the losing plaintiff from the change in the rule. However, this ploy is ruled out by the structure of the legal system. A rule announced by a judge has precedential value only if it was necessary to the result reached in the case. A new prospective rule is logically unnecessary to the present decision because the new rule contradicts the present decision. The judge in the next case would therefore be free to prospectively overrule the new rule, leading to an infinite regress of prospective overrulings.

She will find herself confronted with the possibility of significant loss simply for observing her civic obligation to respect the law that existed at the time of the transaction, a law that the judge has now seen fit to change. Behind her back the judge has turned her into a designated loser.

Part III of this essay is devoted to finding a reinterpretation of Holmes's theory. I will argue that its correct meaning is virtually unknown and rather strange. However we may derive some intellectual comfort by an analogy to prediction in quantum mechanics.

Finally, Part IV will show that the unusual interpretation of Holmes's prediction theory set forth in Part III can stand on its own footing as a sensible explanation of the nature of law. The four parts of the essay taken together then can be seen to offer a way to recapture the old virtue of regarding existing law as a limitation upon judicial freedom.

II. THE STANDARD INTERPRETATION OF HOLMES

We can pinpoint the time when the old conception of judges as law-finders began to morph into the modern conception of judges as lawmakers. Holmes announced what turned out to be a paradigm shift in a speech given in Boston in 1897: "[t]he prophecies of what the courts will do in fact, and nothing more pretentious, are what I mean by the law."¹⁶ The time element in Holmes's theory must have surprised those listeners who were paying close attention. For centuries up to 1897, lawyers, judges, scholars, and the general public viewed law as something that exists in the present—the time when people make decisions that are influenced by the content of the law. Holmes was now apparently informing everyone that law does not exist in the present. It only comes into existence in the future when courts issue their rulings—*after* people have relied on existing law in making their decisions. In the present we are remitted to guessing—making prophecies—about what the law might turn out to be. This view of the matter corresponds with a standard view of probability theory that says that the number between zero and one that we assign to a future event is a measure of our

¹⁶ Oliver Wendell Holmes, Jr., *The Path of the Law*, 10 HARV. L. REV. 457, 460-61 (1897) [hereinafter Holmes, *The Path of Law*].

present degree of ignorance.¹⁷

When I first encountered Holmes's aphorism I interpreted it in the standard way. The image that came to mind was that of a meteorologist on television predicting a 75 percent chance of rain tomorrow. I later pictured an attorney advising her client that if he copies a movie on a DVD and gives it to his friend, he takes a 75 percent risk that a court will find him guilty of a copyright violation. (The attorney might add that if her client *sells* it to his friend, then the risk would go up to 85 percent.) This standard interpretation of Holmes is virtually the only interpretation that has ever been made. Later I will discuss a second possible interpretation.

Holmes's theory slowly but surely caught on with the practicing bar and the world of academia. Why would lawyers take readily to a theory that presupposed their ignorance of existing law? I suspect the answer is that they found that the theory would smooth their relations with clients. For instance, in the DVD copier case, the lawyer wants to avoid answering the client's question with an unqualified yes or no because doing so creates the possibility that the lawyer may be wrong. If so, the client will likely become angry at the lawyer, may become more likely to dispute the legal fees, may tell others not to hire this lawyer, and so forth. Instead, it is much less risky to tell the client that the law is unclear, and judges and juries are unpredictable, but there is a 75 percent chance that a judge (or jury) will find a copyright violation. That statement, in Karl Popper's terms, would be non-falsifiable.¹⁸ No matter the disposition of the DVD case, the lawyer can always tell her client that her 75 percent estimate was exactly right.

In law schools, Holmes's paradigm had to await the retirement of two decades of traditionalist professors.¹⁹ Then, in the 1920s and 1930s, the enthusiasm of younger scholars for the possibilities opened up by the prediction theory led to the

¹⁷ IAN HACKING, AN INTRODUCTION TO PROBABILITY AND INDUCTIVE LOGIC 229-31 (2001).

¹⁸ Popper acknowledged that numerical probability statements are "impervious to strict falsification." KARL POPPER, THE LOGIC OF SCIENTIFIC DISCOVERY 133 (Routledge 1992) (1959) (alteration in original).

¹⁹ Following the typical pattern in paradigmatic revolutions suggested in THOMAS S. KUHN, THE STRUCTURE OF SCIENTIFIC REVOLUTIONS 151 (Univ. of Chicago Press 1962).

movement called legal realism. Its core idea was that if making prophecies of judicial decisions was the game lawyers played, then it was the professional duty of law schools to teach future lawyers how to improve their odds. Since judges can be motivated by ideas other than legal ideas, the curriculum ought to be expanded to include subjects other than the traditional ones. Why teach restitution, damages, bills and notes, and agency, when they can be replaced by courses in policy-making, social welfare, and statistics? If the goal is to turn out effective lawyers, then the curriculum should offer the complete gamut of subjects that might motivate judges.²⁰

But far more important than the impact of legal realism upon attorneys and law professors was its psychological impact upon judges. Every judge in the United States was once a law student. A future judge, sitting in a classroom in the 1920s or 1930s, might have experienced a rush of empowerment upon realizing that all his classmates were studying the law in the hopes that someday they might influence *him*. Better yet, once he became a judge, he would not have to pay much attention to what the lawyers said about the law (any more than he did in the classroom). For the “law” would be whatever he proclaims it to be.

Because professors knew that some of their students would become judges, their decision to offer peripheral subjects served to legitimize those offerings. Thus a course in social policy, which before legal realism would have been deemed irrelevant to studying law, became relevant because future judges would look back on their legal training and assume that social policy was part of the law. Thus legal realism in the curriculum became a self-fulfilling prophecy—not the kind of prophecy Holmes had in mind.

More generally, the most dangerous side-effect of legal realism has been its own process of normalization. Many of those future judges sitting in law school classrooms learned that legal realism itself is part of their job description. Thus, on ascending the bench, they need not regard themselves as being constrained by the law as found in the law books, for the law as now properly understood encompasses every area of human endeavor—from

²⁰ Although my purpose in this essay does not include criticizing legal realism on its own terms, one objection should be mentioned. Suppose the surest way for a lawyer to increase his odds of winning a case would be to bribe the judge. Does it follow from legal realism that law schools should offer courses in the techniques of bribery and corruption?

literature to linguistics, from Darwinism to deconstruction, from judicial activism to judicial laziness. Judge Posner, himself the product of a Harvard Law School faculty then dominated by legal realists, tells us that what today's judges seek above everything—given that they are not remunerated according to the quantity or quality of their work—is the maximization of their own leisure-serving interests.²¹

III. THE UNUSUAL INTERPRETATION

The standard interpretation of Holmes, as we have seen, tells us that in the present we are ignorant of the law. If we go to a lawyer for help, the best the lawyer can do for us is to guess what the law may turn out to be once it comes before a judge. There is nothing to stop a judge from inventing new rules and retroactively applying them to us so that we lose the case.

But there is a second possible interpretation of Holmes. Consider his exact words: "The prophecies of what the courts will do in fact, and nothing more pretentious, are what I mean by the law."²² Removing the superfluous clause we have: the prophecies of what the courts will do in fact are what I mean by the law. However, the standard interpretation asks us to ignore the opening words of the sentence, as if we had: what the courts will do in fact [is] what I mean by the law. But why should we ignore the prophecy clause? Holmes led with it. Indeed, the word "prophecies" may have been chosen instead of "predictions" to call attention to itself; Holmes actually used the word "predictions" at other places in the same speech. So we know that his choice was deliberate. Was he really trying to tell his audience that they can never know what the law is at the time they need to act upon it?

It is more likely that Holmes was reducing his audience's expectations. He was looking for a meaning of "law" that would speak to the present. We may take him as asserting three propositions:²³

1. the prophecies exist in the present;
2. the prophecies are determinable;
3. the law is nothing but the prophecies.

²¹ RICHARD A. POSNER, *OVERCOMING LAW* 135-39 (1995).

²² Holmes, *The Path of Law*, *supra* note 16, at 460-61.

²³ Why didn't Holmes make his point more clearly? Perhaps Holmes himself was not entirely aware of what he was saying. He seems to have

People act on present prophecies, whether they are their own prophecies (as in deciding to go through a red light when it seems stuck) or the predictions of an attorney. Any prophecy above 50 percent signifies illegality. When the attorney advised the client about copying the DVD, the prophecy of a 75 percent chance of illegality, translated into ordinary English, means that it would be illegal—at the present time and knowing everything we can know about the law of copyright—for the client to copy the DVD and give the copy to his friend.²⁴

Although the foregoing considerations may call for rejecting the standard interpretation of Holmes, an apparently insuperable difficulty intrudes. This difficulty is best illustrated by the case of a meteorologist forecasting tomorrow's weather. It is clear that the forecast is not itself the weather, it is only a prediction of the weather. By the same token we can say that a lawyer's prediction is not itself the law but only a prophecy of what the law will be. The analogy between forecaster and solicitor seems to support the standard interpretation.

But sometimes a striking analogy is the most misleading kind. We may need a quite different one. We need a situation where the focal point of interest is the prediction itself and not the eventuality predicted by the prediction. The only example²⁵ of which I am aware is in the field of quantum mechanics. I believe it is an analogy powerful enough to cast additional light on legal realism.

We may begin with the familiar idea that electrons, photons, and other subatomic entities are neither particles nor waves, but

picked up the prediction theory from various nineteenth-century German philosophers of law whose works he perused. Unfortunately Holmes never indicated the provenance of his theories.

²⁴ For example, at 51 percent any planned act is more illegal than it is legal. Even though the difference between illegality and legality may be numerically slight, it would nevertheless be illogical for a judge to choose the lower of the two probabilities (49 percent rather than 51 percent). In criminal cases, the bar is raised to about 80 percent: the defendant must be convicted "beyond a reasonable doubt" because of the drastic consequences of a guilty verdict. But whether the line is drawn at 50 percent in civil cases or 80 percent in criminal cases, the principle is the same.

²⁵ However, on D-Day General Eisenhower had to launch his ships on the basis of a weather forecast; he could not wait till the next morning to see what the actual weather turned out to be since it took his vast fleet the entire night to cross the English Channel to land, in the morning, at Normandy. His decision, based upon meteorological prophecy, was irreversible.

some unimaginable combination of both. Schrödinger described an electron as following a wave function. Picture an ordinary bell curve: the curve represents the probable path of an electron according to Schrödinger. If a measurement of the electron is actually made—on a photographic plate or in a Wilson cloud chamber—then the electron will show up as a particle. The height (or amplitude) of the wave represents the probability of finding an electron at the point where the height is measured. Thus the electron is more likely to show up at the peak of the bell curve than in either of its tails (which theoretically stretch out across the universe).²⁶

However, quantum theory tells us that when we make a measurement of the electron, the measurement itself interferes with the electron. The reason is that the measuring instrument has to consist of a probe on the same scale as the electron it is measuring—for example, a photon of light or another electron on the photographic plate. As we measure our target electron, the probe interacts with the target, displacing it. This is one way to state Heisenberg's uncertainty principle.²⁷ It tells us that we can never know where an electron is right now. The best we can do is use the Schrödinger equation to predict where the electron might show up if we conduct a measurement.

But Max Born, one of the founders of quantum mechanics, thought it absurd to say that we can only guess where an electron might be at the present moment by relying upon a measurement that has not yet taken place.²⁸ Instead, he urged physicists to assume that where the electron is located right now is the correct starting point for analysis. In fact, we have a picture of where the electron is right now—Schrödinger's wave function. Born renamed it a *probability wave*.²⁹ The true picture of the electron in the present is that it is nothing but a wave of probability. A common figure of speech is that the electron is smeared out all

²⁶ See generally HANS REICHENBACH, *PHILOSOPHICAL FOUNDATIONS OF QUANTUM MECHANICS* (Dover 1998) (1944).

²⁷ It is indeed the customary interpretation as given by Heisenberg himself in a lecture at the University of Chicago in 1929. See WERNER HEISENBERG, *THE PHYSICAL PRINCIPLES OF THE QUANTUM THEORY 3* (Dover Publications 1949) (1930) (But it assumes causality—between probe and target—which some physicists regard as an unwarranted assumption.).

²⁸ See generally MAX BORN, *QUANTUM PHYSICS* (1924).

²⁹ *Id.*

along the probability wave. When the wave is disturbed by a measuring probe, the wave function collapses and we find the electron in the form of a particle. But its particle form only represents where the electron is by virtue of its being jarred as a result of the measurement. Right before a measurement the only form any electron has is a wave of probability.

But how could the probability wave itself *be* the electron? This question, which is analogous to the question of how a prophecy can itself be the law, greatly troubled Einstein. In 1935, the heyday of American legal realism in law schools, Einstein was coincidentally promoting the cause of physical realism. He and two associates wrote an influential paper opposing Born's interpretation.³⁰ According to Einstein, the building blocks of the universe are material things, not probabilities.³¹ (*The legal realists at the same time were saying that law was what courts in fact do, not prophecies.*) Einstein argued that there must be reasons that account for the strange behavior of quantum entities *other than* those presented in the classic texts of quantum theory by Bohr, Heisenberg, Born, Schrödinger, De Broglie, Dirac, and Einstein himself.³² (*Similarly the American legal realists at that time were arguing that there must be reasons that account for judicial behavior other than the law on the books.*) Einstein proposed an experiment that could falsify the proposition that electrons and other subatomic particles were just probabilities. He took advantage of a well-known phenomenon about 'paired electrons'—that if two electrons A and B are paired together in an AB combination, they will act as a unit even after they are divided by an electron splitter and go their separate ways.³³ Thus if A originally had a clockwise spin, it would retain its clockwise

³⁰ See A. Einstein, B. Podolsky & N. Rosen, *Can quantum-mechanical description of physical reality be considered complete?*, 47 *PHYS. REV.* 777 (1935) [hereinafter Einstein, Podolsky & Rosen].

³¹ Einstein famously remarked that "God does not play dice with the universe." Niels Bohr, Einstein's famous rival, responded: "Please, Dr. Einstein, do not tell God what He can do."

³² Einstein was awarded the Nobel Prize not for his work in relativity but for his contribution to quantum mechanics in 1905 when he analyzed the photoelectric effect as containing discrete packets of energy (quanta). See Martin J. Klein, Einstein and the development of quantum physics, in *EINSTEIN: A CENTENARY VOLUME* 133 (A.P. French ed., Harvard Univ. Press 1979).

³³ See Einstein, Podolsky & Rosen, *supra* note 30.

spin after being separated from B; while B, which by virtue of its having been paired with A originally had a counterclockwise spin, would retain its counterclockwise spin after it was separated from A.³⁴ Inasmuch as Heisenberg had demonstrated the impossibility of knowing any of two conjugate variables of an elementary particle—in this case, of knowing both the location and the spin of a single electron—Einstein proposed two measurements to be taken after the electrons were separated by the splitter. The first would be the measurement of A's spin, the second would measure B's position. Measuring A's spin would then reveal B's spin by logical implication, since B's spin will be the opposite of A's. Then we combine our inferential knowledge of B's spin with the measurement we actually made of B's position. The bottom line is that we would presumably know B's spin as well as its location. This knowledge was what Heisenberg said was impossible to attain. It would be blocked by the uncertainty principle.

By 1935, Heisenberg's uncertainty principle had been confirmed by hundreds of experiments and never disconfirmed. Einstein was not one to refute an experimental finding for the sake of a theory, even his own. Accordingly, when A's spin is measured, Einstein accepted the fact that B's spin must undergo a random change. This would be true even if at the moment of simultaneous measurement A is on Earth and B is four light-years away on Alpha Centuri. Heisenberg's uncertainty principle would thus be confirmed, but at the cost of assuming some kind of instantaneous communication between A and B—what has been called “spooky action at a distance.”³⁵ To avoid instantaneous communication (which moreover would require the message's speed to be faster than light—in violation of Einstein's own special theory of relativity), Einstein proposed the existence of *hidden variables* unknown to quantum experimentation that would account for the strange results of the experiments.³⁶ These hidden variables, later worked out mathematically by David

³⁴ *See id.*

³⁵ M.P. HOBSON, QUANTUM ENTANGLEMENT AND COMMUNICATION COMPLEXITY 13 (1998).

³⁶ David Bohm proved mathematically that if the hidden variables exist, they could account for the result of the split-electron experiments. *See* DAVID BOHM & B.J. HILEY, THE UNDIVIDED UNIVERSE: AN ONTOLOGICAL INTERPRETATION OF QUANTUM THEORY 140-52 (Routledge 1993).

Bohm,³⁷ would explain the strange results of the quantum experiments. (*Similarly the legal realists at the time were in effect arguing that there were hidden variables—variables other than the law on the books—that affected judicial decision-making.*)

Although Einstein died without retracting his insistence on physical realism, Alain Aspect subsequently proved that there were no hidden variables and there could not possibly be any.³⁸ We now know for certain that the building blocks of the universe have a probabilistic existence.³⁹ The material objects that we see and touch in our macroworld appear solid only because they consist of vast and dense aggregations of probabilities.

The foregoing analogy with physical realism in quantum theory should assist us in conceiving of law as having a probabilistic existence. Whatever degree of probability law has, it must exist in the present—at t_1 . The judge's later measurement at t_2 should not affect what the law was at t_1 . The idea of presentism may be referenced in support of this worldview. Philosophical presentists hold that the only reality in the universe is the one we experience at the present slice of time.⁴⁰ Everything happens in the present and nothing happens in the past or in the future.⁴¹ Presentists would probably criticize as incoherent the realist's idea that a law must be obeyed when its existence or nonexistence can only be guessed at.⁴²

However, the analogy with quantum mechanics should not be pushed too far. A vital difference is that in the quantum world a

³⁷ See DAVID BOHM, *QUANTUM THEORY* (Dover Publications 1989) (1951).

³⁸ See Alain Aspect, Jean Dalibard, & Gerard Roger, *Experimental test of Bell's inequalities using time-varying analyzers*, 49 *PHYS. REV.* 1804 (1982); see also BERNARD D'ESPAGNAT, *IN SEARCH OF REALITY* 39-43 (Springer 1983).

³⁹ See RICHARD FEYNMAN, *THE CHARACTER OF PHYSICAL LAW* 147 (1965) (Stating, "[i]t is not our ignorance of the internal gears, of the internal complications, that makes nature appear to have probability in it. It seems to be somehow intrinsic.").

⁴⁰ For a stimulating survey, see Thomas M. Crisp, *Presentism*, in *THE OXFORD HANDBOOK OF METAPHYSICS* 211 (Michael J. Loux & Dean W. Zimmerman eds., 2003).

⁴¹ See generally Crisp, *supra* note 40.

⁴² The argument that one might be prudent in obeying a law that has not yet come into existence on the ground that it may come into existence, can be refuted by saying the opposite: that one might be prudent in disobeying a law that has not yet come into existence on the ground that its opposite might come into existence.

measurement of electron A will invariably randomize the behavior of its twin B even if, as recent experiments have shown, A's measurement is made after B's behavior is randomized.⁴³ Although quantum mechanics is probabilistic, the aggregate probabilities can be measured accurately because the physical world is deterministic. By contrast, law proceeds on the assumption of free will. A judge's measurement of the law after the fact need not necessarily change the prior law. It all depends on how the judge at t_2 chooses to measure the law at t_1 .

It is possible—indeed, it was classically expected—that a judge at t_2 would simply interpret (measure) the law as it existed on the books at t_1 and put aside other considerations such as his own preferences. This neutral reading of the law (unlike a quantum probe) would not affect its content. To be sure, the judge's reading at t_2 might be a more informed interpretation of the law than either contesting attorneys were able to reach at t_1 , due to the fact that the judge at t_2 will have had the research benefit of both attorneys' briefs and oral arguments. But although the judge at t_2 can take a sharper picture of the law as it was at t_1 without interfering with it, the critical commonality is that the judge and attorneys are looking at the same texts (the texts extant at t_1) with enough mental discipline, we assume, to avoid

⁴³ Two of the most famous and baffling experiments are: (1) The Delayed Choice Experiment, and (2) The Negative Result Experiment. In *The Delayed Choice Experiment*, an experimenter's decision to measure the orientation of the particle after the particle has passed a splitter somehow leads the particle to behave as if it had a precognition that an experimenter will soon measure its future path. In *The Negative Result Experiment*, a device is set up in which the experimenter can choose not to make a measurement of electron A and in fact does not make such a measurement. Electron B weirdly changes its behavior as if it had known in advance that the experimenter would not make the measurement. See JOHN A. WHEELER & WOJCIECH ZUERK, *QUANTUM THEORY AND MEASUREMENT* (1983); see also PAUL C.W. DAVIES, *THE GHOST IN THE ATOM* 9-10 (Cambridge Univ. Press 1986); JOHN GRIBBIN, *SCHRÖDINGER KITTENS AND THE SEARCH FOR REALITY* 138-44 (Little Brown & Co. 1995). These two results seem to deny to human observers any possibility of improving the predictive odds of measuring any more than one facet of an electron's existence. They seem to confirm Max Born's insistence that it is the prediction itself that is the only reality. Additionally, they confirm a logical inference of Born's theory that nothing subsequent to the prediction can alter the probability that we have assigned to the prediction! It is almost as if nature is telling us that we cannot do in science what judges should not do in law, namely, change the law after the prediction is made.

contaminating their reading by wishful thinking, post-event information, or idiosyncratic preferences.

On the other hand, the judge at t_2 who regards himself as a legal realist may change the law as it was at t_1 by inventing new law. How does he pull off this feat of retroactive legerdemain? The well-worn legal phrase provides the answer: "by operation of law."⁴⁴ The judge's opinion at t_2 "relates back" to t_1 by operation of law, changing the law as it used to be at t_1 .

The winning party of course will not protest this magical kind of retroactivity, but the loser would have every reason to complain. His complaint, however, will be deflected with the judiciary's standard defense mechanism: "there's always one party in every case who is disappointed." The judge's law clerks will have been clever enough to dress up the judge's opinion so that it looks as if it was ordained by prior law. Few judges other than Posner in his books (and not even him in his opinions) will ever admit they change the law retroactively. They cannot quite bring themselves to say that they are making new law—legal realism's victory over the public mind has not yet been quite that complete. A realist judge may rationalize that he is a silent hero who is improving the law for the general welfare of society—even if professional ground rules prohibit him from disclosing that fact in his opinions. It is clear from Posner's many books that the one constraint that he regards as binding is the requirement of acting in the highest tradition of the judiciary. The question is whether he regards respect for existing law as part of that tradition. "Greatness in law implies the transcending of law," he writes.⁴⁵ If everyone in the country except the losing litigant benefits from the judge's change in a legal rule, then a judge with utilitarian convictions like Posner's may believe that he has rendered unto society a noble service.

IV. SUMMARY: LAW AS PROBABILITY

So far what I have tried to show can be restated in the following progression:

⁴⁴ Compare the physician's explanation in Machiavelli's *Mandragola* that the "dormative power" in his sleeping potion is the reason it cures insomnia. NICCOLÒ MACHIAVELLI, *MANDRAGOLA* (Anne and Henry Paolucci trans., Macmillan 1987) (1957).

⁴⁵ POSNER, *THE PROBLEMS OF JURISPRUDENCE*, *supra* note 2, at 452.

1. The state's interest in controlling, influencing, or channeling the behavior of its citizens is operationalized by promulgating rules that are designed to influence the citizens at the moment of their decision to act or refrain from acting.

2. In promulgating its rules, the state makes an implicit yet fundamental contract with its citizens: it promises not to punish citizens who obey its rules, but also promises to punish citizens who disobey its rules.

3. In order for the state's promises to be credible, the state must guarantee their observance by every official in the state—including judges and police officers.

4. In order for the state's rules to be effective, they must be known to, or ascertainable by, every citizen at his or her decisional moment.

5. No state official is standing by, at the decisional moment, to explain exactly what the state wants a citizen to do.

6. Thus at the decisional moment the citizen's only option is to predict what the state will do.

7. The citizen is entitled to base her prediction on existing law, for the state has promised (see paragraph 2 above) that it will enforce rules that are in existence at the citizen's decisional moment (see paragraph 1 above).

8. A judge who reviews the citizen's decision *ex post* is bound by the state's promise (see paragraph 2 above) to apply the law as it existed at the decisional moment.

Accordingly, a judge would be breaking the state's promise if he changes the law after the citizen makes her decision. To be sure, the judge would presumably only change the law if he thought that the existing law was unwise or not in the best interests of society. But the citizen who complied with that law may have done so despite her own belief that the law was unwise or not in the best interests of society. It would be lawless for a judge now to punish her. Although the judge may desire to "transcend the law," as Posner suggests, the citizen at the time she relied on the law would have been courting punishment if she had risked transcending it.

V. CONCLUSION

To quote Holmes one last time: "The prophecies of what the courts will do in fact, and nothing more pretentious, are what I

mean by the law."⁴⁶ The law is the prophecies. What the courts "will do in fact" is what they are supposed to do as lawful agents of the state, namely, to fulfill those prophecies.

The judge who finds it more interesting to invent new law rather than restate the old is stealthily undermining public confidence in the rule of law and narrowing the ambit of personal freedom. He is acting as a legislator, not a judge—a legislator of the worst sort, who enacts new law and holds it against innocent people who were dutifully complying with the old law. If the judge in addition believes that he embodies the law, he is saying that if the public wants to understand the law they should study him. For in the end he has no theory of law. He cannot explain what the law is; he can only say that law is what he does—but he does not say that it is a shortcoming on his part that he cannot explain what the law is. Instead it is a failing on the law's part! Law, to the realist judge, is intrinsically inexplicable. Thus legal realism explains nothing.

Legal realism is self-defeating in advocacy. To take a fanciful example that proves the point, suppose an attorney in arguing to a court states that a team of his investigators has been observing the presiding judge every morning. The judge walks out of his downtown apartment and stops for a quick breakfast either at McDonald's or at Dunkin' Donuts. On McDonald's days his decisions favor the plaintiff 84 percent of the time. On Dunkin' days, his decisions favor the defendant 90 percent of the time. The attorney then argues that since he is representing the plaintiff, and since the judge this morning breakfasted at McDonald's, sound principles of statistical sociology require the judge to decide the case in favor of his client. We can well imagine a judge's reaction to this argument: first, thirty days in jail for contempt of court in spying on a judge's private life, and second, decision for the defendant because the plaintiff's lawyer doesn't know the difference between a legal argument and a cup of coffee.

If law professors started the movement of legal realism, they should be the first to disavow it along with its debilitating effect upon the judiciary's perception of the law. This essay has shown that legal realism was founded on a mistake, one that can be corrected by reinterpreting Holmes's prediction theory. All the

⁴⁶ Holmes, *The Path of Law*, *supra* note 16, at 460-61.

implications of that mistake can, and should, be reversed. There is deep psychological wisdom in the classic view that law has an independent existence outside the courtroom. Courts need to respect the law by trying, with each decision, to give further specificity and concreteness to the noble conception.