UIC
REVIEW OF INTELLECTUAL PROPERTY LAW

À LA RECHERCHE DE BREYER PERDU

SHUBHA GHOSH

ORCID: 0000-0002-0316-1614

Cite as Shubha Ghosh, *A La Recherche De Breyer Perdu*, 21 UIC REV. INTELL. PROP. L. 38 (2022).

À LA RECHERCHE DE BREYER PERDU

SHUBHA GHOSH*

I. INTRODUCTION

I remember first hearing of Judge Breyer's nomination to the Supreme Court at a dinner for the annual Law and Economics Association meeting served at a winery up in Woodside, CA, on May 17, 1994. The then dean of the hosting law school made the announcement during his welcoming remarks, describing Judge Breyer as the first appointment to the Supreme bench from the law & economics school. I imagine, although do not fully remember, some breast-beating over the disciplinary triumph among the audience.

None of the press reports noted this milestone, however. Instead, the newspaper articles touted Breyer as a military intelligence officer, Harvard Law Professor, a noted federal jurist, a copyright scholar. A San Francisco paper talked about his Bay Area roots, his undergraduate years at Stanford, and his reading of Proust in high school in French.

If in fact he is the first law & economics scholar to sit on the Supreme Court, he is a highly cultured one. His admiration for Proust has as much relevance as any affiliation with Posner. A 2012 interview in the New York Review of Books focused on Breyer's love of Remembrance of Things Past.[1] The same interview highlighted his fandom for Stendahl, which has even more meaning with the gentle judge favoring the austere black over the revolutionary red.[2] But what may be Breyer's strongest legacy is the nostalgia of young Marcel for a more sane, elegant, and refined time that his opinions evoke. Reading one of Breyer's opinions is like biting into a lemony sponge cake, taking us back to a time slipped away.

---

* © ORCID: 0000-0002-0316-1614. Crandell Melvin Professor of Law, Syracuse University College of Law and Director, Intellectual Property and Technoloogy Comercialization Law Program and Syracuse Intellectual Property Law Institute; for those who find this title pretentious, just think the "Summarize Proust" contest of Monty Python, accessible online through an easy search. Marcel Proust's title gets translated in English as Remembrance of Things Past and most recently as In Search of Lost Time.

[1] Stephen Breyer, interviewed by Ioanna Kohler, *On Reading Proust*, THE N.Y REV. (November 7, 2013), https://www.nybooks.com/articles/2013/11/07/reading-proust/. Maybe Proust has a previously unexamined influence on the law. For example, a few weeks before writing this essay, I read an interesting passage in Professor Barbara Babcock's memoirs, recounting how she spent a vacation with her partner on a beach in Mexico, reading Proust to each other. *See* BARBARA BABCOCK, FISH RAINCOATS: A WOMAN LAWYER'S LIFE 168 (2016) ("I recall sitting on a Mexican beach, weeping over the death of Marcel's mother" from the Remembrance of Things Past). References to Proust by two prominent legal academics do not make a pattern. But it does make one think. Does Proust offer some insight into legal thinking in the United States after World War Two more broadly? How about the influence of other early Twentieth Century modernists, like James Joyce, who, for what it's worth, I prefer to Proust, or Virginia Woolf and John Dos Passos? *See, e.g.*, THOMAS GREY, THE WALLACE STEVENS CASE: LAW AND THE PRACTICE OF POETRY (1991).

[2] *Id.* (referring to Stendahl's dedication of his work to the "happy few").

His 2021 decision in *Google v. Oracle,* for example, evokes debates from the 1990's.[3] Those in the know saw the continuation of the questions left open by the 1996 *Lotus v. Borland* decision.[4] A deeper taste of Justice Breyer's words brought one's mind back to Professor Breyer's tenure piece on *The Uneasy Case for Copyright*,[5] where he declared a skepticism for software copyright, a declaration he implemented in the 2021 decision. In his own reminiscence of the tenure piece, fifty years later, Justice Breyer concedes an indebtedness to the economic analysis of the law, as it was playing out in 1970's era antitrust and in the emerging notion of how law affects transaction costs.[6] Perhaps he is a law & economics Justice, self-identified through his confession.

But his writings reveal not only a cultured law & economics thinker but also one tempered by attention to facts on the ground and institutional detail. His skepticism for copyright grew from a careful study of publishing practices and the dynamics of the software industry. Copyright, he concluded, raised costs albeit with attendant benefits. "Copyright is a tax on readers for the benefit of authors," he quoted Lord McCauley. And like a careful economist he assessed the costs and the benefits and like a tempered jurist, he ventured to gauge the proportionality of cost to benefit. Justice Breyer famously embraced a European style proportionality analysis to assess the scope of rights. Perhaps this proportionality assess was more economic than European.[7]

As we read Breyer's opinion in the future, our nostalgia for his temperament will sear even more deeply, much as we miss Justice Souter, or Justice Stevens, or Justice Ginsburg, or Justice O'Connor (sometimes). Judging does not align with political platforms, as Justice Breyer has often noted. But judging does occur in the public sphere and cannot avoid touching on politics. Even if one sees the political gamesmanship of the appointments post-2016 as an aberration, one might still doubt that the politics dropped off once the Senate vote was tallied.[8] Justice Breyer's retirement is bittersweet, but welcome, reviving the hope we had back when he and Justice Ginsburg were the first Democratic appointments to the Court after nearly thirty years, and the only ones for another sixteen. Now we can sit back and distill what we have learned and hope to sustain. Here are some of the nuggets, each worthy of an extensive article of its own.

---

[3] Google LLC v. Oracle Am. Inc., 141 S. Ct. 1183 (2021).

[4] Lotus Dev. Corp. v. Borland Int'l Inc., 516 U.S. 233 (1996).

[5] Stephen G. Breyer, *The Uneasy Case for Copyright: A Study of Copyright in Books, Photocopies, and Computer Programs*, 84 HARV. L. REV. 281 (1970).

[6] Stephen G. Breyer, *The Uneasy Case for Copyright: A Look Back Across Four Decades*, 79 GEO. WASH. L. REV. 1635 (2011).

[7] *See* STEPHEN BREYER, ACTIVE LIBERTY (2005) (stating that proportionality is just one of several approaches a judge should pursue to preserve democratic values).

[8] Breyer's distancing of the Supreme Court from politics reflects his aestheticism, which he shares with Proust. "So 'little Proust' is preserved from the political compromises which tarnished the lustre of so many writers and philosophers in our century. This snobbish, fashionable, sickly individual managed to preserve…his cult of art—art as a cult." JULIA KRISTEVA, PROUST AND THE SENSE OF TIME 98 (1993). For a detailed criticism of Breyer's view of politics and the Court, see Laurence H. Tribe, *Politicians in Robes*, THE N.Y REV. OF BOOKS, March 10, 2022, https://www.nybooks.com/articles/2022/03/10/politicians-in-robes-justice-breyer-tribe/.

II. BREYER'S WAY

Justice Breyer at his best was attentive to the consequences of legal rules and judicial rulings.[9] This attention to consequences is of greater impact than his call for proportionality in rights enforcement (which often just led to extensive multifactor tests seen in the next section on *Eldred*).[10] In *Qualitex*,[11] for example, Justice Breyer emphasized the implications for trademark protection as applied to colors (such as the UPS brown or the yellow-gold as applied to dry cleaning pads, the subject of the case). Litigation over shades of colors that would inevitably lead to shades of gray in the doctrine was just one of the concerns. Lack of judicial standards for telling the difference between scarlet and crimson, or other close colors, was another.

The *Qualitex* opinion, authored by Justice Breyer, was a break from the textualist approach, four years earlier in the *Taco Cabana* case,[12] the watershed trade dress case. While Breyer focused on the consequences of protecting certain aspects of trade dress, namely color. White's opinion in *Taco Cabana* asked whether trade dress fit within the language of the Lanham Act, with the answer: yes, full stop. Litigation over trade dress continued and trickled up to the Supreme Court once again four years later in *Samara Brothers*,[13] where Justice Scalia provided a compromise between the broad textualist approach of *Taco Cabana* and the pronounced exception in *Qualitex*. Justice Scalia's opinion was a highwire act of common law judging avoiding both the textualism of White and the consequentialism of Breyer to yield its own tertium quid.

But Breyer's way did not vanish. In his 2013 *Kirtsaeng* decision,[14] the question of when a sale of a copyrighted work exhausts the copyright owner's right to control reselling arose. The specific issue was whether the exhausting sale had to occur within the boundaries of the United States or could occur anywhere in the world.[15] Breyer's opinion highlighted examples of absurd results if the domestic sale rule was followed.[16] I can resell a copyrighted book that I bought in the United States without interference from the copyright owner. But if I bought the same book in Canada or Mexico or Germany, I could be barred from reselling. Now, Breyer reminds us, think of the ubiquity of copyright protection that arises from ever present software. My Mercedes is full of copyrighted computer programs. A domestic exhaustion rule would mean I could resell my Mercedes only if bought in the United States but not if I flew to Germany to buy it. Is there sense in that result? Breyer runs through a number of examples, substituting the consumer product in question, to convince us that the rule

---

[9] Although I do not discuss these cases in this essay, another important example of his attention to consequences is Justice Breyer's majority decision in *F.T.C. v. Actavis, Inc.*, 570 U.S. 136 (2013), which found an antitrust claim against a patent owner agreeing with a generic pharmaceutical company to delay entry of a competing pharmaceutical. As I was drafting this essay, Justice Breyer authored the majority opinion in Unicolors, Inc. v. H&M Hennis & Muaritz, L.P., ruling that lack of knowledge of copyright law as well as of facts could excuse errors in potentially invalid copyright registrations. Justice Breyer's analysis emphasized the implications of the ruling for authors and creators trying to secure copyrights in their works. 142 S. Ct. 941 (2022).

[10] Eldred v. Ashcroft, 537 U.S. 186 (2003).

[11] Qualitex Co. v. Jacobs Prods. Co., 514 U.S. 159 (1995).

[12] Two Pesos, Inc. v. Taco Cabana, Inc., 505 U.S. 763 (1992).

[13] Wal-Mart Stores, Inc. v Samara Bros., Inc., 529 U.S. 205 (2000).

[14] Kirtsaeng v. John Wiley & Sons, Inc., 568 U.S. 519 (2013).

[15] *Id.* at 525.

[16] *Id.* at 541–43.

of domestic exhaustion makes no sense, with the rule of international exhaustion leading to a more meaningful result.

Some may characterize this approach as result-oriented, inconsistent with the rule of law. But Breyer is not substituting his own preferred result for the legal methods of analogy, textual reading, and precedent. To peer into the possible consequences of a proposed rule is not to supplant standard methods. Such an approach illustrates the far-sightedness we expect from a judge. Reasoning against legislation that was open ended, ever changing, and ambiguous, both in *Qualitex* and in *Kirtsaeng*, Justice Breyer looked at the facts of the case, the scenarios presented by attorneys and amici, and his own well-tuned judgement to reach a conclusion about the more meaningful rules. This is consequentialism at its finest.

III. WITHIN A REGULATORY GROVE

Justice Breyer is noted for his work in administrative law and regulatory theory. His Breaking the Vicious Circle[17] is a criticism of administrative agencies and was the target of criticism during his 1994 confirmation hearings.[18] While Justice Breyer shares some views with conservative critics of the administrative state, particularly on the role of capture, he adopts a more constructive view of reforming the administrative state than critics who seek to undermine its function through, for example, doctrines like the non-delegation or the major question doctrine. His views on the administrative law and regulation come across in two of his intellectual property opinions, *Aereo* in 2014[19] and *Eldred* in 2003.[20]

Whether Aereo's system of capturing television broadcasts for later viewing by subscribers to the service constituted a public performance rested on arcane construction of the words public and performance. The Second Circuit in a 2-to-1 opinion ruled that the rewatching was not public since the captured program was in an individualized viewed domain.[21] Judge Denny Chin dissented from the intermediate court's ruling and focused on the underlying technical elements of the service which served to transmit the broadcasted programs to a public audience. Justice Breyer's opinion looked to the context of compulsory license for cable broadcast to rule against Aereo. What the company provided was a workaround to a cable system for broadcasting content, finding for Aereo would be an example of regulatory evasion. The innovative company had to work within the existing regulatory structure established by Congress, concluded Justice Breyer. In contrast, Justice Scalia dissented in favor of Aereo. He reasoned that the cable provisions of the 1976 Copyright Act applied to an actual cable system.[22] Just because Aereo's technology functioned like cable did not bring it under the applicable regulations, which were enacted to overrule Supreme Court precedent that a cable broadcast was not a public performance.[23] Since Aereo's system functioned like cable but was not a cable

---

[17] STEPHEN BREYER, BREAKING THE VICIOUS CIRCLE (1993).

[18] *See* Todd C. Zubler, *Breaking the Vicious Circle: Toward Effective Risk Regulation*, 8 HARV. J. L. & TECH. 241 (1994) (reviewing STEPHEN BREYER, BREAKING THE VICIOUS CIRCLE (1993)).

[19] Am. Broad. Co., Inc. v. Aereo, Inc., 573 U.S. 431 (2014).

[20] Eldred v. Ashcroft, 537 U.S. 186 (2003).

[21] WNET, Thirteen v. Aereo, Inc., 712 F.3d 676 (2d Cir. 2013).

[22] *Aereo*, 573 U.S. at 460.

[23] *Id.*

broadcast under the Copyright Act of 1976, Justice Scalia concluded from the Supreme Court precedent that the transmission provided by Aereo would not be a public performance.[24]

These three different approaches arose from the *Aereo* litigation, each resting on different analogies. Justice Breyer's majority opinion of course prevailed for the conclusion that the provisions of the Copyright Act regulating cable applied to Aereo, giving it the burden of working with the costly compulsory licensing system in order to survive. Unlike the analyses of Judge Chin and Justice Scalia, which rested on facts about the underlying technology, Justice Breyer's rested on the existence of the regulatory system created by copyright. Aereo's attempt to circumvent the system undermined Congress' decision to bring certain types of broadcasts under a compulsory license. Justice Breyer's approach highlights copyright as a regulatory system, in this case regulating the broadcast of copyrighted television content. Deference to Congress' choices directed Justice Breyer to assess Aereo's technology through the regulatory lens.

Justice Breyer, however, rejected the stance of Congressional deference in his dissent in *Eldred v. Ashcroft*.[25] At issue was Congress' power to extend the copyright term for already created works by twenty years.[26] While the majority was generous in its reading of the "limited times" language of Article I, Section 8, Clause 8, Justice Breyer would read the language of the Article, especially its directive to "promote progress" as placing limitations on Congress' regulatory powers.[27] Here Justice Breyer recognized the working of capture as existing copyright owners convinced Congress to extend the term to benefit their interests at the expense of competitors and consumers. Judicial intervention, Justice Breyer recognized, was needed to remedy the situation. But the proposed remedy was not a naked limitation on Congressional power. Instead, Justice Breyer turned to a balancing test that would compare the beneficial effects of the legislation with its burden on speech. Multifactor tests tend to make one's eyes roll, especially some devised by Justice Breyer. But with Breyer, we see his embrace of proportionality analysis come to life. His aim is to find the sweet spot between deference to Congress and distrust of legislation that allows for scrutiny of regulation consistent with the fulfillment of its desired ends.

One can question Breyer's proposed balancing test in *Eldred* of course. Its terms seem ad hoc, unpredictable, and perhaps even unworkable. But I would commend the attempt to adopt a more nuanced view of legislation, in light of the Justice's own criticisms of the administrative state from *Beyond the Vicious Circle*. Even more commendable is the recognition that copyright law, and intellectual property more broadly, fits both within the contours of the administrative state and within a broader tradition of regulating economic activity, here the activity of creation, invention, and innovation. However, as the next section shows, Breyer can stumble when he loses the balanced, proportional approach to legislative scrutiny. With his confounding treatment of patentable and copyright subject matter, Justice Breyer's intellectual property jurisprudence runs away from the nuance.

---

[24] *Id.*
[25] 537 U.S. 186 (2003).
[26] *Id.* at 192–93.
[27] *Id.* at 243–44.

IV. THE FUGITIVE

Courts have over time examined closely the question of exclusions from the subject matter of patent and copyright. With respect to patent, the Supreme Court has pronounced that patent grants can extend to everything under the sun made by man, except for natural phenomenon, laws of nature, and abstract ideas.[28] Against legislative silence on patentable subject matter in the Patent Act, the Court turned to a century's worth of precedents to identity these three exceptions as a way to police potential excesses of the United States Patent and Trademark Office in its grant of patents and of the Federal Circuit in its review of patents and patent litigation. On the copyright side, Congress expressly addressed exceptions to copyright subject matter under Section 102(b) of the 1976 Copyright Act.[29] But this legislative language grew out of the Supreme Court's 1879 decision in *Baker v. Selden*,[30] and latter cases. This 1879 decision not only attempted to draw a boundary between copyright and patent, but also introduced specific types of exclusions on copyright, ones based on use versus expression, method versus communication, what something does versus what something says.

Justice Breyer's own contribution to patent and copyright subject matter has been in part a muddle, in part a curiosity. His decision in *Mayo v. Prometheus*[31] is famously part of a tetralogy of Supreme Court decisions on patentable subject matter in the fields of business methods, medical diagnostics, DNA sequences, and information technology. On the surface the decision follows in line from precedent. Justice Breyer concluded that a method of medical diagnosis was not patentable because it was an abstract idea, excluded under prior rulings.[32] But the line Breyer drew between unpatentable abstraction and potentially patentable concreteness is never made clear. His analysis seems to echo the exclusion from patenting of mental steps. And that might have been a clearer approach. Instead, following the strict language of prior Supreme Court cases, Justice Breyer was led to the category of "abstract idea." Yet one wonders when does a method not constitute an idea. After all an invention is defined as a conception reduced to practice, in other words an idea made concrete through implementation. The Court compounds the confusion in a subsequent decision, applying Breyer's approach in *Mayo* to a computer implemented system of managing loans.[33] What is frustrating is how the Court follows precedent to obtain a result rather than examining the underlying policies for patentable subject matter and its exclusions.

While Justice Breyer's approach to patentable subject matter can be understood through an adherence to precedent that ignores deference to Congressional legislation, his approach to copyright subject matter is more byzantine. The majority in *Public.Resource.Org* readily found that a state's annotated code was not protected by copyright under the government edicts doctrine, even when the annotations were

---

[28] Diamond v. Chakrabarty, 447 U.S. 303, 309 (1980).
[29] Copyright Act of 1976, 17 U.S.C. § 102(b) (2022).
[30] Baker v. Selden, 101 U.S. 99 (1879).
[31] Mayo Collaborative Servs. v. Prometheus Labs., Inc., 566 U.S. 66 (2012).
[32] *Id.* at 70–71.
[33] Alice Corp v. CLS Bank Int'l, 573 U.S. 208 (2014).

created by a private entity.[34] Legislation is legislation, ruled Justice Roberts and four colleagues. But Justice Breyer joined the dissent and its concern that private drafters might lose incentive to create the annotations absent copyright.[35] The dissent seemingly ignored the incentives provided by contract with the State to finance the creation of code annotations. Such patronage was not enough and did not fall squarely within the government edicts doctrine. Precedent obtained a bit more scrutiny in the dissent than it did in the *Mayo* decision, where the categorial exclusion was readily, if clumsily, applied. Of course, in this case, the Copyright Act itself was more ambiguous. The legislation created an exclusion for federal government works and did not mention works created by and for state governments. That silence perhaps allows for broader application of copyright for state code. For Breyer, the case for copyright of annotated code perhaps was not so uneasy.

Even more intriguing is Breyer's treatment of software copyright in his opinion in *Google v. Oracle*.[36] While software is expressly granted copyright protection under the statute, there are exclusions for features of software (methods, systems, processes) expressly set forth in the statute. A key question on which certiorari was granted was the scope of this exclusion for Application Programming Interfaces ("API's") that Google had copied from Oracle's code.[37] But Breyer gave scant attention to this question, stating that for the sake of argument he would assume that the API's were subject to copyright protection.[38] Breyer's opinion instead focused on the fair use question (which I analyze in the next section). Perhaps the statutory analysis of the exclusion was too difficult for the Court. After all, the Court had split evenly when the question arose before. But in this iteration, Justice Breyer chose to defer to Congress' broad conclusions about the copyrightability of software while ignoring the statutory language on exclusions. As a matter of reaching the desired result, perhaps the focus on fair use was a wiser analytical strategy. But to sidestep the copyright subject matter, especially after the attention given to patent subject matter, was a disappointment for followers of Justice Breyer's opinions.

One might feel that once bitten with the patentable subject matter, Justice Breyer and the Court may have been hesitant about addressing the copyright subject matter question as to methods and processes. They are certainly aware of the academic and practitioner criticisms of the *Mayo* and *Alice* decisions. But the hesitancy might stem more from a desire not to upset the balance within the software industry by opening the door for exclusions, despite Congress' clear choices. Justice Breyer, however, seems to have moved away from his emphasis on consequences, his recognition of intellectual property as a regulatory scheme, and his stance towards Congressional legislation. On the other, there are ways in which Justice Breyer redeems himself in the *Google* decision, finding a more robust path in the statute to assess software methods and processes.

---

[34] Georgia v. Public.Resource.Org, Inc., 140 S. Ct. 1498, 1503–04 (2020).
[35] *Id.* at 1517.
[36] Google LLC v. Oracle Am., Inc., 141 S. Ct. 1183 (2021).
[37] *Id.* at 1197.
[38] *Id.*

V. TIME REGAINED

Consequentialist thinking, attention to facts, pursuing the implications of legal rulings—the hallmarks of Justice Breyer's intellectual property opinions at their apex—converge in his *Google v. Oracle* opinion, one that implements the ideas about software and copyright declared in his *Uneasy Case for Copyright*.[39] Drawing on the practices of programmers and the norms of computer science, Justice Breyer found the path from which he strayed in his decisions on patent and copyright subject matter.

In the *Google* appeals, computer programmers advocated against copyrightability of interfaces and in favor of fair use. Their brief submitted to the Federal Circuit, as part of the intermediate appeal, represents a technocratic view of software. Interoperability is the key concept. Code needs to be operable across platforms and across uses in order to promote competition and to avoid creating technological barriers that would require costly workarounds that can inhibit the flow of information and technical progress. As their brief asserts:

> Programmers are the immediate beneficiaries of this interoperability. If their skill sets were not transferrable, they would have to start learning from scratch every time they work in a new environment. Software firms also benefit from this interoperability. If programmers' skills were not portable, then firms would need to convince programmers to learn a new toolset to work in a new environment, leading to slower adoption and higher training costs. But consumers are the ultimate beneficiaries of the interoperability of skills, as higher training costs for programmers are passed on to them. Moreover, the proliferation of programming environments enabled by the portability of skills means more innovation, competition, and consumer choice.[40]

Program, software, code, technocratic artifacts whose value is gauged as instruments to engineers support limitations on copyright, contrary to the rationalist's projection of software as an aesthetic abstraction. Copyright law and policy provides new domains for debates among computer scientists.[41]

When seen through the lens of computer science, familiar legal arguments take on an unappreciated edge. A rationalist view of the program abstracts from the instrumentality of software, which serve engineering ends and the needs of problem solving. The technocratic view adopts a more pragmatic and applied perspective on software. But this view is also the subject of disciplinary criticism for reducing software to mere tools as opposed to the subject of deeper scientific inquiry. To treat computer science as about software as instrument would be to reduce astronomy to a field about telescopes. Of course, telescopes are part of the field, but so are charting planetary

---

[39] Breyer, *supra* note 5.

[40] Brief Amicus Curiae of the Computer & Communications Industry Association in Support of Google Inc. at 4, Oracle Am. Inc. v. Google Inc., 2017 WL 11180607 (Fed. Cir. May 26, 2017) (Nos. 2017-1118, 2017-1202).

[41] The programmer position is grounded in network effects for copyright software, particularly on interoperability grounds. *See* Peter S. Menell, *Economic Analysis of Network Effects and Intellectual Property*, 34 BERKELEY TECH. L. J. 219 (2019); Ariel Katz, *A Network Effects Perspective on Software Piracy*, 55 U. OF TORONTO L. J.155 (2005).

orbits, testing theories of physicists, and predicting cosmological phenomena. Computer science as a scientific, empirical, and experimental discipline would need to go beyond the rationalist and technocratic approaches. The program is neither an abstraction nor a mere tool. It is, under the scientific view, an experiment, a tool for testing theories, but also for developing new theories and approaches. Programming operates in a broader world of big data, analytics, and artificial intelligence.

An initial assessment of the *Google* opinion supports a continuation of the technocratic view of software. Justice Breyer adopts a view of software consistent with that articulated by programmers in their earlier brief, as the following language from his decision underscores:

> [G]iven programmers' investment in learning the Sun Java API, to allow enforcement of Oracle's copyright here would risk harm to the public. Given the costs and difficulties of producing alternative APIs with similar appeal to programmers, allowing enforcement here would make of the Sun Java API's declaring code a lock limiting the future creativity of new programs. Oracle alone would hold the key. The result could well prove highly profitable to Oracle (or other firms holding a copyright in computer interfaces). But those profits could well flow from creative improvements, new applications, and new uses developed by users who have learned to work with that interface. To that extent, the lock would interfere with, not further, copyright's basic creativity objectives.[42]

Software as keys and locks that bind programmers fits within an instrumental view of programs and an engineering view of programming. But the Court's analysis is not limited to these technocratic concerns. What is instructive from the majority opinion is its engagement with the nature of the program.

Through its emphasis on fair use, however, the Court points towards a new understanding of software copyright. What signals this new understanding is the Court's slight inversion of the four fair use factors. In order from the statute and from the numerous fair use cases, the factors are: (1) purpose and character of the use; (2) nature of the copyrighted work; (3) the amount and substantiality of what was copied; and (4) the potential market effects of the use.[43] The *Google* Court, without explanation, begins with the second factor. This is one indication that the Court was to call attention to the ontological status of programs under copyright law. Another indication is how the Court characterizes Google's use of the software in question, as described by the Court.

As measured by number of words and paragraphs, Justice Breyer's analysis of the nature of the copyrighted work is the longest part of his fair use analysis. What is striking is his decompiling of Congress' definition of copyright:

> Congress has specified that computer programs are subjects of copyright. It differs, however, from many other kinds of copyrightable computer code. It is inextricably bound together with a general system,

---

[42] *Google*, 141 S. Ct. at 1208.

[43] *Id.* at 1196–97.

> the division of computing tasks, that no one claims is a proper subject of copyright.[44]

Programs are distinct from code and each fit into a broader general system for the tasks of computing. Copyright applies to some but not others, Justice Breyer states, on the surface contradicting his initial assumption that the software at issue is copyrighted. But this seeming contradiction is resolved by shifting from a focus on program as language to a focus on the programming system of which the language is only one part. What distinguishes the analysis from a rationalist or technocratic view of software is moving beyond the program as aesthetic abstraction and program as an instrument for computing. There is a holistic view that posits a deeper, empirical view of software.

This new approach to software is further illustrated by the deft way in which Justice Breyer introduces the functional aspects of software: the copied declaring code and the uncopied implementing programs call for, and reflect, different kinds of capabilities. A single implementation may walk a computer through dozens of different steps. To write implementing programs, witnesses told the jury, requires balancing such considerations as how quickly a computer can execute a task or the likely size of the computer's memory. One witness described that creativity as "magic" practiced by an API developer when he or she worries "about things like power management" for devices that "run on a battery."[45] This is the very creativity that was needed to develop the Android software for use not in laptops or desktops but in the very different context of smartphones.

Although the Court declined to address the question of copyrightability of interfaces, the functionality of interfaces is introduced in the fair use analysis through the word "capabilities."[46] What is notable is that the functionality analysis is distinguishable from the technocratic approach of the *Altai* court.[47] Justice Breyer does not engage in technical filtering or dissection of the program. Instead, the focus is on the empirical realities of what the relevant code can do. These capabilities define the "nature of the work," the meaning of the program. Within this understanding of the work at issue, Justice Breyer progresses to assess the purpose of the use, the substantiality of what was copied, and the market effects.

Where will the fair use analysis lead? What has been regained? Litigants will draw on Justice Breyer's words from the legacy set in his *Google* opinion.

VI. MEMORIES AND LEGACIES

Even though Justice Breyer announced his retirement too recently to speak in nostalgic terms, the cataclysmic changes in the orientation of the Court and the political environment makes Justice Breyer's influence seem so distant. Labels like liberal, conservative, and radical seem elusive and disproportionate to the normative concerns underlying the rights and powers we have learned to expect in our democracy. Breyer's legacy, presented in this essay, is the necessity of memory, or engaging in law

---

[44] *Id.* at 1201.
[45] *Id.* at 1202.
[46] *Id.*
[47] Comput. Assoc. Int'l, Inc. v. Altai, Inc., 982 F.2d 693 (2d Cir. 1992).

through the range of disciplines, economics, literature, politics. Memory revives and energizes our commitments, and we should not forget the complexity of Justice Breyer's engagement with intellectual property.[48]

[48] But we should always be mindful of how memories can pay tricks on us. "As Proust insisted, the remembrance of things past is not necessarily the remembrance of things as they were." JONAH LEHRER, PROUST WAS A NEUROSCIENTIST 95 (2007).