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The Patent Law Origins of Science Fiction

Camilla A. Hrdy* & Daniel H. Brean**

ABSTRACT

This Article reveals the surprising role of patent law in shaping the literary genre of science fiction. Drawing on previously unpublished sources, the Article shows that Hugo Gernsback—the so-called “father” of science fiction who started the first all-science-fiction magazine in 1926—believed that works of science fiction are analogous to patents. Like patents, science fiction stories can disclose useful information to the public about new inventions. Like patents, science fiction stories can influence future inventors and drive innovation. Gernsback went even further, positing that some of the inventions depicted in science fiction should themselves be patentable. In 1952, he urged Congress to reform the Patent Act to make so-called “Provisional Patents” available to science fiction authors who depicted major technological developments before their time. He argued that science fiction authors who filed for Provisional Patents should get an extra thirty years in which to show their invention worked. If they could do so, they would thereafter be able to obtain an ordinary patent, to last another twenty years.

Many will find Gernsback’s proposal deeply problematic from the perspective of patent policy, and rightly so. Granting patent rights too early in an invention’s lifecycle creates new and unjustified opportunities to hold up innovation. A science fiction author who obtained a Provisional Patent for a theoretical invention could crawl out of the woodwork half a century later.
later and sue the very people who figured out how to make the invention work. Gernsback’s ideas for patent reform were half-baked and, the Article shows, probably self-serving. Nonetheless, exploring the connection he cultivated between patents and science fiction yields many surprising insights for science fiction and for innovation policy. Science fiction has more in common with patents than it might seem. Although science fiction does not typically impart enough information to “enable” others to make and use the inventions it describes, science fiction can inspire readers and supply them with a motivation—in Gernsback’s words, a “stimulus”—to implement science fictional inventions in the real world. Science fiction, like patents, can play a role in promoting innovation.
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“I love you sons of bitches. You’re all I read any more. You’re the only ones who’ll talk about the really terrific changes going on . . . . You’re the only ones with guts enough to really care about the future . . . .”

Eliot Rosewater, addressing a convention of science fiction writers

INTRODUCTION

In the 1950s, a young professor of biochemistry at Boston University School of Medicine came up with a computer system called “MULTIVAC.” MULTIVAC was an early version of a supercomputer and an unimaginably powerful form of artificial intelligence. MULTIVAC had some downsides compared to today’s PCs and smartphones. For one thing, MULTIVAC was several miles long. But its data collection and analytical capabilities were so advanced that it could answer nearly any question posed to it and instantaneously derive solutions to quandaries that had long bedeviled humankind, from energy production to space travel.

MULTIVAC might sound familiar. But MULTIVAC was not a real computer or even a real “invention” by ordinary standards. MULTIVAC was a product of the literary genre of science fiction. MULTIVAC’s “inventor” was the science fiction author, Isaac Asimov, who published a series of short stories featuring MULTIVAC. The best-known of these stories is *The Last Question* (1956), in which MULTIVAC, after many millions of years, answers “the last question” confronting humankind by solving the eternal problem of entropy and re-starting the universe with a new burst of energy akin to the Big Bang.

Asimov has sadly passed away, but we imagine he would be amazed, and perhaps disturbed, to see how far artificial intelligence has come and how closely some of its applications resemble his supercomputer. Indeed, as we write, a new artificial intelligence called ChatGPT is beginning to achieve many of the same feats as MULTIVAC. ChatGPT can answer specific and open-ended questions coherently. It can write code. It can write a course syllabus. It can write essays, plots for novels, and op-eds. It can develop strategies for preventing the next global pandemic or for halting global warming. ChatGPT can even compare itself to MULTIVAC and explain to you that, “[w]hile I may be able to provide information and assistance to users in a similar

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2. That is because in 1941, around ten years earlier, two inventors at University of Pennsylvania, Presper Eckert and John Mauchly, made and patented an early version of a computer called “ENIAC,” which stands for Electronic Numerical Integrator and Computer. In 1951, Eckert and Mauchly made a similar computer for the federal government called UNIVAC. Asimov “somehow got it into [his] head” that the prefix “uni” implied “one vacuum tube” and that a computer of the future should have many more tubes. Thus, MULTIVAC was born. Isaac Asimov, *In Memory Yet Green: The Autobiography of Isaac Asimov* 663 (Doubleday 1979). See also Walter Isaacson, *The Innovators: How a Group of Hackers, Geniuses, and Geeks Created the Digital Revolution* 35–85, 108–21 (Simon & Schuster 2014).


manner to MULTIVAC[,] I do not possess the same level of intelligence or capabilities as [that computer] system.” We feel confident in adding “yet.”

There is plenty more where MULTIVAC came from. Countless inventions have been described in the annals of science fiction. To name just a few: using a cannon, and later rockets, to send someone to the moon; using radio waves to detect aircraft and flying objects, now called “radar”; machines that are capable of experiencing human-like emotions; machines that are outwardly indistinguishable from humans; human laborers whose physical capabilities are augmented by machines; instantaneous inter-planetary communication; treating cancer by altering DNA; and a virtual reality world called the Metaverse in which humans can appear as avatars and interact in a virtual space. Several of these inventions have been put into practice, more or less. Some we are still waiting on.

It may seem incorrect to call the fabrications of science fiction authors “inventions.” They were not posited by professional scientists or engineers (for the most part). They did not work at the time they were described by the authors. And they were not patentable. If they did not fall into the category of unpatentable “abstract ideas,” they would have failed patent law’s requirement of “enablement”—and also would have been excluded by the doctrine of “incredible utility”—because they were inoperable and

5. This is the response we received several times when we asked ChatGPT whether it is like MULTIVAC. See ChatGPT, OPENAI, https://chat.openai.com [https://perma.cc/5QND-J4H7] [https://web.archive.org/web/20231019165538/https://chat.openai.com/auth/login] (last visited Oct. 23, 2022).

6. See JULES VERNE, FROM THE EARTH TO THE MOON (Bantam Classics 1993).

7. See ROBERT A. HEINLEIN, ROCKET SHIP GALILEO (Ace Books 1947); see also ARTHUR C. CLARKE, PRELUDE TO SPACE (Harcourt, Brace & World, 1954).

8. See Hugo Gernsback, Ralph 124C 41+, 4 MOD. ELECS. 593 (Dec. 1911). This was published as a book in 1925, but the basic elements of radar were first disclosed in the magazine MODERN ELECTRICS.

9. See Robert Bloch, Almost Human, in 1 THE COMPLETE STORIES OF ROBERT BLOCH 11 (1990); see also, e.g., KAZUO ISHIURO, KLARA AND THE SUN (Faber & Faber 2021).


11. See SAMUEL DELANEY, NOVA (Doubleday 1968).

12. See URSSULA K. LE GUIN, ROCANNON’S WORLD (Ace Books 1966); see also ORSON SCOTT CARD, ENDER’S GAME (Tor Books 1985).

13. See OCTAVIA E. BUTLER, DAWN (Grand Cent. Pub’g 1987).

14. See NEAL STEPHENSON, SNOW CRASH (Bantam Books 1992); see also WILLIAM GIBSON, NEUROMANCER (Ace 1984).

15. However, some of them were. Asimov himself was a biochemist who wrote hundreds of nonfiction books on science. ASIMOV, supra note 2, at 643–79; see also ISAAC ASIMOV, I, ASIMOV: A MEMOIR (Bantam Books 1995).


17. “Enablement” generally refers to the Patent Act’s requirement that an inventor disclose enough information about their invention in the patent to “enable” a person with ordinary skill in the art to make and use the invention at the time the patent is filed. 35 U.S.C. § 112 (2011). See infra note 121.
had little support in contemporary science at the time they were described.\(^{18}\) Indeed, patent law’s requirements of workability and credible, presently-availing utility are precisely what differentiate patentable inventions from mere science fiction.\(^{19}\)

However, this Article reveals that Hugo Gernsback—founder of the first all-science-fiction magazine, the so-called “father” of science fiction, and the man for whom the Hugo Awards are named\(^ {20}\)—believed that a work of science fiction is a lot like a patent, and that at least some science fiction should be patentable. Gernsback made several claims. First, like patents, works of science fiction can disclose useful information about new and nonobvious inventions. Second, similar to patents, science fiction stories can inspire readers to manufacture and improve upon inventions that they learned about while reading. Finally, some science fictional inventions are depicted in such detail that they should themselves be patentable or at least qualify as “prior art” against other peoples’ patents.\(^ {21}\) In 1952, Gernsback tried to turn his ideas into reality. In a speech he gave to the World Science Fiction Convention, entitled “The Impact of Science Fiction on World Progress,” Gernsback urged Congress to reform the patent system to give prescient science fiction authors—those who predicted future inventions before they came to pass—new opportunities to obtain patents for the inventions they described in their stories. At the very least, Gernsback argued, patent examiners should review more science fiction when doing prior art searches.\(^ {22}\)

Gernsback’s ideas were iconoclastic, and his proposal to make patents obtainable for inventions that are not yet reduced to practice is deeply troubling from a policy perspective.\(^ {23}\) Nevertheless, taking a critical look at Gernsback’s philosophy and the historical connection between patents and science fiction generates surprising insights for both science fiction and innovation policy. First, the fact that patent law played a role in shaping the modern genre of science fiction provides a new and different justification for the role of science fiction in society. From the Gernsbackian perspective, a work of science fiction is supposed to act like a patent. It describes technologies of the future in a way that might inspire readers to, literally, pursue those

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18. “Utility” generally refers to the Patent Act’s requirement that an invention must be operable for its intended purpose and have a presently availing utility that is not incredible from the standpoint of contemporary scientific principles. 35 U.S.C. § 101 (2011). See infra note 122.

19. See Camilla A. Hrdy & Daniel H. Brean, *Enabling Science Fiction*, 27 Mich. Tech. L. Rev. 399, 403–13 (2021) (comparing patent law’s requirement that an invention be currently possible and described in sufficient detail, with norms in literary science fiction, which pressure authors to depict science and technology in ways that are at least plausible to readers).


21. We provide direct quotes supporting these claims in Part III infra.

22. We review the details of these proposals in Part IV infra.

23. See infra Part V.A.
inventions in the real world. As we will show, science fiction "teaches" readers in a very
different way from patents and imparts different forms of information from patents,
stretching the bounds of what patent theorists call "disclosure theory." Yet, at the end
of the day, patents and science fiction are, among other things, supposed to perform a
similar function by disclosing useful technical information that the world would not
otherwise obtain. As Gernsback put it, science fiction supplies information "in a very
palatable form . . . imparting knowledge, and even inspiration, without once making
us aware that we are being taught."25

Second, if we think patents are an important part of the innovation ecosystem
because patents disseminate useful technological teachings and insights, then science
fiction might be too. Even if science fiction does not directly influence someone to
make the precise inventions it discloses, it can impact peoples' career choices, inspiring
them to go into science or to pursue a general line of inquiry, like virtual reality or
space travel.26 If Gernsback was right—and we believe that in some cases he was—
science fiction has inspired some of the inventions we have today. We cannot perform
a comprehensive empirical assessment of science fiction's impact on innovation. The
data is just too vast, too dispersed, and often simply unavailable. That said, we do have
evidence that particular inventions—and particular patents—were influenced by
science fiction.27 When an invention has a precursor in literary science fiction, this is
surely sometimes independent invention, the result of multiple thinkers responding to
the same technological developments and contemporary trends. But sometimes it is
not.

One extraordinary example of science fiction's direct influence on invention is
Simon Lake's reliance on the great French writer Jules Verne. When Lake obtained a
patent for a submarine at the end of the nineteenth century, he gave explicit credit to
Verne, who had vividly depicted a submarine decades earlier in his famous novel,
Twenty Thousand Leagues Under the Seas. This example shows that at least some
inventors read science fiction and are deeply moved by it. Its ideas inspire them in ways
that traditional sources—including patents—do not. Gernsback put it best: Science
fiction "fires the reader's imagination more perhaps than anything else of which we
know," leaving readers "deeply thrilled," as their "imagination is fired to the nth
degree . . . ."29 Few people would ever say that about reading patents.

This history should be of great interest to scholars of science fiction and to scholars
of patent and intellectual property law (many of whom are themselves science fiction

24. See infra Part III.
26. See infra Part VI.A.
27. See infra Part VI.A.
29. See infra Part VI.A. The original French title was Vingt mille lieues sous les mers (1869–70).
30. Hugo Gernsback, The Lure of Scientifiction, 1 AMAZING STORIES 195, 195 (1926) [hereinafter
Gernsback, Scientifiction]; Hugo Gernsback, Imagination and Reality, 1 AMAZING STORIES 579, 579 (1926)
[hereinafter Gernsback, Imagination].
fans). This history should also be of special interest to those who care about innovation and study how innovation emerges and diffuses throughout society.

The Article proceeds as follows:

Part I contextualizes Gernsback within the literary genre of science fiction. It explains his unique view of what science fiction should be, and how his view influenced later editors and writers, shaping the genre of science fiction as we know it.

Part II reveals Gernsback’s extensive experience with, and thoughts about, the patent system. By parsing through Gernsback’s published and unpublished materials, we show that not only was Gernsback himself a patent veteran, with many patents to his name, but he also frequently gave advice to others on how to get patents, and he wrote several early editorials espousing unorthodox, sometimes critical views on patents and the patent system. These opinions clearly informed Gernsback’s eventual proposal to make patents available for science fiction authors.

Part III reveals a pivotal piece of history which, so far as we can discern, has gone completely unnoticed. We show that, in editorials he wrote for his famous science fiction magazine, Amazing Stories, Gernsback quite explicitly adopted the theory that a work of science fiction is like a patent. Drawing on a theoretical framework that closely resembles patent law’s “disclosure theory,” he argued that both patents and science fiction stories disclose useful information to the world that can influence later inventors. He further argued that some science fiction stories depict inventions in such detail that the author can, quite literally, file for a patent. At the very least, their story can be considered as prior art against other peoples’ patents.

Part IV analyzes Gernsback’s 1952 patent reform proposal. This proposal has been noted briefly by scholars of science fiction—usually in the context of explaining that it is “regularly ridiculed.” It has yet to be discussed or assessed in any depth, let alone by those familiar with patent law. We do so here, explaining the details of Gernsback’s proposal for a Provisional Patent, exactly how this was supposed to work, and how it diverged from patent law’s current rules. We also reveal Gernsback’s highly creative recommendation for how to entice the Patent Office to read more science fiction when searching for prior art—which so far as we know has not been assessed before, in part because the published version of Gernsback’s 1952 speech deleted most of it.

Part V demonstrates why Gernsback’s proposal for Provisional Patents is a bad idea from the perspective of patent policy. Giving patents to science fiction authors has the potential to hold up future innovation in the worst way—allowing those who propose innovative yet half-baked ideas to crawl out of the woodwork decades later and sue the


33. In one of the few scholarly references we have found to Gernsback’s patent reform proposal, Gary Westfahl observes that Gernsback’s “innovative suggestion” to award patents for inventions depicted in science fiction “is regularly ridiculed.” Westfahl insightfully rejects this easy conclusion, arguing that Gernsback’s ideas in fact “played a key role in validating science fiction as a uniquely significant form of literature which could play a role not only in predicting, but actually creating, the future . . . .” WESTFAHL, supra note 20, at 19.
very people who get those ideas to work. We further posit that Gernsback’s proposal for patent reform might have been more than just naïve; it might have been motivated in part by self-interest and hope for financial gains. We find some support for this hypothesis in Gernsback’s life history, as well as in certain statements he made in his magazines and to the media.

Part VI contends that Gernsback’s ideas, however flawed, contain kernels of truth. By building on patent law’s disclosure theory, we posit that, just as patents disclose useful information that can affect future innovation, so too can science fiction. Science fiction can disclose various forms of information to society. Moreover, because science fiction is drafted in such an engaging medium, and because it is liberated from patent law’s imperative of current-workability, science fiction can impact innovation in ways that most patents never can or will. Science fiction can supply a stimulus to readers, inspiring them to become inventors. Science fiction can predict future technological developments decades or millennia before they come to pass, and in doing so provide useful insights about how to achieve future technological feats or avoid future problems. Science fiction can also explore the moral implications of emerging technologies, flagging the potential moral dangers inherent to certain inventions or lines of inquiry. Science fiction can even enter the broader culture and, in doing so, prepare and acclimate the general public to the inventions of the future.

We conclude by summarizing the implications of science fiction’s patent law origins for the genre of science fiction and for innovation policy, and by providing a bit of advice we suspect Gernsback might have given today’s science fiction authors.

I. THE HUGO GERNSBACK CONNECTION

The connection between patents and science fiction originates with a single historic figure—Hugo Gernsback. Before Gernsback, there was excellent fiction that we today put on the science fiction shelves in bookstores. This includes the “scientific romances” by the nineteenth century giants, Mary Shelley, Edgar Allen Poe, Jules Verne, and H.G. Wells. But there was no dedicated place to get science fiction until Gernsback started an exclusively-science-fiction pulp magazine called Amazing Stories. Gernsback

34. Amazing Stories was considered a “pulp” magazine because it was published on cheap pulp paper. However, it was originally published in a much larger size and was slightly more expensive than the usual pulp. It sold for twenty-five cents an issue. Issues of Amazing Stories from 1926 to 1959 are available at Amazing Stories, The Online Books Page, https://onlinebooks.library.upenn.edu/webbin/serial?id=amazingstories [https://perma.cc/RQU8-QTR6] [https://web.archive.org/web/20230929175925/https://onlinebooks.library.upenn.edu/webbin/serial?id=amazingstories] (last visited Oct. 23, 2023). Ashley, History, supra note 20, at 11–49, 22; Westfahl, supra note 20, at 17; see also Alec Nevala-Lee, Astounding: John W. Campbell, Isaac Asimov, Robert A. Heinlein, L. Ron Hubbard, and the Golden Age of Science Fiction 5–6 (2018) (writing that while there had been prior writers who wrote science fiction, its “emergence as a viable genre was thanks largely” to Gernsback, “who first published science fiction in the cheap magazines known as the pulps, culminating in the debut of Amazing Stories in 1926”).
initially used the term “scientifiction,” before eventually pivoting to the more easily-pronounceable term “science fiction.”

Gernsback did more than give the genre a name. He was also in large part responsible for defining it as a new form of fiction focused on science. In editorials that Gernsback wrote for Amazing Stories, he identified two main criteria as essential to science fiction story, and which distinguished it from other kinds of fiction or romance. First, science fiction must have a grounding in real “scientific fact.” Although the writer has the “perfect right to use [their] imagination,” he wrote, the “fundamental scientific theory must be correct.” Gernsback once hypothesized, not in jest, that the “ideal proportion” was “seventy-five percent literature interwoven with twenty-five percent science.” Second, and uniquely important for Gernsback, a science fiction story must contain what he called “prophetic” science—that is, a scientific development that might be possible in the future, even if it was not possible when the author described it. All his life, Gernsback maintained his belief that the “wonder ingredient” for science fiction was “true or prophetic science.”

The best exemplar of Gernsback’s preferred style of science fiction—one that is based on scientific fact and that contains “prophetic” science—comes from Gernsback’s own series of stories, called Ralph 124C 41+ (the string of symbols is supposed to be read as “one to foresee for all”). In one of these stories, Ralph 124C 41+, a genius from the year 2660, uses a “pulsating polarized ether wave” to pursue a Martian in his “space flyer.” Gernsback called this invention an “Actinoscope.” This methodology was

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35. Michael Ashley asserts that when Gernsback started the new magazine, Science Wonder Stories, he “coined the new phrase ‘science fiction.’” That said, Ashley notes that the term “science fiction” was around already and had intermittently appeared in Amazing Stories. Ashley, supra note 20, at 66; see also Gernsback, Scientifiction, supra note 30, at 195.

36. Westfahl, supra note 20, at 13 (“Science fiction is a successful institution in large part, because Hugo Gernsback ably supervised its initial construction. He provided the genre with a name, a critical theory justifying its importance and value, and a literary history.”).

37. Gary Westfahl has identified similar “Gernsbackian” criteria: “[T]he work must be a narrative; it must incorporate passages of scientific explanation; and it must describe an imaginary but scientifically responsible for defining it as a new form of fiction focused on science. In editorials that Gernsback wrote for Amazing Stories, he identified two main criteria as essential to science fiction story, and which distinguished it from other kinds of fiction or romance. First, science fiction must have a grounding in real “scientific fact.” Although the writer has the “perfect right to use [their] imagination,” he wrote, the “fundamental scientific theory must be correct.” Gernsback once hypothesized, not in jest, that the “ideal proportion” was “seventy-five percent literature interwoven with twenty-five percent science.” Second, and uniquely important for Gernsback, a science fiction story must contain what he called “prophetic” science—that is, a scientific development that might be possible in the future, even if it was not possible when the author described it. All his life, Gernsback maintained his belief that the “wonder ingredient” for science fiction was “true or prophetic science.”

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36. Westfahl, supra note 20, at 13 (“Science fiction is a successful institution in large part, because Hugo Gernsback ably supervised its initial construction. He provided the genre with a name, a critical theory justifying its importance and value, and a literary history.”).

37. Gary Westfahl has identified similar “Gernsbackian” criteria: “[T]he work must be a narrative; it must incorporate passages of scientific explanation; and it must describe an imaginary but scientifically responsible for defining it as a new form of fiction focused on science. In editorials that Gernsback wrote for Amazing Stories, he identified two main criteria as essential to science fiction story, and which distinguished it from other kinds of fiction or romance. First, science fiction must have a grounding in real “scientific fact.” Although the writer has the “perfect right to use [their] imagination,” he wrote, the “fundamental scientific theory must be correct.” Gernsback once hypothesized, not in jest, that the “ideal proportion” was “seventy-five percent literature interwoven with twenty-five percent science.” Second, and uniquely important for Gernsback, a science fiction story must contain what he called “prophetic” science—that is, a scientific development that might be possible in the future, even if it was not possible when the author described it. All his life, Gernsback maintained his belief that the “wonder ingredient” for science fiction was “true or prophetic science.”

The best exemplar of Gernsback’s preferred style of science fiction—one that is based on scientific fact and that contains “prophetic” science—comes from Gernsback’s own series of stories, called Ralph 124C 41+ (the string of symbols is supposed to be read as “one to foresee for all”). In one of these stories, Ralph 124C 41+, a genius from the year 2660, uses a “pulsating polarized ether wave” to pursue a Martian in his “space flyer.” Gernsback called this invention an “Actinoscope.” This methodology was
eventually put into practice. We now call it “radar.” As can be seen below, Gernsback provided substantial technical details and imagery. We have printed the image and text in full below to illustrate an important point: Apart from the fact that this story involves chasing a Martian space flyer, the image and description resemble those seen in real patent documents. As we will explain in the next part, this is not a coincidence.

Figure 1: Using an “Actinoscope” to track a space flyer

A pulsating polarized ether wave, if directed on a metal object can be reflected in the same manner as a light-ray is reflected from a bright surface or from a mirror. The reflection factor, however, varies with different metals. Thus the reflection factor from silver is 1,000 units, the reflection from iron 645, alomagnesium 460, etc. If, therefore, a polarized wave generator were directed toward space, the waves would take a direction as shown in the diagram, provided the parabolic wave reflector was used as shown. By manipulating the entire apparatus like a searchlight, waves would be sent over a large area. Sooner or later these waves would strike a space flyer. A small part of the waves would strike the metal body of the flyer, and these waves would be reflected back to the sending apparatus... From the intensity and the elapsed time of the reflected impulses, the distance between the earth and the flyer can then be accurately and quickly calculated.


44. One even wonders if Gernsback had considered patenting this but abandoned the idea. Or perhaps he did in fact try to patent it and was rejected. This application, if rejected, was not published. Unlike today, applications were not published unless ultimately granted. Cf. 35 U.S.C. § 122 (2011). See generally Lidiya Mishchenko, Thank You for Not Publishing (Unexamined Patent Applications), 47 B.Y.U. L. REV. 1563 (2022) (discussing and critiquing modern rules requiring publication of rejected or non-final patent applications).


46. HUGO GERNSBACK, RALPH 124C 41+, at 152 (Frederick Fell, Inc. 1950) (1925).
This is clearly a more restrictive version of science fiction than most people have for the genre. Modern science fiction has a lot more action, plot, and characterization—and a lot less technical detail—than *Ralph 124C 41+*. But nonetheless, Gernsback's philosophy was highly influential for future generations of science fiction. Subsequent writers, editors, and producers carried forward Gernsback's interest in scientific plausibility, as well as his interest in describing inventions of the future. A case in point is Gernsback's influence on the famed editor, John W. Campbell. Another important figure who ascribed wholeheartedly to Gernsback's theory that science fiction can affect real science was the British writer Arthur C. Clarke. We discuss Clarke's views further in Part VI.

II. GERNSBACK AND THE PATENT SYSTEM

Gernsback’s conviction in the centrality of science to science fiction stemmed from the fact that he was himself a scientist and inventor, and was initially trying to market his magazines to others who were like-minded. As Grant Wythoff has compellingly shown, Gernsback’s famous science fiction magazine *Amazing Stories* began as merely an offshoot of Gernsback's technical magazines in the fields of radio, wireless, and television. Gernsback's technical magazines were marketed towards amateur inventors and an emerging community of "tinkerers"—people interested in inventing outside the typical corporate or academic structure. In these magazines, Gernsback sometimes found that he needed to fill space. To do so, he would publish—and sometimes write himself—stories that featured science in a fictional setting. Often written at the eleventh hour, these "scientifiction" stories had only a very loose plot. They usually featured an inventor or genius of some kind who would basically just

47. See *Westfaahl*, supra note 20, at 17–40 (discussing many subsequent editors who adopted Gernsback’s philosophy that science fiction would anticipate and effect the technology of the future); *Wolfe*, supra note 20, at 3 ("One of the first requirements [for a work to be considered science fiction is that it] should be possible—involving things that we might actually create, places we might actually go, or societies that might actually evolve.").

48. Campbell, who published his first story in Gernsback’s *AMAZING STORIES*, went on to become the highly influential editor of a competing science fiction magazine, *ASTOUNDING STORIES*, in 1938. *ASTOUNDING STORIES* was where many famous "Golden Age" authors got their start, such as Isaac Asimov, Robert Heinlein, and L. Ron Hubbard. A major part of Campbell’s legacy, though, was due to the fact that he revived Gernsback’s focus on scientific plausibility and accurate predictions of future inventions. *Ashley*, supra note 20, at 107–09; *Wolfe*, supra note 20, at 48–52; *Nevala-Lee*, supra note 34, at 73–83, 121–25.

49. See infra Part VI.B.

50. See *Wythoff*, supra note 20, at 2–3.


describe all of the amazing devices they had invented. We already showcased an example of the “Gernsbackian” style in Ralph 124C 41+ to give the reader an idea of what these stories looked like. The intended audience for Gernsback’s early science fiction stories was, at least initially, precisely the same people who read Gernsback’s technical magazines. They were interested in science and invention per se. They were often scientists and inventors themselves.

What no one has paid much attention to is the tremendous influence that patents and patent law had on the evolution of this uniquely “Gernsbackian” form of science fiction. Gernsback’s writings confirm that his philosophy of science fiction—including his unique conviction that it be grounded in real science—was greatly influenced by his understanding of patents and how the patent system is supposed to work.

A. Gernsback’s Patents

Gernsback was a frequent patentee who sought to obtain exclusive rights to many of his inventions. He died with more than thirty patents to his name in the United States alone. His journey with patents and inventing began at a very young age. He spent his childhood in Luxembourg experimenting with communications, batteries, and electrical equipment. At age thirteen, his understanding was apparently so advanced that he was asked to install a telephonic system in a local convent.

After emigrating to New York, Gernsback started a company called The Electro Importing Company (Telimco) to import wireless and electrical equipment from Europe and re-sell it to U.S. customers. Gernsback’s first magazine, Modern Electrics, actually began as a catalog used to market Telimco’s radio and electrical equipment. Modern Electrics soon evolved into a magazine in its own right, marketed to would-be

53. See SAM MOSKOWITZ, HUGO GERNSBACK: FATHER OF SCIENCE FICTION, at 14–22 (1959); ASHLEY, supra note 20, at 30–35; WESTFAHL, supra note 20, at 97–99; Wythoff, supra note 20, at 14–16.
54. A few sources do mention Gernsback’s views on patents, albeit in passing. See, e.g., WESTFAHL, supra note 20, at 19.
56. Gernsback was also fascinated by life on other planets. Legend has it that after reading a book about life on Mars, he became so excited and intellectually engaged that he gave himself a fever. MOSKOWITZ, supra note 53, at 9–10; ASHLEY, supra note 20, at 28.
57. MOSKOWITZ, supra note 53, at 12–14; ASHLEY, supra note 20, at 28; Wythoff, supra note 20, at 1.
58. See, e.g., Wythoff, supra note 20, at 1.
inventors. The magazine featured descriptions of current science research and guidance about how to make certain electrical devices. It also printed patents in the field, advertisements for books on patents, and even ads from patent attorneys willing to do patent searches or reports on patentability.59

Gernsback frequently obtained patents for his own inventions. In fact, Gernsback’s decision to emigrate to the United States was driven in part by his failure to obtain patents for one of his battery inventions from the European patent offices. After France and Germany rejected his applications,60 Gernsback emigrated to the United States, where he fared better, obtaining a U.S. patent for a new method for manufacturing dry-cell batteries in 1907.61

Figure 2: Gernsback’s Battery Cell Patent62

59. For example, the first issue of MODERN ELECTRICS contained a section called “Electrical Patents of the Month.” Electrical Patents of the Month, 1 MOD. ELECTS. 25, 25–26 (1908). Issues of MODERN ELECTRICS are available digitally at Modern Electrics from Hugo Gernsback, WORLD RADIO HIST., https://worldradiohistory.com/Modern_Electrics_Magazine.htm [https://perma.cc/28ZN-PA4R] [https://web.archive.org/web/20230929211829/https://worldradiohistory.com/Modern_Electrics_Magazine.htm]; see also WESTFAHL, supra note 20, at 61 (listing contents of MODERN ELECTRICS, including descriptions of new inventions from readers and patents of month).

60. ASHLEY, supra note 20, at 28; MOSKOWITZ, supra note 53, at 9–10.

61. See U.S. Patent No. 842,950 (issued Feb. 5, 1907); see also MOSKOWITZ, supra note 53, at 11–12; ASHLEY, supra note 20, at 28; Wytthoff, supra note 20, at 13–15.

He would go on to acquire many more patents relating to electrical devices such as radio and telephone components. Gernsback also obtained patents for far less practical inventions. A representative sampling of Gernsback’s more imaginative patents includes: a “combined electric hair brush and comb”; a “submersible amusement device,” which appears to have been a variation on the Ferris wheel that, along with rotating in the air, would take riders underwater; an “apparatus for landing flying machines” that relied on magnets; an ear cushion for telephone receivers; an “acoustic apparatus” he called an Osophone, which provided a compact instrument for sending sound vibrations directly into the bones; and a “hydraulic fishery,” which used a massive suction device to catch fish.

B. GERNSBACK’S ADVICE ON PATENTING

Through his interactions with the patent system as an inventor and entrepreneur, Gernsback learned a great deal about patents and formed a number of opinions about them. He seemed to relish this hard-earned expertise. In his role as a magazine editor, he fielded questions from (by his count) thousands of inventors seeking his advice. In 1933, he drew on this experience in a short booklet, called “Inventing—as a Business, A Plan to Safeguard Inventors.” The booklet provides surprisingly wise advice on how to protect inventions in the early stages and the importance of obtaining patents. “Just the mere fact that you invent something,” Gernsback intoned, “is not sufficient to bring you riches. Many other things are necessary before this is accomplished.” The first and best advice I always give inventors is ‘if you have a good invention, you must eventually patent it.’ There is no way to get around this . . . .”


65. Hugo Gernsback, Inventing—as a Business, a Plan To Safeguard Inventors I (1933) (unpublished manuscript) (on file with authors) (“I have come into contact with some 36,000 inventors by mail and in person.”). 66. Hugo Gernsback, Inventing—as a Business, a Plan To Safeguard Inventors (1933) (unpublished manuscript) (on file with authors). It is not clear if or how he distributed the booklet, but he did publish a similar, albeit much shorter, version of this advice in one of his editorials. See Hugo Gernsback, Inventing as a Business, 12 SCI & INVENTION 11 (May 1924).

67. Hugo Gernsback, Inventing—as a Business, a Plan To Safeguard Inventors I (1933) (unpublished manuscript) (on file with authors) (underlines in original).

68. Id. at 2 (underlines in original).
The booklet shows that Gernsback had a decent, albeit not highly technical, understanding of how patents work, and was aware of the major criteria of patentability. In particular, he emphasized to readers that, to be patented, an invention must be “absolutely new” as compared to the “prior art”—that is, the patents, publications, and other publicly available knowledge that existed before the invention. Gernsback did not, in this booklet, discuss the fact that, to be patented, the invention must actually work. Yet it is clear from his other writings that he understood that the Patent Office would demand the inventions work in accordance with accepted scientific principles. For example, in a 1921 editorial, Gernsback poked fun at inventors seeking to build perpetual motion machines—those hypothetical, elusive devices that supply infinite energy and are widely believed to be impossible—and informed readers (largely correctly) that the Patent Office “accepts no patent application for any device that smacks even remotely of perpetual motion—unless a working model is submitted. Needless to say, so far no model that worked has been submitted or ever will be.”

C. GERNSBACK’S COMPLAINTS ABOUT THE PATENT SYSTEM

For Gernsback, the patent system, though generally virtuous in protecting inventors like himself, left a lot to be desired. His major gripe, which he frequently articulated, was that patents do not protect mere “ideas.” In a provocative 1934 editorial, entitled “Idea’ Patents?,” Gernsback proposed making it easier to patent “ingenious” ideas, even if the inventor did not have a specific device or mechanism in mind. For example, the person who thinks of applying liquid color to hands (i.e., nail polish) should be able to apply for an “Idea Patent” on the whole idea, apart from any particular mechanism for carrying it out. He expressed his hope that “in the near future the U.S. Patent Office will be authorized to issue ’Idea Patents’ as such.”

Another complaint, which Gernsback returned to on numerous occasions, was his perception that the Patent Office does only a cursory job of screening for prior art. As a result, it was too easy to challenge a patent in litigation by digging up old prior art. “[I]f you have (let us assume) invented a new mousetrap,” he wrote, “and someone else makes exactly the same mousetrap specified in your patent, the patent will not be of much use to you; because, if the offender has money, he can fight the case. He will try to demonstrate that your patent was not original as nearly the same mousetrap was

69. See id. at 4–5.
73. Some argue that the Office’s cursory review in determining patentability is by design. See Mark A. Lemley, Rational Ignorance at the Patent Office, 95 NW. L. REV. 1495 (2001). But see Michael D. Frakes & Melissa F. Wasserman, Irrational Ignorance at the Patent Office, 72 VAND. L. REV. 975 (2019) (arguing the patent system would benefit from giving examiners more time to review each application).
printed in a farm journal back in 1884.” It would be better, he urged, for the Patent Office to use greater “diligence in looking up ALL antecedents of the mousetrap, and running down all available comparisons, and satisfy itself that the mousetrap is really new.” That way, the inventor would be in a position to obtain a patent that “would be worth something.”

Both of these complaints—insufficient protection for ideas and the vulnerability of patents due to examiners’ ineptness or incapacity in searching the prior art—would become common refrains for Gernsback. Both would reappear years later in his 1952 proposal for patents for science fiction authors. But before we get there, we must first delve deeper into Gernsback’s patent-inspired theory of science fiction.

III. GERNSBACK’S THEORY OF SCIENCE FICTION AS PATENT

Gernsback’s views on patents were central to his understanding of the nature and function of science fiction. Gernsback founded Amazing Stories in April 1926. As noted above, Amazing Stories was initially an offshoot of Gernsback’s more serious technical magazines, where Gernsback had begun to publish occasional fictional stories featuring science and inventions of the future. Over time, Gernsback saw that there was demand for these stories—indeed, potentially more demand than there was for his purely scientific content. He thus decided to publish a magazine featuring exclusively “scientifiction.” He did not want to leave the science behind, but he believed the fictional format would attract a larger, more generalist audience. In fact, he chose the name Amazing Stories, rather than Scientifiction, for the magazine’s title because he believed many of the readers he hoped to attract—the masses,” as he called them—would not be inherently scientifically minded and might be put off by the word “science.” In later years, he would add the word “science” back into his titles, apparently having concluded that the masses could take it.

It seems Gernsback concluded that “the masses” could also handle philosophical musings about the nature of science fiction. At the beginning of each issue of Amazing Stories, Gernsback provided an in-depth editorial in which he would discuss what the genre of science fiction was and the important role it played in promoting innovation

75. Id.
76. Gernsback was the founder as well as the magazine’s editor for its three years. Thereafter, Gernsback actually lost ownership of the magazine. He went into debt and worked out a deal with creditors that involved the sale of AMAZING STORIES to another company. He started other science fiction magazines thereafter, including WONDER STORIES and SCIENCE-FICTION PLUS. MOSKOWITZ, supra note 53, at 26–27; ASHLEY, supra note 20, at 258–59.
77. By the “masses,” we suspect that Gernsback meant children and women. He stated that he avoided using the word “science” in the title of his magazine because “anything that smacks of science seems to be too ‘deep’ for the average type of reader.” Gernsback, Editorialy Speaking, supra note 38, at 483. In the same passage he noted that “a great many women” were reading the magazine, suggesting a gender bias may have been at work. Id.
78. Ashley provides a full list of Gernsback’s science fiction magazines. ASHLEY, supra note 20, at 258–59. Gernsback’s final science fiction magazine was SCIENCE-FICTION PLUS, which folded after only seven issues in 1953. MOSKOWITZ, supra note 53, at 31–32.
and improving society. It is apparent from these editorials that Gernsback viewed the inventions described in stories as directly analogous to the inventions described in real patents. This analogy, in turn, explains why Gernsback was so adamant, all his life, that science fiction needed to contain real science. It explains why his own stories (like Ralph 124C 41+) looked the way they did. And it explains why, decades later, he would come out with such a seemingly bizarre proposal to award patents to science fiction authors.

A. Patent Law's Disclosure Theory

To understand Gernsback's philosophy of science-fiction-as-patent, it is necessary to understand some patent theory. The primary justification for patents is that patents promote innovation—generating new products and processes that add value to society.\(^7^9\) Under the conventional view, patents promote innovation in two ways.

First, patents are believed to promote innovation by providing inventors with incentives to invent and to “commercialize” (perfect and bring to market) inventions when they might not otherwise do so.\(^8^0\) Patents confer a limited period of exclusivity, during which no one else can make, use, or sell the invention. This gives the owner the potential to obtain greater market power and to charge higher prices than would otherwise be possible in a world of free copying. In other words, through the mechanism of exclusivity, patents are thought to induce innovation by pushing inventors to invent when they are on the margins and by giving them financial motives to come up with, and bring to market, new and nonobvious innovations over the prior art. At the very least, patent law is thought to accelerate the pace at which innovation occurs.\(^8^1\)

Second—and far more relevant in this context—patents are believed to promote innovation by giving inventors incentives to disclose useful information to the public when they might not otherwise do so.\(^8^2\) Pursuant to the so-called “disclosure theory,” the patent document has a very particular function for society. It shares information about the invention with others. The U.S. patent system does not require inventors to physically make the invention themselves. It does not require literal “reduction to practice” in the way of a product, prototype, or other physical embodiment of the invention that works for its intended purpose.\(^8^3\) Rather, the patent must provide

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79. Importantly, not all innovation is patentable and not all patents lead to true innovation. Most patents are not commercialized. Patents are only a rough estimate of innovation. See Camilla A. Hrdy, Commercialization Awards, 2015 Wis. L. Rev. 13 (2015).


82. Machlup, supra note 80, at 21–22; see also Camilla A. Hrdy & Mark A. Lemley, Abandoning Trade Secrets, 73 Stan. L. Rev. 1 (2021).

enough information to allow others—specifically, the law’s hypothetical “person having ordinary skill in the art”—to reduce the invention to practice at the time of filing. 84 This is called “constructive” reduction to practice. The theory is that, when inventors supply this information in their patents, this benefits society at large because others can build upon the invention, design around it, and, once the patent expires, have all the information they need to make and use it. 85

Today, would-be inventors can go onto the Patent Office’s website or Google Patent and review millions of patent documents containing a plethora of useful information. Some dispute that scientists read these patents for their technical teachings. 86 In fact, the assumption that people do not always read patents is baked into the patent bargain: A central tenet of patent infringement is that it is “strict liability,” meaning a patent can be infringed, and the owner can get a pay out, even if no one read and copied from the patent. 87 But some scientists do read patents and find them useful. The degree to which patents disclose useful information varies tremendously by field and by patent. 88

**B. DRAWING THE ANALOGY BETWEEN SCIENCE FICTION AND PATENTS**

The function of science fiction is, in Gernsback’s view, very similar to the “disclosure function” ascribed to patents. Science fiction, he explained in several editorials, discloses ideas for new inventions and provides a “stimulus” or “incentive” to readers to try to make those inventions in the real world. 89 Unlike patents, science fiction stories do not explain how to make these inventions work at the time the author writes about them, and the author usually does not know how to do so. This, however, was immaterial to Gernsback because the fictional work inspires readers to make the inventions in the future. 90

Gernsback frequently referred to science fiction authors who inspire others to make inventions as “original inventors.” 91 “The author who works out a brand new idea in a scientifiction plot,” Gernsback wrote in one editorial, “may be hailed as an original inventor years later, when his brain-child will have taken wings and when cold-

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86. See, e.g., Lemley, supra note 28, at 745 (arguing that, on the whole, “inventors don’t learn their science from patents”).
89. See, e.g., Gernsback, Scientifiction, supra note 30, at 195 (“Frequently the author himself does not realize that his very fantastic yarn may come true in the future . . . . But the seriously-minded scientifiction reader absorbs the knowledge contained in such stories with avidity, with the result that such stories prove an incentive in starting someone to work on a device or invention suggested by some author of scientifiction.”); Gernsback, Imagination, supra note 30, at 579 (1926) (“[M]any of the so-called wild ideas which we read in our scientifiction stories . . . [may] give an actual stimulus to some inventor or inventor-to-be who reads the story.”).
90. See, e.g., Hugo Gernsback, $300.00 Prize Contest: Wanted: A Symbol for Scientifiction, 3 AMAZING STORIES 5, 5 (1928) (“An author may not know how to build or make his invention . . . . but he may know how to predict, and often does predict, the use of such a one. The professional inventor or scientist then comes along, gets the stimulus from the story and promptly responds with the material invention.”).
91. Id.
blooded scientists will have realized the author’s ambition.” 92 Although the “author may not know how to build or make his invention . . . he may know how to predict, and often does predict, the use of such a one. The professional inventor or scientist then comes along, gets the stimulus from the story and promptly responds with the material invention.” 93 The key for inventorship status was that the author’s story might inspire others to make the invention work at a later date; the author did not need to do so themself in order to qualify as an “inventor” in Gernsback’s mind.

Gernsback drew the analogy to patents explicitly. In one key editorial, Gernsback argued that science fiction “contributes something to progress that probably no other kind of literature does.” 94 To make this point, he compared a work of science fiction to a patent. Like a patent, a work of science fiction has the capacity to spur follow-on innovation because others will read the story, learn from it, and then go on to make and improve upon the story’s inventions in the real world. Gernsback described a science fiction author who vividly depicts “wild ideas” in a story, and thereby gives a “stimulus” to “some inventor or inventor-to-be who reads the story.” 95 This science fiction author, he argued, is similar to the proverbial “inventor” who obtains a patent on a “mouse-trap” and then sells “the patent to a manufacturer.” 96 The manufacturer learns from the patent and improves upon it, discovering “that an excellent burglar alarm could be made from the mouse-trap, with but a few changes.” 97

In other words, the work of science fiction is like a patent. The author is like an inventor. The reader who makes the invention described in the story is like a manufacturer who buys a patent and brings the invention to life. Both situations, Gernsback stated, are a “case of an original stimulus which, perhaps, went wrong, but finally became righted.” 98 This shows that Gernsback thought science fiction stories acted like patents by disclosing new information and inspiring future scientists to build science fictional inventions in the real world.

C. PATENTABLE SCIENCE FICTION

This was not purely an analogy. Gernsback also opined that some science fictional inventions can, quite literally, qualify for patents at the time they are depicted by the author.

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92. Id.
93. Id.
94. Gernsback, Imagination, supra note 30, at 579. Gernsback’s continual use of the term “progress” may be an intentional reference to the U.S. Constitution’s “Progress Clause,” which gives Congress power to grant copyrights and patents. The Progress Clause states: “To promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries.” U.S. CONST. art. I, § 8, cl. 8.
95. Id. (“[Ideas in scientifiction stories may] give an actual stimulus to some inventor or inventor-to-be who reads the story. And as long as there is a stimulus of any sort, we have no reason to complain because we never realize where progress in any direction may lead us.”).
96. Id. (“There is the well-known story of the inventor who had patented a mouse-trap, and finally sold the patent to a manufacturer, who found that an excellent burglar alarm could be made from the mouse-trap, with but a few changes.”).
97. Id.
98. Id.
Gernsback recognized the practical difficulties involved in patenting science fiction inventions. He was aware that inventions had to actually work in order to qualify for patents. But he thought these difficulties could be overcome in some instances, so long as the author was able to provide enough details about the invention’s “functions, its purpose and so forth.” He also noted that the author would have to file their patent application in a timely manner, soon after publishing their story, in order to avoid the statutory bar. 99 At the very least, Gernsback contended, such stories should qualify as “prior art” against other peoples’ patents. When doing a novelty search, patent examiners review prior art, including printed publications. This prior art should technically include science fiction stories that disclose inventions in sufficient detail. 100 Gernsback argued that the U.S. Patent Office should review more science fiction when doing these prior art searches. 101

These views would coalesce decades later when Gernsback proposed that Congress adopt a special form of patent for science fiction authors and that the science fiction community develop a system for sending qualifying science fiction to the Patent Office to serve as prior art. We now turn to these unorthodox proposals.

IV. GERNSBACK’S 1952 PATENT REFORM PROPOSAL

In 1952, Gernsback took his theories to the next level, using them as the basis for a proposal for patent reform in which he urged Congress to make it feasible for more science fiction authors to obtain patents.

At the Tenth World Science Fiction Convention, held in Chicago on August 30, 1952, Gernsback gave a speech entitled “The Impact of Science Fiction on World Progress.” The timing for this speech was probably not a coincidence. That summer, Congress had passed the most momentous patent reform bill in history, which resulted in a version of patent law that remains the foundation for U.S. patent law today and which has influenced the patent laws of nations throughout the world. 102 The speech was mentioned in the media 103 and published the following year in Gernsback’s magazine, Science-Fiction Plus, which was then edited by Sam Moskowitz. 104 We have also obtained the original typed manuscript of the speech, which included more details

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99. He recommended the author file within two years of publishing because two years was then the length of the statutory bar’s grace period. Id. The U.S. statutory bar is now only one year. Cf. 35 U.S.C. § 102 (2011).
100. See infra Part IV.B.
101. He even suggested—albeit without evidence—that “the patent offices of most countries” already “follow scientifiction stories pretty closely, because in many of these the germ of an invention is hidden.” Gernsback, Imagination, supra note 30, at 579.
on Gernsback’s ideas relating to patents and which—we believe—is closer to the speech he actually delivered.  

Although they are similar in most respects, the original manuscript lacks certain logical errors which appear in the published version Moskowitz edited. The published version also makes some rather substantive changes, noted below. We suspect that these alterations indicate simple misunderstanding of the details of what Gernsback had proposed. In some cases, however, the edits may indicate the editor’s (presumably Moskowitz’s) disagreement with what Gernsback proposed or the editor’s concern that readers would disagree with Gernsback’s ideas.

The reform proposal contained two elements: a new kind of patent for science fiction inventions, called a “Provisional Patent,” and a novel system for utilizing science fiction as prior art. Below we explain his proposal on each issue and contextualize it within current patent law and theory.

A. “PROVISIONAL PATENTS” FOR SCIENCE FICTION

Gernsback began with his usual theme, expressed in numerous prior editorials, that “Science Fiction” often contains early iterations of inventions that are eventually reduced to practice and adopted many years later. He argued that these early descriptions of inventions often provide “stimulus” to later inventors, who are moved to put these inventions into practice.  

“Inventors, manufacturers, and others understandingly do not like to admit that a Science Fiction story sparked them into activity on the road to a new invention or a new machine,” he pronounced, “but it is an established fact that a host of Science Fiction ideas have been successfully translated into paying realities.”

Gernsback even suggested that these later inventors intentionally take advantage of science fiction authors’ labor, copying their inventions and patenting and commercializing them without paying the authors.

“Frequently,” he stated, the author “is the one who furnished untold inspirations for the modern technical world in which we live.” The author is the “actual inventor.” But the author is “rarely interested commercially in his brain child.” Instead, what “continuously” happens is that “five, ten, or thirty years later someone who read [the author’s] original story will remember the idea, lard it with a few of his own, patent it and start a new billion dollar industry on it.”

To eliminate this injustice, Gernsback urged Congress to reform the patent system so that science fiction authors could get more credit as real inventors and patent their
ideas in a broader range of cases. As we saw above, Gernsback had been thinking about “Idea Patents”\(^{114}\) for quite some time. This new proposal, though, was far more detailed and was specifically tailored to “Science Fiction authors,” not just any inventors. At present, Gernsback stated, the “fundamental requirement for a patent is that it must be new and it must work.”\(^{115}\) Yet “many Science Fiction authors are so far ahead of their times that most of their devices are impractical or non-workable at the time they describe them.”\(^{116}\) Thus, they cannot meet this workability requirement, no matter how ingenious their inventions otherwise are. He gave two examples: his own description of “radar” in 1911 and Jules Verne’s description of a submarine in 1870.\(^{117}\) “Accordingly,” Gernsback proposed, “our patent laws should be revised so that ideas which appear feasible and technically sound to a qualified board of technical examiners will be given”—what Gernsback called—“a Provisional Patent.”\(^{118}\)

The details were not fully fleshed out. But the gist is that science fiction authors could apply for a Provisional Patent if they described a new invention in a work of science fiction that was at least “feasible and technically sound,” even if not yet workable or near commercial viability. The Provisional Patent would have a “life of, say, 30 years,” during which the inventor could demonstrate the “workability or feasibility of the device.” If the inventor could eventually demonstrate “workability or feasibility,” then an ordinary patent could be applied for based on the Provisional Patent. Otherwise, the Provisional Patent would lapse.\(^{119}\)

Gernsback proposed Provisional Patent was essentially sui generis. Despite the similarity in name, Gernsback’s proposed Provisional Patent was only vaguely reminiscent of today’s “provisional patent application.”\(^{120}\) It diverged from normal patents in two major ways.

\(^{114}\) See supra Part II.C.

\(^{115}\) Gernsback, supra note 105, at 5.

\(^{116}\) Id.

\(^{117}\) Id.

\(^{118}\) Id.

\(^{119}\) This description comes from the original manuscript. Id. The published version, in contrast, contains significant errors. It mixes up some of the phrases, making it appear that a patent could be applied for if the inventor could not get the invention to work! Compare Gernsback, supra note 104 (“If, during this period the inventor cannot demonstrate the workability or feasibility of the device, the Provisional Patent will lapse. If he can, a regulation patent can then be applied for. For this purpose, the Provisional Patent will be the basis for the final patent.”), with Gernsback, supra note 105 (“Let us assume that such a patent has a life of, say, 30 years. If, during this period the inventor cannot demonstrate the workability or feasibility of the device, the Provisional Patent will lapse. A regulation patent can then be applied for. The Provisional Patent will be the basis for the final patent.”).

\(^{120}\) Today—though not in Gernsback’s time—inventors have the option to file a “provisional patent application” in order to secure their priority before filing a completed patent application. However, provisional patent applications must include a specification that meets the enablement standard of § 112(a), and they are abandoned after only one year if the provisional application is not completed and converted into an ordinary patent. 35 U.S.C. § 111(b) (1995); see also Gene Quinn, Provisional Patents: What Are They and Why Do You Need Them?, IPWATCHDOG (Aug. 13, 2016), https://ipwatchdog.com/2016/08/13/what-are-provisional-patents/ [https://perma.cc/ML3B-6MQW] [https://web.archive.org/web/20230923034259/https://ipwatchdog.com/2016/08/13/what-are-provisional-patents/]. Another analogy is the “first-to-invent” priority system under the 1952 Patent Act, which allows an inventor to claim priority based on an earlier conception. However, under the 1952 Act, priority generally goes to the first inventor to reduce the invention to practice—meaning “the inventor
1. Relaxing the Enablement and Utility Requirements

First, the Provisional Patent relaxed patent law’s enablement and utility requirements. In the current system, an inventor can only obtain a patent once they satisfy (along with novelty and nonobviousness) the law’s requirements of “enablement”\(^\text{121}\) and “utility.”\(^\text{122}\) While the details of the two doctrines differ, both are based on the rule that the inventor must be able to demonstrate that their invention works for its intended purpose at the time the patent application is filed. These doctrines, along with others,\(^\text{123}\) are intended to weed out patents for “inoperative” inventions and inventions whose utility to society is not yet known.\(^\text{124}\)

Gernsback rightly saw that some science fiction authors—those who conceive and describe in detail operable inventions—might be able to obtain patents.\(^\text{125}\) But he establishes that the claimed invention works for its intended purpose”—and the first to conceive of the invention can get only priority if they have “a definite idea of a complete and operative invention”—which is stricter than what Gernsback had in mind for science fiction authors—and, among other things, “is reasonably diligent in her effort to reduce the claimed invention to practice,” “accomplishes the reduction to practice,” and “does not abandon, suppress, or conceal the claimed invention after reducing it to practice.”


121. Satisfying enablement generally requires disclosing enough information about the invention to “enable” a person having ordinary skill in the art to make and use the invention. 35 U.S.C. § 112 (2011) (“The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same . . . .”); see also Incandescent Lamp Pats., 159 U.S. 465 (1895).

122. Generally speaking, an invention fails the utility requirement if it is not operable—meaning it does not work for its intended purpose—or if it lacks a credible, presently-availng utility that comports with scientific principles known at the time of the filing. 35 U.S.C. § 101 (2011) (providing that an invention must be both new and “useful”); see also Newman v. Quigg, 877 F.2d 1575, 1581 (Fed. Cir. 1989) (holding applicant’s “perpetual motion machine” invention “unpatentable under 35 U.S.C. § 101 because [the] device lacks utility (in that it does not operate to produce what [applicant] claims it does)” (internal quotations omitted); In re Swartz, 232 F.3d 862, 863–64 (Fed. Cir. 2000) (“The utility requirement of § 101 mandates that the invention be both new and “useful”); and, in this case, those skilled in the art would ‘reasonably doubt’ the asserted utility and operability of cold fusion.”). For more on the enablement and utility doctrines, see, e.g., DANIEL BREEN & NED SNOW, PATENT LAW: FUNDAMENTALS OF DOCTRINE AND POLICY 98–99, 397–404 (2020); ROBERT PATRICK MERGES & JOHN FITZGERALD DUFFY, PATENT LAW AND POLICY: CASES AND MATERIALS 211–32 (5th ed. 2011); CRAIG A. NARD, THE LAW OF PATENTS 116–29, 508–15 (6th ed. 2022); JONATHAN S. MASUR & LISA LARRIMORE OUELLETTE, PATENT LAW: CASES, PROBLEMS AND MATERIALS 167–223 (2d ed. 2022).

123. The “abstract ideas” bar, though not explicit in the statutory text, has been developed by the courts to ensure inventions are sufficiently concrete to warrant an exclusive right. See, e.g., Alice Corp. v. CLS Bank Int’l, 573 U.S. 208, 216 (2014) (discussing a judge-made rule that claims that ideas which are too abstract are not patent eligible under § 101).

124. See, e.g., Jorge Contreras, Patent Reality Checks: Eliminating Patents on Fake, Impossible and Other Inoperative Inventions, 102 J. PAT. & TRADEMARK OFF. SOCY 2, 5–6, 9–13 (2021); Janet Freilich, Prophetic Patents, 53 U.C. DAVIS L. REV. 663, 666 (2019); see also Sean B. Seymore, Making Patents Useful, 98 MINN. L. REV. 1046, 1048–49 (2014) (critiquing modern utility doctrine for creating “a bias against patentability for certain types of inventions,” including “inventions in nascent technologies, fields which have a poor track record of success . . .”).

125. Gernsback noted that, so long as they were able to reduce to practice, at least constructively, and took all the steps needed to apply for an ordinary patent within one year, some science fiction authors could get patents. Gernsback, Imagination, supra note 30, at 579.
recognized that most good science fiction stories posit inventions that do not yet work or do not give enough detail to permit actual practice. They fail enablement because they cannot be reduced to practice at the time of filing, and they fail utility because their utility is too speculative or incredible (not credible) based on current science.

To get around these barriers, Gernsback envisioned a different patent system. In his alternate system, the critical moment was not reduction to practice. It was the idea-generation stage. Rights and priority would set in much earlier in the inventive process, long before reduction to practice is possible. So long as the invention was new (and presumably also not obvious) and so long as it appeared “feasible and technically sound,” the originator could apply for one of Gernsback’s “Provisional Patents” and gain at least the opportunity to reserve their priority and convert this Provisional Patent into a real patent within thirty years. The author did not have to satisfy enablement, utility, or all the other requirements.

2. Lengthening the Timeframe for Patenting

Second, Gernsback’s Provisional Patent recalibrated the timeframe for obtaining a patent in order to give science fiction authors a longer period of time in which to demonstrate that their inventions could be reduced to practice.

In patent law, the assumption is that the inventor typically conceives of the invention, reduces the invention to practice after some experimentation, and then files a patent whose term approximates when it would take the inventor to earn enough profit to make their research and development worthwhile. Initially the term was fourteen years, then it was seventeen years, and now it is twenty years. The clock starts ticking at the filing date—and in fact, the real clock starts ticking at the date of invention because the inventor needs to avoid generating prior art that will bar their patent. If they publish about their invention or start selling it, they will need to file the patent within a year to avoid being anticipated by their own prior art.

Gernsback saw the innovation timeline as proceeding in phases, spanning many decades and across multiple generations of inventors. One generation of inventors—

126. See, e.g., Genentech, Inc. v. Novo Nordisk A/S, 108 F.3d 1361, 1366 (Fed. Cir. 1997) (“Patent protection is granted in return for an enabling disclosure of an invention, not for vague intimations of general ideas that may or may not be workable.”).
127. See, e.g., In re Swartz, 232 F.3d 862, 864 (Fed. Cir. 2000) (rejecting cold fusion patent because people in the field would “reasonably doubt” the present workability of cold fusion and the patent document did not provide enough guidance on how to actually make cold fusion work).
130. See 35 U.S.C. § 102(b) (1952) (providing that patent is barred by prior art that falls within the defined categories, including “described in a printed publication,” and that comes out one year or more before filing the patent); see also 35 U.S.C. § 102(b) (2011) (providing a one-year grace period for, among other things, “disclosures” produced by the inventor); Amy Motomura, Innovation and Own Prior Art, 72 HASTINGS L. J. 565 (2021) (discussing various ways that one’s own prior art can anticipate one’s own later invention).
the science fiction writers, or “prophets,” as Gernsback liked to call them—foressees the invention’s adoption decades before it happens. Then a second generation of inventors—the “cold-blooded scientists” or “manufacturers,” focused only on profit—ultimately gets the invention to work, “realiz[ing] the author’s ambition” and “respond[ing] with the material invention.”

To match this altered timeframe for innovation, Gernsback had to alter the timeframe for obtaining a patent. His goal, after all, was to enable science fiction authors—the prophets—to be rewarded with patent rights. But an exclusive right to make and use an invention that is still decades away from being practiced is not very valuable. For example, if a science fiction author somehow obtains a patent on an invention that is still several decades away from being possible, this patent would be largely worthless, even if it were valid (which it is not), because there would be nothing to commercialize and no one to sue for infringement. Theoretically, the author could try to sell the patent, but who would buy it?

Instead, to permit science fiction authors to obtain some of the patent spoils, they needed to be able to lock in their rights long before reduction to practice was possible and to thereafter get some remaining term of exclusivity. This is why, in Gernsback’s system, the science fiction author who achieved a Provisional Patent could lock in a thirty-year placeholder of sorts—a three-decade window of time during which an ordinary patent might spring into being if and when the invention is proven to work.

Once converted into a real patent, ordinary patent rules would presumably apply to confer the usual twenty years of exclusive rights (or, back in Gernsback’s time, seventeen years).

This means the patent might not expire until fifty years after the invention was first posited in science fiction.

Obviously, this timeframe goes against all the rules. It gives the applicant an unprecedented extra thirty years in which to prove workability and utility. That said, Gernsback’s timeframe may provide a somewhat realistic estimate for how long it would take for science fiction authors to profit from patents. Gernsback believed that he had calculated the timeframe that would be required: twenty-seven years. He achieved this number by examining two of his favorite examples of “prophetic” science fiction—the submarine, posited by Jules Verne in 1869, and radar, posited by Gernsback himself in 1911.

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131. See supra Part I (discussing Gernsback’s belief that science fiction stories had to be based on true or “prophetic” science).

132. Gernsback, supra note 90, at 5.

133. During that thirty-year window, the author could presumably describe their invention in a publication (i.e., in their story or novel) without incurring the consequences of a statutory bar.

134. Because Gernsback said nothing about it, we can only assume those twenty years included the usual rights to an injunctive remedy as well as the opportunity to obtain damages in the form of lost profits or, more likely, a “reasonable royalty” fee that estimated what the infringer would have agreed to pay to the science fiction author if they had bargained for the right to use the author’s ideas. 35 U.S.C. § 154 (2011) (twenty-year term); id. §§ 283–84; cf. 35 U.S.C. § 154 (1952) (seventeen-year term).

135. It took “The Nautilus,” Gernsback stated, “so vividly described in 20,000 Leagues Under the Sea, 27 years to become an actuality . . . . Radar, accurately predicted in all its technical elements in my novel RALPH 124C 41+ in 1911, did not become a reality till about 27 years later.” Gernsback, supra note 104, at 2.
This twenty-seven-year estimate loosely tracks reality, at least for these two examples. Gernsback described the use of radar to identify aircraft in 1911. The technology was adopted by the military in the late 1930s or early 1940s.136 This represents a term of twenty-seven years, more or less, between Gernsback’s disclosure in science fiction and real-world deployment of the technology. (That said, radar was described in patents earlier than 1911, and below in Part VI.A.1 we explain why radar is a highly imperfect illustration of some of Gernsback’s theories.)

The submarine example also fits this timeframe. Jules Verne described an underwater vessel, “The Nautilus,” in 20,000 Leagues Under the Seas, which was first serialized between 1869 and 1870. It featured the unforgettable Captain Nemo living quite comfortably with a full crew aboard an electrically powered submarine.137 The inventor Simon Lake designed and submitted plans to the navy for a submarine in 1892. He patented aspects of his submarine starting in 1896. As with the radar example, there was a period of about twenty-seven years between disclosure in science fiction and reduction to practice. We discuss this example further below, revealing that Lake was in fact directly influenced by Verne.138

These examples clearly informed Gernsback’s determination that a thirty-year period was needed for the Provisional Patent. His “27 years” number was probably a decent estimate of how long someone like Verne or Gernsback would need to wait before they could make any significant money off their patents. Whether the timeframe is generalizable to other examples, of course, is less clear. Many science fiction inventions—such as AI chat bots—took a lot longer.139 Some may never come to pass. That said, the patent system as we know it is not currently tailored to individual inventions or technology field, either. The assumption is that the twenty-year term length works well for most inventions.140

We will critique Gernsback’s Provisional Patent proposal in Part V, but we will first move to his second proposal: enhancing science fiction’s function as prior art.

B. ADVOCATING FOR SCIENCE FICTION AS PRIOR ART

The second piece of Gernsback’s patent reform proposal was designed to enhance the status of science fiction as prior art. Despite his early optimism on this point,141 he was now fed up with the U.S Patent Office’s continual failure to take science fiction

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136. See Skolnik, supra note 43.
138. See infra Part VI.A.
139. See supra Introduction (discussing Asimov’s fictional MUITIVAC of the 1950s relative to ChatGPT, unveiled in 2022).
141. Decades earlier, Gernsback asserted that patent offices around the world routinely read science fiction. See supra Part II.
seriously in performing prior art searches. He was now “quite certain that the Patent Office today does not routinely scan all the Science-Fiction stories which appear either in the Science-Fiction press or in general magazines.” He hypothesized that the reason for this negligence was that “[n]either Science Fiction authors nor Science Fiction publishers” took science fiction seriously or were interested in promoting science fiction as potential prior art that might be used in assessing the novelty of real inventions. “Why should the Patent Office treat Science Fiction press seriously when neither author nor publisher are serious about it?”

As the “remedy” for this oversight, Gernsback proposed a novel methodology for getting science fiction stories to the Patent Office. He argued that authors and publishers should “get together” to review science fiction manuscripts to ascertain whether they contained “a new and feasible idea.” If so, the story should be published with “a distinguishing mark or design” to be “adopted by all publishers” in order to certify that a particular story contained a new and technically feasible idea. In fact, Gernsback proclaimed, he himself had already designed a mark that publishers could use to identify qualifying science fiction stories—“a five-pointed star resting on top of a sphere. The center of the sphere shows the letters SF.” Any science fiction stories that had been marked in this distinctive way should then be sent directly to the Patent Office, with “the idea or device clearly marked with a color crayon.”

Gernsback had been thinking about adopting such “a distinguishing mark or design”—a certification mark, really—for quite a while. He began his search for a “Symbol for Scientifiction” in 1928, when he ran a contest in Amazing Stories offering a $300.00 prize for a winning design. “[W]hat scientifiction needs,” Gernsback proclaimed to his readers, “is some sort of label—an emblem, or a trade-mark, so to speak.” Below is the result of the contest, the Symbol for Scientifiction as drawn by Gernsback’s illustrator Frank Paul.

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142. The published version deleted Gernsback’s expression of frustration with authors and publishers for not taking science fiction seriously enough. Perhaps Gernsback was more willing to express anger at his own community orally than he was in print, or perhaps the other editors at SCIENCE FICTION-PLUS did not agree with what he was saying. Compare Gernsback, supra note 105, at 6, with Gernsback, supra note 104, at 2.

143. For whatever reason, these details about marking stories with a crayon and delivering them to the Patent Office were entirely deleted in the published version, even though they were critical to what he was proposing. Compare Gernsback, supra note 105, with Gernsback, supra note 104, at 2.

144. Unlike trademarks, which identify the source of goods or services, certification marks certify that a good or service meets a standard. 15 U.S.C. § 1127 (1946).

145. Gernsback, supra note 90, at 5. The winning symbol was actually a combination—literally a mish-mash—of the first three winning entries. It contains a gear wheel, a pen/test tube, the words “fact” and “theory” written on gears, the moon, stars, and a planet. See Gernsback, supra note 90, at 5; see also WESTFAHL, supra note 20, at 47.
Regardless of which symbol was applied, Gernsback’s hope was that the Patent Office would shortly be deluged with marked-up versions of science fiction stories. That is why he ended with the somewhat ominous prediction that “sooner or later the patent office will take notice.”

Compared to his Provisional Patent concept, this part of Gernsback’s proposal has far more grounding in the law, both today and in 1952. We can argue over the merits of Gernsback’s idea to operate what was essentially a certification program and send selected science fiction to the Patent Office. But it is hard to disagree with his broader point that science fiction can theoretically count as prior art. As explained above, patent prior art includes printed publications and other publicly available content, including published works of science fiction. The main legal barrier keeping science fiction out of prior art is enablement. To anticipate an invention on novelty grounds, prior art

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149. See text and notes supra Part II.
must be enabled, meaning others must be able to practice the invention from reviewing the prior art reference.\textsuperscript{150}

A lot of science fiction will fail patent law’s enablement standard. However, for a variety of reasons, some science fiction can still qualify as prior art, even without altering the usual rules. First, the enablement bar is in certain respects more lenient for prior art than for patent applications. For example, prior art does not need to show how to use an invention to anticipate it—only how to make it.\textsuperscript{151} Second, as a procedural matter, it is rather easy for examiners to get away with citing prior art that is only loosely enabled.\textsuperscript{152} Third, and most importantly, science fiction is far more likely to enter the patent system as \textit{obviousness} prior art than as novelty prior art. Whereas anticipation for lack of novelty requires each element to be enabled by a single prior art reference, obviousness rejections permit combining multiple references that need not, on their own, enable the invention.\textsuperscript{153} Thus, even if a science fiction author’s disclosure does not enable every aspect of an invention, the author’s depiction could, in combination with other references, help render the final result obvious.

Considering science fiction for obviousness purposes raises one additional legal hurdle that perhaps best showcases why, from a normative standpoint, Gernsback cared so much about prior art status. Obviousness prior art must additionally be “analogous” to a given invention—meaning it must either be from the “same field of endeavor” as the claimed invention or “reasonably pertinent” to the particular problem faced by the inventor.\textsuperscript{154} Science fiction, to the extent it is considered merely a medium of entertainment, might not be deemed analogous under this standard. However, Gernsback’s view was that it should be. The whole point of his proposal to send science fiction to the Patent Office was to force examiners, and the science fiction community

\textsuperscript{150} See, e.g., Amgen Inc. v. Hoechst Marion Roussel, Inc., 314 F.3d 1313, 1354–55 (Fed. Cir. 2003) (“[A] non-enabled disclosure cannot be anticipatory (because it is not truly prior art) if that disclosure fails to ‘enable one of skill in the art to reduce the disclosed invention to practice.’”) (citation omitted).

\textsuperscript{151} In addition, if a prior art reference enables a single species, this can anticipate a patent to a whole genus. In contrast, a patent applicant may need to disclose more than a single species in order to enable a claim covering an entire genus. See, e.g., Mishchenko, supra note 44, at 1591 n.136 (citing In re Hafner, 410 F.2d 1403, 1405 (C.C.P.A. 1969); In re Lukach, 442 F.2d 967, 970 (C.C.P.A. 1971)); see also Dmitry Karshtedt, Mark A. Lemley & Sean B. Seymore, The Death of the Genus Claim, 35 HARV. J.L. & TECH. 1, 22–54 (discussing various developments in the law that make it harder to enable a genus claim by disclosing only a few species within the genus).

\textsuperscript{152} According to the Office’s own rules, any prior art reference asserted by the patent examiner “is presumed to be operable. Once such a reference is found, the burden is on applicant to rebut the presumption of operability . . . .” That said, “[w]here a reference appears to not be enabling on its face . . . an applicant may successfully challenge the cited prior art for lack of enablement by argument without supporting evidence.” MANUAL OF PATENT EXAMINING PROCEDURE (MPEP) § 2121 (2023); see also Janet Freilich, Ignoring Information Quality, 89 FORD. L. REV. 2113, 2124 (2021) (citing Amgen Inc., 314 F.3d at 1355) (“[I]n patent prosecution the examiner is entitled to reject application claims as anticipated by a prior art patent without conducting an inquiry into whether or not that patent is enabled . . . .”).

\textsuperscript{153} To quote the Federal Circuit, for an obvious rejection, the reference must only enable “the relied-upon portion of its own disclosure . . . [A] reference that does not provide an enabling disclosure for a particular claim limitation may nonetheless furnish the motivation to combine, and be combined with, another reference in which that limitation is enabled.” Raytheon Techs. Corp. v. Gen. Elec. Co., 993 F.3d 1374, 1380–81 (Fed. Cir. 2021).

\textsuperscript{154} In re Bigio, 381 F.3d 1320, 1325–26 (Fed. Cir. 2004).
itself, to take science fiction “seriously”\textsuperscript{155} as a scientifically-grounded resource—a resource that, unlike patents, is actually read by persons working in technical fields.

Still, despite science fiction’s legal status as potential prior art, the reality is that it is not used that way very often. And this was Gernsback’s point. Unfortunately, we cannot know for sure how often examiners have resorted to science fiction as prior art. For most of the U.S. patent system’s history, patent applications that were filed but never granted remained secret—no records were made available to the public. This changed for patent applications filed after the year 2000, but even today, there are various ways to prevent applications from publishing.\textsuperscript{156} Despite this evidentiary barrier, we have found some instances where examiners cited to science fiction as prior art. For example, when the inventor Charles Hall applied for a patent directed to a waterbed, the examiner rejected the patent initially by citing to Robert Heinlein’s disclosure in \textit{Stranger in the Strange Land} (1961) of a “hydraulic bed.”\textsuperscript{157}

But we suspect formal citations to science fiction as prior art are comparatively small. The reason is that no one has very strong incentives to cite to science fiction during the examination process. Patent examiners have little time to spare. They are unlikely to spend time searching for science fiction references when other types of references are more analogous and more easily searchable.\textsuperscript{158} Inventors, meanwhile, are not required to identify all the prior art that influenced them. They only have to identify prior art that is critical to the technical merits of the invention and that is not “cumulative” of other prior art already cited in the application record.\textsuperscript{159} Even if an inventor was genuinely inspired by a work of science fiction, the technical teachings in the work of science fiction may be cumulative of other nonfictional prior art, and so would not have to be cited. For example, if the inventor of a new form of artificial intelligence was deeply inspired as a teenager by an Isaac Asimov story about an all-intelligent computer, the inventor would not be required to reveal the story to the Patent Office, so long as other prior art—such as old patents and journal articles—contains the same technical details as Asimov disclosed, and is already cited in the record. The upshot is that science fiction probably qualifies as prior art far more than anyone actually cites to it.

\textsuperscript{155} Gernsback, supra note 105, at 6 (“Why should the Patent Office treat Science Fiction press seriously when neither author nor publisher are serious about it?”).

\textsuperscript{156} See 35 U.S.C. § 122 (1999); see also Mishchenko, supra note 44, at 1565 n.1.

\textsuperscript{157} Hall was eventually able to get a patent on his waterbed anyway by adding additional technical details that allowed Hall to differentiate his invention from Heinlein’s description. U.S. Patent No. 3,585,356 (issued June 15, 1971); see Brean, supra note 148, at 3–4.

\textsuperscript{158} Frakes & Wasserman, supra note 73, at 978; see also Christopher A. Cotropia, Mark A. Lemley & Bhaven Sampat, Do Applicant Patent Citations Matter?, 42 Rsch. Pol’y 844, 846 (2013) (noting that examiners use prior art they find themselves to reject applications); Brean, supra note 148, at 4 (“[P]atent examiners do not presently search through fiction in a way that effectively locates those works that are relevant to particular inventions.”).

\textsuperscript{159} Applicants must cite any prior art known to be “material” to the patentability of their inventions, but materiality is defined as both invalidating and not cumulative of other prior art. 37 C.F.R. § 1.56 (“[R]eference is material . . . when it is not cumulative to information already of record or being made of record in the application, and establishes, by itself or in combination with other information, a prima facie case of unpatentability of a claim . . . .”).
Gernsback’s insistence that the Patent Office review more science fiction as prior art presumably stemmed from his long-standing view that the Patent Office should do more to ensure issued patents are vetted against prior art so that inventors can get patents that are actually “worth something” at the end of the day.160 However, his proposal to introduce even more prior art is in serious tension with his complaint that it is too easy to invalidate patents. He had said in earlier years that he was worried that defendants in patent lawsuits could find obscure prior art, like some old “farm journal” article, and use it to “fight the case.”161 Yet here he was, advocating for science fiction as a potential source of prior art, which defendants could presumably raise in litigation.

Still more surprising, Gernsback apparently wanted the Patent Office to review more science fiction partly so that science fiction could be used to narrow the scope of granted patents. Gernsback stated in his speech that if examiners used science fiction to reject patent applications, this could prevent a patent applicant from getting “the sweeping patent claims he could obtain, had he not been thus anticipated.”162 In other words, Gernsback recognized that treating science fiction as prior art had power to constrain the scope of patents in the real world and ensure that what was in the public domain stayed there.163

This appeal to science fiction as a way to weaken patents is surprising, given Gernsback’s lifelong advocacy for strong patents. It is certainly possible that by this time Gernsback had changed his mind. But we think it more likely that Gernsback’s search for credit simply took precedence over all else. If science fiction authors could not get patents for their inventions, at least their work could be cited as prior art. A mere citation in a patent would not directly help authors financially, but it could give them new recognition among scientists and elevate the reputation of science fiction as an institution.

It is not hard, in context, to see why Gernsback cared so much about this issue. Gernsback’s entire reputation and legacy was tied up with the field of “scientifiction” which he started back in 1926. But the genre had grown far beyond his original focus on inventions of the future and had reached far more members of society than he ever envisioned it could. More than anything, Gernsback wanted to reward science fiction authors who were like him, who dwelt on the technical details and successfully “prophesied” the future of technology. Gaining this style of fiction the status of prior art could at least give such science fiction authors a bit more credit and a status akin to “inventor.”

160. See notes and text supra Part II.C.
161. See discussion of Gernsback’s op-ed supra Part II.C.
162. Gernsback, supra note 105, at 6 (“Often the Patent Office will cite a magazine article which describes the identical device submitted by an inventor for a new patent. In that case the inventor will not be able to get the sweeping patent claims he could obtain, had he not been thus anticipated.”) (emphasis added).
163. See Brean, supra note 148, at 4 (“Works of fiction should be searched by the PTO as part of its patent examinations to further ensure that inventions are not appropriated from the public domain.”).
V. CRITIQUING GERNSBACK

Gernsback’s proposal to award Provisional Patents to science fiction authors is a fascinating piece of history. As discussed in the next part, we are very sympathetic to his idea that science fiction can play a role in innovation policy. And, as just alluded to, we also do not see any clear legal or policy justification for categorically excluding science fiction from prior art, especially when it is being used to render a later invention obvious.

However, Gernsback’s proposal to award science fiction authors patents is a remarkably bad idea from the perspective of patent policy. Even assuming we decide science fiction suffers from a problem of under-production and that a government subsidy of some kind is needed, patents—exclusive rights—are not the best way to achieve this goal. Patents are not, even if they sometimes seem to be, a “free lunch.”

As we discuss below, Gernsback did not appear to understand that patents come with social costs. More protection for inventors is not always better for society. Gernsback also had a curiously inflated view of the value of early-stage ideas as compared to the hard work and costly, time-consuming research and development that are usually required to reduce inventions to practice and make them commercially viable. Finally, we suspect that Gernsback’s proposals for new forms of patents were in part motivated by self-interest rather than purely a genuine concern for the public good.

A. IGNORING THE COSTS OF PATENTS

Gernsback thought of patents only as rewards for an inventor’s ingenuity. Thus, the notion that some “ingenious” ideas might remain unprotected by patents was anathema. But as any patent lawyer knows, patents are not just rewards. They create exclusive rights and, as such, generate social costs in the form of higher prices, restrictions on access, and obstacles to future research and innovation. Gernsback never acknowledged the social costs of patents. He simply ignored them.

If patents have no costs, then it makes sense to say that doctrines like enablement and incredible utility should be relaxed to make sure that more inventors—even those whose medium is science fiction—can get patents. But patents do have costs, and these doctrines are not empty mandates. The reason they exist is to prevent inventors from getting rights so early in the process that they gain the power to block off future technological developments. The person who conceives of an invention that is not yet


165. Gernsback, supra note 72, at 584.

reduced to practice, no matter how useful it sounds in theory, is not supposed to be able to pop up years later and sue the very people who get the invention to work and realize its true value to society. Otherwise, as the Federal Circuit aptly puts it, the prematurely-proclaimed “inventor” would be rewarded the spoils instead of the party who demonstrated that the [invention] actually worked.\(^{167}\)

These doctrines also help control patents’ scope. The enablement requirement ensures that the disclosure provided in a patent is commensurate with the scope of the patent’s right to exclude. For example, if the inventor drafts a patent to cover all types of “flying cars,” but only discloses how to make one type of flying car—like a flying car that is kept aloft using rapidly spinning helicopter blades—she cannot use that broad claim to control the many other possible variations of flying cars that she did not consider, like flying cars that use a jet engine.\(^{168}\) By making a patent’s scope commensurate with its disclosure, the law ensures that inventors cannot claim broadly and then control every variation of the invention.\(^{169}\)

One of the most important cases establishing the modern enablement doctrine was the so-called *Incandescent Lamp Patent* case. In 1880, two inventors, Sawyer and Man, had obtained a patent for a light bulb, called an “electric lamp.”\(^{170}\) The patent covered a huge range of materials for the conductor, even though they themselves only got a few materials to work—and not well at that. The owner of the Sawyer and Man patent sued companies that had adopted Thomas Edison’s far superior lighting system for patent infringement. Edison’s system used bamboo for the conductor but still fell under the Sawyer and Man patent’s broad claims.\(^{171}\) However, the Supreme Court held the Sawyer and Man patent was invalid because it did not sufficiently teach others how to practice the full scope of its claims without “undue experimentation.” Edison’s meticulous and time-consuming experimentation, through which he determined bamboo was a superior conductor, helped prove that Sawyer and Man’s patent did not provide enough details and also illustrated the injustice of allowing them to use such a broad patent to “put under tribute” the very person who perfected the invention that Sawyer and Man themselves never achieved.\(^{172}\)

If Gernsback had his way, these rules would be broken. Science fiction authors would be able to obtain Provisional Patents for literal science fiction—inventions that do not work at all—and use those patents to block off future developments. The situation would be even worse than in the *Incandescent Lamp Case*. At least Sawyer and Man invented *something* that worked and taught the public how to make and use it. But imagine if Isaac Asimov had obtained a Provisional Patent in the year 1956 for a “smart automatic computer capable of answering any question posed to it.” Asimov, despite

\(^{167}\) Rasmusson v. SmithKline Beecham Corp., 413 F.3d 1318, 1325 (Fed. Cir. 2005).


\(^{169}\) This issue comes up frequently in regard to so-called “genus claims.” Karshtedt, Lemley & Seymour, *supra* note 151, at 10.


\(^{171}\) *Id.* at 474–75.
not having taught the public how to make any working computer with such capabilities, could have chosen to activate this patent until the year 1986. The computer industry would have been forced to deal with the specter of the “Isaac Asimov smart computer” patent until 2006, when Asimov’s patent finally expired (assuming a twenty-year term). The fifty-year looming uncertainty about who would own what in the space could have deterred people from investing in the technology and founding computer companies.

B. OVERCONFIDENCE IN THE IMPORTANCE OF EARLY-STAGE IDEAS

Gernsback also overestimated the value of mere ideas as compared to execution. In the current system, patents go to the first person to get the invention to work, not the first person who sees the invention’s possibility and predicts its eventual workability. As discussed in Part IV, Gernsback believed this status quo unfairly devalued the work of science fiction authors. By focusing on reduction to practice, patents reward the “cold-blooded scientist” or the mere “manufacturer” rather than the true inventor. An inventor must, in Gernsback’s view, be a “prophet” who is capable of inventing “something that has not existed or been known on earth previously.”173 The people who come later were just mechanics, engineers, and profiteers, there to execute the author’s grand ambition by figuring out all the boring, practical details. This is why, when proposing his sui generis Provisional Patent, Gernsback placed his thumb on the scale of the person who gives the first description of a future invention that is technically sound, rather than the people who ultimately get the invention to work.174

But this is not how innovation works in practice. Ideas can be valuable, but there is usually a lot of work to do to complete the chain between mere idea and true innovation that has an impact on society.175 Ironically, one of the people Gernsback most admired was Thomas Edison.176 As discussed above, it was Edison’s diligent, expensive, and time-consuming experimentation that the Supreme Court used to show that Sawyer and Man did not deserve a broad patent covering lighting innovations they did not themselves possess. Edison understood better than anyone that ideas usually required significant testing before they were ready to be implemented and marketed to the public. In fact, Gernsback himself interviewed Edison in 1919 for his magazine, The Electrical Experimenter, and Edison’s advice to Gernsback and his readers was: “Ideas are easy . . . but working them into commercial shape is generally a long, tedious, and expensive job.” Thus, Edison recommended “that if the young inventor has an idea he had better reduce it to actual practise and be sure that it works before applying for a patent.”

173. See supra Part III; see also, e.g., Hugo Gernsback, Predicting Future Inventions, 11 SCI. & INVENTION 319 (Aug. 1923) (“Every inventor must be a prophet. If he were not, he could not think up inventions that will only exist in the future.”).

174. See supra Part IV.A.


176. ASHLEY, supra note 20, at 28 (noting that Edison and Tesla were Gernsback’s heroes).
Although Edison patented many of his inventions and brought his fair share of patent lawsuits, he revealed to Gernsback that in his “later years” he “made a rule . . . not to patent anything for which I knew there was no actual demand. Merely collecting patents is a waste of time, money, and energy.”

Even though he claimed Edison was his role model, Gernsback pursued the opposite strategy. Whereas Edison recommended meticulous testing and making sure the invention works and is commercially practical, Gernsback seemed to think the more outlandish and impractical the idea was, the better. He obtained many patents and disclosed countless ideas for future technologies—almost none of which he put into practice, let alone manufactured at scale. One notorious Gernsback invention was the Menisol. The Menisol was a concentration-enhancing device and method that required wearing a very large, enclosed metal helmet on one’s head to block out all sound and limit visual distractions. The wearer could not see, except straight ahead, and could not breathe, thus necessitating an oxygen tube to be inserted at the back of the helmet. Another Gernsback invention, which appeared to baffle a journalist reporting on it for the American Weekly, was a massive ocean-skimming liner, sort of a combination between a boat and a plane, that “would, literally, skim the water” at “100 miles an hour, or better,” whisking passengers across the Atlantic in “30 hours.” While this is an awe-inspiring image, it was, to quote the journalist, hugely “impractical if not impossible . . . .”

Gernsback wanted to give Provisional Patents to idea-generators like himself who thought up these sorts of awe-inspiring yet impractical inventions, regardless of how much work they did to make them work as a mechanical or a practical matter. But Gernsback thought ideas were more important than they actually are, and he did not seem to understand the costs such patents would place on the people, like Edison, who figured out the practical and commercial details.

**C. The Shadow of Self-Interest**

A different problem with Gernsback’s Provisional Patents proposal is that it comes across as highly self-interested. Gernsback titled his 1952 speech “The Impact of Science...
Fiction on World Progress” and repeatedly implied to his audience that his interest lay with the “public at large . . . .” 183 However, in light of Gernsback’s personal history and some of the statements he made during his lifetime, it is hard not to suspect that Gernsback in fact wanted this type of patent reform because it would be good for him.

Gernsback did not die a rich man. He was constantly reminded of this fact because he kept a sign in his office that said, “If you’re so smart, why aren’t you rich?” When asked about it, he responded, “I keep it there as a humbling reminder that it’s one question I can never answer.” 184 A Provisional Patent for each Gernsback prediction that came to pass would certainly have been a way to change Gernsback’s financial status. We have some evidence that Gernsback considered this very possibility. He did not say so directly. But reading between the lines of what he did say leads us to the conclusion that Gernsback saw Provisional Patents as a way to profit from his successful predictions of future inventions.

In an interview in 1951, Gernsback raised the prospect that “from some points of view the radio and other industries owe him several hundred million dollars for inventions and devices he disclosed in his various publications over the past 45 years, but did not patent.” Gernsback told the interviewer—apparently lightheartedly—that he would “not press his claims at this late date. ‘What would I do with a zillion dollars?’” “I couldn’t buy anything worth more than the satisfaction of having contributed creatively to technical progress.” 185

This expression of humility and disinterest in profit does not come across as authentic. Gernsback must have known that, under the law, he could not have asked for money for inventions he did not patent and freely disclosed to the public. Gernsback must also have known that, in most cases, he could not patent those inventions. He had no problems patenting when he came up with a patentable invention and where he thought it was worth the fees to do so. It is also not credible that he would not have attempted to sell, license, or commercialize the patents that he did have. In fact, we have documentation showing that Gernsback attempted, apparently unsuccessfully, to generate interest in his hydraulic fishery patent among fisheries and engineering companies. 186

183. Gernsback, supra note 104, at 2 (“The public at large is beginning to take Science seriously. People look to it confidently because they know for the first time in the history of mankind—through the medium of Science-Fiction—man can now gaze into our future world with all its wonders . . . .”).


185. Hugo Gernsback, s-f pioneer, AUTHENTIC SCI. FICTION, May 1952, at 112, 112 (discussing comments Gernsback made in his publication, FORECAST 1952 (Christmas 1951)).

186. For example, a series of letters from 1957 reveals that Gernsback sought to have Williams Brothers Company (which apparently had experience in marine installations) construct a hydraulic fishery according to the specifications in Gernsback’s patent. The company’s Chief Engineer, Wilson N. Gilliat, found the idea “quite novel and intriguing” and posited that “such an installation could be designed and installed from a practical viewpoint.” Gilliat stated that the company “would be privileged to prepare a preliminary engineering report for any client you might acquire.” Letter from Wilson N. Gilliat, Chief Engineer, Williams Bros. Co., to Hugo Gernsback (Apr. 10, 1957) (on file with authors). But the final letter, dated April 12, 1957, is from Gernsback. It states: “Unfortunately, I have not been able to make any arrangements yet with the larger fisheries, but I am plugging along with them. . . . New things of this type are always difficult to industrialize. If anything tangible comes along, I will of course get in touch with you.” Letter from Hugo Gernsback to Wilson N. Gilliat, Chief Engineer, Williams Bros. Co. (Apr. 12, 1957) (on file with authors).
To the contrary, we suspect that Gernsback would have tried to patent as many inventions as possible and done what he could to monetize those legal rights. Adding a Provisional Patent option—especially if it were directed specifically at his favored medium of science fiction—would have changed the status quo for him. Assuming he kept up his track record as a predictor of future inventions, he would have obtained a new stream of profits without any additional effort on his part, besides filing for the provisional rights. Nice work if you can get it.

VI. HOW SCIENCE FICTION CAN AFFECT INNOVATION

Gernsback’s lifelong conviction that science fiction should be recognized as true invention was eccentric. His Provisional Patents proposal was poorly thought out from many angles. His views subjected him to the ridicule of others within the science fiction community. Even as they showed him grudging respect as a “father-figure,” they did not embrace Gernsback’s theory of what science fiction was and his “overriding interest in sf as a vehicle for prediction . . . .”\(^\text{187}\) Nor did they like Gernsback’s writing style. One influential critic and historian of the genre opined that Gernsback’s tunnel vision for “gadgets” of the future introduced a “deadening literalism” that negatively affected how science fiction was written for decades.\(^\text{188}\)

Such dismissive judgments are a missed opportunity. Gernsback had a truly unique perspective. He was one of a short list of people with combined experience and influence in both the world of science fiction, on the one hand, and the world of patents and inventing, on the other.\(^\text{189}\) Taking Gernsback seriously forces us to consider the possibility that, even though he was wrong about some things, he might be right about his bigger-picture intuition that science fiction can influence innovation in a similar way to patents.

As discussed in Part III.A, traditional disclosure theory posits that patents impart useful technical information about how to make inventions work so that others can replicate and build upon those inventions in the real world.\(^\text{190}\) On this view,


\(^{188}\) See, e.g., Brian Aldiss, BILLION YEAR SPREE: THE TRUE HISTORY OF SCIENCE FICTION 209–12 (1973) (discussing evolution of the genre across time and describing Gernsback’s views as outdated and too focused on inventions and “gadgets”); see also Wolfe, supra note 20, at 45 (“In terms of style, characterization, plot, and just about all the qualities of good fiction, Ralph 124C 41+ is almost unreadably awful.”).

\(^{189}\) This is not to say he was the only science fiction author who was also a scientist. See, e.g., Jena Brown, 13 SCIENCE FICTION BOOKS WRITTEN BY ACTUAL SCIENTISTS, THE PORTALIST (July 26, 2023), https://theportalist.com/sci-fi-books-written-by-actual-scientists [https://perma.cc/6U59-XG3H] [https://web.archive.org/web/20230917193912/https://theportalist.com/sci-fi-books-written-by-actual-scientists].

\(^{190}\) See supra Part III.A.
informational disclosures for inventions that do not yet work have little value.\footnote{Janet Freilich, *The Replicability Crisis in Patent Law*, 95 IND. L. J. 431, 439 (2020) ("[P]atents are supposed to disclose useful information about how to make and use new technologies and . . . instructions on how to make and use a product that does not work . . . are not helpful.").}

However, by drawing on Gernsback’s theories, we argue that science fiction can in fact impart useful information that is not predicated on immediate reduction to practice. Even though science fiction stories fall short when it comes to enablement and operable utility, they can provide information that is important to innovation and technology development and is broadly useful to society. What is more, in certain respects, science fiction can match or exceed patents’ potential impact on innovation. It can fill gaps in innovation policy by supplying teachings, insights, and motivations that are beyond the purview of the patent system.

We identify below three types of information that science fiction can supply and through which science fiction can potentially influence innovation. To be clear, the fact that science fiction has the capacity to affect innovation does not mean patents are a necessary or appropriate reward system for science fiction. If anything, copyright law would seem to be the more natural vehicle for rewarding a science fiction author’s work. This is especially true given the high importance that Gernsback placed on the expressive medium through which science fiction imparts information.\footnote{Gernsback never looked to copyright as a solution to the problems he perceived in remunerating and recognizing science fiction authors. He never copyrighted his original run of AMAZING STORIES. See supra note 146. We think this choice was quite deliberate. The Copyright Act expressly denies protection for mere ideas and inventions themselves, and yet that is exactly what Gernsback wanted. See 17 U.S.C. § 102(b) (1976) ("In no case does copyright protection for an original work of authorship extend to any idea, procedure, process, system, method of operation, concept, principle, or discovery, regardless of the form in which it is described, explained, illustrated, or embodied in such work."); see also 17 U.S.C. § 101 (1976) (largely denying protection for “useful articles”). Thanks to Michael Madison and Zvi Rosen for their helpful comments on this issue. For scholarship discussing the fluid boundaries between copyright and patent (as well as trade dress protection), see, e.g., Pamela Samuelson, *Strategies for Discerning the Boundaries of Copyright and Patent Protection*, 92 NOTRE DAME L. REV. 1493, 1497 (2017), and Christopher Buccafusco & Mark A. Lemley, *Functionality Screens*, 103 VA. L. REV. 1293 (2017). See also Mark Bartholomew & John Tehranian, *Historical Kinship & Categorical Mischief: The Use and Misuse of Doctrinal Borrowing in Intellectual Property Law*, 109 IOWA L. REV. 101 (2023).}

A. SUPPLYING A STIMULUS TO LATER INVENTORS

First, science fiction can supply inspiration and (what Gernsback termed) a “stimulus” to readers, who may go on to pursue the inventions they learn about in science fiction and put them into practice.\footnote{Gernsback, supra note 30, at 195.} This section explains this stimulus theory and how it can affect innovation. It also explores how stimulating future inventions relates to, and yet differs from, the mere prediction of future inventions.

I. The Stimulus Theory

A science fiction author can inspire someone and give them a stimulus to pursue an invention without explaining how to make the invention work at all. If the author
paints a vivid enough picture of the invention and showcases its potential utility to society, this alone can drive readers to make it in the future, even without providing the practical details.

Supplying a stimulus to later generations is something that patents cannot do, or at least not to the same degree. Because patents are granted later in the innovation lifecycle and require actual or constructive reduction to practice, patents cannot supply stimulus to someone else to make an invention whose feasibility is still many years away. As explained, even though patent law does not require the author to produce a working model, let alone a marketable product, the inventor still needs to supply enough details to permit a person having ordinary skill in the art to make and use the invention at the time of filing. The invention must be operable and have a utility that is supported by current science. Patents cannot, under these doctrines, reveal a possible invention that might be useful one day; patents are only awarded upon successful completion of such an invention. As the Supreme Court famously put it, “[w]e are not blind to the prospect that what now seems without ‘use’ may tomorrow command the grateful attention of the public . . . . But a patent is not a hunting license. It is not a reward for the search, but compensation for its successful conclusion.”

In contrast, science fiction can inspire and push readers into action well before the conventional—i.e., patentable—invention lifecycle begins. A reader, tantalized by an attractive fictional technology, can be spurred to study the state of the art, learn its limitations, and generate new knowledge or create new technical tools to bring the state of the art closer to the imagined reality. Star Wars fans have gone to great lengths to come up with ways to make real-world lightsabers. Fans of Back to the Future: Part II are engineering actual hoverboards. When seen in this way as a stimulus, the earliness of the science fiction author’s disclosure is an advantage, not a downside. It is

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194. 35 U.S.C. § 112; see also citations supra Part III.A.

195. Brenner v. Manson, 383 U.S. 519, 535–36 (1966) (invalidating patent for a new process for making a steroid where the asserted utility, the possibility of treating tumors, was unproven and only suspected due to the fact that the steroid was similar in structure to steroids known to inhibit tumors in mice).

precisely because science fiction supplies information about future inventions long before they are possible that science fiction can induce innovation. The fact that the author—the originator of the idea for the invention—does not endeavor to reduce the invention to practice does not destroy the efficacy of their disclosure, assuming that the story is inspiring enough.\footnote{198}

On this view, science fiction’s entertaining fictional format is an advantage as compared to how patents are presented. The more likely people are to encounter science fiction and be inspired by it, the more likely science fiction is to affect innovation. Of course, people can learn about inventions in textbooks, journal articles, and patents. But if the purpose is to inspire and supply a stimulus, then science fiction is arguably a superior medium because, to quote Gernsback, it supplies this information “in a very palatable form . . . imparting knowledge, and even inspiration, without once making us aware that we are being taught.”\footnote{199} It “fires the reader’s imagination more perhaps than anything else of which we know,” leaving readers “deeply thrilled” as their “imagination is fired to the nth degree.”\footnote{200} Outside a small community of inventors, patent attorneys, and law professors, few people can honestly say they are “deeply thrilled” by reading patents.

As a strictly empirical matter, it is of course hard to prove whether science fiction in fact inspires readers and stimulates them to bring science fictional inventions into practice. We recognize that limitation—which, notably, also hampers efforts to judge the patent system’s influence on innovation.\footnote{201} Be that as it may, many commentators have perceived science fiction’s influence on some of the world’s most consequential innovations.\footnote{202} A few popular examples of science fictional inventions that supposedly inspired real-world inventions include Jules Verne’s 1869 depiction of a submarine and Gernsback’s 1911 description of using “radar” to find a flying object,\footnote{203} as well as numerous inventions from Gene Roddenberry’s \textit{Star Trek}.\footnote{204} More recently, commentators have theorized that Neil Stephenson’s virtual reality world, the Metaverse, inspired “Big Tech” to invest billions of dollars in developing virtual reality

\begin{footnotes}
\item[198] Cf. Abramowicz & Duffy, supra note 81, at 1599.
\item[199] Gernsback, supra note 25, at 3.
\item[201] As patent scholars frequently observe, it is hard to locate good evidence that the patent system drives innovation. See, e.g., Mark A. Lemley, \textit{Faith-Based Intellectual Property}, 62 UCLA L. REV. 1328 (2015).
\item[203] As explained directly \textit{infra} at notes 210 to 215 and accompanying text, the radar and submarine examples are quite nuanced under scrutiny.
\item[204] William Shatner, the show’s star, attests that the series inspired countless real-world inventions. \textit{See William Shatner, I’m WORKING ON THAT: A TREK FROM SCIENCE FICTION TO SCIENCE FACT} (2001). We recognize that Shatner is not an authoritative source. Some of these examples, including the communicator-to-cell phone linkage, have been challenged. Brian Cronin, \textit{Did Star Trek Communicators Inspire the Invention of the Cell Phone?}, CBR (Jan. 6, 2019), https://www.cbr.com/star-trek-communicators-martin-cooper-cell-phone/ [https://perma.cc/PPH2-8JT4] [https://web.archive.org/web/20230917195721/https://www.cbr.com/star-trek-communicators-martin-cooper-cell-phone/]. We explore this claim further in note 231 \textit{infra} and accompanying text.
\end{footnotes}
systems, and that, for better or worse, science fiction inspired three technology moguls—Jeff Bezos, Richard Branson, and Elon Musk—to start private space companies with the goal of taking humanity to the stars.

It is unlikely that all of these examples prove that science fiction had a direct influence on inventors. Some of them do. For example, one of the most convincing cases is that of Elon Musk, who stated his love for Isaac Asimov’s Foundation trilogy, which features an intergalactic empire. Taylor Locke, Elon Musk Shares the Science Fiction Book Series That Inspired Him To Start SpaceX, CNBC (Feb. 22, 2020), https://www.cnbc.com/2020/02/21/elon-musk-recommends-science-fiction-book-series-that-inspired-spacex.html [https://perma.cc/J236-WEDG]


examples is the theory that Jules Verne inspired Simon Lake to build a submarine. There is extraordinarily good evidence that Verne’s description of the Nautilus in *Twenty Thousand Leagues under the Seas* directly led to Lake’s invention. Verne was not the first to describe a submarine. He was not even the first to name it the Nautilus. However, in his 1930 autobiography, Lake described Verne as “the director-general of my life.” He attested that Verne’s book left him with a lifelong obsession with making, and improving upon, Verne’s Nautilus. He wrote that he became “so excited” that he began to read “everything which might have a bearing on the problems attending my proposed penetration of the depths of the sea.” When Lake completed construction of his much-anticipated submarine, the *Argonaut*, he received a congratulatory telegram from none other than Verne himself, which Lake described as “one of the finest moments of my life.” The submarine depicted in Lake’s 1896 patent looks and works very much like how Verne’s Nautilus was described—even including how water tanks could be filled or emptied as needed to change the buoyancy for diving and surfacing. This chain of events—from a work of science fiction, to an inventor’s imagination, to the Patent Office—is very hard to dispute.

On the other hand, other oft-cited examples of science fiction’s impact are not as compelling. For example, Gernsback’s description of radar in *Ralph 124C 41+* is a very poor illustration of the theory that science fiction affects real-world innovation by supplying stimulus to later inventors. The reason is that it seems quite clear that the person who eventually patented working radar technology in 1917, the British physicist and inventor Sir Robert Watson-Watt, did not know about Gernsback’s story until much later. According to Sam Moskowitz, “no one was more surprised by [Gernsback’s radar] prophecy than Sir Robert Watson-Watt.”

Instead, Gernsback’s depiction of radar is a much better illustration of the second type of informational disclosure that science fiction can provide—predicting a future invention, while not necessarily inspiring anyone to make it. Gernsback’s description of radar is a testament of his prescience and his ability to predict future developments,

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210. A “Nautilus” had been commissioned decades earlier. In the 1790s, Napoleon, then Emperor of France, commissioned a submarine from the famous American inventor, Robert Fulton, who chose the name “Nautilus.” The submarine was tested in the year 1800 but never widely used (it leaked). Napoleon abandoned the project. HERBERT R. LOTTMAN, JULES VERNE: AN EXPLORATORY BIOGRAPHY 131 (1997).

211. In Lake’s own words: “Jules Verne was in a sense the director-general of my life. When I was not more than ten or eleven years old I read his *Twenty Thousand Leagues Under the Sea* and my young imagination was fired . . . . [W]ith the impudence which is a part of the equipment of the totally inexperienced I found fault with some features of Jules Verne’s Nautilus and set about improving on them.” SIMON LAKE, SUBMARINE: THE AUTOBIOGRAPHY OF SIMON LAKE 10 (1930).

212. Id. at 117 (“Jules Verne whose Nautilus had been responsible for my descent into the sea in a submersible cabled congratulations. That was one of the finest moments of my life.”).

213. See, e.g., Submarine Locomotive, U.S. Patent No. 557,835 (issued 1896); see also Combined Surface and Submarine Vessel, U.S. Patent No. 650,758 (issued 1900).

214. Watson-Watt obtained a UK patent in 1917. See Improvements in and Relating To Aerial Circuits for Wireless Telegraphy and Other Purposes, British Patent No. GB 129336 (filed Oct. 24, 1917). Note that there were other claims to priority and other patents as well.

not of his ability to inspire readers and give them a stimulus to put his inventions into practice.

2. Distinguishing Stimulus from Mere Prediction

Science fiction can potentially affect innovation merely by predicting inventions and future technological developments before they arrive. Few people think generating predictions is the genre’s main purpose. But prediction is what a lot of science fiction authors end up doing. This was true in Gernsback’s day, and it remains true today. The highly acclaimed modern author, Kim Stanley Robinson, “likens the genre” of science fiction “to a pair of old-fashioned 3-D glasses,” which offer “predictions about the future” through one lens and “metaphors for our own time” through the other.

When it comes to predictive capacity, science fiction treads where patents cannot. Patents cannot effectively “predict” what is to come. The enablement and utility doctrines ensure that inventors do not get credit for “guessing correctly.” For example, a patent that describes a remarkable new compound that might hypothetically cure a deadly disease but provides little proof for this hypothesis would be invalid—even if it ultimately turns out later that the compound does cure the disease. Patents cannot provide insight on the inventions of the far future because those inventions cannot be


218. See, e.g., In re 318 Pat. Infringement Litig., 583 F.3d 1317, 1327–28 (Fed. Cir. 2009) (finding patent on use of galantamine for treating symptoms of Alzheimer’s disease invalid due to lack of utility and lack of enablement given that patent did not provide sufficient evidence that using galantamine could be effective in treating Alzheimer’s at time of filing, despite the fact that efficacy was later shown and galantamine was later approved by the FDA for this purpose); Rasmusson v. SmithKline Beecham Corp., 413 F.3d 1318, 1325 (Fed. Cir. 2005) (observing that a plausible hypothesis is not enough to justify granting patents for “inventions’ consisting of little more than respectable guesses as to the likelihood of their success . . . ”); see also Sean Seymore, Patents Law’s Role in Protecting Public Health, NOTRE DAME L. REV. (forthcoming 2023) (manuscript at 6–21) (available through SSRN, https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4361765 [https://perma.cc/43A4-ASSS] [https://web.archive.org/web/20230929004827/https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4361765] (discussing practice of denying patents for public health inventions that are not credible or lack foundation in contemporary science).
patented.\textsuperscript{219} Science fiction, in contrast, can do far more predicting precisely because it is liberated from the doctrinal requirements of enablement and presently-availing utility. Science fiction can disclose information about technologies of the future far in advance of their arrival.

In Gernsback’s day, predicting the future was seen as an impressive and worthy endeavor. Starting in the late nineteenth century, there was a “flood” of so-called “forecasting literature” in which writers sought to tell readers what awaited humanity in subsequent centuries.\textsuperscript{220} Jules Verne was praised for his “anticipatory inventions” and successful track record of prediction.\textsuperscript{221} Verne’s The Day of an American Journalist in 2889—which is now rumored to have been authored by his son, Michael—is a short story told from the perspective of a journalist in the year 2889. It describes all sorts of technological novelties that have, in some form, come to pass—from the “aero-train” and the “telephote” to the use of solar energy as a power source.\textsuperscript{222} H.G. Wells, another crucial figure in the history of science fiction, was also praised for his forecasting abilities. In 1901, Wells authored a popular series of articles short-titled the “Anticipations,” in which Wells accurately predicted various developments—like “motor carriages” and “flying machines.”\textsuperscript{223}

Following in the tradition of his idols, Verne and Wells, Gernsback carved out his own reputation for making accurate predictions about the future. He became a fixture in the popular press, which referred to him using honorifics like “The Remarkable Mr. G” or the “Prophet of Science.” While Gernsback’s “description of radar” was considered his “most brilliant stroke,” his contemporaries praised the success of his Ralph 124C 41+ series “as a vehicle for scientific prediction” which “accurately prophesied advances in

\begin{footnotes}
\footnote{219. Compare the trademark system: Trademark registrations, which require use in commerce or bona fide intent to use in commerce followed by actual use, can provide limited insight on the future. See Amanda Levendowski, Dystopian Trademark Revelations, 55 CONN. L. REV. 681, 681 (2023); see also 15 U.S.C. § 1051(a)–(b) (1988) (use and intent to use registrations).}
\footnote{220. Some academics tried to turn this into a serious field called “futurology” or “future studies.” See CLUTE & NICHOLLS, supra note 187, at 457–58; see also JILL LEPORE, IF, THEN: HOW THE SIMULMATIONS CORPORATION INVENTED THE FUTURE 24–26 (1ST ED. 2020) (recounting how the government’s computer, UNIVAC, famously predicted the results of the 1952 presidential election to much fanfare).}
\footnote{221. See H.G. WELLS, PREFACE, in THE COMPLETE SCIENCE FICTION TREASURY OF H.G. WELLS iii, iii–vi (Avenel 1978) (reprinting Wells’s 1934 Preface praising Verne’s ability to conceive of “anticipatory inventions” that represented “actual possibilities of invention and discovery . . .”).}
\footnote{222. See JULES VERNE, THE DAY OF AN AMERICAN JOURNALIST IN 2889, in GOTHIC SCIENCE FICTION SHORT STORIES: ANTHOLOGY OF NEW AND CLASSIC TALES 411, 411–20 (2018).}
\end{footnotes}
dozens of other new fields: fluorescent lighting, sky writing, plastics, [and] automatic packaging machines . . . .”

However, predicting a future technology is materially different from supplying inspiration for it. We are highly skeptical that predicting future technologies has independent value for innovation, on its own, apart from the potential to supply some form of stimulus. As the case of Gernsback’s early—but largely un-read—description of radar illustrates, predicting entails correctly anticipating what is to come; it does not entail influencing anyone to make an invention or stimulating action of any kind. Successful predictions by science fiction authors can certainly be impressive. They show off the intelligence and clairvoyance of the author. But they are arguably not valuable to innovation or society at large unless others act upon those predictions in some way.

To be sure, accurate predictions of the future have value for the simple reason that they tell those who listen what is to come before it happens. In some spheres, like finance, the benefits of such foreknowledge are hard to deny. Who wouldn’t want to place a bet today on next year’s World Series champion, or buy stock in the next Apple or Twitter before it explodes in popularity? However, predicting the future, while impressive, cannot directly affect innovation if it does not induce action, or at least affect people’s perceptions and understandings of technological ideas. Science fiction authors whose predictions do not inspire action or affect others’ perceptions are like the mythical Cassandra, cursed with the ability to predict the future but never listened to.

This is not to suggest science fiction’s predictions cannot have an impact. So-called “dystopian” science fiction—which we discuss further in Part VI.C—often describes problems humanity will face in the future, foreseeing “tomorrow’s crises” and describing the many ways technology might go wrong. This type of story can have “negative” utility. It can tell us which doors are best left unopened and which technologies future generations should avoid. It can even offer potential solutions. Kim Stanley Robinson, for example, often writes science fiction depicting futures in which global warming will have wrought catastrophe. His books vividly imagine apocalyptic futures—such as New York City in the year 2140 submerged under water—and also describe ways in which humans might learn to adapt and thrive in the harsh new

224. Paul O’Neil, The Amazing Hugo Gernsback, Prophet of Science, Barnum of the Space Age, LIFE MAG., July 1963, at 62, 66. See also Eric Hutton, His Pipe Dreams Are Tomorrow’s Inventions, MAG. DIGEST, 1947, at 7–12 (“As far back as his ‘Ralph 124C41+’ days, he not only described but provided an accurate technical blueprint for radar.”); Inez Robb, The Remarkable Mr. G., SIGNAL MAG., Oct. 1957, at 28–29 (writing that Gernsback has “earned a place in the sun” along with others like Robert Fulton and Jules Verne “who have thrilled mankind with their inventive ideas and contributions to society . . .”).


226. As the science fiction scholar James Gunn puts it, “[t]his ability to foresee tomorrow’s crises, to dramatize their human implications and consequences, and to act out alternatives, is one of science fiction’s major values.” GUNN, supra note 20, at 29. That said, Gunn also stated that science fiction’s “more celebrated ability to predict fades to insignificance alongside its ability to dramatize.” Id.
Readers of Robinson’s stories might be moved to act and develop solutions to the problems Robinson identifies. They might become more concerned about climate change and more interested in technologies that reduce pollution and increase energy efficiency. They might even drive demand for those technologies, contributing indirectly to their improvement and widespread adoption.

But again, the benefits of such predictions are nil unless people absorb and respond to them in some manner. On the other extreme, predictions that are wholly inaccurate have even less clear utility, outside of entertainment. Suggesting that time-travelling scientists in the future will romp through time in a telephone booth, for example, makes for a great story. But assuming this fact pattern bears no relationship to what might realistically happen, the impact on real-world innovation is hard to discern. Predictions that do not inspire action—or that are so divorced from reality that they never plausibly could—do not have any clear impact on innovation.

Yet another reason to be skeptical of prediction as an independent benefit of science fiction is that many doubt science fiction authors are better at predicting the future than anyone else. Skeptics—observing that Earth is not populated with flying cars and that humans have not colonized the solar system, as is often depicted in science fiction stories—pronounce that science fiction authors have “conspicuously failed” to anticipate the innovations that predominate in “the world we are now living in.” Asimov himself was highly doubtful of science fiction’s predictive capacity—and in fact he appeared doubtful that prediction has much utility at all. Like Gernsback, Asimov preferred “hard” science fiction that extrapolates from real science, but he thought predicting the future was beside the point. “[I]f you go through my books,” he said in 1975, “the number of things that I’ve spoken about that have really come true is really quite small.” Asimov also insightfully observed that if science fiction authors were only interested in predicting the futures, they would run out of good story material pretty quickly. “[W]e can’t just predict,” he said. “There isn’t enough story material in straight prediction. We make up futures. It doesn’t matter whether we really think they’ll come to pass or not. . . . [W]e ask ourselves only will this be interesting to deal with, and will this be a nice story? And then if some of them do come true, well good.” Robinson is even more blunt about science fiction authors’ capacity for prediction: “Nobody makes a successful prediction of the future. Except for maybe by accident.”

A final problem with viewing prediction as a stand-alone benefit of science fiction is that it can be very hard to distinguish between predicting and generating the future.


228. See Gary Westfahl, Introduction: Of Futures Imagined, and Futures Inhabited, in Science Fiction and the Prediction of the Future: Essays on Foresight and Fallacy 3 (Gary Westfahl et al., eds. 2011); see also Clute & Nicholls, supra note 187, at 957 (discussing the “false belief” that science fiction is “a literature of prediction”).


230. Id.

231. Alter, supra note 209.
When is science fiction predicting future developments, and when is it supplying readers with stimulus that leads to future developments? This can be a hard question to answer without smoking-gun evidence. For example, in the case of Verne’s submarine, if we did not have direct testimony from Lake in his autobiography, it would be very hard to say with certainty whether Verne predicted livable submarines in his novel, or instead inspired this development. We have an example of this “chicken-and-egg” phenomenon today, as commentators speculate about the motivations of the tech moguls who seek to take humans to space. It will be hard if not impossible to know, hundreds of years hence, whether works of science fiction like *Star Trek* predicted humans’ eventual exploration of space or instead inspired humans to go there. As one writer puts the question: Did *Star Trek* predict the future, or is Jeff Bezos going to space because he loves *Star Trek*?232

In sum, we think the genre of science fiction is likely performing both functions—predicting future inventions and generating inventions by stimulating readers to action. The two functions are flipsides of the same coin and often come together. When it looks as if a science fiction author accurately predicted the future, we should also consider the possibility that the author’s vision in fact inspired it and vice versa. If it turns out that a work of science fiction predicted a future technological development but did not inspire or influence the development in any way, this is impressive foresight on the part of the author. But the value for innovation—as opposed to entertainment—is unclear.

**B. ACCLIMATING THE BROADER PUBLIC TO FUTURE INVENTIONS**

We have also identified two additional, far less intuitive mechanisms through which science fiction can affect innovation. The first is science fiction’s ability to familiarize the broader public with inventions of the future before they arrive. We call this the “acclimation” theory.

Patents have a limited audience. Patents’ disclosures and utility to the world are always judged through the lens of a hypothetical “person having ordinary skill in the art” who is knowledgeable and experienced in the precise field of the invention but does not really exist.233 Science fiction has a broader audience and its teachings are far more likely to spill over into society at large, becoming a part of the cultural conversation in ways that patents do not and arguably cannot. One important aspect of this spillover is science fiction’s ability to acclimate the public to what is to come.

Academics who study science fiction theorize that, when science fiction’s depictions of the technologies of the future reach the imaginations of the public at large, this can have an unexpected effect: It can soften the “future shock” that would otherwise occur.

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and thereby accelerate the pace at which new inventions are ultimately adopted once the technology becomes possible. Gernsback did not discuss this “acclimation” theory in the editorials we reviewed, but we are virtually certain he was aware of it. Gernsback’s files contain a clipping from a 1957 New York Times Magazine article featuring this theory and mentioning Gernsback as a part of this tradition. The article declares that if science fiction “has a more serious function” than mere entertainment, “it is less that of precisely pin-pointed prophecy than that of creating in its readers a climate of acceptance of new wonders and a willingness to think at least one step ahead.”

The most famous adherent of this theory was the British writer Arthur C. Clarke. Clarke, as mentioned above, was an admirer of Gernsback and his magazines. Clarke famously pronounced in a speech that he was “quite sure that by writing about space flight,” science fiction authors like himself had “brought its realization nearer by decades . . . . Perhaps even more important, we have helped the public to appreciate what it will mean when it comes.” Clarke gave an unforgettable example of the acclimation theory in his last science fiction novel, Time’s Eye, which he co-authored just before his death. The novel takes place in a future in which time travel has become possible. A time-travelling character, originally from the year 2037, argues that the reason people of his time have an easier time accepting time travel than British time-travelling characters from the early 1800s is that, by the year 2037, everyone had read or heard about H.G. Wells’s The Time Machine. “For us,” the character says, “there has been a process of acculturation. After a century of science fiction you and I are thoroughly accustomed to the idea of time travel, and can immediately accept its implications . . . . But that doesn’t apply to these Victorian-age Brits.”

The acclimation theory is likely easier for many people to accept than the stimulus and prediction theories. The reason is that it does not rely on the premise that science fiction authors are capable of predicting, let alone influencing, what is to come. It does not overstate science fiction authors’ expertise and influence in real-world technology development. Instead, it relies on the author’s ability to write evocatively about the trends that are already occurring. It takes the “readers will be deeply thrilled” aspect of Gernsback’s philosophy, but leaves out Gernsback’s theory that science fiction authors have sufficient expertise about the technicalities of future inventions. It does not require them to have a special gift of prescience that others do not possess.

234. See, e.g., GUNN, supra note 20, at 29 (discussing the view that science fiction eases the “future shock” for the “great masses of humanity who are fearful of change”); Westfahl, supra note 228, at 1 (“[S]upporters of the genre long argued one of science fiction’s primary purposes, and virtues, is that it enables people to better prepare for the future with its plausible predictions of things to come.”).


236. Arthur Clarke, Address at 1956 World Science Fiction Convention, in NEIL MCALEER, ARTHUR C. CLARKE: THE AUTHORIZED BIOGRAPHY 126 (1983); see also WESTFAHL, supra note 20, at 92 (discussing Gernsback’s praise for Clarke as an example of “true prophetic science fiction”); Wythoff, supra note 20, at 22–23 (noting Arthur C. Clarke’s respect for Gernsback).

The acclimation theory is also likely to be attractive because it allows for the influence of highly skilled but less science-heavy writers, like Ray Bradbury and Ursula K. LeGuin. Bradbury’s human-focused stories about colonizing Mars and his novel about a dystopian future in which books are burned are widely beloved and assigned in schools. But they contain very little science.238 Yet Bradbury’s depictions of humans living on Mars or his visions of a government intent on burning books can still have an impact if they enter the broader cultural conversation. They give people the impression that these are realistic possibilities for humanity and acclimate or, to use Clarke’s word, “acculturate” the general public to these visions of the future. Science fiction authors can have an impact, even if they do not give a single scientist a useful idea for what to do in a lab, because they can get inside peoples’ heads and insert plausible depictions of the future that leave them ready to accept and appreciate it, or perhaps reject and fight it, when it comes.

C. ADDRESSING THE MORAL IMPLICATIONS OF FUTURE INVENTIONS

The second non-intuitive mechanism through which science fiction can affect innovation is its ability to consider the moral implications of future technologies. Patents can disclose useful technical information, but patents do not typically disclose any information at all about the morality of the new technologies they protect. Early jurists posited that patent examiners and courts should evaluate so-called “moral utility” as a criterion of patentability. For example, if a new invention was designed “to poison people, or to promote debauchery, or to facilitate private assassination,” perhaps it should be deemed unpatentable because surely such an invention would be “injurious to the well-being, good policy, or sound morals of society . . . .”239 For better or worse, the patent system moved away from this, ostensibly because neither patent examiners nor judges are fit (or perhaps even empowered under the Patent Act) to pass judgment on the morality of new technologies.240

Science fiction, in contrast, can, and frequently does, disclose information about the morality of new inventions. Along with speculating on what future technology will or could look like, it can provide insights on what it should look like. The author, through their story and characters, can weigh in on what would be socially or ethically desirable for humans to do.241 Indeed, some of the most famous science fiction is “dystopian.”242 It imparts far more information about what not to do than what to do; it tells us far more about ethics than about technology. To give just one example, several novels written in the first half of the twentieth century, such as Aldus Huxley’s Brave New

240. See Merges & Duffy, supra note 122, at 223–24 (citing Robert Merges, IP in Higher Life Forms, 47 Md. L. Rev. 1051, 1062–68 (1988)).
241. See, e.g., Contreras, supra note 31, at 71–72 (“[Science fiction is] an ideal medium in which to consider how the law can and should develop in the face of technological change.”); id. at 88–108 (identifying works of science fiction that explore a range of legal issues in fictional setting).
World (1932) and George Orwell's 1984 (1948), feature authoritarian societies in which the populace is effectively sedated and made complacent through mind-altering substances—Soma and Victory Gin respectively. These portrayals of the drugs people might use to find contentment in the future impart significant information about inventions' moral utility but very little technical information. The chemical compositions of the drug and the drink, respectively, are not the point.

Gernsback often ignored the moral component of science fiction. He was entirely fixated on the technical side. However, by the editor John Campbell's time, science fiction was more holistic and socially relevant. The stories Campbell published in Astounding Science Fiction—which ultimately became the dominant science fiction magazine in lieu of Gernsback's Amazing Stories—engaged in significant moralizing. Many contained implicit warnings about the danger of modern technologies, especially weapons. The atomic bomb and nuclear energy, for example, featured prominently in stories written during the World War II era.\textsuperscript{243} One Astounding story, “Deadline” by Cleve Cartmill, published in March 1944, featured the protagonist attempting to stop the detonation of a nuclear device. This generated interest from federal intelligence agents and calls for Campbell to “restrict the number and content of nuclear stories he published”—which Campbell refused to do.\textsuperscript{244}

The modern genre has gone even farther. The so-called “New Wave” of science fiction, which began in the 1960s, focused far more heavily on the morality of future technologies than its forebears. Science fiction began to deal with a wide range of social issues, from authoritarianism and military aggression, to feminism, gender, and patriarchy, to slavery.\textsuperscript{245} Very little technical information is disclosed in some of these stories. Gernsback might not classify them as science fiction at all. But they do impart potentially useful information about the ethical dimensions of the social and technological developments they address.

\textbf{VII. CONCLUSION}

The phrase “science fiction” is often used to evoke the notion of an undeveloped thought experiment, a mere fabrication that does not deserve to be taken seriously. Many technologists and businesspeople use “science fiction” in a derogatory sense to refer to a technology that is not nearly possible or that is still many years away.\textsuperscript{246} Patent

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\begin{itemize}
  \item \textsuperscript{244} This is Ashley's summary of Deadline and recounting of this incident. \textit{Id.} at 15–16. \textit{See also, e.g.,} ALDIS, supra note 188, at 233 (discussing Deadline and how some of Campbell's magazine's stories “seriously predicted” nuclear energy).
  \item \textsuperscript{245} See BOOKER & THOMAS, supra note 242, at 86–97, 98–109, 129–30 (discussing, respectively, feminism and gender; science fiction "satires" dealing with issues like military aggression and patriarchy; and Octavia Butler's books and in particular \textit{Kindred} (1979), in which a woman is transported back into time into the body of her enslaved ancestor).
  \item \textsuperscript{246} \textit{See, e.g.,} Tom Krazit, Why Quantum Computing Is Still Science Fiction, PROTOCOL (Jan. 6, 2022), https://www.protocol.com/newsletters/protocol-enterprise/quantum-computing-ten-years-gone [https://perma.cc/49S3-CJ2J]
\end{itemize}
lawyers, too, employ this terminology, classifying a technical disclosure as “something almost like a science fiction novel” when they think it is not sufficiently enabled.²⁴⁷

The distinction between patentable invention and mere science fiction makes complete sense from the perspective of traditional patent law and policy. Current workability and presently-availing utility are fundamental criteria for obtaining a patent—and for very good reasons. Yet this is exactly the sort of prophetic science that Hugo Gernsback thought was invaluable to society and that deserved more respect from the patent system. For Gernsback, the underlying theory behind science fiction and patents was analogous. Both have the power to disclose useful information about the inventions of the future. Both may help others make, build upon, and improve those inventions in the real world.

Exploring the connection between patents and science fiction generates surprising insights, both for science fiction and for innovation policy. First, science fiction’s patent law origin provides a new and different justification for science fiction’s role in society. According to Gernsback and other adherents of his philosophy like Clarke, science fiction is not just a form of entertainment. It is a legitimate component of innovation policy. Gernsback’s conception of science fiction is certainly not everyone’s view of what science fiction is or should be.²⁴⁸ But his beliefs, and their underlying reliance on patent theory, were nonetheless highly influential. They shaped the genre of science fiction as we know it.

Second, if we think that patents promote innovation, then maybe science fiction does too. It could be that without science fiction, society would not have many of the innovations that surround us today, or at least would not have obtained them so quickly. We do not necessarily suggest that humanity would not have such inventions “but for” the genre of science fiction. We do not suggest there would be no ChatGPT without Asimov’s MULTIVAC. The influence is likely to have been far more subtle and diffuse. Like many technical fields, artificial intelligence has been incrementally advanced by many people over many years, making it impossible to draw defensible but-for conclusions. But nor can we throw up our hands and dismiss all such connections as merely happenstance.

There is also some wisdom in this history for today’s science fiction writers. A little more patent-style “enablement” in science fiction might do more for innovation than science fiction writers want to believe.²⁴⁹ There is nothing wrong with fantasy and so-


²⁴⁸. See, e.g., ALDISS, supra note 188, at 209–12 (discussing the evolution of the genre across time and describing Gernsback’s views as outdated and too focused on inventions and “gadgets”).

²⁴⁹. See Hrdy & Brean, supra note 19, at 403–13 (comparing patent law’s and science fiction’s standards for enablement).
called speculative fiction. It is often tremendously entertaining. But we call it science fiction—and thankfully not scientifiction—for a reason: It is based on kernels of real science. To channel Gernsback, what makes science fiction different from romance and adventure stories is that it is grounded in scientific facts or theories and can be prophetic.\textsuperscript{250} It might one day come to pass. Science fiction authors who work to enable their stories, even just a bit, have a better chance to give a stimulus to readers to reduce their inventions to practice. Many, many authors already do this without compromising the quality of the narrative.\textsuperscript{251} They might literally affect the future in the way we imagine all inventors hope their patents will.

\textsuperscript{250} See supra Part I.

Fair Use and the Judicial Search for Meaning

Paul Szynol*

ABSTRACT

Are courts capable of deciphering the true meanings of artworks? Is it reasonable for them to try? Recent litigation between the Warhol Foundation and the photographer Lynn Goldsmith brought these questions into sharp focus. Fair use, the limited exception to the otherwise exclusive property rights granted to copyright owners, requires courts to assess the meaning of a secondary work so that they can determine whether the secondary use is sufficiently “transformative” to qualify for the fair use defense. Warhol used Goldsmith’s photo of Prince as the basis for his silkscreen, which he called the Orange Prince. Was it infringing, or was it fair use? What did Warhol’s work mean? Despite the centrality of this doctrinal question in all fair use disputes, neither courts nor scholars have ever devised a methodology for assessing new meaning. The theoretical vacuum has led to unpredictable and inconsistent case law. Warhol provided the Supreme Court with a rare opportunity to sharpen methodology, but the Court declined, leaving a pernicious theoretical gap at the heart of the fair use doctrine.

This Article provides a much-needed judicial basis for assessing new meaning. By weaving together doctrinal analysis—with insights drawn from existing case law—and art theory, the Article provides a framework that courts can utilize to determine whether new meaning exists. First, the Article proposes a methodology that allows courts to determine whether there is new meaning without forcing judges to try to find—in vain—what a work of art “really” means, a doctrinal and theoretical dead end that, to date, has yielded painfully inconsistent case law. Second, the proposed methodology not only relieves judges from the impossible task of figuring out what a work of art means, but also provides a clearer standard for when new meaning is transformative. Third, the suggested standard for transformativeness provides a useful method for finding a healthy balance between free speech and economic rights, which are inevitably at odds with each other in fair use disputes. By recognizing that creative works have unique interpretive demands and that the judge’s role should be to inquire into meaning rather

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than to legislate it, the Article provides our courts—as well as fair use practitioners—with a clearer path forward than our current jurisprudence allows.
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INTRODUCTION

A few years ago, two teenagers placed a pair of glasses on the floor of the San Francisco Museum of Art, then watched as onlookers admired the spectacles as if they were looking at a work of art—which, of course, is what they thought they were doing.¹ The piece was in a museum, after all, which suggested that these frames were part of the exhibit and, ipso facto, art, rather than someone’s reading aid.

The prank deftly exposed our almost-gullible trust in institutional settings and cleverly cracked open the standard set of questions around art: Is something art merely by virtue of its inclusion in a museum setting? Could something be art without institutional imprimatur? Could it be art simply because it is intended to be art, or because the audience receives it as art? If it is art, what does it mean? How do you decide? On what basis? There is no single theory that provides definitive answers to all of these questions. It is easy enough to argue all sides—but virtually impossible to pick one position with principled certainty. In an era when art is no longer primarily mimetic or designed to convey a clear narrative, assessing whether something qualifies as art and what it means has become a daunting, if not impossible, challenge.

Some people relish the ambiguity, while others simmer with violent resentment. Agnes Martin, the minimalist artist, thought that the absence of clear meaning pushed some to vandalize her work: “[P]eople can’t stand that those are all empty squares, and the vandalism that happens, you wouldn’t believe how many of my paintings have been destroyed . . . They can’t take those empty squares . . . They don’t like emptiness.”² But no one really expects to get the last word in debates about art’s meaning.

At least superficially, though, there is one exception to our collective intellectual condition, and that is the judicial process. Judges do get the last word—indeed, they have to get the last word in order to resolve thorny legal disputes about meaning and classification. The judicial quest for meaning is particularly prominent in the context of fair use, which requires courts to determine whether the secondary work has a “new meaning,” or contributes “something new” to the existing work.

While the Supreme Court advanced the directive, however, it provided no methodology for applying it—nor has any court since. While some scholarship has explored ways in which courts look at art and images,³ in turn, no academic attempt has been made to provide courts with a comprehensive formula for assessing new meaning in the context of fair use. Judges are left to rely on their intuitions, an approach that, in the aggregate, has not generated stable jurisprudence. Unmoored from guiding principles, “courts are left with almost complete discretion in determining whether any

given factor is present in any particular case,” which, so far, has yielded notoriously unpredictable and inconsistent case law.6

In the Warhol dispute, where one of the key questions was what Warhol’s Orange Prince means, the Court had a rare opportunity to show how the question of new meaning should be addressed. Without much explanation, though, the majority decided that the amount of meaning present in the Orange Prince was minimal, and the opinion altogether skipped over the question of approach. By passing up a rare opportunity to provide much-needed theoretical scaffolding to the analysis, the majority allowed a pernicious ambiguity to linger at the heart of fair use.

This Article proposes a much-needed judicial framework for determining whether new meaning exists for fair use purposes, particularly in the context of creative works. Part I argues that, by forcing judges to find true meanings of creative works, the current approach puts courts in an untenable position. Since a true meaning is impossible to determine, the single-meaning approach sets judges up for failure. In place of the single-meaning approach, Part I offers a framework that allows courts to admit a multitude of interpretations in order to assess whether new meaning is present. In other words, instead of deciphering what a work “really” means, courts only need to decide whether it has new meaning. Part II expands the concept of transformativeness to include a social benefit variable, which not only helps courts identify when new meaning is transformative, but also provides a basis for resolving the inevitable fair-use tension between free speech and property rights. Part III applies the proposed reasonable-meanings framework to Warhol’s Orange Prince as a way of highlighting the method’s efficacy and showing that the Supreme Court’s majority opinion is a misfire.

I. MEANING

A. FAIR USE’S FIRST FACTOR IN CONTEXT

Copyright ownership is not absolute. In limited circumstances, someone other than the author or a licensee can use copyrighted material without asking for permission. If, for instance, I am making a biographical film about a famous actor, I may be able take clips of movies in which the actor appeared so that I can illustrate aspects of that person’s career.6 Or, to use an example of fair use that we all rely on regularly, search engines can return thumbnails of copyrighted images to help us find the full-sized photos.7 In short, in specific situations, the doctrine allows all of us to take content, even if it is copyrighted, and use it for free. By making these uses possible without requiring payment to the copyright owner, fair use “offers a means of balancing the exclusive rights of a copyright holder with the public’s interest in dissemination of information affecting areas of universal concern, such as art, science and industry.”8

6. SOFA Ent., Inc. v. Dodger Prods., Inc., 709 F.3d 1273, 1276 (9th Cir. 2013).
8. Wainwright Sec., Inc. v. Wall St. Transcript Corp., 558 F.2d 91, 94 (2d Cir. 1977).
The central criteria for determining whether a particular use is fair were promulgated in an 1841 opinion and are still in use:

1. the purpose and character of the use, including whether such use is of a commercial nature or is for nonprofit educational purposes;
2. the nature of the copyrighted work;
3. the amount and substantiality of the portion used in relation to the copyrighted work as a whole; and
4. the effect of the use upon the potential market for or value of the copyrighted work.9

Because they are so loosely phrased, the four factors are open to judicial interpretation. “There are no absolute rules as to how much of a copyrighted work may be copied and still be considered a fair use.”10 No factor is dispositive, and the entity raising the fair use defense does not need to show that every factor supports fair use. “Instead, all factors must be explored and the results weighed together in light of the purposes of copyright and the fair use defense.”11

The first factor—the part of the doctrine that requires courts to assess new meaning—has been particularly mystifying. The Copyright Act’s “instruction to consider the ‘purpose and character’ of the secondary use . . . does not explain what types of ‘purpose and character’ . . . favor a finding of fair use and which do not.”12 In a 1990 article, Judge Leval, in an attempt to stabilize the doctrine, emphasized the requirement that “the purpose and character of use” be transformative:

I believe the answer to the question of justification turns primarily on whether, and to what extent, the challenged use is transformative. The use must be productive and must employ the quoted matter in a different manner or for a different purpose from the original. A quotation of copyrighted material that merely repackages or republishes the original is unlikely to pass the test; in Justice Story’s words, it would merely “supersede the objects” of the original. If, on the other hand, the secondary use adds value to the original—if the quoted matter is used as raw material, transformed in the creation of new information, new aesthetics, new insights and understandings—this is the very type of activity that the fair use doctrine intends to protect for the enrichment of society.13

In 1994, the Supreme Court issued the following formulation: When evaluating the purpose and character of the use, one must consider “whether the new work merely ‘supersed[es] the objects’ of the original creation or instead adds something new, with a further purpose or different character, altering the first with new expression, meaning, or message; it asks, in other words, whether and to what extent the new work is ‘transformative.’”14 The Court added an important qualifier: “The more

transformative the new work, the less will be the significance of other factors, like commercialism, that may weigh against a finding of fair use.\textsuperscript{15}

Not all courts are persuaded that this is the best approach, or that it should be the primary one, as it has effectively become:\textsuperscript{16}

\textit{[A]sking exclusively whether something is “transformative” not only replaces the list in § 107 but also could override 17 U.S.C. § 106(2), which protects derivative works. To say that a new use transforms the work is precisely to say that it is derivative and thus, one might suppose, protected under § 106(2). \textit{Cariou} and its predecessors in the Second Circuit do not explain how every “transformative use” can be “fair use” without extinguishing the author’s rights under § 106(2). We think it best to stick with the statutory list, of which the most important usually is the fourth (market effect).}\textsuperscript{17}

But the approach is deeply entrenched in case law. Courts routinely seek to determine whether the secondary use “merely supersedes the objects of the original creation, or instead adds something new, with a further purpose or different character, altering the first with new expression, meaning, or message; it asks, in other words, whether and to what extent the new work is transformative.”\textsuperscript{18} In a 2001 Second Circuit opinion, Judge Leval emphasized that the “heart of the fair use inquiry is into the first specified statutory factor.”\textsuperscript{19} The Second Circuit reiterated the centrality of the first factor in 2006,\textsuperscript{20} as did a recent Ninth Circuit case: “This factor has taken on a heightened significance because it influences the lens through which we consider two other fair use factors.”\textsuperscript{21}

Precisely because the first factor “has a significant impact on the remainder of the fair use inquiry,”\textsuperscript{22} it has provided protection for creative speech that ranges from books\textsuperscript{23} and photography\textsuperscript{24} to music\textsuperscript{25} and music videos.\textsuperscript{26} But its contours remain elusive. The \textit{Campbell} opinion provides a standard, but no clear guidelines for determining whether there is new meaning and a work is in fact transformative. Judges inevitably fall back on intuition and subjectivity, an approach that, in the aggregate, has yielded inconsistent outcomes. The first factor urgently needs a reasoned approach that brings methodological stability and transparency to the judicial assessment of new meaning.

\begin{itemize}
  \item \textsuperscript{15} Id. The commercialism comment was meant to undo the presumption that the Supreme Court created in \textit{Sony Corp. of America v. Universal City Studios, Inc.}, 464 U.S. 417, 449 (1984) (“If the Betamax were used to make copies for a commercial or profit-making purpose, such use would presumptively be unfair.”).
  \item \textsuperscript{17} \textit{Kienitz v. Sconnie Nation LLC}, 766 F.3d 756, 758 (7th Cir. 2014).
  \item \textsuperscript{18} \textit{Campbell}, 510 U.S. at 579 (1994).
  \item \textsuperscript{19} \textit{Davis v. Gap, Inc.}, 246 F.3d 152, 174 (2d Cir. 2001).
  \item \textsuperscript{20} \textit{Blanch v. Koons}, 467 F.3d 244, 251 (2d Cir. 2006).
  \item \textsuperscript{21} \textit{Dr. Seuss Enters., L.P. v. ComicMix LLC}, 983 F.3d 443, 451 (9th Cir. 2020).
  \item \textsuperscript{23} \textit{Suntrust Bank v. Houghton Mifflin Co.}, 268 F.3d 1257 (11th Cir. 2001).
  \item \textsuperscript{24} \textit{Nunez v. Caribbean Int’l News Corp.}, 235 F.3d 18 (1st Cir. 2000).
  \item \textsuperscript{25} \textit{Lennon v. Premise Media Corp.}, 556 F. Supp. 2d 310 (S.D.N.Y. 2008).
  \item \textsuperscript{26} \textit{Seltzer v. Green Day, Inc.}, 725 F.3d 1170, 1176 (9th Cir. 2013).
\end{itemize}
B. THE IMPORTANCE OF MEANING

There are two paths to finding a transformative use under the first factor: new purpose and new meaning. In practice, though, courts often look solely to purpose to determine whether a use is transformative. This approach makes sense with search engines, where the meaning of individual images is immaterial, but it is dangerous when applied to art works, where the question of whether a use is transformative requires a proper assessment of meaning. It is therefore critical that, when assessing creative works, courts look beyond purpose to meaning itself.

Both legislation and Campbell refer to “purpose” in a singular and monolithic way, but courts apply the word to a number of different practices. The first is what we might naturally think when we hear the word purpose, viz., something utilitarian. Search engines are paradigmatic examples—e.g., books in Authors Guild v. Google, Inc.27 and thumbnails in Kelly v. Arriba Soft Corp.28 Other well-known examples include APIs,29 video recording devices,30 or a virtual machine that allows “security researchers to gain deeper insights into” an operating system.31

The second type of purpose is expressive—i.e., instances in which the secondary use is meant to communicate a new meaning. Expressive purpose, in turn, breaks down into what we could call second-order purposes, or specific types of genres of expression that courts, following legislation, generally recognize as qualifying for fair use: criticism, for instance, and commentary. At this level, the meaning of the secondary work is generally assessed to confirm that it supports the purported genre—that, for example, it really is a parody,32 a historical reference,33 or a commentary on a newsworthy debate.34 “In the area of parody as copyright infringement, Second Circuit case law focuses first upon the general question—is the defendant’s work truly a parody?”35 If the court confirms that the secondary use falls into one of the categories delineated in legislation, the first factor tilts in favor of transformation.36

In each instance, if the ostensible purpose is not confirmed (that is, whether the secondary use has a utilitarian purpose or expressive purpose), there is no transformation. There was a valid new purpose when Gone with the Wind was written in parodic form to expose aspects of the original,37 and Grease was reworked as a play

32. Mattel, Inc. v. Walking Mountain Prods., 353 F.3d 792, 801 (9th Cir. 2003) (“The issue of whether a work is a parody is a question of law, not a matter of public majority opinion.”).
36. Wright v. Warner Books, Inc., 953 F.2d 731, 736 (2d Cir. 1991) (“[T]here is a strong presumption that factor one favors the defendant if the allegedly infringing work fits the description of uses described in §107.”).
to point out the film’s retrograde values. But the Sixth Circuit rejected as “wholly meritless” the defendant’s argument that its karaoke was for educational purposes, and another court was unpersuaded that the secondary use was really a form of criticism: “The effort to treat Boldly as lampooning Go! or mocking the purported self-importance of its characters falls flat.”

It is a well-established judicial formula, and courts are confident in applying it: “The issue of whether a work is a parody is a question of law, not a matter of public majority opinion.” Things get messy, however, when courts look at purpose without also considering meaning, particularly when the secondary work cannot be placed in a recognized fair-use category (e.g., parody). The Second Circuit’s Warhol opinion, for example, relies heavily on the purpose-only approach. After declaring, in parallel with Holmes’ century-old warning in Bleistein, that “judges are typically unsuited to make aesthetic judgments,” the opinion concludes that “the overarching purpose and function of the two works at issue here is identical, not merely in the broad sense that they are created as works of visual art, but also in the narrow but essential sense that they are portraits of the same person.” The court made no effort to decipher meaning.

The difference in emphasis—purpose versus meaning—can lead to very different outcomes. In Seltzer v. Green Day, for example, a Ninth Circuit case that had to determine whether Green Day (the band) could fairly use someone’s photograph in a video projected during its concerts, the court applied the “new meaning” standard. The Ninth Circuit found that, unlike the video projected during the band’s concerts, which was replete with religious imagery, the original photograph “clearly says nothing about religion.” This discrepancy in meaning, the court reasoned, provided sufficient basis to find new and transformative meaning:

But regardless of the meaning of the original, it clearly says nothing about religion. With the spray-painted cross, in the context of a song about the hypocrisy of religion, surrounded by religious iconography, Staub’s video backdrop using Screamin Icon conveys “new information, new aesthetics, new insights and understandings” that are plainly distinct from those of the original piece.

If the Ninth Circuit had fixated on purpose instead of meaning—and concluded, for instance, that both photograph and video are visual works or are both expressive and

40. Dr. Seuss Enters., L.P. v. ComicMix LLC, 983 F.3d 443 (9th Cir. 2020).
41. Mattel, Inc. v. Walking Mountain Prods., 353 F.3d 792, 801 (9th Cir. 2003).
42. Bleistein v. Donaldson Lithographing Co., 188 U.S. 239, 251 (1903) (“It would be a dangerous undertaking for persons trained only to the law to constitute themselves final judges of the worth of pictorial illustrations, outside of the narrowest and most obvious limits. At the one extreme some works of genius would be sure to miss appreciation. Their very novelty would make them repulsive until the public had learned the new language in which their author spoke.”).
44. Id. at 114.
46. Id. at 1176–77.
47. Id. at 1177.
therefore non-transformative—it might have found Green Day’s use to be unfair, and therefore infringing.

In *Arrow Prods. v. Weinstein Co. LLC*, to use another example, the district court recognized that recreating scenes from an earlier movie provided new insights about the film and its actress, and was therefore fair use, despite the similarities between the original and the secondary work. The opinion could have said “they’re both movies and portraits of the same person and therefore they have the same purpose,” but that (painfully reductive) take would have missed the new and transformative meaning of the secondary use. In both *Seltzer* and *Arrow*, in other words, the respective superficial purpose, seen from a high level of abstraction, was the same: In the first instance, both the original and secondary pieces were visual works, and in the second instance, both the original and secondary works were movie scenes. In each, the court might have found the same purpose, but in each, the court reached a fair use outcome by identifying new and transformative meaning.

Faced with uncertainty about how to assess meaning in a work, courts may be tempted to fall back on the much-easier assessment of purpose instead, even if the actual meanings are, as Justice Kagan put it in her dissent in *Warhol*, “worlds away.” Languages in particular create considerable interpretive obstacles—not only for lawyers, but for virtually all theorists. But particularly in the context of art, it is critical that courts do not resort to purpose as a way of avoiding the often vexing question of meaning. The purpose-only approach ignores the fact that a secondary use can have a “legitimate purpose” and be transformative, even if the ostensible purpose is the same. By staying away from meaning per se, courts might well appear content neutral, but paradoxically, might be suppressing more speech than they would have if they analyzed actual meaning. For the first factor to function in connection with creative works, where the purpose of both the original and secondary work will often be the same, courts need to look closely at the secondary work’s actual meaning.

### C. Sources of Meaning

Courts need to identify reliable sources that may be leveraged to determine whether a secondary use has new meaning. The Second Circuit’s *Warhol* opinion suggested that “whether a work is transformative cannot turn merely on the stated or perceived intent of the artist or the meaning or impression that a critic—or for that matter, a judge—
draws from the work.” But if, as the opinion instructs, we silence authors, critics, and judges, who is left to determine meaning? The court’s argument seems to eliminate all interested parties from the conversation, which inescapably leads to a dead end. Each one of these sources brings something useful to the proverbial table, and each can help courts determine whether there is new meaning under the first factor.

1. Reasonable People and Experts

The assessment of meaning could start with “that most useful legal personage—the ordinary, reasonable observer,” the mythological creature who gets invited to all the legal parties and figures prominently in case law. In defamation, for example, “courts must additionally consider the impression created by the words used as well as the general tenor of the expression, from the point of view of the reasonable person.” When determining trademark confusion, the “standard to be employed is the ordinary purchaser, not the expert.” Copyright’s de minimis analysis relies on the average lay observer: “Sandoval's photographs as used in the movie are not displayed with sufficient detail for the average lay observer to identify even the subject matter of the photographs, much less the style used in creating them.” Copyright infringement, too, leverages the ordinary observer: The “standard test for substantial similarity...is whether an ordinary observer, unless he set out to detect the disparities, would be disposed to overlook them, and regard [their] aesthetic appeal as the same.” Conversely, outliers need not contribute to an obscenity analysis, which excludes the “particularly susceptible persons.”

This step could be largely standard free (apart from being reasonable, that is), requiring only “good eyes and common sense,” in parallel to the total “look and feel” standard applied in the context of infringement claims, which considers all criteria that the non-lawyer might find relevant. The seminal “look and feel” case looked at mood, characters, arrangement of words, and the combination of artwork conveying a particular mood with the particular message. In The Perfect Critic, T.S. Eliot warned of readers who project their own subjective preferences onto works of art and “like one poet because he reminds him of himself, or another because he expresses emotions

55. Carol Barnhart Inc. v. Econ. Cover Corp., 773 F.2d 411, 422 (2d Cir. 1985).
62. Roth Greeting Cards v. United Card Co., 429 F.2d 1106, 1110 (9th Cir. 1970) (“It appears to us that in total concept and feel the cards of United are the same as the copyrighted cards of Roth. With the possible exception of one United card...the characters depicted in the art work, the mood they portrayed, the combination of art work conveying a particular mood with a particular message, and the arrangement of the words on the greeting card are substantially the same as in Roth’s cards.”).
which he admires.” In the reasonable person category, though, just as with the “look and feel” analysis, we do not need principled analysis.

Here are some short examples of reasonable readers analyzing Martin Parr’s oeuvre, taken from a Reddit thread:

His work says something very potent about the British, and about leisure globally.

His work is compelling storytelling and strong social commentary . . . expertly executed with a great eye for colour, composition and timing. He captures human expression and interaction with uncanny precision. He extracts perfect tableaus from everyday life.

He creates bodies of work that convey a single narrative. The images within that narrative are like paragraphs or chapters in a book.

While none look at a specific work, these comments show the ease with which the proverbial ordinary person can engage with images.

The reasonable person step could mimic trademark law, too, and include surveys, magazine articles, and any other relevant communication that speaks to the meaning attributed to a work. By opening the reasonable person as a source of meaning, courts would ensure that current cultural readings of creative works are taken into account.

If the reasonable reader finds sufficient meaning or the author offers a persuasive reading, there might be no need to keep going; in some instances, it might not “take an art expert to see a transformation.” But courts ought to exhaust all sources before deciding there is no meaning, and if doubt persists, the search for meaning should move to experts—i.e., critics, academics, curators, or other artists—who can supplement the reasonable person interpretation by supplying additional readings.

Notably, some works will not yield clearly articulated explanations from either experts or reasonable readers, but it is key that these be considered. “It would be disastrous to attempt a detailed logical exegesis of this, line by line and image by image, for in Donald Hall’s phrase, this kind of imagination is irrational. Yet it would be a poor reader who felt any large margin of unintelligibility here.” Consider this review from The Nation: “I was aware not merely of the impoverished materials but of their diffident, and elegant, seizure of my attention. It is an indication of how ramified is this art that its sensuality exists more richly and vividly as a psychological state than as a physical act.”

64. blore40, Why Is Martin Parr Regarded as a Great Photographer?, REDDIT (May 6, 2014), https://www.reddit.com/r/photography/comments/24w17b/why_is_martin_parr_regarded_as_a_great [https://perma.cc/PCX7-PTFP].
“I frequently hear the question, ‘What do these images mean?’,” wrote Adolph Gottlieb. “This is simply the wrong question. Visual images do not have to conform to either verbal thinking or optical facts. A better question would be ‘Do these images convey any emotional truth?’” From both reasonable readers and experts alike, works not open to an obvious explanation might nevertheless yield an aesthetic response. “The characteristic of a work of art is its power of provoking aesthetic emotion . . . .” It is imperative for courts to recognize the importance of “aesthetic emotion,” and create space for viewers to have their own experience of the work. However, because a reasonable reader’s inability to provide a clear explanation might be seen as a failure of meaning in the work itself, experts can reassure courts that this is not in fact the case—that, in other words, there is a there there, even if we cannot point to its exact location on the map.

2. Authors

In and out of courtrooms, intent as the sole or even primary source of meaning has been criticized as an insufficient method of interpretation. Critics of intentionalism believe that authors are not in a privileged position to make sense of their own works. “An ambiguous text does not become any less ambiguous because its author wills one of the possible meanings.” Fry, for his part, thought artists are “the least fitted to report upon the aesthetic value of the objects they pressed upon us.” It is a platitude, for instance, that creators do not always know what they are creating, or why they are creating it. Andres Serrano’s interpretation of Piss Christ, the highly controversial photograph that led Jesse Helmes to call the photographer a jerk, was open to many interpretations—some positive and some very negative. But it seems Serrano himself was not sure what the meaning of his photograph was when he set out to work on it: “At the time I made Piss Christ, I wasn’t trying to get anything across,” Serrano told The Guardian. “In hindsight, I’d say Piss Christ is a reflection of my work, not only as an artist, but as a Christian.”

70. CLIVE BELL, ART 62 (1920).
71. Id. at 62.
73. ROGER FRY, VISION AND DESIGN 47 (1925).
'I was just writing . . . I didn’t know that I was writing until it was happening. I didn’t go with the intention of writing a book. I wrote three hundred pages in ten weeks. I really wrote. I’d never done it like that.'

It was like 350 pages of stuff, that then I kind of looked at and figured out what felt essential and what felt like the core of the story to me . . . I don’t really decide what the core of a story is before I write, I write to figure out what the story is.

There are parallel instances in case law. In *Cain v. Universal Pictures Co.*, for example, “[t]he author did not seem to be conscious of the effect of the final scene. And when the meaning just expressed was called to his attention, he stated that he had not had it in mind when writing.” And another, from a photographer:

[The] photo just happened, in a brief moment. I recognized it, shot it the best I could, and moved on, continuing to shoot the devastation. I did note the similarity to Joe Rosenthal’s World War II photograph of the Iwo Jima flag-raising and was certainly aware of the symbolism of what these firefighters were doing, but in no way did I have time to analyze it. The events of the day were far more important, and in my mind, always will be.

It may well be the case that sometimes, if not most of the time, authors simply do not know what their work means. Maybe this is an inescapable condition: “In real art theory does not precede practice, but follows her. Everything is, at first, a matter of feeling. Any theoretical theme will be lacking in the essential of creation—the inner desire for expression—which cannot be determined.” Or as Matisse put it: “The things that are acquired consciously permit us to express ourselves unconsciously with a certain richness.” All of this supports the view that the author “may of course have some critical ability of his own, and so be able to talk about his own work. But the Dante who writes a commentary on the first canto of the *Paradiso* is merely one more of Dante’s critics. What he says has a peculiar interest, but not a peculiar authority.”

Moreover, some authors might prefer to stay silent—temporarily (“I’ll play it and tell you what it is later”) or permanently (“The responsibility of the response to art is

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83. Miles Davis Quintet, *If I Were a Bell*, on RELAXIN WITH THE MILES DAVIS QUINTET (Prestige Records 1958).
not with the artist”). Intent as the single method of interpretation is thus an unstable tool: Sometimes authors cannot divine final meaning of their works, and at other times they simply do not want to. And, in context of fair use, the suggested intent could very well be a convenient post-hoc defensive twist: “[I]t appears that the fair-use defense was merely a post-hoc rationalization concocted to skirt liability.”

Finally, authors may not make the most reliable witnesses. Even if Warhol himself were available to testify as to the meaning of the Orange Prince, for instance, we might have never known for sure what his intent was, not least because he was a master of prevarication: “Warhol lied constantly, almost recreationally. He lied about his age even to his doctor.”86 Or, according to Donald Kuspit, who describes Warhol’s life as if it were at all times a type of performance art, he was engaged in “the pseudo-revelatory serving up of oneself to the ideal spectator, that is, one who only wants to look, not understand.”

When the author wants to speak, though, there is no reason to suppress the author’s interpretation; it would be odd if the author were prohibited from engaging in the very activity that is available to the rest of us, after all. The audience-only approach makes sense in other legal contexts. In defamation, for instance, harm depends on reasonable people adversely interpreting a statement or implication, since someone’s reputation depends on other people’s impressions, not the author’s opinion. But if we can philosophically get past the post-structuralist death of the author,88 it seems unnecessary to silence authors altogether or to trivialize their input in favor of audience interpretations. Indeed, readers might well miss reasonable interpretations available to the author. The Fountain was initially rejected by the art establishment yet went on to revolutionize the very concept of art, which makes it a historic example of the clash between authorial intent and reader interpretation.89

On the other hand, courts should not be prejudiced against works or authors that refuse to reveal themselves clearly. In Graham v. Prince, the court noted that “the murkiness of Prince’s purpose stands in stark contrast to Google’s clearly discernible, well-recorded purpose.”90 But artists are not corporations, and art pieces are not utilitarian objects, and it is unreasonable for courts to expect artists to articulate a purpose in the same way that a company creating an API might. The artist’s failure to

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85. Zomba Enters. v. Panorama Records, Inc., 491 F.3d 574, 584 n.9 (6th Cir. 2007).
89. See, e.g., Arthur C. Danto, **BEYOND THE BRILLO BOX: THE VISUAL ARTS IN POST-HISTORICAL PERSPECTIVE** 93 (Farrar, Straus, Giroux 1992) (“These changes have seemed at times so cataclysmic as to make Picasso look almost traditional in retrospect. The boundary lines between the arts have been redrawn, as have been the boundary lines between art, taken in the most global sense, and the rest of life.”).
“provide those sorts of explanations in his deposition—which might have lent strong support to his defense—is not dispositive,” 91 and absence of explanation is not tantamount to lack of meaning.

In sum, authors can interpret their own work as freely as everyone else can. While the author’s interpretation need not be required or final, and arguably should not be final, it ought to be acknowledged when the author offers it, not least because it can be critically helpful to the assessment of meaning. Shutting it out altogether would be unnecessarily inimical to determining whether there is new meaning. The first factor should create space for willing authors to throw their own interpretations into the hat.

Of course, many artists would prefer to hold on to their vision and interpretation. “It always irritated me when someone, looking at my work, immediately conceived the idea of applying it to his particular interests.” 92 Zadie Smith mused that Nabokov would never relinquish to the reader the important task of controlling meaning: “So proud of his own genius, so particular about his interpretations, Nabokov refused to lie down and die” 93 after Roland Barthes famously proclaimed that it is language that speaks not authors, thereby ushering in the infamous death of the author. 94 She adds later: “Barthes, though, had no interest in what the author felt or wished you to feel, which is where my trouble starts.” 95 Some authors want their interpretation to control and will resist anyone else’s. If the court is persuaded by the author’s reading, there is arguably no reason to keep going. If meaning remains unclear, though, or if the court is not persuaded by the author’s reading, then the authorial interpretation should be supplemented by other sources.

D. AMBIGUITY AND POLYSEMY

While all the sources listed above provide useful bases for assessing new meaning, they do not provide a basis for deciding which interpretation should govern. On what grounds can courts choose one meaning over another, and do so without perpetuating rampant judicial subjectivity? The solution is to shift away from attempting to decipher a work’s “best” or “most persuasive” meaning, and instead to find a way of determining whether a new meaning, whatever it may be, exists. In other words, courts ought to apply a mechanism that allows them to detect the presence of new meaning—which they can do—without attempting to decipher what a work “really” means—which, often, no one can do. This section outlines the importance of moving away from the single-meaning approach and provides an alternative method that allows courts to consider multiple, reasonable meanings.

94. See Barthes, supra note 88.
95. SMITH, supra note 93, at 44.
1. Most Persuasive Meaning

In determining whether a producer had the right to make a film based on the book *Ben Hur*, the Southern District of New York had to look at the parties' contract, "the true meaning of which is the ultimate problem presented by this case." The starting point, in other words, was a search for a single, "true meaning" to be discovered from the terms of the agreement. The search for "true meaning" is evident in statutory interpretation, too. In Hawaii, to take a semi-random example, there are rules of engagement:

Where the words of a law are ambiguous:

1. The meaning of the ambiguous words may be sought by examining the context, with which the ambiguous words, phrases, and sentences may be compared, in order to ascertain their true meaning.

2. The reason and spirit of the law, and the cause which induced the legislature to enact it, may be considered to discover its true meaning.

3. Every construction which leads to an absurdity shall be rejected.  

The twofold presumption in contract and statutory interpretation, in other words, is that legal terminology communicates a true and fixed meaning and that courts, using proper methodology, mine the text to discover it. They reach for dictionaries to "determine the meaning of undefined statutory words." They apply common sense: "The presumption in commercial contracts is that the parties were trying to accomplish something rational . . . Common sense is as much a part of contract interpretation as is the dictionary or the arsenal of canons." They look to intent, which sometimes overrides actual language: The "true meaning of a contract is to be ascertained from a consideration of all its provisions in order to carry out the true intention of the parties gathered from the whole instrument," and, in statutory interpretation, "it is a commonplace that a literal interpretation of the words of a statute is not always a safe guide to its meaning." They look to history: When the meaning of a statute is doubtful, "the history of the legislation may be considered in connection with the object, purpose and language of the statute in order to arrive at its true meaning.

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98. If the legal language does not reveal the true meaning with sufficient clarity, legislators can amend it without altering the substance of the law itself. See, e.g., W. Sec. Bank v. Super. Ct., 933 P.2d 507, 514 (Cal. 1997) ("Our consideration of the surrounding circumstances can indicate that the Legislature made material changes in statutory language in an effort only to clarify a statute's true meaning . . . Such a legislative act has no retrospective effect because the true meaning of the statute remains the same.").
100. Fishman v. LaSalle Nat'l Bank, 247 F.3d 300, 302 (1st Cir. 2001).
When addressing the right to bear arms, the court pointed to “the reliance of millions of Americans (as our historical analysis has shown) upon the true meaning of the right to keep and bear arms.”\textsuperscript{104} There are lots of other principles, starting with the axiom that courts start by looking for ordinary meaning\textsuperscript{105}—“we must, of course, start with the assumption that the legislative purpose is expressed by the ordinary meaning of the words used”\textsuperscript{106}—to looking at every comma.\textsuperscript{107}

What unites all these efforts, over inevitable disagreements over methodology,\textsuperscript{108} is the search for a single and most persuasive meaning that is free of ambiguity. Everyone is looking for the eureka moment: “When so read, the contract’s true meaning becomes clear.”\textsuperscript{109} The presence of more than one possible meaning renders the text ambiguous, and therefore in need of interpretive triage. “The question is which interpretation comports with the true meaning of the statute.”\textsuperscript{110}

In the context of infringement, too, courts typically believe there is a single idea underlying the expression: “[E]ach of Roth’s cards, considered as a whole, represents a tangible expression of an idea.”\textsuperscript{111} The district court found “a different character” and “a new expression” that created new aesthetics in its \textit{Warhol} opinion. The Second Circuit, in turn, looked for “a fundamentally different and new artistic purpose and character,” and the Supreme Court subsequently referred to “a different meaning or message.”\textsuperscript{112} These are all singular standards. In line with this approach, Justice Kagan, in her impassioned dissent, synthesized various interpretations of the \textit{Orange Prince} into a single one about “the dehumanizing culture of celebrity in America.”\textsuperscript{113}

But the single, most-persuasive meaning approach is often at odds with creative works, which are open-ended and subject to multiple interpretations. Legal tools used to clarify contracts and statutes are useless in the context of art, first and foremost because they take a different target: “Any ambiguity must be resolved in a manner consistent with the objectively reasonable expectations of the insured in light of the

\textsuperscript{106} Richards v. United States, 369 U.S. 1, 9 (1962).
\textsuperscript{107} Gollberg v. Bramson Pub. Co., 685 F.2d 224, 228 (7th Cir. 1982) (citing Lessee of Ewing v. Burnet, 36 U.S. 41, 54 (1837)) (“Punctuation is a most fallible standard by which to interpret a writing; it may be resorted to when all other means fail, but the court will first take the instrument by its four corners, in order to ascertain its true meaning; if that is apparent on judicially inspecting the whole, the punctuation will not be suffered to change it.”).
\textsuperscript{108} United States v. Rybicki, 354 F.3d 124, 158 (2d Cir. 2003) (“The majority opinion is a prolonged and sustained search for some prior settled meaning for an opaque statutory phrase—‘the intangible right of honest services’—so that it can be construed as a term of art. That effort to infuse the putative term of art with meaning is conducted in a painstaking way, and considers an abundant variety of alternative meanings. However, a term of art has one single and apparent meaning, in the same way that a pun has two; it is as odd to conduct a scholarly search for the meaning of a term of art as it would be to hear a pun, conduct research in semantics, etymology and philology for a month, and then laugh.”).
\textsuperscript{109} Gollberg, 685 F.2d at 229.
\textsuperscript{110} State v. Tischio, 527 A.2d 388, 391 (N.J. 1987).
\textsuperscript{111} Roth Greeting Cards v. United Card Co., 429 F.2d 1106, 1110 (9th Cir. 1970) (emphasis added).
\textsuperscript{112} Andy Warhol Found. for the Visual Arts, Inc. v. Goldsmith, 598 U.S. 508, 522, 523, 525 (2023) (citing the District Court and Second Circuit Court of Appeals opinions) (emphasis added).
\textsuperscript{113} Id. at 566 (2023).
nature and kind of risks covered by the policy.”

There are no “reasonable expectations” with art, and courts cannot check the Oxford English Dictionary to determine the customary meaning of Agnes Martin’s empty squares, or legislative history to determine who “she” was in Wordsworth’s poem.

More importantly, art often simply cannot be assessed with a sigma five level of accuracy. Martin Heidegger’s assessment of Van Gogh’s A Pair of Old Shoes is a clear example of the mismatch between truth-seeking and meaning-seeking. Heidegger was confident that the painting was of a peasant woman’s shoes and that “[t]he artwork let[es] us know what [the] shoes, in truth, are,” but it turned out there was no peasant woman, and the shoes most likely belonged to Van Gogh himself. Heidegger’s truth turned out to be nothing more than another interpretation, in other words, and it was invalid solely because he was reaching after the painting’s “true” meaning rather than looking for a reasonable reading of it.

Does lack of transparency in a creative work make it any less potent? Not at all. Consider Donald Hall’s review of a Marianne Moore poem:

The method of “Nine Nectarines” might be criticized as deliberately obscuring meaning, but only if one believes that a poem has to “mean” something. The poem is hard to paraphrase. It will not be tucked neatly into a box, for some image or phrase is always hanging out. But who cares? If one wants philosophy there are plenty of essays for us to read. What we have in “Nine Nectarines” is poetry; a joy in words and rhythm, a pleasure in description. What we have, finally, is imagination itself, not talk about imagination.

The fact that a work cannot be read with certainty does not diminish its potency or standing in the art world. Most people would not look away from a Magritte painting and complain that its meaning is unclear. On the contrary, ambiguity is often expected, and can enhance a work’s impact: “I don’t entirely understand it,” wrote Randall Jarrell about a Marianne Moore poem, “but what I understand I love, and what I don’t understand I love almost better.” Some of us, along with the late Louise Gluck, might actually prefer ambiguity: “I am, myself, drawn to the unfinished, to sentences that falter. I dislike poems that feel too complete, the seal too tight; I dislike being herded into certainty.” Adopting Randall Jarrell’s comment, David Lehman wrote that a poem by John Ashbery “has an extraordinary immediacy, but you can’t ‘entirely understand it.’ Its pleasures are accessible, but its meanings are so elusive that the poetry itself sometimes seems to be its first and last subject. It accommodates any number of

interpretations, but at the same time it resists conventional critical analysis, and it nearly always defeats any attempt to paraphrase it.”¹¹⁹

From Infinite Jest (“Get it? I’m not sure ‘get it’ is the point here, really”)¹²⁰ to Mulholland Drive (“the predominant attitude seems to be that whatever Lynch is up to, you are free to love it or hate it but there is no use trying to understand it”),¹²¹ there are countless examples of works that are inescapably open to various interpretations and, in some cases, frustrate readers with their “lack of clearly discernible meanings.”¹²²

But while ambiguity may be a defect in legislation or contract, it is a positive feature of creative works. “[A] painting should contain a mystery, but not for mystery’s sake, a mystery that is essential to reality.”¹²³ We do not for sure know who “she” is in Wordsworth’s “A Slumber did my Spirit Seal.” Was “she” even a person? Or was “she” a metaphor, or a comment on the nature of poetry, making “quiet mockery of ideas of poetic representation which involve an imitation of reality?”¹²⁴ We do not know, and we do not need to know. “Poetry is not like reasoning,”¹²⁵ and it is precisely because there is more than one possible answer that some works have the potency they have. In these works, ambiguity is not mold concealing the actual object; ambiguity is a key part of the actual object.

The refusal to yield a clear, “true” meaning rubs salt into the basic human wish for what psychologists call “cognitive closure,” the “desire for definite knowledge on some issue and the eschewal of confusion and ambiguity.”¹²⁶ But ambiguity is not something that courts should strive to remove the way they remove ambiguity from an insurance


¹²². Nicholas Wroe, Parallel Lines, THE GUARDIAN (Apr. 22, 2005), https://www.theguardian.com/books/2005/apr/23/featuresreviews.guardianreview13 [https://perma.cc/XXP6-MYTJ] [https://web.archive.org/web/20230917204833/https://www.theguardian.com/books/2005/apr/23/featuresreviews.guardianreview13] (“If the range of his references has left some readers baffled, and frustrated by the lack of clearly discernable meanings, Ashbery has stated that ‘a poem that communicates something that’s already known to a reader is not really communicating anything to him, and in fact shows a lack of respect’. [sic] Vendler has suggested that for Ashbery, ‘a change of mood is the chief principle of form . . . every poem is unique, recording a unique interval of consciousness’ . . . .”)


¹²⁵. Percy Bysshe Shelley, A Defence of Poetry, in ESSAYS, LETTERS FROM ABROAD, TRANSLATIONS AND FRAGMENTS 1, 47 (1840).

policy. On the contrary, ambiguity is something that ought to be protected as an essential part of creative works, an inescapable and meaningful feature, not a failure of communication. In *Hurley*, the Court acknowledged that “a narrow, succinctly articulable message is not a condition of constitutional protection, which if confined to expressions conveying a ‘particularized message’ . . . would never reach the unquestionably shielded painting of Jackson Pollock, music of Arnold Schoenberg, or Jabberwocky verse of Lewis Carroll.”

Like the First Amendment, art “recognizes no such thing as a ‘false’ idea.” If the first factor of the fair use doctrine is to recognize creative works on their own terms, rather than foisting incongruous legal values and demands upon them, and if it is to help sustain fair use as the First Amendment safety valve, it too needs to embrace ambiguous aspects of artworks. The fact that a work is not created “with such clarity as to remove all ambiguity” may be a valid criticism of a treaty, but it would be an invalid criticism of art. While the legal system dislikes ambiguity and aims to eradicate it, creative endeavors often embrace it. An advertising campaign could be deliberately ambiguous, for example, and a song could contain deliberately non-sensical lyrics: In 1972, for instance, Adriano Celentano released *Prisencolinensinainciusol*, a catchy pop tune with gibberish lyrics designed to highlight Italian obsession with American music. Fair use ought to protect ambiguity in works of art. “A court should not . . . stretch its imagination in order to read ambiguity into a [contract] where none is present.” Similarly, a court should not have to stretch its imagination to articulate a “true” meaning of an ambiguous work or, to adapt a phrase from a 1954 opinion by the Virginia Supreme Court, “make that certain which is in fact uncertain.”

But where does that leave judges? In effect, we have a doctrine full of ambiguity analyzing creative content full of ambiguity. Artists, critics, and theoreticians can disregard interpretive methodologies without compromising their works. Judges, on the other hand, need to make sense of art in a way that aligns with doctrine. How can courts reconcile doctrinal imperative—i.e., to determine whether there is a new meaning—with artistic freedom to say anything in any way so that it means any number of things? If art resists final interpretation, will courts not be destined to fail if they look for a single and final meaning in something that by design is not meant to provide one?

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130. See, e.g., Onassis v. Christian Dior-New York, Inc., 472 N.Y.S.2d 254, 257 (Sup. Ct. 1984) (“Evidently, to stir comment, the relationship portrayed in the ad campaign was meant to be ambiguous, to specify nothing but suggest everything.”) (internal quotation marks omitted), affd, 110 A.D.2d 1095 (1985).
A good amount of interpretive tension and aimlessness is removed if, rather than looking for the most persuasive meaning when analyzing creative works, courts treat the first factor as a mechanism for aggregating reasonable interpretations. If courts let go of the first factor as a tool for finding true and persuasive meaning, and instead assess all reasonable interpretations to determine whether there is new meaning in the aggregate, first-factor analysis will morph from a subjective standard to an objective mechanism for detecting the presence of new meaning. The question would not be what a work means, but what reasonable interpretations it can sustain.

2. Reasonable Meanings

In many instances, the single-meaning approach will work just fine for first-factor analysis. If the work is factual rather than creative (e.g., news rather than a comic book), a distinction that is deeply entrenched in copyright law, a single-meaning interpretation is probably sufficient—judges can determine new meaning without recourse to expert testimony. In biographies, for example, a quotation or clip typically conveys a clear, single meaning, and its interaction with the surrounding context is easy enough to discern. In SOFA Entertainment, Inc. v. Dodger Productions, Inc., for instance, the meaning of a clip was self-evident: “By using the clip for its biographical significance, Dodger has imbued it with new meaning and did so without usurping whatever demand there is for the original clip.”

Creative works, however, demand a broader framework that is sensitive to art’s sui generis interpretive demands. Since creative works are open, any interpretive “account will be viewed as plausible more than as true, once what is indisputably descriptive has been provided—and always with a caution that the work may be construed in alternative ways.” The single, “most persuasive” meaning approach simply does not work.

As a thought experiment, consider this clause: “[I]t is impossible to interpret language that is unintelligible. Thus, when faced with such language, the court has only two options. It may legislate by saying, ‘this unintelligible language means X,’ or, it may declare the law invalid and give the General Assembly an opportunity to write an intelligible statute.” In the context of fair use, a court has the same two options when faced with a work whose meaning is unclear: It can impose its own meaning, or it can refuse—or fail—to find a meaning. If a court chooses option B, it likely will not find fair use. If a court chooses option A, and if we agree that in modern art there is no such thing as a single, valid, and “true” meaning of a work, then, under the guise of finding the true interpretation, the court imposes its own reading and in effect legislates the meaning of art.

134. Stewart v. Abend, 495 U.S. 207, 237 (1990) (“In general, fair use is more likely to be found in factual works than in fictional works.”).
135. SOFA Ent., Inc. v. Dodger Prods., Inc., 709 F.3d 1273, 1276 (9th Cir. 2013).
136. JOSPEH MARGOLIS, THE LANGUAGE OF ART & ART CRITICISM: ANALYTIC QUESTION IN AESTHETICS 82 (1965) (“It is difficult to decide what is admissible in interpretations of works of art.”).
As a matter of theory, it is a specious outcome. The court’s interpretation is no more valid than any other reasonable interpretation, which means that option A forces judges into a disingenuous assessment, legal fiction at best and epistemological error at worst. As a matter of doctrine, in turn, it creates unpredictable and subjective results. A search for “truth” in the context of art forces judges to engage in what one psychologist called “satisficing,” an approximation of meaning, and an exercise that is no different—and no less subjective—from what a critic, unbounded by precedent and legal principle, would do: “I merely look closely at and into all sort of photographic images and attempt to pinpoint in words what they provoke me to feel and think and understand.” This is not a formula for predictable jurisprudence.

In addition, the single-meaning approach clashes with a handful of free speech values:

Content Neutrality. Since an artwork is open to a range of interpretations, courts looking for a single meaning are forced to fall back on intuition and subjective assessments, and, in effect, pluck one interpretation out of many, whether their own or somebody else’s, and thus favor one idea over the rest, which goes against “a central tenet of the First Amendment that the government must remain neutral in the marketplace of ideas.”

Official Culture. In the aggregate, judicial interpretation also generates a slice of official culture: Forced to decide meaning, courts may well favor works that are easily interpreted, and find meaning only if the works appeal to their own set of values. Indeed, government cherry picking is one argument against any government-based funding of art: “But if we think about the arts as a whole, it’s easy to see that the endowments have moved us dramatically toward a fully institutionalized, bureaucratized and univocal art, an art that is infinitely more hostile to subversive voices of the right or the left or nowhere at all.”

Prevented Speech. If, moreover, courts decide meaning for us, which includes finding no meaning at all, the broader community might well be locked out of the conversation before it even starts, an outcome that preemptively silences not only the work itself but the discourse that would have followed, not just in the immediate future, but next year, and decades later. If Ulysses had remained banned, how many dissertations would not have been written?

Compelled Speech. The single-meaning assessment also sometimes looks like compelled speech. In *Hurley*, the Supreme Court lamented the presence of “a message the organizers do not wish to convey.”143 But judicial interpretation that discovers a single and “true” meaning of an artwork—whether it be the original or the secondary use—publicly attaches that meaning to the work even if the author does not agree, a meaning that is publicized through court papers rather than, say, a license plate.144 *Shostakovich v. Twentieth Century-Fox Film Corp.* is a glaring example of a copyright opinion, entirely oblivious to Soviet sensibility, condoning a misattributed meaning.145

In short, the single-meaning approach to creative work is full of tensions, inside and outside the legal system. A lot of the strain is removed, however, if courts stop looking for the most persuasive meaning and, instead, look for all reasonable meanings. By aggregating reasonable interpretations rather than looking for the best one, judges can replace the precarious and arguably futile process of finding a “true” meaning with a more manageable standard that scour(s) all reasonable interpretations rather than searching for the one that is “best” or “true.”

The reasonable-meanings approach addresses the free speech risks delineated above:

**Content Neutrality.** Since a court will draw on a range of sources and detect the presence of new meaning rather than select its favorite interpretation, it remains content-neutral vis-à-vis all possible readings.

**Official Culture.** A key benefit of canvassing a range of sources for meaning is that no single person or theory will dictate meaning, and, just as George Lucas could not control the meaning of the phrase “star wars,”146 no one—including courts—can control the meaning of a creative work. And because a wide swath of the community is involved, the range of interpretations will reflect community values—a sort of Urban Dictionary built into the doctrine itself.

**Prevented Speech.** Since the court will not silence valid interpretations simply because it itself cannot find one, the first factor will not silence reasonable readings, or the work itself.

**Compelled Speech.** Since the court will not favor a particular reading of a work, it will not misattribute a judicial meaning to a work that may very well mean something else to the author and audiences.

The reasonable-meanings approach not only prevents the First Amendment risks listed above, but also provides a copyright benefit—viz., a stronger idea-expression dichotomy. One of the key concepts in copyright, the idea-expression dichotomy is the principle that copyright protects only expression, not the idea behind it, so that the former does not hold the latter captive by a private owner. In line with Rilke’s

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145. *Shostakovich v. Twentieth Century-Fox Film Corp.*, 80 N.Y.S.2d 575, 578 (S. Ct. 1948) (“The gravamen of plaintiffs’ charge is that by the portrayal of the espionage activities of the representatives of the Union of Soviet Socialist Republics in Canada and by the depicted disowning of these activities by one of these representatives a picture with an anti-Soviet theme has been published. The use of plaintiffs’ music in such a picture, it is argued, indicates their ‘approval’, [sic] ‘endorsement’ and ‘participation’ therein thereby casting upon them the false imputation of being disloyal to their country’ [sic].”).
devastatingly insightful phrase that there are more faces than people,147 the idea-expression dichotomy recognizes that there are more expressions than ideas. Think of car chases in films, photos of handbags, or flying superheroes. In modern art, though, the opposite of the single-idea/multiple-expressions paradigm is true, too. A single expression can yield a multitude of ideas. An artwork, in other words, is the cultural locus of multiple meanings: “The formed matter of esthetic experience directly expresses... the meanings that are imaginatively evoked.”148 Notably, it is not just modern art that is capable of potent polysemy: “[W]e all draw something from our national symbol, for it is capable of conveying simultaneously a spectrum of meanings.”149 To take an expression that is right on brand, under the first factor each idea can be given its fifteen minutes, and each will get a chance to stimulate “productive thought.”150 A meaning-agnostic first factor augments the idea-expression dichotomy: By recognizing all ideas embedded in a single expression, rather than just one, it protects not only multiple expressions of a single idea but multiple ideas embedded in a single expression. That expansion, in turn, brings a First Amendment benefit, since it increases the free flow of ideas151 and “the widest possible dissemination of information from diverse and antagonistic sources.”152

And here is a comforting thought to those among us who do believe artworks can have a true interpretation that would be diluted by the reasonable-meanings approach: If there is such a thing as a “true” meaning of a given work, it will survive along with the other interpretations, since a reasonable-meanings approach will capture the “true” meaning along with the other readings. At least in principle, subsequent commentaries can identify the most persuasive meaning in the First Amendment’s idealized marketplace of ideas,153 and, through robust debate, we can figure out for ourselves which interpretations are the most compelling. In this way, a reasonable-meanings approach aligns fair use with the First Amendment’s lodestar,154 “an uninhibited marketplace of ideas in which truth will ultimately prevail.”155 “Truth, on this view, might be an epistemological triumph, or it might be cultural meaning, but, in either case, it will be something that the interested community rather than a court will determine.

147. Rainer Maria Rilke, The Notebooks of Malte Laurids Brigge 4 (Robert Vilain, trans., Oxford U. Press 2016) (“Suprising, for example, that I’ve never been properly aware of how many faces there are. There are many people, but even more faces, since everyone has several.”).
150. Leval, supra note 13, at 1110.
151. Associated Press v. United States, 326 U.S. 1, 20 (1945) (“[T]he government itself shall not impede the free flow of ideas...”). Roth v. United States, 354 U.S. 476, 484 (1957) (“All ideas having even the slightest redeeming social importance—unorthodox ideas, controversial ideas, even ideas hateful to the prevailing climate of opinion—have the full protection of the guaranties, unless excludable because they encroach upon the limited area of more important interests.”).
Albrecht Dürer, the medieval artist, thought the community approach to aesthetics—*consensus omnium* (which translates to consent of all), or what today we might call the lowest common denominator—is naïve. Notably, though, the reasonable-meanings approach is not actually a *consensus omnium*. The interpretations do not have to agree with each other. The threshold is the presence of reasonable meanings rather than agreement among them. If copyright is to remain content-neutral, and if it is true that “theory—in the requisite classical sense—is *never* forthcoming in aesthetics”\(^{157}\) anyway, the presence of reasonable interpretations, rather than a single, most persuasive meaning or absolute agreement among them, is all the first factor can really detect and apply. Dürer’s complaint against the tyranny of popular taste—“*what all the world holds to be beautiful . . . we shall think beautiful, too*”\(^{158}\)—can be adapted to create a first factor axiom: What the community holds to be meaningful, courts will think meaningful, too. New meaning will then be “*anything you can get away*”\(^{159}\) with as long as the community’s reading of the works allows it. Courts themselves will not need to solve an epistemological mystery—instead of searching for the interpretation that reveals the elusive ‘true’ meaning, courts can look for the existence of all reasonable interpretations to determine if, in the aggregate, the secondary work has generated new meaning. “*There is always a tendency to legislate rather than to inquire,*”\(^{160}\) wrote T.S. Eliot about criticism. This shift in doctrinal approach would reverse the pattern and allow judges to inquire into rather than legislate meaning.

3. Something New

The first factor can easily accommodate an approach that looks for reasonable meanings rather than the single best meaning. In fact, the case-law building blocks are already in existence.

1. Meaning Agnosticism. In *Seltzer*, the Ninth Circuit was entirely unclear about the meaning of both the original and the secondary work, but thought it enough that the secondary use clearly did not mean the same thing as the original:

The message and meaning of the original *Scream Icon* is debatable . . . But regardless of the meaning of the original, it clearly says nothing about religion . . . Staub’s video backdrop using *Scream Icon* conveys ‘new information, new aesthetics, new insights and understandings’ that are plainly distinct from those of the original piece.\(^{161}\)

It is possible, in other words, for courts to find new meaning without actually identifying what that new—or even old—meaning is, which underscores the fact that finding the presence of new meaning is more important than deciphering it.

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158. PANOFSKY, supra note 156, at 276.
159. The phrase is sometimes misattributed to Warhol; it is actually from MARSHALL McLUHAN & QUENTIN FIORE, *THE MEDIUM IS THE MESSAGE* 132–36 (1967).
2. Reasonableness. In *Campbell*, the Supreme Court asked whether the parodic element can be reasonably perceived: “The threshold question when fair use is raised in defense of parody is whether a parodic character may reasonably be perceived.”162 The Ninth Circuit in 2004, for example, thought “the parodic character of Defendant’s work is reasonably perceived.”163 And other opinions have applied this standard,164 including the Second Circuit’s *Warhol* opinion.165

3. Polysemy. The “something new” required by fair use jurisprudence does not need to be just one thing. Instead of deconstructing the work to find “a” new meaning, courts would simply ask if, given all available interpretations and relevant criteria, new meaning exists. The Eleventh Circuit recently adopted this approach with regard to purpose: “[T]ransformativeness does not require unanimity of purpose—or that the new work be entirely distinct—because works rarely have one purpose.”166 The same multivalence principle can naturally apply to meaning.

If we combine these three pieces—meaning agnosticism, reasonableness, and polysemy—we have a formula that allows courts to abandon the divining-rod approach, which looks for the best and “true” and most persuasive interpretation, and open up the first factor to all reasonable interpretations that can then be analyzed in the aggregate for the presence of meaning. A creative work analyzed under the first factor could be a cornucopia of valid interpretations, each of which can be “something new,” and all of which, collectively, establishes the presence of new meaning. The first factor, on this view, would not be a requirement for discovering a single, “true” meaning, but an open space to discover multiple reasonable meanings. “The fact that the picture can be reasonably interpreted in multiple ways does not mean the picture lacks relevance, and is therefore, inadmissible.”167 In the context of the first factor, the fact that a work can have multiple interpretations does not mean it lacks meaning and should be suppressed. The reasonable-meanings approach turns the first factor into a happy parade replete with meanings,168 or, to use another First Amendment case metaphor, measures the volume of the rock concert, not its content, and asks if there is music, not what it means.169

164. *Leibovitz v. Paramount Pictures Corp.*, 137 F.3d 109 (2d Cir. 1998) (“Applying *Campbell* to the first-factor analysis, we inquire whether Paramount’s advertisement ‘may reasonably be perceived’ . . . as a new work that ‘at least in part, comments on’ [the original].”); *Cariou v. Prince*, 714 F.3d 694, 707 (2d Cir. 2013) (“[W]e . . . examine how the artworks may ‘reasonably be perceived’ in order to assess their transformative nature.”). See also *Apple Inc. v. Corellium, Inc.*, No. 21-12835, 2023 U.S. App. LEXIS 11225 (11th Cir. May 8, 2023); *Abilene Music, Inc. v. Sony Music Ent., Inc.*, 320 F. Supp. 2d 84 (S.D.N.Y. 2003).
165. *Andy Warhol Found. for the Visual Arts, Inc. v. Goldsmith*, 11 F.4th 26, 37 (“We evaluate whether a work is transformative by examining how it may ‘reasonably be perceived.’”).
II. APPLICATION

A. Judicial Role

Recognition of polysemy does not mean that all readings should be deemed valid; anything cannot be “something new” for first factor purposes. Without judicial oversight, moreover, new meaning would become pure majority vote based solely on the number of interpretations that the defense can muster. Some judicial intervention or procedural framework is essential to ensure interpretive and doctrinal integrity. The judicial role should be (a) to aggregate readings from available sources, (b) to filter out interpretations that are based on defective sources, and (c) to determine whether the ones that remain signal new meaning.

1. Filtration

Here are some dimensions for courts to consider when assessing whether interpretations are based on defective sources.

Work Specificity. An interpretation may be based on a source that does not speak specifically to the particular work. For example, an expert might rely too heavily on an isolated statement in an artist’s autobiography. Consider what Warhol wrote (via his ghostwriters) in *The Philosophy of Andy Warhol*: "You’re recycling work and you’re recycling people, and you’re running your business as a by-product of other businesses."170 The sentence seems to promote predatory business practices, but that is not at all true. Warhol was a cultural environmentalist of sorts, making sure that cultural content did not go to waste. “Things that were discarded, that everybody knew were no good, I always thought had great potential to be funny. It was like recycling work.”171 As an interpretive tool, the first statement is of questionable utility, since it is a broad pronouncement that did not necessarily influence a particular work or its meaning.

Historical Context. Like textualists in the context of statutory interpretation, some theorists think interpretation should be limited to and based solely on the work itself. Beardsley, a well-known proponent of the text-only approach, said: “There is a gross body of life, of sensory and mental experience, which lies behind and in some sense causes every poem, but can never be and need not be known in the verbal and hence intellectual composition which is the poem.”172 Moreover, context can be manipulated, and force feed the meaning of a work: “The measure of control exercised by the artist and his sponsor . . . over the viewer’s approach to the work . . . his access to information and documentation about it, forecloses an independent appraisal of the work. It thereby renders problematic any discussion of the work as such, for it inhibits an effective dissociation between what one sees and what one is expected to see.

171. Id. at 93.
between what one believes and what one is led to believe.”173 According to this school of thought, we should stick to the text or the frame: “Historians of images have learned well enough how the law of the frame touches them: image or context, that is the choice. It is better to stay with the particular or get quickly lost in the cover of the background.”174

If the point is to allow the maximum number of interpretations, however, a work-only analysis would be an unnecessary limitation. An artwork makes most sense when viewed in its cultural and historical context, an assessment of its zeitgeist that inevitably requires consideration of external elements. The Orange Prince, to take the most immediate example, is part of Pop art, which has very clear criteria for inclusion: “Popular, transient, expendable, low-cost, mass-produced, young, witty, sexy, gimmicky, glamorous, and Big Business,” according to Richard Hamilton’s well-known formula.175 The artist’s immediate social context might provide insights, too. In connection with Silver Elvises, for example, one theorist argued “that both time and place—the late spring and summer of 1963 and Los Angeles, respectively—played pivotal roles in the conception, installation, and intended meaning of the series.”176

But some readings might go too far. Does the fact that Picasso was Spanish and exposed to bullfighting give his Bull’s Head an autobiographical meaning? Zadie Smith thought Nabokov’s experience in the Soviet Union predisposed him against “ideologies that made light of Western freedoms and individual privilege, up to and including the individuality of the author.”177 They are reasonable suspicions and questions, but do they provide reasonable interpretations? Are these accurate analyses, ex post hoc, ergo propter hoc misreadings, or merely possible but not probable—and therefore, for first factor purposes, not reasonable—explanations?

Motivation. Do autobiographical details matter, or would we be delving into motivation rather than intent? Van Morrison notoriously recorded what has colloquially become known as the Contractual Obligation Session,178 a series of songs meant to fulfill his contractual requirements, including gems like “Blow in your Nose,” “Nose in your Blow,” and “Want a Danish.” Is every lyric just obvious frustration with the music label, or should we interpret the words on their own terms? Does his motivation change the work’s meaning? Even if it is an accurate reading of the artist’s psychic impetus, does it matter if “the smile of Mona Lisa del Gioconda awakened in

177. SMITH, supra note 93, at 47.
the man the memory of the mother of his first years of childhood?” Or is this just motivation? More generally, is this too much reliance on psychology rather than objectively verifiable data?

**Literal Meaning.** Some readings are impossible to confirm or dispen: Wordsworth’s biographer thought “slumber” referred to the “creative sleep of the senses when the ‘soul’ and imagination are most alive.” Is that an interpretive overreach? Is there a way to make that determination? Probably not. But the validity of some interpretations can be challenged on purely factual or logical grounds. Upon encountering the phrase “base football player,” for example, someone based in the United States might draw immediate associations, but Shakespeare clearly was not thinking about American sports. The phrase might be about Oswald’s social standing and his views on authority, but “base football player” in Shakespeare cannot possibly be a reference to Michael Vick. Similarly, though a woman appears to be holding a smartphone in an 1860 painting by Ferdinand Georg Waldmüller, for obvious reasons that interpretation is literally impossible, and a court would reject it.

In sum, judicial filtration would ensure that interpretations that use unreliable sources are removed from consideration. The ones that remain, in turn, would ipso facto be reasonable and provide material for courts to determine whether new meaning exists.

**2. Assessment**

Once defective readings are eliminated, the remaining interpretations can be used to determine whether a secondary use yields new meaning. Here are some possible approaches to this step.

**Multiplicity of Reasonable Interpretations.** The fact that a work of art can accommodate multiple interpretations that survive judicial review is itself evidence of new meaning; for first factor purposes, a work’s ability to sustain a range of interpretations and aesthetic reactions signals potency rather than weakness.

**Convergence.** Sometimes explanations coming from various sources will agree with each other, creating, in effect, a single, most persuasive meaning. Convergence indicates there is not only meaningful cultural discourse, but also a primary meaning (at least for the moment—future generations might collectively find a new shared interpretation). Lack of convergence, on the other hand, or the presence of various interpretations that do not overlap, should not be an argument against new meaning. No two people read the same book, goes the old adage, and Edmund Wilson took the argument even a step further by making continuity impossible even in a single reader: “In a sense, one can never read the book that the author originally wrote, and one can

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179. SIGMUND FREUD, LEONARDO DA VINCI: A PSYCHOSEXUAL STUDY OF AN INFANTILE REMINISCENCE 91 (1916).
181. See Matthew Davis, My Master Calls Me: Authority and Loyalty in King Lear, 70 RENASCENCE: ESSAYS ON VALUES IN LITERATURE 59, 68 (2018).
182. Ferdinand Georg Waldmüller, Die Erwartete (1860), Neue Pinakothek (Munich, Ger.).
never read the same book twice." Courts should not expect readers to buttress the same interpretation—the whole point is to allow multiple interpretations. Absence of overlap, in other words, is not absence of meaning. Interpretations do not have to agree with each other. Absence of convergence should therefore be treated as neutral rather than a negative.

**Mutual Exclusivity.** Despite both being portraits of the same person, the actual meanings of Goldsmith’s *Prince* and the *Orange Prince* are mutually exclusive—the vulnerability in Goldsmith’s *Prince* is entirely missing from the *Orange Prince*, and the message communicated by the latter is vastly different from that of the original. In other words, the latter can sustain an interpretation that the former cannot, a mutual exclusivity of interpretation which suggests there is new meaning.

Here is a homemade example. The first is Wordsworth’s poem “A Slumber did my Spirit Seal.” The second is my version.

A slumber did my spirit seal;
I had no human fears;
She seemed a thing that could not feel
The touch of earthly years.

No motion has she now, no force;
She neither hears nor sees;
Rolled around in earth’s diurnal course,
With rocks, and stones, and trees.

Here is my alternative. The storyline is more or less the same, but I make some ostensibly-minor changes:

A slumber did my spirit seal;
I had no fear:
She seemed indifferent and immune
To the passage of time.

She lies still, enthralled;
Hearing and seeing nothing;

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Turned with the earth’s endless rotation,
Along with concrete, cars, and parks.

There are some minor tweaks here, but the second version could be interpreted as a story about someone who took sedatives and is now in a stupor in a city flat, or even someone taking LSD. Given that LSD was not isolated until 1938, that interpretation of the original is a historical impossibility. The original is one of Wordsworth’s Lucy poems, but my Lucy is closer to the Beatles’ “Lucy in the Sky with Diamonds.” In short, the two interpretations are mutually exclusive, and, since the new version can sustain an interpretation that the original cannot, the presence of new meaning would be hard to deny.

Status and Novelty. According to the institutional theory of art, a work ought to be considered an artwork if the art world gatekeepers recognize it as such. While gallery and museum imprimatur certainly should not mean the work should be ipso facto transformative—indeed, recently Graham v. Prince yielded precisely the opposite result—if art world principals do consider something a work of art, it is only reasonable to ask why. But the flip side of this question—novelty and lack of established critical discourse—is at least as important to consider.

While fair use disputes sometimes involve established artists—Jeff Koons, wrote the Second Circuit, “has been exhibited widely in museums and commercial galleries and has been the subject of much critical commentary”—often fair use defendants are not well known, and the challenged works have not been in circulation for long. The Orange Prince itself has been in existence for decades, for example, but until 2016 Goldsmith did not even know it existed, and it is not clear that the work had ever been publicly visible before ending up on the cover of Vanity Fair. Fair use, in this sense, is a conversation starter. Since absence of discourse might easily be confused with absence of meaning, new works with no established interpretive discourse are
particularly vulnerable to first factor misanalysis. A new work’s susceptibility to judicial misunderstanding is precisely the risk that Holmes identified in *Bleistein* when he worried that courts simply might not get it: “[S]ome works of genius would be sure to miss appreciation. Their very novelty would make them repulsive until the public had learned the new language in which their author spoke.”190 Absence of discourse around a work might easily be confused with absence of meaning and used as the basis for dismissing the whole work.

But lack of clear meaning or established discourse is not necessarily lack of meaning. When writing about Post-Impressionists, Roger Fry noted that a “charge that is frequently made against these artists is that they allow what is merely capricious, or even what is extravagant and eccentric, in their work—that it is not serious, but an attempt to impose on the good-natured tolerance of the public.”191 But, Fry thought, the public simply needed more time to get used to the new aesthetic: “It is too early to be dogmatic on the point, which can only be decided when our sensibilities to such abstract forms have been more practised than they are at present. But I would suggest that there is nothing ridiculous in the attempt to do this.”192 Leo Steinberg described the dynamic of the public’s first encounter with a work of art that eludes clear interpretation: “The grooves in which thoughts and feelings will eventually run have to be excavated before anything but bewilderment or resentment is felt at all. For a long time the direction of flow remains uncertain, dammed up, or runs out all over, until, after many trial cuts by venturesome critics, certain changes are formed. In the end, that wide river . . . becomes navigable to all.”193

Because a reasonable-meanings approach to the first factor allows a multitude of reasonable readings, it provides more free speech protection to new works than does the single-meaning approach: The availability of some interpretations, even in the absence of a dominant one, will signal the presence of meaning, and courts will be less likely to dismiss the new work as non-transformative simply because, as Holmes feared, they cannot find a single, most persuasive explanation.

**Most Persuasive Meaning.** Courts could still simply pick the most persuasive meaning. Since the other interpretations will survive along with this one, free speech is not stifled, and there is no First Amendment harm, particularly if courts are clear that they are choosing one out of many, rather than insisting that they have found its “true” meaning.

In one way or another, courts have already applied some of these standards. Here, for instance, are the steps taken in a 1928 opinion tasked with deciding whether a sculpture was, in fact, a work of art. The opinion recognized the art movement, and removed its own preferences from the equation: “Whether or not we are in sympathy with these newer ideas and the schools which represent them, we think the fact of their existence and their influence upon the art world as recognized by the courts must be

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191. *Fry*, supra note 73, at 238.
192. *Id.* at 239.
considered.\textsuperscript{194} The court looked at the purpose of the statute and located the work’s place in art history: “The object now under consideration is shown to be for purely ornamental purposes, its use being the same as that of any piece of sculpture of the old masters.”\textsuperscript{195} The opinion acknowledged the work’s aesthetic impact: “It is beautiful and symmetrical in outline”\textsuperscript{196} and “while some difficulty might be encountered in associating it with a bird, it is nevertheless pleasing to look at and highly ornamental.”\textsuperscript{197} Finally, the court considered the status of the artist: “[I]t is the original production of a professional sculptor.”\textsuperscript{198} All of which then led the court to conclude that the sculpture “is in fact a piece of sculpture and a work of art.”\textsuperscript{199}

As with all else in fair use, the details will vary across disputes, and other categories of defects are likely to be identified. But a set of criteria are available for judges to apply in order to assess the validity of interpretation. All of these dimensions, moreover, will be useful even if courts insist on looking for the most persuasive meaning. The proposed formula thus provides objective criteria for courts to apply whether they are looking for a single interpretation or all reasonable interpretations.

\section*{B. Transformation and Social Benefit}

The foregoing formulation provides a stable mechanism for detecting the presence of new meaning, but a key question remains: When is new meaning transformative? When Picasso put together a bicycle seat and handle bar he found and converted them into an artwork, he said that a “metamorphosis has taken place.”\textsuperscript{200} In \textit{Ways of Seeing}, his classic book on visual art, John Berger wrote that “[w]hen a painting is put to use, its meaning is either modified or totally changed.”\textsuperscript{201} The judicial process, however, takes a more conservative view of change: “A secondary work may modify the original without being transformative.”\textsuperscript{202} Under the first factor, not all new uses generate new meaning, which is fine, but what is often a bit confusing is that not all new meaning is legally sufficient new meaning. “Many secondary works add something new. That alone does not render such uses fair.”\textsuperscript{203} Identifying precisely this vacuum, Judge Wallace wrote in dissent: “Indeed, while I admit freely that I am not an art critic or expert, I fail to see how the majority in its appellate role can ‘confidently’ draw a distinction between the twenty-five works that it has identified as constituting fair use and the five works that do not readily lend themselves to a fair use determination.”\textsuperscript{204}

The line between sufficient new meaning and insufficient new meaning remains unclear and arbitrary; courts have not found a “bright line marking the point at which

\begin{thebibliography}{203}
\bibitem{id} \textit{Id.} at *8.
\bibitem{id} \textit{Id.}
\bibitem{id} \textit{Id.}
\bibitem{id} \textit{Id.}
\bibitem{berger} The Faber Book of Art Anecdotes 444 (Edward Lucie-Smith ed., 1992).
\bibitem{cariou} Cariou v. Prince, 714 F.3d 694, 708 (2d Cir. 2013).
\bibitem{warhol} Cariou, 714 F.3d at 713.
\end{thebibliography}
this change is sufficient to become ‘transformative,’” 205 and “whether a work is transformative is often a highly contentious topic.”206 When Justice Kagan says, in her dissent, that Warhol “reframed and reformulated—in a word, transformed,”207 she is not actually using legal synonyms. You can have the first two without the third, and it is not clear when the first two amount to the third.

The missing piece—the bridge between new meaning and transformative new meaning—is social benefit.

1. Social Benefit

*Philpot v. Media Research Center Inc.* reasoned that transformation occurs when a secondary work succeeds in “informing the public about a newsworthy event, providing commentary, or adding other social benefit,”208 and, according to the Second Circuit, the first factor “asks whether the original was copied in good faith to benefit the public or primarily for the commercial interests of the infringer.”209 The first factor, in other words, turns out not to be about new meaning per se, as much as it is about new meaning that generates a social benefit. Transformativeness, in this sense, is a question of meaning in conjunction with public welfare. Put another way, the first factor looks for new meaning that serves the public interest. If there is new meaning, and if it carries a social benefit, the legal transformation is complete.

*Campbell*, for instance, took the position that parody creates a “social benefit, by shedding light on an earlier work, and, in the process, creating a new one.”210 This approach squares with case law that recognizes the value in “adding a new, critical perspective,”211 and with secondary uses that allow us to see things in a “different light.”212 Book reviews fold nicely under this rubric, since they “serve the reading public as a useful guide to which books to buy”213 by letting us see them in the light cast by the reviewers. As do historical references,214 since they allow us to learn about our past by seeing what is being discussed. And the more meaning there is, the easier it is to determine what the social benefit might be, particularly in the context of new

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213. Ty, Inc. v. Pubn’s Int’l Ltd., 292 F.3d 512, 517 (7th Cir. 2002).
214. See Bouchat v. Balt. Ravens Ltd. P’ship, 737 F.3d 932, 940 (4th Cir. 2013) (“[T]hese videos used the Fly-ing B as part of the historical record to tell stories of past drafts, major events in Ravens history, and player careers.”); see also Bill Graham Archives v. Dorling Kindersley Ltd., 448 F.3d 605, 609 (2d Cir. 2006) (“[C]ourts have frequently afforded fair use protection to the use of copyrighted material in biographies, recognizing such works as forms of historic scholarship, criticism, and comment that require incorporation of original source material for optimum treatment of their subjects.”).
perspectives and understandings. What did a book reviewer say about a particular book? It will not be enough if I say, “This book is good. Check it out. Here is the first chapter.” That is a review in a purely formal sense, but it provides no social benefit whatsoever, since it communicates no useful information other than providing a copy of the original. In short, the meaning of the review is essential. Including copies of posters for Grateful Dead concerts, on the other hand, meaningfully illustrated how the band billed its concerts through its career.\textsuperscript{215}

In other instances, social benefit is primarily a question of access, or “the public’s interest in dissemination of information affecting areas of universal concern, such as art, science.”\textsuperscript{216} This principle captures a vast array of activities: the creation of digitized content,\textsuperscript{217} comparative advertising that enables customers to make informed decisions,\textsuperscript{218} and the preservation of significant information.\textsuperscript{219} More generally, it captures the “broad public availability of literature, music, and the other arts”\textsuperscript{220} and the First Amendment’s “positive right of public access to information and ideas.”\textsuperscript{221} This second set of uses has a utilitarian as well as expressive purpose, but meaning is still significant, if only to assess the types of information being accessed. There is, after all, a difference between access to books,\textsuperscript{222} which carries a social benefit, and access to information delivered via a hidden video feed, which is private gain at someone else’s privacy expense.\textsuperscript{223}

In addition, social benefit captures all the uses that have been regarded as presumptively fair by virtue of their inclusion in legislation—commentary, criticism, and so on. Since the legislative list is not meant to be exhaustive, however, the social benefit standard creates a basis for assessing uses that fall outside the list, too. Social benefit also aligns with utilitarian purpose assessments—e.g., the social benefit of search engines—which provides nice doctrinal symmetry.

This approach also explains why in some cases there might be a lot of new meaning that is not actually transformative. I might write a sequel to \textit{Gone with the Wind},\textsuperscript{224} for example, but unless my sequel provides some social benefit—by, for instance, exposing dated values in the original—it likely will not be transformative, even though it might contain a lot of new meaning.

\textsuperscript{215} See Bill Graham Archives, 448 F.3d 605 (2d Cir. 2006).
\textsuperscript{216} Wainwright Sec., Inc. v. Wall St. Transcript Corp., 558 F.2d 91, 94 (2d Cir. 1977).
\textsuperscript{217} See Authors Guild v. Google, Inc., 804 F.3d 202, 229 (2d Cir. 2015) ("In sum, we conclude that: (1) Google’s unauthorized digitizing of copyright-protected works, creation of a search functionality, and display of snippets from those works are non-infringing fair uses.").
\textsuperscript{218} See Sony Comput. Ent. Am., Inc. v. Bleem, LLC, 214 F.3d 1022, 1027 (9th Cir. 2000) ("[C]omparative advertising redounds greatly to the purchasing public’s benefit . . . .").
\textsuperscript{219} Pac. & S. Co. v. Duncan, 572 F. Supp. 1186, 1196 (N.D. Ga. 1983) ("[U]nder Plaintiff’s present procedure, film of news events of possibly great import could be destroyed a week after the broadcast, with no useful copy being available thereafter. In such a case, Defendant’s systematic copying and sales could represent a modest social benefit.").
\textsuperscript{220} Twentieth Century Music Corp. v. Aiken, 422 U.S. 151, 156 (1975).
\textsuperscript{221} Kreimer v. Bureau of Police, 958 F.2d 1242, 1255 (3d Cir. 1992).
\textsuperscript{222} See Authors Guild, 804 F.3d.
In effect, the social benefit standard implements the guiding principle that Judge Leval proposed in 1990—viz., any “activity that the fair use doctrine intends to protect for the enrichment of society.” 225 In Fitzgerald v. CBS Broadcasting, Inc., a use was infringing because it “primarily served defendant’s private interests rather than the public interest in underlying copyright law.” 226 Social benefit is that concept in inverse; it is what serves public interest rather than a private interest, and advances the core imperative behind copyright. In other words, “[t]o promote the Progress of Science and useful Arts.” 227 Its presence means transformative speech creates something that we as a society consider valuable. In Authors Guild v. Google Inc., the Southern District of New York wrote that “[t]he more the appropriator is using the copied material for new, transformative purposes, the more it serves copyright’s goal of enriching public knowledge . . . .” 228 This formulation, if reversed, yields the useful axiom that the more the appropriator serves copyright’s goal of enriching public knowledge, the more transformative the use is.

2. First Factor Versus Fourth Factor

The first fair use factor pushes for fair use if the work is transformative. The fourth factor protects the copyright owner’s profits. The two factors exist in perpetual tension. If under the first factor the secondary use is deemed sufficiently transformative and therefore fair use, the copyright owner does not get paid for that secondary use, which is the adverse market impact that the fourth factor is meant to prevent. In this sense, the two factors seem hopelessly at odds. But the social benefit variable provides a simple theoretical rapprochement.

The profit motive that is embedded in copyright—i.e., the principle that people will create new works if copyright gives them property rights they can leverage to charge for access to those works—suggests that an unpaid use of copyrighted materials effectively deprives the copyright owner of due revenue. Put another way, copyright provides economic incentives to creators by allowing them to generate revenue from their works. Since a licensing fee is one of those sources of revenue, if someone uses the original on a fair use basis, the copyright owner misses out on that revenue.

But the social benefit variable shifts the analysis. From this perspective, a secondary use diverts the copyright owner’s profits only if the secondary user exploits the original for purely commercial gain. If, for instance, I use a copyrighted character in my own film because I know that it will tap into a loyal audience, all I am really doing is exploiting the market value of the original. If, however, I use a copyrighted character to reveal social biases inherent in the character, I generate a social benefit—i.e., social commentary. This is precisely the kind of use that the fair use doctrine protects. And because the value of the secondary work lies in the social benefit that the secondary work adds to the original, the revenue from that secondary work properly belongs to

me. In other words, there is no tension between the two factors if we insert the social benefit variable as a mediator between them. The key is simply to distinguish those uses that exploit the original work solely for commercial purposes, which is pure infringement, from those uses that leverage copyrighted materials in ways that provide a social benefit, which is fair use.

Here is another way of looking at it. The major economic harm that can befall the copyright owner is substitution. This is the cheap (or fancy, as the case may be) knockoff that altogether displaces the original from the market. A copy of a photograph is a simple example. Since my version can entirely replace the original, it can erode or even eliminate the copyright owner’s profits. Another economic harm is misappropriation, or the incorporation of existing materials into a secondary work solely in order to capitalize on their commercial value.229 A burlesque version of a play, for instance, will not be fair use simply because superficial aspects of the work have changed. “The defense, ’I only burlesqued’ the copyrighted material is not per se a defense,”230 or really any defense at all; “[a] burlesque presentation of such a copy is no defense to an action for infringement of copyright.”231 Neither of those uses makes it past the fourth factor’s watchful eye, since each is merely exploiting the economic value of the original. For those same reasons, I might not be able to write a sequel to Rocky232 if I am just free riding on its market strength any more than I can create a sequel to Catcher in the Rye233 or adapt Dr. Seuss.234 In those instances, there might be new meaning (it is hard to believe the fusion of two universes in a Star Trek and Dr. Seuss mash-up was actually meaningless),235 but because the new meaning lacks a recognizable social benefit, it is not transformative.

229. Courts differentiate between economic benefit and commercial misuse. The “appropriation of copyrighted material solely for personal profit, unrelied by any creative purpose, cannot constitute parody as matter of law.” Tin Pan Apple, Inc. v. Miller Brewing Co., 737 F. Supp. 826, 831 (S.D.N.Y. 1990). But the fact that a work generates a commercial benefit is not a strike against the secondary user for the simple reason that “nearly all authors hope to make a profit with their work.” Robinson v. Random House, Inc., 877 F. Supp. 830, 840 (S.D.N.Y. 1995). And precisely because “many, if not most, secondary users seek at least some measure of commercial gain from their use, unduly emphasizing the commercial motivation of a copier will lead to an overly restrictive view of fair use.” Am. Geophysical Union v. Texaco, Inc., 60 F.3d 913, 921 (2d Cir. 1994). Making money, in other words, is not inherently a misuse of the copyright profit mechanism, even if you use someone else’s copyrighted content. But using someone’s existing copyrighted materials is an abuse of the profit mechanism if the original is exploited merely for its commercial benefit.

231. Benny v. Loew’s Inc., 239 F.2d 532, 537 (9th Cir. 1956).
234. “See Dr. Seuss Enters. L.P. v. ComicMix LLC, 983 F.3d 443, 448 (9th Cir. 2020) (“Enter Oh, the Places You’ll Boldly Go! (Boldly). Authored by Star Trek episodes author David Gerrold, illustrated by Ty Templeton, and edited by fellow Trekkie Glenn Hauman (collectively, ComicMix), Boldly is a mashup that borrows liberally—graphically and otherwise—from Got! and other works by Dr. Seuss, and that uses Captain Kirk and his spaceship Enterprise to tell readers that ‘life is an adventure but it will be tough.’”).
235. “See Dr. Seuss Enters. L.P., 983 F.3d.”
If, however, my version is a commentary on the original—if, for example, I expose some key aspect of Rocky as playing into racial stereotypes—I might well be able to write a sequel, just as rewriting Gone with the Wind and making a play about Grease qualified for fair use because of the social benefit each provided by virtue of exposing dated and problematic values in the originals. And here is the critical shift: The revenue generated by the secondary use is the monetary reward to the secondary user for creating the social benefit. It is true, of course, that the secondary use would not have been possible without the original work. But the value of the secondary work is in its social benefit, not the original. If the work did not contain the social benefit, then it would be merely infringing, since, to put it in more economic terms, it would be substitutional copying that merely replaces the original.

The Seventh Circuit expressed concern that the first prong will swallow up derivative works if the analysis moves away from economics and places emphasis on the transformative nature of a secondary use: “[A]sking exclusively whether something is ‘transformative’ not only replaces the list in § 107 but also could override 17 U.S.C. § 106(2), which protects derivative works. To say that a new use transforms the work is precisely to say that it is derivative and thus, one might suppose, protected under § 106(2). Cariou and its predecessors in the Second Circuit do no [sic] explain how every ‘transformative use’ can be ‘fair use’ without extinguishing the author’s rights under § 106(2). We think it best to stick with the statutory list, of which the most important usually is the fourth (market effect).”

But the social benefit standard provides an explanation. The fair user who creates a secondary work with social benefit does not abuse the profit mechanism by exploiting the original solely for pecuniary gain or to create a substitutional work. The fair user adapts the work in a way that increases public welfare and promotes science and the arts, which is what fair use, like copyright law in general, aims to achieve. The profits that flow to the secondary user reward the social benefit conveyed by the secondary work. From this perspective, the fact that the copyright owner does not profit is not a loss; it is simply revenue that naturally belongs to the secondary user who is also a social benefactor. Indeed, if revenue from the secondary use were allocated to the copyright owner, it would be the copyright owner free riding on the work of the secondary user. Put more formally, cultural output that provides an identifiable social benefit rather than merely generating private gain ipso facto justifies unpaid use precisely because it increases public welfare.

The simple but potent principle can be phrased this way: Transformative speech—that is, new meaning coupled with social benefit—dovetails with copyright's


239. Kienitz v. Sconnie Nation LLC, 766 F.3d 756, 758 (7th Cir. 2014).
constitutional imperative “to promote the Progress of Science and useful Arts.” The secondary user should be rewarded for creating a secondary use that generates a social benefit. Conversely, transformative speech should not be silenced unless the secondary user abuses the profit mechanism solely for private gain (e.g., misappropriation) thereby harming the original copyright owner (by siphoning off or displacing revenue).

3. Final Formulation

If we include social benefit as part of the formula, a work would be transformative if
(a) the author, readers (reasonable person, experts, judges), and status analysis, either collectively or individually, point(s) toward a new persuasive meaning or a number of reasonable meanings (as measured, in part, by convergence and mutual exclusivity); and
(b) the court cannot offer a reasonable basis for rejecting all meanings found under (a), which basis would be something other than a substantive disagreement with the interpretation—for instance, defects in interpretive sources or lack of legitimate purpose; and
(c) the secondary use has a recognizable social benefit.

We can add two other criteria: the reasonable author and reasonable use. In that case, a work would be transformative if
(a) the author, readers (reasonable person, experts, judges), and status analysis, either collectively or individually, point(s) toward a new persuasive meaning or a number of reasonable meanings (as measured, in part, by convergence and mutual exclusivity); and
(b) the court cannot offer a reasonable basis for rejecting the meanings found under (a), which basis would be something other than a substantive disagreement with the interpretation—for instance, defects in interpretive sources or lack of legitimate purpose; and
(c) the secondary use has a recognizable social benefit, would be permitted by the reasonable author, and/or is used in a reasonable manner.

242. Weissmann v. Freeman, 868 F.2d 1313, 1323 (2d Cir. 1989). The phrase is a shorter version of the definition offered by HORACE G. BALL, THE LAW OF COPYRIGHT AND LITERARY PROPERTY 260 (1944) (“[A] privilege in others than the owner of a copyright to use the copyrighted material in a reasonable manner without his consent, notwithstanding the monopoly granted to the owner . . . .”).
III. WARHOL REASSESSSED

Lynn Goldsmith, a photographer who has produced countless photographs of famous musicians over the decades, took a series of portraits of Prince in her New York City studio in the 80s. One of them ended up on the cover of Vanity Fair. Subsequently, and without Goldsmith’s knowledge or permission, Warhol used Goldsmith’s image as the basis for his Orange Prince, which is a silkscreen rendition of the original photograph.243 The litigation between the two sides raised the standard fair use inquiry: Did the Orange Prince transform Goldsmith’s photo? What does Warhol’s iteration mean, if anything at all? Was it fair use, or was it infringement?

The Second Circuit thought Warhol’s adaptation of the original was nothing “more than the imposition of another artist’s style on the primary work such that the secondary work remains both recognizably deriving from, and retaining the essential elements of, its source material.”244 To the extent it considered meaning at all, in turn, the Supreme Court limited its analysis to style, too, and found that because the changes were minimal, so was the work’s meaning.245 For both courts, it seems, the Orange Prince is little more than a photograph dipped in a jar of paint. Because both courts mistook their own inability to see new meaning as new meaning’s absence, they found insufficient new meaning under the first factor. Had the courts applied a reasonable-meanings approach instead of forcing its own reading on the Orange Prince, the outcome would have been markedly different.

Goldsmith’s side of the dispute consistently trivialized meaning. One of her attorneys joked in oral argument that she might prefer an air-brushed photograph of herself:

I guarantee the air-brushed pictures of me look better than the real pictures of me, and they have a very different meaning and message to me.

(Laughter.)

JUSTICE ALITO: What’s your —

CHIEF JUSTICE ROBERTS: Well, I think that’s not right. I mean, I think you would look at —

(Laughter.)246

Airbrushing might well be facile use of scissors, but it also might not be—imagine, for example, a series of photos of wounded victims airbrushed to look like a fashion

244. Andy Warhol Found. for the Visual Arts, Inc. v. Goldsmith, 598 U.S. 508, 518 (2023) (“In addition to the single illustration authorized by the Vanity Fair license, Warhol created 15 other works based on Goldsmith’s photograph: 13 silkscreen prints and two pencil drawings.”).  
245. Andy Warhol Found. for the Visual Arts, Inc. v. Goldsmith, 598 U.S. 508, 546 (2023) (“The application of an artist’s characteristic style to bring out a particular meaning that was available in the photograph is less likely to constitute a ‘further purpose’ as Campbell used the term.”).  
advertisement. While some instances of airbrushing might be meaningless, and while some visual adjustments in general could be meaningless, it is inaccurate to suggest that all visual changes are on the level of superficiality.

Notably, Justice Roberts, who signed on to Justice Kagan’s dissent, resisted this line of reasoning:

CHIEF JUSTICE ROBERTS:—I think you would look at both of them, and one would say those are pictures of the same woman. This one you may look a little better than that one, but it’s the same woman, it’s for the same purpose, it’s to show what she looks like. But, if you had a picture, a photograph of you and then a Warhol, you know, it’s just not the same thing. You look at the Warhol thing and you say, oh, that’s—you know, that’s —

The Second Circuit, for its part, implied that style is, in fact, always meaningless. The court referred to Martin Scorsese and Ken Russell as examples of filmmakers with unique styles, but the court never asked how the directors’ respective styles actually impacted the meaning of specific films.248 In effect, just as the Court looked to purpose to avoid an analysis of meaning, the Second Circuit looked to style to avoid the same question.

It is certainly possible, to adapt a phrase from T.S. Eliot that conveniently parallels copyright phrasing, that a change “alters the object, but never transforms it.”249 Picasso disliked frames,250 for instance, presumably because they ostensibly converted his art to dining room decoration. But no one would argue that framing a painting changed its fundamental meaning any more than a song means something different when you hear it on vinyl rather than a streaming service. In *Mirage Editions, Inc. v. Albuquerque A.R.T. Co.*, the defendant “selected pages from the book, [and] mounted them individually onto ceramic tiles,”251 which the Ninth Circuit thought was enough to create a derivative work.252 Some ten years later, however, the Seventh Circuit took a less literal view of things and ruled that minor mechanical changes—such as mounting a work on a new physical medium—do not create derivative works.253 Small changes to the actual work might not create a derivative work either: “We asked at oral argument what would

248. *Andy Warhol Found. for the Visual Arts, Inc.*, 11 F.4th at 42–43 (2d Cir. 2021) (“That is not to deny that the Warhol works display the distinct aesthetic sensibility that many would immediately associate with Warhol’s signature style—the elements of which are absent from the Goldsmith photo. But the same can be said, for example, of the Ken Russell film . . . derived from D.H. Lawrence’s novel, *Women in Love*; the film is as recognizable a ‘Ken Russell’ as the Prince Series are recognizably ‘Warhol.’ But the film, for all the ways in which it transforms . . . is also plainly an adaptation of the Lawrence novel . . . [T]he fact that Martin Scorsese’s recent film *The Irishman* is recognizably ‘a Scorsese’ do[es] not absolve [him] of the obligation to license the original book on which it is based.”) (internal quotation marks omitted).
252. *Id.* at 1343 (“What appellant has clearly done here is to make another version of Nagel’s art works . . . and that amounts to preparation of a derivative work.”).
happen if a purchaser jotted a note on one of the note cards, or used it as a coaster for
a drink, or cut it in half, or if a collector applied his seal (as is common in Japan) . . . .”254

Courts apply similar reasoning in the context of fair use. A minor change255 in
presentation is what Judge Story had in the nineteenth century called “the facile use of
scissors.”256 Cropping a photo, for example, “is slicing things a bit thinly”257 for fair use
purposes. In another case, “[t]he only obvious change Violent Hues made to the Photo’s
content was to crop it so as to remove negative space. This change [did] not alter
the original with ‘new expression, meaning or message.’”258 Merely mechanical changes, in
other words, fail to convey new meaning. More, “[t]his kind of mechanical ‘transformation’ bears little resemblance to . . . creative metamorphosis accomplished
by the parodists in the Campbell case.”259 The general principle is that “a derivative work
that merely presents the same material but in a new form, such as a book of synopses
of televisions shows, is not transformative”;260 since both contain the same information
that is presented in a different way, there is no more new meaning than there is in
verbatim copying. Since this is effectively substitutional copying, moreover, there is no
social benefit, and therefore the use cannot be transformative.

While a small stylistic variation will be meaningless (and therefore likely
infringing),261 often style does carry significant meaning. In What Remains, for example,
Sally Mann used old and flawed lenses to make her photographs of death, thereby
accentuating the slow dissolution of physical objects.262 In 1987, the Southern District
of New York recognized that “style is one ingredient of ‘expression,’” which, in that
case, was “the sketchy, whimsical style that has become one of Steinberg’s hallmarks.”263
Indeed, differences in style have been enough to withstand a claim of infringement. In
one case, a district court focused on the grittiness of a photo, and its “sense of barely
restrained chaos.” Compared to the original, the court noted, the “allegedly infringing
images from the 2012 anti-Kony campaign are, by contrast, in color with a slight sepia
tinge.” The opinion concluded that the “photograph and the allegedly infringing Kony
2012 images do not share any meaningful similarities.”264

254. Id. at 582.
to escape legal liability because of a minor change or because of crude craftsmanship, which did not destroy
the substantial similarity of its copies to the authentic, would permit unfair use of plaintiff’s copyrighted
work.”).
261. Roth Greeting Cards v. United Card Co., 429 F.2d 1106, 1110 (9th Cir. 1970) (“With the exception of
minor variations in color and style, defendant’s card . . . is identical.”).
262. See SALLY MANN, WHAT REMAINS (2003).
263. Steinberg v. Columbia Pictures Indus., 663 F. Supp. 706, 712 (S.D.N.Y. 1987). Steinberg, the artist,
is probably best known for his parodic New Yorker poster of the world as seen from the city, which was
adapted, without permission, by the defendant movie studio.
Style, in other words, can carry meaning—indeed, a whole range of meanings. An artist’s adherence to a particular style, which Meyer Schapiro defined as the “constant form—and sometimes the constant elements, qualities, and expression—in the art of an individual or a group,” shows fidelity to an art movement (it is how we know Warhol was a Pop artist, after all), and might also be a sign of a student’s loyalty: “[I]f Sasaki were to suggest that a person’s painting was in any way ‘disloyal’ to our teacher, this would almost always lead to immediate capitulation on the part of the offender—who would then abandon the painting, or in some cases, burn it along with the refuse.” On a group level, stylistic differences are the basis on which art history is segmented and the basis on which regional variation is identified. Style is what distinguishes Beccafumi’s Descent of Christ into Limbo from Bronzino’s version and places each at different spots on the mannerist bridge between the Renaissance and Baroque periods. Style is how we recognize specific musicians and gauge whether something might be literature or poetry. If you see the phrase “I inside the old year dying,” you might say “no one talks like that,” but in fact some people do—when they are writing poetry or lyrics. The unusual phrasing is a hint that we have stepped outside of ordinary conversation and outside of ordinary meaning. The alliterative phrases in Lolita remind us that we are in a novel not a law review article, whereas the absence of playful phrasing might indicate the converse. Word usage in Ulysses introduces shifts in meaning, as could the rhythm of language. Think of proverbial pregnant pauses during political speeches, or silences in a film—these are not meaningless gaps any more than John Cage’s “4’ 33” is a temporary window of nothing.

(S.D.N.Y. 2016) (“[T]he Pegasus in the Sculpture, while necessarily made of stuffing, is plainly designed to give the ‘feel’ of a living animal, whereas the stuffed quality of the animal in defendants’ advertisements is central to its depiction and message as a child’s toy.”).


266. KAZUO ISHIGURO, ARTIST OF THE FLOATING WORLD 140 (2012).

267. Bob Kenselaar, Breakfast with Bill Evans, ALL ABOUT JAZZ (Feb. 16, 2012), https://www.allaboutjazz.com/breakfast-with-bill-evans-bill-evans-by-bob-kenselaar [https://perma.cc/EL8P-H48D] [https://web.archive.org/web/20230926154502/https://www.allaboutjazz.com/breakfast-with-bill-evans-bill-evans-by-bob-kenselaar] (“I never aimed to be a stylist or influence. I didn’t even aim to have an identity. I just play music the way I play it, putting it together my own way and trying to serve a certain kind of quality or beauty. I guess the end result of it all is that somehow my personality comes through.”).

268. See GEOFFREY LEECH, LANGUAGE IN LITERATURE, STYLE AND FOREGROUNDING 59 (2008) (“Deviation is especially characteristic of poetic language: the poet deviates from ‘expected norms’ of linguistic expression. In other words, he exercises, in the broadest sense, ‘poetic licence.’”).

269. Or album and song titles—this one is the latest album from PJ HARVEY, I INSIDE THE OLD YEAR DYING (PARTISAN RECORDS 2023).


272. Indeed, one such silence in a documentary led to a defamation claim. See Va. Citizens Def. League v. Couric, 910 F.3d 780 (4th Cir. 2018); see also Lois Beckett, Katie Couric Says Sorry for ‘Misleading’ Edit in Gun
Julian Schnabel, in turn, "paints with oil, gesso, crayon, Rhoplex, and dirt on tarps, flags, rugs, cowhide, Chinese scrolls, vintage maps, hopsack, inkjet prints of surfers and or an old drop cloth bleached in a way that resembled the waterways of Venice." He converts utilitarian materials into meaningful content: "Schnabel destructively hammers . . . familiar surfaces into raw 'flesh' that is erotically profound but also signifies a state of deep woundedness." Seeing art in ordinary objects is counterintuitive, but consider Andy Goldsworthy's *Drawn Stone* at the de Young Museum in San Francisco, which uses architecture and stone as its medium—it would be impossible for it to achieve its meaning without that base. Picasso's *Old Guitarist* would not be nearly as poignant and heartbreaking if he were steeped in orange instead of blue. In *Traffic*, the drug neighborhood scenes are covered in a blue haze that conveys an other-worldliness, a distance, an inaccessibility, and the scenes in Mexico are shown in harsh, high-contrast yellow that conveys heat and anxiety. These are not meaningless affects, and style is not meaningless lacquer.

Here is a home-brewed example of an interplay between style and meaning, written in Python code:

```python
def taylorSwiftRules(_taylorSwiftRules) {
    _taylorSwiftRules = True;
    if _taylorSwiftRules
        return _taylorSwiftRules
    return _taylorSwiftRules
}
```

The function returns true no matter what. If the intent were simply to return true, the function would be this:

```python
def taylorSwiftRules() {
    return true;
}
```


The first snippet is clearly intended to be something more than code. First, it uses human-readable English to convey a specific message. Second, it uses logic to return—invariably—a value of true, which serves to convey, inescapably, that Taylor Swift rules and that there is simply no way around this outcome. Third, as a piece of code, it is silly: There is no practical reason to write a function that always returns true, and no practical reason for declaring a variable instead of simply returning the desired Boolean value. In short, it is a joke, a silly way to assert one’s loyalty to a pop star.

Importantly, I can take the underlying form and create any version:

```python
def justiceKaganRules(_justiceKaganRules) {
    _justiceKaganRules = True;
    if _justiceKaganRules
        return _justiceKaganRules
    return _justiceKaganRules
}
```

The form stays the same, and its meaning as an assertion of invariable truth stays the same, but the actual meaning changes since I have changed the identity of the person to whom it refers. In other words, meaning is connected to, but analytically separate from, the presentation. But adopting the same form in the second example creates an interaction between two independent pieces of expression. Here is an example that taps into a college football tradition:

```python
def harvardSucks(_harvardSucks) {
    _harvardSucks = True;
    if _harvardSucks
        return _harvardSucks
    return _harvardSucks
}
```

and

```python
def yaleSucks(_yaleSucks) {
    _yaleSucks = True;
    if _yaleSucks
        return _yaleSucks
    return _yaleSucks
}
```

In the Harvard/Yale example, the second work rejects the original message but, by embracing the form, engages in the conversation. The second work could just be:

```python
def yaleSucks() {
    return true;
}
```
The second example does not engage in a conversation with the original, and that aspect of the message is entirely lost. The form used in the first example, in contrast, ensures that the message is inserted into the stream of discourse, just the way a style of art places the work in a particular movement. Removing the form removes the cultural locus of the content, and therefore removes it from the conversation, which impacts its meaning. Presentation, in short, is part of the message.

What if we just change the font?

```python
def pepsiSucks(_pepsiSucks) {
    _pepsiSucks = True;
    if _pepsiSucks
        return _pepsiSucks
    return _pepsiSucks
}

def pepsiSucks(_pepsiSucks) {
    _pepsiSucks = True;
    if _pepsiSucks
        return _pepsiSucks
    return _pepsiSucks
}
```

The two are not the same since the font is different, but the meaning has not changed from one to the other since font itself communicates nothing new. In effect, the second one sends the same message, and the change is purely on the presentation level. But what if the font is changed to this?

```python
def pepsiSucks(_pepsiSucks) {
    _pepsiSucks = True;
    if _pepsiSucks
        return _pepsiSucks
    return _pepsiSucks
}
```

Is the message there the same? No. The second message is not only condemning Pepsi, but also appears to be promoting Coke, and even suggesting that Coke is the one sending this message (which of course is what got the “Enjoy Cocaine!” folks in trouble). So, there is new meaning by virtue of the new font. Conversely, if we

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remove the font, we remove Coke from the equation and change the meaning of the message.

What if we take Pepsi out of the equation?

```python
def drink(_drink):
    _drink = True;
    if _drink
        return _drink
    return _drink
}
```

This conveys nothing beyond a brand- and content-agnostic imperative to drink. But a specific font can introduce another concept:

```python
def drinkPepsi(_drinkPepsi):
    _drinkPepsi = True;
    if _drinkPepsi
        return _drinkPepsi
    return _drinkPepsi
}
```

So, in these examples, the font is not merely presentation, and it is not meaningless style. The game can go further:

This last example creates cognitive dissonance because it uses the recognizable Coke font to promote its competitor. We are told to drink two competing products, and there is no basis for deciding which one. Is it a commentary on the arbitrariness of branding, on the mutability of trademarks, or on a cultural practice? Does it matter that the last example does not use the red typically associated with Coke? Does it matter that it is the color of water? And does not the fact that we can ask reasonable questions about color indicate that color is not, after all, meaningless? What if this last iteration is
framed, and called Buridan’s Pop. Could it be read to suggest that we as consumers struggle with choosing one product over another and that we need marketing to push us in a specific direction? It would be difficult to argue, in any case, that the font is nothing more than presentation, or that this is just a snippet of meaningless Python code. There is a lot of meaning here, whatever you think of it as an artwork or argument (or code), and the meaning is legible even though it is not entirely conveyed in text or standard English.

Once we recognize that style can be a valid source of meaning, it becomes clear that the Second Circuit pressed the point too far when it collapsed style into a presentation-layer category, and that the Supreme Court missed something important by concluding that meaning in the Orange Prince is at its lowest ebb. The Orange Prince is not just Goldsmith’s photo wrapped in pretty Pop art cellophane. He might be doing so with “eye-popping” orange instead of text, but Warhol is clearly communicating a new message, as articulated by expert testimony. To see only meaningless color in the Orange Prince is to see words without reading them, and to miss the meaningful conversation between Goldsmith’s Prince and the Orange Prince.

Indeed, Justice Thomas seemed to equate Warhol’s work with nothing but its color when he asked during oral argument, “But let’s say that I’m also a Syracuse fan and I decide to make one of those big blowup posters of Orange Prince and change the colors a little bit around the edges and put ‘Go Orange’ underneath. Would you sue me —.”

If, like Kandinsky, we take the absolutist approach that all form carries meaning, the first factor’s utility collapses, since everything will have new meaning by virtue of a new form. But the suggestion that style inherently carries little or no meaning goes too far in the other direction. Justice Kagan tried to save the day and steer the court away from its near-exclusive focus on purpose and toward new meaning: Warhol’s work “is miles away from a literal copy of the publicity photo,” she wrote, and “the meaning is different from any the photo had.” All for naught: The majority disregarded the dissent along with the district court’s opinion and expert analysis, apparently confirming Kandinsky’s suspicion that “[t]o anyone who cannot experience the inner appeal of form, such composition can never be other than meaningless. Apparently aimless alterations in form-arrangement will make art seem merely a game.”

Warhol might have come out very differently if the Second Circuit and Supreme Court had adopted the proposed reasonable-meanings formula.

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276. Buridan’s ass is an old philosophical problem: The imagined animal could not choose between two equidistant sources of food and water, and starved.


278. There are plenty of colors in the history of the world that carry potent meaning—from purple in classical antiquity to the bright red of a MAGA baseball hat.


280. KANDINSKY, supra note 80, at 29 n.6 (“It is never literally true that any form is meaningless and ‘says nothing.’ Every form in the world says something. But its message often fails to reach us, and even if it does, full understanding is often withheld from us.”).


282. KANDINSKY, supra note 80, at 33.
1. Authorial intent. Not available, so this variable is neutral.

2. Reader interpretation. As Justice Kagan wrote in her dissent, “[i]t does not take an art expert to see a transformation—but in any event, all those offering testimony in this case agreed there was one.” Two Justices and the district court judge found new meaning, as did multiple experts. That is a plus for meaning.

3. Convergence/mutual exclusivity. The consumerist interpretation of Pop art, which subsumes the Orange Prince, is widespread, which indicates convergence. The way we read Warhol’s Prince is not the way we can read Goldsmith’s photo. The two are on the same thematic spectrum—the construction of celebrity—but they occupy different places within it: Prince’s vulnerability is key to the photo, and it has been entirely eradicated in the Orange Prince. The two readings are mutually exclusive, which also underscores the presence of new meaning.


5. Social benefit. A new perspective on the meaning of art and on popular culture. That is a plus for meaning.

6. Basis for rejection. Since the Court offered no explanation that would contradict any of the foregoing, the balance of the other factors should govern.

A reasonable-meanings approach that acknowledges style as a source of meaning would render the Orange Prince transformative under the first factor. On what grounds did seven “persons trained only to the law” override the interpretations provided by persons trained in the arts (and three other judges)? Which elements of the work did the Court consider? What interpretive sources? Which meanings were considered, which were discarded? How much weight was each meaning given, and, in each instance, on what basis? We have no idea.

Maybe the majority had a policy basis for suppressing meaning in the Orange Prince. If anyone can add a mustache to any painting and call it art, fair use could swallow up derivative works. Maybe, in other words, the majority artificially throttled the First Amendment safety valve to protect property interests and keep fair use separate from derivative works. But the fact that Warhol applied the same method to multiple works should not dilute or eliminate meaning: Prince (the visual artist) “transformed” twenty-five photos in a single batch, and, since Pop art is about mass production, almost by definition its aesthetics needs to apply on a mass scale. In other words, Pop art can capture vast swaths of culture because it is about vast swaths of culture, and its widespread applicability does not render it meaningless—on the contrary, Pop art’s wide application shows its efficacy as a visual vocabulary.


Moreover, Warhol’s use generated a social benefit by yielding potent new ideas about popular culture, about popular art, and, indeed, about art in general. Warhol’s use of Goldsmith’s photo, in other words, generated a social benefit that made his work transformative. That is categorically different from someone simply drawing a mustache on anyone’s copyrighted content without aiming to convey a message.

If, in any case, this is the fear that drove the courts’ decision to minimize meaning—if, in other words, both the Supreme Court and the Second Circuit refused to acknowledge new meaning simply because it would create a lax fair use standard—the courts misapplied the doctrine’s first factor. Meaning should not be artificially suppressed in order to justify a policy outcome. Moreover, economic considerations belong in fourth-factor rather than first-factor analysis, and importing them into the first factor is a glaring procedural misstep.

The Warhol majority shows little doubt as to the validity of its conclusion—a fact underscored by the opinion’s comment about the healthy state of American art—but we should remember Jonathan Lethem’s quip that “[i]n travesty, as in interpretation, only one’s own effort is likely to seem wholly excusable.” Self-assurance is no replacement for a reasoned formula, and it is the latter that the doctrine needs. The majority’s failure to provide a basis for its assessment of meaning gives the unfortunate impression of an interpretive coup and judges doing exactly that which Holmes warned against: evaluating art and choosing their interpretation over everyone else’s, or failing to see a reasonable reading altogether. By offering no basis for its decision, moreover, the majority not only did exactly what Holmes worried courts might do (i.e., fail to see value in a work of art), but also refused to do what courts demand of the very works they analyze—viz., provide a reasonable explanation.

**IV. CONCLUSION**

Given the importance of the first factor for fair use, and given the importance of fair use for American creativity, courts need a stable and transparent methodology. If we recognize that the limit of one interpretation is not the limit of overall meaning—in the context of art, reasonable minds can freely disagree—the question of what a secondary work means can be replaced with the question of what reasonable interpretations the secondary work can sustain. Available interpretations would not be source material for courts to determine the single “best” interpretation, but a measure for whether, given available interpretations, there is new meaning. The proposed formula does not yield mathematical precision, but it is a much more precise approach than the intuitive and disparate readings courts apply at the moment, and the criteria it offers can be applied even in situations where courts look for a single and most persuasive meaning. By implementing an approach that utilizes predictable indicia, courts can articulate a clear methodology to determine whether a secondary use

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286. Andy Warhol Found. for the Visual Arts, Inc., 598 U.S. at 550 (“If the last century of American art, literature, music, and film is any indication, the existing copyright law, of which today’s opinion is a continuation, is a powerful engine of creativity.”).


conveys new meaning, which will generate doctrinal stability and accountability, and enable fair use practitioners to guide their clients with a greater degree of certainty than the doctrine currently permits.
After Abu Dhabi: 
Restoring Integrity and Accountability in Formula 1

Alice S. Zheng*

INTRODUCTION

By any metric, Sir Lewis Hamilton is one of the greatest drivers in Formula 1 history. With seven World Championship titles, 103 race victories, 1, 104 pole positions, and 197 podiums under his belt to date, he continues to perform after nearly two decades at the pinnacle of motorsport. For many fans, the exciting aspect of a sport comes from the spectacle of competition, where regular people can watch an elite group of athletes fight for the title under a set of strict guidelines that are designed to promote fairness and offer a chance for any competitor to win. This veneer of a level playing field is shattered, however, when the very people put in charge to ensure accountability are...
the ones who contravene the established rules. Formula 1, with its flashy cars and high-speed racing, is no stranger to excitement and controversies. But the 2021 season brought to light certain aspects of the sport’s regulations and governance structure that many fans were unaware of, but which sit at the heart of the sport.

The 2021 Abu Dhabi Grand Prix ended the 2021 Formula One World Championship in a dramatic and controversial fashion. Mercedes’ Lewis Hamilton and Red Bull’s Max Verstappen went into the final round with an equal number of points scored for the World Drivers’ Championship. The race was decided in the final few laps after Williams’ Nicholas Latifi crashed into the barriers with five laps remaining. After the safety car was deployed, Verstappen pitted for a fresh set of soft tyres, while Hamilton stayed out to maintain track position. On the second-to-last lap, Race Director Michael Masi directed only the five lapped cars between Verstappen and Hamilton to unlap themselves, in direct contravention of established Fédération Internationale de l’Automobile (FIA) rules. On the final lap, the green flag was deployed and the race resumed; Verstappen overtook Hamilton on his fresher tyres and maintained the lead, going on to win the Grand Prix and consequently the World Drivers’ Championship. Mercedes initially filed protests for breach of sporting regulations, but eventually withdrew them, citing a loss of faith in racing and that what happened in Abu Dhabi was “not right.”


8. Id.

9. Id.

10. Id. “Tyre” is the standard spelling within the F1 sphere. See, e.g., id.

11. McDonagh, supra note 7.

12. Id.


This Note will clarify the problems with the current self-governing system utilized by FIA by examining the level of external versus internal decision-making and accountability systems, including the current judicial remedies offered by FIA. I will specifically examine the substantive discretion accorded to the Race Director and stewards to dictate the events of each Grand Prix, and what avenues are available to drivers and teams when a dispute arises that involves actions by the stewards. Namely, I will address the inadequacies of an organization attempting to police itself using its own appeals system. I will compare the governing structure and dispute resolution mechanisms used by FIA with the structures used by Major League Baseball (MLB) and the Fédération Internationale de Football Association (FIFA). I will then offer three potential methods of introducing external accountability to FIA—the Court of Arbitration for Sport (CAS) arbitration, MLB arbitration, or civil justice—and ultimately recommend CAS arbitration to FIA for adoption.

I. BACKGROUND

A. FIA AND ITS GOVERNING STRUCTURE

FIA, the Fédération Internationale de l’Automobile, is the governing body for world motorsport and the federation of the world’s leading motoring organizations. Since 1904, it has brought together 244 international motoring and sporting organizations from 146 countries on five continents, including Formula 1, the highest class of international racing for open-wheel, single-seater formula racing cars. FIA promotes motorsports, works across three areas of activity (sport, campaigns, and mobility), and licenses and sanctions Formula 1 and other motor racing competitions. The organization’s duties include reviewing, enacting, and enforcing sporting rules; promoting accessible, sustainable, and safe mobility for all; taking executive decisions; and resolving disputes.

The structure of FIA is, per its own website, similar to that of a nation state, with its own executive, legislative, and judicial branches. Its government consists of, among other organs, a President, General Assembly, Senate, various Committees and...
Commissions, World Motor Sport Council, International Tribunal (IT), and International Court of Appeal (ICA). The IT hears all disciplinary matters in the first instance, except for anti-doping and financial regulations cases, which go to specialized courts, and can impose sanctions. The ICA enjoys broad authority to judge any disputes arising from the application of the FIA Statutes, the Statutes of the body governed by Swiss law, the International Sporting Code (ISC), and generally the rules and regulations of FIA; settle disputes related to FIA activities; and hear litigation submitted to it by the President of FIA.

Each year, FIA adopts the ISC, a set of rules which are valid for all auto racing events that it governs. Under the ISC, FIA is the “sole international sporting authority entitled to make and enforce regulations based on the fundamental principles of safety and sporting fairness, for encouragement and control of automobile competitions, and to organize FIA International Championships.” FIA recognizes a self-contained system of rule enforcement.

To the fullest extent permitted by applicable law, neither the FIA nor any of its officers, agents, employees, directors or officials shall be liable to any other party for any claim, cost, damage or loss resulting from any action, decision or omission by the FIA and/or its officers, agents, employees, directors or officials in connection with their duties, except for willful misconduct or fraud.

FIA is also the final international court of appeal for the settlement of disputes arising from these competitions.

B. STRUCTURE OF FORMULA 1

Formula 1 is the highest level of motorsport competition. Ten teams each build their own open-wheel, single-seater cars, which are piloted by two drivers per team for a total of twenty drivers on the grid. The teams compete for points during every

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24. Id. art. 1, § 1.1.1.
25. Id. art. 1, § 1.1.2.
26. Id. art. 1, § 1.1.2.
Grand Prix race, held at street circuits and racetracks around the world. The driver who accrues the most points at the end of the season is crowned the World Driver Champion (WDC), and the team which accrues the most points wins the World Constructor’s Champion (WCC). During each Grand Prix, only the top ten drivers receive points: 1st (25), 2nd (18), 3rd (15), 4th (12), 5th (10), 6th (8), 7th (6), 8th (4), 9th (2), and 10th (1), with an additional point given to the driver setting the fastest lap of the race, as long as that driver finishes within the top ten. The 2021 championship season consisted of twenty-two Grands Prix in total. With this in mind, we now turn to discuss the event that precipitated the need for this update to the FIA rules.

C. ABU DHABI 2021

1. On-Track Events

Going into the Abu Dhabi Grand Prix on December 12, 2021, the last scheduled race of the season, both Hamilton and Verstappen had 369.5 points, which meant this final race would decide both the WDC and WCC. Verstappen started on pole position, but Hamilton led most of the fifty-eight-lap race. With five laps to go, Williams’ Nicholas Latifi crashed into the barriers, which brought out the safety car while the track was cleared of debris by race marshals. Under the safety car, the speed of cars on the track is limited so that the marshals can work safely, resulting in the cars bunching up behind


29. Id.
31. Id. art. 6, § 6.2.
32. Id. art. 6, § 6.4.
36. Id.
the safety car in a line in the order they are out on track, regardless of whether they have been lapped or not.\textsuperscript{37} Drivers are not permitted to overtake the safety car until the signal is given for the lapped cars to overtake.\textsuperscript{38}

Hamilton stayed out to not lose track position, since he was worried that he would not be able to reclaim his lead position if the race ended under the safety car,\textsuperscript{39} while Verstappen pitted for a fresh set of soft tyres.\textsuperscript{40} After pitting, Verstappen retained second place with five lapped cars remaining between him and Hamilton, and three additional lapped cars behind Verstappen.\textsuperscript{41} Race control initially issued a message that lapped cars would not be permitted to overtake the safety car.\textsuperscript{42} With two laps to go, Race Director Michael Masi permitted only the five cars between Verstappen and Hamilton to unlap themselves, meaning they would move past Hamilton and clear the way for Verstappen to attempt to catch up to Hamilton once the safety car period was finished.\textsuperscript{43} On the last lap, green flag racing conditions were permitted, and Verstappen overtook Hamilton for the lead, which he maintained until the end, ensuring that Verstappen came away with the WDC.\textsuperscript{44}

2. Post-Race Protests

Immediately after the conclusion of the race, Mercedes filed two notices of protest pursuant to Article 17 (Protest and Appeals) of the 2021 F1 Sporting Regulations, which governs the fees associated with protests and what types of appeals are allowed,\textsuperscript{45} and Articles 13.1 (Right to Protest) and 13.5 (To Whom Addressed) of the 2021 ISC, which further clarifies the procedures for filing a protest.\textsuperscript{46} The first protest alleged a breach of Article 48.8 of the F1 Sporting Regulations, which lay out the exceptions to prohibitions on overtaking when the safety car is present.\textsuperscript{47} Mercedes alleged that

\textsuperscript{37} Formula One Sporting Reguls. art. 48, § 48.7 (Dec. 8, 2021).
\textsuperscript{38} Id. art. 48, § 48.8.
\textsuperscript{39} Id. art. 51, § 51.13.
\textsuperscript{40} Reuters Staff, supra note 35.
\textsuperscript{42} McDonagh, supra note 7.
\textsuperscript{43} Id.
\textsuperscript{44} The Athletic Staff, supra note 13.
\textsuperscript{45} Formula One Sporting Reguls. art. 17, §§ 17.1–17.3 (Dec. 8, 2021).
Verstappen overtook Hamilton during the safety car period, which is not permitted. The second protest alleged a breach of Article 48.12 of the F1 Sporting Regulations and sought an amendment to the Race Classification.\(^{48}\) Per the regulations, once the message that “LAPPED CARS MAY NOW OVERTAKE” has been sent, all lapped cars must pass the cars on the lead lap and safety cars, not just the cars between the race leaders.\(^{49}\)

Team representatives for Mercedes and Red Bull were summoned for a hearing. In answer to the first protest, the stewards issued Document 57, determining that while Verstappen did move ahead of Hamilton under the safety car for a short period of time, Verstappen moved back behind Hamilton before the safety car period ended and dismissed the complaint.\(^{50}\) For the second protest, the stewards issued Document 58, claiming that Article 48.13, which allows the Race Director to control the use of the safety car, overrides Article 48.12—and further, it is “highly desirable” for races to end under green racing conditions rather than under a safety car.\(^{51}\) The stewards then dismissed the second complaint. After the hearings, Mercedes retained a right of appeal for both complaints in accordance with Article 15 of the FIA International Sporting Code and Article 10 of the FIA Judicial and Disciplinary Rules, and the team notified the stewards in writing of its intention to appeal to the FIA International Court of Appeal.\(^{52}\)

A few days after the race on December 15, 2021, FIA released a statement regarding the events of the race, claiming that the fallout is “currently tarnishing the image” of the Formula 1 Championship, and that the events have “generated significant misunderstanding and reactions from Formula 1 teams, drivers and fans,” but that FIA would be producing a “detailed analysis and clarification exercise for the future.”\(^{53}\) Notably, the statement did not include any admissions of wrongdoing or even mention Race Director Michael Masi by name.

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\(^{49}\) Formula One Sporting Reguls. art. 48, § 48.12 (Dec. 8, 2021).

\(^{50}\) CONNELLY ET AL., supra note 47.

\(^{51}\) CONNELLY ET AL., supra note 48.


On December 16, 2021, the last day to file an appeal, Mercedes publicly confirmed that it was withdrawing the appeal, and welcomed the commission that FIA created to analyze what happened during the race and work to ensure that a similar situation would not happen in the future.\(^{54}\) Fan reaction to the withdrawal of the appeal was mixed,\(^{55}\) with some feeling that Mercedes did not fight hard enough for what they perceived to be a robbery of Hamilton’s eighth Championship title. But in interviews after the fact, Mercedes team principal Toto Wolff addressed why the team made the decision to withdraw, stating

[W]e believe we had a very strong case, and if you look at it from the legal side, if it would have been judged in a regular court you could almost guarantee that we would have won. But the problem with the ICA is the way it is structured. The FIA can’t really mark their own homework. And there is a difference between being right, and obtaining justice.\(^{56}\)

He reiterated his distrust of the remedial abilities of the FIA, stating “at the moment, we are set up in terms of our governance to end up in a situation that would have given us remedy, that would have reinstated the result that was taken away from Lewis before the last lap of the race.”\(^{57}\) It is precisely these concerns that strike at the heart of what made the situation at Abu Dhabi possible, and why external accountability is needed at FIA.

3. FIA Commission Analysis

In March 2022, just prior to the start of the 2022 season, FIA released an executive summary report to the World Motor Sport Council for the purposes of drawing lessons from the events at Abu Dhabi and providing clarity moving forward.\(^{58}\) In the report, FIA emphasized four areas—(1) the “multiple roles and responsibilities of the Race Director”; (2) the propriety of publicized radio communications between teams and the Race Director; (3) safety car unlapping procedures; and (4) the structure of the FIA race management team—for clarification and analysis and issued recommendations to

\(^{54}\) Mercedes-AMG PETRONAS F1 Team (@MercedesAMGF1), TMDRITTER (Dec. 16, 2021, 5:00 AM), https://twitter.com/MercedesAMGF1/status/1471419870680125441 [https://perma.cc/ECQ4-BVXS] [https://web.archive.org/web/20231021174945/https://twitter.com/MercedesAMGF1/status/1471419870680125441].

\(^{55}\) Id. Comments and quote tweets on the Mercedes Twitter statement showcase varied opinions among fans.


\(^{57}\) Id.

address each of these concerns. First, the creation of a Virtual Race Control Room, similar to the Virtual Assistant Referee used in football, to assist the Race Director in making decisions during the race. Second, to no longer broadcast direct radio communications during the race. Third, to reassess safety car unlapping procedures prior to the start of the 2022 season. And finally, to implement a new race management team, where two individuals will act alternatively as the Race Director, assisted by a senior advisor.

In addition to the specific recommendations, FIA stated that a new F1 Sporting Director and additional senior regulatory legal counsel would be recruited. Of particular note in the analysis was the finding that “human error” was a factor in the controversy, but that Race Director Michael Masi acted in “good faith and to the best of his knowledge” and that the results are “valid, final and cannot now be changed.”

While the results of Abu Dhabi 2021 and the World Drivers’ Championship are set in stone, improvements can be made to FIA’s judicial system to minimize the chances for a similar controversy to occur in the future.

II. THE ISSUE

Like many sports governing bodies around the world, FIA essentially enjoys a monopoly when it comes to the governance and regulation of all aspects of Formula 1 and its feeder series. Outside of Formula 1, FIA is also the umbrella organization that oversees Formula 4, Formula 3, Formula 2, Formula E, and various regional Formula championships. Outside the aegis of FIA, the main alternate open-wheel racing series is IndyCar, often called the “American Formula 1,” but the IndyCar series is seen as less prestigious and less popular, especially to those outside American circles. FIA’s...
streamlined formula feeder process makes it easier for logistical and organizational purposes, but one international federation overseeing the bulk of motorsports worldwide creates issues of accountability since it is difficult for an organization to accurately judge itself. The FIA internal judicial system makes it difficult for those within the organizations to adequately adjudicate issues of sporting fairness by high-level officials, such as what happened at Abu Dhabi.

A. ROLE OF THE RACE DIRECTOR AND STEWARDS

The role of the Race Director is at the center of the conflict around Abu Dhabi. Under the Formula 1 Sporting Regulations,\textsuperscript{70} and ISC,\textsuperscript{71} the Race Director works in permanent consultation with the clerk of the course and has overriding authority in several areas:

a) The control of practice, sprint qualifying session and the race, adherence to the timetable and, if he deems it necessary, the making of any proposal to the stewards to modify the timetable in accordance with the Code or Sporting Regulations.

b) The stopping of any car in accordance with the Code or Sporting Regulations.

c) The stopping of practice, suspension of a sprint qualifying session or suspension of the race in accordance with the Sporting Regulations if he deems it unsafe to continue and ensuring that the correct restart procedure is carried out.

d) The starting procedure.

e) The use of the safety car.\textsuperscript{72}

Subsection e makes clear that the Race Director has wide latitude to decide every aspect of how the safety car is deployed and used. During the race, the Sporting Regulations Section 47.1 provides further clarifications to what the Race Director can do in the event of an incident:

The Race Director may report any on-track incident or suspected breach of these Sporting Regulations or the Code (an “Incident”) to the stewards. After review it shall be at the discretion of the stewards to decide whether or not to proceed with an investigation. The stewards may also investigate an Incident noted by themselves.\textsuperscript{73}

The decision to investigate, and subsequent punishments, are handed out by the stewards rather than by the Race Director, but the Race Director still has a duty to notify the stewards of an incident for investigation.

\begin{footnotes}
\textsuperscript{70} Formula One Sporting Reguls. art. 15, § 15.3 (Dec. 8, 2021).

\textsuperscript{71} FIA Int'l Sporting Code art. 11, § 11.10 (Jan. 1, 2021).

\textsuperscript{72} Formula One Sporting Reguls. art. 15, § 15.3 (Dec. 8, 2021).

\textsuperscript{73} Id. art. 47, § 47.1.
\end{footnotes}

After the FIA Commission analysis of the events at Abu Dhabi, FIA removed Masi from his post in February 2022, and offered him a new position within the organization. FIA then designated two individuals with previous motorsport experience—Niels Wittich and Eduardo Freitas—to serve as Race Director on a rotating basis for the 2022 season.\footnote{Craig Christopher, Formula 1: Team Radio Reveals Drama, Intrigue, Hysteria and a Hint of Nastiness, BLEACHER REPORT (Oct. 10, 2011), https://bleacherreport.com/articles/887093-formula-1-team-radio-reveals-drama-intrigue-hysteria-and-a-hint-of-nastiness [https://perma.cc/X2YE-7EQT]} In July 2022, Masi left FIA entirely.\footnote{Mohammed Ben Sulayem, President, FIA, Address Regarding F1 Commission Meeting (Feb. 17, 2022), https://www.fia.com/news/fia-president-mohammed-ben-sulayem-opens-way-new-step-forward-formula-1-refereeing [https://perma.cc/A3QV-K452]} The Race Director rotation system was ended in October 2022 following an incident with a crane on track during the Japanese Grand Prix, and Niels Wittich served out the rest of the
season as the sole Race Director.\textsuperscript{81} While it is likely that the public will never know what truly happened internally in FIA that led to Masi’s ousting, since he signed an NDA, it is clear that he left his mark on the world of motorsport.\textsuperscript{82}

\section*{B. FIA’s Judicial System}

1. FIA International Tribunal and International Court of Appeal

FIA’s judicial system consists of two main courts: the International Tribunal and the International Court of Appeal. They are independent bodies with their own administration detached from the FIA structure, and which serve appellate and disciplinary functions within FIA.\textsuperscript{83} This structure was adopted by the FIA General Assembly in 2010.\textsuperscript{84} The Courts comprise eighteen to thirty-six Judges elected by the FIA General Assembly, with each country represented by not more than four Judges.\textsuperscript{85} Those selected “must be and remain independent of the FIA and of the parties involved,”\textsuperscript{86} and Judges must “respect the integrity and independence of the FIA Courts and to honour their duties of confidentiality with regard to the deliberations of the FIA Courts.”\textsuperscript{87}

IT “exercises the FIA’s disciplinary powers in the first instance (for cases not dealt with by the Stewards of the Meeting),” and “[d]ecisions taken by the IT can be appealed before the International Court of Appeal (ICA).”\textsuperscript{88} Its jurisdiction covers matters outlined in Article 5.2 of the Judicial and Disciplinary Rules, including sections of most relevance to the Abu Dhabi controversy: Section 5.2.1.a, “contraven[ion] of the Statutes and Regulations of the FIA, including the International Sporting Code and the Code of Ethics but excluding the FIA Anti-Doping Regulations”; Section 5.2.1.c, “[p]ursuit of [an] objective contrary or opposed to those of the FIA”; and Section

\begin{itemize}
\item \textsuperscript{82} Tom Sunderland, F1 Fans Suspicious After Michael Masi ‘Signed NDA’ with FIA Over Abu Dhabi GP Fiasco, MIRROR (Aug. 1, 2022), https://www.mirror.co.uk/sport/formula-1/masi-fia-abu-dhabi-nda-27629056 [https://perma.cc/V7TZ-3PYG].
\item \textsuperscript{85} FIA Judicial and Disciplinary Rules ch. 1, art. 1, § 1.2 (Jan. 1, 2021).
\item \textsuperscript{86} Id. ch. 1, art. 1, § 1.8.
\item \textsuperscript{87} Id. ch. 1, art. 1, § 1.10.
\end{itemize}
5.2.1.d.2, “by words, actions or writings[, ... damage to the standing and/or reputation of, or loss to, the FIA, its bodies, its members or its executive officers.”

Each case in front of the IT is decided strictly on its own merits, where the Tribunal can consider previous rulings but is not legally bound to follow them. Hearings are held before a judging panel and presided over by the President of the Hearing, and each party outlines its case “in accordance with adversarial principles.” Decisions are based on simple majority, with the President of the Hearing as a tiebreaker when necessary. Once a decision is made, “[o]nly the FIA, under the authority of its President, and the Respondent may appeal against a decision to the ICA.” While Section 6.7.2 claims that IT decisions are made public, an examination of the website shows only three published prior rulings. This lack of transparency adds to the deeply insular nature of FIA as an organization and the difficulties of ensuring that the processes are fair.

The ICA is the final appeals tribunal for international motorsport, established under the FIA Statutes and FIA International Sporting Code, and resolves disputes brought by any National Sporting Authority or President of the FIA, or non-sporting disputes brought by national motoring organizations affiliated with FIA. The ICA hears four types of appeal cases: “(1) appeals concerning sporting decisions; (2) appeals concerning decisions taken by the IT; (3) appeals concerning decisions taken by the CCAP [(Cost Cap Adjudication Panel)]; and (4) appeals concerning the interpretation or application of the FIA’s statutes.” In terms of the Abu Dhabi controversy, the most relevant types of possible appeals are appeals concerning sporting decisions and appeals concerning the interpretation or application of the FIA’s statutes. Outside of hearings, the ICA can “definitely settle by arbitration disputes of a sporting, contractual or regulatory nature.” To bring an appeal for a hearing, parties need to pay a deposit ranging from €3,000 to €6,000, depending on who the appeal is against. Similar to the procedures of the IT, hearings before the ICA are conducted by the judging panel and presided over by the President of the Hearing, and the hearing plays out in accordance with adversarial principles. Once a decision is made, it is “binding with immediate effect as soon as [it is] issued.” And there is a right of review if new evidence is discovered, or

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89. FIA Judicial and Disciplinary Rules ch. 3, art 5.2 (Jan. 1, 2021).
91. FIA Judicial and Disciplinary Rules ch. 3, art. 6.6, § 6.6.2 (Jan. 1, 2021).
92. Id. ch. 3, art. 6.7, § 6.7.1.
93. Id. ch.3, art. 6.8.
94. See Judgements of the IT, supra note 90.
97. Id. ch. 4, art. 9.2.
98. Id. ch. 4, art.10.1.2, § 10.1.2.a.
99. Id. ch.4, art 10.9.
100. Id. ch. 4, art. 10.10, § 10.10.6.
the ICA can choose to reexamine a case “on its own initiative or following a petition for review by either one of the parties concerned and/or a party that is directly affected by any decision handed down, or by the President of the FIA” within twelve months of the decision.\textsuperscript{101}

Since 2001, the ICA has heard around two dozen cases pertaining to Formula 1. Recent examples of ICA cases include a 2021 withdrawn appeal by Aston Martin regarding a breach of the technical regulations;\textsuperscript{102} the 2020 withdrawn appeals by Renault, BWT Racing Point (now Aston Martin), and Ferrari over similarities in car design;\textsuperscript{103} a 2019 appeal by Alfa Romeo over the ability to appeal a time penalty;\textsuperscript{104} a 2018 appeal by Haas over a technical regulation;\textsuperscript{105} and a 2014 appeal by Red Bull over technical regulations.\textsuperscript{106} Of these cases, a third ended up being withdrawn, and approximately half concerned interpretations of the technical regulations. Only a few notable cases, such as the “pink Mercedes” controversy,\textsuperscript{107} Spygate,\textsuperscript{108} the PK Racing prejudicial statements,\textsuperscript{109} and the 2005 decision of the World Motor Sport Council,\textsuperscript{110} are not related to technical regulations or on-track driver actions. In no published cases did the ICA hear an appeal that would have had a direct and immediate impact on the World Driver’s Championship standings, as would have happened had Mercedes chosen to move forward with an appeal after Abu Dhabi.

Had Mercedes gone ahead with its appeal, the case would have fallen under the first type of ICA appeal, “in the context of a competition forming part of a FIA Championship, Cup, Trophy, Challenge or Series, appeals against decisions of the Stewards of an event brought by organisers, competitors, drivers or other licence-holders that are addressees of such decisions or that are individually affected by such
decisions,” or the fourth type, an “appeals brought by FIA Members in relation to the interpretation or application of the FIA Statutes by the FIA.” Specifically, Mercedes could have brought the first type of appeal against the stewards’ decisions outlined in Document 58, in which the stewards interpreted the Race Director’s powers under Article 15.3 and Article 48.13 of the Sporting Regulations to essentially “override” Article 48.12. The team could have also brought the fourth type of appeal to challenge how Masi’s safety car unlapping procedure to ensure a final lap of racing contravened the International Sporting Code Article 1.1.1, which charges FIA with “enfor[cing] regulations based on the fundamental principles of safety and sporting fairness.”

The team could have pointed to Masi’s failure to consistently apply the sporting regulations. During the 2020 Eifel Grand Prix, the safety car was deployed during the final third of the race to give the marshals time to safely remove a retired car that was stopped by the side of the track, and remained out for five laps despite the cold conditions, making a slowdown for that period of time potentially dangerous for tyre conditions. When asked why the safety car was deployed for so long, Masi stated that since all the cars up to the fifth place car had been lapped, that length of time was required for the other cars to unlap themselves, noting that “there’s a requirement in the sporting regulations, to wave all lapped cars past. So 10, 11 cars, that had to unlap themselves, and therefore the safety car period was a bit longer than what we would have normally expected.” After the race, some drivers criticized the decision to leave the safety car out that long, including Verstappen who opined that “I think they just wanted to make it more exciting again because of the gaps.” Masi had interpreted the safety car rules differently during the 2020 season, reading Sporting Regulation Section 48.12 “any cars that have been lapped” to mean “all cars that have been lapped,” than during Abu Dhabi 2021, where the clause was interpreted as removing only those lapped cars that “interfere” in racing. This lack of consistent application of the sporting regulations is especially problematic in a sport where every point gained in the constructor’s standings translates to millions of dollars of additional prize money at the end of the season, and consequently millions of dollars more that can be put towards

111. FIA Judicial and Disciplinary Rules ch. 4, art. 9.1, § 9.1.1(a) (Jan. 1, 2021).
112. Id. ch. 4, art. 9.1, § 9.1.4(b).
113. See CONNELLY ET AL., supra note 48.
116. Id.
118. See Smith, supra note 115.
research and development of a faster car.\textsuperscript{120} The already high-stakes nature of every race, coupled with the season-long head-to-head dramatics of the 2021 season and the need to provide an entertaining product for fans, are two of the reasons why external accountability measures are needed.

In even the most dramatic of championship showdowns in previous seasons—the 1990 Japanese Grand Prix battle between Ayrton Senna and Alain Prost, the 1997 European Grand Prix title fight between Michael Schumacher and Giles Villeneuve, and the 1994 Australian Grand Prix fight between Michael Schumacher and Damon Hill come to mind—none of these previous title fights’ results hinged on the actions of the Race Director or stewards.\textsuperscript{121} Mercedes’ desire not to pursue its appeal and win Lewis Hamilton’s historic eighth Championship in the courts—rather than on the track—is understandable in this regard. Even had the team gone forward with the appeal, it is unlikely that the team would have gotten the result it wanted, and there is no way to know what would have happened during the race had it not been for Masi’s meddling.

2. Post-2022 Season Analysis

With a full 2022 season of Formula 1 racing since Abu Dhabi 2021 wrapped up, the issues that the race forced into the spotlight remain more relevant than ever. Following the first recommended course of action after FIA conducted the Abu Dhabi investigation, the Remote Operations Center (ROC) in Geneva has been up and running.\textsuperscript{122} The ROC was used most notably during the 2022 season to review the Japanese Grand Prix after a recovery crane was deployed on track to retrieve a crashed car during torrential rain conditions, causing drivers to fear for their safety during the low visibility conditions.\textsuperscript{123} Data collected by the ROC was used to create a timeline of the incidents and monitoring tasks are to be delegated to the ROC for future races. While the inspiration for the ROC came from the Video Assistant Referee (VAR) system used in football, “those working at the ROC do not make definitive rulings, and

\begin{itemize}
\item \textsuperscript{120} Justin Cohen, Chasing the Bag: Breaking Down F1 Constructors Payout, ONE37PM (Mar. 20, 2023), https://www.one37pm.com/sports/f1-constructors-payout [https://perma.cc/REN6-BGAJ] [https://web.archive.org/web/20230919021024/https://www.one37pm.com/sports/f1-constructors-payout].
\item \textsuperscript{121} Simmons & Turner, supra note 5.
\end{itemize}
instead are providing extra information and working as spare pairs of eyes.”\textsuperscript{124} Team members can communicate with race control, technical teams, and other regulatory teams on the ground to provide data and connect experts with those at the track.\textsuperscript{125} There may be drawbacks to the ROC’s limited supplementary functions, but its data collection and analysis have already been helpful to race control. Moreover, in the future, its role as a training tool for race directors, stewards, and other leadership, by simulating a race weekend with challenging conditions, is certainly promising to reduce the human error that marred Masi’s tenure.\textsuperscript{126}

Following the second recommendation, team principal radio interventions are no longer allowed.\textsuperscript{127} FIA President Mohammed Ben Sulayem stated that

I think it was used as entertainment for the fans, but actually it has its downside . . . [a]nd then the race director and the whole race control was just bombarded by unnecessary [messages] and everybody was complaining. That was putting, I don’t think, pressure, but I think stress on the race director there.\textsuperscript{128}

From the 2022 season onwards, only team managers will have a direct line to race control to ask questions, while routine calls will be handled by another individual in race control.\textsuperscript{129} In the balance between transparency and effectiveness, the barring of team principals is likely going to be beneficial, especially in situations such as Abu Dhabi where the Race Director needed to make important decisions and did not have the time to deal with lobbying by the teams involved.

Under the third recommendation, the safety car rules have been clarified for the 2022 season and beyond.\textsuperscript{130} The updated Article 55.13 of the 2022 Sporting Regulations now reads “If the clerk of the course considers it safe to do so, and the message ‘LAPPED CARS MAY NOW OVERTAKE’ has been sent to all Competitors using the official messaging system, all cars that have been lapped by the leader will be required to pass
the cars on the lead lap and the safety car.”131 The change from “any” to “all” makes it unequivocally clear that the Race Director cannot choose for only some of the lapped cars to overtake, but not others, and brings the regulations more in line with common practice prior to Abu Dhabi.

Following the final recommendation, the rotating Race Director system was implemented for the 2022 season until the Japanese Grand Prix, after which only one of the Race Directors served out the remainder of the season.132 FIA President Ben Sulayem had decided on the rotating system because he felt that “[w]e can’t trust each other because what if something happens? We have to be prepared for any contingency if we want to strengthen our sport.”133 The issue is that there needs to be some baseline level of trust between other FIA officials and the Race Director to make decisions in real time. Mercedes’ driver, Grand Prix Drivers’ Association director George Russell, and other drivers have raised concerns about the rotation system. Russell stated that drivers “believe that having the rotation isn’t the best thing for a sport, for that consistency.”134 Further, he spoke about how “[i]t was frustrating sometimes when we were talking about a certain incident on track and the stewards who actually made that decision weren’t there to give their views on this.”135 In most other sports and organizations, leadership and final decision-making are typically in the hands of one individual supported by others, rather than two people on rotation. While the concerns of concentrating duties and responsibilities in the Race Director are legitimate, the lack of consistency, especially with decision-making around the Japanese Grand Prix and the United States Grand Prix during the 2022 season, suggests that a sole experienced Race Director is the better method.136

C. INADEQUACIES OF CURRENT REMEDIES

The main shortcoming of the current remedies available to drivers and teams in Formula 1 is that there is little recourse outside the FIA system when it comes to decisions made by FIA leadership. The Judicial and Disciplinary Rules state that

132. Smith, supra note 81.
134. Id.
136. Smith, supra note 81.
“nothing in these rules shall prevent any party from pursuing any right of action which it may have before any court or tribunal,” but this latitude is “subject at all times to such party having first exhausted all mechanisms of dispute resolution set out in the Statutes and regulations of the FIA.”\textsuperscript{137} The requirement of first having to go through the FIA dispute resolution system means added expense, time, and the possibility of self-selecting out of fighting a protracted battle in the FIA court systems that the party feels that it has little chance of winning, which was the path chosen by Mercedes after Abu Dhabi. Additionally, by agreeing to participate in any capacity whatsoever . . . in any competition or event organised, directly or indirectly, by the FIA or subject to the regulations and decisions of the FIA, all persons concerned . . . accept and acknowledge the obligation first to use the procedures established by the Statutes, the FIA International Sporting Code, the present Rules and any other regulations of the FIA.\textsuperscript{138}

Further, CAS, the typical international body to settle sporting disputes, is “exclusively competent to resolve definitively appeals against the decisions of the FIA Anti-Doping Disciplinary Committee” and thus cannot be an avenue to settle appeals not related to doping.\textsuperscript{139}

Despite this, FIA and Formula 1 are no stranger to lawsuits. Due to the highly technical nature of the sport, and the lucrative revenue generated by sponsorships, licensing for merchandise, and ticketing, it is no surprise that there has been legal action over nearly every aspect of Formula 1 racing in a wide range of jurisdictions, including within the American legal system.\textsuperscript{140} At the start of 2023, AlphaTauri’s rookie Nyck de Vries faced a lawsuit in Dutch court over allegedly withholding information and breach of agreement over a loan he received when he was still in Formula 2.\textsuperscript{141} In the 2021 case \textit{Ferguson v. Dolphins}, a Florida district court dismissed a case brought by residents of Miami-Dade county against FIA over alleged equal protection violations and noise ordinance disruptions caused by the Miami Grand Prix, which held its inaugural race during the 2022 season.\textsuperscript{142} In the 2020 case \textit{Nygaard v. Federation Internationale de l’Automobile et al.}, inventor Jens Nygaard settled a case with

\begin{footnotes}
\item[137] FIA Judicial and Disciplinary Rules ch. 6, art. 13, § 13.1 (Jan. 1, 2021).
\item[138] Id. ch. 6, art. 13, § 13.2.
\item[139] FIA Int'l Sporting Code art. 15.10 (Jan. 1, 2021).
\end{footnotes}
FIA in a Texas district court over alleged patent infringement surrounding the Halo,\(^{143}\) a curved titanium bar that surrounds the cockpit and serves as a protection system for drivers, and which has been credited with saving the lives of at least three drivers since its introduction in 2018.\(^{144}\) In the 2015 case *Giedo van der Garde BV v Sauber Motorsport AG*, Sauber driver Giedo van der Garde successfully won in Swiss Arbitration and later in the Victorian Supreme Court in Australia to enforce van der Garde’s contract and allow him to drive for Sauber that season, though he eventually settled with the team and left Formula 1.\(^{145}\) In the 2007 case *Bowers v. Fédération Internationale De L’Automobile*, disgruntled fans sued the organizers of the 2005 United States Grand Prix alleging breach of contract, promissory estoppel, and negligence after fourteen of twenty cars did not participate in the race due to dangerous tyres, though the Seventh Circuit affirmed the dismissal of all claims.\(^{146}\) And in 1984, a superior court jury in Rhode Island awarded $9.6 million to the estate of American driver Mark Donohue, who was killed when his Goodyear-manufactured tyre blew out during practice, causing him to fatally crash into the barriers at the 1975 Austrian Grand Prix.\(^{147}\)

Notably, many of the above cases filed in civil courts were brought by fans, residents near a Grand Prix track, a sponsor, or other entities not as directly involved with the Formula 1 universe as a team or a driver. Indeed, even the van der Garde arbitration case which involved a driver was brought to settle a contract dispute, which is dealt with by the Contract Recognition Board, a separate entity dealing specifically with contracts within FIA which is not covered by the scope of this Note.\(^{148}\) None of these cases concerned the actions of FIA leadership nor directly impacted the awarding of that season’s World Driver’s Championship.


\(^{145}\) *Giedo van der Garde BV v Sauber Motorsport AG* [2015] VSC 80 (Austl.).

\(^{146}\) *Bowers v. Fed’n Internationale De L’Automobile*, 489 F.3d 316 (7th Cir. 2007).


D. COMPARISON WITH OTHER LEAGUES

1. Structural Similarities and Differences

While there are several key differences between Formula 1, MLB, and FIFA, a comparison with one major American sports league and one major international federation can offer valuable insight on ways to improve accountability and transparency in FIA’s own governing structure. One of the most notable differences between these three organizations is the number of participants. There are only twenty drivers on the Formula 1 grid, whereas there are a little over a thousand active players in MLB and over 100,000 professional association football players worldwide. This may be partly due to cost. To even make it through the ranks of motorsport before reaching Formula 1 is prohibitively expensive. By some calculations, it can cost around $10 million to graduate from karting to Formula 1, with karting alone costing over $60,000 per year. In addition, most drivers just starting out do not have the benefit of sponsorships or outside funding, which means they and their families must foot the bill until they are able to join a talent scheme under one of the major teams to help with costs. In comparison, the cost to become a football or baseball player is closer to $30,000 to $50,000. While still a significant investment in aspiring young athletes, most of whom will not make it to the big leagues, this is significantly more attainable than the millions of dollars required for young drivers to have a shot at becoming one of twenty on the Formula 1 starting grid.

In terms of governing structure, MLB governs just one sport—baseball—while the FIA also oversees rally, hill climb, cross country, and other motorsport events, and
FIFA also oversees beach soccer and futsal. Because of the single sport structure in MLB, there is no similar opportunity for a Race Director type of individual to affect the outcome of a championship with a single decision that contravenes the rules. Even the Commissioner, who is given a broad range of powers to act in the “best interest” of the sport, does not enjoy such wide-ranging latitude. In terms of day-to-day operations, MLB, FIA, and FIFA essentially operate as monopolies in their respective fields. And all three organizations have their own internal systems of justice, outlined below.

2. MLB Judicial System

The majority of disputes in Major League Baseball concern labor, and much of the responsibility for labor relations and the power of investigation in MLB is vested in the Commissioner. Under the Major League Constitution Article II, the function of the Commissioner includes:

(b) To investigate, either upon complaint or upon the Commissioner’s own initiative, any act, transaction or practice charged, alleged or suspected to be not in the best interests of the national game of Baseball . . .

(c) To determine, after investigation, what preventive, remedial or punitive action is appropriate in the premises, and to take such action either against Major League Clubs or individuals, as the case may be.

Further, Article VI Section 1 of the Constitution gives the Commissioner the power to hear all disputes and controversies related in any way to professional baseball . . . other than those whose resolution is expressly provided for by another means . . . shall be submitted to the Commissioner, as arbitrator, who, after hearing, shall have the sole and exclusive right to decide such disputes and controversies and whose decision shall be final and unappealable.


159. Id. art. IV, § 1.
This power is separate from and does not alter the “Commissioner’s powers to act in the best interests of Baseball under Article II.” Under Section 2, the Clubs recognize that “it is in the best interests of Baseball that all actions taken by the Commissioner under the authority of this Constitution . . . be accepted and complied with . . . and that the Clubs not otherwise engage in any form of litigation between or among themselves or with any Major League Baseball entity.” Further, the Clubs “agree to be finally and unappealably bound by actions of the Commissioner and all other actions, decisions or interpretations taken or reached pursuant to the provisions of this Constitution and severally waive such right of recourse to the courts as would otherwise have existed in their favor.”

While the Commissioner does enjoy significant powers, he is not all-powerful, and MLB is no stranger to litigation. Throughout history, the “best interest of baseball” clause has been interpreted widely: in 1978 when Commissioner Bowie Kuhn invoked the clause to prevent Oakland Athletics owner Charlie Finely from selling his best players to rival teams in *Finley v. Kuhn*, and in 1990 when Commissioner Fay Vincent cited the clause when banning Yankees owner George Steinbrenner after Steinbrenner paid a gambler to investigate his own team’s right fielder Dave Winfield.

Since 1968, a new Collective Bargaining Agreement (CBA) between the league and the Major League Baseball Players Association (MLBPA) has been hammered out every few years. The CBA concerns the rules of employment and financial structure of the game, including the salary structure, free agency, salary arbitration, amateur draft rules, drug testing, on-field rules, and the injured list. Most recently, the start of the 2022 season was delayed after a ninety-nine-day lockout, with the new CBA eventually signed and in effect until the end of the 2026 season. Under the terms of the CBA, notices of investigations are sent to the player and the Association who provide reasonable cooperation. The player and Association reserve the right to assert that the investigatory request does not require cooperation, and disputes over whether

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160. Id. art. VI, § 1.
161. Id. art. VI, § 2.
162. Id.
163. Charles O. Finley & Co. v. Kuhn, 569 F.2d 527 (7th Cir. 1978).
166. Id.
reasonable cooperation has been provided are resolved by the Arbitration Panel. Further requirements are listed when it comes to investigations for violation of the drug policy, which will not be covered in the scope of this Note.

The CBA also discusses eligibility requirements for salary arbitration, which is typically only an option for players with three or more but less than six years of Major League service. In certain cases, “Super Two” players—those who rank in the top twenty-two percent of service time amongst those who have spent between two to three years in the Majors—are also eligible for salary arbitration. For salary arbitration, the Major League Baseball Players’ Association and the Major League Baseball Labor Relations Department “annually select the arbitrators,” and if they cannot agree on a list of names, the “American Arbitration Association [will] furnish them lists of prominent, professional arbitrators. Upon receipt of such lists, the arbitrators shall be selected by alternately striking names from the lists.” Cases are heard before a panel of three arbitrators.

In addition, the CBA details the grievance process. A grievance is “a complaint which involves the existence or interpretation of, or compliance with, any agreement, or any provision of any agreement, between the Association and the Clubs or any of them, or between a Player and a Club” aside from the Benefit Plan and agreement regarding dues check-off. With the grievance system, players are able to challenge the Commissioner’s disapproval of their contract or disputes regarding a contract, but it excludes complaints “which involve[] action taken with respect to a Player or Players by the Commissioner involving the preservation of the integrity of, or the maintenance of public confidence in, the game of baseball.”

Another aspect of the MLB judicial system is the Department of Investigations (DOI), which was established in response to Senator George Mitchell’s 2007 independent investigative report into use of performance enhancing substances amongst MLB players in the early 2000s “steroid era.” While the department operates independently from MLB’s labor department, it still answers to the

169. Id. at 18–19.
170. Id. at 19.
171. Id. at 20.
172. Id.
173. Id. at 41.
174. Id. at 3.
175. Id. at 18.
176. Id. at 42.
Commissioner, again highlighting the internal nature of this branch of MLB's judiciary. Former Senior Vice President of Investigations Dan Mullin described his department's duties broadly: "to protect the integrity of the game, and we do everything from investigations involving performance enhancing drugs, corruption, gambling, we do corporate due diligence, we do age and identity fraud in Latin America, we do internal issues involving players." The DOI led an investigation into the 2017 Astros sign stealing scandal, in which the team used a camera pointed at home plate and players banging on trash cans to let their hitters know what pitch was coming; ultimately, the team won the World Series that year. In the Commissioner's report, he ruled that some members of Club leadership, but no players, were to be disciplined over their role in the scheme. Thus, even though the DOI is the department charged with a wide range of investigative powers, it is still the Commissioner who has the final say in handing out punishments.

3. FIFA Judicial System

FIFA utilizes a three-part independent judicial body made up of the Disciplinary Committee, Ethics Committee, and Appeal Committee. The Disciplinary Committee, Appeal Committee, and both chambers of the Ethics Committee are comprised of a "chairperson, deputy chairperson, and a specific number of other members," and the "composition of the judicial bodies should respect the fair distribution of positions and take account of the member associations." Members "together, have the knowledge, abilities and specialist experience that is necessary for the due completion of their tasks" and "fulfil the independence criteria as defined in the..."
FIFA Governance Regulations." Members are elected by the Congress for four-year terms, for a maximum of three terms in total.

The Disciplinary Committee is tasked with “pronounce[ing] the sanctions described in these Statutes and the FIFA Disciplinary Code on member associations, clubs, officials, players, football agents and match agents” and can propose amendments to the FIFA Disciplinary Code. Recent decisions by the Disciplinary Committee include a December 2022 case of the French Football Federation (FFF) over Article 46 of the Disciplinary Code, which covers protests. After a 2022 World Cup match between the Tunisian and French national teams, the FFF filed a protest challenging the referee’s decision to refuse a goal scored by the French team. The Disciplinary Committee held that FFF failed to properly follow procedure when submitting the protest, and that under the FIFA Disciplinary Code the protest had no merit since decisions of referees are not able to be reviewed by FIFA judicial bodies. Another recent decision from November 2022 concerned the Turkish club Yeni Malatyaspor over a violation of Article 15 of the Disciplinary Code, which covers failure to respect decisions. The Disciplinary Committee found that Yeni Malatyaspor had failed to comply with an award ordered by the Court of Arbitration for Sport, and imposed a fine in addition to a requirement to pay the money owed; further bans or sanctions could be imposed if the club continues to fail to comply.

The Ethics Committee is divided into an investigatory chamber and an adjudicatory chamber, and the Committee is tasked with “pronounce[ing] the sanctions described in these Statutes, the FIFA Code of Ethics and the FIFA Disciplinary Code on officials, players, football agents and match agents” and can propose amendments to the FIFA Code of Ethics. Recent decisions by the Ethics Committee include the October 2022 case of Obert Zhoya, a Zimbabwean referee alleged to have sexually harassed female referees in violation of Articles 13, 23, and 25 of the Code of Ethics. Zhoya was found

185. Id. at 52.
186. Id.
187. Id. at 53.
189. Id.
190. Id.
191. YENI MALATYASPOR, FIFA, DECISION OF THE FIFA DISCIPLINARY COMMITTEE (Nov. 17, 2022), https://digitalhub.fifa.com/m/3e9935473b9a17/original/Yeni-Malatyaspor17112022.pdf [https://perma.cc/5MDB-88QD]
192. Id.
193. Id.
to be in violation of all three Code of Ethics articles, and the Committee banned him from football for five years and ordered him to pay a fine.\textsuperscript{195} Another recent decision includes the June 2021 case of Issa Hayatou, a former president of the Confédération Africaine de Football, member of the FIFA council, and Honorary Vice-President of FIFA, over alleged violations of Articles 13, 15, and 25 of the Code of Ethics.\textsuperscript{196} The Ethics Committee found that Hayatou breached the Article 15 duty of loyalty, and he was consequently banned from football for one year and required to pay a fine.\textsuperscript{197}

The Appeal Committee hears “appeals against decisions from the Disciplinary Committee and the Ethics Committee that are not declared final by the relevant FIFA regulations,” and its decisions are “irrevocable and binding on all the parties concerned . . . subject to appeals lodged with the Court of Arbitration for Sport (CAS).”\textsuperscript{198} Further, “[r]ecourse to ordinary courts of law is prohibited unless specifically provided for in the FIFA regulations.”\textsuperscript{199} Recent decisions by the Appeal Committee include a September 2022 appeal by the Chilean Football Association and Peruvian Football Association over a decision by the Disciplinary Committee, where the Disciplinary Committee had dismissed all charges against the Ecuadorian Football Association over alleged forgery of documents establishing a player’s Ecuadorian nationality.\textsuperscript{200} The Appeal Committee confirmed the decision of the Disciplinary Committee and dismissed the appeals.\textsuperscript{201} Another recent decision involves the case of Minhajul Islam Minhaj, who had received a lifetime ban by the Bangladesh Football Federation over suspected betting activities; the ban was extended to worldwide effect by the Disciplinary Committee.\textsuperscript{202} The Appeal Committee declared the appeal inadmissible.\textsuperscript{203}
Since 2002, FIFA has recognized the authority of CAS to resolve appeals of decisions by its internal judicial system.\(^{204}\) First established in 1984 by the International Olympic Committee, CAS is now an "institution independent of any sports organization which provides for services in order to facilitate the settlement of sports-related disputes through arbitration or mediation by means of procedural rules adapted to the specific needs of the sports world."\(^{205}\) It is staffed with nearly 300 arbitrators and tasked with "resolving legal disputes in the field of sport through arbitration" by "pronouncing arbitral awards that have the same enforceability as judgements of ordinary courts," and also provides avenues for parties to resolve disputes through mediation.\(^{206}\) CAS will only hear disputes if parties agree to submit to its authority in writing, and the recognition of its authority "may be on a one-off basis or appear in a contract or the statutes or regulations of a sports organization."\(^{207}\) Once pronounced, a CAS award is final and binding but "recourse to the Swiss Federal Tribunal is allowed on a very limited number of grounds, such as lack of jurisdiction, violation of elementary procedural rules (e.g. violation of the right to a fair hearing) or incompatibility with public policy."\(^{208}\)

While FIFA was originally resistant to the idea of CAS jurisdiction, as of 2020 approximately forty-five percent of cases heard at CAS are FIFA appeals, and the number grows each year.\(^{209}\) One of the first cases that tested CAS jurisdiction over FIFA appeals was the 2003 decision *Fulham FC v. Olympique Lyonnais* that involved a transfer contractual dispute between clubs.\(^{210}\) After Fulham refused to comply with the CAS decision that the club needed to complete the transfer payment, FIFA imposed a transfer ban on Fulham until it complied; this early case shows how even in the beginning, FIFA was serious about submitting to CAS jurisdiction. A recent CAS arbitral award that involved FIFA includes the 2022 decision *Football Union of Russia v. Fédération Internationale de Football Association et al.*, an appeal against a decision by the Bureau of the FIFA Council which suspended national teams associated with the Football Union of Russia from participation in FIFA competitions following Russia’s...


206. Id.

207. Id.

208. Id.


invasion of Ukraine. As a fellow International Federation, FIA can examine FIFA’s implementation of CAS jurisdiction to supplement its own internal judicial mechanisms.

III. SOLUTIONS

A. CAS

One possible solution to the problem of FIA self-policing is to add a provision in the FIA governing documents that allows parties recourse to submit to CAS arbitration outside of doping-related incidents. Under this new system, FIA will still be able to maintain an internal mechanism for dispute resolution with the requirement that parties must first exhaust the resolution mechanisms of the International Tribunal and International Court of Appeal, but with the added provision that parties will be able to appeal the decision to CAS, which exists as a less biased third party. This method will go a long way to address the concern that FIA cannot adequately mark its own homework.

With this approach, FIA does not need to reinvent the wheel. The organization can simply model its CAS appeals procedure on the one outlined in the FIFA Statutes. Under Article 56 of the FIFA Statutes, “CAS shall primarily apply the various regulations of FIFA and, additionally, Swiss law.” However, “[r]ecourse may only be made to CAS after all other internal channels have been exhausted,” and CAS does not deal with appeals concerning “(a) violations of the Laws of the Game; (b) suspensions of up to four matches or up to three months (with the exception of doping decisions); (c) decisions against which an appeal to an independent and duly constituted arbitration tribunal recognised under the rules of an association or confederation may be made.”

FIA can add similar provisions to its own Statutes to incorporate CAS arbitration. Instead of violations of laws of the game, FIA could have interpretations of the sporting regulations; instead of suspensions of matches, FIA could discuss suspension from participation in a Grand Prix or suspension of a driver’s Super License; the final prong could be kept intact since FIA would still want to keep some aspects of its internal system.

Initially, FIFA wanted to establish its own independent Arbitration Tribunal for Football, but after it became apparent that financial and time constraints would not permit the organization to properly set up an independent arbitration tribunal, FIFA

212. Id.
213. FIFA, supra note 182, at 58.
214. Id.
decided to recognize CAS jurisdiction. Similarly, FIA would likely find it difficult to set up its own tribunal, especially when the existing and trusted mechanisms of CAS exist. Notably, “CAS has developed its structure and jurisprudence to be the ‘world’s supreme court in sport’ and contributes massively to the development of lex sportiva.”

Adding FIA to the list of organizations which recognize CAS jurisdiction for cases outside of doping would contribute a great deal to lex sportiva, which translates to sports law. Other advantages to CAS arbitration include institutional legitimacy and uniformity of decisions. CAS tends to “engag[e] extensively in de facto precedent setting and precedent following.” Further, CAS serves two review functions as an organization. It engages in a “vertical, constitution-like form of review” when it ensures that sports governing bodies “act within their competences and follow proper procedure; that they respect the principle of legality, fundamental rights, and the principle of proportionality; and that they interpret and apply applicable rules in a correct and consistent manner.” And CAS engages in horizontal review when it “settles disputes where [sports governing bodies] disagree on the division of powers between them.” In this way, FIA parties that choose to appeal to CAS can be sure that their appeal will be heard by a body that sets and follows its own precedent and enjoys worldwide legitimacy.

The solution of CAS arbitration is not without shortcomings. One problem is lack of expertise. Right now, there are no CAS arbitrators with requisite expertise in motorsports or Formula 1 matters to form diverse panels to adequately decide on Formula 1 cases. This was also a hurdle faced by FIFA when it began to permit CAS arbitration, and once again FIA can take a page out of its sister international federation’s book. Because of the large amount of football-related disputes that come before CAS, CAS and FIFA have set up a specialist list of 168 arbitrators forming the “Football List,” “[which] are appointed by ICAS as per the proposals submitted by the six confederations, clubs (ECA), leagues (WLF), players (FIFPro), ICAs and FIFA.” Similarly, FIA can work together with the constructors and drivers to come up with a “Formula 1 List” of specialist arbitrators to hear future appeals.

Had the FIA rules included an avenue to appeal decisions to CAS, it is possible that Mercedes would have gone ahead with its appeal after Abu Dhabi through the FIA

217. Johan Lindholm, A Legit Supreme Court of World Sports? The CAS(e) for Reform, 21 INT’L SPORTS L.J. 1, 2 (2021).
218. Id. at 2 (emphasis omitted).
219. Id.
judicial system, with the knowledge that it would be able to appeal to CAS if the decision did not fall the way the team wanted. While this is pure speculation, it is not a reach to believe that a potential to appeal to CAS would have factored into Mercedes’ decision to withdraw the appeal.

B. MLB Arbitration

Another possible solution is to take notes from MLB’s arbitration procedures, in which the Players’ Association and the League’s Labor Department each select arbitrators to comprise three-member panels to hear salary disputes. FIA could adopt a version where the Grand Prix Drivers’ Association (GPDA), the union of Formula 1 drivers, and Formula 1 leadership select arbitrators from a list provided by CAS, the American Arbitration Association-Internal Centre for Dispute Resolution (AAA-ICDR), or another arbitration body. The selected arbitrators would then form three-member panels to hear disputes as an alternative mechanism to the IT and ICA, with the decisions appealable to CAS as the final instance. In this manner, the drivers have more oversight in the arbitration process and are not entirely at the whim of FIA leadership.

Some immediate issues arise with this proposal. One of the most notable differences between FIA and MLB is the different governance models of European versus American sports. In the European system, “almost all sporting activity takes place within a ‘pyramid’ structure where an international federation of national governing boards (NGBs) regulate a particular sport; each nation’s NGB regulates both commercial professional leagues . . . and a scheme of regional and local governance of clubs . . . .” Within this system, “strong player unions are absent.” In the American system, professional sports are organized as “highly successful commercial major leagues, operated as for-profit businesses, using the structure of a joint venture controlled by the owners of professional clubs.” As such, “bona fide arms-length negotiation operates as a pre-condition to the applicability of the non-statutory labor exemption, which is a judicial creation designed to immunize collective bargains struck between both sides of industry from anti-trust law.” While the GPDA exists, because


224. STEPHEN F. ROSS, ADVANCED INTRODUCTION TO GLOBAL SPORTS LAW 1 (2021).


226. ROSS, supra note 224, at 2.

227. Weatherill, supra note 225, at 73.
not every driver is necessarily a member and there are only twenty Formula 1 drivers total, the union does not enjoy bargaining power comparable to that of the MLBPA. All Major League players on each club’s 40-man roster as well as those on the injured list are represented by the MLBPA, and as of 2022, a majority of Minor League players have elected to join the union.

Another potential issue that arises is that the Commissioner has the final say when it comes to salary arbitration. FIA certainly cannot follow this system and put the final decision of arbitration in the hands of the FIA President, the position most equivalent to Commissioner, since it would exacerbate the problem of FIA’s ability to rubberstamp its own decisions. One potential remedy for this is to combine this solution with the CAS solution by permitting appeals to CAS after parties have gone through this internal arbitration. With this proposal, however, drivers would likely face steep opposition in their attempt to become more involved in the arbitrator selection process.

C. CIVIL JUSTICE

A third possible solution is an avenue for civil justice without first needing to exhaust internal FIA mechanisms. Parties could directly bring their cases to national courts and have their disputes heard before judges or juries depending on the legal system of the country in which they brought the complaint.

While this proposal would take the FIA dispute resolution system outside of the international federation entirely, thereby sidestepping the issue of FIA’s self-governance, several difficulties of implementation exist. The autonomy of sport has long been recognized, including by the United Nations in 2014. While this autonomy “does not mean that [sports] are above the law or [sports] should not be expected to adhere to principles of good governance . . . the world of sport and sports
administration should be free from direct political or government interference.”\textsuperscript{232} The respect for sporting autonomy means that when it comes to sports cases, “[c]ourts generally are very deferential to the rule-making, dispute resolution, and enforcement authority of sport governing bodies at all levels of national . . . or state . . . athletic competition to protect the on-field and off-field integrity of sport.”\textsuperscript{233} Indeed, “judges rarely invalidate or refuse to enforce arguably reasonable internal rules and decisions to protect the integrity of sport.”\textsuperscript{234}

Because of the wide variety of nationalities of people involved in FIA, “if national courts adjudicate these disputes, there is an inherent tension between internationalism (i.e., the need for international sports to operate under a consistent, worldwide legal framework), and nationalism (i.e., the desire of each nation to preserve its sovereignty and ensure that its athlete citizens are protected by its laws).”\textsuperscript{235} Questions of jurisdiction would arise regarding where to hear complaints and which country’s laws to follow, and whether a decision of the courts of one country is enforceable in another or against another country’s citizens. Political differences would also come into play despite every sporting organization’s ostensible commitment to political neutrality.

One solution would be to follow French law since FIA is headquartered in France.\textsuperscript{236} Or, Swiss law could be followed, modeled off the CAS mechanism which already allows limited recourse to the Swiss Federal Tribunal,\textsuperscript{237} though both the “Swiss Federal Tribunal and EctHR [(European Court of Human Rights)] have mentioned that there is no other viable alternative to the CAS to resolve international sports-related disputes quickly and effectively.”\textsuperscript{238} Regardless, “inconsistent and unpredictable jurisprudence and the application of general principles”\textsuperscript{239} are likely to occur, making this proposal one that is unlikely to garner much support.

**IV. CONCLUSION**

While Formula 1 is a sport that has seen its fair share of controversy over the years, the decisions by FIA leadership made during the 2021 Abu Dhabi Grand Prix have had lasting consequences on the motorsport community and even on the sporting world at large. The concentration of decision-making power in the hands of one Race Director and the lack of external judicial mechanisms contributed to the contravention of the sporting rules during the race and ended the 2021 season shrouded with scandal. This

\textsuperscript{232} Louise Reilly, An Introduction To the Court of Arbitration for Sport (CAS) @ the Role of National Courts in International Sports Disputes, 2012 J. DISP. RESOL. 63, 77 (2012).
\textsuperscript{234} Id. at 89.
\textsuperscript{237} Frequently Asked Questions, supra note 205.
\textsuperscript{238} Anderson & Goh, supra note 216, at 263.
\textsuperscript{239} Id.
Note compares the judicial and governance structure of FIA with that of MLB and FIFA, and proposes three solutions to bring external accountability to FIA to ensure that a situation like Abu Dhabi 2021 does not happen again.

In one solution, FIA would permit parties to submit to CAS arbitration for cases outside of those related to doping. A second solution would see FIA develop an arbitration system similar to that used by MLB. A third possible solution would see FIA allow parties to go directly to civil justice without first exhausting internal judicial mechanisms. To best address the issues brought to light by Abu Dhabi, allowing FIA judicial decisions to be appealed to CAS is the method that is most likely to achieve success and restore public faith in the sport of Formula 1.
Deconstructing the Blueprint for Infringement: 
Remedying Flawed Interpretations of the § 120(a) Exception to Architecture Copyrights

Margalit Zimand*

INTRODUCTION

Drafting the Architectural Works Copyright Protection Act of 1990 ("AWCPA") consisted of a bizarre hodgepodge of considerations. Ostensibly, the goal of the Act was to bring the United States unquestionably into compliance with the Berne Convention for the Protection of Literary and Artistic Works, which the United States had just recently joined, with as minimal an impact on U.S. law as possible. In reality, this goal—itself not without built-in tensions—was but one of several competing forces at play in the drafting process. The other forces generally fell into three camps. There were the proponents of preserving the interests and expanding the rights of America’s architects in one corner. In the opposite corner, with a seemingly outsized influence, were the proponents of the rights of America’s architectural photographers. Finally, and most abstractly, there were the proponents of preserving the elusive integrity of copyright law itself. As a testament to this elusiveness, the most active debates were fought not between the architects and photographers, but rather among America’s foremost copyright experts whose various normative frameworks led them to competing views on how best to facilitate the progression of the law.

While all views were considered, the final product is unsurprisingly flawed: an amalgamation of poorly assimilated concepts with rampant logical loopholes. The flaws are most evident in § 120, the scope of copyright protection for architecture. Section 120(a) provides an exception, common to nearly all Berne Union members,

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allowing buildings to be replicated in other artists’ two-dimensional works without violating the copyright of the building’s architect.\(^3\) During the drafting process, while there was debate over the exact wording, there was little debate over whether to include this exception, as it seemed fairly innocuous and important for the endurance of the urban photography industry.\(^4\)

In 2022, the U.S. District Court for the Western District of Texas interpreted this exception to allow a realtor to reproduce and distribute the blueprints of a single-family home for marketing purposes without the consent of its architect.\(^5\) As confounding a conclusion as this may seem to those well-versed in copyright law, it is actually not entirely unfounded in the text. This is due in part to an edit that was made during the drafting of the definition section of the Act to include “architectural plans” in the definition of “architectural works,”\(^6\) thus arguably extending the same exception from the exterior of constructed buildings to their blueprints. As such, in an effort to meet its Berne obligations and provide added copyright protection for America’s architects, Congress may have inadvertently stripped architects of a right that they previously held.

Before the passage of the AWCPA, architectural blueprints were protected as “[p]ictorial, graphic, and sculptural works,”\(^7\) and were therefore protected against unauthorized reproduction in two-dimensional form. That said, these blueprints were not protected against construction of the buildings depicted in them because the buildings themselves were nearly always considered “useful articles,” with few to no conceptually separable elements.\(^8\) This protection for blueprints was clarified and codified in the Berne Convention Implementation Act of 1988,\(^9\) which added “diagrams, models, and technical drawings, including architectural plans” to the definition of “[p]ictorial, graphic, and sculptural works.”\(^10\) Substantively, the result of this amendment—that architectural plans that contained copyrightable elements could not be reproduced and distributed without the consent of the copyright owner—made no difference except to appease those concerned about the lack of explicit statutory language responsive to Berne Convention requirements. The real substantive change

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4. Testimony from David Daieda, American Institute of Architects (“AIA”) former Director: “The AIA has no desire to curtail the innocent activities of photography, painting, or other pictorial representation or display of architectural works for private purposes.” Architectural Design Protection: Hearing on H.R. 3990 and H.R. 3991 Before the H. Comm. on the Judiciary, 101st Congress 111 (1990) [hereinafter Hearing] (statement of David Daieda, Former Director, AIA). Letter from Charles D. Ossola, American Society of Magazine Photographers (“ASMP”) Counsel: “Removal of the photography exception will not effectively deter architects and builders intent upon copying the design of a building, but would instead prevent photographers from freely exercising their rights to choose the appropriate subject matter for their work.” Id. at 197 (letter from Charles D. Ossola, Counsel, ASMP).
7. Id.
8. Id.
came a year later with the AWCPA, which created a new copyright subject matter category: “architectural works.” This category covers both plans and constructed works, thus protecting against the construction of buildings from protected plans.\textsuperscript{11}

It is important to note here that the AWCPA was not intended to replace the copyright protection in blueprints as “pictorial, graphic, and sculptural works,” nor was it meant to take precedence over that right. After the AWCPA, architectural blueprints are simultaneously protected both as “architectural works” and as “pictorial, graphic, and sculptural works.” These two forms of copyright protection bring with them different standards and different exceptions, but they are meant to coexist. Protection as a “pictorial, graphic, and sculptural work” is subject to the conceptual separability test. However, those elements that are deemed copyrightable are always protected against unauthorized reproduction. As noted above, the AWCPA includes a pictorial representations exception. In applying the pictorial representations exception to architectural plans, as the U.S. District Court for the Western District of Texas did, however, the protection that copyright holders previously held against reproduction of their plans as “pictorial, graphic, and sculptural works” is lost. Loss of that protection means that there is no statutory means of preventing rampant copying and distributing of architectural blueprints of constructed buildings visible from public places. It also means that protection as “pictorial, graphic, and sculptural works” for architectural plans is rendered toothless.

This is a problem for a few reasons. First, for the most successful architects, there exists a market in their blueprints and architectural drawings as art forms themselves. A quick Google search reveals that one can purchase prints of the original architectural plans of renowned architectural works, such as those by Frank Lloyd Wright, Frank Gehry, and Michael Graves.\textsuperscript{12} These prints contain as much artistic value as any other prints and thus Wright, Gehry, and Graves deserve the right to control the market for their original drawings just as much as Hopper, O’Keeffe, and Warhol do. Second, while it remains unlawful to construct buildings out of blueprints without the authority of the owners of the copyrights in the blueprints, there are other economic benefits that might come from copying and distributing the blueprint. Other architects might consciously or subconsciously copy those blueprints, without authorization from their authors. Realtors might circulate the blueprints to potential buyers, to promote houses on the market.\textsuperscript{13} The purpose of copyright law is to provide incentives to authors to create works by granting them limited monopolies on their works. With nearly no monopolies on their blueprints, architects may find that they lack incentive to create them. More abstractly, this would allow one section of the Copyright Act to invalidate another section of the Copyright Act, thus rendering the entire Act unstable.

\textsuperscript{11} 17 U.S.C. § 101.
\textsuperscript{13} See infra Part II.B.
In order to ensure that architectural plans remain protected against reproduction and the integrity of copyright law is preserved, Congress or the courts must reiterate the persistent protection of plans as “pictorial, graphic, and sculptural works” and clarify that, while an “architectural work” could be any physical manifestation of architecture, the § 120(a) exception applies only to the constructed exterior (or publicly accessible interior elements, such as the interior of the Capitol building’s dome) of the work. This interpretation is simple, but understanding why it was necessary to add architectural plans to the definition of “architectural works,” how Congress failed to perceive the ambiguities that addition potentially introduced, and where to go from here requires in-depth analysis of the legislative history and text. Part I of this Note will present the requisite background information, including the history of the inclusion of architecture in the Berne Convention, U.S. implementation of the Convention, expert opinions on the language at issue, and international interpretations. Part II will address the problems that have emerged in subsequent case law and the paradox that the intended beneficiaries might not be the actual beneficiaries of this protection. Finally, Part III will present solutions to the problem.

I. BACKGROUND: BERNE AND BEYOND

A. THE BERNE CONVENTION

The United International Bureaux for the Protection of Intellectual Property (now the World Intellectual Property Organization or “WIPO”) adopted the Berne Convention for the Protection of Literary and Artistic Works in 1886, after Western Europeans embraced the notion that in order to fully protect their works, they would require multinational agreements.14 Prior to the Berne Convention, there were numerous bilateral copyright treaties, but there was no comprehensive protection for authors in other countries, and thus the protection that did exist was not adequate to prevent rampant copying abroad.15 In 1878, under the guidance of Victor Hugo, the Association Littéraire (and later et Artistique) Internationale (“ALAI”) was founded to promote the rights of authors worldwide. In 1879, visual artists were added to their ranks.16 ALAI soon started advocating for “fuller international copyright relations.”17 At its 1882 Congress in Rome, Dr. Paul Schmidt of the German Publisher’s Guild proposed a multilateral treaty created in the interest of all parties relevant to copyright protection. This included artists and authors, of course, but also publishers, booksellers, composers, and music houses. At the end of the Congress, it was decided that there would be a conference held in Berne to address the matter. This conference took place in 1883 and resulted in a draft of ten articles which would remain largely unchanged in

15. Id. at 25–38.
16. Id. at 45–47.
17. Id. at 51.
the Berne Convention deliberations. In 1886, what would 100 years later be described by U.S. congressmen as “the world’s most important copyright convention,” the Berne Convention for the Protection of Literary and Artistic Works was adopted.

While there was support for protecting architecture as early as the 1880s, and “plans, sketches and plastic works relative to . . . architecture” were included in the Convention, there was no mention of architectural works at any of the initial Berne conferences, and they were not added to the Convention until the 1908 Berlin Revision Conference. Although member nations were not required to protect architectural works, many member nations protected constructed buildings in their national legislation prior to 1908. The ALAI conducted a study in advance of the 1896 Paris Conference and concluded, based on its assessment that the protection of architectural works in Berne Union nations was inequitable, that architecture should be added to the Convention. This suggestion received backlash from a few union members, notably Germany and the United Kingdom, who believed protection for architectural plans was sufficient. However, the majority of nations disagreed with Germany and the United Kingdom because constructing buildings from plans was not considered an infringing reproduction in many member nations, and some buildings were constructed without plans. Interestingly, the U.S. Congress echoed this same debate 100 years later. At the 1896 Conference, limited protection for architectural works was added. Union members were not required to enact national legislation protecting architectural works, but, for those that already had such national legislation, the protections of the treaty would be extended to that area. The intention was to induce members who did not have such legislation to add it—and it worked. Union members started to change their minds, and the Commission added architectural works to the list of protected artistic works in 1908.

While the term “architectural works” was added to the Convention, it was not defined. Rather, Union members were left to determine what it would mean within their own national copyright schemata, so long as both plans and constructed buildings were protected. This fact opened the door for the congressional debates that are the focus of this Note.

B. BERNE IMPLEMENTATION LEGISLATION

On March 1, 1989, the 100th Congress of the United States ratified the Berne Convention and enacted the first implementation legislation, without adding

18. Id. at 54–56.
20. RICKETSON & GINSBURG, supra note 14, at 75.
21. WIPO, supra note 2.
22. RICKETSON & GINSBURG, supra note 14, at 443–45.
23. Id. at 443–45.
24. See infra Part I.B.
25. RICKETSON & GINSBURG, supra note 14, at 444.
26. Id. at 441.
27. Id. at 446.
architectural works as a protected category. In the late 1980s, a consensus emerged in Congress in favor of joining the Convention, so the State Department established a working group to assess the compatibility of existing U.S. law with the Convention. The working group found that U.S. law was incompatible with the Berne Convention’s inclusion of architectural works in mandatorily protected subject matter because constructed architectural works would fail the separability test for “pictorial, graphic, and sculptural works” under the Copyright Act, and therefore U.S. law had inadequate protection both for constructed buildings and against unauthorized construction of buildings from plans. Four different Berne implementation acts were introduced in the Subcommittee on Courts, Intellectual Property and the Administration of Justice, including one by the Reagan administration. The goal of these bills was to ensure that the United States was in compliance with the Convention, but that U.S. copyright law would be altered as minimally as possible. Architectural works were hardly mentioned in the hearings until the final day, February 10, 1988, at which point copyright scholars Paul Goldstein and Barbara Ringer testified that existing American law provided sufficient protection to meet the Berne requirements for architecture. As such, under the banner of minimalism, the Berne Convention Implementation Act was passed without adding “architectural works” as a protected category, though architectural plans were added to the definition of “pictorial, graphic, and sculptural works” to clarify existing U.S. law, which already tended to protect them as such.

C. INTRODUCTION OF THE AWCPA

Not entirely confident in their conclusions, Goldstein and Ringer recommended Subcommittee Chairman Robert Kastenmeier do further research on the subject. He commissioned a study by the Copyright Office, which published a notice in the Federal Register. After a thorough analysis of copyright protection for architecture in the United States and abroad—including eleven comments from architects, engineers, and law firms—the Register of Copyrights, Ralph Oman, concluded that U.S. law may have been inadequate after all. Within the Copyright Office, there was no consensus. In fact, Oman wrote in the preface to the report:

I know of no other issue to arise in the Copyright Office that has engendered such deep and bitterly fought professional disagreements. Instead of our usual dainty and refined

29. See id. (statement of Ralph Oman, Register of Copyrights, Library of Congress).
30. See id. (statement of Jeffrey M. Samuels, Assistant Commissioner, Trademarks, Patent and Trademark Office).
31. See id. (statement of Ralph Oman, Register of Copyrights, Library of Congress).
34. See id. (statement of Jeffrey M. Samuels, Assistant Commissioner, Trademarks, Patent and Trademark Office).
35. Id. (statement of Jeffrey M. Samuels, Assistant Commissioner, Trademarks, Patent and Trademark Office).
cerebral discourse, we had robust, knock-down-drag-out fights, and in the last act I wound up with more bodies on the floor around me than Macbeth.


As such, the topic of protection for architectural works was again picked up the following year and legislation protecting architectural works was ultimately enacted by the 101st Congress. Subcommittee Chairman Kastenmeier introduced two bills in the House Judiciary Committee on February 7, 1990. The first, H.R. 3990, or the Architectural Works Copyright Protection Act (“AWCPA”), was intended “to amend title 17, United States Code, to protect works of architecture by creating a new category of copyright subject matter.”\footnote{37. H.R. 3990, 101st Cong. (1990) (enacted).} The second, H.R. 3991, or the Unique Architectural Structures Copyright Act, was intended “to amend title 17, United States Code, by modifying the definition of ‘useful article’ to exclude unique architectural structures.”\footnote{38. H.R. 3991, 101st Cong. (1990).} After extensive deliberations in the Subcommittee on Courts, Intellectual Property and the Administration of Justice (discussed in depth below), the Unique Architectural Structures Copyright Act was abandoned and the AWCPA was integrated into an omnibus copyright reform bill, H.R. 5498, or the Copyright Amendments Act of 1990.\footnote{39. H.R. 5498, 101st Cong. (1990) (enacted).} The AWCPA became law later that year, “plac[ing] the United States in full compliance with its multilateral treaty obligations as specified in the Berne Convention for the Protection of Literary and Artistic Works with respect to works of architecture, by creating a new category of copyright subject matter for the constructed design of buildings.”\footnote{40. H.R. Rep., No. 101-735, at 4 (1990).}

**D. Drafting Debates: “Architectural Works” and § 120(a)**

The two linguistic points that were in contention during the drafting of the Architectural Works Copyright Protection Act and that are most pertinent to this Note are the definition of “architectural works” and the specific carve-outs granted by § 120(a). The AWCPA added “architectural works” as a subject matter category in § 102 of the Copyright Act.\footnote{41. 17 U.S.C. § 102.} It also added “architectural works” to the definition section, § 101.\footnote{42. 17 U.S.C. § 101.} The definition of “architectural works” was already a contentious topic among copyright experts who disagreed over whether it was necessary, implied, or harmful to include architectural plans and drawings in the definition, as well as buildings. “[T]echnical drawings, including architectural plans” already received protection as pictorial, graphic, and sculptural works,\footnote{43. Id.} but there was debate as to whether protection
for plans and buildings as separate categories would prevent unauthorized construction of buildings from plans.\textsuperscript{44}

Despite later proving to be the most problematic section of the AWCPA, § 120(a) received relatively little debate during the drafting process. Like many other Berne Union members, the United States cabined its copyright protection for architecture in an exception for pictorial representations of buildings visible to the public.\textsuperscript{45} Between the first draft and the final draft, the phrase “or ordinarily visible from” was added after “located in a public place” to include private properties that can be seen from the street.\textsuperscript{46} However, it was noted in the congressional explanation of the amendment that this was not intended to condone trespassing to make pictorial representations.\textsuperscript{47} In mentioning trespassing as a line that could not be crossed, Congress exposed the gray area that remains: Would the interior of a building that could be seen from the street through a big window qualify as “ordinarily visible from a public place”? What about the interior of a building that the public was invited inside to see? At its most extreme, would the interior always be fair game as long as the exterior was “ordinarily visible from a public place” and the viewer was not trespassing? None of this was addressed in the drafting process. Additionally, the phrase “that has been constructed” was added after “architectural work,” and “or other three-dimensional structure” was stricken to avoid answering the question of whether this statute should apply to bridges and highways.\textsuperscript{48} But what ultimately proved to be the most problematic aspect of § 120(a) was in fact its application to “architectural works.”

The Berne Convention itself did not define “architectural works”\textsuperscript{49} and made minimal mention of exceptions for reproductions of architecture in other works of art. Article 2(1) of the Convention defines “literary and artistic works” and includes “every production in the literary, scientific and artistic domain, \textit{whatever may be the mode or form} of its expression.”\textsuperscript{50} This article supports the idea that “architectural works” should include all manifestations of the work, including plans and constructed buildings. But Article 2(2) states “[i]t shall, however, be a matter for legislation in the countries of the Union to prescribe that works in general or any specified categories of works shall not be protected unless they have been fixed in some material form.”\textsuperscript{51} The notion of “works in general” or “specified categories of works” suggests that “architectural works” and

\begin{enumerate}
  \item See infra pp. 153–55.
  \item Id.
  \item Id.
  \item Id. at 20.
  \item WIPO, supra note 2. But see the 2003 WIPO guide to the Berne Convention, written a decade after the passage of the AWCPA, which added a definition: “\textit{Work of Architecture}: A creation in the field of the art of constructing buildings, bridges and similar structures. Such creations are usually understood as comprising both the plans, designs, sketches and models serving as a basis for construction – and the completed buildings, bridges and similar structures themselves. The term ‘works of architecture’ appears in the non-exhaustive list of literary and artistic works in Article 2(1) of the Berne Convention.”
  \item WIPO, supra note 2 (emphasis added).
  \item Id.
\end{enumerate}
“architectural plans” might be two different categories of works—both necessarily protectible upon fixation, but inherently different based on their forms of fixation.

According to the report by the Register of Copyrights, draft model law principles were circulated in the 1980s, and these draft principles included one on reproduction exceptions.\textsuperscript{52} Principle WA7 held that

\begin{quote}
The reproduction of the external images of works of architecture by means of photography, cinematography, painting, sculpture, drawing or similar methods should not require the authorization of their authors if it is done for private purposes or, even if it is done for commercial purposes, where the works of architecture are on a public street, road or square or in any other place normally accessible to the public.\textsuperscript{53}
\end{quote}

The report noted that this principle received mixed reactions. Some thought it took away too much of the rights and market that architects should have in the pictorial reproductions of their work. There were suggestions that the principle should clarify whether it only covers images of external elements of a constructed work or also internal elements and whether these reproductions may be commercial in nature. However, the report noted that no such changes received sufficient support, so “Principle WA7 has been reproduced without changes.”\textsuperscript{54}

The Tunis Model Law on Copyright for Developing Countries paints a different picture. The model law was adopted in 1976 after WIPO and UNESCO “deemed [it] appropriate to provide States with a text of a model law which, if they so desired, they could take as a pattern when framing or revising domestic legislation, having regard to their particular interests.”\textsuperscript{55} Section 7 of the Model Law references two forms of reproductions to be excepted:

\begin{quote}
The reproduction of works of art and of architecture, in a film or in a television broadcast, and the communication to the public of the works so reproduced, if the said works are permanently located in a place where they can be viewed by the public or are included in the film or in the broadcast only by way of background or as incidental to the essential matters represented;

The reproduction, by photographic or similar process, by public libraries, non-commercial documentation centers, scientific institutions and educational establishments, of literary, artistic or scientific works which have already been lawfully made available to the public, provided that such reproduction and the number of copies made are limited to the needs of their activities, do not conflict with the normal exploitation of the work and do not unreasonably prejudice the legitimate interests of the author.\textsuperscript{56}
\end{quote}

A far cry from the architectural photography coffee table books so thoroughly safeguarded in the United States, these reproductions are incidental, not commercial,

\begin{footnotes}
\item[52.\textsuperscript{52}]
U.S. COPYRIGHT OFF., supra note 36, at 150.
\item[53.\textsuperscript{53}]
\item[54.\textsuperscript{54}]
U.S. COPYRIGHT OFF., supra note 36, at 154.
\item[55.\textsuperscript{55}]
TUNIS MODEL LAW ON COPYRIGHT FOR DEVELOPING COUNTRIES, at 3 (WIPO 1976).
\item[56.\textsuperscript{56}]
Id § 7(iv)–(v).
\end{footnotes}
in nature and seemingly granted out of necessity. It is worth noting these differences to highlight that, while Congress claimed to simply be minimalistically adhering to its Berne obligations, in actuality, it made several conscious choices that went beyond what was necessary.\footnote{57}

In that vein, the reproduction exception legislation of other Berne Union members sheds light on the choices that were made in the United States. The Register’s report provides a survey of “Foreign Laws on Works of Architecture.”\footnote{58} The report noted that most nations follow a standard for these exceptions to their copyright law, highlighting, for example, that Ireland has the “standard exemption for reproductions” and Senegal “provides the usual public place exemption.”\footnote{59} What the report failed to note was that these “standard exemptions” actually fall into two distinct camps that have been conflated. In one camp, there are exemptions for an array of reproductions because the reproductions themselves are a market worth protecting. In the other camp, there are the exemptions for films and broadcasts out of necessity because buildings will always be incidentally included in the background. Examples of the first camp include Chile, where the law provides complete exemption for “photographs, cinematography, television, and any other analogous process,” and Poland, where it grants “[i]n the domain of fine art, any person may reproduce architectural works, except for building purposes.”\footnote{60} Examples of the second camp include The Central African Republic, where the law provides an exception only for “reproduction with a view to cinematography, sound or television broadcasting or public communication of works of art and architecture permanently located in a public place or included in a film or broadcast in an accessory manner or that are merely incidental to the main subject”; Iceland, where the exemption is qualified by the notion that if the work of architecture “constitutes the chief motif of a picture which is used for commercial purposes, then the author shall be entitled to remuneration”; and The Netherlands, where the exception is only for the exterior of buildings and does not include images in which the work is the principal focus or a reconstruction.\footnote{61} All of these models were available to lawmakers prior to the drafting of the AWCPA and therefore could have factored into some of the choices that were made. However, they were not mentioned in the debates.

\section*{E. Expert Testimony}

During the deliberations over H.R. 3990 and H.R. 3991 in the Subcommittee on Courts, Intellectual Property and the Administration of Justice of the Committee on the Judiciary, expert testimony came from three groups: architects, architecture photographers, and copyright experts. Among the architects, there were three sources of testimony: a representative of the American Institute of Architects, a representative of the Wright Foundation, and renowned architect Michael Graves. The American
Society of Magazine Photographers (now called the American Society of Media Photographers) represented the photographers. Finally, Columbia Law School Professor Jane Ginsburg, Register of Copyrights Ralph Oman, and Assistant Commissioner of Patents and Trademarks Jeffrey Samuels all represented the interests of copyright law.

Michael Graves, whose testimony was intended to shed light on “problems that [he] as an architect, would have with one-of-a-kind buildings and those with a unique artistic character,” was mainly concerned with the arbitrary distinction made in § 120(a) between architecture located in a public place and architecture located in private. He noted that architects “frequently document their work through photography for purposes of publication, marketing materials, entry in design competitions, reference and scholarship. Thus, buildings not accessible to the public, as well as private areas of buildings, should be treated in the same manner as public areas of public buildings.” While Graves made a compelling point about the market for architectural photography that is lost to architects, he seemed to misunderstand the reason for not extending this exception to privately located architectural works—so as not to appear to condone trespassing. Ralph Oman responded to Graves’s concern:

[T]here was a slight misconception as to what the distinction between private and public related to. He seemed to think that photographs of public buildings would be treated differently than photographs of private residences. In fact, he will have the right to protect brochures, flyers, and other works that contain photographs without distinction between public and private structures. Based on this misunderstanding, Mr. Graves was urging that the public and private distinction be eliminated. I think that under any circumstance the photographs that Mr. Graves includes in his brochures and flyers would be protected normally under the traditional copyright law.

As the representative for the American Institute of Architects (“AIA”), David Daileda highlighted the need for sensitivity with regard to the actual interests of architects and noted that the pictorial representations exception was potentially a problem. Daileda was concerned that, without specific language prohibiting such activity, the pictorial representations exception may enable “the indirect copying of protected architectural works.” He warned of new technology that allows users to upload photographs of buildings and receive architectural blueprints of those buildings in return. Like Graves, Daileda seemed to neglect the role of other areas of the law. In reality this fear is likely unnecessary, given that such a reconstruction would be an act of infringement, whether a prohibition against reconstruction was included in § 120(a) or not. The AIA also advocated in favor of limiting the pictorial

62. Hearing, supra note 4, at 11 (statement of Michael Graves, President, Michael Graves Architects).
63. Id. at 19–20 (statement of Michael Graves, President, Michael Graves Architects).
64. Id. at 44 (statement of Ralph Oman, Register of Copyrights, Library of Congress).
65. Id. at 111, 116 (statement of David Daileda, Former Director, AIA).
66. Id. at 116 (statement of David Daileda, Former Director, AIA).
representations exception to instances when the architectural work is not the primary subject of the pictorial representation, as is the case in France.67

Similar to Graves, Richard Carney of the Frank Lloyd Wright Foundation warned of the dangers of copying that great architects face, noting “[a]s working architects, we personally have been victimized by knowledgeable copycats.”68 He also expressed his support for § 120(a) but warned against extending this protection to reproductions of architectural drawings, stating “in light of the significant social and economic benefits which redound to architects from the exhibition, sale or transfer of original architectural drawings, it must be made clear that this exemption does not apply to original architectural drawings.”69 This fear proved the wisest of all those held by testifying architects. In fact, had it been given weight during the drafting process, the events that are the topic of this Note would have been prevented.

The American Society of Magazine Photographers (“ASMP”) wrote to the subcommittee to express its belief that the pictorial representations exception was “vitaly important to professional photographers” and society at large.70 In the letter, the ASMP expressed its understanding that the AIA was incorrect in its assumption that the pictorial representation exception would enable infringement by means of unauthorized construction of buildings because that infringement would still be unlawful. Further, it noted that “it would surely be overkill to try to discourage infringement of an architect’s rights in buildings by prohibiting or limiting the taking of photographs of buildings,” as that would be a massive loss for photographers who would likely feel inclined to shy away from photographing buildings, all for the remote possibility of subsequent infringement of architectural copyrights.71 It warned that, without the pictorial representations exception, photographers would lose their rights “to choose the appropriate subject matter for their work,” which would in turn be a great loss to society and would be “inimical to the copyright law objective of promoting the dissemination of creative works to the public.”72

This logic is flawed for a number of reasons and yet seems to have been accepted by the drafters. First, it is not true that without this exception, photographers have complete freedom to choose their subject matter. For example, photographers do not have the right (beyond fair use) to exploit images of publicly displayed “pictorial, graphic, and sculptural works”; there is no “public placement” exception to the scope of copyright in those works.73 Outside the realm of copyright, there is also subject matter that is forbidden because of privacy concerns.74

67. Id. at 125 (statement of David Daieda, Former Director, AIA).
68. Id. at. 137 (statement of Richard Carney, Managing Trustee & CEO, Frank Lloyd Wright Foundation).
69. Id. at 147 (statement of Richard Carney, Managing Trustee & CEO, Frank Lloyd Wright Foundation).
70. Id. at 195 (letter from Charles D. Ossola, Counsel, ASMP).
71. Id. at 197 (letter from Charles D. Ossola, Counsel, ASMP).
72. Id. at 196 (letter from Charles D. Ossola, Counsel, ASMP).
74. For a discussion on the right of publicity, see, e.g., RESTATEMENT OF THE L. (SECOND), TORTS § 652 (1977).
Second, architectural photography may be of great benefit to society, but those benefits would still exist if architects’ copyrights covered the right to authorize photographs and license out the rights to photographers. Movie adaptations of books are greatly beneficial to society and, unless the book is in the public domain, only exist when the authors of said books grant the rights to the filmmakers.\textsuperscript{75} It is even possible that photography of buildings is so lucrative that allowing architects to license out the rights would benefit architects while causing no more harm to photographers than already exists relative to publicly displayed “pictorial, graphic, and sculptural works,” whose authors enjoy exclusive reproduction rights including over pictorial representations. This arrangement would not be “inimical to the copyright law objective of promoting the dissemination of creative works to the public”\textsuperscript{76} as these works would still be disseminated, just by the architect rather than the photographer.

That said, Congress never considered the possibility that architects would hold the rights to authorize photographs of their works. This was likely because photographers had long freely photographed buildings and thus, despite buildings now holding copyright protection, maintaining the status quo meant not extending that protection to pictorial representations. This might not have been the case had “architectural works” been included as a subcategory of “pictorial, graphic, and sculptural works,” which are not subject to pictorial representation exceptions, instead of as its own category of protected works. In some ways, the decision to maintain the status quo was paradoxically quite radical because it created a copyright subject matter category that can be freely replicated in two-dimensional form for the first time.

Professor Jane Ginsburg wrote to the subcommittee to express five concerns that she and the students in her Columbia Law School copyright class had with the bill.\textsuperscript{77} She highlighted two of them in particular, one being that protection for architectural plans and structures should not be considered distinct and the other being that the pictorial representation exception need not be broader for architecture than it is for other public outdoor artwork.

Beginning with the first concern, Ginsburg feared that there existed a gap in protection for architectural plans (covered under “pictorial, graphic, and sculptural works”) and constructed buildings (covered under the AWCPA). She found it unlikely that courts would adequately and consistently protect against construction of buildings from plans based on any existing theories. The theory that the new building would be an unlawful copy so long as the plans were already embodied in a constructed building elsewhere would not cover buildings that had not yet been built. The theory that the constructed buildings would constitute infringement regardless would often fail as well. This is because unauthorized constructions are not protectable, as works must be fixed with the authority of their author to be considered fixed for the purpose of copyright protection. Ginsburg added, “If the building is not independently protectable, construction from the plans can be infringement only if the resulting building meets

\textsuperscript{75} 17 U.S.C. § 106(2).
\textsuperscript{76} Hearing, supra note 4, at 196 (letter from Charles D. Ossola, Counsel, ASMP).
\textsuperscript{77} See id. (letter from Jane C. Ginsburg, Associate Professor, Columbia Law School).
the pictorial graphic and sculptural work standard of separability. This is a standard few buildings as a whole are likely to meet.” Ginsburg also noted that, generally, the form of fixation is irrelevant in copyright law (i.e., a song is copyrightable whether it is fixed in sheet music or a sound recording) and there is no reason why architecture should be treated any differently.79 These arguments were persuasive to Congress, and the definition of “architectural works” was amended to include both plans and constructed buildings.80

As for the second concern, Ginsburg argued that it was unnecessary to grant an exception for two-dimensional representations of architecture when the same exception was not granted for other forms of public artwork. In contrast to the points raised by the ASMP, Ginsburg posited that “[i]n general, the bill appears to remove from the architect’s control and compensation significant commercial exploitations of the work, in a manner neither coherent nor justified.”81 She suggested amending the pictorial representations exception to apply only to noncommercial representations in which the architectural work is not the primary subject.82 On these points, Congress chose not to oblige.

Ralph Oman, the Register of Copyrights and author of the report that inspired the passage of AWCPA, did not share Ginsburg’s concern that “architectural works” would not be adequately protected without including architectural plans in their definition but supported the amendment as long as it was clear that architectural plans were simply a different manifestation of constructed buildings and not a separate type of architectural work. Oman explained several reasons why it might be beneficial to distinguish between architectural plans and constructed buildings. First, he warned of confusion that might arise when architectural plans are protected both as “pictorial, graphic, and sculptural works,” for which the separability test could be applied, and as “architectural works,” for which the separability test was consciously avoided. He worried that architectural works would be subjected to the more limited scope of protection of “pictorial, graphic, and sculptural works” as a result of this confusion. Oman, like Carney, also warned against applying the pictorial representations exemption to architectural plans, as that would “be inconsistent with our Berne obligations . . . . There is a healthy market for original architectural drawings, providing architects with additional revenue and exposure.”83 He feared “[i]nclusion of architectural plans within the definition of architectural works would lead to drafting problems for these exemptions.”84 This fear proved prophetic, but it is not necessarily an argument in favor of excluding architectural plans from the definition of

78. Id. at 185 (letter from Jane C. Ginsburg, Associate Professor, Columbia Law School).
79. Id. at 185–86 (letter from Jane C. Ginsburg, Associate Professor, Columbia Law School).
81. Hearing, supra note 4, at 187 (letter from Jane C. Ginsburg, Associate Professor, Columbia Law School).
82. Id.
83. Id at 70 n.32 (statement of Ralph Oman, Register of Copyrights, Library of Congress).
84. Id. at 64 (statement of Ralph Oman, Register of Copyrights, Library of Congress).
“architectural works” as an equally viable option would be to just apply the exception to “constructed architectural works.”  

Oman also disagreed that including architectural plans in “architectural works” would be necessary for adequate protection. He reasoned that builders getting away with “scooping” buildings from others’ plans was not a risk because, if the builders had the plans without the consent of the copyright owners, they would be charged with copyright infringement for copying the plans or conversion for taking the original plans. He also clarified what he perceived to be confusion over the difference between the access standard and the copying standard, stating that any building that was a copy of another constructed building would be considered an infringement of the original building, whether the second builder had access to it through the building itself or only through its plans. That said, Oman was not opposed to Ginsburg’s proposal, so long as Congress made it clear that “architectural work as currently defined in H.R. 3990 can be depicted both in a built structure and in plans,” while “the plans themselves would still be regarded as pictorial or graphic works, governed entirely by 17 U.S.C. 102(5),” and concluded this section of his testimony by stating: “[A]lthough I do not believe the perceived gap exists, if the Subcommittee wishes to clarify the issue beyond any doubt, I can support the proposed language so long as it is made clear that architectural works, however depicted, are governed by new section 102(8).”

Finally, Jeffrey Samuels, acting as Commissioner for Trademark at the time and speaking on behalf of the administration, added little to the conversation but generally supported the bill. In vague terms, he emphasized that

> It is important to remember that the guiding principle of copyright is to protect an author’s expression of his or her ideas, while at the same time leaving those ideas in the open marketplace, to be used and developed by all. Any legislation in this area should carefully maintain this critical balance, already struck in the Copyright Act of 1976.  

He provided no concrete examples of what he meant by this.

All of the testimonies were considered and the final draft was enacted in 1990. In the enacted act, the definition of “architectural works” is “the design of a building as embodied in any tangible medium of expression, including a building, architectural plans, or drawings. The work includes the overall form as well as the arrangement and composition of spaces and elements in the design, but does not include individual standard features.” Additionally, § 120(a) as enacted provides,

> Pictorial representations permitted.—The copyright in an architectural work that has been constructed does not include the right to prevent the making, distributing, or public display of pictures, paintings, photographs, or other pictorial representations of the work,
if the building in which the work is embodied is located in or ordinarily visible from a public place. 89

This language reflects a balance between the two most important interests highlighted in the deliberations. The first is the need to prevent loopholes that would allow would-be infringers to make lawful copies by constructing a building based on lawfully obtained blueprints. The second is the need to preserve the ability to make two-dimensional recreations of constructed buildings so that the buildings can be sufficiently appreciated for their value to society. 90 However, despite Congress’s best intentions, the chosen language failed to adequately balance those needs.

II. SUBSEQUENT DEVELOPMENTS: DESIGNWORKS AND KIPP FLORES

A. CONTEXT

For thirty years, between the enactment of the Architectural Works Copyright Protection Act of 1990 and the recent cases on the scope of § 120(a), the Act seemed to be achieving its intended purpose of providing enhanced copyright protection for architecture per the Berne Convention obligations. Two cases from 2021 and 2022 forced architects and copyright scholars alike to reconsider the utility of the language of the AWCPA as enacted. The issues that scholars warned of during the drafting process finally came to fruition, turning the AWCPA on its head. Under the most recent rule out of the Western District of Texas, architects are left with considerably less protection than they held in 1989, before the enactment of the AWCPA. 91 Section 120(a) has become the exception that swallowed the rule, granting near-complete freedom to reproduce any architectural work, so long as a building has been constructed and is visible from a public place. 92 Congress added architectural plans to the definition of “architectural works” to ensure, despite this assumption, that plans would be completely protected. Yet, in doing so, Congress unintentionally left architectural plans more vulnerable than they have been since prior to their addition to the definition of “pictorial, graphic, and sculptural works.” 93

Stepping back, before looking at the cases, it is important to first address what the purpose of the Act was and who the intended beneficiaries of the Act were. The main purpose of the Act was to meet the requirements of the Berne Convention and to “at a minimum . . . provide the equivalent kind of protection to our American designers and

89. 17 U.S.C. § 120(a).
92. Shrewd readers will observe that such a notion is completely antithetical to the assumption made by the Register of Copyrights, Ralph Oman, prior to the enactment of the AWCPA that unauthorized construction of buildings from lawfully obtained blueprints would be prevented so long as a building had already been constructed because the access standard does not require the new building to have been copied from the prior building itself. See supra p. 155.
architects as is provided to their counterparts in foreign countries."\textsuperscript{94} However, if this was the only goal, Congress could have adopted the Model Law wholesale. Congress unsurprisingly chose not to do this and instead catered its law to the specific needs of the American people. Despite testimony from architects to the contrary, it is probably the case that the main de facto beneficiaries of this protection were smaller architectural firms responsible for designing suburban single-family housing developments. Both Graves and Carney spoke about the necessity of protecting great architects from copying.\textsuperscript{95} Though I do not doubt the veracity of their statements, observation alone (from the perspective of a non-architect, no less) suggests that the risk of copying great works of architecture was probably not the most significant ill that Congress intended to remedy in enacting the AWCPA. Walking down the streets of Manhattan, I can observe that the most famous buildings are one of a kind, a stark difference from the Silver Spring, Maryland, neighborhood I grew up in, where nearly every house was identical. As far as I know, the houses in my neighborhood were designed by the same architect and therefore were not infringements, but I can only assume that copying goes unpunished far more often among the rank and file than among the fabulous. This hypothesis is further supported by the report of the Register of Copyrights, which states,

Since most copyright infringement suits involve single-family housing, and smaller architectural firms are responsible for the design of most single-family housing, an extension of copyright protection to prohibit the construction of substantially similar buildings based on unauthorized use of the plans that depict the building may improve the economic well-being of smaller architectural firms.\textsuperscript{96}

Conversely, the pictorial representations exception was clearly drafted with big-name architects in mind. Oman noted in his testimony that "two-dimensional reproductions of architectural works, such as photographs, postcards, and T-shirts are not a necessary component of [the architect's] economic incentive, and serve a valuable public interest in promoting familiarity, appreciation and criticism of architectural works." Of course, it goes without saying that few "photographs, postcards and T-shirts" depicting suburban housing developments are on the market, let alone serving a "valuable public interest."\textsuperscript{97}

Returning to the concept of the two camps that reproduction exemptions fall into internationally, the United States does not neatly fall into either. On one hand, while

\textsuperscript{94} Hearing, supra note 4, at 9 (statement of Carlos Moorhead, Ranking Minority Member, Subcommittee on Courts, Intellectual Property, and the Administration of Justice & Bill Co-Sponsor).

\textsuperscript{95} See id. (statement of Michael Graves, President, Michael Graves Architects; statement of Richard Carney, Managing Trustee & CEO, Frank Lloyd Wright Foundation).

\textsuperscript{96} U.S. COPYRIGHT OFF., supra note 36, at 12. This notion is also suggested by Paul Goldstein in his casebook on copyright: "Most architectural works cases deal with alleged infringement of designs less fanciful than the one involved in Shine. A good deal of litigation concerns competing plans for mass-produced 'semi-custom' development homes, which consist of a combination of elements that might be called 'standard features,' incapable of copyright protection in themselves." PAUL GOLDSTEIN, COPYRIGHT 216 (1996).

\textsuperscript{97} Hearing, supra note 4, at 70 (statement of Ralph Oman, Register of Copyrights, Library of Congress).
§ 120(a) does not itself fall into the latter camp (exemptions for films and broadcasts out of necessity), such exemptions already exist for “pictorial, graphic, and sculptural works.” Section 118 of the Copyright Act provides that parties must either negotiate to allow protected “pictorial, graphic, and sculptural works” to be featured in public broadcasts or obtain a compulsory license.98 Interestingly, this exemption was not extended to cover “architectural works” in or after the AWCPA. Thus, constructed buildings, which are only covered as “architectural works,” are not subject to this exemption. In the report describing amendments made to H.R. 1990, Representative Jack Brooks highlighted the importance of protecting photography for the purposes of tourism.99 But, given that film is a significant export of the United States,100 it is interesting that no mention was made about protecting the film industry. While this was likely an oversight, it is indicative of a larger theme that Congress may not have sufficiently considered its options in drafting § 120(a).

It seems uniquely American that the main beneficiaries of this protection are architects of residential, single-family homes (though this is impossible to know from the statutory text, as it is nowhere expressed in the language itself). This dynamic sheds an interesting light on the pictorial representations exception, as the works that benefit the most from this protection are affected the least by the exception while the works affected the most by the exception benefit the least from protection. Though ostensibly the law is to be applied evenly to all “architectural works,” it is clear (and may have even been so for some during the drafting process) that the effect of the law is that little changes for big name architects, while smaller architects have practically unbounded protection. In this way, the United States managed to both enhance protection for architecture and provide an exception for photography where they were most needed. This protection and exception might have been entirely effective if not for the drafting errors that allowed courts to read in a pictorial representations exception to copyrights in architectural plans.

B. DESIGNWORKS

The first case to address the issue of pictorial representations of architectural plans was Designworks Homes, Inc. v. Columbia House of Brokers Realty, Inc.101 In 2019, the U.S. District Court for the Western District of Missouri heard the case and held that the reproduction of floorplans by the defendants did not constitute an infringement
because it fell under the purview of § 120(a). In that case, the architectural firm, Designworks, brought a claim against real estate agents, Columbia House of Brokers, who published floorplans of Designworks’s designs as part of their efforts to sell the homes. The defendants argued that they were entitled to summary judgment because the publication of floor plans fell under the pictorial representation exception in § 120(a). The plaintiffs argued that floorplans were not pictorial representations and the building was not visible from a public place. The court found in favor of the defendants after concluding that, because the building itself is ordinarily visible from a public place, any two-dimensional representation is allowed, including two-dimensional representations of elements that are not ordinarily visible from a public place. This is because the statute says a work may be reproduced “if the building in which the work is embodied is located in or ordinarily visible from a public place,” not if the work being copied is itself ordinarily visible from a public place. The court stated:

The work at issue in this case is the Design, which is embodied in the completed architectural work located at 1713 Kenilworth, which is ordinarily visible from a public place. Consequently, Defendants’ creation of the Floorplan capturing the layout of 1713 Kenilworth is not an infringing act because the Floorplan is a pictorial representation of the structure’s interior as it exists.

This is not an implausible argument and could even be a valid interpretation based on a textualist reading of the statute, but it is obviously counter to the goal of enhanced protection for architectural works.

The plaintiffs appealed and the Eighth Circuit heard the case in 2021. That court reversed, holding that floorplans do not come within the exception for pictorial representations. The court employed several classic tools of statutory interpretation. First, it considered the ordinary public meaning of the word “pictures” and concluded that, out of context, it might be acceptable to define a floorplan as a “picture.” However, words must be interpreted within their broader contexts and in this case, the broader context suggested that floorplans were not “pictures.” “[A]rchitectural plans” are explicitly put forth in other parts of the statute, so it should not be taken for granted that Congress intended the exception to include “architectural plans” if it did not specify “architectural plans.” The court then used the canons of noscitur a sociis and ejusdem generis to show that all other words in the list connote artistic expression, so other “pictorial representations” should as well. Purely functional architectural blueprints should not be included in their ranks.

While the Eighth Circuit’s holding was correct, the logic the court used to reach it does not hold water because the purpose of including “pictorial representations” in addition to “pictures” is likely to evoke the broader understanding of pictorial works.

102. 17 U.S.C. § 120(a) (emphasis added).
as a subset of “pictorial, graphic, and sculptural works,” defined earlier in the statute, which is deliberately not confined to works of artistic expression. As further support, the Compendium of U.S. Copyright Office Practices provides representative examples of “pictorial works” and “graphic works.” Examples under “pictorial works” include maps, technical drawings, and diagrams, all potentially purely functional works. Congress was not picking terms in a vacuum. After the study conducted by the Register of Copyrights, commissioned by Representative Robert Kastenmeier, the bill's drafter and sponsor, Congress had access to all the language selected by other Berne Union members in their own exceptions. Congress consciously chose to use the term “pictorial representation” despite the fact that no other Union members had used this term. It is conceivable that Congress intended for the term to specifically include engravings and other such artistic expressions, but then it could have said so, as other Berne Union members did. It can hardly be a coincidence that the word Congress chose just so happens to be a subset of a term already defined in the same statute, and therefore the term must be interpreted the way it is interpreted earlier in the statute.

In reality, Congress likely did not plan for this particular situation in its word choice because of the “ordinarily visible from a public place” qualification—the internal design of a building would not be considered viewable from a public place. The court did eventually acknowledge this point, highlighting that the public place factor also informs this situation because it would be nearly impossible to recreate floorplans by viewing a building from a public place. Therefore, Congress could not have intended for this exception to cover floorplans.

C. Kipp Flores

The next court to take up the topic of floorplans as pictorial representations was the District Court for the Western District of Texas in Kipp Flores Architects, LLC v. AMH Creekside Development, LLC. The plaintiff there alleged that its designs were distributed without its Copyright Management Information, in violation of the licensing agreement between the parties. Because the licensing agreement was violated, the designs were unlawfully distributed without the consent of the copyright owner, thus infringing Kipp Flores's copyright in the architectural blueprints. Among other defenses, the defendant, AMH Creekside Development, argued that the floorplans it distributed were "pictorial representations" and therefore were exempted under § 120(a). The plaintiff asserted that the § 120(a) exception should not apply to its architectural blueprints because they were protected both as “architectural works” and

109. Supra p. 150.
110. 17 U.S.C § 101.
111. Designworks Homes, Inc., 9 F.4th at 810.
as “pictorial, graphic, and sculptural works.” The court countered that § 120(a) “protects pictorial representations regardless of whether the copyright holder has a copyright in the structure itself or in the technical drawings.”\textsuperscript{113} The court, however, did not explain why the limitations on the “architectural works” copyright should trump the protections for “pictorial, graphic, and sculptural works” copyright. In fact, prior case law confirms that the scope of “architectural works” copyright does not override that of “pictorial, graphic, and sculptural works,”\textsuperscript{114} but this court did not address that authority. Thus, the court wrote a massive exception into copyrights for “pictorial, graphic, and sculptural works” that certainly was not intended.\textsuperscript{115}

Additionally, despite presenting the § 120(a) test as “(1) that the alleged infringing work constitutes a picture, painting, photograph, or other pictorial representation of the copyrighted architectural work and (2) that the copyrighted architectural work has been constructed and is ordinarily visible from a public place,”\textsuperscript{116} the court never actually addressed the “public place” prong. Though the court did not explicitly state as much, it seemed to rely on a similar argument to that made by the Western District of Missouri—that it only matters that the building itself is ordinarily visible from a public place, not that the particular element copied is.\textsuperscript{117} The court briefly addressed timing (focusing on the words “has been”) and concluded that the homes were already constructed at the time of the distribution of the floorplans, contrary to the allegations of the plaintiff. As such, the court concluded that the defendant met the second prong as well.\textsuperscript{118}

In \textit{Kipp Flores Architects, LLC v. Pradera SFR, LLC}, the same court heard a case from the same plaintiff, based on the same background facts as the above case.\textsuperscript{119} In this case, the court found that § 120(a) was inapplicable because the alleged distribution of infringing blueprints occurred before the building was constructed, and therefore the

\begin{itemize}
\item \textsuperscript{113} \textit{Id.} at *8 (citing Builders Mut. Ins. Co. v. Donald A. Gardner Architects, Inc., 856 F. Supp. 2d 773, 777 (D.S.C. 2012)).
\item \textsuperscript{114} \textit{See} Scholz Design, Inc. v. Sard Custom Homes, LLC, 691 F.3d 182 (2d Cir. 2012).
\item \textsuperscript{115} Congress gave little explanation as to how the interplay between the overlapping subject matter categories protecting architectural plans would function, but Congress said enough to make it clear that its intention was not for the “architectural works” exception to override “pictorial, graphic, and sculptural works” protection. The only explicit mention of the interplay in the congressional explanation of the amendment was as follows: “An individual creating an architectural work by depicting that work in plans or drawing will have two separate copyrights, one in the architectural work (17 USC § 102(a)(8)), the other in the plans or drawings (17 U.S.C. § 102(a)(5)). Either or both of these copyrights may be infringed and eligible separately for damages.” \textit{H.R. REP. NO. 101-735}, at 19 (1990). In his testimony before the subcommittee, Register of Copyrights Ralph Oman noted that, even if architectural plans were included in the definition of architectural works, “[t]his protection is wholly apart from that currently granted to architectural plans, drawings, and models as ‘pictorial, graphic, and sculptural works.’” \textit{Hearing}, supra note 4, at 58–59 (statement of Ralph Oman, Register of Copyrights, Library of Congress). More abstractly, it was mentioned several times in the drafting process that the bill is meant to change copyright law as minimalistically as possible. This would imply that the changes were not intended to invalidate or override another section of the law. See \textit{id.} (statement of Ralph Oman, Register of Copyrights, Library of Congress); \textit{supra} Part I(B).
\item \textsuperscript{116} \textit{Kipp Flores Architects, LLC}, 2022 WL 4352480, at *7.
\item \textsuperscript{117} \textit{See supra} p. 158.
\item \textsuperscript{118} \textit{Kipp Flores Architects, LLC}, 2022 WL 4352480, at *7.
\end{itemize}
building was not “ordinarily visible from a public place.” 120 In essence, the court restated the rule it hinted at in Kipp Flores Architects, LLC v. AMH Creekside Development, LLC, that § 120(a) is always applicable to blueprints, so long as the building has been constructed. 121

This rule obviously does not make any sense. Why would Congress make a distinction, in allowing the copying of blueprints, between blueprints of buildings that have not been constructed and blueprints of buildings that have? If anything, this court reached the opposite conclusion of that intended by Congress in granting the right to distribute blueprints only in circumstances that would disrupt the rights of the owner of a copyright in a constructed building and not in circumstances that would not.

These holdings flip the intentions and beneficiaries of the Act on their heads. If one were to read § 120(a) as saying that architectural plans for constructed buildings visible from a public place can be copied with impunity, as the Western District of Texas has, then architects are objectively in a worse position than they were before the enactment of the AWCPA because, under that reading, the AWCPA protects buildings but strips protection for the plans and representations of the buildings once they have been constructed and are publicly visible. For high-end architects, that means a market they may have had in artistic renderings of their architectural plans has now been eliminated. For low-end architects, there is a risk that realtors might circulate their blueprints and the architects will not be able to stop them (though the architects will still be able to obtain relief against others actually building properties based on their blueprints).

III. SOLUTION: JUDICIAL OR CONGRESSIONAL CLARIFICATION

Ultimately, while these problems are complex, the solutions are not. The Supreme Court already denied certiorari to Columbia House of Brokers Realty, Inc. v. Designworks Homes, Inc., prior to the publication of the Western District of Texas’s decision in Kipp Flores, and thus does not presently have jurisdiction to remedy the errors of this doctrine. 122 However, the Fifth Circuit, and any other court that may encounter this doctrine, must take the opportunity to clarify this issue. But they must not stop at rectifying the misunderstanding of copyright law as it currently stands. They must take this opportunity to quash extending § 120(a) to third-party pictorial representations of blueprints.

They may do so through a few different methods of statutory interpretation. The court might apply a purposivist lens, through which it would come to the conclusion that the intent of Congress was to provide an exception to copyrights in architecture for two-dimensional representations of the exterior of constructed works of architecture. The court might also apply the absurdity canon to negate a reading that strips architects of previously-held protection rather than providing them with

120. 17 U.S.C. § 120(a).
enhanced protection. Even by applying a textualist lens, the court might conclude that the clause "that has been constructed,"123 which is included after the first mention of an architectural work in the statute, should be read in after every mention of architectural works. This would result in a read that the pictorial representations are only authorized for works that have been constructed, if the pictorial representations themselves are of works that have been constructed (eliminating the possibility of creating a two-dimensional representation of a blueprint). Additionally, the "publicly visible" criterion should be interpreted to mean that the aspect replicated is itself "publicly visible."

If anomalous judicial interpretations persist, Congress should amend the statute accordingly: One amendment must clarify that, while "architectural works" can be manifested as plans or constructed buildings, § 120(a) applies only to those manifested as constructed buildings. Another amendment should clarify the interior versus exterior debate. I propose the following language:

The copyright in an architectural work that has been constructed does not include the right to prevent the making, distributing, or public display of pictures, paintings, photographs, or other pictorial representations of the constructed elements of the building that are visible to the public, if the building in which the work is embodied is located in or ordinarily visible from a public place.

Congress should also consider the goals motivating the § 120(a) exception and whether other types of exceptions should be statutorily granted as well. For instance, exceptions for miniature three-dimensional representations or representations in films or broadcasts might achieve the ends of promoting tourism and properly appreciating American landmarks.

IV. CONCLUSION

Without the proposed changes, this crisis transcends architecture. Architects and the owners of copyrights in architecture are clearly harmed by a holding that strips them of protection against copying and distributing copyrighted blueprints. But copyright law itself is also harmed by such a rule. "Pictorial, graphic, and sculptural works" copyrights for architectural plans are rendered essentially void so long as a building has been constructed from the plans and that building is "ordinarily visible from a public place."124 This scheme engenders a problematic gap in copyright law. If one section of the law is allowed to invalidate another, without explicitly stating such, the entire system is unreliable. Furthermore, if explicit efforts by Congress to expand the rights of a group of artists result in an interpretation that dramatically decreases those same rights, the law is fundamentally flawed. Congress or the courts must take the first opportunity to remedy this flaw in order to preserve the rights of architects and the integrity of copyright law in America.

124. Id.