INTELLECTUAL PROPERTY'S FAITH-BASED EMPIRICISM

Patrick R. Goold

I.
INTRODUCTION

CONTEMPORARY IP LAW INCREASINGLY looks like a pub brawl. At the heart of the fracas is the question: when, if ever, should the state grant people legal rights to own creative works, inventions, and other intangible goods? The belligerents involved can be loosely termed the "utilitarians" and the "natural rights" theorists. The former argue that IP rights should be granted if – and only if – such rights will improve society's utility (typically conceptualized as welfare); the latter claim that such rights ought to be awarded when it is necessary to protect creators' natural rights.[1] Tensions between the antagonists flare up over discreet policy issues such as the appropriate duration of IP rights and the scope of exceptions and limitations.

Patrick Goold is a Senior Lecturer in The City Law School, City, University of London.

[1] WILLIAM M LANDES AND RICHARD A POSNER, THE ECONOMIC STRUCTURE OF INTELLECTUAL PROPERTY LAW (Harvard University Press 2003). *Cf* Justin Hughes, *The Philosophy of Intellectual Property*, 77 GEORGETOWN LJ 287 (1988).

Despite enjoying the upper hand in the Anglo-American world for many years, the utilitarians have recently lost supporters to the natural rights cause. Luminaries from Thomas Jefferson to Stephen Breyer have at various times concluded that the only plausible justification for patents and copyrights is utilitarian.[2] However, the claim that IP rights improve utility is empirically questionable. Researchers have gathered data, performed interviews, and conducted experiments to test whether IP rights make people better off.[3] The results are underwhelming at best. As Robert Merges explains, the data is "maddeningly inconclusive" and "[t]ry as I might, I simply cannot justify our current IP system on the basis of verifiable data showing that people are better off with IP law than they would be without it."[4] And so some, like Merges, have switched sides; to oversimplify.[5] As Merges explains: "through all the doubts over empirical proof, my faith in the necessity and importance of IP law has only grown."[6] As the utilitarian case for IP rights has weakened, some have come to see IP rights as resting on a deeper, less contingent, set of values.

The utilitarians have not pulled any punches in response. In a polemical and thought-provoking essay, Mark Lemley – arguably the world's pre-eminent IP scholar – accuses the defectors of abandoning reason.[7] According to Lemley, the rational response to the underwhelming empirical evidence

---

[2] Thomas Jefferson, "Letter to Isaac McPherson" 13 August 1813, in AA Lipscomb (ed.), WRITINGS OF THOMAS JEFFERSON, vol 13 (Thomas Jefferson Memorial Association of the United States 1903) 333-5. Stephen Breyer, *The Uneasy Case for Copyright: A Study of Copyright in Books, Photocopies, and Computer Programs*, 84 HARV L REV 281 (1970).

[3] See e.g., JAMES BESSEN AND MICHAEL MEURER, PATENT FAILURE: HOW JUDGES, LAWYERS, AND BUREAUCRATS PUT INNOVATION AT RISK (Princeton University Press 2008). GLYNN LUNNEY JR, COPYRIGHT'S EXCESS: MONEY AND MUSIC IN THE US RECORDING INDUSTRY (Cambridge University Press 2018). Petra Moser, *Patents and Innovation: Evidence from Economic History*, 23 JOURNAL OF ECONOMIC PERSPECTIVES 23 (2013). Josh Lerner, *The Empirical Impact of Intellectual Property Rights on Innovation: Puzzles and Clues*, 99 AMERICAN ECONOMIC REV 343 (2009).

[4] ROBERT P MERGES, JUSTIFYING INTELLECTUAL PROPERTY (Harvard University Press 2011) 3.

[5] On a less simplified account, MERGES *supra* note 4, calls for pluralism in the justifications for IP, as reiterated in Robert P Merges, *Against Utilitarian Fundamentalism* 90 ST JOHN'S L REV 681 (2017).

[6] MERGES, *supra* note 4.

[7] Mark A Lemley, *Faith-Based Intellectual Property* 62 UCLA L REV 1328 (2015).

is simple: to promote utility the state ought to grant fewer and more limited IP rights in the future. But rather than draw this conclusion, Merges and others who profess "faith" in IP, have instead retreated to a position that is "resistant to evidentiary challenge."[8] In continuing to justify the status quo, the new crop of non-utilitarian theorists have become "adherents to a new religion."[9] This strange new religion believes in IP law as "an end in itself"[10] and, much like other forms of religious faith, the belief system is non-falsifiable and therefore "not a science because it does not admit the prospect of being wrong."[11] Ultimately, Lemley criticizes faith-based IP as a "step backwards in a rational society."[12]

This essay responds to Lemley's "faith-based" criticism of natural rights arguments. The essay asks: are empirical arguments about the relationship between IP and utility (hereinafter "empirical-utilitarian" arguments) rational? If natural rights arguments supporting IP rights involve some measure of faith, is the type of argument that empirically minded utilitarians offer any better? This is not a normative question about whether promoting utility or protecting natural rights is better as a matter of ethics or political philosophy. Instead, the question is whether the epistemological assumptions made by many contemporary IP empiricists are any more justifiable than those made by natural rights theorists. And while this is a purely philosophical question, in a world of rapidly proliferating and expanding IP rights, it is a philosophical question with real-world significance.

As I explain below, empirical arguments in IP, and particularly empirical-utilitarian arguments, are not rational. At the heart of the argument is one of philosophy's greatest puzzles: David Hume's "problem of induction"[13] – a problem so fundamental that Bertrand Russell said, in absence of a solu-

---

[8] *Id* at 1338.

[9] *Id* at 1337.

[10] *Id* at 1338.

[11] *Id*.

[12] *Id* at 1328.

[13] David Hume, *An Enquiry concerning Human Understanding* [1748] in JOHN COTTINGHAM, WESTERN PHILOSOPHY: AN ANTHOLOGY (2nd edition, Blackwell 2008) 433-437 [hereinafter COTTINGHAM].

tion, there is "no intellectual difference between sanity and insanity."[14] Put simply, no matter how many empirical studies find no positive association between IP and social utility, making predictions about the future based on those prior observations involves a leap of faith.

To make this argument, part II describes and evaluates the deductive and rationalist arguments presented by IP natural rights theories. Part III demonstrates how empirical arguments are based on inductive reasoning and why this is not rational – at least, as philosophers would understand it. Part IV shows how modern attempts to rationalize empirical observation – including Popper's method of conjecture and refutation and Bayesian personal probability – do not solve IP's induction problem; they merely evade it. Lastly, part V returns to the idea of faith. The ultimate point of this essay is not to suggest society ought to abandon the empirical project in IP. It does not even argue that empirical-utilitarian arguments are wrong. While it may not be philosophically rational, society ought to base IP policy on the outcomes of empirical observation. Like the author of this essay, when it comes to IP and utility, one might choose to be a "faith-based empiricist."

II.
DEDUCTION, RATIONALISM, AND NATURAL RIGHTS

Natural rights arguments are primarily based upon deductive reasoning. Although natural rights' arguments for IP rights are diverse in content,[15] the following is illustrative of the class of arguments:

---

[14] BERTRAND RUSSELL, A HISTORY OF WESTERN PHILOSOPHY (London: George Allen and Unwin Ltd 1946) 699.

[15] See generally MERGES, *supra* note 4 at 31-67. Wendy Gordon, *A Property Right in Self-Expression: Equality and Individualism in the Natural Law of Intellectual Property*, 102 YALE LJ 1533 (1993). Mala Chatterjee, *Lockean Copyright versus Lockean Property* 12 Journal of Legal Analysis 136 (2020). Kenneth Einar Himma, *Toward a Lockean Moral Justification of Legal Protection of Intellectual Property*, 49 SAN DIEGO L REV 1105 (2012).

> Major Premise: Socrates is the natural owner of the intangible goods he creates;[16]
>
> Minor Premise: Socrates has created intangible good X;
>
> Conclusion: Socrates is the natural owner of intangible good X.

Deductive arguments enjoy a special place in epistemology because they are theoretically capable of producing knowledge (knowledge produced *a priori*). The beauty of deduction is that if the argument is "sound" – that is, the premises are "true" and the inference drawn is "valid" (or logical) – then the conclusion must also be true; it is simply impossible for the conclusion to be untrue in these circumstances.[17] That, of course, is not to say that all deductive arguments are in fact sound. Deductive arguments are unsound when the premises are false or if the inference drawn is invalid. But theoretically, at least, sound deductive arguments can give us a *reason* to believe in the conclusion. If the above natural rights argument is sound, then our conclusion that Socrates naturally owns X is no longer a mere opinion or belief; it is something we can justifiably claim to know. As a result, deduction forms the heart of the so-called "Rationalist" tradition in western philosophy, i.e., the idea that reason is the source of knowledge.

The heart of Lemley's faith-based critique of natural rights arguments is that the major premise above is unverifiable. There is merit to this claim. Deductive arguments suffer a limitation in that they cannot tell one whether the premises are in fact true. Some philosophers, notably Descartes, tried to get around this problem by relying only on premises which seem to be beyond a doubt (i.e., "I think").[18] Alas, there are not so many of those premises in our universe, and the major premise here is not one of them. The idea that Socrates is the exclusive owner of intangibles he

---

[16] Ownership is defined herein as exclusive control over the intangible, see generally Henry E Smith, *Property as a Law of Things*, 125 Harv L Rev 1691 (2012). The essay does not express any doubts about non-ownership claims that creators might make, including for example, the right to be named as the creator or the right to financial compensation through compulsory licensing.

[17] IAN HACKING, AN INTRODUCTION TO PROBABILITY AND INDUCTIVE LOGIC (Cambridge University Press 2001) 1-10.

[18] René Descartes, *Discourse on the Method* [1637] in COTTINGHAM, *supra* note 13 at 21-25.

creates is counter-intuitive, as both Jefferson and Lemley explain.[19] The very nature of intangibles is that they are *public* goods (i.e., non-excludable and non-rival). It seems incoherent for nature to give Socrates private ownership over something which is public by nature.

Because the major premise is not self-evident, natural rights theorists must support it with a supplementary argument. In the Anglo-American world, the supplementary argument is typically Lockean and as follows: Socrates naturally owns his labor; Socrates joins his labor to unowned ideas to create intangibles; therefore, Socrates owns the intangibles he creates.[20] But that supporting argument is invalid. Assuming the premises are both true, the inference involves a logical jump. Why does Socrates's act of joining something he owns to something he does not own give him ownership of the combined outcome? It is also possible that the non-ownership of ideas extends over the ownership of labor to result in an unowned intangible. If Socrates owns a can of tomato juice and throws it into the ocean, one possible conclusion is that his ownership of the juice extends over the ocean, and that he gains something he did not previously own; but it is equally possible that non-ownership of the ocean results in a combined outcome that is unowned, and that Socrates has simply lost what he did previously own.[21] In both the intangible and the tangible case, there is a formal fallacy: the conclusion is not necessarily true even if the premises are.[22]

And so Lemley's criticism that natural rights arguments involve "faith" has traction. Of course, the conclusion that Socrates naturally owns X might be true nonetheless; we simply do not have good reason, yet, to believe it. To believe the conclusion absent such a reason involves some-

---

[19] Jefferson, *supra* note 2. Lemley, *supra* note 7 at 1339.

[20] See e.g., MERGES, *supra* note 4 at 31-67. Gordon *supra* note 15, Chatterjee *supra* note 15.

[21] ROBERT NOZICK, ANARCHY, STATE, UTOPIA (BASIC Books 1974) 136. Jeremy Waldron, *Two Worries about Mixing One's Labour,* 33 THE PHILOSOPHICAL QUARTERLY 37 (1983). See Himma, *supra* note 15 at 1131, 1137.

[22] *Cf* MERGES, *supra* note 4 at 15. In response to the fallacy, some scholars have moved away from the traditional "mixing" version of Locke's argument. See e.g., Himma, *supra* note 15 at 1135. Similar validity problems exist in claiming that Socrates owns an intangible because it flows from his personality, see GEORG FRIEDRICH WILHELM HEGEL, ELEMENTS OF THE PHILOSOPHY OF RIGHTS (1820) Sec 41-43 and 61-71. Because such arguments are not clearly natural rights claims, these arguments are skipped here.

thing that we might fairly call "faith" – if we consider trust, faith, belief, and opinion to be synonyms. The question is, are empirical-utilitarian arguments in IP law any better as a matter of reason?

III.
INDUCTION, EMPIRICISM, AND UTILITARIANISM

Deductive arguments can be contrasted with inductive arguments. Inductive arguments draw inferences from what we have observed, to make conclusions about things we have not observed (knowledge produced *a posteriori*).[23] Such inferences come in many forms. Commonly, inductive inferences are "past-to-future" inferences where events in the past are used to draw a conclusion about events in the future. For example, an inductive argument is to say that because sun has always risen in the past (an observed phenomenon), the sun will rise tomorrow (an unobserved phenomenon). Alternatively, inductive arguments might involve "specific-to-general" inferences, where specific observations are used to draw general conclusions about a class of things. For example, having witnessed only black ravens, one might conclude that all ravens are black. And we can also make present-to-past inferences, as a detective might when using clues to solve a murder case.

Empirical arguments, and particularly empirical-utilitarian arguments, in IP are based on inductive reasoning. This is best illustrated by considering Lemley's skepticism for IP rights. Lemley's skepticism involves two types of inductive inference. First, Lemley makes a "specific-to-general" inference. Lemley argues that based on empirical observations, we have reason to doubt the general theory that IP improves utility. As Lemley explains, the "upshot" of our empirical analysis is "something rather less than a complete vindication of the theory of IP."[24] Second, Lemley makes a "past-to-future" inference. Empirical IP studies have found a complex and generally unfavorable relationship between IP rights and utility in the past, and this is likely to continue to be the case in the future. On this basis, we should

[23] HACKING, *supra* note 17 at 11-22.

[24] Lemley, *supra* note 7 at 1334.

not extend IP rights any further. Or as Lemley says, if "the evidence has a hard time justifying the existing regulatory structure we have built around IP, it has an even harder time justifying wave after wave of new laws that departs further from the free market in the name of protecting IP owners . . . ."[25] But equally, a less skeptical empirical-utilitarian would make a past-to-future inference when claiming, based on evidence from prior studies, that IP rights will promote utility in the future.

The problem facing empirical arguments is that even if the premises are true, the inferences drawn are invalid. Assume for the time being that observations can give us knowledge about what we have observed. Take for granted that our prior observations that the sun has always risen before and that IP rights have not clearly improved utility in the past are true.[26] The question is: why does that allow us to draw a conclusion about something we have not observed, i.e., what the sun or IP rights will do tomorrow? We make a logical jump from major premise (the sun has always risen before; IP rights have/have not improved utility in the past) to conclusion (the sun will rise tomorrow; IP rights will/will not improve utility in the future). There is a missing minor premise that would permit this inference; or as Hume wrote, there "is required a medium which may enable the mind to draw such an inference, if indeed it be drawn by reasoning and argument."[27] Unlike the conclusions drawn in a sound deductive argument, there would be no contradiction between premise and conclusion if IP rights were to start improving utility tomorrow. However many studies we produce failing to find a positive association between IP and utility, there is always the possibility that the latest expansion or extension of IP rights will turn out to be the legal equivalent of a white raven.

Worse still, there is no candidate for that missing premise which does not involve "begging the question" or circular reasoning. Our inclination is to fill the gap with the idea that nature behaves consistently and uniformly, and the world does not simply change at random. If the sun has always risen before, and the sun's orbit is consistent, then we might conclude that the sun will rise tomorrow. Or if IP rights have not improved utility before, and if human nature is consistent such that our preferences do not

[25] *Id* at 1335.

[26] *Cf* Descartes, *supra* note 18.

[27] Hume, *supra* note 13 at 435.

change overnight, IP rights might not improve utility in the future. Alas, how do we know that nature is consistent and preferences are stable? The intuitive answer is that we have observed and experienced such consistent behavior in the past. Every time I have previously doubted whether the sun would rise the next day, my doubt has been proved wrong when the sun eventually did appear. But although I have experienced the uniformity of nature in the past, what reason do we have to believe nature will continue to behave uniformly in the future? Unfortunately, we are simply trying to use induction to justify induction! Or, as Hume put it, we are now "evidently going in a circle, and taking that for granted which is the very point in question."[28]

Of course, that does not mean the conclusions we draw through inductive inference are in fact false; we simply do not have good reason to believe the conclusions yet. And so, empirical arguments face their own charge of irrationality. If we are to conclude based on empirical analysis that society would be better off in the future with fewer or narrower IP rights, that conclusion must be based on something other than reason. Or, should it be based on reason, then as David Hume wrote long ago, "I desire you to produce that reasoning."[29]

IV.
EVADING IP'S INDUCTION PROBLEM

But perhaps we have been too hasty so far. Perhaps empiricists have indeed produced the reasoning on which their inductive claims are based. In *Faith-Based IP*, Lemley criticizes borne again natural rights theorists for adopting a non-falsifiable position.[30] This is accompanied by a claim that natural rights arguments are not "science" and a citation to Karl Popper.[31] But, as Karl Popper himself explained, his method of conjecture and refutation did not solve the problem of induction; it merely evaded it.[32]

---

[28] *Id*.

[29] *Id*.

[30] Lemley, *supra* note 7 at 1338.

[31] *Id* at 1346.

[32] KARL POPPER, CONJECTURES AND REFUTATIONS: THE GROWTH OF SCIENTIFIC KNOWLEDGE (Routledge, 1963) 42.

Like Hume, Popper agreed that induction could not be rationally justified. In his 1953 lecture, *Science: Conjecture and Refutation*, Popper had the following to say: "Hume, I felt, was perfectly right in pointing out that induction cannot be logically justified . . . . I found Hume's refutation of inductive inference clear and conclusive."[33] Where Popper departed from Hume was in his response to that apparent irrationality. Hume accepted that humans are sometimes simply irrational. Popper, however, found that unsatisfying. And so, Popper set out to reconceive of science as a deductive, not inductive, enterprise.

On some accounts, the essential feature of science is its empirical method. But Popper disagreed with this traditional account. In Popper's view, many "pseudo-sciences" (including the theories of Marx and Freud) were also empirical.[34] Rather, what marked out Einstein's work as real science, for example, was that it was risky. Unlike the claims of Marx and Freud, Einstein's theories could potentially be proved wrong. They were, in other words, "falsifiable" and could be falsified through the process of "conjecture and refutation."

Popper's method of conjecture and refutation is deductive. A scientist, according to Popper, starts with a "conjecture" – for example, that the sun will rise tomorrow, or IP rights promote utility. This conjecture serves as a major premise (or "universal hypothesis") from which we can deduce a conclusion. Thus, we may have a deductive argument that goes as follows: IP rights improve utility (major premise), society has IP rights currently (minor premise), therefore our existing IP rights improve utility (conclusion). We can then test this conclusion through observation. At this point, recall the beauty of deductive arguments: if the premises are all true and the inference valid, then the conclusion will necessarily also be true. By the same reasoning, if the conclusion is false yet the inference valid, that must mean that at least one of the premises is also false. And so, if we look around the world and observe that our existing IP rights are not promoting utility, then we know our conclusion is false, and so too must be at least one of the premises. As no one seriously doubts the minor premise, we must necessarily conclude that the major premise, i.e., that IP improves

[33] *Id* at 455-456.

[34] *Id*.

utility, is also false. And so, we have used a purely deductive argument to produce knowledge.

Of course, the deductive method of conjecture and refutation cannot ever prove a premise is true. The nature of deductive argument is that while a false conclusion must necessarily mean one or more of the premises are also false, a true conclusion does not mean that the premises are all necessarily true. To illustrate, all Chinese people are philosophers (false), Socrates is Chinese (false), Socrates is a philosopher (true). And so, if IP empiricists look around the world and find their observations are consistent with their conjecture (i.e., that IP improves utility), then the most they can say is that this conjecture is not falsified yet. It is, in other words, the best theory that we have currently.

Unfortunately for empirical utilitarians, reconceiving IP empiricism as a deductive argument does not remove the need for faith. The most common epistemological challenge to Popper's method is known as the "theory ladenness of observation."[35] To believe in observation, we always need to take on faith a range of other conjectures. For example, in physics, we may start with the hypothesis that the earth orbits the sun. We can then test that conjecture through observations using a telescope. But to believe the observations we make through the telescope, we must first trust the optical theories that explain how it works e.g., refraction of light. And how do we know that light refracts and changes direction when traveling through a prism? Well, we can subject that theory to observation too! Some high-school physics students might still do this by drawing arrows on a sheet of paper and placing it behind a glass of water and observing what happens to light passing through the glass. But why do we trust what we see? To believe our sight, one needs to trust a range of theories about how light rays behave. And so on. To break the cycle, and provide a basis for such assumptions, we must rely on some non-deductive reasoning. Realizing this, but having already dismissed induction as irrational, Popper

[35] *See* Nora Mills Boyd and James Bogen, "Theory and Observation in Science" STANFORD ENCYCLOPEDIA OF PHILOSOPHY (Winter 2021 Edition), Edward N Zalta (ed.) https://plato.stanford.edu/cgi-bin/encyclopedia/archinfo.cgi?entry=science-theory-observation.

claimed that we simply "decide to accept" certain truths, which he also called "dogmas" – a word he reserved for the very opposite of science.[36]

Empirical observations in IP also cannot be made absent assumptions. We could start with a conjecture that IP improves utility and subject that hypothesis to testing through observation. But why should we believe our observations? Our observations are based on a range of other conjectures and theories, including: the rules of probability and statistical inference (such as the normal distribution of probabilities as a bell curve, or that a p-value of less than 0.05 is significant); the appropriateness of sampling procedure (such as samples can be random and larger size increases reliability); theories about human behavior (such as individuals are rational welfare maximizers or that interviewees are reliable); and so on.[37] Indeed, understanding and appreciating the limits of assumptions is a hallmark of good empirical analysis in IP.[38] But at a certain point, these assumptions must be based on induction, if they are to be based on anything at all.

Although not referenced in Lemley's critique, a second possible evasion of the problem concerns probability. One might claim that while we cannot use empirical studies in IP to demonstrate that protection will have dubious utility effects in the future, we can nevertheless claim that this remains *probably* true. Hume, however, was equally concerned with the rational basis of such probabilistic claims. To Hume, "all probable arguments are built on the supposition, that there is conformity betwixt the future and the past."[39] And yet this supposition "will admit of no proof" because, going back to the heart of the problem, "our experience in the past can be a proof of nothing for the future."[40] Claiming to know something

---

[36] KARL POPPER, THE LOGIC OF SCIENTIFIC DISCOVERY [1935] (Routledge 2002) 86.

[37] On such standard assumptions, and many more, see LEE EPSTEIN AND ANDREW MARTIN, AN INTRODUCTION TO EMPIRICAL LEGAL RESEARCH (OUP 2014).

[38] See e.g., Emily Hudson and Andrew Kenyon, *Intellectual Property Law and Empirical Research* (2020) in Graeme Austin et al, ACROSS INTELLECTUAL PROPERTY: ESSAYS IN HONOUR OF SAM RICKETSON (Cambridge University Press 2020) 240.

[39] David Hume, *An Abstract of a Treatise on Human Nature* [1740] in John Maynard Keynes and Plero Sraffa (eds.) AN ABSTRACT OF A TREATISE ON HUMAN NATURE (Cambridge University Press 1938) 15.

[40] *Id*.

will probably be true in the future suffers from exactly the same jump in logic as claiming that something will be true in the future.

Despite Hume's skepticism, probability theory has advanced in the past three hundred years. Using modern Bayesian probability theory, empirical utilitarians may nevertheless claim that we should update our beliefs when we gain new experiences.[41] At any given time, we hold various opinions. We may believe some of our opinions more strongly than others. We can mathematically express the degree of our belief in an opinion on a scale of 0 to 1.[42] So-called "belief-type probability" theorists claim that our various beliefs ought to be consistent with one another; to do otherwise would be to hold an incoherent belief structure. Furthermore, belief-type probability theorists claim that if our beliefs satisfy the rules of probability, they will necessarily be consistent with one another. Using Bayes' Rule, we can update our beliefs in the light of new evidence, and our beliefs will remain internally consistent and coherent.[43] And empiricists in IP can use the same logic to learn from experience. We all start with beliefs about whether IP rights will improve utility (so called "priors") and the degree of our belief can be expressed between 0 and 1. When new evidence comes to light in the form of empirical studies, we update the degree of belief in accordance with the rules of probability.

Alas, Bayesian probability theory does not make empirical-utilitarian arguments rational. The faith-based critique is not merely that our beliefs will be consistent when updated in light of new evidence, but that our experiences give us good *reason* for our beliefs. Yet, as explained by Ian Hacking, the "Bayesian does not claim to be able to justify any given set of degrees of belief as being uniquely rational."[44] Bayesians do not claim we have good reason to believe what we do; only that if we care about our beliefs being internally consistent with one another then they ought to be updated in light of new experiences. Much like Popper, Bayesians concede the problem of induction and seek merely to evade it. We can of course update our opinions about whether IP is good for society based on new

[41] HACKING, *supra* note 17 at 256-260.

[42] *Id.* at 151-162.

[43] *Id* at 171-188.

[44] *Id* at 256.

experiences to reach a coherent set of beliefs, but that does not supply a reason to believe the future will be like the past.

The insights of Popper and Bayesian theorists are clearly profound. But in the epistemological battle between empiricism and rationalism, they do not turn empiricism into rationalism any more than base metals can be transformed into gold.

V.
FAITH AND LIVING WITH SKEPTICISM

But before giving up on empiricism altogether, perhaps there remains a final resolution to IP's induction problem. Empiricism is not rationalism; but it need not be. Rather than try to make empirical claims in IP fit the mode of rationalism, we could simply accept the irrationality of empiricism.

Despite his skepticism, Hume was an empiricist. In Hume's words, "none but a fool or madman will ever pretend to dispute the authority of experience."[45] After all, Hume lived and wrote precisely at a point in history where science was enjoying remarkable success in explaining the natural world. The very core of the problem of induction is that inductive arguments in the sciences are highly reliable, even though they are not rational. So how could Hume deny the rationality of induction while still calling our experiences the "greatest guide of human life?"[46] Hume's answer was that we rely on induction merely out of custom or habit.[47] All humans have an ingrained psychological disposition to believe that the future will be like the past in some respects. Much like a pet dog who, fed every day at 5pm, comes to expect food at 5pm, people form expectations based on something we would hesitate to call "reason."

And in IP we might decide to live with skeptical doubt. Without knowing them to be true, we might irrationally, but very humanly, trust that our empirical observations will turn out to be true. We might believe,

---

[45] Hume, *supra* note 13 at 435-6.

[46] *Id*.

[47] *Id*.

without being sure, that if IP rights did not measurably improve utility yesterday, they will not do so tomorrow. But that resolution to the problem surely tempers the challenge that natural rights theory is uniquely irrational. Beware for whom the bell tolls, empiricists, it tolls for thee.