Google LLC v. Oracle America, Inc.

Elizabeth Spica

Follow this and additional works at: https://ir.law.utk.edu/tennesseelawreview

Part of the Courts Commons, Intellectual Property Law Commons, and the Supreme Court of the United States Commons

Recommended Citation
Available at: https://ir.law.utk.edu/tennesseelawreview/vol90/iss2/9

This Article is brought to you for free and open access by Legal Scholarship Repository: A Service of the Joel A. Katz Law Library. It has been accepted for inclusion in Tennessee Law Review by an authorized editor of Legal Scholarship Repository: A Service of the Joel A. Katz Law Library. For more information, please contact eliza.boles@utk.edu.
INTRODUCTION

In *Google LLC v. Oracle America, Inc.*, the Supreme Court examined whether Google infringed on Oracle’s copyright ownership by copying 11,500 lines of code from the Java Standard Edition (SE) software platform when developing its Android Operating System (OS). In a 6-2 decision, the Court held that Google’s use of the Java SE code was protected under fair use, a doctrine in copyright law that allows for the limited use of copyrighted material without the permission of the copyright holder. Not only did this decision free Google from liability for copyright infringement, but the Court’s solid acknowledgement of fair use in the context of software code also opened doors for programmers of Java, one of the world’s most common programming languages, to write programs for Google’s new Android OS. In exploring the implications of this pivotal decision, this comment begins by tracing the history of this pivotal case, then provides essential background on fair use before analyzing the Court’s ultimate decision for Google and its resulting implications for fair use and the ever-evolving tech industry.

*Google v. Oracle*’s rather complex history began in 2010 when Oracle sued for copyright infringement in the Northern District of California. Oracle’s interest in the Java programming language began after Oracle acquired Sun Microsystems in 2010, including Sun’s interest in the Java programming language. Sun was renamed Oracle America, Inc. and filed suit shortly thereafter accusing Google of infringing its Java-related copyrights and patents.

1. *Google LLC v. Oracle Am., Inc.*, 141 S. Ct. 1183 (2021). Oracle’s interest in Java programming language began after Oracle acquired Sun Microsystems in 2010, including Sun’s interest in the Java programming language. Sun was renamed Oracle America, Inc. and filed suit shortly thereafter accusing Google of infringing its Java-related copyrights and patents.
2. *Id.* at 1190.
California after Google copied 37 of Oracle’s Application Programming Interface (API) packages from the Java programming language. In Ruling for Google, Federal District Judge Alsup held the copied APIs represented uncopyrightable “structure, sequence and organization” elements that belonged to “the realm of patents, not copyright.” In Oracle’s 2014 appeal, the U.S. Court of Appeals for the Federal Circuit reversed in part and remanded in part, with the reversal holding that while the declaring code and “structure, sequence, and organization” of the Sun Java API were copyrightable, Google should have written its own declaring code just as it had written its own implementing code. The remand was for a jury to determine whether Google’s use of the Java API was protected under a fair use defense. In a subsequent trial, a jury found that Google’s use of the Java API was protected under fair use. Oracle then made another appeal to the Federal Circuit, which again reversed the lower court, holding as a matter of law that Google’s use was not protected under the fair use...
As the Federal Circuit again remanded the case for a trial on damages, Google petitioned the Supreme Court on the questions of the API’s copyrightability and fair use. The Supreme Court granted certiorari in 2020, ultimately holding on April 5th, 2021, that Google’s use of the code was indeed protected under fair use.

The development and application of the fair use doctrine as relevant to Google’s actions in copying portions of the Java SE API are detailed in the next section, followed by an analysis of the Court’s decision and resulting implications for software developers and the copyrightability of computer code and other emerging technologies.

I. ISSUE

The issue at the center of this case concerned whether Google’s use of portions of the Java API code for desktop/laptop environments constituted fair use in the context of creating its Android smartphone OS.

II. COPYRIGHT LIMITATIONS & THE FAIR USE DEFENSE

Copyright exists because of the enumerated power granted to Congress under the United States Constitution "[t]o promote the Progress of Science and the useful Arts... by securing for limited Times to Authors and Inventors... the exclusive Right to their respective Writings and Discoveries." As part of this ultimate aim to promote progress, copyright incentivizes authors to create “informative, intellectually enriching works for public consumption.” Despite this incentive, however, a copyright holder cannot prevent another

10. Oracle Am., Inc. v. Google LLC, 886 F.3d 1179 at 1210 (Fed. Cir. 2018) (holding “[t]here is nothing fair about taking a copyrighted work verbatim and using it for the same purpose and function as the original in a competing platform.”).

11. Id. at 1186. See also Google LLC v. Oracle America, Inc., 804 F. App’x 863 (Fed. Cir. 2020), cert. granted, 141 S. Ct. 1183 (2021).


13. Also implicated was 17 U.S.C. § 102(b), namely whether the copied code constituted an uncopyrightable “idea, procedure, process, system, method of operation, concept, principle, or discovery.” Here the Court elected to assume the copied code was copyrighted and instead focus on the fair use analysis. The Court also rejected Google’s claim that the Federal Circuit’s reversal of the jury decision violated the Reexamination Clause of the 7th amendment (See id. at 1200).


person from making a “fair use” of the copyrighted material.\textsuperscript{16} In this way, just as a copyright restricts the use of the work by others in giving the creator a limited-time monopoly, the very time-limited nature of that monopoly underscores the ultimate aim of copyright “to stimulate artistic creativity for the general public good.”\textsuperscript{17}

\textbf{A. Development of the Fair Use Doctrine}

In response to Oracle’s allegations of copyright infringement, Google asserted a fair use defense. Under 17 U.S.C. § 107, fair use allows for the limited use of copyrighted material without the need for the user to secure permission from the copyright owner.\textsuperscript{18} The limitation to the otherwise exclusive rights of copyright owners to reproduce, distribute, publicly display, perform, and/or create derivatives helps “promote the Progress of Science and the useful Arts” by providing a path for others to use and build upon copyrighted works.\textsuperscript{19} Fair use, therefore, balances the need to protect the “fruits of intellectual labor” as “founded in the creative powers of the mind” with the public interest to participate in the “free expression and creativity” central to democracy under the First Amendment.\textsuperscript{20} An equitable rule, the fair use doctrine avoids prescribing any firm rules, instead allowing juries and courts to take a case-by-case approach to the “endless variety of situations and combinations of circumstances that can rise in particular cases.”\textsuperscript{21}

\textbf{B. Fair Use: The Four Factors}

\begin{itemize}
  \item \textsuperscript{16} Google LLC, 141 S. Ct. at 1196.
  \item \textsuperscript{17} Sony Corp. of Am. v. Universal City Studios, Inc., 464 U.S. 417, 432 (1984).
  \item \textsuperscript{18} 17 U.S.C.S. § 107; see also FAIR USE, H.R. REP. NO. 94-1476 at 65 (1976) (noting “there is ample case law recognizing the existence of the [fair use] doctrine and applying it.”).
  \item \textsuperscript{19} 17 U.S.C.S. § 107.
  \item \textsuperscript{20} Trade-Mark Cases, 100 U.S. 82, 94 (1879); Comedy III Prods., Inc. v. Gary Saderup, Inc., 21 P.3d 797, 808 (2001).
  \item \textsuperscript{21} Harper & Row, Publrs. v. Nation Enters., 471 U.S. 539, 560 (1985) (noting that, while juries may initially decide fair use, judges review appeals de novo as questions of law rather than fact. See also H.R. Rep. No. 94-1476 at 66 (1976) (hesitating to freeze the fair use doctrine in time due to the need to evolve and adapt to “rapid technological change.”); 17 U.S.C.S. § 107 (creating a carveout in copyright restrictions that allows copying “for purposes such as criticism, comment, news reporting, teaching (including multiple copies for classroom use), scholarship, or research.”).
\end{itemize}
Under the federal Copyright Act 17 U.S.C. § 107, four factors guide whether the copying of copyrighted material constitutes fair use. These four non-exclusive factors are weighed together when determining the applicability of a fair use defense: (1) the purpose and character of the use; (2) the nature of the copyrighted work; (3) the amount and substantiality of the portion used; and (4) the effect of the use upon the potential market for or value of the copyrighted work. The following section outlines each factor with emphasis on the application of each to technology and computer programs.

**Factor 1.** "[T]he purpose and character of the use, including whether such use is of a commercial nature or is for nonprofit educational purposes."  
Purpose and character encompasses whether a use is "transformative," a term less concerned with the value a new work contributes and more so "whether that new work merely 'superseded 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." The first test of transformative use appeared in the California case Comedy III Productions, Inc. v. Gary Saderup, Inc., a California Supreme Court attempt to balance First Amendment rights with the state's statutory and common law right of publicity based on "whether the work in question adds significant creative elements so as to be transformed into something more than a mere celebrity likeness or imitation."  

---

23. Id. The "shall" language in 17 U.S.C.S. § 107 signals the non-exhaustive nature of the fair use factors, which are likewise not "counted up" or weighted equally (see Cambridge Univ. Press v. Patton, 769 F.3d 1232, 1260 (11th Cir. 2014) (finding error with the district court for equally weighting the four factors and treating them "as a simple mathematical formula").
26. Comedy III Prods., 21 P.3d at 391. This case concerned the infringing use of a "The Three Stooges" lithograph in silk-screened t-shirts.
This “balancing test” emphasized that a work with significant transformative elements “is not only especially worthy of First Amendment protection, but it is also less likely to interfere with the economic interest protected by the right of publicity.”

Even copying an entire work can be transformative when the result "serve[s] a different function from the original [copied work]." The Second Circuit reinforced this idea in Authors Guild, Inc. v. HathiTrust, stating that the libraries’ copying of entire works to create a full-text searchable database was “quintessentially transformative” because the digitization of entire works was necessary to create the searchable database, itself “different in purpose, character, expression, meaning, and message from the page (and the book) from which it [was] drawn. Similarly, in 2015, the Second Circuit affirmed a fair use defense for Google regarding the Google Books project, which used digital copies of tens of millions of books to create a public search function allowing users to determine and view “snippets” containing a specific word or phrase. Just as in HathiTrust, Google’s copying was considered transformative insofar as the digitization of entire works was necessary to create the new Google Books system that located words and phrases of interest for users. The commercial nature of a use is also not necessarily dispositive, with the Court noting in Campbell v. Acuff-Rose Music, Inc. that the lower court erred in cutting short its fair use inquiry because of an allegedly infringing song’s “blatantly commercial purpose.” Here the Court emphasized that all factors must be considered together, and “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.”

27. Id. at 405.
28. Authors Guild, 804 F.3d at 217 (quoting HathiTrust, 755 F.3d at 97).
29. Id.
30. Authors Guild, 755 F.3d at, 804 F.3d 202, 207 (2d Cir. 2015).
31. Id. at 212.
32. Campbell, 510 U.S. at 569. See also H.R. Rep. No. 94-1476 at 66 (1976) (clarifying that the commercial or non-profit character of an activity “is not intended to be interpreted as any sort of not-for-profit limitation on educational uses of copyrighted works” but rather “an express recognition that, as under the present law, the commercial or non-profit character of an activity, while not conclusive with respect to fair use, can and should be weighed along with other factors in fair use decisions.”).
33. Campbell, 510 U.S. at 579. See also Fair Use, H.R. REP. NO. 94-1476 at 65 (1976) (noting “there is ample case law recognizing the existence of the doctrine and applying it.”).
Factor 2. Nature of the Copyrighted Work

The second factor recognizes that highly expressive creative works like paintings, musical compositions, poems, and fictional stories lie closer to the core of copyright protection than purely factual, informational works like directories, basic lists, and news of current events, with fair use being more difficult to establish when the latter is copied. Generally receiving little airtime in copyright infringement disputes, the second factor served as the primary focus of arguments in Google v. Oracle, with both parties attempting to pinpoint (to no definitive end) where on the copyright protection spectrum declaring code and other programming elements should lie.

Factor 3. “Amount and Substantiality of the Portion used in Relation to the Copyrighted Work as a Whole”

The third fair use factor weighs both the quantity and quality copied from the allegedly infringed work, looking to whether more than necessary was copied, and at how qualitatively significant the copied portion was. Even a small amount of copying may fall outside the scope of fair use when that small amount constitutes the “heart” of the work, as seen in Harper & Row, Publishers v. Nation Enterprises. Here, the Court held that Nation magazine’s publication of 300 words of direct quotations and ideas from Gerald Ford’s yet-published memoir constituted infringement, as that small portion was of “central importance” to the memoir as a whole, essentially constituting the “heart of the book.”

On the other extreme, and as mentioned above, the copying of a large amount, even an entire work, can also fall under fair use, especially when the copying is tethered to a valid, transformative use. Hallmark example is Authors Guild v. Google, Inc., where Google used entire digital copies of tens of millions of books to establish its publicly available search function allowing users to view “snippets” of words or phrases appearing in the books. Here, even

34. Campbell, 510 U.S. at 586.
36. Id.
38. Id.
40. Authors Guild, 804 F.3d at 207.
though Google used entire works, that amount was essential to create their new system locating words or phrases of interest to users.\textsuperscript{41} Similarly, in \textit{Author’s Guild v. HathiTrust}, the “substantiality” factor weighed in favor of fair use because the amounts copied were necessary for libraries to achieve their transformative purpose in creating the full-text search function.

\textbf{Factor 4. Market Effects}

The fourth fair use factor examines “the effect of the use upon the potential market for or value of the copyrighted work.”\textsuperscript{42} In assessing market effects, courts consider whether the use of the copyrighted work could serve as a substitute for the original work, thereby reducing the market demand for the original work and depriving its copyright owner of profits.\textsuperscript{43} In \textit{Sony Corp. of America v. Universal City Studios, Inc.}, for example, the Court held that Sony was not liable for contributory infringement when consumers used Sony’s Betamax videocassette recorder to tape copyrighted television programs for viewing at a later time.\textsuperscript{44} Here, Universal was unable to prove that Sony’s videocassette recorder “reduced the value of the Studios’ copyrighted works in [the Studios’] present markets.”\textsuperscript{45} Instead, the Court referred to Sony’s technology had created a new, distinctly different market comprising “persons who desire to view television programs at times other than when they are broadcast.”\textsuperscript{46}

Where relevant, the fourth factor also considers whether the harm incurred by the copyright holder could be outweighed by benefits to the public.\textsuperscript{47} In the aforementioned case, for instance, even if Universal had been able to prove harm in the exact market of Universal’s television programming, that harm would likely have been outweighed by the public’s interest in “free flow of ideas, information, and commerce” that comes with the ability to access and

\textsuperscript{41} Id. at 212.
\textsuperscript{42} 17 U.S.C.S. § 107.
\textsuperscript{43} 4 NIMMER ON COPYRIGHT § 13.05 (2023).
\textsuperscript{44} Sony Corp. of Am., 464 U.S. at 417. \textit{Sony} also established the "substantial non-infringing use" doctrine, which holds that a product or technology may not be found to be infringing on copyright if it has significant non-infringing uses, even if it is capable of infringing uses.
\textsuperscript{45} Id. at 497 (emphasis added).
\textsuperscript{46} Id.
\textsuperscript{47} MCA, Inc. v. Wilson, 677 F.2d 180, 183 (2d Cir. 1981) (noting the need to balance public benefits against losses to the copyright owner).
use new technology. This balancing of private against public interests underscores both the case-by-case nature in determining fair use as well as the function of copyright as a creation incentive ultimately designed to benefit the public.

As noted under the Copyright Act, potential market effects are important to examine even when the allegedly infringed work is unpublished. In *Harper & Row*, Nation magazine’s prepublication of quotes and information from Ford’s memoir “supersede[d] the use of the original work” and deprived the actual copyright holders of the “valuable right to control first publication.” Here, the market effects weighed against Nation magazine because their publication affected not only potential book profits, but also revenues lost with the cancellation of an exclusive prepublication contract with *Time* magazine. Because *Harper & Row* demonstrated that Nation magazine’s use of the unpublished memoir had a significant impact on its potential market, this factor weighed against Nation magazine’s fair use defense.

III. ANALYSIS OF THE COURT’S DECISION FOR GOOGLE

After analyzing the four fair use factors described in the previous section, the Court concluded that Google’s copying of 11,500 lines of Oracle’s declaring code to create the Android mobile OS, a new and distinct technology, was a fair, transformative use. The Court also affirmed the Federal Circuit in stating that fair use is a mixed question of law and fact, requiring courts to separate factual jury questions such as “harm to the actual or potential markets for the copyrighted work” or “how much of the copyrighted work was copied” from questions of law suitable for courts to address under a *de novo* standard of review.

In a 6-2 opinion authored by Justice Stephen Breyer, the Court’s major holding was that Google’s copying of the Java API declaring code and organizational structure was done as a fair use under 17

---

49. 17 U.S.C.S. § 107 (noting “[t]he fact that a work is unpublished shall not itself bar a finding of fair use if such finding is made upon consideration of all the above factors.”).
U.S.C. § 107, with all four factors favoring Google's fair use defense. This section outlines the Court's analysis under each factor, followed by a section exploring the implications of this decision for future cases.

Factor 1. Purpose and Character of the Use

In evaluating the purpose and character of the use, the Court found Google's use of the Java code transformative, as Google's purpose was to create an interface for mobile technologies, a "distinct and different computing environment" from the laptop and desktop contexts for which the copied Java APIs were created. In copying only the portions of declaring code needed to "add[ ] something new and important," the Court noted that Google's Android Operating System for smartphones represented the "creative 'progress' that is the basic constitutional objective of copyright itself." By repurposing or reimplementing some of the syntax from the Sun Java API system, Google also aided innovation for future computer programs, which rely on shared interfaces and language to communicate (noting also that Sun itself had repurposed existing interfaces in building its Java API).

The Court also considered commerciality and good faith, finding Google's commercial and profit motive an unconvincing reason to deny fair use, acknowledging that even the most universally accepted forms of fair use – news reporting, research, parody – are done commercially for profit. The Court only made passing mention of bad faith, noting that while "[c]opyright is not a privilege reserved for the well-behaved," the jury's finding for Google and strength of the other factors make the examination of good faith not determinative.

Therefore, because Google repurposed programming language for use in a distinctly different smartphone environment, to the benefit of future programming innovation, the Court found Google's use

54. Id. at 1202-03 (noting how Google's new product "offers programmers a highly creative and innovative tool for a smartphone environment," which is distinguished by programming considerations like battery life and power management).
55. Id. at 1203. See also Feist Publications Inc., v. Rural Telephone Service Co., 499 U. S. at 349-350 (noting "[t]he primary objective of copyright is not to reward the labor of authors, but [t]o promote the Progress of Science and useful Arts.").
56. Id.
57. Id. at 1204. See also Authors Guild v. Google, Inc., 804 F.3d at 219.
58. Google LLC, 141 S. Ct. at 1204 (quoting Leval, supra note 25, at 1126).
transformative, with its “purpose and character” weighing in favor of fair use.\textsuperscript{59}

\textbf{Factor 2. “Nature of the Copyrighted Work”\textsuperscript{60}}

The Court’s analysis actually began and focused primarily on this second factor, clarifying a decidedly vital distinction between the declaring code and method calls Google copied from the implementing code from the implementation code of the corresponding programs that Google did not copy (opting rather to write their own programs optimized for the smartphone environment).\textsuperscript{61} Essentially, declaring code and method calls operate as “shortcuts” for programmers to call up a program, similar to how a driver uses a gas pedal as a shortcut to instruct the car to increase speed.\textsuperscript{62} Just as a driver does not need to manually manipulate an engine, declaring code and method calls save a programmer from typing out the entire program code with each mention, serving as a shortcut that instructs the computer to execute a program.

In addition to the efficiencies of using a commonly known programming language, the Court also noted the declaring code’s Dewey Decimal System-like function to organize and categorize potential tasks, making calling up those programs easy for programmers.\textsuperscript{63} Here the Court analogized declaring code to a robot who first takes your order in a restaurant, then locates the right recipe from a file system and then delivers it to the cook who actually prepares the food.\textsuperscript{64} In other words, Google only used the robot (the copied Java API declaring code) to take the order, whereas the actual meal (the proverbial chilidog analogous to the actual computer program) was prepared by the cooks or program creators.\textsuperscript{65} The Court suggests this organizational/order-taking function, in being “inextricably bound together with a general system, the division of computing tasks, that no one claims is a proper subject of copyright,” may not warrant copyright protection at all.\textsuperscript{66}

\begin{itemize}
  \item \textsuperscript{59} \textit{Id.} at 1204.
  \item \textsuperscript{60} 17 U.S.C.S. § 107.
  \item \textsuperscript{61} \textit{Google LLC}, 141 S. Ct. at 1201.
  \item \textsuperscript{62} \textit{Id.} at 1192.
  \item \textsuperscript{63} \textit{Id.}
  \item \textsuperscript{64} \textit{Id.}
  \item \textsuperscript{65} \textit{Id.}
  \item \textsuperscript{66} \textit{Id.} at 1201, 1213 (Thomas, J. dissenting) (arguing that, because declaring code is “inextricably bound” to the implementing code in that neither have a function
So while both computer programs and declaring code are functional in nature, the declaring code from the Java API that Google copied was transformative in being "inherently bound together with uncopyrightable ideas (general task division and organization) and new creative expression (Android’s own implementing code)." By using the declaring code shortcuts from 37 Java packages (and creating their own declaring code for most packages, and writing their own corresponding implementing programs), Google provided a path for Java programmers to more easily program, debug, modify, and build upon existing code for the new Android smartphone interface. When combined with the Court’s suggestion that declaring code may not be copyrightable at all, this second factor regarding “the nature of the copyrighted work” also weighed in favor of fair use.

**Factor 3. “Amount and Substantiality of the Portion used in Relation to the Copyrighted Work as a Whole”**

While admitting "no plagiarist can excuse the wrong by showing how much of his work he did not pirate," the Court determined the 11,500 lines of declaring code Google copied to be quantitatively small, comprising 0.4 percent of the 2.86 million lines of the Sun Java API’s total computer code (implementing code included). Qualitatively, the copied lines neither constituted the “heart” of the original work’s creative expression (which the Court indicated is bound rather to the implementing code, or actual programs). The Court also disagreed with the Federal Circuit’s assertion that Google could have achieved its objective “to permit programmers to make use of their knowledge and experience” without copying the Sun Java API. On balance, given Google’s transformative use of a limited amount of code (that arguably lay outside the realm of creative expression anyway), the

---

67. *Id.* at 1292.
68. *Id.*
70. *Id.*
73. *Id.*
74. *Id.*
Court found the “Amount and Substantiality of the Portion Used” factor to also have favored fair use.75

**Factor 4. Market Effects**

The effect of Google’s copying the Java SE Code was shown to have no effect on the market value of Java SE, as Google’s new Android smartphone platform was decidedly not a market substitute.76 Not only was Sun ill-equipped to succeed in the mobile phone market, but the differences in the mobile devices for which Android was developed versus the desktop/laptop devices that typically licensed the Sun Java technology made Android a poor market substitute.77

Here the Court also emphasized copyright’s overall objective of contributing to public knowledge, as the names, organization, and functionality of Java allowed millions of developers to access and more easily write programs for Android OS.78 Furthermore, Oracle also stood to benefit from more programmers learning Java on the smartphone market and then transferring their skills to Oracle’s desktop and laptop markets.79 As the Court stated, Android’s profitability had more to do with the programmers invested in continuing to use the common language than it did “Sun’s investment in creating the Sun Java API.”80

Along those lines, the risks of creativity-related harms to the public also played a role in this fourth factor’s weighing in favor of fair use.81 Similar to Sony where the benefits of public access to new technology outweighed the potential harms to Universal, the Court determined that “allow[ing] enforcement of Oracle’s copyright here would risk harm to the public” and “make of the Sun Java API’s declaring code a lock limiting the future creativity of new programs” that would “interfere with, not further, copyrights’ basic creativity

---

75. *Id.* at 1206.
76. *Id.* Java would later develop Java Micro Edition (Java ME), a mobile edition based on its Java SE.
77. *Id.* at 1206-07 (noting that, as early as 2006, a year prior to Google’s release of the Android platform, Sun projected declining revenue because of emerging smartphone technology).
79. *Google LLC*, 141 S. Ct. at 1207.
80. *Id.* at 1208.
81. *Id.*
objectives.” On balance, because Google’s Android OS was not a market substitute harming Oracle, and because any harm to Oracle would likely be outweighed by benefits to the public, the Court found the fourth factor regarding market effects to also weigh in favor of fair use.

IV. IMPLICATIONS

Overall, the Google v. Oracle decision provided greater legal clarity and protection for developers hesitant to build new applications with existing APIs for fear of copyright infringement. The decision also further legitimized the use of APIs in open-source software projects, which generally rely heavily on APIs to connect with various services. Increased use of APIs could also lead to increased operability between platforms, allowing programmers to use a common language that makes it easier for different applications to communicate across platforms. In reaffirming the importance of fair use in software development, the Court’s decision in Google v. Oracle may also alleviate fears and give developers confidence to continue innovating and pushing the boundaries of emerging technologies like Artificial Intelligence (AI), which also relies heavily on APIs to connect to data sources for training machine learning models.

While the Court confirmed that the use of APIs in code indeed aligns with fair use and the desire with copyright to “not grant anyone more economic power than is necessary to achieve the incentive to create,” the decision also surfaced several issues relating to the continued evolution of software and emerging technologies. For instance, the Court’s only guidance as to the copyrightability of the declaring code copied by Google was that, “if copyrightable at all,” declaring code lies further from “the core of copyright” than most computer programs. Justice Thomas (joined by Justice Alito) dissented in arguing that declaring code is a work of authorship, rather than a “method of operation” excluded from copyright

82. Id.
83. One of many examples here is WordPress, the open-source content management system behind millions of websites. WordPress relies heavily on APIs to connect to social media platforms, embed interactive maps and videos, and integrate outside e-commerce and marketing platforms.
84. Google LLC, 141 S. Ct. at 1198 (quoting Commission on New Technological Uses of Copyrighted Works (CONTU), Final Report 12 (July 31, 1978)).
85. Id. at 1202.
Like other copyrighted works, Thomas explained, the declaring code of Java’s API consists of “words, numbers, or other verbal or numerical symbols” rising to the level of creativity because “Oracle could have created them any number of ways,” just as Apple and Microsoft developed their own declaring code for their own platforms. Nuances such as these will continue to surface until resolved.

The dual nature of computer code in being “highly functional like an invention; yet as a writing, [it is] also a work of authorship” also presents interesting challenges for future case law to clarify the relationship between copyright and words that also represent uncopyrightable methods of operation. Instead of tackling this question in Google v. Oracle, the Court instead chose to assume “purely for argument’s sake” that the declaring code was copyrightable, its general reluctance to tackle the issue of copyrightability balanced by an attempt to at least begin organizing a taxonomy of sorts with their “comprehensive, albeit farfetched” robot-restaurant analogy describing the relationship between declaring and other elements of code. Are these analogies the beginning of a taxonomy eventually categorizing API aspects like methods, classes, packages, etc. and code elements into “original works of authorship” eligible for copyright protection, with functional categories like declaring code that enable interaction falling outside the scope? And given the “in no case definitive or determinative” list of factors in a fair use analysis, will additional factors be needed to address emerging technologies like AI that also depend heavily on existing code and data sets? Has the Court’s recognition of the public benefits in a shared programming language that “unlock[s] the programmers’ creative energies” across multiple environments also just shepherded the beginning of a brave new monolingual tech world? Time will tell.

VI. CONCLUSION

86. Id. at 1212-13 (Thomas, J., dissenting).
87. Id. at 1213.
88. Id. at 1212.
89. Id. at 1193.
92. Id. at 1197. See also Campbell, 510 U. S. at 577; Harper & Row, Publishers, Inc., 471 U. S. at 560; Leval, supra note 25, at 1110 (“The factors do not represent a score card that promises victory to the winner of the majority”).
93. Id. at 1205.
Lingering ambiguities aside, the Court’s 6-2 decision in *Google v. Oracle* was clear: Google did not infringe Oracle’s copyright, and Google’s copying of 11,500 lines of Oracle’s declaring code to create its new, distinct Android mobile OS technology, was a fair, transformative use. In supporting fair use and interoperability over commercial interests, the Court’s decision showcases copyright’s intention to balance the creator’s limited, exclusive rights with the public’s right to use those works in the name of progress. This decision will likely reappear in surprising contexts, perhaps even influencing how tech companies license and use code, which may in turn positively impact the cost and availability of software tools and services to the public. However, until the Court clarifies copyright with respect to the dual, expressive-operative nature of computer code, courts will continue to struggle in determining when copyright’s time-limited monopoly protection is warranted and when such material falls under fair use or even outside the scope of copyright altogether. With *Google v. Oracle*, though, progress has been made, with the Court’s decision for Google underscoring the ultimate goal of copyright “[t]o promote the Progress of Science and the useful Arts,” and reinforcing that these protected expressions ultimately belong, and can be fairly used “for the enrichment of society” until the point they fully belong, to and by the public, programmers and non-programmers alike.\footnote{U.S. CONST. art. I, § 8, cl. 8; Leval, supra note 25, at 1110.}