

II. The Subject Matter of Copyright Protection

Section 102 of the Copyright Act sets out copyright’s “subject matter,” the types of works that copyright protects. The text of § 102 contains several elements we address in this chapter: the requirements of **fixation** and **originality**, the **idea-expression distinction**, and the **categories of copyrightable subject matter**. (We address the copyrightability of **derivative works and compilations** in section C; section 103 of the Copyright Act addresses derivative works and compilations specifically by building on the more general framework that § 102 provides.)

Because § 102 features heavily throughout this chapter, we set it out in its entirety here, returning to relevant components in the sections that follow.

(a) Copyright protection subsists, in accordance with this title, in original works of authorship fixed in any tangible medium of expression, now known or later developed, from which they can be perceived, reproduced, or otherwise communicated, either directly or with the aid of a machine or device. Works of authorship include the following categories:

- (1) literary works;*
- (2) musical works, including any accompanying words;*
- (3) dramatic works, including any accompanying music;*
- (4) pantomimes and choreographic works;*
- (5) pictorial, graphic, and sculptural works;*
- (6) motion pictures and other audiovisual works;*
- (7) sound recordings; and*
- (8) architectural works.*

(b) 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.

A. Fixation

Section 102 requires, as a pre-condition for copyright protection, that a work be “fixed” in a “tangible medium of expression.” There are at least four reasons for this requirement. First and arguably foremost is the high likelihood that the U.S. Constitution requires fixation. The Constitution grants power to Congress to create copyright laws “by securing for limited Times to Authors ... the exclusive Right to their ... Writings.” U.S. CONST. art. I, § 8, cl. 8. Although the U.S. Supreme Court has never conclusively ruled that fixation is a constitutional requirement, it has repeatedly suggested or assumed as much. For example, in one case involving recorded music, the Court suggests that a “Writing[],” as used in the Constitution, means “any *physical rendering* of the fruits of creative intellectual or aesthetic labor.” *Goldstein v. California*, 412 U.S. 456, 562 (1983) (emphasis added). By implication, anything that is not physically rendered cannot be a “Writing[].”

Even if fixation were not constitutionally mandated, there are at least three policy reasons that support this requirement. First, recall that a central justification for American copyright law is to encourage the creation and dissemination of artistically and culturally valuable works. A fixation requirement advances these goals by protecting only works that are likely to be preserved—because they are fixed in a tangible medium of expression—and thus more easily disseminated over time and space. By contrast, society is less likely to retain ephemeral works over time and space. An unrecorded performance, for example, is unlikely to be retained other than in the memories of the audience that was there to see it at that moment. On this theory, copyright

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law provides protection only for fixed works because they are more likely to contribute to preserved knowledge and culture. Malla Pollack, *What Is Congress Supposed to Promote?: Defining "Progress" in Article I, Section 8, Clause 8 of the United States Constitution, or Introducing the Progress Clause*, 80 NEB. L. REV. 754, 773-79 (2001). Are you convinced by this theory? Can you think of whether unfixed works, such as folklore, contribute to a society's knowledge and culture?

Second, copyright fixation serves an evidentiary function. Should a work ever be the subject of an infringement dispute, a fixed copy of the work readily serves as documentary evidence as to what the work is, and what it is not. It is much more difficult to show reliably and precisely what an unfixed work is, and, as a consequence, more difficult reliably to determine whether an unfixed work has been infringed. Douglas Lichtman, *Copyright as a Rule of Evidence*, 52 DUKE L.J. 683, 730-34 (2003); Lydia Pallas Loren, *Fixation as Notice in Copyright Law*, 96 B.U. L. REV. 939 (2016).

Third and relatedly, fixation ensures that a work's (protected) expression is fully delineated, which makes that expression easier to separate from any unprotected "ideas" the work may contain or represent. Lichtman, *supra*, at 731-32. (In section D, below, we delve into this idea-expression distinction.)

Consider now the specific statutory requirements for fixation. Section 102 requires that works be

fixed in any tangible medium of expression, now known or later developed, from which they can be perceived, reproduced, or otherwise communicated, either directly or with the aid of a machine or device.

Section 101 further defines what it means for a work to be "fixed" in a tangible medium of expression:

A work is "fixed" in a tangible medium of expression when its embodiment in a copy or phonorecord, by or under the authority of the author, is sufficiently permanent or stable to permit it to be perceived, reproduced, or otherwise communicated for a period of more than transitory duration.*

Before delving further into these statutory definitions, a brief word about the history that underlies them. In 1908, the U.S. Supreme Court considered in *White-Smith Music Publishing Co. v. Apollo Co.*, 209 U.S. 1, whether a player piano roll represented a copy of a musical composition. (A player-piano roll is a roll of paper with perforations punched into it. When installed on a player piano, the piano plays notes in sequence as determined by the position and length of the particular perforations. A player piano with an installed piano roll is shown in Figure 1.)

The plaintiff in the case owned copyrights in certain musical compositions, which had been fixed in the form of sheet music. The defendant was in the business of making and selling player pianos and piano rolls. Some of those piano rolls, when installed in the defendant's player pianos, reproduced the plaintiff's compositions. In the resulting suit for infringement, the U.S. Supreme Court was called upon to consider whether the piano rolls were "copies" of the musical composition. (Although this case did not raise issues of fixation of the musical composition in the piano roll as a requisite to copyright protection, it required the Court to ask essentially the same question to ascertain whether the defendant infringed the plaintiff's copyright by creating a copy of the musical composition.)

* Copies are "material objects, other than phonorecords, in which a work is fixed" as per the statutory definitions. 17 U.S.C. § 101. Phonorecords are "material objects in which sounds, other than those accompanying a motion picture or other audiovisual work, are fixed" as per the statutory definitions. *Id.*



Figure 1: player piano with piano roll

The Supreme Court held that the piano roll was not a copy of the musical composition it represented (and therefore the law did not prohibit this type of reproduction by the defendant). The Court reasoned that the piano roll was not a copy unless it was “put in a form which others [humans] can see and read.” Because people did not read piano rolls like many read sheet music, it was not a copy. The Court thought it irrelevant that “[t]hese perforated rolls are parts of a machine which, when duly applied and properly operated in connection with the mechanism to which they are adapted, produce musical tones in harmonious combination.” Following this decision, a work was considered fixed only if it existed in a form readable by humans, not just machines.

Although there are arguably justifications for a focus on human readability, the *White-Smith* decision’s formalism provoked severe criticism. Even if a person could not read or hear the musical composition encoded in a piano roll, that same person could still consume the work with the help of a player piano. As a functional matter, *White-Smith* meant that copiers could circumvent copyright protections by creating copies of a work that were unreadable by humans, but could be made comprehensible with the aid of a machine.*

In its overhaul of copyright law in 1976, Congress instituted fixation as a requisite to copyright protection. (Before the 1976 Act, a work had to be published or registered to get copyright protection. *See infra* Chapter IV.) Congress also overruled *White-Smith* by clarifying that a work is fixed in a tangible medium of expression so long as the work “can be perceived, reproduced, or otherwise communicated, either directly or with the aid of a machine or device.” 17 U.S.C. §§ 101 (“copies”; “phonorecords”); 102(a). A legislative report that preceded the new law pointed out that this change was “intended to avoid the artificial and largely unjustifiable distinctions, derived from cases such as *White-Smith* ..., under which statutory copyrightability in certain cases has been made to depend upon the form or medium in which the work is fixed.” H.R. REP. NO. 1476, 94th Cong., 2d Sess. 47, at 52 (1976) (“House Report”).

With the new language of “fixation” in the 1976 Act, Congress intended to account broadly for existing technologies of fixation (everything from books to sound recordings to the piano roll) as well as then-unknown technologies of fixation. Congress did, however, specifically address one important technology, live broadcasts. According to the House Report, “the definition of ‘fixation’ would exclude from the concept purely evanescent or transient reproductions such as those projected briefly on a screen, shown electronically on a

* The following year, Congress overturned the specific holding of *White-Smith* by granting copyright holders in musical works the right to control the mechanical reproduction of their works and instituting a compulsory-license scheme for manufacturers of piano rolls and other mechanical reproductions. We discuss this legal development further in Chapter V’s section on the music industry.

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television or other cathode ray tube.” *Id.* at 53. These representations are not fixed because they are not “sufficiently permanent or stable to permit [them] to be perceived, reproduced, or otherwise communicated for a period of more than transitory duration,” as required by § 101. Congress, however, made the choice to protect “live broadcasts—sports, news coverage, live performances of music, etc.—that are reaching the public in unfixed form but that are simultaneously being recorded.” H.R. REP. NO. 1476, 94th Cong., 2d Sess. 47, at 52 (1976). It did so by adding the following sentence to the statute: “A work consisting of sounds, images, or both, that are being transmitted, is ‘fixed’ for purposes of this title if a fixation of the work is being made simultaneously with its transmission.” 17 U.S.C. § 101.

Congress thought it had resolved a complicated area with its new rules for fixation, but as new technologies developed—and particularly digital technologies—unforeseen complications arose.

As you read the following case, think about the different copyrights the plaintiff claims to hold and the medium in which each might be fixed. Is there some aspect of video games that might make it difficult to determine whether they are fixed as required by law? What effect does and should the participation of video game players have on the plaintiff’s arguments?

Williams Electronics, Inc. v. Artic International, Inc.

685 F.2d 870 (3d Cir. 1982)

SLOVITER, J.: ...

[1] Plaintiff-appellee Williams Electronics, Inc. manufactures and sells coin-operated electronic video games. A video game machine consists of a cabinet containing, *inter alia*, a cathode ray tube (CRT), a sound system, hand controls for the player, and electronic circuit boards. The electronic circuitry includes a microprocessor and memory devices, called ROMs (Read Only Memory), which are tiny computer [chips] containing thousands of data locations which store the instructions and data of a computer program. The microprocessor executes the computer program to cause the game to operate... [T]he interaction of the program stored in the ROM with the other components of the game produces the sights and sounds of the audiovisual display that the player sees and hears. The memory devices determine not only the appearance and movement of the (game) images but also the variations in movement in response to the player’s operation of the hand controls.

[2] ... Williams ... design[ed] a new video game, ... called DEFENDER, which incorporated various original and unique audiovisual features. The DEFENDER game ... has ... achieved great success in the marketplace. In the DEFENDER game, there are symbols of a spaceship and aliens who do battle with symbols of human figures. The player operates the flight of and weapons on the spaceship, and has the mission of preventing invading aliens from kidnapping the humans from a ground plane.

[3] Williams obtained three copyright registrations relating to its DEFENDER game: one covering the computer program; the second covering the audiovisual effects displayed during the game’s “attract mode”²; and the third covering the audiovisual effects displayed during the game’s “play mode.”³ ...

² The “attract mode” refers to the audiovisual effects displayed before a coin is inserted into the game. It repeatedly shows the name of the game, the game symbols in typical motion and interaction patterns, and the initials of previous players who have achieved high scores.

³ The “play mode” refers to the audiovisual effects displayed during the actual play of the game, when the game symbols move and interact on the screen, and the player controls the movement of one of the symbols (e.g., a spaceship).



Figure 2: screenshot from Williams Electronics DEFENDER arcade game

[4] Defendant-appellant Artic International, Inc. is a seller of electronic components for video games in competition with Williams.... Artic has sold circuit boards, which contain electronic circuits including a microprocessor and memory devices (ROMs). These memory devices incorporate a computer program which is virtually identical to Williams' program for its DEFENDER game. The result is a circuit board "kit" which is sold by Artic to others and which, when connected to a cathode ray tube, produces audiovisual effects and a game almost identical to the Williams DEFENDER game including both the attract mode and the play mode. The play mode and actual play of Artic's game, entitled "DEFENSE COMMAND," is virtually identical to that of the Williams game, i.e., the characters displayed on the cathode ray tube including the player's spaceship are identical in shape, size, color, manner of movement and interaction with other symbols. Also, the attract mode of the Artic game is substantially identical to that of Williams' game, with minor exceptions such as the absence of the Williams name and the substitution of the terms "DEFENSE" and/or "DEFENSE COMMAND" for the term "DEFENDER" in its display.... [T]he district court found that the defendant Artic had infringed the plaintiff's computer program copyright for the DEFENDER game by selling kits which contain a computer program which is a copy of plaintiff's computer program, and that the defendant had infringed both of the plaintiff's audiovisual copyrights for the DEFENDER game by selling copies of those audiovisual works.

[5] In the appeal before us, defendant does not dispute the findings with respect to copying but instead challenges the conclusions of the district court with respect to copyright infringement and the validity and scope of plaintiff's copyrights....

[6] With respect to the plaintiff's two audiovisual copyrights, defendant contends that there can be no copyright protection for the DEFENDER game's attract mode and play mode because these works fail to meet the statutory requirement of "fixation."

[7] Defendant claims that the images in the plaintiff's audiovisual game are transient, and cannot be "fixed." Specifically, it contends that there is a lack of "fixation" because the video game generates or creates "new" images each time the attract mode or play mode is displayed, notwithstanding the fact that the new images are identical or substantially identical to the earlier ones.

[8] We reject this contention. The fixation requirement is met whenever the work is "sufficiently permanent or stable to permit it to be ... reproduced, or otherwise communicated" for more than a transitory period. Here the original audiovisual features of the DEFENDER game repeat themselves over and over.... The audiovisual

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work is permanently embodied in a material object, the memory devices, from which it can be perceived with the aid of the other components of the game.

[9] Defendant also apparently contends that the player's participation withdraws the game's audiovisual work from copyright eligibility because there is no set or fixed performance and the player becomes a co-author of what appears on the screen. Although there is player interaction with the machine during the play mode which causes the audiovisual presentation to change in some respects from one game to the next in response to the player's varying participation, there is always a repetitive sequence of a substantial portion of the sights and sounds of the game, and many aspects of the display remain constant from game to game regardless of how the player operates the controls. Furthermore, there is no player participation in the attract mode which is displayed repetitively without change....

[10] [T]he district court's order granting [an] injunction will be affirmed

NOTE

1. According to the House Report on the 1976 Act, "the definition of 'fixation' would exclude from the concept purely evanescent or transient reproductions such as those projected briefly on a screen, shown electronically on a ... cathode ray tube, or captured momentarily in the 'memory' of a computer." H.R. REP. NO. 1476, 94th Cong., 2d Sess. 47, at 53 (1976). Can you square this understanding of fixation with the decision in this case?

As you read the following case, think about how long a work must be fixed for it to meet the statutory requirement. How do digital and online technologies make this a complicated question?

Cartoon Network LP v. CSC Holdings, Inc.

536 F.3d 121 (2d Cir. 2008)

WALKER, J.:

[1] Defendant-Appellant Cablevision Systems Corporation wants to market a new "Remote Storage" Digital Video Recorder system ("RS-DVR"), using a technology akin to both traditional, set-top digital video recorders, like TiVo, and the video-on-demand ... services provided by many cable companies. Plaintiffs-Appellees produce copyrighted movies and television programs that they provide to Cablevision pursuant to numerous licensing agreements. They contend that Cablevision, through the operation of its RS-DVR system as proposed, would directly infringe their copyrights

[2] Today's television viewers increasingly use digital video recorders ("DVRs") instead of video cassette recorders ("VCRs") to record television programs and play them back later at their convenience. DVRs generally store recorded programming on an internal hard drive rather than a cassette. But, as this case demonstrates, the generic term "DVR" actually refers to a growing number of different devices and systems....

[3] In March 2006, Cablevision, an operator of cable television systems, announced the advent of its new "Remote Storage DVR System." As designed, the RS-DVR allows Cablevision customers who do not have a stand-alone DVR to record cable programming on central hard drives housed and maintained by Cablevision at a "remote" location. RS-DVR customers may then receive playback of those programs through their home television sets, using only a remote control and a standard cable box equipped with the RS-DVR software.

Cablevision notified its content providers, including plaintiffs, of its plans to offer RS-DVR, but it did not seek any license from them to operate or sell the RS-DVR.

[4] Plaintiffs, which hold the copyrights to numerous movies and television programs, sued Cablevision for declaratory and injunctive relief. They alleged that Cablevision's proposed operation of the RS-DVR would directly infringe their exclusive rights to both reproduce and publicly perform their copyrighted works....

[5] Cable companies like Cablevision aggregate television programming from a wide variety of "content providers"—the various broadcast and cable channels that produce or provide individual programs—and transmit those programs into the homes of their subscribers via coaxial cable. At the outset of the transmission process, Cablevision gathers the content of the various television channels into a single stream of data....

[6] Under the new RS-DVR, this single stream of data is split into two streams. The first is routed immediately to customers as before. The second stream flows into a device called the Broadband Media Router ("BMR"), which buffers the data stream, reformats it, and sends it to the "Arroyo Server," which consists, in relevant part, of two data buffers and a number of high-capacity hard disks. The entire stream of data moves to the first buffer (the "primary ingest buffer"), at which point the server automatically inquires as to whether any customers want to record any of that programming. If a customer has requested a particular program, the data for that program move from the primary buffer into a secondary buffer, and then onto a portion of one of the hard disks allocated to that customer. As new data flow into the primary buffer, they overwrite a corresponding quantity of data already on the buffer. The primary ingest buffer holds no more than 0.1 seconds of each channel's programming at any moment. Thus, every tenth of a second, the data residing on this buffer are automatically erased and replaced. The data buffer in the BMR holds no more than 1.2 seconds of programming at any time. While buffering occurs at other points in the operation of the RS-DVR, only the BMR buffer and the primary ingest buffer are utilized absent any request from an individual subscriber.

[7] To the customer, ... the processes of recording and playback on the RS-DVR are similar to that of a standard set-top DVR. Using a remote control, the customer can record programming by selecting a program in advance from an on-screen guide, or by pressing the record button while viewing a given program.... To begin playback, the customer selects the show from an on-screen list of previously recorded programs. The principal difference in operation is that, instead of sending signals from the remote to an on-set box, the viewer sends signals from the remote, through the cable, to the Arroyo Server at Cablevision's central facility....

[8] As to the buffer data, the district court rejected defendants' argument[] that the data were not "fixed" and therefore were not "copies" as defined in the Copyright Act

[9] It is undisputed that Cablevision ... takes the content from one stream of programming, after the split, and stores it, one small piece at a time, in the BMR buffer and the primary ingest buffer. As a result, the information is buffered before any customer requests a recording, and would be buffered even if no such request were made. The question is whether, by buffering the data that make up a given work, Cablevision "reproduce[s]" that work "in copies," 17 U.S.C. § 106(1), and thereby infringes the copyright holder's reproduction right.

[10] "Copies," as defined in the Copyright Act, "are material objects ... in which a work is fixed by any method ... and from which the work can be ... reproduced." *Id.* § 101. The Act also provides that a work is "'fixed' in a tangible medium of expression when its embodiment ... is sufficiently permanent or stable to permit it to be ... reproduced ... for a period of more than transitory duration." *Id.* (emphasis added). We believe that this language plainly imposes two distinct but related requirements: the work must be embodied in a medium, i.e., placed in a medium such that it can be perceived, reproduced, etc., from that medium (the "embodiment requirement"), and it must remain thus embodied "for a period of more than transitory duration" (the "duration requirement").

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Unless both requirements are met, the work is not “fixed” in the buffer, and, as a result, the buffer data is not a “copy” of the original work whose data is buffered.

[11] The district court mistakenly limited its analysis primarily to the embodiment requirement. As a result of this error, once it determined that the buffer data was “[c]learly ... capable of being reproduced,” i.e., that the work was embodied in the buffer, the district court concluded that the work was therefore “fixed” in the buffer, and that a copy had thus been made. In doing so, it relied on a line of cases beginning with *MAI Systems Corp. v. Peak Computer Inc.*, 991 F.2d 511 (9th Cir. 1993)

[12] The district court’s reliance on cases like *MAI Systems* is misplaced. In general, those cases conclude that an alleged copy is fixed without addressing the duration requirement; it does not follow, however, that those cases assume, much less establish, that such a requirement does not exist. Indeed, the duration requirement, by itself, was not at issue in *MAI Systems* and its progeny. As a result, they do not speak to the issues squarely before us here: If a work is only “embodied” in a medium for a period of transitory duration, can it be “fixed” in that medium, and thus a copy? And what constitutes a period “of more than transitory duration”?

[13] In *MAI Systems*, defendant Peak Computer, Inc., performed maintenance and repairs on computers made and sold by MAI Systems. In order to service a customer’s computer, a Peak employee had to operate the computer and run the computer’s copyrighted operating system software. The issue in *MAI Systems* was whether, by loading the software into the computer’s RAM,¹ the repairman created a “copy” as defined in § 101. The resolution of this issue turned on whether the software’s embodiment in the computer’s RAM was “fixed,” within the meaning of the same section. The Ninth Circuit concluded that

by showing that Peak loads the software into the RAM and is then able to view the system error log and diagnose the problem with the computer, MAI has adequately shown that the representation created in the RAM is “sufficiently permanent or stable to permit it to be perceived, reproduced, or otherwise communicated for a period of more than transitory duration.”

[14] The *MAI Systems* court referenced the “transitory duration” language but did not discuss or analyze it... This omission suggests that the parties did not litigate the significance of the “transitory duration” language, and the court therefore had no occasion to address it. This is unsurprising, because it seems fair to assume that in these cases the program was embodied in the RAM for at least several minutes.

[15] Accordingly, we construe *MAI Systems* and its progeny as holding that loading a program into a computer’s RAM can result in copying that program. We do not read *MAI Systems* as holding that, as a matter of law, loading a program into a form of RAM always results in copying. Such a holding would read the “transitory duration” language out of the definition, and we do not believe our sister circuit would dismiss this statutory language without even discussing it...

[16] Cablevision does not seriously dispute that copyrighted works are “embodied” in the buffer. Data in the BMR buffer can be reformatted and transmitted to the other components of the RS-DVR system. Data in the primary ingest buffer can be copied onto the Arroyo hard disks if a user has requested a recording of that data. Thus, a work’s “embodiment” in either buffer “is sufficiently permanent or stable to permit it to be perceived, reproduced,” (as in the case of the ingest buffer) “or otherwise communicated” (as in the BMR buffer). The result might be different if only a single second of a much longer work was placed in the buffer in isolation. In

¹ To run a computer program, the data representing that program must be transferred from a data storage medium (such as a floppy disk or a hard drive) to a form of Random Access Memory (“RAM”) where the data can be processed. The data buffers at issue here are also a form of RAM.

such a situation, it might be reasonable to conclude that only a minuscule portion of a work, rather than “a work” was embodied in the buffer. Here, however, where every second of an entire work is placed, one second at a time, in the buffer, we conclude that the work is embodied in the buffer.

[17] Does any such embodiment last “for a period of more than transitory duration”? No bit of data remains in any buffer for more than a fleeting 1.2 seconds. And unlike the data in cases like *MAI Systems*, which remained embodied in the computer’s RAM memory until the user turned the computer off, each bit of data here is rapidly and automatically overwritten as soon as it is processed. While our inquiry is necessarily fact-specific, and other factors not present here may alter the duration analysis significantly, these facts strongly suggest that the works in this case are embodied in the buffer for only a “transitory” period, thus failing the duration requirement.

[18] Against this evidence, plaintiffs argue only that the duration is not transitory because the data persist “long enough for Cablevision to make reproductions from them.” As we have explained above, however, this reasoning impermissibly reads the duration language out of the statute, and we reject it. Given that the data reside in no buffer for more than 1.2 seconds before being automatically overwritten, and in the absence of compelling arguments to the contrary, we believe that the copyrighted works here are not “embodied” in the buffers for a period of more than transitory duration, and are therefore not “fixed” in the buffers. Accordingly, the acts of buffering in the operation of the RS-DVR do not create copies, as the Copyright Act defines that term....

NOTES

1. In 2011, Victor Whitmill, the artist who had designed and tattooed the face of former boxer Mike Tyson (shown on the left in Figure 3), sued Warner Bros. Entertainment, the distributor of *The Hangover Part II* film, for copyright infringement. He claimed that Warner Bros. infringed his copyright in the tattoo artwork because actor Ed Helms’s character sported a similar tattoo on his face in the movie (depicted on the right in Figure 3). *Whitmill v. Warner Bros. Ent. Inc.*, No. 4:11-cv-752 (E.D. Mo. 2011). Warner Bros. argued that Whitmill’s tattoo was not fixed as required, because a human body could not and should not be considered a “tangible medium of expression.” The case settled without a determination on the question. What do you think of Warner Bros.’s argument as a statutory matter? As a policy or constitutional matter? Are there certain “negative spaces” that copyright law should not reach?



Figure 3: Mike Tyson (left) and *The Hangover Part II* movie poster (right)

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2. The multimedia messaging app Snapchat allows users to send messages, known as snaps, to selected contacts. These snaps can be viewed for between 1 and 10 seconds. After that viewing, Snapchat automatically deletes the snap. (If a snap goes unopened for 30 days, it is also automatically deleted.) Are these snaps fixed, as per copyright law?

3. Might a bowl of perishable Vietnamese food be fixed for purposes of copyright law? One district court said no, reasoning that “a bowl of perishable food will, by its terms, ultimately perish,” and “a bowl of food which, once it spoils is gone forever, cannot be considered ‘fixed.’” *Kim Seng Co. v. J & A Importers, Inc.*, 810 F. Supp. 2d 1046, 1054 (C.D. Cal. 2011). Do you think this result is consistent with *MAI Systems* and *Cartoon Network*? Should it matter whether this bowl of food will endure longer than a program held in a computer’s RAM memory, which *MAI Systems* held to be fixed?

4. A Restatement of Copyright comment provides some guidance regarding how to interpret the temporal requirement in the Copyright Act’s definition of “fixation”:

The holdings in the leading cases and the legislative history suggest one possible way to understand the statutory requirement, namely, that fixation requires an embodiment that lasts long enough to allow the enjoyment, exploitation, or other non-fleeting use of the work’s expressive content after the embodiment is initially made. On this understanding, the duration of the work’s embodiment is insufficient if, for example, the work has not previously been fixed and is perceptible only during its transmission, even if that transmission involves a momentary embodiment of the work in a tangible medium of expression. This understanding does not inquire into whether a particular embodiment of a work has in fact been used to enjoy or exploit the work; it is enough if the particular embodiment lasts long enough to permit enjoyment or exploitation of the work.

Understood this way, the fixation requirement serves the statute’s underlying purposes. Fixation both ensures that works can be communicated over time in a way that promotes the progress of knowledge and that they can be reliably identified, which is practically necessary to a well functioning copyright system.... Protection for embodiments too evanescent to allow enjoyment or exploitation of the work’s expressive content beyond the initial time of the work’s embodiment would not serve these purposes.

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Apply this standard to the cases you’ve just read. How do the fixation issues come out?

5. The Uruguay Round Agreements Act, Pub. L. No. 103-465, 108 Stat. 4809 (1994), was passed pursuant to the United States’s obligation under the TRIPS Agreement that

In respect of a fixation of their performance on a phonogram, performers shall have the possibility of preventing the following acts when undertaken without their authorization: the fixation of their unfixed performances and the reproduction of such fixation.

Art. 14(1). The Act provides civil and criminal liability for those who, among other things, make or distribute certain audio or video bootlegs (unauthorized copies) of live musical performances, whether or not the performance was fixed by or under the authority of the performer. This law effectively provides “copyright-like” protection to a subset of otherwise copyrightable works that are not fixed. Some criminal defendants accused of violating this Act have challenged its constitutionality, but each court to have considered this challenge has rejected it, reasoning that Congress had the authority to enact the law under the Commerce Clause, even if the

Copyright and Patent Clause does not authorize the protection of unfixed works. *United States v. Martignon*, 492 F.3d 140, 149-52 (2d Cir. 2007); *United States v. Moghadam*, 175 F.3d 1269, 1280 (11th Cir. 1999); *Kiss Catalog, Ltd. v. Passport Int’l Prods., Inc.*, 405 F. Supp. 2d 1169, 1172-74 (C.D. Cal. 2005). For a contrary view and more on whether Congress can use its other Article I powers to legislate beyond the Copyright and Patent Clause’s limitations, see Jeanne C. Fromer, *The Intellectual Property Clause’s External Limitations*, 61 DUKE L.J. 1329 (2012).

B. Originality

Section 102 also states that copyright protection attaches to “original works of authorship.” The statute is silent as to what an “original work[] of authorship” is. The legislative history of the 1976 Act provides that

The phrase “original works of authorship,” which is purposely left undefined, is intended to incorporate without change the standard of originality established by the courts under the [1909 Act]. This standard does not include requirements of novelty, ingenuity, or esthetic merit, and there is no intention to enlarge the standard of copyright protection to require them.

H.R. REP. NO. 1476, 94th Cong., 2d Sess. 47, at 51 (1976). This elaboration states what the originality requirement is *not* without saying precisely what it is.

In the absence of much guidance from Congress, courts have been left to define this central term. As we will see from the cases in this section, courts locate the basis for this originality requirement in the U.S. Constitution’s grant of power to Congress to create copyright laws “by securing for limited Times to *Authors* ... the exclusive Right to their ... *Writings*.” U.S. CONST. art. I, § 8, cl. 8 (emphases added).

1. Classic Cases

What follows are three classic pre-1976 opinions on originality. These cases set the stage for the Supreme Court’s post-1976 definition of originality in *Feist Publications, Inc. v. Rural Telephone Service Co.*, 499 U.S. 340 (1991), which we will read following these important early articulations of the originality standard.

As you read the next three cases, consider how the different types of works that are at issue—photographs, advertisements containing drawings, and mezzotint versions of paintings—challenge what we understand to be “original.” Do all three courts adopt the same or different definitions of originality? If different, how do they differ? Is the originality requirement a stringent one?

Burrow-Giles Lithographic Co. v. Napoleon Sarony

111 U.S. 53 (1884)

MILLER, J.:

[1] The suit was commenced by an action at law in which Sarony was plaintiff and the lithographic company was defendant, the plaintiff charging the defendant with violating his copyright in regard to a photograph, the title of which is ‘Oscar Wilde, No. 18.’

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[2] The constitutional question [whether Congress could provide copyright protection for photographs] is not free from difficulty. The eighth section of the first article of the [C]onstitution is the great repository of the powers of [C]ongress, and by the eight[h] clause of that section [C]ongress is authorized “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.” The argument here is that a photograph is not a writing nor the production of an author.... It is insisted, in argument, that a photograph being a reproduction, on paper, of the exact features of some natural object, or of some person, is not a writing of which the producer is the author. [The federal statute] places photographs in the same class as things which may be copyrighted with “books, maps, charts, dramatic or musical compositions, engravings, cuts, prints, paintings, drawings, statues, statuary, and models or designs intended to be perfected as works of the fine arts.”...

[3] The first [C]ongress of the United States, sitting immediately after the formation of the constitution, enacted that the “author or authors of any map, chart, book, or books, being a citizen or resident of the United States, shall have the sole right and liberty of printing, reprinting, publishing, and vending the same for the period of fourteen years from the recording of the title thereof in the clerk’s office, as afterwards directed.” This statute not only makes maps and charts subjects of copyright, but mentions them before books in the order of designation. The second section of an act to amend this act, approved April 29, 1802, enacts that ... thereafter he who shall invent and design, engrave, etch, or work, or from his own works shall cause to be designed and engraved, etched, or worked, any historical or other print or prints, shall have the same exclusive right for the term of 14 years from recording the title thereof as prescribed by law....

[4] The construction placed upon the [C]onstitution by the first act of 1790 and the act of 1802, by the men who were contemporary with its formation, many of whom were members of the convention which framed it, is of itself entitled to very great weight, and when it is remembered that the rights thus established have not been disputed during a period of nearly a century, it is almost conclusive. Unless, therefore, photographs can be distinguished in the classification of this point from the maps, charts, designs, engravings, etchings, cuts, and other prints, it is difficult to see why [C]ongress cannot make them the subject of copyright as well as the others. These statutes certainly answer the objection that books only, or writing, in the limited sense of a book and its author, are within the constitutional provision. Both these words are susceptible of a more enlarged definition than this. An author in that sense is he to whom anything owes its origin; originator; maker; one who completes a work of science or literature. So, also, no one would now claim that the word ‘writing’ in this clause of the constitution, though the only word used as to subjects in regard to which authors are to be secured, is limited to the actual script of the author, and excludes books and all other printed matter. By writings in that clause is meant the literary productions of those authors, and [C]ongress very properly has declared these to include all forms of writing, printing, engravings, etchings, etc., by which the ideas in the mind of the author are given visible expression. The only reason why photographs were not included in the extended list in the act of 1802 is, probably, that they did not exist, as photography, as an art, was then unknown, and the scientific principle on which it rests, and the chemicals and machinery by which it is operated, have all been discovered long since that statute was enacted....

[5] We entertain no doubt that the [C]onstitution is broad enough to cover an act authorizing copyright of photographs, so far as they are representatives of original intellectual conceptions of the author.

[6] But it is said that an engraving, a painting, a print, does embody the intellectual conception of its author, in which there is novelty, invention, originality, and therefore comes within the purpose of the constitution in securing its exclusive use or sale to its author, while a photograph is the mere mechanical reproduction of the physical features or outlines of some object, animate or inanimate, and involves no originality of thought or any novelty in the intellectual operation connected with its visible reproduction in shape of a picture. That while the effect of light on the prepared plate may have been a discovery in the production of these pictures, and patents could properly be obtained for the combination of the chemicals, for their application to the paper or other

surface, for all the machinery by which the light reflected from the object was thrown on the prepared plate, and for all the improvements in this machinery, and in the materials, the remainder of the process is merely mechanical, with no place for novelty, invention, or originality. It is simply the manual operation, by the use of these instruments and preparations, of transferring to the plate the visible representation of some existing object, the accuracy of this representation being its highest merit. This may be true in regard to the ordinary production of a photograph, and that in such case a copyright is no protection. On the question as thus stated we decide nothing....

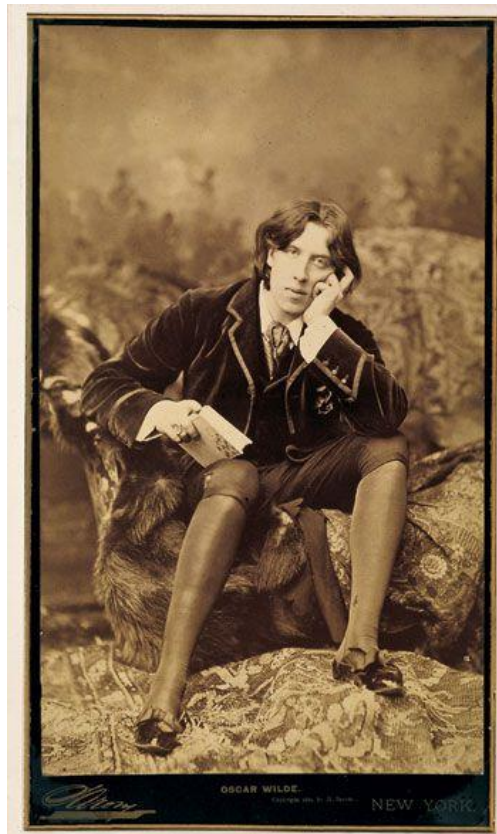


Figure 4: Sarony's photograph of Oscar Wilde

[7] The [circuit court found], in regard to the photograph in question, that it is a "useful, new, harmonious, characteristic, and graceful picture, and that plaintiff made the same ... entirely from his own original mental conception, to which he gave visible form by posing the said Oscar Wilde in front of the camera, selecting and arranging the costume, draperies, and other various accessories in said photograph, arranging the subject so as to present graceful outlines, arranging and disposing the light and shade, suggesting and evoking the desired expression, and from such disposition, arrangement, or representation, made entirely by plaintiff, he produced the picture in suit." These findings, we think, show this photograph to be an original work of art, the product of plaintiff's intellectual invention, of which plaintiff is the author, and of a class of [creations] for which the [C]onstitution intended that [C]ongress should secure to him the exclusive right to use, publish, and sell, as it has done by [statute]....

George Bleistein v. Donaldson Lithographing Co.

188 U.S. 239 (1903)

HOLMES, J.:

[1] The alleged infringements consisted in the copying in reduced form of three chromolithographs prepared by employees of the plaintiffs for advertisements of a circus owned by one Wallace. Each of the three contained

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a portrait of Wallace in the corner, and lettering bearing some slight relation to the scheme of decoration, indicating the subject of the design and the fact that the reality was to be seen at the circus. One of the designs was of an ordinary ballet, one of a number of men and women, described as the Stirk family, performing on bicycles, and one of groups of men and women whitened to represent statues. The circuit court directed a verdict for the defendant on the ground that the chromolithographs were not within the protection of the copyright law, and this ruling was sustained by the circuit court of appeals....

[2] [T]he plaintiff's case is not affected by the fact, if it be one, that the pictures represent actual groups—visible things. They seem from the testimony to have been composed from hints or description, not from sight of a performance. But even if they had been drawn from the life, that fact would not deprive them of protection. The opposite proposition would mean that a portrait by Velasquez or Whistler was common property because others might try their hand on the same face. Others are free to copy the original. They are not free to copy the copy. The copy is the personal reaction of an individual upon nature. Personality always contains something unique. It expresses its singularity even in handwriting, and a very modest grade of art has in it something irreducible, which is one man's alone. That something he may copyright unless there is a restriction in the words of the act....



Figure 5: one of Bleistein's three circus posters

[3] We assume that the construction of [the statute] allowing a copyright to the "author, designer, or proprietor ... of any engraving, cut, print ... [or] chromo" is affected by the section [which] provides that, "in the construction of this act, the words 'engraving,' 'cut,' and 'print' shall be applied only to pictorial illustrations or works connected with the fine arts."...

[4] These chromolithographs are "pictorial illustrations."... [T]he act ... does not mean that ordinary posters are not good enough to be considered within its scope. The antithesis to "illustrations or works connected with the fine arts" is not works of little merit or of humble degree, or illustrations addressed to the less educated classes Certainly works are not the less connected with the fine arts because their pictorial quality attracts the crowd, and therefore gives them a real use—if use means to increase trade and to help to make money. A picture is none the less a picture, and none the less a subject of copyright, that it is used for an advertisement. And if pictures may be used to advertise soap, or the theatre, or monthly magazines, as they are, they may be used to advertise a circus. Of course, the ballet is as legitimate a subject for illustration as any other. A rule cannot be laid down that would excommunicate the paintings of Degas.

[5] Finally, the special adaptation of these pictures to the advertisement of the Wallace shows does not prevent a copyright....

[6] 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. It may be more than doubted, for instance, whether the etchings of Goya or the paintings of Manet would have been sure of protection when seen for the first time. At the other end, copyright would be denied to pictures which appealed to a public less educated than the judge. Yet if they command the interest of any public, they have a commercial value—it would be bold to say that they have not an aesthetic and educational value—and the taste of any public is not to be treated with contempt. It is an ultimate fact for the moment, whatever may be our hopes for a change. That these pictures had their worth and their success is sufficiently shown by the desire to reproduce them without regard to the plaintiffs' rights. We are of opinion that there was evidence that the plaintiffs have rights entitled to the protection of the law....

Alfred Bell & Co. v. Catalda Fine Arts

191 F.2d 99 (2d Cir. 1951)

FRANK, J.:

{The plaintiff, a British print producer and dealer, copyrighted in the United States eight mezzotint engravings of well-known paintings from the eighteenth and nineteenth centuries produced at its order by mezzotint engravers. Mezzotint was once a popular process for reproducing paintings by engraving a copper or steel plate that uses, among other things, roughening for shading and smoothing for light areas. The defendants, a color lithographer and a dealer in lithographs, produced and sold color lithographs of these mezzotints. The plaintiff sued for copyright infringement.} ...

[1] The defendants' contention apparently results from the ambiguity of the word "original." It may mean startling, novel or unusual, a marked departure from the past.... [By contrast,] "[o]riginal" in reference to a copyrighted work means that the particular work owes its origin to the author. No large measure of novelty is necessary....

[2] All that is needed to satisfy both the Constitution and the statute is that the author contributed something more than a merely trivial variation, something recognizably his own. Originality in this context means little more than a prohibition of actual copying. No matter how poor artistically the "author's" addition, it is enough if it be his own. *Bleistein v. Donaldson Lithographing Co.*, 188 U.S. 239, 250 (1903)

[3] We consider untenable defendants' suggestion that plaintiff's mezzotints could not validly be copyrighted because they are reproductions of works in the public domain. Not only does the Act include "Reproductions of a work or art," but ... it explicitly provides for the copyrighting of "translations, or other versions of works in the public domain." The mezzotints were such "versions." They "originated" with those who make them, and ... amply met the standards imposed by the Constitution and the statute.²² There is evidence that they were not

²² See COPINGER, *THE LAW OF COPYRIGHTS* 46 (7th ed. 1936): "Again, an engraver is almost invariably a copyist, but although his work may infringe copyright in the original painting if made without the consent of the owner of the copyright therein, his work may still be original in the sense that he has employed skill and judgment in its production. He produces the resemblance he is desirous of obtaining by means very different from those employed by the painter or draughtsman from whom he copies: means which require great labour and talent. The engraver produces his effects by the management of light and shade, or, as the term of his art expresses it, the chiaroscuro. The due degrees of light and shade are produced

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intended to, and did not, imitate the paintings they reproduced. But even if their substantial departures from the paintings were inadvertent, the copyrights would be valid. A copyist's bad eyesight or defective musculature, or a shock caused by a clap of thunder, may yield sufficiently distinguishable variations. Having hit upon such a variation unintentionally, the "author" may adopt it as his and copyright it....



Figure 6: original (left) and mezzotint (right) of Thomas Gainsborough's "The Blue Boy"

NOTES

1. Consider Justice Holmes's admonition above in *Bleistein*: "It would be a dangerous undertaking for persons trained only to the law to constitute themselves final judges of the work of pictorial illustrations, outside the narrowest and most obvious limits." This assertion is well-known (it is referred to frequently as the *Bleistein* "nondiscrimination principle") and is often invoked in copyright law to state that copyright law should not make its protections depend on the aesthetic worth of the work at issue. That is, there should be no need for aesthetic judgments in copyright law. Is that the natural understanding of what Holmes wrote in *Bleistein*? Keep this principle in mind moving forward, and query whether the opinions excerpted in this book comply with this principle. The Supreme Court has recently clarified that *Bleistein* forbids courts from "evaluat[ing] the artistic significance of a ... work" but that "the meaning of a ... work, as reasonably can be perceived, should be considered to the extent necessary." *Andy Warhol Found. For Visual Arts, Inc. v. Goldsmith*, 598 U.S. 508, 511-12 (2023). On whether the copyright statute encodes a nondiscrimination principle and how practically this principle can be enforced, see Amy B. Cohen, *Copyright Law and the Myth of Objectivity: The Idea-Expression Dichotomy and the Inevitability of Artistic Value Judgments*, 66 *IND. L.J.* 175 (1990), Dave Fagundes, *Who is the Bad Art Judge?*, *N.Y.U. L. REV. F.*, Dec. 28, 2023, <https://www.nyulawreview.org/forum/2023/12/who-is-the-bad-art-judge-aesthetic-nondiscrimination-in-andy-warhol-foundation-v-goldsmith>, and Robert Kirk Walker & Ben Depoorter, *Unavoidable Aesthetic Judgments in Copyright Law: A Community of Practice Standard*, 109 *NW. U. L. REV.* 343 (2015). For a reevaluation of Holmes's admonition in *Bleistein* and other aspects of the decision, see Barton Beebe, *Bleistein, the Problem of Aesthetic Progress, and the Making of American Copyright Law*, 117 *COLUM. L. REV.* 319 (2017).

by different lines and dots; he who is the engraver must decide on the choice of the different lines or dots for himself, and on his choice depends the success of his print."

2. Does *Alfred Bell* suggest that replicas of works in the public domain are always original? If not, what about replicas that have inadvertent minor changes due to the difficulties of replicating with precision?
3. One way to think about originality is by focusing on the work itself. Another way to think about originality is by focusing on the process of creating that work. Do these two different foci yield different results as to whether a work is original? If so, is one more consistent with copyright's utilitarian approach? Lockean labor theory? Kantian/Hegelian personhood theory?

2. Contemporary Cases

Fast forward now to the originality requirement as it currently is articulated in § 102 pursuant to the 1976 Act. In reading through the Supreme Court's pronouncement of how to understand the originality requirement under the 1976 Act, consider whether *Burrow-Giles*, *Bleistein*, and *Alfred Bell* remain good law after this decision. If not, how does the rule articulated here differ? Which theory of copyright law does the Court adopt?

Feist Publications, Inc. v. Rural Telephone Service Co.

499 U.S. 340 (1991)

O'CONNOR, J.:

[1] This case requires us to clarify the extent of copyright protection available to telephone directory white pages.

[2] Rural Telephone Service Company, Inc., is a certified public utility that provides telephone service to several communities in northwest Kansas. It is subject to a state regulation that requires all telephone companies operating in Kansas to issue annually an updated telephone directory. Accordingly, as a condition of its monopoly franchise, Rural publishes a typical telephone directory The white pages list in alphabetical order the names of Rural's subscribers, together with their towns and telephone numbers.... Rural distributes its directory free of charge to its subscribers

[3] Feist Publications, Inc., is a publishing company that specializes in area-wide telephone directories. Unlike a typical directory, which covers only a particular calling area, Feist's area-wide directories cover a much larger geographical range, reducing the need to call directory assistance or consult multiple directories. The Feist directory that is the subject of this litigation covers 11 different telephone service areas in 15 counties and contains 46,878 white pages listings—compared to Rural's approximately 7,700 listings. Like Rural's directory, Feist's is distributed free of charge

[4] As the sole provider of telephone service in its service area, Rural obtains subscriber information quite easily. Persons desiring telephone service must apply to Rural and provide their names and addresses; Rural then assigns them a telephone number. Feist is not a telephone company, let alone one with monopoly status, and therefore lacks independent access to any subscriber information. To obtain white pages listings for its area-wide directory, Feist approached each of the 11 telephone companies operating in northwest Kansas and offered to pay for the right to use its white pages listings.

[5] Of the 11 telephone companies, only Rural refused to license its listings to Feist. Rural's refusal created a problem for Feist, as omitting these listings would have left a gaping hole in its area-wide directory

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[6] Unable to license Rural's white pages listings, Feist used them without Rural's consent. Feist began by removing several thousand listings that fell outside the geographic range of its area-wide directory, then hired personnel to investigate the 4,935 that remained. These employees verified the data reported by Rural and sought to obtain additional information. As a result, a typical Feist listing includes the individual's street address; most of Rural's listings do not. Notwithstanding these additions, however, 1,309 of the 46,878 listings in Feist's 1983 directory were identical to listings in Rural's 1982–1983 white pages. Four of these were fictitious listings that Rural had inserted into its directory to detect copying.

[7] Rural sued for copyright infringement

[8] The *sine qua non* of copyright is originality. To qualify for copyright protection, a work must be original to the author. Original, as the term is used in copyright, means only that the work was independently created by the author (as opposed to copied from other works), and that it possesses at least some minimal degree of creativity. To be sure, the requisite level of creativity is extremely low; even a slight amount will suffice. The vast majority of works make the grade quite easily, as they possess some creative spark, no matter how crude, humble or obvious it might be. Originality does not signify novelty; a work may be original even though it closely resembles other works so long as the similarity is fortuitous, not the result of copying. To illustrate, assume that two poets, each ignorant of the other, compose identical poems. Neither work is novel, yet both are original and, hence, copyrightable.

[9] Originality is a constitutional requirement. The source of Congress' power to enact copyright laws is Article I, § 8, cl. 8, of the Constitution, which authorizes Congress to "secur[e] for limited Times to Authors ... the exclusive Right to their respective Writings." In two decisions from the late 19th century—[one being] *Burrow-Giles Lithographic Co. v. Sarony*, 111 U.S. 53 (1884)—this Court defined the crucial terms "authors" and "writings." In so doing, the Court made it unmistakably clear that these terms presuppose a degree of originality....

[10] The originality requirement articulated in [those cases] remains the touchstone of copyright protection today....

[11] It is this bedrock principle of copyright that mandates the law's seemingly disparate treatment of facts and factual compilations. No one may claim originality as to facts. This is because facts do not owe their origin to an act of authorship. The distinction is one between creation and discovery: The first person to find and report a particular fact has not created the fact; he or she has merely discovered its existence. To borrow from *Burrow-Giles*, one who discovers a fact is not its "maker" or "originator." The discoverer merely finds and records. Census takers, for example, do not "create" the population figures that emerge from their efforts; in a sense, they copy these figures from the world around them. Census data therefore do not trigger copyright because these data are not "original" in the constitutional sense. The same is true of all facts—scientific, historical, biographical, and news of the day. They may not be copyrighted and are part of the public domain available to every person.

[12] Factual compilations, on the other hand, may possess the requisite originality. The compilation author typically chooses which facts to include, in what order to place them, and how to arrange the collected data so that they may be used effectively by readers. These choices as to selection and arrangement, so long as they are made independently by the compiler and entail a minimal degree of creativity, are sufficiently original that Congress may protect such compilations through the copyright laws. Thus, even a directory that contains absolutely no protectible written expression, only facts, meets the constitutional minimum for copyright protection if it features an original selection or arrangement....

[13] This inevitably means that the copyright in a factual compilation is thin. Notwithstanding a valid copyright, a subsequent compiler remains free to use the facts contained in another's publication to aid in preparing a competing work, so long as the competing work does not feature the same selection and arrangement....

[14] It may seem unfair that much of the fruit of the compiler's labor may be used by others without compensation.... [H]owever, this is not some unforeseen byproduct of a statutory scheme. It is, rather, the essence of copyright and a constitutional requirement. The primary objective of copyright is not to reward the labor of authors, but "[t]o promote the Progress of Science and useful Arts." Art. I, § 8, cl. 8.... As applied to a factual compilation, assuming the absence of original written expression, only the compiler's selection and arrangement may be protected; the raw facts may be copied at will. This result is neither unfair nor unfortunate. It is the means by which copyright advances the progress of science and art....

[15] This, then, resolves the doctrinal tension: Copyright treats facts and factual compilations in a wholly consistent manner. Facts, whether alone or as part of a compilation, are not original and therefore may not be copyrighted. A factual compilation is eligible for copyright if it features an original selection or arrangement of facts, but the copyright is limited to the particular selection or arrangement. In no event may copyright extend to the facts themselves....

[16] [Some] courts developed a new theory to justify the protection of factual compilations. Known alternatively as "sweat of the brow" or "industrious collection," the underlying notion was that copyright was a reward for the hard work that went into compiling facts....

[17] The "sweat of the brow" doctrine had numerous flaws, the most glaring being that it extended copyright protection in a compilation beyond selection and arrangement—the compiler's original contributions—to the facts themselves....

[18] ... [T]he Copyright Act leave[s] no doubt that originality, not "sweat of the brow," is the touchstone of copyright protection

{We return to the copyrightability of the telephone directory listings here below in section C, when we address compilations specifically.}

NOTES

1. Consider the Restatement of Copyright's distillation of the originality requirement in the Black Letter of § 5:

§ 5. Originality: In General

(a) The Copyright Act grants protection to "original works of authorship."

(b) For a work to be original, the work must be independently created by its author ... and must embody expression that is at least minimally creative....

(c) Because copyright protects only an author's independently created expression, only the elements of the work's expression that the author did not copy from any preexisting work can satisfy the minimal-creativity requirement....

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2. In considering the requirement of independent creation that *Feist* articulates, contemplate Judge Learned Hand's statement on the matter: "[I]f by some magic a man who had never known it were to compose anew Keats's *Ode on a Grecian Urn*, he would be an 'author,' and, if he copyrighted it, others might not copy that poem, though they might of course copy Keats's." *Sheldon v. Metro-Goldwyn Pictures Corp.*, 81 F.2d 49, 54 (2d Cir. 1936). How likely is it that someone would independently create Keats's poem? If unlikely, is Hand's statement of any help? Can you explain the rule of independent creation in relation to the utilitarian, Lockean labor, and Kantian/Hegelian personality copyright theories?

3. In *Feist*, the Court states that "the requisite level of creativity is extremely low; even a slight amount will suffice." Compare this threshold requirement to that of patent law, which requires that an invention be both novel and nonobvious to be protectable. 35 U.S.C. §§ 102-103. The requisite level of creativity for an invention to be patentable is much higher. Does copyright law's lower threshold set a target for creativity that results in creators barely clearing the bar? And if the target were set higher, would creators be encouraged to produce more creative work? Some scholars think so. Joseph Scott Miller, *Hoisting Originality*, 31 *CARDOZO L. REV.* 451, 463-64 (2009); Gideon Parchomovsky & Alex Stein, *Originality*, 95 *VA. L. REV.* 1505, 1506 (2009). They propose that copyright's creativity threshold be raised to encourage production of more creative works. Others suggest that raising the creativity threshold would require too much undesirable assessment of aesthetic merit or would run counter to how much creativity consumers actually want from artistic and cultural works. Jeanne C. Fromer, *A Psychology of Intellectual Property*, 104 *NW. U. L. REV.* 1441, 1492-1501 (2010); Erlend Lavik & Stef van Gompel, *On the Prospects of Raising the Originality Requirement in Copyright Law: Perspectives from the Humanities*, 60 *J. COPYRIGHT SOC'Y USA* 387, 423-24 (2013). There is also empirical work that suggests that providing extrinsic incentives to people to act creatively counterproductively makes them less likely to produce creative works than those without such incentives. Teresa M. Amabile, *Effects of External Evaluation on Artistic Creativity*, 37 *J. PERSONALITY & SOC. PSYCHOL.* 221, 222 (1979). On the other hand, an experimental study of creativity thresholds in the context of intellectual property provides evidence that raising the creativity threshold does in fact significantly increase the creativity of the resulting work. Christopher Buccafusco, Zachary C. Burns, Jeanne C. Fromer & Christopher Jon Sprigman, *Experimental Tests of Intellectual Property Laws' Creativity Thresholds*, 92 *TEX. L. REV.* 1921 (2014).

Think about copyright law's goals. Does keeping the creativity threshold lower or higher better support them? Do we want to encourage the creation of ever more works? Do we want to encourage only works that contribute to aesthetic progress? For more on these questions, see Barton Beebe, Bleistein, *The Problem of Aesthetic Progress, and the Making of American Copyright Law*, 117 *COLUM. L. REV.* 319 (2017); Jeanne C. Fromer, *An Information Theory of Copyright Law*, 64 *EMORY L.J.* 71 (2014); Jake Linford, *Copyright and Attention Scarcity*, 41 *CARDOZO L. REV.* 143 (2020).

4. The 1790 Act discussed in Chapter I covered maps, charts, and books. We just saw in *Feist* that copyright protects certain forms of creative expression, but does not protect facts. But are maps and charts not "facts"? Or, more precisely, do they not represent facts? What elements of a map or chart do you think might be copyrightable expression? For more on these questions, see Isabella Alexander, *Cartography, Empire and Copyright Law in Colonial Australia*, 5 *LAW & HISTORY* 24 (2018).

To explore more fully the implications of *Feist*, consider this post-*Feist* decision. What role, if any, does a creator's intent play in assessing originality? How do you reconcile this decision with *Alfred Bell*?

Meshwerks, Inc. v. Toyota Motor Sales U.S.A., Inc.

528 F.3d 1258 (10th Cir. 2008)

GORSUCH, J.:

[1] This case calls on us to apply copyright principles to ... digital modeling....

[2] In 2003, and in conjunction with Saatchi & Saatchi, its advertising agency, Toyota began work on its model-year 2004 advertising campaign. Saatchi and Toyota agreed that the campaign would involve, among other things, digital models of Toyota's vehicles for use on Toyota's website and in various other media. These digital models have substantial advantages over the product photographs for which they substitute. With a few clicks of a computer mouse, the advertiser can change the color of the car, its surroundings, and even edit its physical dimensions to portray changes in vehicle styling; before this innovation, advertisers had to conduct new photo shoots of whole fleets of vehicles each time the manufacturer made even a small design change to a car or truck.

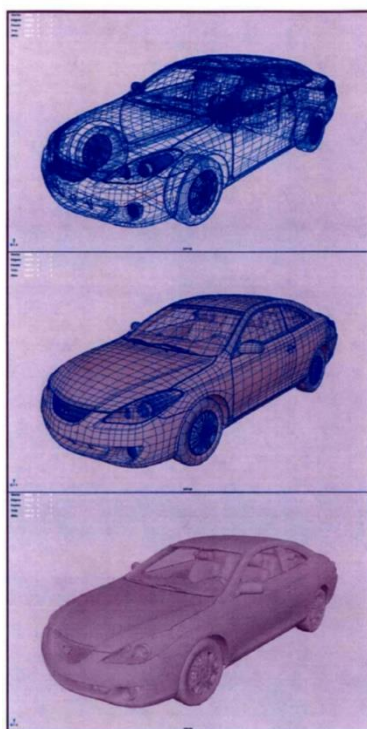
[3] To supply these digital models, Saatchi and Toyota hired Grace & Wild, Inc. ("G & W"). In turn, G & W subcontracted with Meshwerks to assist with two initial aspects of the project—digitization and modeling. Digitizing involves collecting physical data points from the object to be portrayed. In the case of Toyota's vehicles, Meshwerks took copious measurements of Toyota's vehicles by covering each car, truck, and van with a grid of tape and running an articulated arm tethered to a computer over the vehicle to measure all points of intersection in the grid. Based on these measurements, modeling software then generated a digital image resembling a wire-frame model. In other words, the vehicles' data points (measurements) were mapped onto a computerized grid and the modeling software connected the dots to create a "wire frame" of each vehicle.

[4] At this point, however, the on-screen image remained far from perfect and manual "modeling" was necessary. Meshwerks personnel fine-tuned or, as the company prefers it, "sculpted," the lines on screen to resemble each vehicle as closely as possible. Approximately 90 percent of the data points contained in each final model, Meshwerks represents, were the result not of the first-step measurement process, but of the skill and effort its digital sculptors manually expended at the second step. For example, some areas of detail, such as wheels, headlights, door handles, and the Toyota emblem, could not be accurately measured using current technology; those features had to be added at the second "sculpting" stage, and Meshwerks had to recreate those features as realistically as possible by hand, based on photographs. Even for areas that were measured, Meshwerks faced the challenge of converting measurements taken of a three-dimensional car into a two-dimensional computer representation; to achieve this, its modelers had to sculpt, or move, data points to achieve a visually convincing result. The purpose and product of these processes, after nearly 80 to 100 hours of effort per vehicle, were two-dimensional wire-frame depictions of Toyota's vehicles that appeared three-dimensional on screen, but were utterly unadorned-lacking color, shading, and other details....

[5] With Meshwerks' wire-frame products in hand, G & W then manipulated the computerized models by, first, adding detail, the result of which appeared on screen as a "tightening" of the wire frames, as though significantly more wires had been added to the frames, or as though they were made of a finer mesh. Next, G & W digitally applied color, texture, lighting, and animation for use in Toyota's advertisements.... G & W's digital models were then sent to Saatchi to be employed in a number of advertisements prepared by Saatchi and Toyota in various print, online, and television media....

APPENDIX A

06-4222, Meshwerks v. Toyota



APPENDIX B

06-4222, Meshwerks v. Toyota

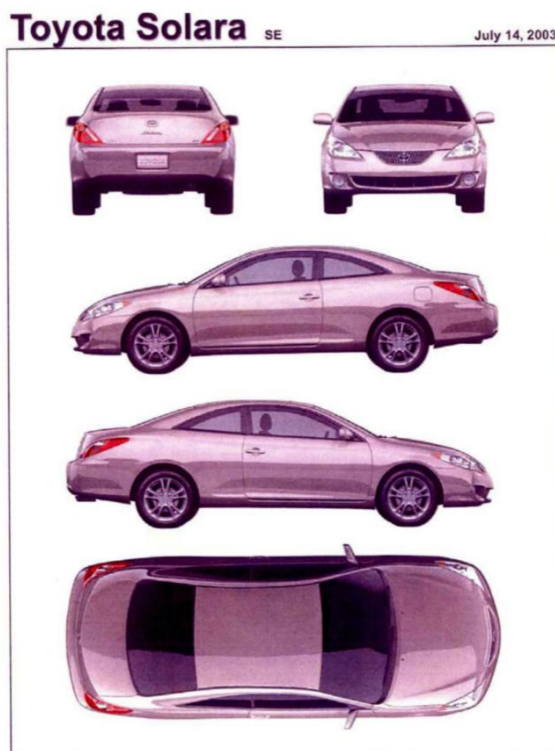


Figure 7: Meshwerks digital wire-frame models (left) and Toyota finished digital model (right)

[6] This dispute arose because, according to Meshwerks, it contracted with G & W for only a single use of its models—as part of one Toyota television commercial—and neither Toyota nor any other defendant was allowed to use the digital models created from Meshwerks’ wire-frames in other advertisements. Thus, Meshwerks contends defendants improperly—in violation of copyright laws as well as the parties’ agreement—reused and redistributed the models created by Meshwerks in a host of other media....

[7] In due course, defendants moved for summary judgment on the theory that Meshwerks’ wire-frame models lacked sufficient originality to be protected by copyright. Specifically, defendants argued that any original expression found in Meshwerks’ products was attributable to the Toyota designers who conceived of the vehicle designs in the first place; accordingly, defendants’ use of the models could not give rise to a claim for copyright infringement.

[8] The district court agreed....

[9] The parties focus most of their energy in this case on the question whether Meshwerks’ models qualify as independent creations, as opposed to copies of Toyota’s handiwork. But what can be said, at least based on received copyright doctrine, to distinguish an independent creation from a copy? And how might that doctrine apply in an age of virtual worlds and digital media that seek to mimic the “real” world, but often do so in ways that undoubtedly qualify as (highly) original? While there is little authority explaining how our received principles of copyright law apply to the relatively new digital medium before us, some lessons may be discerned from how the law coped in an earlier time with a previous revolution in technology: photography....

[10] Applying these principles, evolved in the realm of photography, to the new medium that has come to supplement and even in some ways to supplant it, we think Meshwerks’ models are not so much independent creations as (very good) copies of Toyota’s vehicles. In reaching this conclusion we rely on (1) an objective

assessment of the particular models before us and (2) the parties' purpose in creating them. All the same, we do not doubt for an instant that the digital medium before us, like photography before it, can be employed to create vivid new expressions fully protectable in copyright....

[11] Key to our evaluation of this case is the fact that Meshwerks' digital wire-frame computer models depict Toyota's vehicles without any individualizing features: they are untouched by a digital paintbrush; they are not depicted in front of a palm tree, whizzing down the open road, or climbing up a mountainside. Put another way, Meshwerks' models depict nothing more than unadorned Toyota vehicles—the car as car. And the unequivocal lesson from *Feist* is that works are not copyrightable to the extent they do not involve any expression apart from the raw facts in the world. As Professor Nimmer has commented in connection with the predecessor technology of photography, “[a]s applied to a photograph of a pre-existing product, that bedrock principle [of originality] means that the photographer manifestly cannot claim to have originated the matter depicted therein.... The upshot is that the photographer is entitled to copyright solely based on lighting, angle, perspective, and the other ingredients that traditionally apply to that art-form.” NIMMER ON COPYRIGHT § 3.03[C][3]. It seems to us that exactly the same holds true with the digital medium now before us: the facts in this case unambiguously show that Meshwerks did not make any decisions regarding lighting, shading, the background in front of which a vehicle would be posed, the angle at which to pose it, or the like—in short, its models reflect none of the decisions that can make depictions of things or facts in the world, whether Oscar Wilde or a Toyota Camry, new expressions subject to copyright protection....

[12] ... [W]e hold that the unadorned images of Toyota's vehicles cannot be copyrighted by Meshwerks and ... must be filtered out. To the extent that Meshwerks' digital wire-frame models depict only those unadorned vehicles, having stripped away all lighting, angle, perspective, and “other ingredients” associated with an original expression, we conclude that they have left no copyrightable matter.

[13] Confirming this conclusion as well is the peculiar place where Meshwerks stood in the model-creation pecking order. On the one hand, Meshwerks had nothing to do with designing the appearance of Toyota's vehicles, distinguishing them from any other cars, trucks, or vans in the world. That expressive creation took place before Meshwerks happened along, and was the result of work done by Toyota and its designers On the other hand, how the models Meshwerks created were to be deployed in advertising—including the backgrounds, lighting, angles, and colors—were all matters left to those ... who came after Meshwerks left the scene. Meshwerks thus played a narrow, if pivotal, role in the process by simply, if effectively, copying Toyota's vehicles into a digital medium so they could be expressively manipulated by others.⁸

[14] Were we to afford copyright protection in this case, we would run aground on one of the bedrock principles of copyright law—namely, that originality, “as the term is used in copyright, means only that the work was independently created by the author (*as opposed to copied from other works*).” *Feist*, 499 U.S. at 345 (emphasis added). Because our copyright laws protect only “original” expression, the reason for refusing copyright protection to copies is clear, since obviously a copier is not a creator, much less an “independent” creator....

[15] It is certainly true that what Meshwerks accomplished was a peculiar kind of copying. It did not seek to recreate Toyota vehicles outright—steel, rubber, and all; instead, it sought to depict Toyota's three-dimensional physical objects in a two-dimensional digital medium. But we hold, as many before us have already suggested, that, standing alone, the fact that a work in one medium has been copied from a work in another medium does not render it any the less a “copy.” After all, the putative creator who merely shifts the medium

⁸ We are not called upon to, and do not, express any view on the copyrightability of the work products produced by those who employed and adorned Meshwerks' models.

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in which another's creation is expressed has not necessarily added anything beyond the expression contained in the original.

[16] In reaching this conclusion, we do not for a moment seek to downplay the considerable amount of time, effort, and skill that went into making Meshwerks' digital wire-frame models. But, in assessing the originality of a work for which copyright protection is sought, we look only at the final product, not the process, and the fact that intensive, skillful, and even creative labor is invested in the process of creating a product does not guarantee its copyrightability....

[17] Meshwerks' intent in making its wire-frame models provides additional support for our conclusion.... If an artist affirmatively sets out to be unoriginal—to make a copy of someone else's creation, rather than to create an original work—it is far more likely that the resultant product will, in fact, be unoriginal. Of course, this is not to say that the accidental or spontaneous artist will be denied copyright protection for not intending to produce art; it is only to say that authorial intent sometimes can shed light on the question of whether a particular work qualifies as an independent creation or only a copy.

[18] In this case, the undisputed evidence before us leaves no question that Meshwerks set out to copy Toyota's vehicles, rather than to create, or even to add, any original expression. The purchase order signed by G & W asked Meshwerks to "digitize and model" Toyota's vehicles, and Meshwerks' invoice submitted to G & W for payment reflects that this is exactly the service Meshwerks performed. Meshwerks itself has consistently described digitization and modeling as an attempt accurately to depict real-world, three-dimensional objects as digital images viewable on a computer screen. The parties thus intended to have Meshwerks create base-layer digital models to which the original and creative elements viewers would see in actual advertisements could be added by others in subsequent processes....

[19] Although we hold that Meshwerks' digital, wire-frame models are insufficiently original to warrant copyright protection, we do not turn a blind eye to the fact that digital imaging is a relatively new and evolving technology and that Congress extended copyright protection to "original works of authorship fixed in any tangible medium of expression, *now known or later developed*." 17 U.S.C. § 102(a) (emphasis added). A Luddite might make the mistake of suggesting that digital modeling, as was once said of photography, allows for nothing more than "mechanical reproduction of the physical features or outlines of some object ... and involves no originality of thought or any novelty in the intellectual operation connected with its visible reproduction in the shape of a picture." *Burrow-Giles*, 111 U.S. at 59. Clearly, this is not so.

[20] Digital modeling can be, surely is being, and no doubt increasingly will be used to create copyrightable expressions. Yet, just as photographs can be, but are not per se, copyrightable, the same holds true for digital models. There's little question that digital models can be devised of Toyota cars with copyrightable features, whether by virtue of unique shading, lighting, angle, background scene, or other choices. The problem for Meshwerks in this particular case is simply that the uncontested facts reveal that it wasn't involved in any such process, and indeed contracted to provide completely unadorned digital replicas of Toyota vehicles in a two-dimensional space. For this reason, we do not envision any "chilling effect" on creative expression based on our holding today, and instead see it as applying to digital modeling the same legal principles that have come, in the fullness of time and with an enlightened eye, to apply to photographs and other media....

NOTES

1. What if Meshwerks had created these same works instead for an art show (perhaps to comment on the role of technology or the car in society)? Consider Marcel Duchamp's *Fountain* in Figure 8, which is made up of a pre-existing porcelain urinal that he signed "R. Mutt." Is that work original, as per *Meshwerks*?



Figure 8: Marcel Duchamp's *Fountain*

2. Consider the originality of photographs in light of *Burrow-Giles* and *Meshwerks*. Pictured in Figure 9 is Thomas Mangelsen's photograph *Catch of the Day*, which captures a salmon jumping into the gaping mouth of a brown bear in a national park in Alaska. How is this photograph different than the one at issue in *Burrow-Giles*? What, if anything, makes, Mangelsen's photograph original? More generally, are there different ways in which photographs can be original?



Figure 9: Thomas Mangelsen's *Catch of the Day*

3. In recent years, the Copyright Office has refused to issue copyright registration in various instances involving business logos, including the Tommy Hilfiger flag logo shown on the left in Figure 10, as well as other works, such as the Fuck Snow Globe shown on the right in Figure 10.

In these instances, the Copyright Office and its Review Board have stated that these works' respective combinations of commonplace geometric shapes, coloring, or wording are not original under *Feist*. Do you agree? As you proceed through this book, ponder why a business might want copyright protection for its logo in addition to trademark protection, which it presumably could have.



Figure 10: Tommy Hilfiger flag logo (left) and Fuck Snow Globe (right)

4. The Copyright Office has also issued bright-line regulations that certain material is “not subject to copyright” and therefore “applications for registration of such works cannot be entertained.” 37 C.F.R. § 202.1. On this list is “[w]ords and short phrases such as names, titles, and slogans,” as well as “mere listing of ingredients or contents.” Is it true that these categories of works always lack the requisite modicum of creativity? By contrast to the Copyright Office, some courts have ruled that such material might sometimes be copyrightable. For instance, the Ninth Circuit recently ruled that nine words of lyrics from 3LW’s 2001 song “Playas Gon’ Play”—“Playas, they gonna play / And haters, they gonna hate”—might be original in an infringement lawsuit against Taylor Swift for somewhat similar lyrics in her song “Shake It Off,” thereby reversing the district court’s dismissal of the complaint on the ground that the lyrics lack originality. *Hall v. Swift*, 786 Fed. Appx. 711 (9th Cir. 2019).

The next case concerns both the fixation and originality requirements. Can works of nature ever be fixed or original? Is there more to the originality requirement than the rule articulated in *Feist*?

Chapman Kelley v. Chicago Park District

635 F.3d 290 (7th Cir. 2011)

SYKES, J.:

[1] Chapman Kelley is a nationally recognized artist known for his representational paintings of landscapes and flowers—in particular, romantic floral and woodland interpretations set within ellipses. In 1984 he received permission from the Chicago Park District to install an ambitious wildflower display at the north end of Grant Park, a prominent public space in the heart of downtown Chicago. “Wildflower Works” was thereafter planted: two enormous elliptical flower beds, each nearly as big as a football field, featuring a variety of native wildflowers and edged with borders of gravel and steel.

[2] Promoted as “living art,” Wildflower Works received critical and popular acclaim, and for a while Kelley and a group of volunteers tended the vast garden, pruning and replanting as needed. But by 2004 Wildflower Works had deteriorated, and the City’s goals for Grant Park had changed. So the Park District dramatically modified the garden, substantially reducing its size, reconfiguring the oval flower beds into rectangles, and changing some of the planting material.



Figure 11: park before alteration

[3] Kelley sued the Park District {for violating his moral rights under the Visual Artists Rights Act (VARA), something we study in Chapter V, and which provides protection to certain works of visual art}

[4] The district court rejected Kelley’s moral-rights claim

[5] [F]or reasons relating to copyright’s requirements of expressive authorship and fixation, a living garden like Wildflower Works is not copyrightable....

[6] The district court held that although Wildflower Works was both a painting and a sculpture, it was ineligible for copyright because it lacked originality. There is a contradiction here. As we have explained, VARA supplements general copyright protection and applies only to artists who create the specific subcategories of art enumerated in the statute. VARA-eligible paintings and sculptures comprise a discrete subset of otherwise copyrightable pictorial and sculptural works; the statute designates these works of fine art as worthy of special protection. If a work is so lacking in originality that it cannot satisfy the basic requirements for copyright, then it can hardly qualify as a painting or sculpture eligible for *extra* protection under VARA.

[7] That point aside, the district court’s conclusion misunderstands the originality requirement....

[8] The district court took the position that Wildflower Works was not original because Kelley was not “the first person to ever conceive of and express an arrangement of growing wildflowers in ellipse-shaped enclosed area[s].” This mistakenly equates originality with novelty; the law is clear that a work can be original even if it is not novel. No one argues that Wildflower Works was copied; it plainly possesses more than a little creative spark....

[9] The real impediment to copyright here is not that Wildflower Works fails the test for originality (understood as “not copied” and “possessing some creativity”) but that a living garden lacks the kind of authorship and stable fixation normally required to support copyright. Unlike originality, authorship and fixation are *explicit* constitutional requirements; the Copyright Clause empowers Congress to secure for “authors” exclusive rights in their “writings.” U.S. CONST. art 1, § 8, cl. 8. The originality requirement is implicit in these express limitations on the congressional copyright power. *See Feist*, 499 U.S. at 346 (The constitutional reference to “authors” and “writings” “presuppose[s] a degree of originality.”). The Supreme Court has repeatedly construed all three

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terms in relation to one another [or] perhaps has collapsed them into a single concept; therefore, writings are what authors create, but for one to be an author, the writing has to be original.

[10] Without fixation, moreover, there cannot be a “writing.” ...

[11] Finally, authorship is an entirely human endeavor. Authors of copyrightable works must be human; works owing their form to the forces of nature cannot be copyrighted. [S]ee also U.S. COPYRIGHT OFFICE, COMPENDIUM II: COPYRIGHT OFFICE PRACTICES § 503.03(a) (1984) (“[A] work must be the product of human authorship” and not the forces of nature.); *id.* § 202.02(b).

[12] Recognizing copyright in Wildflower Works presses too hard on these basic principles. We fully accept that the artistic community might classify Kelley’s garden as a work of postmodern conceptual art. We acknowledge as well that copyright’s prerequisites of authorship and fixation are broadly defined. But the law must have some limits; not all conceptual art may be copyrighted. In the ordinary copyright case, authorship and fixation are not contested; most works presented for copyright are unambiguously authored and unambiguously fixed. But this is not an ordinary case. A living garden like Wildflower Works is neither “authored” nor “fixed” in the senses required for copyright.

[13] Simply put, gardens are planted and cultivated, not authored. A garden’s constituent elements are alive and inherently changeable, not fixed. Most of what we see and experience in a garden—the colors, shapes, textures, and scents of the plants—originates in nature, not in the mind of the gardener. At any given moment in time, a garden owes most of its form and appearance to natural forces, though the gardener who plants and tends it obviously assists. All this is true of Wildflower Works, even though it was designed and planted by an artist.

[14] Of course, a human “author”—whether an artist, a professional landscape designer, or an amateur backyard gardener—determines the initial arrangement of the plants in a garden. This is not the kind of authorship required for copyright. To the extent that seeds or seedlings can be considered a “medium of expression,” they originate in nature, and natural forces—not the intellect of the gardener—determine their form, growth, and appearance. Moreover, a garden is simply too changeable to satisfy the primary purpose of fixation; its appearance is too inherently variable to supply a baseline for determining questions of copyright creation and infringement. If a garden can qualify as a “work of authorship” sufficiently “embodied in a copy,” at what point has fixation occurred? When the garden is newly planted? When its first blossoms appear? When it is in full bloom? How—and at what point in time—is a court to determine whether infringing copying has occurred?

[15] In contrast, when a landscape designer conceives of a plan for a garden and puts it in writing—records it in text, diagrams, or drawings on paper or on a digital-storage device—we can say that his intangible intellectual property has been embodied in a fixed and tangible “copy.” This writing is a sufficiently permanent and stable copy of the designer’s intellectual expression and is vulnerable to infringing copying, giving rise to the designer’s right to claim copyright. The same cannot be said of a garden, which is not a fixed copy of the gardener’s intellectual property.... Seeds and plants in a garden are naturally in a state of perpetual change; they germinate, grow, bloom, become dormant, and eventually die. This life cycle moves gradually, over days, weeks, and season to season, but the real barrier to copyright here is not temporal but essential. The essence of a garden is its vitality, not its fixedness. It may endure from season to season, but its nature is one of dynamic change...

NOTE

1. In *Kelley*, the Seventh Circuit relied on principles of fixation to resolve the case, whereas the district court rested on originality doctrine. Do you think there might be other principles at play here (at least tacitly), such as whether a garden is a permissible category of copyrightable subject matter? We explore the categories of copyrightable subject matter in section E.

C. Derivative Works and Compilations

This section explores derivative works and compilations, two classes of works that are based in part on preexisting material sometimes copyrightable in their own right. They raise distinct questions of originality.

According to § 101, a **derivative work** is

a work based upon one or more preexisting works, such as a translation, musical arrangement, dramatization, fictionalization, motion picture version, sound recording, art reproduction, abridgment, condensation, or any other form in which a work may be recast, transformed, or adapted.

For example, the film *Harry Potter and the Chamber of Secrets*, based on J.K. Rowling's book of the same name is a derivative work, as is a French translation of that book, originally written in English. As per § 101, a **compilation** is

a work formed by the collection and assembling of preexisting materials or of data that are selected, coordinated, or arranged in such a way that the resulting work as a whole constitutes an original work of authorship. The term "compilation" includes collective works.

A **collective work** is further defined in § 101 as

a work, such as a periodical issue, anthology, or encyclopedia, in which a number of contributions, constituting separate and independent works in themselves, are assembled into a collective whole.

Section 103(a) of the Copyright Act provides for the copyrightability of derivative works and compilations:

The subject matter of copyright as specified by section 102 includes compilations and derivative works, but protection for a work employing preexisting material in which copyright subsists does not extend to any part of the work in which such material has been used unlawfully.

That said, the Copyright Act accounts for the fact that these works are based in part on preexisting materials, sometimes copyrightable in their own right, by specifying in section 103(b) that

The copyright in a compilation or derivative work extends only to the material contributed by the author of such work, as distinguished from the preexisting material employed in the work, and does not imply any exclusive right in the preexisting material. The copyright in such work is independent of, and does not affect or enlarge the scope, duration, ownership, or subsistence of, any copyright protection in the preexisting material.

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This section considers the meaning of these statutory provisions, as well as the standard of originality in derivative works and compilations. Because of their basis in or incorporation of preexisting material sometimes copyrightable in their own right, they raise additional questions as to their own copyrightability.

1. Derivative Works

The statute says nothing about the threshold of originality required of a derivative work, as compared with the underlying original work. The following cases explore whether a second comer has added enough new, original content to a pre-existing work such that the resulting work is a copyrightable derivative work.

As you read the following case, consider how, if at all, the court's test for originality differs from how the requirement was articulated outside of the context of derivative works. If the test is different, why do you think that is?

L. Batlin & Son, Inc. v. Jeffrey Snyder

536 F.2d 486 (2d Cir. 1976) (en banc)

OAKES, J.: ...

[1] Uncle Sam mechanical banks have been on the American scene at least since June 8, 1886, when Design Patent No. 16,728, issued on a toy savings bank of its type. The basic delightful design has long since been in the public domain. The banks are well documented in collectors' books and known to the average person interested in Americana. A description of the bank is that Uncle Sam, dressed in his usual stove pipe hat, blue full dress coat, starred vest and red and white striped trousers, and leaning on his umbrella, stands on a four- or five-inch wide base, on which sits his carpetbag. A coin may be placed in Uncle Sam's extended hand. When a lever is pressed, the arm lowers, and the coin falls into the bag, while Uncle Sam's whiskers move up and down. The base has an embossed American eagle on it with the words "Uncle Sam" on streamers above it, as well as the word "Bank" on each side. Such a bank is listed in a number of collectors' books, ... and is said to be not particularly rare.

[2] Appellant Jeffrey Snyder ... obtained a registration of copyright on a plastic "Uncle Sam bank" [H]e had seen a cast metal antique Uncle Sam bank with an overall height of the figure and base of 11 inches.... [H]e flew to Hong Kong to arrange for the design and eventual manufacture of replicas of the bank as Bicentennial items, taking the cast metal Uncle Sam bank with him.... Snyder wanted his bank to be made of plastic and to be shorter than the cast metal sample "in order to fit into the required price range and quality and quantity of material to be used." The figure of Uncle Sam was thus shortened from 11 to nine inches, and the base shortened and narrowed. It was also decided ... to change the shape of the carpetbag and to include the umbrella in a one-piece mold for the Uncle Sam figure, "so as not to have a problem with a loose umbrella or a separate molding process." [Snyder's Hong Kong] representative made his sketches while looking at the cast metal bank. After a clay model was made, a plastic prototype was approved by Snyder and his order placed

[3] Appellee Batlin is also in the novelty business and ... ordered 30 cartons of cast iron Uncle Sam mechanical banks from Taiwan where its president had seen the bank made. When he became aware of the existence of a plastic bank, which he considered an almost identical copy of the cast iron bank, Batlin's trading company in Hong Kong procured a manufacturer and the president of Batlin ordered plastic copies also.... Batlin was notified by the United States Customs Service that the plastic banks it was receiving were covered by appellants' copyright. In addition the Customs Service was ... refusing entry to cast iron banks previously

ordered, according to ... Batlin Thus Batlin instituted suit for a judgment declaring appellants' copyright void



Figure 12: public domain cast iron Uncle Sam bank, 1886 (left) and Snyder's plastic version, 1975 (right)

[4] This court has examined both the appellants' plastic Uncle Sam bank made under Snyder's copyright and the uncopyrighted model cast iron mechanical bank which is itself a reproduction of the original public domain Uncle Sam bank. Appellant Snyder claims differences not only of size but also in a number of other very minute details: the carpetbag shape of the plastic bank is smooth, the iron bank rough; the metal bank bag is fatter at its base; the eagle on the front of the platform in the metal bank is holding arrows in his talons while in the plastic bank he clutches leaves, this change concededly having been made, however, because "the arrows did not reproduce well in plastic on a smaller size." The shape of Uncle Sam's face is supposedly different, as is the shape and texture of the hats, according to the Snyder affidavit. In the metal version the umbrella is hanging loose while in the plastic item it is included in the single mold. The texture of the clothing, the hairline, shape of the bow ties and of the shirt collar and left arm as well as the flag carrying the name on the base of the statue are all claimed to be different, along with the shape and texture of the eagles on the side. Many of these differences are not perceptible to the casual observer....

[5] [T]he Snyder bank is extremely similar to the cast iron bank, save in size and material with the only other differences, such as the shape of the satchel and the leaves in the eagle's talons being by all appearances, minor. Similarities include, more importantly, the appearance and number of stripes on the trousers, buttons on the coat, and stars on the vest and hat, the attire and pose of Uncle Sam, the decor on his base and bag, the overall color scheme, the method of carpetbag opening, to name but a few....

[6] ... [T]he appellants' plastic version reproduces the cast iron bank except that it proportionately reduces the height from approximately eleven inches to approximately nine inches with trivial variations.... [T]he variations found in appellants' plastic bank were merely trivial and ... it was a reproduction of the metal bank made as simply as possible for the purposes of manufacture. In other words, there were no elements of difference that

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amounted to significant alteration or that had any purpose other than the functional one of making a more suitable (and probably less expensive) figure in the plastic medium.

[7] What the leading authority has called “the one pervading element prerequisite to copyright protection regardless of the form of the work” is the requirement of originality that the work be the original product of the claimant. 1 M. NIMMER, *THE LAW OF COPYRIGHT* s 10, at 32 (1975). This derives from the fact that, constitutionally, copyright protection may be claimed only by authors. Thus, one who has slavishly or mechanically copied from others may not claim to be an author. Since the constitutional requirement must be read into the Copyright Act, the requirement of originality is also a statutory one.... [I]n order to obtain a copyright upon a reproduction of a work of art ... the work [must] contain some substantial, not merely trivial originality.

[8] The test of originality is concededly one with a low threshold in that “[a]ll that is needed . . . is that the ‘author’ contributed something more than a ‘merely trivial’ variation, something recognizably ‘his own.’” *Alfred Bell & Co. v. Catalda Fine Arts, Inc.*, 191 F.2d at 103. But ... while a copy of something in the public domain will not, if it be merely a copy, support a copyright, a distinguishable variation will.

[9] ... The requirement of substantial as opposed to trivial variation and the prohibition of mechanical copying, both of which are inherent in and subsumed by the concept of originality, apply There is implicit in that concept a minimal element of creativity over and above the requirement of independent effort....

[10] A reproduction of a work of art obviously presupposes an underlying work of art.... [I]t has been established that mass-produced commercial objects with a minimal element of artistic craftsmanship may satisfy the statutory requirement of such a work. So, too, a toy which qualifies as a work of art such as the original Uncle Sam mechanical bank may qualify as a work of art The underlying work of art may as here be in the public domain. But even to claim the more limited protection given to a reproduction of a work of art (that to the distinctive features contributed by the reproducer), the reproduction must contain an original contribution not present in the underlying work of art and be more than a mere copy.

[11] ... [T]o support a copyright there must be at least some substantial variation, not merely a trivial variation such as might occur in the translation to a different medium.

[12] Nor can the requirement of originality be satisfied simply by the demonstration of physical skill or special training which, to be sure, ... was required for the production of the plastic molds that furnished the basis for appellants’ plastic bank. A considerably higher degree of skill is required, true artistic skill, to make the reproduction copyrightable. Thus in *Alfred Bell & Co. v. Catalda Fine Arts, Inc.*, Judge Frank pointed out that the mezzotint engraver’s art there concerned required “great labour and talent” to effectuate the “management of light and shade ... produced by different lines and dots ...,” means “very different from those employed by the painter or draughtsman from whom he copies....” Here on the basis of appellants’ own expert’s testimony it took [Snyder’s Hong Kong] representative “[a]bout a day and a half, two days work” to produce the plastic mold sculpture from the metal Uncle Sam bank. If there be a point in the copyright law pertaining to reproductions at which sheer artistic skill and effort can act as a substitute for the requirement of substantial variation, it was not reached here.

[13] Appellants rely heavily upon *Alva Studios, Inc. v. Winninger*, the “Hand of God” case, where the court held that “great skill and originality (were required) to produce a scale reduction of a great work with exactitude.” 177 F. Supp. 265, 267 (S.D.N.Y. 1959). There, the original sculpture was, “one of the most intricate pieces of sculpture ever created” with “[i]nnumerable planes, lines and geometric patterns ... interdependent in [a] multi-dimensional work.” Originality was found by the district court to consist primarily in the fact that “[i]t takes ‘an extremely skilled sculptor’ many hours working directly in front of the original” to effectuate a scale reduction. The court, indeed, found the exact replica to be so original, distinct, and creative as to constitute a work of art

in itself. The complexity and exactitude there involved distinguishes that case amply from the one at bar. As appellants themselves have pointed out, there are a number of trivial differences or deviations from the original public domain cast iron bank in their plastic reproduction. Thus concededly the plastic version is not, and was scarcely meticulously produced to be, an exactly faithful reproduction. Nor is the creativity in the underlying work of art of the same order of magnitude as in the case of the “Hand of God.” Rodin’s sculpture is, furthermore, so unique and rare, and adequate public access to it such a problem that a significant public benefit accrues from its precise, artistic reproduction. No such benefit can be imagined to accrue here from the “knock-off” reproduction of the cast iron Uncle Sam bank. Thus appellants’ plastic bank is neither in the category of exactitude required by Alva Studios nor in a category of substantial originality; it falls within what has been suggested by the amicus curiae is a copyright no-man’s land.

[14] Absent a genuine difference between the underlying work of art and the copy of it for which protection is sought, the public interest in promoting progress in the arts indeed, the constitutional demand, could hardly be served. To extend copyrightability to minuscule variations would simply put a weapon for harassment in the hands of mischievous copiers intent on appropriating and monopolizing public domain work....

NOTE



Figure 13: Rodin’s *Hand of God* sculpture (left) and Alva Studios replica (right)

1. In discussing the relevance of the skill employed to create a replica of an existing work, the court invokes a (smaller) replica of Auguste Rodin’s *Hand of God* sculpture (the original and the replica are shown in Figure 13). The court thought the replica was categorically different than Snyder’s Uncle Sam banks. In stating that, the court cited to a previous case assessing the copyrightability of the replica. In that case, the district court had reasoned that the replica of *Hand of God* “embodies and resulted from [the replica maker’s] skill and originality in producing an accurate scale reproduction of the original. In a work of sculpture, this reduction requires far more than an abridgement of a written classic; great skill and originality is called for when one seeks to produce a scale reduction of a great work with exactitude.” *Alva Studios, Inc. v. Winninger*, 177 F. Supp. 265, 267 (S.D.N.Y. 1959). The court also thought that originality came from turning a work that was originally 37 inches into one that is 18½ inches and in changing the rear side of the sculpture’s base. Finally, the court credited the fact that the sculpture’s owner granted permission to the replica maker to make its replicas as a sign that the replica maker’s work “bears the stamp of originality and skill.” Is the court’s reasoning (and *L. Batlin & Son’s* reliance on it to distinguish the Uncle Sam bank replicas) persuasive? How does this reasoning hold up post-*Feist*?

In reading the following case, consider how the underlying work differs from the one in the previous case. Does that and should that reflect the assessment of originality in the derivative work? In practice, what does the court’s ruling mean for the originality requirement for derivative works?

Daniel Schrock v. Learning Curve International, Inc.

586 F.3d 513 (7th Cir. 2009)

SYKES, J.: ...

[1] HIT is the owner of the copyright in the “Thomas & Friends” properties, and Learning Curve is a producer and distributor of children’s toys. HIT and Learning Curve entered into a licensing agreement granting Learning Curve a license to create and market toys based on HIT’s characters. HIT and Learning Curve maintain ... that HIT retained all intellectual-property rights in the works produced under the license....

[2] In 1999 Learning Curve retained Daniel Schrock to take product photographs of its toys, including those based on HIT’s characters, for use in promotional materials. On numerous occasions during the next four years, Schrock photographed several lines of Learning Curve’s toys, including many of the “Thomas & Friends” toy trains, related figures, and train-set accessories.... Schrock invoiced Learning Curve for this work, and some of the invoices included “usage restrictions” purporting to limit Learning Curve’s use of his photographs to two years. Learning Curve paid the invoices in full—in total more than \$400,000.



Figure 14: one of Schrock’s Thomas & Friends product photographs

[3] Learning Curve stopped using Schrock’s photography services in mid-2003 but continued to use some of his photos in its printed advertising, on packaging, and on the internet. In 2004 Schrock registered his photos for copyright protection and sued HIT and Learning Curve for infringement HIT and Learning Curve moved for summary judgment, arguing primarily that Schrock’s photos were derivative works and not sufficiently original to claim copyright protection, and that neither HIT nor Learning Curve ever authorized Schrock to copyright the photos. They argued in the alternative that Schrock granted them an unlimited oral license to use the photos.

[4] The district court granted summary judgment for the defendants.... The judge focused ... on whether the photos were derivative works under the Copyright Act and concluded that they were. Then, following language in *Gracen v. Bradford Exchange*, 698 F.2d 300 (7th Cir.1983), the judge held that Learning Curve’s permission to make the photos was not enough to trigger Schrock’s copyright in them; the judge said Schrock must also have Learning Curve’s permission to copyright the photos. Schrock did not have that permission, so the judge concluded that Schrock had no copyright in the photos and dismissed his claim for copyright infringement. Schrock appealed....

[5] Schrock argues that the district judge mistakenly classified his photos as derivative works and misread or misapplied *Gracen*. He contends that his photos are not derivative works, and even if they are, his copyright is valid and enforceable because he had permission from Learning Curve to photograph the underlying copyrighted works and his photos contained sufficient incremental original expression to qualify for copyright. HIT and Learning Curve defend the district court’s determination that the photos are derivative works and argue that the court properly read *Gracen* to require permission to copyright as well as permission to make the derivative works. Alternatively, they maintain that Schrock’s photographs contain insufficient originality to be copyrightable Finally, the defendants ask us to affirm on the independent ground that Schrock orally granted them an unlimited license to use his works....

[6] Much of the briefing on appeal—and most of the district court’s analysis—concerned the classification of the photos as derivative works.... The Copyright Act specifically grants the author of a derivative work copyright protection in the incremental original expression he contributes as long as the derivative work does not infringe the underlying work. The copyright in a derivative work, however, “extends only to the material contributed by the author of such work, as distinguished from the preexisting material employed in the work.” 17 U.S.C. § 103(b)....

[7] Whether photographs of a copyrighted work are derivative works is the subject of deep disagreement among courts and commentators alike....

[8] We need not resolve the issue definitively here. The classification of Schrock’s photos as derivative works does not affect the applicable legal standard for determining copyrightability, although as we have noted, it does determine the scope of copyright protection. Accordingly, we will assume without deciding that each of Schrock’s photos qualifies as a derivative work within the meaning of the Copyright Act....

[9] Our review of Schrock’s photographs convinces us that they do not fall into the narrow category of photographs that can be classified as slavish copies, lacking any independently created expression. To be sure, the photographs are accurate depictions of the three-dimensional “Thomas & Friends” toys, but Schrock’s artistic and technical choices combine to create a two-dimensional image that is subtly but nonetheless sufficiently his own.³ This is confirmed by Schrock’s deposition testimony describing his creative process in depicting the toys. Schrock explained how he used various camera and lighting techniques to make the toys look more “life like,” “personable,” and “friendly.” He explained how he tried to give the toys “a little bit of dimension” and that it was his goal to make the toys “a little bit better than what they look like when you actually see them on the shelf.” The original expression in the representative sample is not particularly great (it was not meant to be), but it is enough under the applicable standard to warrant the limited copyright protection accorded derivative works under § 103(b).

[10] Aside from arguing that the works fail under the generally accepted test for originality, Learning Curve and HIT offer two additional reasons why we should conclude that Schrock’s photographs are not original. First,

³ We note, however, that a mere shift in medium, without more, is generally insufficient to satisfy the requirement of originality for copyright in a derivative work.

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they claim that the photos are intended to serve the “purely utilitarian function” of identifying products for consumers. The purpose of the photographs, however, is irrelevant. See *Bleistein v. Donaldson Lithographing Co.*, 188 U.S. 239, 251-52 (1903).

[11] The defendants’ second and more substantial argument is that it is not enough that Schrock’s photographs might pass the ordinary test for originality; they claim that as derivative works, the photos are subject to a higher standard of originality. A leading copyright commentator disagrees. The Nimmer treatise maintains that the quantum of originality required for copyright in a derivative work is the same as that required for copyright in any other work. See 1 NIMMER ON COPYRIGHT § 3.01, at 3-2, § 3.03[A], at 3-7. More particularly, Nimmer says the relevant standard is whether a derivative work contains a “nontrivial” variation from the preexisting work “sufficient to render the derivative work distinguishable from [the] prior work in any meaningful manner.” *Id.* § 3.03[A], at 3-10. The caselaw generally follows this formulation.

[12] Learning Curve and HIT argue that our decision in *Gracen* established a more demanding standard of originality for derivative works. *Gracen* involved an artistic competition in which artists were invited to submit paintings of the character Dorothy from the Metro-Goldwyn-Mayer (“MGM”) movie *The Wizard of Oz*. Participating artists were given a still photograph of Dorothy from the film as an exemplar, and the paintings were solicited and submitted with the understanding that the best painting would be chosen for a series of collector’s plates. Plaintiff Gracen prevailed in the competition, but she refused to sign the contract allowing her painting to be used in the collector’s plates. The competition sponsor commissioned another artist to create a similar plate, and Gracen sued the sponsor, MGM, and the artist for copyright infringement. We held that Gracen could not maintain her infringement suit because her painting, a derivative work, was not “substantially different from the underlying work to be copyrightable.” ...

[13] The concern expressed in *Gracen* was that a derivative work could be so similar in appearance to the underlying work that in a subsequent infringement suit brought by a derivative author, it would be difficult to separate the original elements of expression in the derivative and underlying works in order to determine whether one derivative work infringed another. The opinion offered the example of artists A and B who both painted their versions of the Mona Lisa, a painting in the public domain. “[I]f the difference between the original and A’s reproduction is slight, the difference between A’s and B’s reproductions will also be slight, so that if B had access to A’s reproductions the trier of fact will be hard-pressed to decide whether B was copying A or copying the Mona Lisa itself.” *Id.* [at 304.]

[14] No doubt this concern is valid. But nothing in the Copyright Act suggests that derivative works are subject to a more exacting originality requirement than other works of authorship. Indeed, we have explained since *Gracen* that the only “originality” required for a new work to be copyrightable is enough expressive variation from public-domain or other existing works to enable the new work to be readily distinguished from its predecessors. We emphasized ... that this standard does not require a high degree of incremental originality.

[15] [We make clear] the following general principles: (1) the originality requirement for derivative works is not more demanding than the originality requirement for other works; and (2) the key inquiry is whether there is sufficient nontrivial expressive variation in the derivative work to make it distinguishable from the underlying work in some meaningful way. This focus on the presence of nontrivial “distinguishable variation” adequately captures the concerns articulated in *Gracen* without unduly narrowing the copyrightability of derivative works. It is worth repeating that the copyright in a derivative work is thin, extending only to the incremental original expression contributed by the author of the derivative work.

[16] As applied to photographs, we have already explained that the original expression in a photograph generally subsists in its rendition of the subject matter. If the photographer’s rendition of a copyrighted work varies enough from the underlying work to enable the photograph to be distinguished from the underlying work

(aside from the obvious shift from three dimensions to two), then the photograph contains sufficient incremental originality to qualify for copyright. Schrock’s photos of the “Thomas & Friends” toys are highly accurate product photos but contain minimally sufficient variation in angle, perspective, lighting, and dimension to be distinguishable from the underlying works; they are not slavish copies. Accordingly, the photos qualify for the limited derivative-work copyright provided by § 103(b). However narrow that copyright might be, it at least protects against the kind of outright copying that occurred here....

[17] To be copyrightable, a derivative work must not be infringing. See 17 U.S.C. § 103(a)....

[18] [T]here is nothing in the Copyright Act requiring the author of a derivative work to obtain permission to copyright his work from the owner of the copyright in the underlying work. To the contrary, the Act provides that copyright in a derivative work, like copyright in any other work, arises by operation of law once the author’s original expression is fixed in a tangible medium. “Copyright protection subsists ... in original works of authorship fixed in any tangible medium of expression,” 17 U.S.C. § 102(a), and “[t]he subject matter of copyright ... includes ... derivative works,” *id.* § 103(a). “Copyright in a work protected under this title vests initially in the author or authors of the work.” *Id.* § 201(a)....

[19] ... [B]ecause the owner of a copyrighted work has the exclusive right to control the preparation of derivative works, the owner could limit the derivative-work author’s intellectual-property rights in the contract, license, or agreement that authorized the production of the derivative work....

[20] In this case, the evidence submitted with the summary-judgment motion does not establish as a matter of law that the parties adjusted Schrock’s rights by contract [F]urther development of the record might resolve the remaining liability questions as a matter of law. It is undisputed that Schrock was authorized to photograph the “Thomas & Friends” toys, and as the creator of the photos, Schrock’s copyright arose by operation of law. We cannot tell, however, whether the parties altered this default rule in their agreements....

[21] Learning Curve argues in the alternative that Schrock granted it an unlimited license to use his photos, but on this issue the record is also ambiguous. We leave it to the district court to sort out [these issues].

NOTES

1. The court here assumes without deciding that photographs can qualify as derivative works. Can you think of reasons why photographs might qualify as derivative works? Can you think of reasons why they might not?



Figure 15: Gracen’s painting (left) and Judy Garland in *The Wizard of Oz* Movie (right)

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2. The court discusses *Gracen v. Bradford Exchange*, 698 F.2d 300 (7th Cir. 1983), at length. Consider plaintiff Jorie Gracen’s painting of Dorothy as played by Judy Garland in *The Wizard of Oz* movie, shown on the left in Figure 15. The painting is not of any particular scene that actually appears in the movie. Consider also a still photograph from the film of Judy Garland, shown on the right in Figure 15. Does Gracen’s painting meet *Schrock*’s originality standard? Should it?

3. We return to consider derivative works in the context of a copyright owner’s exclusive right to prepare derivative works based on the owner’s work (Chapter V). In that context, we also consider whether the rights to derivative works are more properly vested in the creator of the underlying work or subsequent creators.

2. Compilations

Just as the statute says nothing about the threshold of originality required of a derivative work, the statute is silent on the threshold of originality required of a compilation. We return to the *Feist* decision to explore how to assess the originality of compilations.

Does the Court think that compilations of facts can be copyrightable? To what extent? Will the protection offered, if any, be thick or thin?

Feist Publications, Inc. v. Rural Telephone Service Co.

499 U.S. 340 (1991)

O’CONNOR, J.: ...

[1] The mere fact that a work is copyrighted does not mean that every element of the work may be protected. Originality remains the sine qua non of copyright; accordingly, copyright protection may extend only to those components of a work that are original to the author. Thus, if the compilation author clothes facts with an original collocation of words, he or she may be able to claim a copyright in this written expression. Others may copy the underlying facts from the publication, but not the precise words used to present them.... Where the compilation author adds no written expression but rather lets the facts speak for themselves, the expressive element is more elusive. The only conceivable expression is the manner in which the compiler has selected and arranged the facts. Thus, if the selection and arrangement are original, these elements of the work are eligible for copyright protection.... No matter how original the format, however, the facts themselves do not become original through association.

[2] This inevitably means that the copyright in a factual compilation is thin. Notwithstanding a valid copyright, a subsequent compiler remains free to use the facts contained in another’s publication to aid in preparing a competing work, so long as the competing work does not feature the same selection and arrangement....

[3] The definition of “compilation” is found in § 101 of the 1976 Act. It defines a “compilation” in the copyright sense as “a work formed by the collection and assembling of preexisting materials or of data *that* are selected, coordinated, or arranged *in such a way that* the resulting work as a whole constitutes an original work of authorship” (emphasis added).

[4] The purpose of the statutory definition is to emphasize that collections of facts are not copyrightable *per se*. It conveys this message through its tripartite structure, as emphasized above by the italics. The statute identifies three distinct elements and requires each to be met for a work to qualify as a copyrightable

compilation: (1) the collection and assembly of pre-existing material, facts, or data; (2) the selection, coordination, or arrangement of those materials; and (3) the creation, by virtue of the particular selection, coordination, or arrangement, of an “original” work of authorship....

[5] The third requirement is ... illuminating. It emphasizes that a compilation, like any other work, is copyrightable only if it satisfies the originality requirement Although § 102 states plainly that the originality requirement applies to all works, the point was emphasized with regard to compilations to ensure that courts would not repeat the mistake of the “sweat of the brow” courts by concluding that fact-based works are treated differently and measured by some other standard.

[6] The key to the statutory definition is the second requirement. It instructs courts that, in determining whether a fact-based work is an original work of authorship, they should focus on the manner in which the collected facts have been selected, coordinated, and arranged. This is a straightforward application of the originality requirement. Facts are never original, so the compilation author can claim originality, if at all, only in the way the facts are presented. To that end, the statute dictates that the principal focus should be on whether the selection, coordination, and arrangement are sufficiently original to merit protection.

[7] Not every selection, coordination, or arrangement will pass muster. This is plain from the statute. It states that, to merit protection, the facts must be selected, coordinated, or arranged “in such a way” as to render the work as a whole original. This implies that some “ways” will trigger copyright, but that others will not....

[8] ... [H]owever, the originality requirement is not particularly stringent. A compiler may settle upon a selection or arrangement that others have used; novelty is not required. Originality requires only that the author make the selection or arrangement independently (i.e., without copying that selection or arrangement from another work), and that it display some minimal level of creativity. Presumably, the vast majority of compilations will pass this test, but not all will. There remains a narrow category of works in which the creative spark is utterly lacking or so trivial as to be virtually nonexistent. Such works are incapable of sustaining a valid copyright.

[9] Even if a work qualifies as a copyrightable compilation, it receives only limited protection. This is the point of § 103 of the Act. Section 103 explains that “[t]he subject matter of copyright ... includes compilations,” § 103(a), but that copyright protects only the author’s original contributions—not the facts or information conveyed

[10] As § 103 makes clear, copyright is not a tool by which a compilation author may keep others from using the facts or data he or she has collected.... Rather, the facts contained in existing works may be freely copied because copyright protects only the elements that owe their origin to the compiler—the selection, coordination, and arrangement of facts....

[11] There is no doubt that Feist took from the white pages of Rural’s directory a substantial amount of factual information. At a minimum, Feist copied the names, towns, and telephone numbers of 1,309 of Rural’s subscribers....

[12] The question is whether Feist, by taking 1,309 names, towns, and telephone numbers from Rural’s white pages, cop[ied] anything that was “original” to Rural? Certainly, the raw data does not satisfy the originality requirement. Rural may have been the first to discover and report the names, towns, and telephone numbers of its subscribers, but this data does not “ow[e] its origin” to Rural. *Burrow-Giles*, 111 U.S. at 58. Rather, these bits of information are uncopyrightable facts; they existed before Rural reported them and would have continued to exist if Rural had never published a telephone directory....

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[13] The question that remains is whether Rural selected, coordinated, or arranged these uncopyrightable facts in an original way.... [T]he selection and arrangement of facts cannot be so mechanical or routine as to require no creativity whatsoever. The standard of originality is low, but it does exist....

[14] The selection, coordination, and arrangement of Rural's white pages do not satisfy the minimum constitutional standards for copyright protection. As mentioned at the outset, Rural's white pages are entirely typical. Persons desiring telephone service in Rural's service area fill out an application and Rural issues them a telephone number. In preparing its white pages, Rural simply takes the data provided by its subscribers and lists it alphabetically by surname. The end product is a garden-variety white pages directory, devoid of even the slightest trace of creativity.

[15] Rural's selection of listings could not be more obvious: It publishes the most basic information—name, town, and telephone number—about each person who applies to it for telephone service. This is "selection" of a sort, but it lacks the modicum of creativity necessary to transform mere selection into copyrightable expression. Rural expended sufficient effort to make the white pages directory useful, but insufficient creativity to make it original....

[16] Nor can Rural claim originality in its coordination and arrangement of facts. The white pages do nothing more than list Rural's subscribers in alphabetical order. This arrangement may, technically speaking, owe its origin to Rural; no one disputes that Rural undertook the task of alphabetizing the names itself. But there is nothing remotely creative about arranging names alphabetically in a white pages directory. It is an age-old practice, firmly rooted in tradition and so commonplace that it has come to be expected as a matter of course. It is not only unoriginal, it is practically inevitable. This time-honored tradition does not possess the minimal creative spark required by the Copyright Act and the Constitution.

[17] We conclude that the names, towns, and telephone numbers copied by Feist were not original to Rural and therefore were not protected by the copyright in Rural's combined white and yellow pages directory....

NOTES

1. In the wake of *Feist*, Congress proposed various bills to protect databases more comprehensively, although none of them passed into law. See, e.g., Database and Collections of Information Misappropriation Act, H.R. 3261, 108th Cong. (2003) (proposing the "prohibit[ion of] the misappropriation of certain databases"); Database Investment and Intellectual Property Antipiracy Act of 1996, H.R. 3531, 104th Cong. (1996) (proposing a statutory amendment "to promote investment and prevent intellectual property piracy with respect to databases"). Those bills generally relied on the Commerce Clause for their authority because the Copyright and Patent Clause had been ruled off-limits by *Feist* for noncreative databases. For differing views about whether Congress has authority to enact database protection laws post-*Feist*, compare Jane C. Ginsburg, *No "Sweat"?: Copyright and Other Protection of Works of Information after Feist v. Rural Telephone*, 92 COLUM. L. REV. 338 (1992), with Jeanne C. Fromer, *The Intellectual Property Clause's External Limitations*, 61 DUKE L.J. 1329 (2012). Are there other ways to protect databases if not through federal laws?

Regardless of constitutional authority, is it good policy to protect databases from copying? The European Union thinks so. In 1996, it adopted a Database Directive that gives *sui generis* protection, with some exception, to "the maker of a database which shows that there has been qualitatively and/or quantitatively a substantial investment in either the obtaining, verification or presentation of the contents to prevent extraction and/or re-utilization of the whole or of a substantial part, evaluated qualitatively and/or quantitatively, of the contents of that database." Directive 96/9, of the European Parliament and of the Council of 11 March 1996 on the Legal Protection of Databases, 1996 O.J. (L 77) 20, 25 (EC). Additionally, in 2016, Congress itself enacted the Defend

Trade Secrets Act, which provides federal civil remedies for the misappropriation of trade secrets, much like state laws long have. Databases maintained as trade secrets thus now have some form of federal protection.

That said, there are continuing doubts about the wisdom of database protection. In 2005, the European Union conducted a study of its 1996 rule granting protection to databases. The study concluded that the economic impact of the new protections was “unproven,” and that, although the new rule “was introduced to stimulate the production of databases in Europe, the new instrument has had no proven impact on the production of databases.” Indeed, by 2004, database production in the European Union had fallen below 1998 levels, which was just before the EU rule took effect across the entire community. In other words, the implementation of the new protection against copying correlated with a decline in production, not an increase. And, perhaps more significant, the European Union’s share of the global database market has stagnated. In 1992, about 26% of all online databases were produced by European firms, while about 60% were of North American origin. By 2005, North American production had swelled to approximately 70% of the global total. The European Union’s share had barely budged, and, by some measures, had even declined slightly. In essence, while database production in the United States and Canada (which, like the United States, lacks protection for fact-based databases) has continued to grow, database production in the European Union has stayed at best constant, and more likely has slowed a bit.

2. Consider whether different aspects of West’s case reporters (as exemplified in Figure 16) are protectable by copyright: (a) the text of a case opinion; (b) the facts about a case (such as the party names, the court, and an opinion date); (c) the case headnotes; (d) the page numbers; and (e) the compilation of all of this material. West has sued others for using its “star pagination,” pagination keyed to West’s case reporters. In one pre-*Feist* decision, it won its claim to copyright protection. *West Publishing Co. v. Mead Data Central, Inc.* 799 F.2d 1219 (8th Cir. 1986). In another decision, this time post-*Feist*, it lost. *Matthew Bender & Co. v. West Pub. Co.*, 158 F.3d 693 (2d Cir. 1998). Does West have an argument to victory post-*Feist*? What competitive interests are at stake in protecting or denying protection to West for its pagination? Were similar interests at stake in *Feist*?

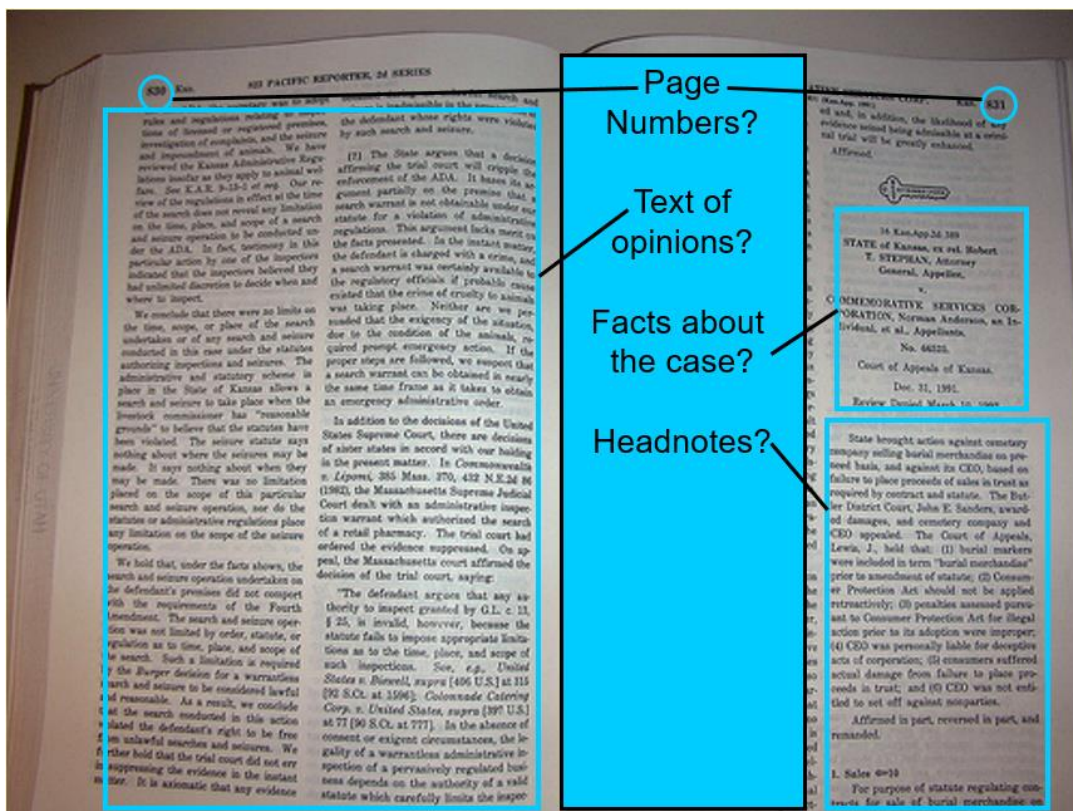


Figure 16: West case reporter

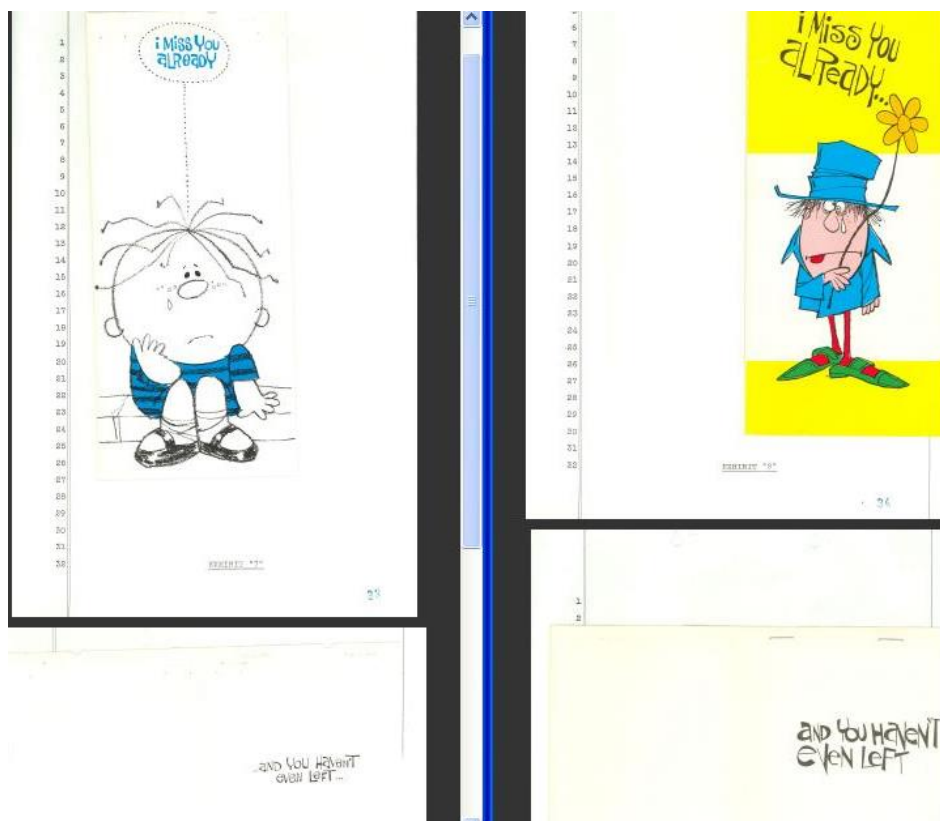


Figure 17: Roth Greeting Card card (left) and United Card Co. card (right)

3. Is a greeting card, like the one shown in Figure 17 on the left, copyrightable? Consider first whether the text and artwork are each independently copyrightable. If not (or even if so), are they altogether copyrightable as a compilation? In a suit by Roth Greeting Cards, maker of this card, against United Card Co. (maker of the card in the same figure on the right), the Ninth Circuit concluded that “[c]onsidering all of these elements together, th[is] card[is] ... both original and copyrightable.” *Roth Greeting Cards v. United Card Co.*, 429 F.2d 1106, 1109 (9th Cir. 1970). *Is Roth* good law after *Feist*?

Should we treat this type of work as a compilation? Or something else? If this greeting card qualifies as a compilation, can you imagine a work that would not?

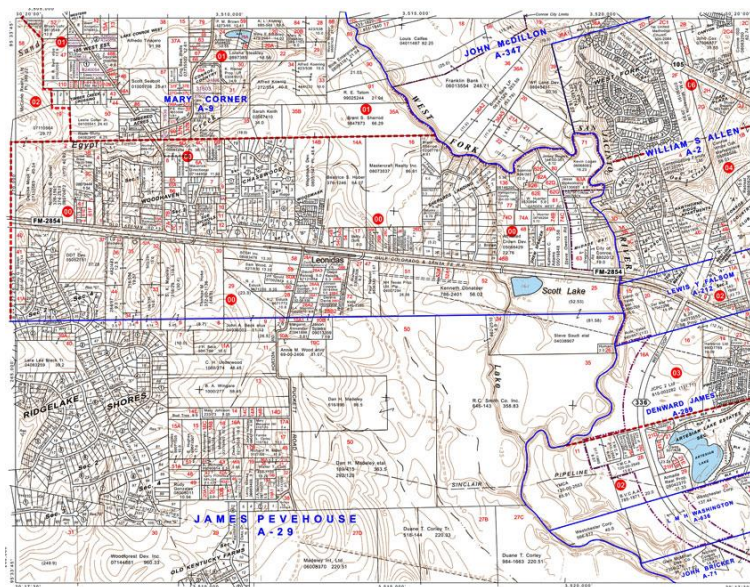


Figure 18: sample county real estate ownership map

4. Consider a real estate ownership map that covers a county and pictorially shows the location, size, and shape of surveys; land grants; tracts; and various topological features within the county. Numbers and words on the map identify deeds, abstract numbers, acreage, and owners. A sample map excerpt is shown in Figure 18. The map creator assembled this information from county tax, deed, and survey records; river authority data; state survey records, maps and abstracts of land titles; other title and subdivision information; and city and national maps. What evidence might the map creator cite to show that this work is original? Might this map be protectable as a compilation? Or some other type of work? For the Fifth Circuit’s take on this issue, see *Mason v. Montgomery Data, Inc.*, 967 F.2d 135 (5th Cir. 1992).

5. In its *Compendium of U.S. Copyright Office Practices*, the Copyright Office states that “the Office generally will not register a compilation containing only two or three elements, because the selection is necessarily *de minimis*.” § 312.2. To support this rule, the Copyright Office cites the legislative history leading up to the 1976 Act: The House of Representatives Report observes that a work “where relatively few separate elements have been brought together,” such as “a composition consisting of words and music, a work published with illustrations or front matter, or three one-act plays,” would not be considered a collective work. H.R. REP. NO. 1476, 94th Cong., 2d Sess. 47, at 122 (1976). Does the statutory definition of “compilation” or “collective work” justify or cut against the legislative history (or the Copyright Office’s understanding)? How would Roth Greeting Cards and Mason each fare under the Copyright Office rule? As a matter of policy, does the Copyright Office’s rule make sense?

6. Consider what makes the selection, coordination, or arrangement of data original. In a Sixth Circuit case alleging copyright infringement of an automobile transmissions catalog with illustrations and a numbering system for transmission parts, the court held that the catalog is not protectable as an original compilation of data. *ATC Distribution Grp., Inc. v. Whatever It Takes Transmissions & Parts, Inc.*, 402 F.3d 700 (6th Cir. 2005). The court reasoned that the selection of data on transmission parts could not supply the requisite creativity because “ATC included in its catalog every transmission part available.” As to the arrangement of this data, the court reasoned that even though “the creativity bar has been set extremely low,” the catalog at issue “does not even have this minimal level of creativity, ... because the only aspect of the catalog that differs from [a previous transmissions] catalog is the choice of headings and arrangement of the parts into categories—two minor differences that [are] insufficiently creative to justify copyright protection.” Even if this sequence of information were new to the industry, the court reasoned that so long as it is “typical, if not inevitable,” it lacks the requisite degree of creativity. By contrast, in a case involving a guide to used car values, the Second Circuit held that “the fact that an arrangement of data responds *logically* to the needs of the market for which the compilation was prepared does not negate originality. To the contrary, the use of logic to solve the problems of how best to present the information being compiled is independent creation.” *CCC Info. Servs., Inc. v. Maclean Hunter Mkt. Reports, Inc.*, 44 F.3d 61, 67 (2d Cir. 1994). The court proceeded to find originality in this compilation because it divided the used car market into geographical regions, selected optional features for inclusion, adjusted for mileage in 5,000-mile increments, used the abstract concept of the “average vehicle” in each category as the subject of valuation, and decided how many years’ models to include in the guide. How do you think the logic of selecting and arranging data should affect the determination of originality? As you read the next section about copyright’s idea-expression distinction, think back and ask yourself whether *ATC* or *CCC* represents the better understanding of the scope of copyrightable subject matter.

D. Idea-Expression Distinction

The copyrightability requirements we have looked at thus far in § 102(a) set out affirmative requirements. In contrast, § 102(b)’s withdrawal of protection for certain elements of works is expressed as a limitation on the scope of copyright protection:

Chapter II – Subject Matter

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.

This section makes clear that copyright law does not protect ideas, procedures, and so forth. However, ideas and the like must be expressed in some way, and the *expression* of an idea is protected matter. Section 102(b) thus sets up a distinction between protectable expression and unprotectable ideas, which has come to be known as the “idea-expression distinction.” The idea-expression distinction is shorthand for the entire list of matter that section 102(b) states lies outside the scope of copyright, including procedures, processes, systems, methods of operation, concepts, principles, and discoveries, not just ideas. In enacting this provision in the 1976 Act, the legislative history emphasizes that § 102(b) is meant to codify common law development of the idea-expression distinction. H.R. REP. NO. 1476, 94th Cong., 2d Sess. 47, at 57 (1976).

In this section, we will consider three opinions, each of which help us get at a form of the idea-expression distinction: the **process-expression distinction**, the **idea-expression distinction**, and the **historical fact-expression distinction**, respectively. The policies underlying a denial of protection for each of these three categories are somewhat distinct. That said, underpinning the idea-expression distinction generally is a judgment that ideas, processes, facts, and the like ought to be in the public domain. As one of us has written, “the basic building blocks of expression ought to be left freely available for anyone to use. It would be both inefficient and unfair to grant rights in these basic components that so many authors will need just because one person happened to employ them first. Doing otherwise would ultimately be detrimental to generating a robust body of authored works.” Jeanne C. Fromer, *An Information Theory of Copyright Law*, 64 EMORY L.J. 71, 98 (2014).

1. Process-Expression Distinction

The following case is considered the foundational case on the idea-expression distinction. Yet it might be better addressed to a process-expression distinction. As you read this case, consider—in addition to the policy just discussed—whether there are any other reasons copyright law might prefer to exclude from protection procedures, processes, systems, and methods of operation. Also, is everything about Selden’s work unprotectable by copyright law? By other laws?

W.C.M. Baker v. Charles Selden

101 U.S. 99 (1879)

BRADLEY, J.:

[1] Charles Selden, the testator of the complainant in this case, in the year 1859 took the requisite steps for obtaining the copyright of a book, entitled “Selden’s Condensed Ledger, or Book-keeping Simplified,” the object of which was to exhibit and explain a peculiar system of book-keeping. In 1860 and 1861, he took the copyright of several other books, containing additions to and improvements upon the said system. The bill of complaint was filed against the defendant, Baker, for an alleged infringement of these copyrights. The latter, in his answer, denied that Selden was the author or designer of the books, and denied the infringement charged, and contends on the argument that the matter alleged to be infringed is not a lawful subject of copyright....

CONDENSED LEDGER.											
Brought forw'd.		DISTRIBUTION.		AGGREGATES OF ACCOUNTS. MONDAY MORNING, DECEMBER 1, 1860.				TOTALS.		BALANCES.	
DR.	CR.	DR.	CR.	DR.	SUNDRIES TO	SUNDRIES.	CR.	DR.	CR.	DR.	CR.
				55 00	TREASURER.		50 00				
					Dr.	Cr.					
					\$	\$					
				20 00	County Fund.....		10 00				
				10 00	Bridge Fund.....		15 00				
				10 00	County Infirmary.....		10 00				
				10 00	Building Fund.....		10 00				
				10 00	Interest Fund.....		20 00				
				5 00	Bond Fund.....						
					Refunders.....						
					Belongings.....		2 00				
					Tax Outlets.....		1 00				
					State Liens.....		2 00				
					Duplicates.....						
					Shaw Liens.....						
					State Fund.....						
					School Fund.....						
					Corporation Fund.....						
					Township Fund.....						
					Treasurer's Fund.....						
				128 00	Carried Forward.....		128 00				

<p style="text-align: center;">FLOATING ORDERS.</p> <p style="text-align: center;">COUNTY FUND.</p> <table style="width: 100%; border-collapse: collapse;"> <tr><td>Sept. 4</td><td>1</td><td>I. West.....</td><td style="text-align: right;">1 00</td></tr> <tr><td>10</td><td>4</td><td>F. East.....</td><td style="text-align: right;">1 25</td></tr> <tr><td>25</td><td>10</td><td>J. Bell.....</td><td style="text-align: right;">2 50</td></tr> <tr><td>Oct. 4</td><td>25</td><td>M. Bert.....</td><td style="text-align: right;">75</td></tr> <tr><td>11</td><td>25</td><td>T. Hanks.....</td><td style="text-align: right;">1 25</td></tr> <tr><td>25</td><td>25</td><td>O. Wells.....</td><td style="text-align: right;">1 50</td></tr> <tr><td>Nov. 2</td><td>40</td><td>F. Jones.....</td><td style="text-align: right;">1 75</td></tr> <tr><td>15</td><td>00</td><td>L. Iron.....</td><td style="text-align: right;">75</td></tr> <tr><td>25</td><td>05</td><td>N. Thoms.....</td><td style="text-align: right;">1 25</td></tr> <tr><td></td><td></td><td></td><td style="text-align: right;">12 00</td></tr> </table>	Sept. 4	1	I. West.....	1 00	10	4	F. East.....	1 25	25	10	J. Bell.....	2 50	Oct. 4	25	M. Bert.....	75	11	25	T. Hanks.....	1 25	25	25	O. Wells.....	1 50	Nov. 2	40	F. Jones.....	1 75	15	00	L. Iron.....	75	25	05	N. Thoms.....	1 25				12 00	<p>A. B., Esq., Auditor of County,</p> <p>Sir:</p> <p>I herewith certify that the above aggregates of accounts, and the annexed lists of Floating Orders are correct at the expiration of my official term.</p> <p>Respectfully, E. P., Law Auditor.</p>	<p style="text-align: center;">FLOATING ORDERS.</p> <p style="text-align: center;">BRIDGE FUND.</p> <table style="width: 100%; border-collapse: collapse;"> <tr><td>Oct. 20</td><td>15</td><td>W. Bell.....</td><td style="text-align: right;">10 00</td></tr> </table> <p style="text-align: center;">COUNTY INFIRMARY.</p> <table style="width: 100%; border-collapse: collapse;"> <tr><td>Nov. 10</td><td>6</td><td>O. Orr.....</td><td style="text-align: right;">10 00</td></tr> </table>	Oct. 20	15	W. Bell.....	10 00	Nov. 10	6	O. Orr.....	10 00
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Figure 19: page from *Selden's Condensed Ledger*

[2] The book or series of books of which the complainant claims the copyright consists of an introductory essay explaining the system of book-keeping referred to, to which are annexed certain forms or blanks, consisting of ruled lines, and headings, illustrating the system and showing how it is to be used and carried out in practice. This system effects the same results as book-keeping by double entry; but, by a peculiar arrangement of columns and headings, presents the entire operation, of a day, a week, or a month, on a single page, or on two pages facing each other, in an account-book. The defendant uses a similar plan so far as results are concerned; but makes a different arrangement of the columns, and uses different headings. If the complainant's testator had the exclusive right to the use of the system explained in his book, it would be difficult to contend that the defendant does not infringe it, notwithstanding the difference in his form of arrangement; but if it be assumed that the system is open to public use, it seems to be equally difficult to contend that the books made and sold by the defendant are a violation of the copyright of the complainant's book considered merely as a book explanatory of the system. Where the truths of a science or the methods of an art are the common property of the whole world, any author has the right to express the one, or explain and use the other, in his own way. As an author, Selden explained the system in a particular way. It may be conceded that Baker makes and uses

Chapter II – Subject Matter

account-books arranged on substantially the same system; but the proof fails to show that he has violated the copyright of Selden's book, regarding the latter merely as an explanatory work; or that he has infringed Selden's right in any way, unless the latter became entitled to an exclusive right in the system.

[3] The evidence of the complainant is principally directed to the object of showing that Baker uses the same system as that which is explained and illustrated in Selden's books. It becomes important, therefore, to determine whether, in obtaining the copyright of his books, he secured the exclusive right to the use of the system or method of book-keeping which the said books are intended to illustrate and explain. It is contended that he has secured such exclusive right, because no one can use the system without using substantially the same ruled lines and headings which he was appended to his books in illustration of it. In other words, it is contended that the ruled lines and headings, given to illustrate the system, are a part of the book, and, as such, are secured by the copyright; and that no one can make or use similar ruled lines and headings, or ruled lines and headings made and arranged on substantially the same system, without violating the copyright. And this is really the question to be decided in this case. Stated in another form, the question is, whether the exclusive property in a system of book-keeping can be claimed, under the law or copyright, by means of a book in which that system is explained? ...

[4] There is no doubt that a work on the subject of book-keeping, though only explanatory of well-known systems, may be the subject of a copyright; but, then, it is claimed only as a book. Such a book may be explanatory either of old systems, or of an entirely new system; and, considered as a book, as the work of an author, conveying information on the subject of book-keeping, and containing detailed explanations of the art, it may be a very valuable acquisition to the practical knowledge of the community. But there is a clear distinction between the book, as such, and the art which it is intended to illustrate. The mere statement of the proposition is so evident, that it requires hardly any argument to support it. The same distinction may be predicated of every other art as well as that of book-keeping. A treatise on the composition and use of medicines, be they old or new; on the construction and use of ploughs, or watches, or churns; or on the mixture and application of colors for painting or dyeing; or on the mode of drawing lines to produce the effect of perspective—would be the subject of copyright; but no one would contend that the copyright of the treatise would give the exclusive right to the art or manufacture described therein. The copyright of the book, if not pirated from other works, would be valid without regard to the novelty, or want of novelty, of its subject-matter. The novelty of the art or thing described or explained has nothing to do with the validity of the copyright. To give to the author of the book an exclusive property in the art described therein, when no examination of its novelty has ever been officially made, would be a surprise and a fraud upon the public. That is the province of letters-patent, not of copyright. The claim to an invention or discovery of an art or manufacture must be subjected to the examination of the Patent Office before an exclusive right therein can be obtained; and it can only be secured by a patent from the government.

[5] The difference between the two things, letters-patent and copyright, may be illustrated by reference to the subjects just enumerated. Take the case of medicines. Certain mixtures are found to be of great value in the healing art. If the discoverer writes and publishes a book on the subject (as regular physicians generally do), he gains no exclusive right to the manufacture and sale of the medicine; he gives that to the public. If he desires to acquire such exclusive right, he must obtain a patent for the mixture as a new art, manufacture, or composition of matter. He may copyright his book, if he pleases; but that only secures to him the exclusive right of printing and publishing his book. So of all other inventions or discoveries.

[6] The copyright of a book on perspective, no matter how many drawings and illustrations it may contain, gives no exclusive right to the modes of drawing described, though they may never have been known or used before. By publishing the book, without getting a patent for the art, the latter is given to the public. The fact that the art described in the book by illustrations of lines and figures which are reproduced in practice in the application of the art, makes no difference. Those illustrations are the mere language employed by the author to convey

his ideas more clearly. Had he used words of description instead of diagrams (which merely stand in the place of words), there could not be the slightest doubt that others, applying the art to practical use, might lawfully draw the lines and diagrams which were in the author's mind, and which he thus described by words in his book.

[7] The copyright of a work on mathematical science cannot give to the author an exclusive right to the methods of operation which he propounds, or to the diagrams which he employs to explain them, so as to prevent an engineer from using them whenever occasion requires. The very object of publishing a book on science or the useful arts is to communicate to the world the useful knowledge which it contains. But this object would be frustrated if the knowledge could not be used without incurring the guilt of piracy of the book. And where the art it teaches cannot be used without employing the methods and diagrams used to illustrate the book, or such as are similar to them, such methods and diagrams are to be considered as necessary incidents to the art, and given therewith to the public; not given for the purpose of publication in other works explanatory of the art, but for the purpose of practical application....

[8] Of course, these observations are not intended to apply to ornamental designs, or pictorial illustrations addressed to the taste. Of these it may be said, that their form is their essence, and their object, the production of pleasure in their contemplation. This is their final end. They are as much the product of genius and the result of composition, as are the lines of the poet or the historian's period. On the other hand, the teachings of science and the rules and methods of useful art have their final end in application and use; and this application and use are what the public derive from the publication of a book which teaches them. But as embodied and taught in a literary composition or book, their essence consists only in their statement. This alone is what is secured by the copyright. The use by another of the same methods of statement, whether in words or illustrations, in a book published for teaching the art, would undoubtedly be an infringement of the copyright.

[9] ... Charles Selden, by his books, explained and described a peculiar system of book-keeping, and illustrated his method by means of ruled lines and blank columns, with proper headings on a page, or on successive pages. Now, whilst no one has a right to print or publish his book, or any material part thereof, as a book intended to convey instruction in the art, any person may practise and use the art itself which he has described and illustrated therein. The use of the art is a totally different thing from a publication of the book explaining it. The copyright of a book on book-keeping cannot secure the exclusive right to make, sell, and use account-books prepared upon the plan set forth in such book. Whether the art might or might not have been patented, is a question which is not before us. It was not patented, and is open and free to the use of the public. And, of course, in using the art, the ruled lines and headings of accounts must necessarily be used as incident to it.

[10] The plausibility of the claim put forward by the complainant in this case arises from a confusion of ideas produced by the peculiar nature of the art described in the books which have been made the subject of copyright. In describing the art, the illustrations and diagrams employed happen to correspond more closely than usual with the actual work performed by the operator who uses the art. Those illustrations and diagrams consist of ruled lines and headings of accounts; and it is similar ruled lines and headings of accounts which, in the application of the art, the book-keeper makes with his pen, or the stationer with his press; whilst in most other cases the diagrams and illustrations can only be represented in concrete forms of wood, metal, stone, or some other physical embodiment. But the principle is the same in all. The description of the art in a book, though entitled to the benefit of copyright, lays no foundation for an exclusive claim to the art itself. The object of the one is explanation; the object of the other is use. The former may be secured by copyright. The latter can only be secured, if it can be secured at all, by letters-patent....

[11] The conclusion to which we have come is, that blank account-books are not the subject of copyright; and that the mere copyright of Selden's book did not confer upon him the exclusive right to make and use account-books, ruled and arranged as designated by him and described and illustrated in said book....

NOTES

1. For an in-depth consideration of how Congress codified *Baker* in § 102(b), see Pamela Samuelson, *Why Copyright Law Excludes Systems and Processes from the Scope of Its Protection*, 85 TEX. L. REV. 1921 (2007).

2. Is a sequence of twenty-six yoga poses and two breathing exercises, as developed by Bikram Choudhury and described in his 1979 book *Bikram's Beginning Yoga Class*, copyrightable? The book contains descriptions, photographs, and drawings of the sequence's poses and exercises. In a copyright infringement lawsuit over unauthorized use of the sequence in a competitor's yoga classes, the Ninth Circuit held that the sequence is not copyrightable. *Bikram's Yoga Coll. of India, LP v. Evolation Yoga, Inc.*, 803 F.3d 1032 (9th Cir. 2015). It reasoned that the sequence is "a healing art: a system designed to yield physical benefits and a sense of well-being," and that the sequence's claim to "produce spiritual and psychological benefits makes it no less a ... system[] or process." Importantly, the court also thought it irrelevant that the sequence's poses might be beautiful or graceful, particularly because

[t]he performance of many ideas, systems, or processes may be beautiful: a surgeon's intricate movements, a book-keeper's careful notations, or a baker's kneading might each possess a certain grace for at least some viewers. Indeed, from Vermeer's milkmaid to Lewis Hine's power house mechanic, the individual engrossed in a process has long attracted artistic attention. But the beauty of the process does not permit one who describes it to gain, through copyright, the monopolistic power to exclude all others from practicing it. This is true even where, as here, the process was conceived with at least some aesthetic considerations in mind.

3. Is a banana attached to a wall with duct tape, as in Figure 20, protectable by copyright law? Consider whether this is protectable expression or unprotectable idea and whether the merger doctrine plays a role. For an analysis, see *Morford v. Cattelan*, No. 21-20039-Civ-Scola, 2023 WL 3971968 (S.D. Fla. June 12, 2023).



Figure 20: banana duct-taped to wall

4. In what is known as the "blank form" doctrine, the Copyright Office has specified it will not register

Blank forms, such as time cards, graph paper, account books, diaries, bank checks, scorecards, address books, report forms, order forms and the like, which are designed for recording information and do not in themselves convey information.

37 C.F.R. § 202.1(c). Does the Copyright Office's rule follow from *Baker*? Can you think of any blank forms which should qualify for copyright protection?

5. A critical implication of the idea-expression distinction is the **merger doctrine**. To get a sense of this doctrine, consider *Morrissey v. Proctor & Gamble Co.*, 379 F.2d 675 (1st Cir. 1967). Frank Morrissey owned a copyright in a set of rules for a sweepstakes involving the Social Security numbers of the participants. He sued Proctor & Gamble for copying almost precisely the rules for entry in a sweepstakes contest for Tide detergent. Compare Morrissey’s Rule 1 (left) to Proctor & Gamble’s (right):

1. Entrants should print name, address and social security number on a boxtop, or a plain paper. Entries must be accompanied by ... boxtop or by plain paper on which the name ... is copied from any source. Official rules are explained on .. packages or leaflets obtained from dealer. If you do not have a social security number you may use the name and number of any member of your immediate family living with you. Only the person named on the entry will be deemed an entrant and may qualify for prize.

Use the correct social security number belonging to the person named on entry ... wrong number will be disqualified.

1. Entrants should print name, address and Social Security number on a Tide boxtop, or on (a) plain paper. Entries must be accompanied by Tide boxtop (any size) or by plain paper on which the name 'Tide' is copied from any source. Official rules are available on Tide Sweepstakes packages, or on leaflets at Tide dealers, or you can send a stamped, self-addressed envelope to: Tide 'Shopping Fling' Sweepstakes, P.O. Box 4459, Chicago 77, Illinois.

If you do not have a Social Security number, you may use the name and number of any member of your immediate family living with you. Only the person named on the entry will be deemed an entrant and may qualify for a prize.

Use the correct Social Security number, belonging to the person named on the entry—wrong numbers will be disqualified.

Baker makes clear that copyright protects original expression describing unprotected contest rules. Although the First Circuit held that there was original expression in Morrissey’s rules, it nonetheless denied him copyright protection on them pursuant to the merger doctrine. The court reasoned that when there is “one form of expression, [or] at best only a limited number [of ways to express an idea or system], to permit copyrighting would mean that a party or parties, by copyrighting a mere handful of forms, could exhaust all possibilities of future use of the substance.” Put another way, the limited number of ways to express an idea indicates that the idea has merged with the expression itself. Protecting the expression in such circumstances would effectively provide copyright protection for the idea, something copyright law prohibits. In those circumstances, copyright protection ought to be denied to the expression as well.

Instead of denying protection for expression in these circumstances, some courts instead provide what is called “**thin protection**,” wherein only exact or near-exact copying will be prohibited as infringing. For more on the different ways in which courts understand the merger doctrine, see Pamela Samuelson, *Reconceptualizing Copyright’s Merger Doctrine*, 63 J. COPYRIGHT SOC’Y U.S.A. 417 (2016).

2. Idea-Expression Distinction

Turning now to a case that applies the idea-expression more canonically, consider what particular policy justifications might undergird copyright law's refusal to protect ideas. What is the connection between the idea-expression distinction and merger doctrine in this case?

ATC Distribution Group, Inc. v. Whatever It Takes Transmissions & Parts, Inc.

402 F.3d 700 (6th Cir. 2005)

BOGGS, C.J.:

[1] Appellant, ATC Distribution Group, Inc., appeals the district court's grant of summary judgment in favor of the Appellees. ATC sells transmission parts. One of ATC's employees, Kenny Hester, left ATC to form his own transmission parts company, Whatever It Takes Transmissions ("WITT"). WITT hired away several of ATC's other employees and created a transmission parts catalog that was almost identical to the ATC catalog, on which Hester had worked while he was with ATC. ATC sued WITT and several of its former employees, including Hester, alleging ... intellectual property ... claims. The district court granted summary judgment in favor of WITT and the other defendants on almost all of ATC's claims.... For the reasons set forth below, we affirm the judgment of the district court in its entirety....

[2] ... This case began with the merger of two companies in 1994. ATC Technology Group, ATC's predecessor-in-interest, acquired Hester Transmission Parts ("HTP"), along with ... the right to use HTP's transmission parts catalog, which HTP had originally acquired from McCarty, a printing company. ATC also acquired the services of Kenny Hester ..., who had worked at HTP

[3] Hester eventually left ATC in October 1999 Hester started a new transmission parts distributor, WITT, in Louisville, Kentucky in November 1999....

[4] ... In 1995, ATC first published a transmission parts catalog that Hester had worked on since his days at HTP, a catalog that ATC hoped would become the industry standard. This and subsequent catalogs were distributed throughout the industry. The ATC catalog and the parts numbering system used in the catalog were based on an original catalog and numbering system that McCarty, the printing company, had distributed to several parts wholesalers, each with the wholesaler's own name on it.... After Hester left ATC in 1999, he obtained an electronic copy of the ATC catalog, on which he based a new catalog used by WITT salespeople. According to Hester, no copies of this catalog have ever been distributed outside WITT, but WITT does use many of ATC's part numbers in advertising and in its internal processes.

[5] ATC brought suit against WITT, Hester, and [others] in the United States District Court for the Western District of Kentucky in June 2000, alleging ... copyright infringement (by WITT and Hester), in the form of copying without permission ATC's catalog and the part numbers and illustrations contained in the catalog [among other claims]. All parties moved for summary judgment.

[6] The court granted summary judgment in favor of all named defendants on ATC's claims for copyright infringement

[7] The district court ... agreed that the catalog ... lacked the originality required for copyright protection

[8] ATC argues that its catalog is a creative classification scheme, or taxonomy, which sorts parts into categories and sub-categories, and allocates numbers to each part. Under this theory, the individual part numbers would be protected as the copyrightable expressions of the overall taxonomy....

[9] ATC's parts-classification scheme divides transmission parts into a series of categories and sub-categories. There are three basic categories: brand, transmission type, and type of part. In addition, a suffix field is available to further sub-divide a particular part when appropriate. Within each category, several sub-categories have been created. In the brand category the sub-categories are relatively obvious: the transmissions are listed by manufacturer. In the part category the sub-categories are less obvious, and require decisions such as whether to have a single category of rings, of which some are sealing rings and some are O-rings, or to have two distinct categories, sealing rings and O-rings. Each of the three basic categories and the optional suffix are represented in each part number by a two-digit or three-digit field (with the occasional letter), within which the transmission types or parts are numbered in order, with gaps being left in each sub-category to accommodate new parts in the future. Although all parts within a sub-category are numbered sequentially, the ordering of the sub-categories within a field, or the parts within a sub-category appears to be random. As such, the fact that an "O-ring pump" and an "O-ring pump bolt" are in the same general range of numbers is no accident. But the fact that O-rings in general are numbered in the 300's, and the fact that these two parts are numbered 311 and 312 rather than 341 and 342, are accidental. Each discrete transmission part will have a number that is between five and nine digits and/or letters.

[10] ATC claims that its numbering scheme involves several different types of creativity: (1) deciding what kind of information to convey in part numbers; (2) predicting future developments in the transmission parts industry and deciding how many slots to leave open in a given sub-category to allow for those developments; (3) deciding whether an apparently novel part that does not obviously fit in any of the existing classifications should be assigned a new category of its own or placed in an existing category, and, if the latter, which one; (4) designing the part numbers; and (5) devising the overall taxonomy of part numbers that places the parts into different categories. An example of this last type of creativity would be the decision to include in the catalog entries for "Pressure Plate, Intermediate (Top)" (assigned number 144) and "Pressure Plate, Intermediate (Bottom)" (145), as opposed to using one unitary entry for "Pressure Plate, Intermediate," but adding a suffix to that part number that differentiates between top (1441) and bottom (1442) plates....

[11] Classification schemes can in principle be creative enough to satisfy the originality requirement of copyright protection. See *Am. Dental Ass'n v. Delta Dental Plans Ass'n*, 126 F.3d 977 (7th Cir. 1997) ("Facts do not supply their own principles of organization. Classification is a creative endeavor.... There can be multiple, and equally original, biographies of the same person's life, and multiple original taxonomies of a field of knowledge."). None of ATC's claimed creative endeavors seem particularly creative when compared to a great painting or novel, but the Supreme Court has made clear that only a bare minimum amount of creativity is required to satisfy the constitutional originality requirement. See *Feist*, 499 U.S. at 345. At least some of the decisions made by ATC are arguably non-obvious choices made from among more than a few options.

[12] Original and creative *ideas*, however, are not copyrightable, because 17 U.S.C. § 102(b) provides that "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 [its] form." Section 102(b) codifies the common-law principle that unlike a patent, a copyright gives no exclusive right to the art disclosed; protection is given only to the expression of the idea—not the idea itself. And all of the creative aspects of the ATC classification scheme are just that: ideas. ATC cannot copyright its prediction of how many types of sealing ring will be developed in the future, its judgment that O-rings and sealing rings should form two separate

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categories of parts, or its judgment that a new part belongs with the retainers as opposed to the pressure plates.⁴

[13] The *expression* of ATC's ideas about part classification and the future of the transmission parts market is not barred from copyright protection by the idea-expression distinction. It is barred, however, in part by the "merger doctrine," and in part by the originality requirement. For almost all of the types of creativity claimed by ATC, there is only one reasonable way to express the underlying idea. For example, the only way to express the prediction that a maximum of four additional types of sealing ring might be developed is to leave four numbers unallocated, and the only way to express the idea that a novel part should be placed with the sealing rings rather than with the gaskets is to place that part with the sealing rings. Under the merger doctrine, when there is essentially only one way to express an idea, the idea and its expression are inseparable, and copyright is no bar to copying that expression.

[14] The only aspect of the numbering system that does not merge with the underlying idea is the allocation of numbers to each sub-category, and ultimately to each part. ATC argues that its individual part numbers are copyright protected as expressions of the catalog as a whole, and cites as authority the Seventh Circuit's holding in *American Dental*, which held that the American Dental Association's Code on Dental Procedures and Nomenclature was copyrightable. The Code classified dental procedures into groups, with each procedure receiving a number, a short description, and a long description. For example, number 04267 was assigned to the short description "guided tissue regeneration-nonresorbable barrier, per site, per tooth (includes membrane removal)." The Seventh Circuit held that the numbers assigned to each procedure were copyrightable, in addition to the long and short descriptions of each procedure.

[15] The *American Dental* court's rationale for holding that the individual procedure numbers were copyrightable is rather opaque:

Number 04267 reads "guided tissue regeneration-nonresorbable barrier, per site, per tooth" but could have read "regeneration of tissue, guided by nonresorbable barrier, one site and tooth per entry". Or "use of barrier to guide regeneration of tissue, without regard to the number of sites per tooth and whether or not the barrier is resorbable". The first variation is linguistic, the second substantive; in each case the decision to use the actual description is original to the ADA, not knuckling under to an order imposed on language by some "fact" about dental procedures. Blood is shed in the ADA's committees about which description is preferable. The number assigned to any one of the three descriptions could have had four or six digits rather than five; guided tissue regeneration could have been placed in the 2500 series rather than the 4200 series; again any of these choices is original to the author of a taxonomy, and another author could do things differently. Every number in the ADA's Code begins with zero, assuring a large supply of unused numbers for procedures to be devised or reclassified in the future; an author could have elected instead to leave wide gaps inside the sequence. A catalog that initially assigns 04266, 04267, 04268 to three procedures will over time depart substantively from one that initially assigns 42660, 42670, and 42680 to the same three procedures. So all three elements of the Code-numbers, short descriptions, and long descriptions, are copyrightable subject matter under 17 U.S.C. § 102(a).

Almost all of this passage concerns either the wording of the descriptions, or the creative thought that went into the underlying taxonomy, such as the decision to leave gaps in the numbering system. The discussion of

⁴ As the district court notes, permitting copyright protection for ATC's choice of where in the catalog to locate a new part would be akin to granting copyright protection to a grocer who decides to display a new type of heirloom tomato with the gourmet produce, as opposed to with the other tomatoes or the locally grown produce.

the numbers themselves is limited to two immaterial observations: that numbers in the 4200's rather than the 2500's were assigned to guided tissue regeneration; and that the numbers assigned to a particular procedure in a catalog will differ depending on the prior allocation of numbers to other procedures. Neither of these facts evidences any creativity by the ADA that would render the numbers eligible for copyright protection. The mere fact that numbers are attached to, or are a by-product of categories and descriptions that are copyrightable does not render the numbers themselves copyrightable. See *Southco, Inc. v. Kanebridge Corp.*, 258 F.3d 148 (3d Cir. 2001) ("For purposes of copyright law ... [a] numbering system itself and the actual numbers produced by the system are two very different works," such that even if the underlying system is original and creative, the numbers themselves are not copyrightable unless they are assigned to parts in a creative way).

[16] Even assuming, *arguendo*, that some strings of numbers used to designate an item or procedure could be sufficiently creative to merit copyright protection, the parts numbers at issue in the case before us do not evidence any such creativity. ATC's allocation of numbers to parts was an essentially random process, serving only to provide a useful shorthand way of referring to each part. The only reason that a "sealing ring, pump slide" is allocated number 176 is the random ordering of sub-categories of parts, and the random ordering of parts within that sub-category. Were it not for a series of random orderings within each category field, a given part could be 47165 or 89386. As such, the particular numbers allocated to each part do not express any of the creative ideas that went into the classification scheme in any way that could be considered eligible for copyright protection. These numbers are no more copyrightable than would be the fruit of an author's labors if she wrote a book and then "translated" it into numbers using a random number generator for each letter in every word. Even if the text in English was copyrightable, the randomly generated list of numbers that comprised the "translation" could not be....

[17] As a last resort, ATC suggested during oral argument that even if neither the ideas that gave rise to the parts numbers, nor the individual part numbers, *qua* expressions of those ideas, are copyrightable, the part numbers taken as a whole were somehow copyrightable as a middle ground between the two, much in the same way that while neither the basic idea behind a novel nor the individual words used to write it are protected, the story that those words form when taken together is copyrightable. The flaw in this argument is that there is no such middle ground in this case. Unlike the words that comprise a novel, which add up to a story, the numbers used in ATC's catalog only add up to a long list of numbers. Putting all the numbers together does not make them expressive in the way that putting words together makes a narrative....

NOTES

1. The First Amendment is often cited as a basis for the idea-expression distinction. As the Supreme Court observed in *Feist*, copyright law "assures authors the right to their original expression, but encourages others to build freely upon the ideas and information conveyed by a work." *Feist Publ'ns, Inc. v. Rural Tel. Serv. Co.*, 499 U.S. 340, 349-50 (1991). For an exploration and criticism of this justification vis-à-vis First Amendment values, see Neil Weinstock Netanel, *Locating Copyright Within the First Amendment Skein*, 54 STAN. L. REV. 1 (2001).

2. To assess whether something is an unprotectable idea, one must first specify a work's idea (or ideas). Courts frequently note how difficult it is to distinguish between idea and expression, see, e.g., *Nichols v. Universal Pictures Corp.*, 45 F.2d 119, 121 (2d Cir.1930), and there is little to no guiding doctrine on how to ascertain a work's idea (or ideas). For a rare judicial meditation on this essential issue, consider this reflection on how to ascertain the idea of Peter Kaplan's disturbing photograph, shown in Figure 21:

[W]hat is the "idea" of Kaplan's photograph? Is it (1) a businessman contemplating suicide by jumping from a building, (2) a businessman contemplating suicide by jumping from a building, seen from the vantage point of the businessman, with his shoes set against the street far below,

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or perhaps something more general, such as (3) a sense of desperation produced by urban professional life?

Mannion v. Coors Brewing Co., 377 F. Supp. 2d 444, 456 (S.D.N.Y. 2005). How does the precise articulation of the idea affect copyrightability? The opinion goes on to suggest that one can ascertain the idea of a literary work much more easily than the idea of a photograph or other visual arts. Is that correct?

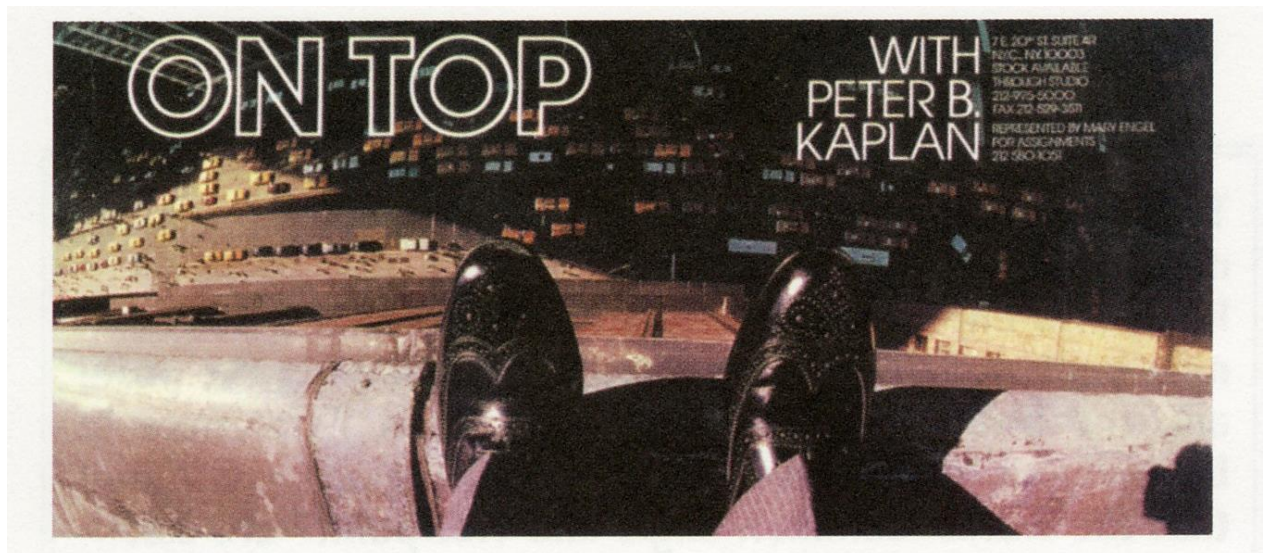


Figure 21: Peter Kaplan photograph

3. An extension of the merger doctrine is the doctrine of **scènes à faire**, which applies primarily to fictional works (but also, as we shall see, to computer software). As explained by one court, the doctrine bars protection of the “incidents, characters or settings which are as a practical matter indispensable, or at least standard in the treatment of a given topic.” *Atari, Inc. v. N. Am. Phillips Consumer Elecs. Corp.*, 672 F.2d 607, 616 (7th Cir. 1982). The animating principle is the same as with the merger doctrine: To give protection to these character or plot elements would counterproductively bar others from writing similar settings, even when those settings are standard for the genre. Consider one (era-specific) application of this doctrine: “Elements such as drunks, prostitutes, vermin and derelict cars would appear in any realistic work about the work of policemen in the South Bronx.” *Walker v. Time Life Films, Inc.*, 784 F.2d 44, 50 (2d Cir. 1986).

4. Mark Lemley suggests that the idea-expression distinction in copyright law does not mesh well with the value in current generative artificial intelligence technologies. Mark A. Lemley, *How Generative AI Turns Copyright Upside Down*, 25 *SCI. & TECH. L. REV.* 21 (2024). In particular, he suggests that this distinction “worked well in a world where the expression of ideas was hard, and was therefore the thing copyright needed to encourage.” But, he continues, “AI automates much of that formerly hard work” and “increasingly, the things humans contribute in a collaboration with generative AI will be ideas and high-level concepts,” such as “in the human structuring of the prompts that produce [AI] outputs.” Do you agree with this assessment? Are prompts copyrightable expression or uncopyrightable idea? For more on whether human authorship is necessary for copyrightability, see *infra* Chapter III.

3. Historical Fact-Expression Distinction

Consider now a third category of unprotectable matter: historical facts. As you read this opinion, reflect on the reasons that historical facts are unprotectable. Does § 102(b) forbid their protection? What incentives does the historical fact-expression distinction provide to historians?

A.A. Hoehling v. Universal City Studios, Inc.

618 F.2d 972 (2d Cir. 1980)

KAUFMAN, C.J.: ...

[1] This litigation arises from three separate accounts of the triumphant introduction, last voyage, and tragic destruction of the Hindenburg, the colossal dirigible constructed in Germany during Hitler's reign. The zeppelin, the last and most sophisticated in a fleet of luxury airships, which punctually floated its wealthy passengers from the Third Reich to the United States, exploded into flames and disintegrated in 35 seconds as it hovered above the Lakehurst, New Jersey Naval Air Station at 7:25 p. m. on May 6, 1937. Thirty-six passengers and crew were killed but, fortunately, 52 persons survived. Official investigations conducted by both American and German authorities could ascertain no definitive cause of the disaster, but both suggested the plausibility of static electricity or St. Elmo's Fire, which could have ignited the highly explosive hydrogen that filled the airship. Throughout, the investigators refused to rule out the possibility of sabotage.

[2] The destruction of the Hindenburg marked the concluding chapter in the chronicle of airship passenger service, for after the tragedy at Lakehurst, the Nazi regime permanently grounded the Graf Zeppelin I and discontinued its plan to construct an even larger dirigible, the Graf Zeppelin II.

[3] The final pages of the airship's story marked the beginning of a series of journalistic, historical, and literary accounts devoted to the Hindenburg and its fate. Indeed, weeks of testimony by a plethora of witnesses before the official investigative panels provided fertile source material for would-be authors. Moreover, both the American and German Commissions issued official reports, detailing all that was then known of the tragedy. A number of newspaper and magazine articles had been written about the Hindenburg in 1936, its first year of trans-Atlantic service, and they, of course, multiplied many fold after the crash. In addition, two passengers Margaret Mather and Gertrud Adelt published separate and detailed accounts of the voyage, C.E. Rosendahl, commander of the Lakehurst Naval Air Station and a pioneer in airship travel himself, wrote a book titled *What About the Airship?*, in which he endorsed the theory that the Hindenburg was the victim of sabotage. In 1957, Nelson Gidding, who would return to the subject of the Hindenburg some 20 years later, wrote an unpublished "treatment" for a motion picture based on the deliberate destruction of the airship.... In 1962, Dale Titler released *Wings of Mystery*, in which he too devoted a chapter to the Hindenburg.¹

[4] Appellant A.A. Hoehling published *Who Destroyed the Hindenburg?*, a full-length book based on his exhaustive research in 1962. Mr. Hoehling studied the investigative reports, consulted previously published articles and books, and conducted interviews with survivors of the crash as well as others who possessed information about the Hindenburg. His book is presented as a factual account, written in an objective, reportorial style.

¹ Titler's account was published after the release of appellant's book. In an affidavit in this litigation, Titler states that he copied Hoehling's theory of sabotage. Hoehling, however, has never instituted a copyright action against Titler.

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[5] The first half recounts the final crossing of the Hindenburg, from Sunday, May 2, when it left Frankfurt, to Thursday, May 6, when it exploded at Lakehurst. Hoehling describes the airship, its role as an instrument of propaganda in Nazi Germany, its passengers and crew, the danger of hydrogen, and the ominous threats received by German officials, warning that the Hindenburg would be destroyed. The second portion, headed *The Quest*, sets forth the progress of the official investigations, followed by an account of Hoehling's own research. In the final chapter, spanning eleven pages, Hoehling suggests that all proffered explanations of the explosion, save deliberate destruction, are unconvincing. He concludes that the most likely saboteur is one Eric Spehl, a "rigger" on the Hindenburg crew who was killed at Lakehurst.

[6] According to Hoehling, Spehl had motive, expertise, and opportunity to plant an explosive device, constructed of dry-cell batteries and a flashbulb, in "Gas Cell 4," the location of the initial explosion. An amateur photographer with access to flashbulbs, Spehl could have destroyed the Hindenburg to please his ladyfriend, a suspected communist dedicated to exploding the myth of Nazi invincibility.

[7] Ten years later appellee Michael MacDonald Mooney published his book, *The Hindenburg*. Mooney's endeavor might be characterized as more literary than historical in its attempt to weave a number of symbolic themes through the actual events surrounding the tragedy. His dominant theme contrasts the natural beauty of the month of May, when the disaster occurred, with the cold, deliberate progress of "technology." The May theme is expressed not simply by the season, but also by the character of Spehl, portrayed as a sensitive artisan with needle and thread. The Hindenburg, in contrast, is the symbol of technology, as are its German creators and the Reich itself. The destruction is depicted as the ultimate triumph of nature over technology, as Spehl plants the bomb that ignites the hydrogen. Developing this theme from the outset, Mooney begins with an extended review of man's efforts to defy nature through flight, focusing on the evolution of the zeppelin. This story culminates in the construction of the Hindenburg, and the Nazis' claims of its indestructibility. Mooney then traces the fateful voyage, advising the reader almost immediately of Spehl's scheme. The book concludes with the airship's explosion.

[8] Mooney acknowledges, in this case, that he consulted Hoehling's book, and that he relied on it for some details. He asserts that he first discovered the "Spehl-as-saboteur" theory when he read Titler's *Wings of Mystery*. Indeed, Titler concludes that Spehl was the saboteur, for essentially the reasons stated by Hoehling. Mooney also claims to have studied the complete National Archives and New York Times files concerning the Hindenburg, as well as all previously published material. Moreover, he traveled to Germany, visited Spehl's birthplace, and conducted a number of interviews with survivors.

[9] After Mooney prepared an outline of his anticipated book, his publisher succeeded in negotiations to sell the motion picture rights to appellee Universal City Studios. Universal then commissioned a screen story by writers Levinson and Link, best known for their television series, *Columbo*, in which a somewhat disheveled, but wise detective unravels artfully conceived murder mysteries. In their screen story, Levinson and Link created a Columbo-like character who endeavored to identify the saboteur on board the Hindenburg. Director Robert Wise, however, was not satisfied with this version, and called upon Nelson Gidding to write a final screenplay. Gidding, it will be recalled, had engaged in preliminary work on a film about the Hindenburg almost twenty years earlier.

[10] The Gidding screenplay follows what is known in the motion picture industry as a "Grand Hotel" formula, developing a number of fictional characters and subplots involving them. This formula has become standard fare in so-called "disaster" movies In the film, which was released in late 1975, a rigger named "Boerth," who has an anti-Nazi ladyfriend, plans to destroy the airship in an effort to embarrass the Reich. Nazi officials, vaguely aware of sabotage threats, station a Luftwaffe intelligence officer on the zeppelin, loosely resembling a Colonel Erdmann who was aboard the Hindenburg. This character is portrayed as a likable fellow who soon discovers that Boerth is the saboteur. Boerth, however, convinces him that the Hindenburg should be destroyed

and the two join forces, planning the explosion for several hours after the landing at Lakehurst, when no people would be on board. In Gidding’s version, the airship is delayed by a storm, frantic efforts to defuse the bomb fail, and the Hindenburg is destroyed. The film’s subplots involve other possible suspects, including a fictional countess who has had her estate expropriated by the Reich, two fictional confidence men wanted by New York City police, and an advertising executive rushing to close a business deal in America.

[11] Upon learning of Universal’s plans to release the film, Hoehling instituted this action against Universal [and Mooney] for copyright infringement

[12] Hoehling’s principal claim is that both Mooney and Universal copied the essential plot of his book i.e., Eric Spehl, influenced by his girlfriend, sabotaged the Hindenburg by placing a crude bomb in Gas Cell 4.... [A]ppellees have labored to convince us that their plots are not substantially similar to Hoehling’s. While Hoehling’s Spehl destroys the airship to please his communist girlfriend, Mooney’s character is motivated by an aversion to the technological age. Universal’s Boerth, on the other hand, is a fervent anti-fascist who enlists the support of a Luftwaffe colonel who, in turn, unsuccessfully attempts to defuse the bomb at the eleventh hour.

[13] [A]ppellees further argue that Hoehling’s plot is an idea, and ideas are not copyrightable as a matter of law.

[14] Hoehling, however, correctly rejoins that while ideas themselves are not subject to copyright, his “expression” of his idea is copyrightable....

[15] [I]n works of fiction, ... the distinction between an idea and its expression is especially elusive. But, where, as here, the idea at issue is an interpretation of an historical event, ... such interpretations are not copyrightable as a matter of law.... [Even when] the plots of ... two works were necessarily similar, there could be no infringement because of the public benefit in encouraging the development of historical and biographical works and their public distribution. To avoid a chilling effect on authors who contemplate tackling an historical issue or event, broad latitude must be granted to subsequent authors who make use of historical subject matter, including theories or plots....

[16] [T]he hypothesis that Eric Spehl destroyed the Hindenburg is based entirely on the interpretation of historical facts, including Spehl’s life, his girlfriend’s anti-Nazi connections, the explosion’s origin in Gas Cell 4, Spehl’s duty station, discovery of a dry-cell battery among the wreckage, and rumors about Spehl’s involvement dating from a 1938 Gestapo investigation. Such an historical interpretation, whether or not it originated with Mr. Hoehling, is not protected by his copyright and can be freely used by subsequent authors....

[17] The same reasoning governs Hoehling’s claim that a number of specific facts, ascertained through his personal research, were copied by appellees.⁶ ... [F]actual information is in the public domain. Each appellee had the right to avail himself of the facts contained in Hoehling’s book and to use such information, whether correct or incorrect, in his own literary work.... [W]e refuse to subscribe to the view that an author is absolutely precluded from saving time and effort by referring to and relying upon prior published material. It is just such wasted effort that the proscription against the copyright of ideas and facts are designed to prevent.

⁶ The following ten examples ... are illustrative: (1) Eric Spehl’s age and birthplace; (2) Crew members had smuggled monkeys on board the Graf Zeppelin; (3) Germany’s ambassador to the United States dismissed threats of sabotage; (4) A warning letter had been received from a Mrs. Rauch; (5) The Hindenburg’s captain was constructing a new home in Zeppelinheim; (6) Eric Spehl was a photographer; (7) The airship flew over Boston; (8) The Hindenburg was “tail heavy” before landing; (9) A member of the ground crew had etched his name in the zeppelin’s hull; and (10) The navigator set the Hindenburg’s course by reference to various North Atlantic islands.

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[18] The remainder of Hoehling's claimed similarities relate to random duplications of phrases and sequences of events. For example, all three works contain a scene in a German beer hall, in which the airship's crew engages in revelry prior to the voyage. Other claimed similarities concern common German greetings of the period, such as "Heil Hitler," or songs, such as the German National anthem. These elements, however, are merely scenes a faire, that is, incidents, characters or settings which are as a practical matter indispensable, or at least standard, in the treatment of a given topic. Because it is virtually impossible to write about a particular historical era or fictional theme without employing certain stock or standard literary devices, ... scenes a faire are not copyrightable as a matter of law....

[19] All of Hoehling's allegations of copying, therefore, encompass material that is non-copyrightable as a matter of law We are aware, however, that in distinguishing between themes, facts, and scenes a faire on the one hand, and copyrightable expression on the other, courts may lose sight of the forest for the trees. By factoring out similarities based on non-copyrightable elements, a court runs the risk of overlooking wholesale usurpation of a prior author's expression. A verbatim reproduction of another work, of course, even in the realm of nonfiction, is actionable as copyright infringement. Thus, ... courts should assure themselves that the works before them are not virtually identical. In this case, it is clear that all three authors relate the story of the Hindenburg differently.

[20] In works devoted to historical subjects, it is our view that a second author may make significant use of prior work, so long as he does not bodily appropriate the expression of another. This principle is justified by the fundamental policy undergirding the copyright laws the encouragement of contributions to recorded knowledge. The financial reward guaranteed to the copyright holder is but an incident of this general objective, rather than an end in itself. Knowledge is expanded as well by granting new authors of historical works a relatively free hand to build upon the work of their predecessors.⁷ ...

NOTES

1. The producer of the *Seinfeld* television series sued the publisher of *The Seinfeld Aptitude Test*, a book filled with trivia questions about the series. The book publisher argued in its defense that it did not copy any protected expression, but rather asked trivia questions about the series' underlying (and unprotected) facts. For example, one multiple-choice question asked:

To impress a woman, George passes himself off as

- a) a gynecologist
- b) a geologist
- c) a marine biologist
- d) a meteorologist

Then-district court Judge Sotomayor rejected the defendant's characterization, ruling that these purported facts are not historical facts, but **created facts**:

[The trivia book] does not pose "factual" questions about the Seinfeld show; it does not ask who acts in the program, who directs or produces the show, how many seasons it has run, etc. Instead, [it] poses questions about the events depicted during episodes of the Seinfeld show. The facts depicted in a Seinfeld episode, however, are quite unlike the facts depicted in a biography, historical text, or compilation. Seinfeld is fiction; both the "facts" in the various Seinfeld episodes,

⁷ We note that publication of Mooney's book and release of the motion picture revived long dormant interest in the Hindenburg. As a result, Hoehling's book, which had been out of print for some time, was actually re-released after the film was featured in theaters across the country.

and the expression of those facts, are plaintiff's creation. Thus, ... [the book] is devoted to questions concerning creative components of Seinfeld. In other words, by copying "facts" that plaintiff invented, [the book] appropriates [the] plaintiff's original contributions.

Castle Rock Ent. v. Carol Pub. Group, Inc., 955 F. Supp. 260, 266 (S.D.N.Y. 1997), *aff'd*, 150 F.3d 132 (2d Cir. 1998). "Created facts" as a category is thus a misnomer. The material that then-Judge Sotomayor refers to as "created facts" is, rather, simply copyrightable expression (though a type of expression that might be especially likely to qualify as fair use (Chapter VI)). For more on created facts, see Justin Hughes, *Created Facts and the Flawed Ontology of Copyright Law*, 83 NOTRE DAME L. REV. 43 (2007).

2. In addition to historical facts, some cases focus on expression based on unprotectable **natural facts** (that is, facts about natural objects). In a lawsuit by artist Richard Satava against artist Christopher Lowry, the Ninth Circuit held that aspects of Satava's glass-in-glass jellyfish sculptures were not copyrightable. *Satava v. Lowry*, 323 F.3d 805 (9th Cir. 2003). The court reasoned that a realistic depiction of jellyfish, in a clear outer layer of glass which took the shape of the jellyfish, is not protectable: "These elements are so commonplace in glass-in-glass sculpture and so typical of jellyfish physiology that to recognize copyright protection in their combination effectively would give Satava a monopoly on lifelike glass-in-glass sculptures of single jellyfish with vertical tentacles." Can you envision aspects of a jellyfish sculpture in a glass-in-glass structure that are copyrightable?

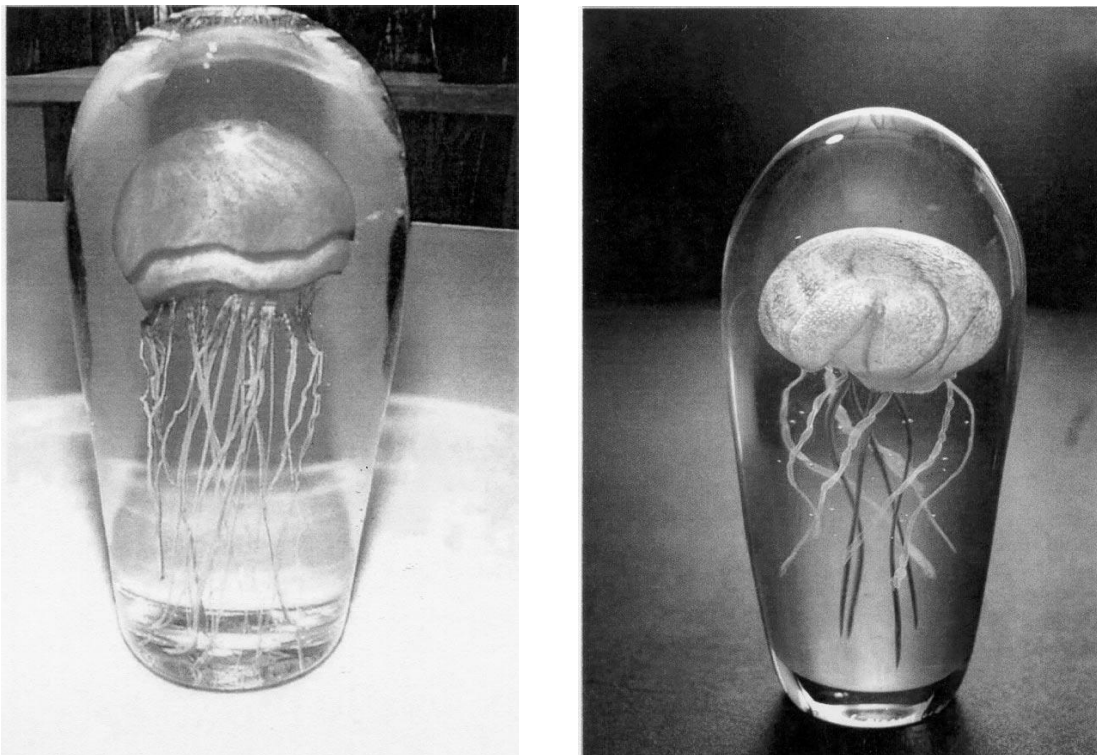


Figure 22: glass-in-glass jellyfish sculptures by Richard Satava (left) and Christopher Lowry (right)

3. Another complicated issue arises with regard to so-called **opinion-based facts**. In one decision on the copyrightability of *Automobile Red Book* valuations, the Second Circuit found the valuations to be protectable because they "were neither reports of historical prices nor mechanical derivations of historical prices or other data." *CCC Info. Servs., Inc. v. Maclean Hunter Mkt. Reports, Inc.*, 44 F.3d 61, 67 (2d Cir. 1994). Instead, the court understood them to "represent[] predictions by the *Red Book* editors of future prices estimated to cover specified geographic regions based not only on a multitude of data sources, but also on professional judgment and expertise." By contrast, the Second Circuit denied copyrightability to a mercantile exchange's settlement prices that it produced to value customers' open positions. *N.Y. Mercantile Exch., Inc. v. Intercontinental Exchange, Inc.*, 497 F.3d 109, 114 (2d Cir. 2007). The Second Circuit noted that the exchange

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acts more as “a census taker, copying the market’s valuation of futures contracts” than as a “creat[or of] the settlement prices.” *N.Y. Mercantile Exch., Inc. v. Intercontinental Exchange, Inc.*, 497 F.3d 109, 114 (2d Cir. 2007).

The image shows two pages from 'The Automobile Red Book' for Toyota (Japanese) models. The left page is for the 1990-89 model year, and the right page is for the 1989-88 model year. Each page contains a grid of car listings with columns for model name, price, and other specifications. The listings are organized by model type, such as Sedan, Hatchback, and Truck. The text is dense and difficult to read in detail, but it clearly shows a comprehensive list of vehicles and their associated costs.

Figure 23: sample pages from *The Automobile Red Book*

4. Not only does copyright law not protect historical facts, but courts also generally refuse to protect aspects of a work that are held out as factual even if these aspects are actually fictional. This doctrine is frequently known as **copyright estoppel**, though the Ninth Circuit has referred to it as the “asserted truths” doctrine. *Corbello v. Valli*, 974 F.3d 965 (9th Cir. 2020). The exclusion does not depend on whether the facts are objectively or scientifically true. It depends on whether the author holds them out as true. For example, this doctrine has been applied to bar protection for a work the author claimed was dictated to him by the spirit of a dead person. *Oliver v. St. Germain Found.*, 41 F. Supp. 296 (S.D. Cal. 1941). The author’s subjective belief regarding the truth or falsity of elements of a work presented as factual is also irrelevant; if the author represents elements to be facts, then the author is estopped from later claiming copyright protection for those “facts.” The Ninth Circuit has explained that “It would hinder, not promote the progress of science and useful arts to allow a copyright owner to spring an infringement suit on subsequent authors who built freely on a work held out as factual, contending after the completion of the copyrighted work, and against the work’s own averments, that the purported truths were actually fictions.” *Corbello*, 974 F.3d at 979. How should this doctrine handle fictional works that use claims to truthfulness as a literary device, like the Orson Welles radio broadcast of “War of the Worlds”?

E. Copyrightable Subject Matter

This section considers the range of copyrightable subject matter. After introducing the categories of copyrightable subject matter, it discusses a mass exclusion of government works from protection and then three particular categories of subject matter—useful articles, architectural works, and computer software—that raise special concerns about the boundaries of copyrightability.

1. Introduction to Categories

Section 102(a) lists different types of works of authorship that copyright law protects:

Works of authorship include the following categories:

- (1) literary works;*
- (2) musical works, including any accompanying words;*
- (3) dramatic works, including any accompanying music;*
- (4) pantomimes and choreographic works;*
- (5) pictorial, graphic, and sculptural works;*
- (6) motion pictures and other audiovisual works;*
- (7) sound recordings; and*
- (8) architectural works.*

Note that the statutory language suggests that this list is not exhaustive, because in listing these categories, the section says “include.” That said, the Copyright Office has expressed the view that only Congress, and not the courts, can provide for the copyrightability of works falling outside the enumerated categories. COPYRIGHT OFFICE COMPENDIUM (THIRD) §§ 307, 313.3. And no court has yet found copyrightable any work falling outside the enumerated categories. For example, the Second Circuit has held that basketball games are not copyrightable subject matter, reasoning that the enumerated “list does not include athletic events, and, although the list is concededly non-exclusive, such events are neither similar nor analogous to any of the listed categories.” *Nat’l Basketball Ass’n v. Motorola, Inc.*, 105 F.3d 841, 846 (2d Cir. 1997). This doctrinal development might be explained in several ways. Perhaps courts have not yet found fixed and original works of authorship outside of the broad illustrative categories that Congress established. Or perhaps courts lack a clear method to determine whether a new subject matter category ought to qualify. Alternatively, maybe courts mistakenly believe they cannot protect under copyright law any matter outside of the illustrative categories listed in the Act. Reconsider the Seventh Circuit’s *Kelley* decision, which you read in section B to hold that a garden is not fixed. Do you think a garden is copyrightable subject matter?

The statutory category into which a work falls can matter. As we shall see, the category can determine which rights a copyright holder gets. Moreover, courts can apply different approaches to different categories, as we just saw with regard to compilations. Relatedly, a work (or a work’s components) can fall into more than one category at a time.

Before delving into the more complicated categories in the sections below, it is helpful to get a sense of how these enumerated categories have been defined. Section 101 defines some of them. In particular, it defines **literary works** as

works, other than audiovisual works, expressed in words, numbers, or other verbal or numerical symbols or indicia, regardless of the nature of the material objects, such as books, periodicals, manuscripts, phonorecords, film, tapes, disks, or cards, in which they are embodied.

This category includes, as expected, material like novels. In addition, perhaps less intuitively, it also includes material that humans typically do not read, such as computer software code, as discussed in more detail in section 5 below.

Based on the list in § 102(a), note that there are two copyrights that generally attach to a song: The first is the **musical work**, which is the song composition itself—the arrangement of notes, chords, rhythms, and other compositional elements. The second is the **sound recording**—the actual fixed performance of the song. As defined by § 101, sound recordings are

works that result from the fixation of a series of musical, spoken, or other sounds, but not including the sounds accompanying a motion picture or other audiovisual work, regardless of the

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nature of the material objects, such as disks, tapes, or other phonorecords, in which they are embodied.

Until 2018, sound recordings were eligible for federal copyright protection only if fixed on or after February 15, 1972 (when sound recordings were added as a § 102(a) category). The Sound Recording Amendment of 1971, Pub. L. No. 92-140, 85 Stat. 391. In 2018, Congress extended much of federal copyright’s protections to pre-1972 sound recordings. The Orrin G. Hatch-Bob Goodlatte Music Modernization Act, Pub. L. No. 115-264, 132 Stat. 3676 (2018).

Pictorial, graphic, and sculptural works are another category of copyrightable works. Section 101 defines them as

two-dimensional and three-dimensional works of fine, graphic, and applied art, photographs, prints and art reproductions, maps, globes, charts, diagrams, models, and technical drawings, including architectural plans.

Copyright protection for this category of works is limited by the **useful articles doctrine**, which we explore in detail below in section 3.

Section 101 defines **motion pictures** as

audiovisual works consisting of a series of related images which, when shown in succession, impart an impression of motion, together with accompanying sounds, if any.

It further defines **audiovisual works** as

works that consist of a series of related images which are intrinsically intended to be shown by the use of machines, or devices such as projectors, viewers, or electronic equipment, together with accompanying sounds, if any, regardless of the nature of the material objects, such as films or tapes, in which the works are embodied.

We defer the definition of architectural works until our deeper discussion of them below in section 5.

2. Exclusion of Government Works

Before exploring further some of the most difficult categories of copyrightable subject matter, this section sets out one wholesale exclusion from the categories of protectable subject matter: that of certain government works. Section 105 sets out that

Copyright protection under this title is not available for any work of the United States Government, but the United States Government is not precluded from receiving and holding copyrights transferred to it by assignment, bequest, or otherwise.

This provision encodes more systematically what has long been a prohibition under the common law from obtaining copyright protection for government edicts. In particular, the U.S. Supreme Court long ago stated that copyright cannot be claimed in federal judicial opinions. *Wheaton v. Peters*, 33 U.S. (8 Pet.) 591 (1834). The Supreme Court has recently more broadly clarified that as per the **government edicts doctrine**, “copyright does not vest in works that are (1) created by judges and legislators (2) in the course of their judicial and legislative duties,” extending *Wheaton’s* reasoning to state judicial opinions and federal and state statutes, not to mention judicial concurrences and dissents and annotations contained in a state’s official annotated code. *Georgia v. Public.Resource.Org, Inc.*, 140 S. Ct. 1498, 1508 (2020). The Court explained that “judges, acting as

judges, cannot be ‘authors’ because of their authority to make and interpret the law,” just as “legislators, acting as legislators, cannot be either.”

This restriction on copyright protection for government edicts is grounded in constitutional and policy considerations. First, denying copyright protection maximizes access to the law and government information so that citizens can know, discuss, use, and seek to change the law and the government’s operation. This reasoning is grounded in the right to free speech, due process rights, and policies related to ensuring a democratic government. Second, government works are typically paid for with public funds, which might imply public ownership of those works, or at least no need for a second subsidy of those works via copyright protection. Query whether the typical reasons for copyright protection apply to government works. For more on these issues, see Shyamkrishna Balganesh, *Authoring the Law*, 69 J. COPYRIGHT SOC’Y U.S.A. 353 (2022); Shubha Ghosh, *Legal Code and the Need for a Broader Functionality Doctrine in Copyright*, 50 J. COPYRIGHT SOC’Y U.S.A. 71 (2003); Samuel E. Trosow, *Copyright Protection for Federally Funded Research: Necessary Incentive or Double Subsidy?*, 22 CARDOZO ARTS & ENT. L.J. 613 (2004); Note, Andrea Simon, *A Constitutional Analysis of Copyrighting Government-Commissioned Work*, 84 COLUM. L. REV. 425 (1984).

Even though court decisions barring protection for government edicts refer to federal and state governmental works interchangeably, § 105—by its terms—prohibits copyright protection only for federal government works. In particular, § 101 defines a “work of the United States Government” as “a work prepared by an officer or employee of the United States Government as part of that person’s official duties.” Yet in another way, this statutory bar sweeps more broadly than the narrower common law government edicts doctrine: “That bar applies to works created by all federal ‘officer[s] or employee[s],’ without regard for the nature of their position or scope of their authority.... Th[e narrower government edicts] doctrine does not apply to non-lawmaking [state] officials, leaving States free to assert copyright in the vast majority of expressive works they produce, such as those created by their universities, libraries, tourism offices, and so on.” *Georgia*, 140 S. Ct. at 1510.*

By the statutory terms, § 105 also does not bar copyright in works specially commissioned by the federal government from independent contractors. H.R. REP. NO. 1476, 94th Cong., 2d Sess. 47, at 59 (1976). Similarly, federally funded works are not excluded from obtaining copyright protection. *Schnapper v. Foley*, 667 F.2d 102 (D.C. Cir. 1981). Note also that § 105 expressly allows for the federal government to hold copyright in works for which copyright has been transferred to the federal government by assignment, bequest, or otherwise. Together, these provisions open up the possibility for the federal government to subvert the prohibition on copyright by hiring independent contractors to create a copyrightable work, for which they transfer their copyright to the federal government. See, e.g., *United States v. Wash. Mint, LLC*, 115 F. Supp. 2d 1089 (D. Minn. 2000).

What does the Supreme Court’s rule in *Georgia* mean for model codes drafted by a private organization that are then adopted as law in one or more jurisdictions? The First Circuit had previously ruled that in such a situation the code enters the public domain once it is adopted into law, reasoning that:

Due process requires people to have notice of what the law requires of them so that they may obey it and avoid its sanctions. So long as the law is generally available for the public to examine, then everyone may be considered to have constructive notice of it; any failure to gain actual notice results from simple lack of diligence. But if access to the law is limited, then the people will

* That said, in 2019, Congress carved out a narrow exception to provide that “a civilian member of the faculty of [certain military] institution[s]” “owns the copyright” to “a literary work produced by [the member] in the course of employment [such an] institution for publication by a scholarly press or journal.” 17 U.S.C. §§ 105(b)-(c). Congress went on to provide that “[t]he Secretary of Defense may direct [such authors of such works] to provide the Federal Government with an irrevocable, royalty-free, world-wide, nonexclusive license to reproduce, distribute, perform, or display such covered work for purposes of the United States Government.” *Id.* § 105(c).

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or may be unable to learn of its requirements and may be thereby deprived of the notice to which due process entitles them.

Building Officials & Code Adm'rs Int'l, Inc. v. Code Tech., Inc., 628 F.2d 730, 734 (1st Cir. 1980).

The law remains less clear-cut for private materials incorporated in part into state or local law. For example, the Second Circuit has held that “a state’s [mere] reference to a copyrighted work as a legal standard for valuation” does not prohibit an assertion of copyright. *CCC Info. Servs., Inc. v. Maclean Hunter Mkt. Reports, Inc.*, 44 F.3d 61, 74 (2d Cir. 1994). The Fifth Circuit has observed that materials created privately for reasons other than adoption or incorporation into law might provide more justification in favor of copyrightability. *Veeck*, 293 F.3d at 805. The Second Circuit has ruled that two factors govern copyrightability: “(1) whether the entity or individual who created the work needs an economic incentive to create or has a proprietary interest in creating the work and (2) whether the public needs notice of this particular work to have notice of the law.” *County of Suffolk, N.Y. v. First Am. Real Estate Solutions*, 261 F.3d 179, 194 (2d Cir. 2001). Does this reasoning remain valid following the Supreme Court’s rule in *Georgia*? See *Int'l Code Council, Inc. v. UpCodes, Inc.*, No. 17 Civ. 6261 (VM), 2020 WL 2750636 (S.D.N.Y. May 27, 2020) (distinguishing *Suffolk* post-*Georgia*, saying that “where due process concerns are particularly high, as where a work is itself ‘the law,’ an author’s economic incentives play a particularly low role in the analysis, if any”).

Similar to § 105, some foreign governments deny copyright protection to their own government works. 1 NIMMER ON COPYRIGHT § 5.13[E] (2021). Less clear is whether U.S. copyright law denies protection to foreign government works. The Berne Convention leaves that question to the U.S. government to decide. Berne Convention (Paris text), art. 2(4) (“It shall be a matter for legislation in the countries of the Union to determine the protection to be granted to official texts of a legislative, administrative and legal nature, and to official translations of such texts.”). Section 105 does not address this category of works, but the same due process concerns arise if the conduct of U.S. persons is made subject to a foreign law, as is likely to happen when a U.S. person travels to a foreign jurisdiction.

3. Useful Articles

The issue of copyright protection for useful articles arises for the variety of pictorial, graphic, or sculptural works that also serve some useful purpose. For a straightforward example, think of a chair. A chair is a sculptural work. It is also useful. Does copyright protect the shape of the chair? Typically, as you shall see, copyright law does not protect the pictorial, graphic, or sculptural features of useful articles, unless those features are “separable” from the useful article’s utilitarian aspects.

As you read this foundational Supreme Court decision, consider why copyright law might want to forbid protection for useful articles. Do these motivations connect to other doctrines we have already explored?

Mazer v. Stein

347 U.S. 201 (1954)

REED, J.:

[1] This case involves the validity of copyrights obtained by respondents for statuettes of male and female dancing figures made of semivitreous china. The controversy centers around the fact that although copyrighted

as 'works of art,' the statuettes were intended for use and used as bases for table lamps, with electric wiring, sockets and lamp shades attached.

[2] Respondents are partners in the manufacture and sale of electric lamps. One of the respondents created original works of sculpture in the form of human figures by traditional clay-model technique. From this model, a production mold for casting copies was made. The resulting statuettes, without any lamp components added, were submitted by the respondents to the Copyright Office for registration as 'works of art' or reproductions thereof under [the Copyright Act of 1909], and certificates of registration issued.... Thereafter, the statuettes were sold in quantity throughout the country both as lamp bases and as statuettes. The sales in lamp form accounted for all but an insignificant portion of respondents' sales.



Figure 24: one of Stein's ballet dancer statuettes/lamp bases

[3] Petitioners [also] make and sell lamps. Without authorization, they copied the statuettes, embodied them in lamps and sold them.

[4] ... [T]he District Court dismissed the complaint [of copyright infringement against the petitioners]. The Court of Appeals reversed and held the copyrights valid. It said: 'A subsequent utilization of a work of art in an article of manufacture in no way affects the right of the copyright owner to be protected against infringement of the work of art itself.'

[5] Petitioners ... seek here a reversal of the Court of Appeals decree upholding the copyrights. Petitioners in their petition for certiorari present a single question:

'Can statuettes be protected in the United States by copyright when the copyright applicant intended primarily to use the statuettes in the form of lamp bases to be made and sold in quantity and carried the intentions into effect?'

'Stripped down to its essentials, the question presented is: Can a lamp manufacturer copyright his lamp bases?'

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[6] The first paragraph accurately summarizes the issue. The last gives it a quirk that unjustifiably, we think, broadens the controversy. The case requires an answer, not as to a manufacturer's right to register a lamp base but as to an artist's right to copyright a work of art intended to be reproduced for lamp bases. As petitioners say in their brief, their contention 'questions the validity of the copyright based upon the actions of respondents.' Petitioners question the validity of a copyright of a work of art for 'mass' production. 'Reproduction of a work of art' does not mean to them unlimited reproduction. Their position is that a copyright does not cover industrial reproduction of the protected article. Thus their reply brief states:

'When an artist becomes a manufacturer or a designer for a manufacturer he is subject to the limitations of design patents and deserves no more consideration than any other manufacturer or designer.' ...

[7] ... In recent years the question as to utilitarian use of copyrighted articles has been much discussed.

[8] In 1790 the First Congress conferred a copyright on 'authors of any map, chart, book or books already printed'. Later, designing, engraving and etching were included; in 1831 musical composition; dramatic compositions in 1856; and photographs and negatives thereof in 1865.

[9] The Act of 1870 defined copyrightable subject matter as:

' * * any book, map, chart, dramatic or musical composition, engraving, cut, print, or photograph or negative thereof, or of a painting, drawing, chromo, statue, statuary, and of models or designs intended to be perfected as works of the fine arts'.* (Emphasis supplied.)

[10] The italicized part added three-dimensional work of art to what had been protected previously. In 1909 Congress again enlarged the scope of the copyright statute. The new Act provided in [section] 4:

'That the works for which copyright may be secured under this Act shall include all the writings of an author.'

[11] Some writers interpret this section as being coextensive with the constitutional grant, but the House Report, while inconclusive, indicates that it was 'declaratory of existing law' only.... Significant for our purposes was the deletion of the fine-arts clause of the 1870 Act. Verbal distinctions between purely aesthetic articles and useful works of art ended insofar as the statutory copyright language is concerned.

[12] The practice of the Copyright Office, under the 1870 and 1874 Acts and before the 1909 Act, was to allow registration 'as works of the fine arts' of articles of the same character as those of respondents now under challenge.... The current pertinent regulation ... reads thus:

'Works of art (Class G)—(a)—In General. This class includes works of artistic craftsmanship, in so far as their form but not their mechanical or utilitarian aspects are concerned, such as artistic jewelry, enamels, glassware, and tapestries, as well as all works belonging to the fine arts, such as paintings, drawings and sculpture.'

[13] So we have a contemporaneous and long-continued construction of the statutes by the agency charged to administer them that would allow the registration of such a statuette as is in question here....

[14] The successive acts, the legislative history of the 1909 Act and the practice of the Copyright Office unite to show that 'works of art' and 'reproductions of works of art' are terms that were intended by Congress to include the authority to copyright these statuettes. Individual perception of the beautiful is too varied a power to permit a narrow or rigid concept of art. As a standard we can hardly do better than the words of the present Regulation,

naming the things that appertain to the arts. They must be original, that is, the author's tangible expression of his ideas. Such expression, whether meticulously delineating the model or mental image or conveying the meaning by modernistic form or color, is copyrightable. What cases there are confirm this coverage of the statute.

[15] The conclusion that the statues here in issue may be copyrighted goes far to solve the question whether their intended reproduction as lamp stands bars or invalidates their registration. This depends solely on statutory interpretation. Congress may after publication protect by copyright any writing of an author. Its statute creates the copyright. It did not exist at common law even though he had a property right in his unpublished work.

[16] But petitioners assert that congressional enactment of the design patent laws should be interpreted as denying protection to artistic articles embodied or reproduced in manufactured articles....

[17] Their argument is that design patents require the critical examination given patents to protect the public against monopoly. Attention is called to *Gorham Mfg. Co. v. White*, 81 U.S. 511 (1871), interpreting the design patent law of 1842, granting a patent to anyone who by 'their own industry, genius, efforts, and expense, may have invented or produced any new and original design for a manufacture.' A pattern for flat silver was there upheld. As petitioner sees the effect of the design patent law:

'If an industrial designer can not satisfy the novelty requirements of the design patent laws, then his design as used on articles of manufacture can be copied by anyone.'

[18] Petitioner has furnished the Court a booklet of numerous design patents for statuettes, bases for table lamps and similar articles for manufacture, quite indistinguishable in type from the copyrighted statuettes here in issue. Petitioner urges that overlapping of patent and copyright legislation so as to give an author or inventor a choice between patents and copyrights should not be permitted. We assume petitioner takes the position that protection for a statuette for industrial use can only be obtained by patent, if any protection can be given.

[19] As we have held the statuettes here involved copyrightable, we need not decide the question of their patentability. Though other courts have passed upon the issue as to whether allowance by the election of the author or patentee of one bars a grant of the other, we do not. We do hold that the patentability of the statuettes, fitted as lamps or unfitted, does not bar copyright as works of art. Neither the Copyright Statute nor any other says that because a thing is patentable it may not be copyrighted. We should not so hold.

[20] Unlike a patent, a copyright gives no exclusive right to the art disclosed; protection is given only to the expression of the idea—not the idea itself.... The dichotomy of protection for the aesthetic is not beauty and utility but art for the copyright and the invention of original and ornamental design for design patents. We find nothing in the copyright statute to support the argument that the intended use or use in industry of an article eligible for copyright bars or invalidates its registration. We do not read such a limitation into the copyright law....

[21] The copyright law, like the patent statutes, makes reward to the owner a secondary consideration. However, it is intended definitely to grant valuable, enforceable rights to authors, publishers, etc., without burdensome requirements; to afford greater encouragement to the production of literary (or artistic) works of lasting benefit to the world.

[22] The economic philosophy behind the clause empowering Congress to grant patents and copyrights is the conviction that encouragement of individual effort by personal gain is the best way to advance public welfare through the talents of authors and inventors in 'Science and useful Arts.' Sacrificial days devoted to such creative activities deserve rewards commensurate with the services rendered....

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DOUGLAS, J., in which Mr. Justice BLACK concurs:

[23] An important constitutional question underlies this case—a question which was stirred on oral argument but not treated in the briefs. It is whether these statuettes of dancing figures may be copyrighted. Congress has provided that ‘works of art’, ‘models or designs for works of art’, and ‘reproductions of a work of art’ may be copyrighted, and the Court holds that these statuettes are included in the words ‘works of art’. But may statuettes be granted the monopoly of the copyright?

[24] Article I, s 8 of the Constitution grants Congress the power ‘To promote the Progress of [] Science and useful Arts, by securing for limited Times to Authors the exclusive Right to their respective Writings.’ The power is thus circumscribed: it allows a monopoly to be granted only to ‘authors’ for their ‘writings.’ Is a sculptor an ‘author’ and is his statute a ‘writing’ within the meaning of the Constitution? We have never decided the question....

[25] The interests involved in the category of ‘works of art,’ as used in the copyright law, are considerable. The Copyright Office has supplied us with a long list of such articles which have been copyrighted—statuettes, book ends, clocks, lamps, door knockers, candlesticks, inkstands, chandeliers, piggy banks, sundials, salt and pepper shakers, fish bowls, casseroles, and ash trays. Perhaps these are all ‘writings’ in the constitutional sense. But to me, at least, they are not obviously so. It is time that we came to the problem full face. I would accordingly put the case down for reargument.

Congress sought to codify what it understood to be *Mazer’s* holding in the 1976 Act. In its definition of “pictorial, graphic, and sculptural works” in § 101, Congress stated that

Such works shall include works of artistic craftsmanship insofar as their form but not their mechanical or utilitarian aspects are concerned; the design of a useful article, as defined in this section, shall be considered a pictorial, graphic, or sculptural work only if, and only to the extent that, such design incorporates pictorial, graphic, or sculptural features that can be identified separately from, and are capable of existing independently of, the utilitarian aspects of the article.

Section 101 further defines a “useful article” as

an article having an intrinsic utilitarian function that is not merely to portray the appearance of the article or to convey information. An article that is normally a part of a useful article is considered a “useful article.”

Congress understood *Mazer’s* holding to suggest that the statuette was **separable** from and capable of existing independently of the lamp, which it encoded in the statute. H.R. REP. NO. 1476, 94th Cong., 2d Sess. 47, at 55 (1976) (indicating that there is the requisite separability when “a statute or carving is ... incorporated into a product without losing its ability to exist independently as a work of art”). Note that pursuant to the statutory language, Stein would get copyright protection only for that which is separable—the statuette—rather than the entire lamp as a whole.

The legislative history enumerated further the statutory line Congress sought to draw between protectable and unprotectable matter in this context:

In adopting this ... language, [Congress] is seeking to draw as clear a line as possible between copyrightable works of applied art and uncopyrighted works of industrial design. A two-dimensional painting, drawing, or graphic work is still capable of being identified as such when it

is printed on or applied to utilitarian articles such as textile fabrics, wallpaper, containers, and the like.... On the other hand, although the shape of an industrial product may be aesthetically satisfying and valuable, the ... intention is not to offer it copyright protection under the bill. Unless the shape of an automobile, airplane, ladies' dress, food processor, television set, or any other industrial product contains some element that, physically or conceptually, can be identified as separable from the utilitarian aspects of that article, the design would not be copyrighted under the bill.

This legislative history states that there are two types of separability: physical and conceptual. Physical separability refers to situations in which one can actually remove an expressive work from a functional work, as is possible with the jaguar-shaped sculpture attached to a Jaguar automobile. The sculpture can be physically removed from the automobile and is thus “separable.”

The meaning of “conceptual” separability has been less clear. Over the years, courts struggled with how to understand this category of separable works and articulated different, often conflicting, tests. In 2017, the Supreme Court stepped in to resolve the confusion.

As you read the Supreme Court’s decision, focus on the differences between the majority and the dissent with regard to how each understands the statute and copyright policy underpinning it. Is the majority’s separability test one that will be satisfied easily or with great difficulty? Can you reconcile it with *Bleistein’s* nondiscrimination principle?

Star Athletica, LLC v. Varsity Brands, Inc.

580 U.S. 405 (2017)

THOMAS, J.:

[1] Congress has provided copyright protection for original works of art, but not for industrial designs. The line between art and industrial design, however, is often difficult to draw. This is particularly true when an industrial design incorporates artistic elements. Congress has afforded limited protection for these artistic elements by providing that “pictorial, graphic, or sculptural features” of the “design of a useful article” are eligible for copyright protection as artistic works if those features “can be identified separately from, and are capable of existing independently of, the utilitarian aspects of the article.” 17 U.S.C. § 101.

[2] We granted certiorari to resolve widespread disagreement over the proper test for implementing § 101’s separate-identification and independent-existence requirements. We hold that a feature incorporated into the design of a useful article is eligible for copyright protection only if the feature (1) can be perceived as a two- or three-dimensional work of art separate from the useful article and (2) would qualify as a protectable pictorial, graphic, or sculptural work—either on its own or fixed in some other tangible medium of expression—if it were imagined separately from the useful article into which it is incorporated. Because that test is satisfied in this case, we affirm....

[3] Respondents Varsity Brands, Inc., Varsity Spirit Corporation, and Varsity Spirit Fashions & Supplies, Inc., design, make, and sell cheerleading uniforms. Respondents have obtained or acquired more than 200 U.S. copyright registrations for two-dimensional designs appearing on the surface of their uniforms and other garments. These designs are primarily “combinations, positionings, and arrangements of elements” that include “chevrons ..., lines, curves, stripes, angles, diagonals, inverted [chevrons], coloring, and shapes.” At issue in this case are Designs 299A, 299B, 074, 078, and 0815.

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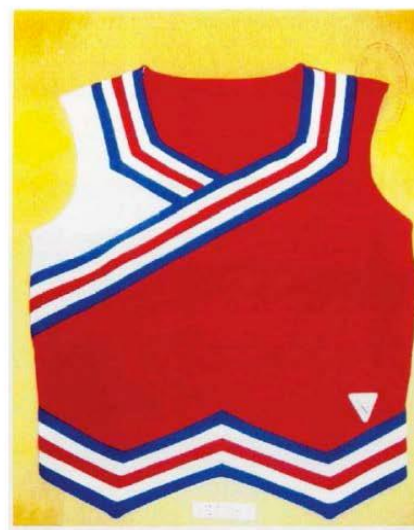
Design 078
Registration No. VA 1-417-427



Design 0815
Registration No. VA 1-675-905



Design 299B
Registration No. VA 1-319-226



Design 299A
Registration No. VA 1-319-228



Design 074
Registration No. VA 1-411-535

Figure 25: Varsity Brands' cheerleading uniform designs

[4] Petitioner Star Athletica, L.L.C., also markets and sells cheerleading uniforms. Respondents sued petitioner for infringing their copyrights in the five designs. The District Court entered summary judgment for petitioner on respondents' copyright claims on the ground that the designs did not qualify as protectable pictorial, graphic, or sculptural works. It reasoned that the designs served the useful, or "utilitarian," function of identifying the garments as "cheerleading uniforms" and therefore could not be "physically or conceptually" separated under § 101 "from the utilitarian function" of the uniform.

[5] The Court of Appeals for the Sixth Circuit reversed. In its view, the "graphic designs" were "separately identifiable" because the designs "and a blank cheerleading uniform can appear side by side—one as a graphic design, and one as a cheerleading uniform." And it determined that the designs were "capable of existing independently" because they could be incorporated onto the surface of different types of garments, or hung on the wall and framed as art.

[6] Judge McKeague dissented. He would have held that, because "identifying the wearer as a cheerleader" is a utilitarian function of a cheerleading uniform and the surface designs were "integral to" achieving that function, the designs were inseparable from the uniforms....

[7] Courts, the Copyright Office, and commentators have described the analysis undertaken to determine whether a feature can be separately identified from, and exist independently of, a useful article as "separability." In this case, our task is to determine whether the arrangements of lines, chevrons, and colorful shapes appearing on the surface of respondents' cheerleading uniforms are eligible for copyright protection as separable features of the design of those cheerleading uniforms....

[8] Respondents argue that "[s]eparability is only implicated when a [pictorial, graphic, or sculptural] work is the 'design of a useful article.'" They contend that the surface decorations in this case are "two-dimensional graphic designs that appear *on* useful articles," but are not themselves designs *of* useful articles. Consequently, the surface decorations are protected two-dimensional works of graphic art without regard to any separability analysis under § 101. Under this theory, two-dimensional artistic features on the surface of useful articles are "inherently separable."

[9] This argument is inconsistent with the text of § 101. The statute requires separability analysis for any "pictorial, graphic, or sculptural features" incorporated into the "design of a useful article." ... [T]he words "pictorial" and "graphic" include, in this context, two-dimensional features such as pictures, paintings, or drawings. And the statute expressly defines "[p]ictorial, graphical, and sculptural works" to include "two-dimensional ... works of ... art." § 101. The statute thus provides that the "design of a useful article" can include two-dimensional "pictorial" and "graphic" features, and separability analysis applies to those features just as it does to three-dimensional "sculptural" features....

[10] We must now decide when a feature incorporated into a useful article "can be identified separately from" and is "capable of existing independently of" "the utilitarian aspects" of the article. This is not a free-ranging search for the best copyright policy, but rather "depends solely on statutory interpretation." *Mazer v. Stein*, 347 U.S. 201, 214 (1954). The controlling principle in this case is the basic and unexceptional rule that courts must give effect to the clear meaning of statutes as written. We thus begin and end our inquiry with the text, giving each word its ordinary, contemporary, common meaning....

[11] The statute provides that a "pictorial, graphic, or sculptural featur[e]" incorporated into the "design of a useful article" is eligible for copyright protection if it (1) "can be identified separately from," and (2) is "capable of existing independently of, the utilitarian aspects of the article." § 101. The first requirement—separate identification—is not onerous. The decisionmaker need only be able to look at the useful article and spot some two- or three-dimensional element that appears to have pictorial, graphic, or sculptural qualities.

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[12] The independent-existence requirement is ordinarily more difficult to satisfy. The decisionmaker must determine that the separately identified feature has the capacity to exist apart from the utilitarian aspects of the article. In other words, the feature must be able to exist as its own pictorial, graphic, or sculptural work as defined in § 101 once it is imagined apart from the useful article. If the feature is not capable of existing as a pictorial, graphic, or sculptural work once separated from the useful article, then it was not a pictorial, graphic, or sculptural feature of that article, but rather one of its utilitarian aspects.

[13] Of course, to qualify as a pictorial, graphic, or sculptural work on its own, the feature cannot itself be a useful article or “[a]n article that is normally a part of a useful article” (which is itself considered a useful article). § 101. Nor could someone claim a copyright in a useful article merely by creating a replica of that article in some other medium—for example, a cardboard model of a car. Although the replica could itself be copyrightable, it would not give rise to any rights in the useful article that inspired it....

[14] The ultimate separability question, then, is whether the feature for which copyright protection is claimed would have been eligible for copyright protection as a pictorial, graphic, or sculptural work had it originally been fixed in some tangible medium other than a useful article before being applied to a useful article....

[15] This interpretation is also consistent with the history of the Copyright Act....

[16] Two of *Mazer*’s holdings are relevant here. First, the Court held that the respondents owned a copyright in the statuette even though it was intended for use as a lamp base. In doing so, the Court approved the Copyright Office’s regulation extending copyright protection to works of art that might also serve a useful purpose. See 37 C.F.R. § 202.8(a) (1949) (protecting “works of artistic craftsmanship, in so far as their form but not their mechanical or utilitarian aspects are concerned”).

[17] Second, the Court held that it was irrelevant to the copyright inquiry whether the statuette was initially created as a freestanding sculpture or as a lamp base. *Mazer* thus interpreted the 1909 Act consistently with the rule discussed above: If a design would have been copyrightable as a standalone pictorial, graphic, or sculptural work, it is copyrightable if created first as part of a useful article.

[18] Shortly thereafter, the Copyright Office enacted a regulation implementing the holdings of *Mazer*. As amended, the regulation introduced the modern separability test to copyright law:

“If the sole intrinsic function of an article is its utility, the fact that the article is unique and attractively shaped will not qualify it as a work of art. However, if the shape of a utilitarian article incorporates features, such as artistic sculpture, carving, or pictorial representation, which can be identified separately and are capable of existing independently as a work of art, such features will be eligible for registration.” 37 C.F.R. § 202.10(c) (1960) (punctuation altered).

[19] Congress essentially lifted the language governing protection for the design of a useful article directly from the post-*Mazer* regulations and placed it into § 101 of the 1976 Act. Consistent with *Mazer*, the approach we outline today interprets § 101 ... in a way that would afford copyright protection to the statuette in *Mazer* regardless of whether it was first created as a standalone sculptural work or as the base of the lamp....

[20] In sum, a feature of the design of a useful article is eligible for copyright if, when identified and imagined apart from the useful article, it would qualify as a pictorial, graphic, or sculptural work either on its own or when fixed in some other tangible medium.

[21] Applying this test to the surface decorations on the cheerleading uniforms is straightforward. First, one can identify the decorations as features having pictorial, graphic, or sculptural qualities. Second, if the arrangement

of colors, shapes, stripes, and chevrons on the surface of the cheerleading uniforms were separated from the uniform and applied in another medium—for example, on a painter’s canvas—they would qualify as “two-dimensional ... works of ... art,” § 101. And imaginatively removing the surface decorations from the uniforms and applying them in another medium would not replicate the uniform itself. Indeed, respondents have applied the designs in this case to other media of expression—different types of clothing—without replicating the uniform. The decorations are therefore separable from the uniforms and eligible for copyright protection.¹

[22] The dissent argues that the designs are not separable because imaginatively removing them from the uniforms and placing them in some other medium of expression—a canvas, for example—would create “pictures of cheerleader uniforms.” Petitioner similarly argues that the decorations cannot be copyrighted because, even when extracted from the useful article, they retain the outline of a cheerleading uniform.

[23] This is not a bar to copyright. Just as two-dimensional fine art corresponds to the shape of the canvas on which it is painted, two-dimensional applied art correlates to the contours of the article on which it is applied. A fresco painted on a wall, ceiling panel, or dome would not lose copyright protection, for example, simply because it was designed to track the dimensions of the surface on which it was painted. Or consider, for example, a design etched or painted on the surface of a guitar. If that entire design is imaginatively removed from the guitar’s surface and placed on an album cover, it would still resemble the shape of a guitar. But the image on the cover does not “replicate” the guitar as a useful article. Rather, the design is a two-dimensional work of art that corresponds to the shape of the useful article to which it was applied. The statute protects that work of art whether it is first drawn on the album cover and then applied to the guitar’s surface, or vice versa. Failing to protect that art would create an anomaly: It would extend protection to two-dimensional designs that cover a part of a useful article but would not protect the same design if it covered the entire article. The statute does not support that distinction, nor can it be reconciled with the dissent’s recognition that “artwork printed on a t-shirt” could be protected.

[24] To be clear, the only feature of the cheerleading uniform eligible for a copyright in this case is the two-dimensional work of art fixed in the tangible medium of the uniform fabric. Even if respondents ultimately succeed in establishing a valid copyright in the surface decorations at issue here, respondents have no right to prohibit any person from manufacturing a cheerleading uniform of identical shape, cut, and dimensions to the ones on which the decorations in this case appear. They may prohibit only the reproduction of the surface designs in any tangible medium of expression—a uniform or otherwise.² ...

[25] Petitioner ... argues that our reading of the statute is missing an important step. It contends that a feature may exist independently only if it can stand alone as a copyrightable work *and* if the useful article from which it was extracted would remain equally useful. In other words, copyright extends only to “solely artistic” features of useful articles. According to petitioner, if a feature of a useful article “advance[s] the utility of the article,” then it is categorically beyond the scope of copyright.... Because the uniforms would not be equally useful without the designs, petitioner contends that the designs are inseparable from the “utilitarian aspects” of the uniform.

¹ We do not today hold that the surface decorations are copyrightable. We express no opinion on whether these works are sufficiently original to qualify for copyright protection, see *Feist Publications, Inc. v. Rural Telephone Service Co.*, 499 U.S. 340, 358–59 (1991), or on whether any other prerequisite of a valid copyright has been satisfied.

² The dissent suggests that our test would lead to the copyrighting of shovels. But a shovel, like a cheerleading uniform, even if displayed in an art gallery, is “an article having an intrinsic utilitarian function that is not merely to portray the appearance of the article or to convey information.” 17 U.S.C. § 101. It therefore cannot be copyrighted. A drawing of a shovel could, of course, be copyrighted. And, if the shovel included any artistic features that could be perceived as art apart from the shovel, and which would qualify as protectable pictorial, graphic, or sculptural works on their own or in another medium, they too could be copyrighted. But a shovel as a shovel cannot.

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[26] The Government raises a similar argument, although it reaches a different result. It suggests that the appropriate test is whether the useful article with the artistic feature removed would “remain *similarly* useful.” In the view of the United States, however, a plain white cheerleading uniform is “similarly useful” to uniforms with respondents’ designs.

[27] The debate over the relative utility of a plain white cheerleading uniform is unnecessary. The focus of the separability inquiry is on the extracted feature and not on any aspects of the useful article that remain after the imaginary extraction. The statute does not require the decisionmaker to imagine a fully functioning useful article without the artistic feature. Instead, it requires that the separated feature qualify as a nonuseful pictorial, graphic, or sculptural work on its own.

[28] Of course, because the removed feature may not be a useful article—as it would then not qualify as a pictorial, graphic, or sculptural work—there necessarily would be some aspects of the original useful article “left behind” if the feature were conceptually removed. But the statute does not require the imagined remainder to be a fully functioning useful article at all, much less an equally useful one. Indeed, such a requirement would deprive the *Mazer* statuette of protection had it been created first as a lamp base rather than as a statuette. Without the base, the “lamp” would be just a shade, bulb, and wires. The statute does not require that we imagine a nonartistic replacement for the removed feature to determine whether that *feature* is capable of an independent existence....

[29] Because we reject the view that a useful article must remain after the artistic feature has been imaginatively separated from the article, we necessarily abandon the distinction between “physical” and “conceptual” separability, which some courts and commentators have adopted based on the Copyright Act’s legislative history. See H.R. REP. NO. 94–1476, p. 55 (1976). According to this view, a feature is *physically* separable from the underlying useful article if it can “be physically separated from the article by ordinary means while leaving the utilitarian aspects of the article completely intact.” COMPENDIUM § 924.2(A). *Conceptual* separability applies if the feature physically could not be removed from the useful article by ordinary means. See COMPENDIUM § 924.2(B).

[30] The statutory text indicates that separability is a conceptual undertaking. Because separability does not require the underlying useful article to remain, the physical-conceptual distinction is unnecessary....

[31] Petitioner next argues that we should incorporate two “objective” components into our test to provide guidance to the lower courts: (1) “whether the design elements can be identified as reflecting the designer’s artistic judgment exercised independently of functional influence,” and (2) whether “there is [a] substantial likelihood that the pictorial, graphic, or sculptural feature would still be marketable to some significant segment of the community without its utilitarian function.”

[32] We reject this argument because neither consideration is grounded in the text of the statute....

[33] Finally, petitioner argues that allowing the surface decorations to qualify as a “work of authorship” is inconsistent with Congress’ intent to entirely exclude industrial design from copyright. Petitioner notes that Congress refused to pass a provision that would have provided limited copyright protection for industrial designs, including clothing, when it enacted the 1976 Act, and that it has enacted laws protecting designs for specific useful articles—semiconductor chips and boat hulls—while declining to enact other industrial design statutes. From this history of failed legislation petitioner reasons that Congress intends to channel intellectual property claims for industrial design into design patents. It therefore urges us to approach this question with a presumption against copyrightability.

[34] We do not share petitioner’s concern. As an initial matter, congressional inaction lacks persuasive significance in most circumstances. Moreover, we have long held that design patent and copyright are not

mutually exclusive. Congress has provided for limited copyright protection for certain features of industrial design, and approaching the statute with presumptive hostility toward protection for industrial design would undermine Congress' choice. In any event, as explained above, our test does not render the shape, cut, and physical dimensions of the cheerleading uniforms eligible for copyright protection....

[35] We hold that an artistic feature of the design of a useful article is eligible for copyright protection if the feature (1) can be perceived as a two- or three-dimensional work of art separate from the useful article and (2) would qualify as a protectable pictorial, graphic, or sculptural work either on its own or in some other medium if imagined separately from the useful article. Because the designs on the surface of respondents' cheerleading uniforms in this case satisfy these requirements, the judgment of the Court of Appeals is affirmed....

BREYER, J., with whom Justice KENNEDY joins, dissenting.

[36] I agree with much in the Court's opinion. But I do not agree that the designs that Varsity Brands, Inc., submitted to the Copyright Office are eligible for copyright protection. Even applying the majority's test, the designs *cannot* "be perceived as ... two- or three-dimensional work[s] of art separate from the useful article."

[37] Look at the designs that Varsity submitted to the Copyright Office. You will see only pictures of cheerleader uniforms. And cheerleader uniforms are useful articles. A picture of the relevant design features, whether separately "perceived" on paper or in the imagination, is a picture of, and thereby "replicate[s]," the underlying useful article of which they are a part. Hence the design features that Varsity seeks to protect are not "capable of existing independently of [f] the utilitarian aspects of the article." 17 U.S.C. § 101....

[38] The relevant statutory provision says that the "design of a useful article" is copyrightable "only if, and only to the extent that, such design incorporates pictorial, graphic, or sculptural features that can be identified separately from, and are capable of existing independently of, the utilitarian aspects of the article." But what, we must ask, do the words "identified separately" mean? Just when is a design separate from the "utilitarian aspect of the [useful] article?" The most direct, helpful aspect of the Court's opinion answers this question by stating:

"Nor could someone claim a copyright in a useful article merely by creating a replica of that article in some other medium—for example, a cardboard model of a car. Although the replica could itself be copyrightable, it would not give rise to any rights in the useful article that inspired it."

[39] Exactly so. These words help explain the Court's statement that a copyrightable work of art must be "perceived as a two- or three-dimensional work of art separate from the useful article." They help clarify the concept of separateness. They are consistent with Congress' own expressed intent. And they reflect long held views of the Copyright Office. See COMPENDIUM OF U.S. COPYRIGHT OFFICE PRACTICES § 924.2(B) (3d ed. 2014).

[40] Consider, for example, the explanation that the House Report for the Copyright Act of 1976 provides. It says:

"Unless the shape of an automobile, airplane, ladies' dress, food processor, television set, or any other industrial product contains some element that, physically or conceptually, can be identified as separable from the utilitarian aspects of that article, the design would not be copyrighted...." H.R. REP., at 55 (emphasis added).

[41] These words suggest two exercises, one physical, one mental. Can the design features (the picture, the graphic, the sculpture) be physically removed from the article (and considered separately), all the while leaving the fully functioning utilitarian object in place? If not, can one nonetheless conceive of the design features separately without replicating a picture of the utilitarian object? If the answer to either of these questions is

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“yes,” then the design is eligible for copyright protection. Otherwise, it is not. The abstract nature of these questions makes them sound difficult to apply. But with the Court’s words in mind, the difficulty tends to disappear.

[42] An example will help. Imagine a lamp with a circular marble base, a vertical 10–inch tall brass rod (containing wires) inserted off center on the base, a light bulb fixture emerging from the top of the brass rod, and a lampshade sitting on top. In front of the brass rod a porcelain Siamese cat sits on the base facing outward. Obviously, the Siamese cat is *physically separate* from the lamp, as it could be easily removed while leaving both cat and lamp intact. And, assuming it otherwise qualifies, the designed cat is eligible for copyright protection.

[43] Now suppose there is no long brass rod; instead the cat sits in the middle of the base and the wires run up through the cat to the bulbs. The cat is not physically separate from the lamp, as the reality of the lamp’s construction is such that an effort to physically separate the cat and lamp will destroy both cat and lamp. The two are integrated into a single functional object, like the similar configuration of the ballet dancer statuettes that formed the lamp bases at issue in *Mazer v. Stein*. But we can easily imagine the cat on its own, as did Congress when conceptualizing the ballet dancer. See H.R. REP., at 55 (the statuette in *Mazer* was “incorporated into a product without losing its ability to exist independently as a work of art”). In doing so, we do not create a mental picture of a lamp (or, in the Court’s words, a “replica” of the lamp), which is a useful article. We simply perceive the cat separately, as a small cat figurine that could be a copyrightable design work standing alone that does not replicate the lamp. Hence the cat is *conceptually separate* from the utilitarian article that is the lamp.



Figure 26: cat lamps

[44] Case law, particularly case law that Congress and the Copyright Office have considered, reflects the same approach. Congress cited examples of copyrightable design works, including “a carving on the back of a chair” and “a floral relief design on silver flatware.” Copyright Office guidance on copyrightable designs in useful articles include “an engraving on a vase,” “[a]rtwork printed on a t-shirt,” “[a] colorful pattern decorating the surface of a shopping bag,” “[a] drawing on the surface of wallpaper,” and “[a] floral relief decorating the handle of a spoon.” Courts have found copyrightable matter in a plaster ballet dancer statuette encasing the lamp’s electric cords and forming its base, as well as carvings engraved onto furniture, and designs on laminated floor tiles.

[45] By way of contrast, Van Gogh's painting of a pair of old shoes, though beautifully executed and copyrightable as a painting, would not qualify for a shoe design copyright. Courts have similarly denied copyright protection to objects that begin as three-dimensional designs, such as measuring spoons shaped like heart-tipped arrows, candleholders shaped like sailboats, and wire spokes on a wheel cover. None of these designs could qualify for copyright protection that would prevent others from selling spoons, candleholders, or wheel covers with the same design. Why not? Because in each case the design is not separable from the utilitarian aspects of the object to which it relates. The designs cannot be physically separated because they themselves make up the shape of the spoon, candleholders, or wheel covers of which they are a part. And spoons, candleholders, and wheel covers are useful objects, as are the old shoes depicted in Van Gogh's painting. More importantly, one cannot easily imagine or otherwise conceptualize the design of the spoons or the candleholders or the shoes *without that picture, or image, or replica being a picture of spoons, or candleholders, or wheel covers, or shoes*. The designs necessarily bring along the underlying utilitarian object. Hence each design is not conceptually separable from the physical useful object.

[46] The upshot is that one could copyright the floral design on a soup spoon but one could not copyright the shape of the spoon itself, no matter how beautiful, artistic, or esthetically pleasing that shape might be: A picture of the shape of the spoon is also a picture of a spoon; the picture of a floral design is not.

[47] To repeat: A separable design feature must be "capable of existing independently" of the useful article as a separate artistic work that is not itself the useful article. If the claimed feature could be extracted without replicating the useful article of which it is a part, and the result would be a copyrightable artistic work standing alone, then there is a separable design. But if extracting the claimed features would necessarily bring along the underlying useful article, the design is not separable from the useful article. In many or most cases, to decide whether a design or artistic feature of a useful article is conceptually separate from the article itself, it is enough to imagine the feature on its own and ask, "Have I created a picture of a (useful part of a) useful article?" If so, the design is not separable from the useful article. If not, it is.

[48] In referring to imagined pictures and the like, I am not speaking technically. I am simply trying to explain an intuitive idea of what separation is about, as well as how I understand the majority's opinion. So understood, the opinion puts design copyrights in their rightful place. The law has long recognized that drawings or photographs of real world objects are copyrightable as drawings or photographs, but the copyright does not give protection against others making the underlying useful objects. That is why a copyright on Van Gogh's painting would prevent others from reproducing that painting, but it would not prevent others from reproducing and selling the comfortable old shoes that the painting depicts....

[49] To ask this kind of simple question—does the design picture the useful article?—will not provide an answer in every case, for there will be cases where it is difficult to say whether a picture of the design is, or is not, also a picture of the useful article. But the question will avoid courts focusing primarily upon what I believe is an unhelpful feature of the inquiry, namely, whether the design can be imagined as a "two- or three-dimensional work of art." That is because virtually any industrial design can be thought of separately as a "work of art": Just imagine a frame surrounding the design, or its being placed in a gallery. Consider Marcel Duchamp's "readymades" series, the functional mass-produced objects he designated as art. What is there in the world that, viewed through an esthetic lens, cannot be seen as a good, bad, or indifferent work of art? What design features could not be imaginatively reproduced on a painter's canvas? Indeed, great industrial design may well include design that is inseparable from the useful article—where, as Frank Lloyd Wright put it, "form and function are one." Where they are one, the designer may be able to obtain 15 years of protection through a design patent. But, if they are one, Congress did not intend a century or more of copyright protection....

[50] The conceptual approach that I have described reflects Congress' answer to a problem that is primarily practical and economic. Years ago Lord Macaulay drew attention to the problem when he described copyright

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in books as a “tax on readers for the purpose of giving a bounty to writers.” He called attention to the main benefit of copyright protection, which is to provide an incentive to produce copyrightable works and thereby “promote the Progress of Science and useful Arts.” U.S. CONST. art. I, § 8, cl. 8. But Macaulay also made clear that copyright protection imposes costs. Those costs include the higher prices that can accompany the grant of a copyright monopoly. They also can include (for those wishing to display, sell, or perform a design, film, work of art, or piece of music, for example) the costs of discovering whether there are previous copyrights, of contacting copyright holders, and of securing permission to copy. Sometimes, as Thomas Jefferson wrote to James Madison, costs can outweigh “the benefit even of limited monopolies.” Letter from Thomas Jefferson to James Madison (July 31, 1788), in 13 PAPERS OF THOMAS JEFFERSON 443 (J. Boyd ed. 1956) (Jefferson Letter). And that is particularly true in light of the fact that Congress has extended the “limited Times” of protection from the “14 years” of Jefferson’s day to potentially more than a century today.

[51] The Constitution grants Congress primary responsibility for assessing comparative costs and benefits and drawing copyright’s statutory lines. Courts must respect those lines and not grant copyright protection where Congress has decided not to do so. And it is clear that Congress has not extended broad copyright protection to the fashion design industry.

[52] Congress’ decision not to grant full copyright protection to the fashion industry has not left the industry without protection. Patent design protection is available. A maker of clothing can obtain trademark protection under the Lanham Act for signature features of the clothing. And a designer who creates an original textile design can receive copyright protection for that pattern as placed, for example, on a bolt of cloth, or anything made with that cloth. ...

[53] The fashion industry has thrived against this backdrop, and designers have contributed immeasurably to artistic and personal self-expression through clothing. But a decision by this Court to grant protection to the design of a garment would grant the designer protection that Congress refused to provide.... That is why I believe it important to emphasize those parts of the Court’s opinion that limit the scope of its interpretation. That language, as I have said, makes clear that one may not “claim a copyright in a useful article merely by creating a replica of that article in some other medium,” which “would not give rise to any rights in the useful article that inspired it.” ...

[54] If we ask the “separateness” question correctly, the answer here is not difficult to find.... Can the design features in Varsity’s pictures exist separately from the utilitarian aspects of a dress? Can we extract those features as copyrightable design works standing alone, without bringing along, via picture or design, the dresses of which they constitute a part?

[55] Consider designs 074, 078, and 0815. They certainly look like cheerleader uniforms. That is to say, they look like pictures of cheerleader uniforms, just like Van Gogh’s old shoes look like shoes. I do not see how one could see them otherwise. Designs 299A and 299B present slightly closer questions. They omit some of the dresslike context that the other designs possess. But the necklines, the sleeves, and the cut of the skirt suggest that they too are pictures of dresses. Looking at all five of Varsity’s pictures, I do not see how one could conceptualize the design features in a way that does not picture, not just artistic designs, but dresses as well.

[56] Were I to accept the majority’s invitation to “imaginatively remov[e]” the chevrons and stripes *as they are arranged* on the neckline, waistline, sleeves, and skirt of each uniform, and apply them on a “painter’s canvas,” that painting would be of a cheerleader’s dress. The esthetic elements on which Varsity seeks protection exist only as part of the uniform design—there is nothing to separate out but for dress-shaped lines that replicate the cut and style of the uniforms. Hence, each design is not physically separate, nor is it conceptually separate, from the useful article it depicts, namely, a cheerleader’s dress. They cannot be copyrighted.

[57] Varsity, of course, could have sought a design patent for its designs. Or, it could have sought a copyright on a textile design, even one with a similar theme of chevrons and lines.

[58] But that is not the nature of Varsity’s copyright claim. It has instead claimed ownership of the particular “treatment and arrangement” of the chevrons and lines of the design as they appear at the neckline, waist, skirt, sleeves, and overall cut of each uniform. The majority imagines that Varsity submitted something different—that is, only the surface decorations of chevrons and stripes, as in a textile design. As the majority sees it, Varsity’s copyright claim would be the same had it submitted a plain rectangular space depicting chevrons and stripes, like swaths from a bolt of fabric. But considered on their own, the simple stripes are plainly unoriginal. Varsity, then, seeks to do indirectly what it cannot do directly: bring along the design and cut of the dresses by seeking to protect surface decorations whose “treatment and arrangement” are *coextensive with that design and cut*. As Varsity would have it, it would prevent its competitors from making useful three-dimensional cheerleader uniforms by submitting plainly unoriginal chevrons and stripes as cut and arranged on a useful article. But with that cut and arrangement, the resulting pictures on which Varsity seeks protection do not simply depict designs. They depict clothing. They depict the useful articles of which the designs are inextricable parts. And Varsity cannot obtain copyright protection that would give them the power to prevent others from making those useful uniforms, any more than Van Gogh can copyright comfortable old shoes by painting their likeness.

[59] I fear that, in looking past the three-dimensional design inherent in Varsity’s claim by treating it as if it were no more than a design for a bolt of cloth, the majority has lost sight of its own important limiting principle. One may not “claim a copyright in a useful article merely by creating a replica of that article in some other medium,” such as in a picture. That is to say, one cannot obtain a copyright that would give its holder “any rights in the useful article that inspired it.”

[60] With respect, I dissent.

NOTES

1. To get a feel for *Star Athletica*’s separability test, consider how this work whose copyrightability was litigated pre-*Star Athletica* would fare under the Supreme Court’s test: the Brandir RIBBON bicycle rack, as shown in Figure 27 and at issue in *Brandir Int’l, Inc. v. Cascade Pac. Lumber Co.*, 834 F.2d 1142 (2d Cir. 1987). As background, consider the court’s explanation of how the bicycle rack came to be:

[The bicycle rack’s creator] testified, that the original design of the RIBBON Rack stemmed from wire sculptures that [he] had created, each formed from one continuous undulating piece of wire. These sculptures were, he said, created and displayed in his home as a means of personal expression, but apparently were never sold or displayed elsewhere. He also created a wire sculpture in the shape of a bicycle and states that he did not give any thought to the utilitarian application of any of his sculptures until he accidentally juxtaposed the bicycle sculpture with one of the self-standing wire sculptures.... [A] friend, [who was] a bicycle buff and author of numerous articles about urban cycling, ... informed [the creator] that the sculptures would make excellent bicycle racks, permitting bicycles to be parked under the overloops as well as on top of the underloops. Following this meeting, ... [the creator] complet[ed] the designs for the RIBBON Rack by the use of a vacuum cleaner hose, and submit[ed] his drawings to a fabricator complete with dimensions.



Figure 27: Brandir RIBBON bicycle rack

2. What are the works for which Varsity Brands was seeking copyright protection? The majority opinion understood the work to be “surface designs” consisting primarily of “the arrangement of colors, shapes, stripes, and chevrons on the ...cheerleading uniforms,” designs that simply “correspond[ed] to the shape of the useful article[s].” Justice Breyer’s dissent, by contrast, conceived of the designs as inescapably depicting cheerleading uniforms, because Varsity Brands did not merely claim a series of chevrons and stripes but instead chevrons and stripes “as they [were] arranged on the neckline, waistline, sleeves, and skirt of each uniform.” In contrast, Justice Ginsburg’s concurrence (not included above), described the designs as “standalone pictorial and graphic works that [Varsity Brands] reproduce[d] on cheerleading uniforms”—works that did not even require separability analysis because they were not designs of useful articles. How might the understanding of what the work itself is affect the analysis of whether a work is a useful article and whether it satisfies the separability test? For more on how copyright law’s lack of a claiming methodology perpetuates these concerns, see Jeanne C. Fromer & Mark P. McKenna, *Claiming Design*, 167 U. PA. L. REV. 123 (2018).

3. The Supreme Court holds that both two-dimensional and three-dimensional design features must be subjected to separability analysis. It is straightforward to think of three-dimensional design features that are useful or functional. In the context of fashion design, for example, the incorporation of pockets on a pair of trousers is useful because the pockets give the wearer a place for their wallet and keys. Similarly, a shirt sleeve provides a certain degree of warmth, modesty, or ease of movement. Can you think of any two-dimensional design features that are functional?

4. *Star Athletica* does not discuss what makes a feature qualify as functional, or useful, in the first instance. Why might that be important to do? How should one derive that definition? Reconsider § 101’s definition of a useful article as “an article having an intrinsic function that is not merely to portray the appearance of the article or to convey information.” This definition suggests that a feature is an expressive feature, rather than a functional one, only if the feature serves “merely to portray the appearance of the article or to convey information.” A feature with any other purpose is arguably functional as a matter of copyright law. Does this reading mean that design features will qualify as functional more or less frequently?

Can a design feature be simultaneously both expressive and functional? How would § 101 treat such dual-nature features? One possible example of a dual-nature design feature is camouflage. A camouflage pattern might portray its own appearance or convey information. But it also functions to cloak the person or object that it covers in an appropriate environment. Consider, by comparison, the two camouflage patterns in Figure 28. The camouflage pattern on the left was worn by soldiers in the U.S. Army deployed in Afghanistan to cloak them well against their surroundings, whereas the camouflage pattern on the right, worn by North Korean soldiers, does not cloak them, but if anything, makes them easier to see.



Figure 28: good (left) and bad (right) camouflage designs

Consider now optical illusions in fashion. Many features of garment design—line, shape, texture, color, and print—exploit features of human visual perception and optical illusions to influence the way in which the wearer’s body is perceived. Importantly, these visual effects can be created with both three-dimensional design techniques such as garment shape and cut as well as with two-dimensional design techniques such as patterns, stripes, and color. For example, consider the Müller-Lyer illusion, as shown in Figure 29 on the left, which causes a line to look longer if it is bracketed on each end by arrow tails and shorter if it is bracketed on each end by arrowheads. This illusion can be incorporated into garment designs to lengthen or contract the body of the wearer through placement of arrow tails or heads, respectively, as shown in Figure 29 on the right. Is that design feature, as it appears on clothing, functional within the meaning of copyright law? Separable? In this vein, reconsider the zig zags, chevrons, and stripes at issue in *Star Athletica*. Might you be able to make the case that they are functional in affecting the perception of the wearer’s body?

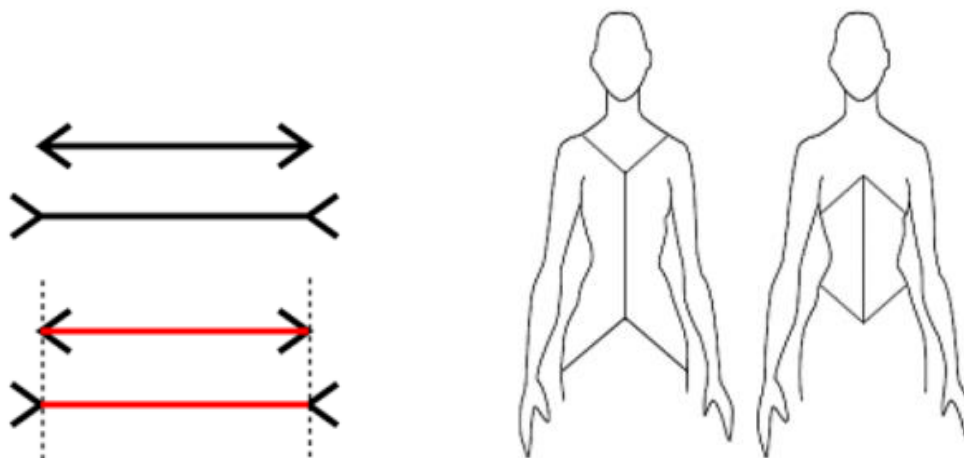


Figure 29: Müller-Lyon Illusion (left) and on body (right)

For more on how to think about this constellation of issues and an argument that much of fashion design is functional as a matter of copyright law, see Christopher Buccafusco & Jeanne C. Fromer, *Fashion’s Function in Intellectual Property Law*, 93 NOTRE DAME L. REV. 51 (2017).

5. Consider whether it is good policy to provide copyright protection for fashion designs. Kal Raustiala and Christopher Sprigman suggest that society benefits more by permitting piracy of fashion designs. How so? They explain that “copying may actually promote innovation and benefit originators. We call this the ‘piracy paradox.’... [C]opying functions as an important element of—and perhaps even a necessary predicate to—the apparel industry’s swift cycle of innovation.” Kal Raustiala & Christopher Sprigman, *The Piracy Paradox: Innovation and Intellectual Property in Fashion Design*, 92 VA. L. REV. 1687, 1691 (2006). In their analysis, the value of fashion design is in part status-based and fashion is cyclical. Because of these two features, design

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copying induces obsolescence of those designs and induces innovation in fashion. To them, if copying is permitted, there will thus be more innovation in fashion design, to the benefit of society. Scott Hemphill and Jeannie Suk Gersen take a stance in favor of protection for “close” copies. To them, “[i]n fashion we observe simultaneously the participation in collective trends and the expression of individuality,” which they call “flocking” and “differentiation,” respectively. C. Scott Hemphill & Jeannie Suk, *The Law, Culture, and Economics of Fashion*, 61 STAN. L. REV. 1147, 1152 (2009). To encourage both phenomena, they think it is important to forbid close copying of fashion designs or otherwise designers’ incentives to create might be undermined. Which view is more convincing? To the extent that fashion designs are in large part about protecting status, or are contemporary forms of sumptuary codes, should copyright law protect them? See Barton Beebe, *Intellectual Property Law and the Sumptuary Code*, 123 HARV. L. REV. 809 (2010).

6. Article 25 of the TRIPS Agreement requires protection for industrial designs. Other forms of legal protection are potentially available to those who cannot get copyright protection for a particular design because it is a useful article that fails the separability test. There are three primary other forms of protection in this context: design patents, trade dress protection, and *sui generis* design protection.

Design patents are available to creators of “any new, original and ornamental design for an article of manufacture.” 35 U.S.C. § 171. Design patents provide protection from infringement for fifteen years from the date of patent grant. *Id.* §§ 173, 289. To get a design patent, a design’s creator must apply to the Patent and Trademark Office, where the application will be examined for patentability. *Id.* §§ 111, 112, 171.

Product design and product packaging are protectable as trade dress, which, under modern law, is a species of trademark. *Wal-Mart Stores, Inc. v. Samara Bros.*, 529 U.S. 205, 209-16 (2000). Trademark rights arise through use rather than registration. 2 J. THOMAS MCCARTHY, MCCARTHY ON TRADEMARKS & UNFAIR COMPETITION § 16:18 (5th ed. 2018). While the Lanham Act—the governing federal law—creates procedures for federal registration of marks, 15 U.S.C. § 1052, unregistered marks are enforceable under federal law on substantially the same terms as registered marks. *Id.* §§ 1114, 1125(a). Like all marks, to be protectable, product design and packaging must be used in commerce in a way that “identif[ies] and distinguish[es] [a party’s goods] from those manufactured or sold by others and ... indicate[s] the source of the goods, even if that source is unknown.” *Id.* § 1127. Product packaging is capable of being considered inherently distinctive, but product design is only protectable if it has acquired secondary meaning. *Wal-Mart Stores, Inc.*, 529 U.S. at 210-15. Moreover, trade dress features are not protectable to the extent they are functional, meaning they are “essential to the use or purpose of the article or ... affect[] the cost or quality of the article.” *Traffix Dev., Inc. v. Mktg. Displays, Inc.*, 532 U.S. 23, 33 (2001).

A third possibility is *sui generis* design protection. In the United States, this protection is only of limited availability. The Vessel Hull Design Protection Act protects original ship vessel hulls that are registered for a period of ten years. 17 U.S.C. §§ 1301-1310. The Semiconductor Chip Protection Act protects the visual appearance of semiconductor chips that are registered for a period of ten years. *Id.* §§ 901-914. There have been a number of failed recent attempts to provide *sui generis* protection for fashion designs. Innovative Design Protection and Piracy Protection Act, 111 S. 3728 (2010); Design Piracy Prohibition Act, 110 S. 1957 (2007). The European Union provides *sui generis* design protection for novel designs with individual character. EU: Directive 98/71/EC (Oct. 13, 1998). There are different forms of protection for unregistered and registered designs.

Consider now one of the few post-*Star Athletica* circuit court decisions. Does it align with your understanding of how easy or hard protection of useful articles will be under *Star Athletica*? What do you make of the court’s analysis of originality, merger, and scenes a faire?

Silvertop Associates Inc. v. Kangaroo Manufacturing Inc.

931 F.3d 215 (3d Cir. 2019)

HARDIMAN, J.:

[1] This ... appeal involves the validity of a copyright in a full-body banana costume. Appellant Kangaroo Manufacturing Inc. concedes that the banana costume it manufactures and sells is substantially similar to the banana costume created and sold by Appellee Rasta Imposta. Yet Kangaroo claims that Rasta cannot hold a valid copyright in such a costume’s “pictorial, graphic, or sculptural features.” 17 U.S.C. § 101.... We hold that, in combination, the Rasta costume’s non-utilitarian, sculptural features are copyrightable, so we will affirm the District Court’s preliminary injunction....

[2] This dispute stems from a business relationship that went bad. In 2010, Rasta obtained Copyright Registration No. VA 1-707-439 for its full-body banana costume. Two years later, Rasta began working with a company called Yagoozon, Inc., which purchased and resold thousands of Rasta’s banana costumes. Yagoozon’s founder, Justin Ligeri, also founded Kangaroo and at all relevant times was aware of Rasta’s copyright registration in the banana costume. After the business relationship between Rasta and Yagoozon ended, Rasta’s CEO, Robert Berman, discovered Kangaroo selling a costume that resembled his company’s without a license.



Figure 30: banana costumes of Rasta and Kangaroo

[3] Rasta sued Kangaroo for copyright infringement After settlement discussions were unsuccessful, Rasta moved for a preliminary injunction and Kangaroo responded by moving to dismiss. The District Court granted the motion for a preliminary injunction Kangaroo appealed

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[4] Kangaroo claims the injunction should not have issued because Rasta is not likely to succeed on the merits of its copyright infringement claim. According to Kangaroo, Rasta does not hold a valid copyright in its banana costume....

[5] We begin by analyzing whether non-utilitarian, sculptural features of the costume are copyrightable by determining whether those features can be identified separately from its utilitarian features and are capable of existing independently from its utilitarian features. See 17 U.S.C. § 101; *Star Athletica*, 137 S. Ct. at 1008. We then consider whether the merger and *scènes a faire* doctrines render the costume ineligible for copyright protection. We conclude that the District Court did not err when it held that Rasta is reasonably likely to prove ownership of a valid copyright....

[6] Having articulated the legal principles that govern our analysis, we turn to the particular facts of this case. To begin with, Rasta’s banana costume is a useful article.⁴ The artistic features of the costume, in combination, prove both separable and capable of independent existence as a copyrightable work: a sculpture. Those sculptural features include the banana’s combination of colors, lines, shape, and length. They do not include the cutout holes for the wearer’s arms, legs, and face; the holes’ dimensions; or the holes’ locations on the costume, because those features are utilitarian.⁵ Although more difficult to imagine separately from the costume’s non-appearance related utility (i.e., wearability) than many works, one can still imagine the banana apart from the costume as an original sculpture. That sculpted banana, once split from the costume, is not intrinsically utilitarian and does not merely replicate the costume, so it may be copyrighted.

[7] Kangaroo responds that we must inspect each feature individually, find each one too unoriginal or too utilitarian in isolation for copyright, and decline to protect the whole. But [our case law] forecloses this divide-and-conquer approach by training our focus on the combination of design elements in a work. And the *Star Athletica* Court did not cherry-pick the uniform designs’ colors, shapes, or lines; it too evaluated their combination. 137 S. Ct. at 1012 (focusing on “the arrangement of colors, shapes, stripes, and chevrons on the surface of the cheerleading uniforms”). Thus, the separately imagined banana—the sum of its non-utilitarian parts—is copyrightable.

[8] Kangaroo also contends the banana is unoriginal because its designers based the design on a natural banana. They ask us to hold that depictions of natural objects in their natural condition can never be copyrighted. This argument seeks to raise the originality requirement’s very low bar, which precedent forecloses for good reason. A judge’s own aesthetic judgments must play no role in copyright analysis. Our inquiry is limited to how the article and features are perceived, not how or why they were designed. The cases Kangaroo cites in its brief confirm that whether natural objects are copyrightable depends on the circumstances. Compare *Satava v. Lowry*, 323 F.3d 805, 810 (9th Cir. 2003) (holding that a sculpture of a jellyfish was not copyrightable), with *Coquico, Inc. v. Rodriguez-Miranda*, 562 F.3d 62, 69 (1st Cir. 2009) (holding that several elements of a plush toy depicting a tree frog were copyrightable). The essential question is whether the depiction of the natural object has a minimal level of creativity. Rasta’s banana meets those requirements....

⁴ ... [A] costume may serve, aside from its appearance, to clothe the wearer. *Star Athletica* addressed cheerleader uniforms as useful articles. And Rasta concedes its costume is a useful article.

⁵ The District Court correctly found that the cutout holes are not, per se, a feature eligible for copyright because they perform a solely utilitarian function. It went on, however, to list the location of the head and arm cutouts which dictate how the costume drapes on and protrudes from a wearer (as opposed to the mere existence of the cutout holes) among the copyrightable features. We disagree with that portion of the District Court’s analysis because we must imagine the banana apart from the useful (i.e., wearable) article. Rasta has not identified any artistic aspect to the holes’ dimensions or locations except in relation to the wearer. The cutout holes’ dimensions and locations on the costume are intrinsically useful (perhaps even necessary) to make the costume wearable like the shape, cut, and dimensions of the cheerleader uniforms in *Star Athletica*, so they cannot be copyrighted.

[9] We therefore hold that the banana costume’s combination of colors, lines, shape, and length (i.e., its artistic features) are both separable and capable of independent existence, and thus are copyrightable....

[10] Lastly, Kangaroo invokes two copyright doctrines—merger and *scenes a faire*—to argue the banana costume is ineligible for protection. Both arguments address the same question: whether copyrighting the banana costume would effectively monopolize an underlying idea, either directly or through elements necessary to that idea’s expression....

[11] Here, copyrighting Rasta’s banana costume would not effectively monopolize the underlying idea because there are many other ways to make a costume resemble a banana. Indeed, Rasta provided over 20 non-infringing examples. As the District Court observed, one can easily distinguish those examples from Rasta’s costume based on the shape, curvature, tips, tips’ color, overall color, length, width, lining, texture, and material. We agree and hold the merger doctrine does not apply here....

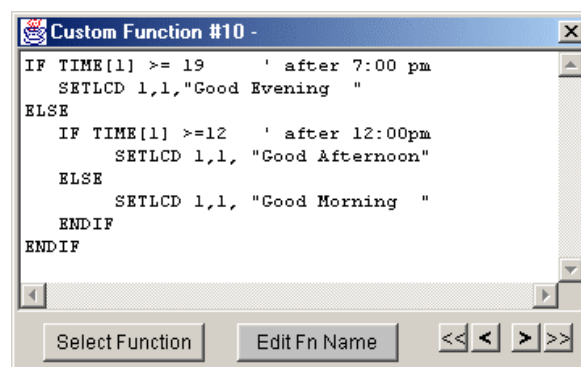
[12] Here too, copyrighting the banana costume’s non-utilitarian features in combination would not threaten ... monopolization [of *scenes a faire*]. Kangaroo points to no specific feature that necessarily results from the costume’s subject matter (a banana). Although a banana costume is likely to be yellow, it could be any shade of yellow—or green or brown for that matter. Although a banana costume is likely to be curved, it need not be—let alone in any particular manner. And although a banana costume is likely to have ends that resemble a natural banana’s, those tips need not look like Rasta’s black tips (in color, shape, or size). Again, the record includes over 20 examples of banana costumes that Rasta concedes would be non-infringing. The *scenes a faire* doctrine does not apply here either....

[13] Because Rasta established a reasonable likelihood that it could prove entitlement to protection for the veritable fruits of its intellectual labor, we will affirm.

4. Computer Software

a. Understanding Computer Software

To study the copyrightability of computer software, it is helpful to first explain some of the terminology in the field. **Software** can generally be understood as the non-tangible component of computers or other hardware that helps direct their operation. This is in contrast to a computer’s hardware, such as a processor or disk drive. In modern computers (and other computing devices, such as a smartphone), hardware and software need each other. Neither works without the other. The software instructs the hardware’s operation (such as adding two numbers together or saving information to computer memory). Software is stored in computer memory.



```

Custom Function #10 -
IF TIME[1] >= 19      ' after 7:00 pm
  SETLCD 1,1,"Good Evening  "
ELSE
  IF TIME[1] >=12    ' after 12:00pm
    SETLCD 1,1, "Good Afternoon"
  ELSE
    SETLCD 1,1, "Good Morning  "
  ENDIF
ENDIF

```

Figure 31: source code example

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Humans write these instructions to the computer in a programming language, using the syntax of the language. These instructions are known as **source code**. Consider the simple example of source code that appears in Figure 31. It is a set of instructions to the computer to display a message of “Good Evening” if it is after 7 pm, a message of “Good Afternoon” if it is before then but after noon, and a message of “Good Morning” if it is earlier than noon.

The slightly more complicated example of source code in Figure 32 calculates sales commissions for employees based on specified rates and each employee’s total sales and then prints out the sales commissions.

```
#define R 10
Struct Sales {char Name[25], char Dept[8], float Sales}; Sales SalesFile[R];

void main(void)
{
    int r;
    float MaxSales = 500.00, Rate1 = 0.07, Rate2 = 0.05, Commission, TotalCommission=0;

    GetDataFile(R);
    for(r = 0; r < R; r++)
        if(SalesFile [r].Sales >= MaxSales)
            Commission = SalesFile [r].Sales*Rate1;
        else
            Commission = SalesFile [r].Sales*Rate2;
        TotalCommission += Commission;
        Printf("\n \t %-s \t %-s \t %.2f \t %.2f", SalesFile [r].Name, SalesFile [r].Dept,
            SalesFile [r].Sales, Commission);
    }
    printf("\n \t Total Sales Commission: %.2f", TotalCommission);
}
```

Figure 32: source code example

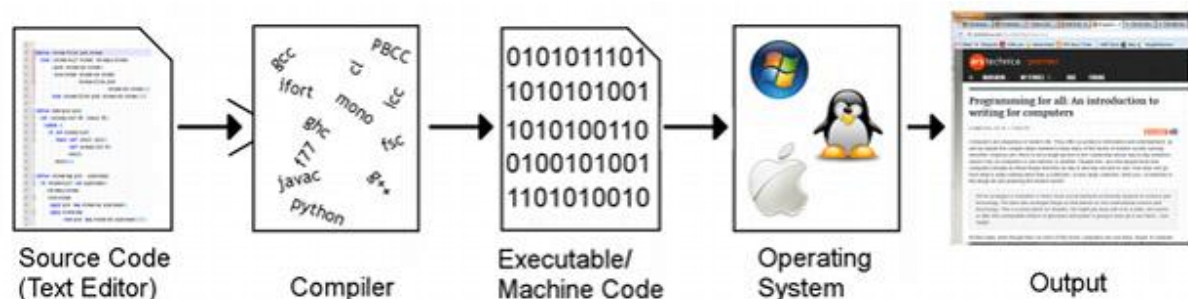


Figure 33: making source code run

Source code cannot instruct the computer in and of itself. It first must be converted to a form that a computer can use. Typically, to do that, a program called a compiler converts the source code to instructions that the computer can execute. This conversion happens by breaking down each source code instruction into a set of computer-readable instructions (such as to write a value in memory, then write another value in memory, and then add those values together). This converted code that the computer can “read” or execute is called **object code**, or **machine code**. It is encoded in binary form, or in zeros and ones. A computer can then execute this object code as an **applications program** (such as a word processing program or an internet browser program) in interaction with a computer’s **operating system**, which is the software—such as Microsoft’s Windows, Apple’s Mac OS, the iPhone’s iOS, or Linux—that supports a computer’s basic functions. This process of a computer’s execution of source code instructions is depicted in Figure 33.

Software design principles suggest breaking up software programs into different **modules** that can interact with one another. For example, Figure 34 shows software modules for an accounting software program. One

reason modules are helpful is that one can take a module, such as the “Accounts Receivable” module here, and use it as well in a different software program (such as billing software).

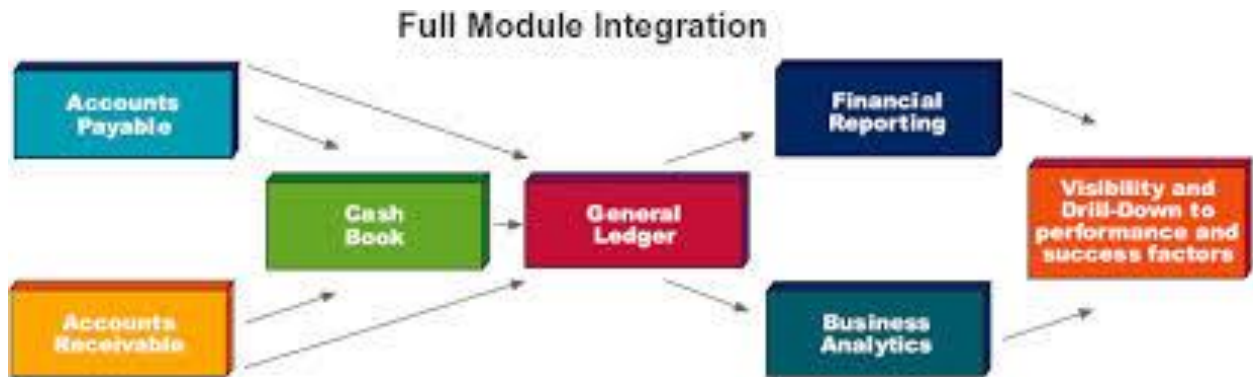


Figure 34: software modules

Finally, what users see in interacting with a software program or operating system is its **user interface**. The user interface of the Microsoft Word word-processing program is depicted in Figure 35.

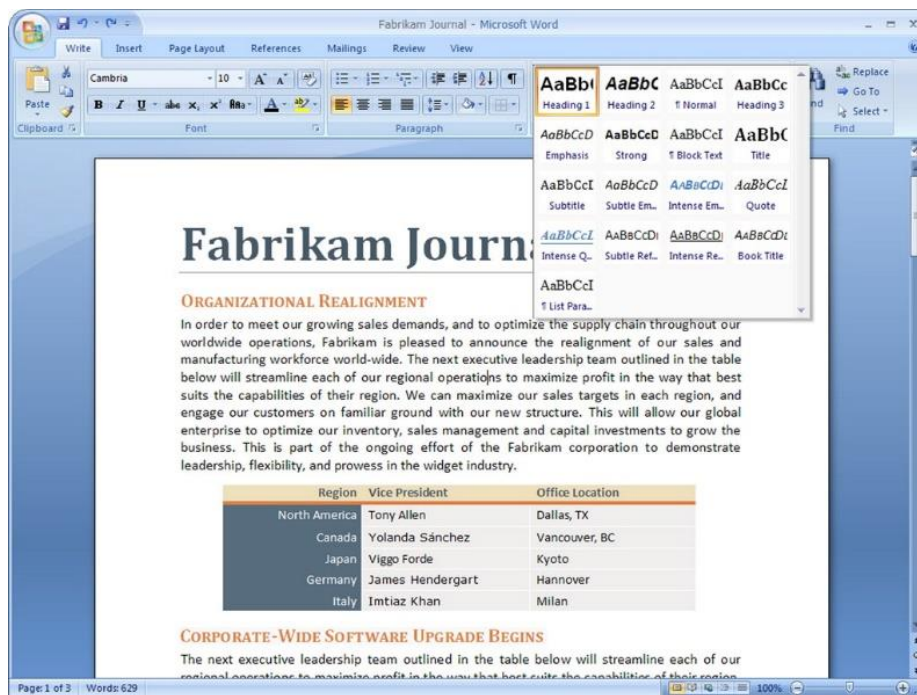


Figure 35: Microsoft Word user interface

The first general purpose computers became commercially available in the 1950s. During this early era of computing, the computer industry was primarily a hardware business. In fact, IBM and other major mainframe manufacturers provided software to their hardware customers free of charge. In the 1980s, as personal computers, or microcomputers, became widely available, the software sector started to grow. Companies like Microsoft began selling operating system and applications programs independently of hardware. With the growth of the internet in the 1990s, yet more software was developed and distributed by independent software companies. Today, software is widely distributed for many forms of hardware beyond traditional computers, such as phones and refrigerators.

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b. Network Effects in Software

One important feature of the software industry to keep in mind as we explore the copyrightability of software are the **network effects** that sometimes drive markets for software. A market exhibits network effects when “the value that consumers place on a good increases as others use the good.” Mark A. Lemley & David McGowan, *Legal Implications of Network Economic Effects*, 86 CALIF. L. REV. 479, 481 (1998). As Mark Lemley and David McGowan explain with regard to computer software,

An operating system or application program will allow even a single user to perform a variety of tasks regardless whether even a single other consumer owns the software. At the same time, the value of a given program grows considerably as the number of additional purchasers increases. As more consumers adopted WordPerfect, for example, it became easier for each previous user to share files without the need for a conversion program and easier for employees to switch jobs without retraining.

That is not the only network effect to which software is subject. In addition,

software may be subject to “increasing returns” based on positive feedback from the market in the form of complementary goods. Software developers will write more applications programs for an operating system with two-thirds of the market than for a system with one-third because the operating system with the larger share will provide the biggest market for applications programs. The availability of a broader array of application programs will reinforce the popularity of an operating system, which in turn will make investment in application programs compatible with that system more desirable than investment in programs compatible with less popular systems. Similarly, firms that adopt relatively popular software will likely incur lower costs to train employees and will find it easier to hire productive temporary help than will firms with unpopular software. Importantly, the strength of network effects will vary depending on the type of software in question. Network effects will be materially greater for operating systems software than for applications programs, for example

There are thus many benefits to computer users from the network effects in certain software markets. Having more programs available provides users with more functionality and choice. When network effects drive software markets to standardization, users also may realize a greater ability to exchange data.

Yet the tendency of some software markets to be driven by network effects also raises a number of concerns. Sometimes the power of network effects can trap an industry or a market in an obsolete or less-than-optimal standard because of the difficulties of switching away from it. And sometimes the power of network effects can make the entry of new competitors into software markets more difficult.

Keep in mind the consequences of software’s network effects as we consider the policies and doctrines underpinning copyright protection for computer software.

c. Copyright Protection for Software

Copyright law, as reflected in the 1976 Act, says nothing specifically about software. That said, given § 101’s expansive definition of “literary work,” software would seem to fit into this category of protectable subject matter. The legislative history says as much:

The term “literary works” does not connote any criterion of literary merit or qualitative value: it includes catalogs, directories, and similar factual, reference, or instructional works and

compilations of data. It also includes computer data bases, and computer programs to the extent that they incorporate authorship in the programmer's expression of original ideas, as distinguished from the ideas themselves.

H.R. REP. NO. 1476, 94th Cong., 2d Sess. 47, at 54 (1976). Congress deliberately chose not to address computer software explicitly in the 1976 Act. Rather, it decided to give the issue of intellectual property protection for software and other new technologies further attention and established the National Commission on New Technological Uses of Copyrighted Works (CONTU) to study these issues. In 1978, CONTU concluded that computer software should be protected by copyright as a literary work. NATIONAL COMMISSION ON NEW TECHNOLOGICAL USES OF COPYRIGHTED WORKS, FINAL REPORT ON NEW TECHNOLOGICAL USES OF COPYRIGHTED WORKS¹¹, 14-15, 38, 43-46 (1979). The commission concluded that copyright law's protections and limitations would fit well with software. In particular, it emphasized that

The "idea-expression identity" exception provides that copyrighted language may be copied without infringing when there is but a limited number of ways to express a given idea. This rule is the logical extension of the fundamental principle that copyright cannot protect ideas. In the computer context this means that when specific instructions, even though previously copyrighted, are the only and essential means of accomplishing a given task, their later use by another will not amount to an infringement....

When other language is available, programmers are free to read copyrighted programs and use the ideas embodied in them in preparing their own works.

In 1980, Congress accepted CONTU's recommendation on computer software. It did not expressly change the subject matter provisions in § 102(a) to allow for software—as it was already considered protectable as a literary work—but it added two provisions to the statute. First, Congress defined a "computer program" in § 101: to be "a set of statements or instructions to be used directly or indirectly in a computer in order to bring about a certain result." Second, Congress added a defense to copyright infringement in § 117 for limited categories of copying computer programs, such as when an owner of a copy of computer program copies it "as an essential step in the utilization of the computer program in conjunction with a machine." For reflections on CONTU's recommendations and Congress's adoption of them, see Arthur R. Miller, *Copyright Protection for Computer Programs, Databases, and Computer-Generated Works: Is Anything New Since CONTU?*, 106 HARV. L. REV. 977 (1993); Pamela Samuelson, *CONTU Revisited: The Case Against Copyright Protection for Computer Programs in Machine-Readable Form*, 1984 DUKE L.J. 663.

Many preliminary questions about the extent of the copyrightability of computer software nonetheless remained unresolved. Early cases sought to settle them. In one foundational case, Apple Computer, Inc., sued Franklin Computer Corporation for copyright infringement. Franklin had made "Apple compatible" computers by copying the code for the Apple II operating system programs. This enabled Franklin's consumers to use peripheral equipment and software developed for the Apple II computer. Franklin had copied all of Apple's code to ensure perfect compatibility. The ensuing Third Circuit decision articulated some fundamental principles on copyright in software programs. *Apple Computer, Inc. v. Franklin Computer Corp.*, 714 F.2d 1240 (3d Cir. 1983). In addition to source code being copyrightable as a literary work, the Third Circuit ruled that object code is also copyrightable as a literary work. The court reasoned that "the category of 'literary works'... is not confined to literature in the nature of Hemingway's *For Whom the Bell Tolls*. The definition of 'literary works' in section 101 includes expression not only in words but also 'numbers, or other ... numerical symbols or indicia,' thereby expanding the common usage of 'literary works.'" The court also rejected Franklin's argument that operating system programs cannot be copyrighted, even if applications programs can. Franklin had argued that operating system programs were unprotectable as systems or processes pursuant to § 102(b). The court thought there was no material distinction between operating system programs and applications programs in this regard, in

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that both instruct the computer to do something. Finally, the court dismissed Franklin's argument that the merger doctrine applies to bar protection for Apple's operating system program. Franklin had maintained that compatibility is important and there are only a few ways to arrange an operating system to be compatible with Apple's. The Third Circuit disagreed:

If other methods of expressing that idea are not foreclosed as a practical matter, then there is no merger. Franklin may wish to achieve total compatibility with independently developed application programs written for the Apple II, but that is a commercial and competitive objective which does not enter into the somewhat metaphysical issue of whether particular ideas and expression have merged.

This was an early case, but over the next few years, all courts agreed that source code and object code, for both operating systems and applications, were copyrightable.

Despite Congress's determination to include software as copyrightable subject matter, there has been sustained skepticism regarding whether software is a proper subject of copyright protection. One critique has been that software code is lacking in the communicative function that copyright is meant to protect. As CONTU Commissioner John Hersey expressed in his dissent from the commission's report, the other categories of copyrightable subject matter are "intended to be circulated to human beings and to be used by them—to be read, heard, or seen, for either pleasurable or practical ends. Computer programs, in their mature phase, are addressed to machines." NATIONAL COMMISSION ON NEW TECHNOLOGICAL USES OF COPYRIGHTED WORKS, FINAL REPORT ON NEW TECHNOLOGICAL USES OF COPYRIGHTED WORKS 28 (1979). On this front, is software code similar to, or different from, the piano rolls we studied earlier, which are now copyrightable? What to make of the fact that some software code is shared with other programmers, whether to build upon or to learn from it? Another criticism is that object code in particular lacks authorship because it is compiled by a computer from source code. Richard H. Stern, *Another Look at Copyright Protection of Software*, 3 COMPUTER/L. J. 1 (1981). Is that correct? Or does the object code preserve the source code programmer's authorship in its translation? Another related line of criticism is that computer software code has the central aim of functionality, much like things that are patented, and very much unlike the canonical forms of copyrighted works. Jeanne C. Fromer, *A Psychology of Intellectual Property*, 104 NW. U. L. REV. 1441 (2010); Pamela Samuelson, *A Manifesto Concerning the Legal Protection of Computer Programs*, 94 COLUM. L. REV. 2308 (1994). If true, might limitations on copyrightability, such as the idea-expression distinction and the merger doctrine, ensure that functional aspects of programs do not receive protection? Finally, the network effects of software raise some worries that providing too much protection can impede progress in ways that are absent for other categories of copyrightable subject matter that do not produce such network effects. Peter S. Menell, *An Analysis of the Scope of Copyright Protection for Application Programs*, 41 STAN. L. REV. 1045, 1066-69 (1989).

The earliest cases protecting software under copyright, like *Apple*, prohibited piracy of computer programs—that is, exact copying. But when cases arose in which claims of copyright infringement rested on copying non-literal elements of computer code, courts had to learn to distinguish idea and process from expression in software.

As you read this case, consider how, if at all, the court takes into account software’s unique technical and economic features in establishing the line between protectable expression and unprotectable ideas and processes. Practically, how much do you think will be left as protectable expression in software code after applying the court’s framework?

Computer Associates International v. Altai, Inc.

982 F.2d 693 (2d Cir. 1992)

WALKER, J.:

[1] In recent years, the growth of computer science has spawned a number of challenging legal questions, particularly in the field of copyright law. As scientific knowledge advances, courts endeavor to keep pace, and sometimes—as in the area of computer technology—they are required to venture into less than familiar waters. This is not a new development, though. From its beginning, the law of copyright has developed in response to significant changes in technology.

[2] Article I, section 8 of the Constitution authorizes Congress “[t]o 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.” The Supreme Court has stated that “[t]he economic philosophy behind the clause ... is the conviction that encouragement of individual effort by personal gain is the best way to advance public welfare....” *Mazer v. Stein*, 347 U.S. 201, 219 (1954). The author’s benefit, however, is clearly a “secondary” consideration. The ultimate aim is, by this incentive, to stimulate artistic creativity for the general public good.

[3] Thus, the copyright law seeks to establish a delicate equilibrium. On the one hand, it affords protection to authors as an incentive to create, and, on the other, it must appropriately limit the extent of that protection so as to avoid the effects of monopolistic stagnation. In applying the federal act to new types of cases, courts must always keep this symmetry in mind.

[4] Among other things, this case deals with the challenging question of whether and to what extent the “non-literal” aspects of a computer program, that is, those aspects that are not reduced to written code, are protected by copyright.... Drawing upon long-standing doctrines of copyright law, we take an approach that we think ... addresses the practical difficulties embedded in these types of cases. In so doing, we have kept in mind the necessary balance between creative incentive and industrial competition....

[5] The Copyright Act defines a computer program as “a set of statements or instructions to be used directly or indirectly in a computer in order to bring about a certain result.” 17 U.S.C. § 101. In writing these directions, the programmer works from the general to the specific.

[6] The first step in this procedure is to identify a program’s ultimate function or purpose. An example of such an ultimate purpose might be the creation and maintenance of a business ledger. Once this goal has been achieved, a programmer breaks down or decomposes the program’s ultimate function into simpler constituent problems or “subtasks,” which are also known as subroutines or modules. In the context of a business ledger program, a module or subroutine might be responsible for the task of updating a list of outstanding accounts receivable. Sometimes, depending upon the complexity of its task, a subroutine may be broken down further into sub-subroutines.

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[7] Having sufficiently decomposed the program's ultimate function into its component elements, a programmer will then arrange the subroutines or modules into what are known as organizational or flow charts. Flow charts map the interactions between modules that achieve the program's end goal.

[8] In order to accomplish these intra-program interactions, a programmer must carefully design each module's parameter list. A parameter list is the information sent to and received from a subroutine. The term "parameter list" refers to the form in which information is passed between modules (e.g. for accounts receivable, the designated time frame and particular customer identifying number) and the information's actual content (e.g. 8/91–7/92; customer No. 3). With respect to form, interacting modules must share similar parameter lists so that they are capable of exchanging information.

[9] The functions of the modules in a program together with each module's relationships to other modules constitute the "structure" of the program. Additionally, the term structure may include the category of modules referred to as "macros." A macro is a single instruction that initiates a sequence of operations or module interactions within the program. Very often the user will accompany a macro with an instruction from the parameter list to refine the instruction (e.g. current total of accounts receivable (macro), but limited to those for 8/91 to 7/92 from customer No. 3 (parameters)).

[10] In fashioning the structure, a programmer will normally attempt to maximize the program's speed, efficiency, as well as simplicity for user operation, while taking into consideration certain externalities such as the memory constraints of the computer upon which the program will be run. This stage of program design often requires the most time and investment.

[11] Once each necessary module has been identified, designed, and its relationship to the other modules has been laid out conceptually, the resulting program structure must be embodied in a written language that the computer can read. This process is called "coding," and requires two steps. First, the programmer must transpose the program's structural blue-print into a source code. This step has been described as comparable to the novelist fleshing out the broad outline of his plot by crafting from words and sentences the paragraphs that convey the ideas.... Once the source code has been completed, the second step is to translate or "compile" it into object code. Object code is the binary language comprised of zeros and ones through which the computer directly receives its instructions.

[12] After the coding is finished, the programmer will run the program on the computer in order to find and correct any logical and syntactical errors. This is known as "debugging" and, once done, the program is complete....

[13] The subject of this litigation originates with one of CA's marketed programs entitled CA-SCHEDULER. CA-SCHEDULER is a job scheduling program designed for IBM mainframe computers. Its primary functions are straightforward: to create a schedule specifying when the computer should run various tasks, and then to control the computer as it executes the schedule. CA-SCHEDULER contains a sub-program entitled ADAPTER, also developed by CA. ADAPTER is not an independently marketed product of CA; it is a wholly integrated component of CA-SCHEDULER and has no capacity for independent use.

[14] Nevertheless, ADAPTER plays an extremely important role. It is an "operating system compatibility component," which means, roughly speaking, it serves as a translator. An "operating system" is itself a program that manages the resources of the computer, allocating those resources to other programs as needed. The IBM System 370 family of computers, for which CA-SCHEDULER was created, is, depending upon the computer's size, designed to contain one of three operating systems: DOS/VSE, MVS, or CMS. As the district court noted, the general rule is that a program written for one operating system, e.g., DOS/VSE, will not, without modification, run under another operating system such as MVS. ADAPTER's function is to translate the

language of a given program into the particular language that the computer's own operating system can understand....

[15] A program like ADAPTER, which allows a computer user to change or use multiple operating systems while maintaining the same software, is highly desirable. It saves the user the costs, both in time and money, that otherwise would be expended in purchasing new programs, modifying existing systems to run them, and gaining familiarity with their operation. The benefits run both ways. The increased compatibility afforded by an ADAPTER-like component, and its resulting popularity among consumers, makes whatever software in which it is incorporated significantly more marketable.

[16] Starting in 1982, Altai began marketing its own job scheduling program entitled ZEKE. The original version of ZEKE was designed for use in conjunction with a VSE operating system. By late 1983, in response to customer demand, Altai decided to rewrite ZEKE so that it could be run in conjunction with an MVS operating system.

[17] At that time, James P. Williams, then an employee of Altai and now its President, approached Claude F. Arney, III, a computer programmer who worked for CA. Williams and Arney were longstanding friends, and had in fact been co-workers at CA for some time before Williams left CA to work for Altai's predecessor. Williams wanted to recruit Arney to assist Altai in designing an MVS version of ZEKE...

[18] Arney ... was intimately familiar with various aspects of ADAPTER....

[19] Once at Altai, Arney and Williams discussed design possibilities for adapting ZEKE to run on MVS operating systems.... Arney persuaded Williams that the best way to make the needed modifications was to introduce a "common system interface" component into ZEKE. He did not tell Williams that his idea stemmed from his familiarity with ADAPTER. They decided to name this new component-program OSCAR.

[20] Arney went to work creating OSCAR at Altai's offices using the ADAPTER source code.... In three months, Arney successfully completed the OSCAR/VSE project. In an additional month he developed an OSCAR/MVS version. When the dust finally settled, Arney had copied approximately 30% of OSCAR's code from CA's ADAPTER program.

[21] The first generation of OSCAR programs was known as OSCAR 3.4. From 1985 to August 1988, Altai used OSCAR 3.4 in its ZEKE product In late July 1988, CA first learned that Altai may have appropriated parts of ADAPTER. After confirming its suspicions, CA secured copyrights on its 2.1 and 7.0 versions of CA-SCHEDULER. CA then brought this copyright and trade secret misappropriation action against Altai.

[22] Apparently, it was upon receipt of the summons and complaint that Altai first learned that Arney had copied much of the OSCAR code from ADAPTER....

[23] Upon advice of counsel, Williams initiated OSCAR's rewrite. The project's goal was to save as much of OSCAR 3.4 as legitimately could be used, and to excise those portions which had been copied from ADAPTER. Arney was entirely excluded from the process, and his copy of the ADAPTER code was locked away. Williams put eight other programmers on the project, none of whom had been involved in any way in the development of OSCAR 3.4. Williams provided the programmers with a description of the ZEKE operating system services so that they could rewrite the appropriate code. The rewrite project took about six months to complete and was finished in mid-November 1989. The resulting program was entitled OSCAR 3.5.

[24] From that point on, Altai shipped only OSCAR 3.5 to its new customers. Altai also shipped OSCAR 3.5 as a "free upgrade" to all customers that had previously purchased OSCAR 3.4....

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[25] ... Altai has conceded liability for the copying of ADAPTER into OSCAR 3.4 and raises no challenge to the award of \$364,444 in damages on that score. Thus, we address only CA's appeal from the district court's ruling[] that ... Altai was not liable for copyright infringement in developing OSCAR 3.5....

[26] As a general matter, and to varying degrees, copyright protection extends beyond a literary work's strictly textual form to its non-literal components. As we have said, "[i]t is of course essential to any protection of literary property ... that the right cannot be limited literally to the text, else a plagiarist would escape by immaterial variations." *Nichols v. Universal Pictures Corp.*, 45 F.2d 119, 121 (2d Cir.1930) (L. Hand, J.). Thus, where the fundamental essence or structure of one work is duplicated in another, courts have found copyright infringement....

[27] In this case, the hotly contested issues surround OSCAR 3.5. As recounted above, OSCAR 3.5 is the product of Altai's carefully orchestrated rewrite of OSCAR 3.4. After the purge, none of the ADAPTER source code remained in the 3.5 version; thus, Altai made sure that the literal elements of its revamped OSCAR program were no longer substantially similar to the literal elements of CA's ADAPTER.

[28] According to CA, the district court ... committed legal error in analyzing its claims of copyright infringement by failing to find that copyright protects expression contained in the non-literal elements of computer software. We disagree.

[29] CA argues that, despite Altai's rewrite of the OSCAR code, the resulting program remained substantially similar to the structure of its ADAPTER program. As discussed above, a program's structure includes its non-literal components such as general flow charts as well as the more specific organization of inter-modular relationships, parameter lists, and macros. In addition to these aspects, CA contends that OSCAR 3.5 is also substantially similar to ADAPTER with respect to the list of services that both ADAPTER and OSCAR obtain from their respective operating systems. We must decide whether and to what extent these elements of computer programs are protected by copyright law.

[30] ... The Copyright Act affords protection to "original works of authorship fixed in any tangible medium of expression." 17 U.S.C. § 102(a). This broad category of protected "works" includes "literary works," *id.* § 102(a)(1), which are defined by the Act as

works, other than audiovisual works, expressed in words, numbers, or other verbal or numerical symbols or indicia, regardless of the nature of the material objects, such as books, periodicals, manuscripts, phonorecords, film tapes, disks, or cards, in which they are embodied.

17 U.S.C. § 101. While computer programs are not specifically listed as part of the above statutory definition, the legislative history leaves no doubt that Congress intended them to be considered literary works.

[31] The syllogism that follows from the foregoing premises is a powerful one: if the non-literal structures of literary works are protected by copyright; and if computer programs are literary works, as we are told by the legislature; then the non-literal structures of computer programs are protected by copyright. We have no reservation in joining the company of those courts that have already ascribed to this logic. However, that conclusion does not end our analysis. We must determine the scope of copyright protection that extends to a computer program's non-literal structure....

[32] It is a fundamental principle of copyright law that a copyright does not protect an idea, but only the expression of the idea....

[33] Congress made no special exception for computer programs. To the contrary, the legislative history explicitly states that copyright protects computer programs only "to the extent that they incorporate

authorship in programmer’s expression of original ideas, as distinguished from the ideas themselves.” House Report at 5667; *see also id.* at 5670 (“Section 102(b) is intended ... to make clear that the expression adopted by the programmer is the copyrightable element in a computer program, and that the actual processes or methods embodied in the program are not within the scope of copyright law.”)

[34] Drawing the line between idea and expression is a tricky business....

[35] The essentially utilitarian nature of a computer program further complicates the task of distilling its idea from its expression. In order to describe both computational processes and abstract ideas, its content combines creative and technical expression. The variations of expression found in purely creative compositions, as opposed to those contained in utilitarian works, are not directed towards practical application. For example, a narration of Humpty Dumpty’s demise, which would clearly be a creative composition, does not serve the same ends as, say, a recipe for scrambled eggs—which is a more process oriented text. Thus, compared to aesthetic works, computer programs hover even more closely to the elusive boundary line described in § 102(b).

[36] The doctrinal starting point in analyses of utilitarian works, is the seminal case of *Baker v. Selden*....

[37] To the extent that an accounting text and a computer program are both “a set of statements or instructions ... to bring about a certain result,” 17 U.S.C. § 101, they are roughly analogous. In the former case, the processes are ultimately conducted by human agency; in the latter, by electronic means. In either case, as already stated, the processes themselves are not protectable. But the holding in *Baker* goes farther. The Court concluded that those aspects of a work, which “must necessarily be used as incident to” the idea, system or process that the work describes, are also not copyrightable. Selden’s ledger sheets, therefore, enjoyed no copyright protection because they were “necessary incidents to” the system of accounting that he described. From this reasoning, we conclude that those elements of a computer program that are necessarily incidental to its function are similarly unprotectable.

[38] While *Baker v. Selden* provides a sound analytical foundation, it offers scant guidance on how to separate idea or process from expression, and moreover, on how to further distinguish protectable expression from that expression which “must necessarily be used as incident to” the work’s underlying concept. In the context of computer programs, the Third Circuit’s noted decision in *Whelan [Assocs., Inc. v. Jaslow Dental Lab., Inc.]*, 797 F.2d 1222 (3d Cir. 1986),] has, thus far, been the most thoughtful attempt to accomplish these ends.

[39] The court in *Whelan* faced substantially the same problem as is presented by this case. There, the defendant was accused of making off with the non-literal structure of the plaintiff’s copyrighted dental lab management program, and employing it to create its own competitive version. In assessing whether there had been an infringement, the court had to determine which aspects of the programs involved were ideas, and which were expression. In separating the two, the court settled upon the following conceptual approach:

[T]he line between idea and expression may be drawn with reference to the end sought to be achieved by the work in question. In other words, the purpose or function of a utilitarian work would be the work’s idea, and everything that is not necessary to that purpose or function would be part of the expression of the idea.... Where there are various means of achieving the desired purpose, then the particular means chosen is not necessary to the purpose; hence, there is expression, not idea.

The “idea” of the program at issue in *Whelan* was identified by the court as simply “the efficient management of a dental laboratory.”

[40] So far, in the courts, the *Whelan* rule has received a mixed reception. While some decisions have adopted its reasoning, others have rejected it.

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[41] *Whelan* has fared even more poorly in the academic community, where its standard for distinguishing idea from expression has been widely criticized for being conceptually overbroad. The leading commentator in the field has stated that “[t]he crucial flaw in [*Whelan*’s] reasoning is that it assumes that only one ‘idea,’ in copyright law terms, underlies any computer program, and that once a separable idea can be identified, everything else must be expression.” 3 NIMMER ON COPYRIGHT § 13.03(F), at 13–62.34. This criticism focuses not upon the program’s ultimate purpose but upon the reality of its structural design. As we have already noted, a computer program’s ultimate function or purpose is the composite result of interacting subroutines. Since each subroutine is itself a program, and thus, may be said to have its own “idea,” *Whelan*’s general formulation that a program’s overall purpose equates with the program’s idea is descriptively inadequate.

[42] Accordingly, we think that [the district court] wisely declined to follow *Whelan*....

[43] As discussed herein, we think that district courts would be well-advised to undertake a three-step procedure ... in order to determine whether the non-literal elements of two or more computer programs are substantially similar. This approach breaks no new ground; rather, it draws on such familiar copyright doctrines as merger, scenes a faire, and public domain. In taking this approach, however, we are cognizant that computer technology is a dynamic field which can quickly outpace judicial decisionmaking. Thus, in cases where the technology in question does not allow for a literal application of the procedure we outline below, our opinion should not be read to foreclose the district courts of our circuit from utilizing a modified version.

[44] ... [A] court would first break down the allegedly infringed program into its constituent structural parts. Then, by examining each of these parts for such things as incorporated ideas, expression that is necessarily incidental to those ideas, and elements that are taken from the public domain, a court would then be able to sift out all non-protectable material. Left with a kernel, or possible kernels, of creative expression after following this process of elimination, the court’s last step would be to compare this material with the structure of an allegedly infringing program. The result of this comparison will determine whether the protectable elements of the programs at issue are substantially similar so as to warrant a finding of infringement. It will be helpful to elaborate a bit further.

Step One: Abstraction

[45] As the district court appreciated, the theoretic framework for analyzing substantial similarity expounded by Learned Hand in the *Nichols* case is helpful in the present context. In *Nichols*, we enunciated what has now become known as the “abstractions” test for separating idea from expression:

Upon any work ... a great number of patterns of increasing generality will fit equally well, as more and more of the incident is left out. The last may perhaps be no more than the most general statement of what the [work] is about, and at times might consist only of its title; but there is a point in this series of abstractions where they are no longer protected, since otherwise the [author] could prevent the use of his “ideas,” to which, apart from their expression, his property is never extended.

[46] While the abstractions test was originally applied in relation to literary works such as novels and plays, it is adaptable to computer programs. In contrast to the *Whelan* approach, the abstractions test implicitly recognizes that any given work may consist of a mixture of numerous ideas and expressions.

[47] As applied to computer programs, the abstractions test will comprise the first step in the examination for substantial similarity. Initially, in a manner that resembles reverse engineering on a theoretical plane, a court should dissect the allegedly copied program’s structure and isolate each level of abstraction contained within it. This process begins with the code and ends with an articulation of the program’s ultimate function. Along

the way, it is necessary essentially to retrace and map each of the designer's steps—in the opposite order in which they were taken during the program's creation.

[48] As an anatomical guide to this procedure, the following description is helpful:

At the lowest level of abstraction, a computer program may be thought of in its entirety as a set of individual instructions organized into a hierarchy of modules. At a higher level of abstraction, the instructions in the lowest-level modules may be replaced conceptually by the functions of those modules. At progressively higher levels of abstraction, the functions of higher-level modules conceptually replace the implementations of those modules in terms of lower-level modules and instructions, until finally, one is left with nothing but the ultimate function of the program.... A program has structure at every level of abstraction at which it is viewed. At low levels of abstraction, a program's structure may be quite complex; at the highest level it is trivial.

Step Two: Filtration

[49] Once the program's abstraction levels have been discovered, the substantial similarity inquiry moves from the conceptual to the concrete. Professor Nimmer suggests, and we endorse, a "successive filtering method" for separating protectable expression from non-protectable material. *See generally* 3 NIMMER § 13.03[F]. This process entails examining the structural components at each level of abstraction to determine whether their particular inclusion at that level was "idea" or was dictated by considerations of efficiency, so as to be necessarily incidental to that idea; required by factors external to the program itself; or taken from the public domain and hence is nonprotectable expression. The structure of any given program may reflect some, all, or none of these considerations. Each case requires its own fact specific investigation.

[50] Strictly speaking, this filtration serves the purpose of defining the scope of plaintiff's copyright. By applying well developed doctrines of copyright law, it may ultimately leave behind a core of protectable material. Further explication of this second step may be helpful.

(a) Elements Dictated by Efficiency ...

[51] CONTU recognized the applicability of the merger doctrine to computer programs. In its report to Congress it stated that:

[C]opyrighted language may be copied without infringing when there is but a limited number of ways to express a given idea.... In the computer context, this means that when specific instructions, even though previously copyrighted, are the only and essential means of accomplishing a given task, their later use by another will not amount to infringement.

CONTU Report, at 20. While this statement directly concerns only the application of merger to program code, that is, the textual aspect of the program, it reasonably suggests that the doctrine fits comfortably within the general context of computer programs.

[52] Furthermore, when one considers the fact that programmers generally strive to create programs that meet the user's needs in the most efficient manner, the applicability of the merger doctrine to computer programs becomes compelling. In the context of computer program design, the concept of efficiency is akin to deriving the most concise logical proof or formulating the most succinct mathematical computation. Thus, the more efficient a set of modules are, the more closely they approximate the idea or process embodied in that particular aspect of the program's structure.

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[53] While, hypothetically, there might be a myriad of ways in which a programmer may effectuate certain functions within a program,—i.e., express the idea embodied in a given subroutine—efficiency concerns may so narrow the practical range of choice as to make only one or two forms of expression workable options. Of course, not all program structure is informed by efficiency concerns. It follows that in order to determine whether the merger doctrine precludes copyright protection to an aspect of a program’s structure that is so oriented, a court must inquire whether the use of this particular set of modules is necessary efficiently to implement that part of the program’s process being implemented. If the answer is yes, then the expression represented by the programmer’s choice of a specific module or group of modules has merged with their underlying idea and is unprotected.

[54] Another justification for linking structural economy with the application of the merger doctrine stems from a program’s essentially utilitarian nature and the competitive forces that exist in the software marketplace. Working in tandem, these factors give rise to a problem of proof which merger helps to eliminate.

[55] Efficiency is an industry-wide goal. Since, as we have already noted, there may be only a limited number of efficient implementations for any given program task, it is quite possible that multiple programmers, working independently, will design the identical method employed in the allegedly infringed work. Of course, if this is the case, there is no copyright infringement.

[56] Under these circumstances, the fact that two programs contain the same efficient structure may as likely lead to an inference of independent creation as it does to one of copying. Thus, since evidence of similarly efficient structure is not particularly probative of copying, it should be disregarded in the overall substantial similarity analysis....

(b) Elements Dictated by External Factors

[57] We have stated that where it is virtually impossible to write about a particular historical era or fictional theme without employing certain ‘stock’ or standard literary devices, such expression is not copyrightable....

[58] Professor Nimmer points out that “in many instances it is virtually impossible to write a program to perform particular functions in a specific computing environment without employing standard techniques.” 3 NIMMER § 13.03[F][3], at 13–65. This is a result of the fact that a programmer’s freedom of design choice is often circumscribed by extrinsic considerations such as (1) the mechanical specifications of the computer on which a particular program is intended to run; (2) compatibility requirements of other programs with which a program is designed to operate in conjunction; (3) computer manufacturers’ design standards; (4) demands of the industry being serviced; and (5) widely accepted programming practices within the computer industry....

[59] ... [W]e conclude that a court must also examine the structural content of an allegedly infringed program for elements that might have been dictated by external factors.

(c) Elements Taken from the Public Domain

[60] Closely related to the non-protectability of scenes a faire, is material found in the public domain. Such material is free for the taking and cannot be appropriated by a single author even though it is included in a copyrighted work. We see no reason to make an exception to this rule for elements of a computer program that have entered the public domain by virtue of freely accessible program exchanges and the like. Thus, a court must also filter out this material from the allegedly infringed program before it makes the final inquiry in its substantial similarity analysis.

Step Three: Comparison

[61] The third and final step of the test for substantial similarity that we believe appropriate for non-literal program components entails a comparison. Once a court has sifted out all elements of the allegedly infringed program which are “ideas” or are dictated by efficiency or external factors, or taken from the public domain, there may remain a core of protectable expression. In terms of a work’s copyright value, this is the golden nugget.... {We return to substantial similarity analysis in Chapter V.}

[62] We are satisfied that the three step approach we have just outlined not only comports with, but advances the constitutional policies underlying the Copyright Act. Since any method that tries to distinguish idea from expression ultimately impacts on the scope of copyright protection afforded to a particular type of work, the line it draws must be a pragmatic one, which also keeps in consideration the preservation of the balance between competition and protection.

[63] CA and some amici argue against the type of approach that we have set forth on the grounds that it will be a disincentive for future computer program research and development. At bottom, they claim that if programmers are not guaranteed broad copyright protection for their work, they will not invest the extensive time, energy and funds required to design and improve program structures. While they have a point, their argument cannot carry the day. The interest of the copyright law is not in simply conferring a monopoly on industrious persons, but in advancing the public welfare through rewarding artistic creativity, in a manner that permits the free use and development of non-protectable ideas and processes.

[64] In this respect, our conclusion is informed by Justice Stewart’s concise discussion of the principles that correctly govern the adaptation of the copyright law to new circumstances. In *Twentieth Century Music Corp. v. Aiken*, he wrote:

The limited scope of the copyright holder’s statutory monopoly, like the limited copyright duration required by the Constitution, reflects a balance of competing claims upon the public interest: Creative work is to be encouraged and rewarded, but private motivation must ultimately serve the cause of promoting broad public availability of literature, music, and the other arts.

The immediate effect of our copyright law is to secure a fair return for an “author’s” creative labor. But the ultimate aim is, by this incentive, to stimulate artistic creativity for the general public good.... When technological change has rendered its literal terms ambiguous, the Copyright Act must be construed in light of this basic purpose.

422 U.S. 151, 156 (1975)

[65] *Feist* teaches that substantial effort alone cannot confer copyright status on an otherwise uncopyrightable work. As we have discussed, despite the fact that significant labor and expense often goes into computer program flow-charting and debugging, that process does not always result in inherently protectable expression. Thus, *Feist* implicitly undercuts the *Whelan* rationale, which allowed copyright protection beyond the literal computer code in order to provide the proper incentive for programmers by protecting their most valuable efforts.... In view of the Supreme Court’s recent holding, however, we must reject the legal basis of CA’s disincentive argument.

[66] Furthermore, we are unpersuaded that the test we approve today will lead to the dire consequences for the computer program industry that plaintiff and some amici predict. To the contrary, serious students of the industry have been highly critical of the sweeping scope of copyright protection engendered by the *Whelan* rule, in that it enables first comers to lock up basic programming techniques as implemented in programs to perform particular tasks.

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[67] To be frank, the exact contours of copyright protection for non-literal program structure are not completely clear. We trust that as future cases are decided, those limits will become better defined. Indeed, it may well be that the Copyright Act serves as a relatively weak barrier against public access to the theoretical interstices behind a program's source and object codes. This results from the hybrid nature of a computer program, which, while it is literary expression, is also a highly functional, utilitarian component in the larger process of computing.

[68] Generally, we think that copyright registration—with its indiscriminating availability—is not ideally suited to deal with the highly dynamic technology of computer science. Thus far, many of the decisions in this area reflect the courts' attempt to fit the proverbial square peg in a round hole.... [P]atent registration, with its exacting up-front novelty and non-obviousness requirements, might be the more appropriate rubric of protection for intellectual property of this kind....

[69] In the meantime, Congress has made clear that computer programs are literary works entitled to copyright protection. Of course, we shall abide by these instructions, but in so doing we must not impair the overall integrity of copyright law. While incentive based arguments in favor of broad copyright protection are perhaps attractive from a pure policy perspective, ultimately, they have a corrosive effect on certain fundamental tenets of copyright doctrine. If the test we have outlined results in narrowing the scope of protection, as we expect it will, that result flows from applying, in accordance with Congressional intent, long-standing principles of copyright law to computer programs. Of course, our decision is also informed by our concern that these fundamental principles remain undistorted....

[70] The district court had to determine whether Altai's OSCAR 3.5 program was substantially similar to CA's ADAPTER. We note that [the district court]'s method of analysis effectively served as a road map for our own, with one exception—[the district court] filtered out the non-copyrightable aspects of OSCAR 3.5 rather than those found in ADAPTER, the allegedly infringed program. We think that our approach—i.e., filtering out the unprotected aspects of an allegedly infringed program and then comparing the end product to the structure of the suspect program—is preferable, and therefore believe that district courts should proceed in this manner in future cases.

[71] We opt for this strategy because, in some cases, the defendant's program structure might contain protectable expression and/or other elements that are not found in the plaintiff's program. Since it is extraneous to the allegedly copied work, this material would have no bearing on any potential substantial similarity between the two programs. Thus, its filtration would be wasteful and unnecessarily time consuming. Furthermore, by focusing the analysis on the infringing rather than on the infringed material, a court may mistakenly place too little emphasis on a quantitatively small misappropriation which is, in reality, a qualitatively vital aspect of the plaintiff's protectable expression.

[72] The fact that the district court's analysis proceeded in the reverse order, however, had no material impact on the outcome of this case. Since [the district court] determined that OSCAR effectively contained no protectable expression whatsoever, the most serious charge that can be levelled against him is that he was overly thorough in his examination.

[73] The district court took the first step in the analysis set forth in this opinion when it separated the program by levels of abstraction. The district court stated:

As applied to computer software programs, this abstractions test would progress in order of "increasing generality" from object code, to source code, to parameter lists, to services required, to general outline. In discussing the particular similarities, therefore, we shall focus on these levels.

[74] While the facts of a different case might require that a district court draw a more particularized blueprint of a program's overall structure, this description is a workable one for the case at hand.

[75] Moving to the district court's evaluation of OSCAR 3.5's structural components, we agree with [the district court]'s systematic exclusion of non-protectable expression. With respect to code, the district court observed that after the rewrite of OSCAR 3.4 to OSCAR 3.5, "there remained virtually no lines of code that were identical to ADAPTER." Accordingly, the court found that the code "present[ed] no similarity at all."

[76] Next, [the district court] addressed the issue of similarity between the two programs' parameter lists and macros. He concluded that, viewing the conflicting evidence most favorably to CA, it demonstrated that "only a few of the lists and macros were similar to protected elements in ADAPTER; the others were either in the public domain or dictated by the functional demands of the program." As discussed above, functional elements and elements taken from the public domain do not qualify for copyright protection. With respect to the few remaining parameter lists and macros, the district court could reasonably conclude that they did not warrant a finding of infringement given their relative contribution to the overall program. In any event, the district court reasonably found that, for lack of persuasive evidence, CA failed to meet its burden of proof on whether the macros and parameter lists at issue were substantially similar.

[77] The district court also found that the overlap exhibited between the list of services required for both ADAPTER and OSCAR 3.5 was "determined by the demands of the operating system and of the applications program to which it [was] to be linked through ADAPTER or OSCAR...." In other words, this aspect of the program's structure was dictated by the nature of other programs with which it was designed to interact and, thus, is not protected by copyright.

[78] Finally, in his infringement analysis, [the district court] accorded no weight to the similarities between the two programs' organizational charts, "because [the charts were] so simple and obvious to anyone exposed to the operation of the program[s]." CA argues that the district court's action in this regard "is not consistent with copyright law"—that "obvious" expression is protected, and that the district court erroneously failed to realize this. However, to say that elements of a work are "obvious," in the manner in which the district court used the word, is to say that they follow naturally from the work's theme rather than from the author's creativity. This is but one formulation of the scenes a faire doctrine, which we have already endorsed as a means of weeding out unprotectable expression....

[79] In adopting the above three step analysis for substantial similarity between the non-literal elements of computer programs, we seek to insure two things: (1) that programmers may receive appropriate copyright protection for innovative utilitarian works containing expression; and (2) that non-protectable technical expression remains in the public domain for others to use freely as building blocks in their own work. At first blush, it may seem counter-intuitive that someone who has benefitted to some degree from illicitly obtained material can emerge from an infringement suit relatively unscathed. However, so long as the appropriated material consists of non-protectable expression, "[t]his result is neither unfair nor unfortunate. It is the means by which copyright advances the progress of science and art." *Feist*....

NOTE

1. In another foundational case involving software, Apple sued Microsoft for copyright infringement for using the "look and feel" of its Macintosh operating system (see Figure 36) in certain versions of the Microsoft Windows operating system (see Figure 37). The Ninth Circuit found only limited copyright protection, such as for Macintosh's particular depiction of a trash can icon. *Apple Comput., Inc. v. Microsoft Corp.*, 35 F.3d 1435 (9th Cir. 1994). The court rejected Apple's argument that analytic dissection of a graphical user interface (GUI) audiovisual work for protectability and infringement was inappropriate, reasoning that "even though GUIs are

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thought of as the 'look and feel' of a computer, ... copyright protection extends only to protectable elements of expression." With limited exception, the Ninth Circuit found there to be merely unprotectable ideas (such as "use of windows to display multiple images on the computer screen and to facilitate user interaction with the information contained in the windows") or protectable elements that had been licensed to Microsoft for use. The Ninth Circuit further reasoned that "Apple cannot get patent-like protection for the idea of a graphical user interface, or the idea of a desktop metaphor It can, and did, put those ideas together creatively with animation, overlapping windows, and well-designed icons; but it licensed the visual displays which resulted." The court further reasoned that copyright is extremely thin "[w]hen the range of protectable and unauthorized expression is narrow," making "the appropriate standard for illicit copying ... virtual identity."

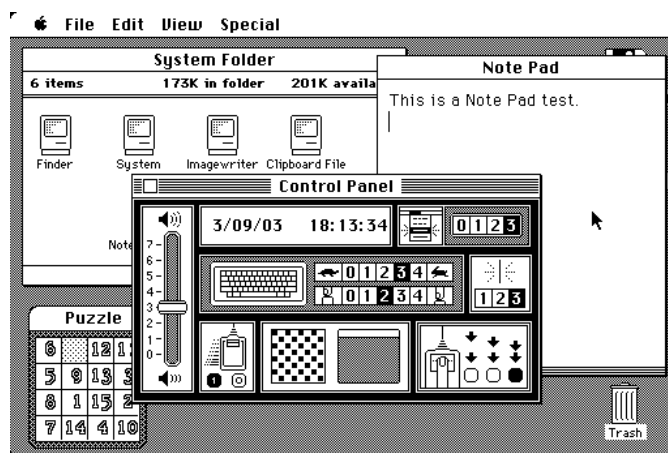


Figure 36: Macintosh operating system

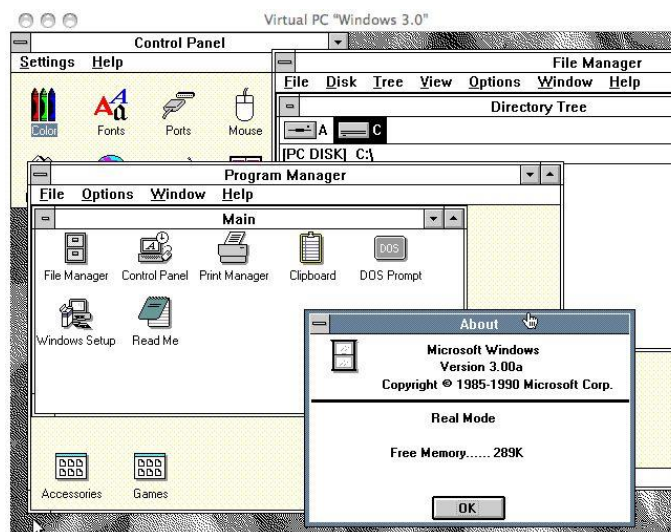


Figure 37: Microsoft Windows 3.0 operating system

Sometimes, a competitor might seek to make its own program compatible with another program, or it might write its own code to make a functionally equivalent program. Does copyright stand in the way of these competitive strategies?

As you read this case, be attentive to what Borland has copied and why it has done so. How do the district court and the First Circuit differ on how they understand the choices that Borland has made? Think about whether copyright doctrines or economic circumstances are driving this decision.

Lotus Development Corp. v. Borland International, Inc.

49 F.3d 807 (1st Cir. 1995)

STAHL, J.:

[1] This appeal requires us to decide whether a computer menu command hierarchy is copyrightable subject matter. In particular, we must decide whether, as the district court held, plaintiff-appellee Lotus Development Corporation’s copyright in Lotus 1–2–3, a computer spreadsheet program, was infringed by defendant-appellant Borland International, Inc., when Borland copied the Lotus 1–2–3 menu command hierarchy into its Quattro and Quattro Pro computer spreadsheet programs....

[2] Lotus 1–2–3 is a spreadsheet program that enables users to perform accounting functions electronically on a computer. Users manipulate and control the program via a series of menu commands, such as “Copy,” “Print,” and “Quit.” Users choose commands either by highlighting them on the screen or by typing their first letter. In all, Lotus 1–2–3 has 469 commands arranged into more than 50 menus and submenus.

[3] Lotus 1–2–3, like many computer programs, allows users to write what are called “macros.” By writing a macro, a user can designate a series of command choices with a single macro keystroke. Then, to execute that series of commands in multiple parts of the spreadsheet, rather than typing the whole series each time, the user only needs to type the single pre-programmed macro keystroke, causing the program to recall and perform the designated series of commands automatically. Thus, Lotus 1–2–3 macros shorten the time needed to set up and operate the program.

A	B	C	D	E	F	G
EMP	EMP_NAME	DEPTNO	JOB	YEARS	SALARY	BONUS
2	1777 Azibad	4000	Sales	2	40000	10000
3	81964 Brown	6000	Sales	3	45000	10000
4	40370 Burns	6000	Mgr	4	75000	25000
5	50706 Caesar	7000	Mgr	3	65000	25000
6	49692 Curly	3000	Mgr	5	65000	20000
7	34791 Dabarrett	7000	Sales	2	45000	10000
8	84984 Daniels	1000	President	8	150000	100000
9	59937 Dempsey	3000	Sales	3	40000	10000
10	51515 Donovan	3000	Sales	2	30000	5000
11	48338 Fields	4000	Mgr	5	70000	25000
12	91574 Fiklore	1000	Admin	8	35000	---
13	64596 Fine	5000	Mgr	3	75000	25000
14	13729 Green	1000	Mgr	5	90000	25000
15	55957 Hermann	4000	Sales	4	50000	10000
16	31619 Hodgedon	5000	Sales	2	40000	10000
17	1773 Howard	2000	Mgr	3	80000	25000
18	2165 Hugh	1000	Admin	5	30000	---
19	23907 Johnson	1000	VP	1	100000	50000
20	7166 Laflare	2000	Sales	2	35000	5000

Figure 38: screenshot of Lotus 1-2-3 spreadsheet program

[4] Borland released its first Quattro program to the public in 1987, after Borland’s engineers had labored over its development for nearly three years. Borland’s objective was to develop a spreadsheet program far superior

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to existing programs, including Lotus 1–2–3. In Borland’s words, “[f]rom the time of its initial release ... Quattro included enormous innovations over competing spreadsheet products.”

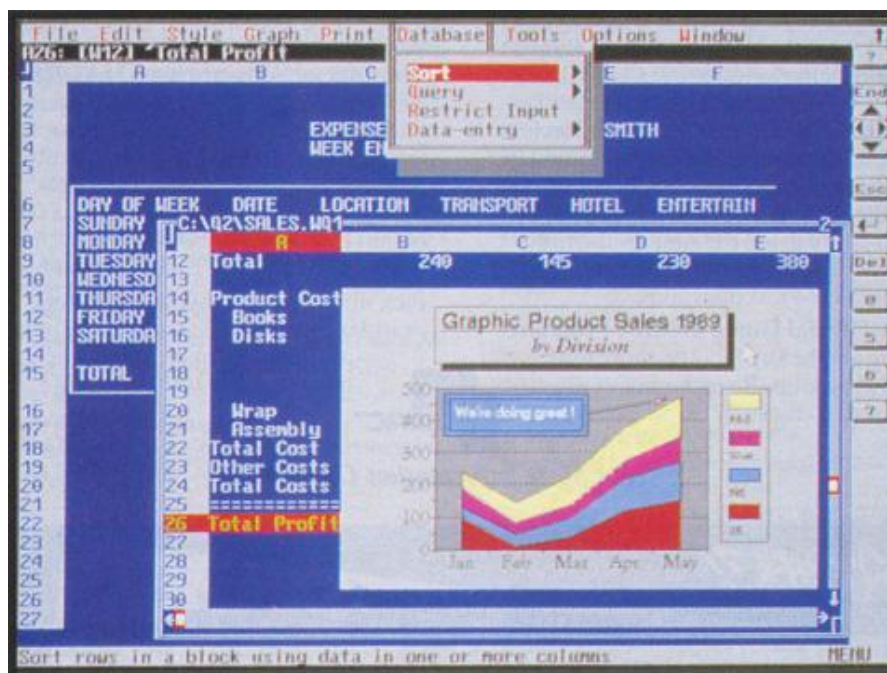


Figure 39: screenshot of Quattro Pro spreadsheet program

[5] The district court found, and Borland does not now contest, that Borland included in its Quattro and Quattro Pro version 1.0 programs a virtually identical copy of the entire 1–2–3 menu tree. In so doing, Borland did not copy any of Lotus’s underlying computer code; it copied only the words and structure of Lotus’s menu command hierarchy. Borland included the Lotus menu command hierarchy in its programs to make them compatible with Lotus 1–2–3 so that spreadsheet users who were already familiar with Lotus 1–2–3 would be able to switch to the Borland programs without having to learn new commands or rewrite their Lotus macros.

[6] In its Quattro and Quattro Pro version 1.0 programs, Borland achieved compatibility with Lotus 1–2–3 by offering its users an alternate user interface, the “Lotus Emulation Interface.” By activating the Emulation Interface, Borland users would see the Lotus menu commands on their screens and could interact with Quattro or Quattro Pro as if using Lotus 1–2–3, albeit with a slightly different looking screen and with many Borland options not available on Lotus 1–2–3. In effect, Borland allowed users to choose how they wanted to communicate with Borland’s spreadsheet programs: either by using menu commands designed by Borland, or by using the commands and command structure used in Lotus 1–2–3 augmented by Borland-added commands.

[7] Lotus filed this action against Borland

[8] The district court ruled that the Lotus menu command hierarchy was copyrightable expression because

[a] very satisfactory spreadsheet menu tree can be constructed using different commands and a different command structure from those of Lotus 1–2–3. In fact, Borland has constructed just such an alternate tree for use in Quattro Pro’s native mode. Even if one holds the arrangement of menu commands constant, it is possible to generate literally millions of satisfactory menu trees by varying the menu commands employed.

[9] The district court demonstrated this by offering alternate command words for the ten commands that appear in Lotus’s main menu. For example, the district court stated that “[t]he ‘Quit’ command could be named ‘Exit’ without any other modifications,” and that “[t]he ‘Copy’ command could be called ‘Clone,’ ‘Ditto,’

'Duplicate,' 'Imitate,' 'Mimic,' 'Replicate,' and 'Reproduce,' among others." Because so many variations were possible, the district court concluded that the Lotus developers' choice and arrangement of command terms, reflected in the Lotus menu command hierarchy, constituted copyrightable expression....

[10] [T]he court concluded that a jury trial was necessary ... to what extent, if any, functional constraints limited the number of possible ways that the Lotus menu command hierarchy could have been arranged at the time of its creation....

[11] Immediately following the district court's summary judgment decision, Borland removed the Lotus Emulation Interface from its products.... Nonetheless, Borland's programs continued to be partially compatible with Lotus 1-2-3, for Borland retained what it called the "Key Reader" in its Quattro Pro programs. Once turned on, the Key Reader allowed Borland's programs to understand and perform some Lotus 1-2-3 macros.... Accordingly, people who wrote or purchased macros to shorten the time needed to perform an operation in Lotus 1-2-3 could still use those macros in Borland's programs. The district court permitted Lotus to file a supplemental complaint alleging that the Key Reader infringed its copyright...

[12] ... [T]he district court found that "each of the Borland emulation interfaces contains a virtually identical copy of the 1-2-3 menu tree and that the 1-2-3 menu tree is capable of a wide variety of expression."

[13] ... [T]he district court [also] found that Borland's Key Reader file included "a virtually identical copy of the Lotus menu tree structure, but represented in a different form and with first letters of menu command names in place of the full menu command names." In other words, Borland's programs no longer included the Lotus command terms, but only their first letters. The district court held that "the Lotus menu structure, organization, and first letters of the command names ... constitute part of the protectable expression found in [Lotus 1-2-3]." Accordingly, the district court held that with its Key Reader, Borland had infringed Lotus's copyright....

[14] On appeal, Borland contends that the Lotus menu command hierarchy is not copyrightable because it is a system, method of operation, process, or procedure foreclosed from protection by 17 U.S.C. § 102(b)....

[15] Whether a computer menu command hierarchy constitutes copyrightable subject matter is a matter of first impression in this court....

[16] Borland vigorously argues, however, that the Supreme Court charted our course more than 100 years ago when it decided *Baker v. Selden*....

[17] We do not think that *Baker v. Selden* is nearly as analogous to this appeal as Borland claims. Of course, Lotus 1-2-3 is a computer spreadsheet, and as such its grid of horizontal rows and vertical columns certainly resembles an accounting ledger or any other paper spreadsheet. Those grids, however, are not at issue in this appeal for, unlike *Selden*, Lotus does not claim to have a monopoly over its accounting system. Rather, this appeal involves Lotus's monopoly over the commands it uses to operate the computer. Accordingly, this appeal is not, as Borland contends, "identical" to *Baker v. Selden*....

[18] Before we analyze whether the Lotus menu command hierarchy is a system, method of operation, process, or procedure, we first consider the applicability of the test the Second Circuit set forth in *Computer Assoc. Int'l, Inc. v. Altai, Inc.*....

[19] In the instant appeal, we are not confronted with alleged nonliteral copying of computer code. Rather, we are faced with Borland's deliberate, literal copying of the Lotus menu command hierarchy. Thus, we must determine not whether nonliteral copying occurred in some amorphous sense, but rather whether the literal copying of the Lotus menu command hierarchy constitutes copyright infringement.

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[20] While the *Altai* test may provide a useful framework for assessing the alleged nonliteral copying of computer code, we find it to be of little help in assessing whether the literal copying of a menu command hierarchy constitutes copyright infringement. In fact, we think that the *Altai* test in this context may actually be misleading because, in instructing courts to abstract the various levels, it seems to encourage them to find a base level that includes copyrightable subject matter that, if literally copied, would make the copier liable for copyright infringement.⁸ While that base (or literal) level would not be at issue in a nonliteral-copying case like *Altai*, it is precisely what is at issue in this appeal. We think that abstracting menu command hierarchies down to their individual word and menu levels and then filtering idea from expression at that stage, as both the *Altai* and the district court tests require, obscures the more fundamental question of whether a menu command hierarchy can be copyrighted at all. The initial inquiry should not be whether individual components of a menu command hierarchy are expressive, but rather whether the menu command hierarchy as a whole can be copyrighted....

[21] Borland argues that the Lotus menu command hierarchy is uncopyrightable because it is a system, method of operation, process, or procedure foreclosed from copyright protection by 17 U.S.C. § 102(b). Section 102(b) states: "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." Because we conclude that the Lotus menu command hierarchy is a method of operation, we do not consider whether it could also be a system, process, or procedure.

[22] We think that "method of operation," as that term is used in § 102(b), refers to the means by which a person operates something, whether it be a car, a food processor, or a computer. Thus a text describing how to operate something would not extend copyright protection to the method of operation itself; other people would be free to employ that method and to describe it in their own words. Similarly, if a new method of operation is used rather than described, other people would still be free to employ or describe that method.

[23] We hold that the Lotus menu command hierarchy is an uncopyrightable "method of operation." The Lotus menu command hierarchy provides the means by which users control and operate Lotus 1–2–3. If users wish to copy material, for example, they use the "Copy" command. If users wish to print material, they use the "Print" command. Users must use the command terms to tell the computer what to do. Without the menu command hierarchy, users would not be able to access and control, or indeed make use of, Lotus 1–2–3's functional capabilities.

[24] The Lotus menu command hierarchy does not merely explain and present Lotus 1–2–3's functional capabilities to the user; it also serves as the method by which the program is operated and controlled.... The Lotus menu command hierarchy is ... different from the Lotus screen displays, for users need not "use" any expressive aspects of the screen displays in order to operate Lotus 1–2–3; because the way the screens look has little bearing on how users control the program, the screen displays are not part of Lotus 1–2–3's "method of operation." ... The Lotus menu command hierarchy is also different from the underlying computer code, because while code is necessary for the program to work, its precise formulation is not. In other words, to offer the same capabilities as Lotus 1–2–3, Borland did not have to copy Lotus's underlying code (and indeed it did not); to allow users to operate its programs in substantially the same way, however, Borland had to copy the

⁸ We recognize that *Altai* never states that every work contains a copyrightable "nugget" of protectable expression. Nonetheless, the implication is that for literal copying, "it is not necessary to determine the level of abstraction at which similarity ceases to consist of an 'expression of ideas,' because literal similarity by definition is always a similarity as to the expression of ideas." 3 MELVILLE B. NIMMER & DAVID NIMMER, NIMMER ON COPYRIGHT § 13.03[A](2) (1993).

Lotus menu command hierarchy. Thus the Lotus 1–2–3 code is not a uncopyrightable “method of operation.”
...

[25] The district court held that the Lotus menu command hierarchy, with its specific choice and arrangement of command terms, constituted an “expression” of the “idea” of operating a computer program with commands arranged hierarchically into menus and submenus. Under the district court’s reasoning, Lotus’s decision to employ hierarchically arranged command terms to operate its program could not foreclose its competitors from also employing hierarchically arranged command terms to operate their programs, but it did foreclose them from employing the specific command terms and arrangement that Lotus had used. In effect, the district court limited Lotus 1–2–3’s “method of operation” to an abstraction.

[26] Accepting the district court’s finding that the Lotus developers made some expressive choices in choosing and arranging the Lotus command terms, we nonetheless hold that that expression is not copyrightable because it is part of Lotus 1–2–3’s “method of operation.” We do not think that “methods of operation” are limited to abstractions; rather, they are the means by which a user operates something. If specific words are essential to operating something, then they are part of a “method of operation” and, as such, are unprotectable. This is so whether they must be highlighted, typed in, or even spoken, as computer programs no doubt will soon be controlled by spoken words.

[27] The fact that Lotus developers could have designed the Lotus menu command hierarchy differently is immaterial to the question of whether it is a “method of operation.” In other words, our initial inquiry is not whether the Lotus menu command hierarchy incorporates any expression. Rather, our initial inquiry is whether the Lotus menu command hierarchy is a “method of operation.” Concluding, as we do, that users operate Lotus 1–2–3 by using the Lotus menu command hierarchy, and that the entire Lotus menu command hierarchy is essential to operating Lotus 1–2–3, we do not inquire further whether that method of operation could have been designed differently. The “expressive” choices of what to name the command terms and how to arrange them do not magically change the uncopyrightable menu command hierarchy into copyrightable subject matter.

[28] Our holding that “methods of operation” are not limited to mere abstractions is bolstered by *Baker v. Selden*. In *Baker*, the Supreme Court explained that

the teachings of science and the rules and methods of useful art have their final end in application and use; and this application and use are what the public derive from the publication of a book which teaches them.... The description of the art in a book, though entitled to the benefit of copyright, lays no foundation for an exclusive claim to the art itself. The object of the one is explanation; the object of the other is use. The former may be secured by copyright. The latter can only be secured, if it can be secured at all, by letters-patent.

Lotus wrote its menu command hierarchy so that people could learn it and use it. Accordingly, it falls squarely within the prohibition on copyright protection established in *Baker v. Selden* and codified by Congress in § 102(b).

[29] In many ways, the Lotus menu command hierarchy is like the buttons used to control, say, a video cassette recorder. A VCR is a machine that enables one to watch and record video tapes. Users operate VCRs by pressing a series of buttons that are typically labelled “Record, Play, Reverse, Fast Forward, Pause, Stop/Eject.” That the buttons are arranged and labeled does not make them a “literary work,” nor does it make them an “expression” of the abstract “method of operating” a VCR via a set of labeled buttons. Instead, the buttons are themselves the “method of operating” the VCR.

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[30] When a Lotus 1–2–3 user chooses a command, either by highlighting it on the screen or by typing its first letter, he or she effectively pushes a button. Highlighting the “Print” command on the screen, or typing the letter “P,” is analogous to pressing a VCR button labeled “Play.”

[31] Just as one could not operate a buttonless VCR, it would be impossible to operate Lotus 1–2–3 without employing its menu command hierarchy. Thus the Lotus command terms are not equivalent to the labels on the VCR’s buttons, but are instead equivalent to the buttons themselves. Unlike the labels on a VCR’s buttons, which merely make operating a VCR easier by indicating the buttons’ functions, the Lotus menu commands are essential to operating Lotus 1–2–3. Without the menu commands, there would be no way to “push” the Lotus buttons, as one could push unlabeled VCR buttons. While Lotus could probably have designed a user interface for which the command terms were mere labels, it did not do so here. Lotus 1–2–3 depends for its operation on use of the precise command terms that make up the Lotus menu command hierarchy....

[32] That the Lotus menu command hierarchy is a “method of operation” becomes clearer when one considers program compatibility. Under Lotus’s theory, if a user uses several different programs, he or she must learn how to perform the same operation in a different way for each program used. For example, if the user wanted the computer to print material, then the user would have to learn not just one method of operating the computer such that it prints, but many different methods. We find this absurd. The fact that there may be many different ways to operate a computer program, or even many different ways to operate a computer program using a set of hierarchically arranged command terms, does not make the actual method of operation chosen copyrightable; it still functions as a method for operating the computer and as such is uncopyrightable.

[33] Consider also that users employ the Lotus menu command hierarchy in writing macros. Under the district court’s holding, if the user wrote a macro to shorten the time needed to perform a certain operation in Lotus 1–2–3, the user would be unable to use that macro to shorten the time needed to perform that same operation in another program. Rather, the user would have to rewrite his or her macro using that other program’s menu command hierarchy. This is despite the fact that the macro is clearly the user’s own work product. We think that forcing the user to cause the computer to perform the same operation in a different way ignores Congress’s direction in § 102(b) that “methods of operation” are not copyrightable. That programs can offer users the ability to write macros in many different ways does not change the fact that, once written, the macro allows the user to perform an operation automatically. As the Lotus menu command hierarchy serves as the basis for Lotus 1–2–3 macros, the Lotus menu command hierarchy is a “method of operation.” ...

[34] We also note that in most contexts, there is no need to “build” upon other people’s expression, for the ideas conveyed by that expression can be conveyed by someone else without copying the first author’s expression.¹³ In the context of methods of operation, however, “building” requires the use of the precise method of operation already employed; otherwise, “building” would require dismantling, too. Original developers are not the only people entitled to build on the methods of operation they create; anyone can. Thus, Borland may build on the method of operation that Lotus designed and may use the Lotus menu command hierarchy in doing so....

[35] ... [W]e hold that the Lotus menu command hierarchy is uncopyrightable subject matter

BOUDIN, J., concurring.

[36] The importance of this case, and a slightly different emphasis in my view of the underlying problem, prompt me to add a few words to the majority’s tightly focused discussion....

¹³ When there are a limited number of ways to express an idea, however, the expression “merges” with the idea and becomes uncopyrightable.

[37] Most of the law of copyright and the “tools” of analysis have developed in the context of literary works such as novels, plays, and films. In this milieu, the principal problem—simply stated, if difficult to resolve—is to stimulate creative expression without unduly limiting access by others to the broader themes and concepts deployed by the author. The middle of the spectrum presents close cases; but a “mistake” in providing too much protection involves a small cost: subsequent authors treating the same themes must take a few more steps away from the original expression.

[38] The problem presented by computer programs is fundamentally different in one respect. The computer program is a means for causing something to happen; it has a mechanical utility, an instrumental role, in accomplishing the world’s work. Granting protection, in other words, can have some of the consequences of patent protection in limiting other people’s ability to perform a task in the most efficient manner. Utility does not bar copyright (dictionaries may be copyrighted), but it alters the calculus.

[39] Of course, the argument for protection is undiminished, perhaps even enhanced, by utility: if we want more of an intellectual product, a temporary monopoly for the creator provides incentives for others to create other, different items in this class. But the “cost” side of the equation may be different where one places a very high value on public access to a useful innovation that may be the most efficient means of performing a given task. Thus, the argument for extending protection may be the same; but the stakes on the other side are much higher.

[40] It is no accident that patent protection has preconditions that copyright protection does not—notably, the requirements of novelty and non-obviousness—and that patents are granted for a shorter period than copyrights. This problem of utility has sometimes manifested itself in copyright cases, such as *Baker v. Selden*, and been dealt with through various formulations that limit copyright or create limited rights to copy. But the case law and doctrine addressed to utility in copyright have been brief detours in the general march of copyright law.

[41] Requests for the protection of computer menus present the concern with fencing off access to the commons in an acute form. A new menu may be a creative work, but over time its importance may come to reside more in the investment that has been made by users in learning the menu and in building their own mini-programs—macros—in reliance upon the menu. Better typewriter keyboard layouts may exist, but the familiar QWERTY keyboard dominates the market because that is what everyone has learned to use. The QWERTY keyboard is nothing other than a menu of letters.

[42] Thus, to assume that computer programs are just one more new means of expression, like a filmed play, may be quite wrong. The “form”—the written source code or the menu structure depicted on the screen—look hauntingly like the familiar stuff of copyright; but the “substance” probably has more to do with problems presented in patent law or, as already noted, in those rare cases where copyright law has confronted industrially useful expressions. Applying copyright law to computer programs is like assembling a jigsaw puzzle whose pieces do not quite fit.

[43] All of this would make no difference if Congress had squarely confronted the issue, and given explicit directions as to what should be done. The Copyright Act of 1976 took a different course. While Congress said that computer programs might be subject to copyright protection, it said this in very general terms; and, especially in § 102(b), Congress adopted a string of exclusions that if taken literally might easily seem to exclude most computer programs from protection. The only detailed prescriptions for computers involve narrow issues (like back-up copies) of no relevance here.

[44] Of course, one could still read the statute as a congressional command that the familiar doctrines of copyright law be taken and applied to computer programs, in cookie cutter fashion, as if the programs were

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novels or play scripts. Some of the cases involving computer programs embody this approach. It seems to be mistaken on two different grounds: the tradition of copyright law, and the likely intent of Congress.

[45] The broad-brush conception of copyright protection, the time limits, and the formalities have long been prescribed by statute. But the heart of copyright doctrine—what may be protected and with what limitations and exceptions—has been developed by the courts through experience with individual cases. Occasionally Congress addresses a problem in detail. For the most part the interstitial development of copyright through the courts is our tradition.

[46] Nothing in the language or legislative history of the 1976 Act, or at least nothing brought to our attention, suggests that Congress meant the courts to abandon this case-by-case approach. Indeed, by setting up § 102(b) as a counterpoint theme, Congress has arguably recognized the tension and left it for the courts to resolve through the development of case law. And case law development is adaptive: it allows new problems to be solved with help of earlier doctrine, but it does not preclude new doctrines to meet new situations....

[47] In this case, the raw facts are mostly, if not entirely, undisputed. Although the inferences to be drawn may be more debatable, it is very hard to see that Borland has shown any interest in the Lotus menu except as a fall-back option for those users already committed to it by prior experience or in order to run their own macros using 1–2–3 commands. At least for the amateur, accessing the Lotus menu in the Borland Quattro or Quattro Pro program takes some effort.

[48] Put differently, it is unlikely that users who value the Lotus menu for its own sake—*independent of any investment they have made themselves in learning Lotus' commands or creating macros dependent upon them*—would choose the Borland program in order to secure access to the Lotus menu. Borland's success is due primarily to other features. Its rationale for deploying the Lotus menu bears the ring of truth.

[49] Now, any use of the Lotus menu by Borland is a commercial use and deprives Lotus of a portion of its "reward," in the sense that an infringement claim if allowed would increase Lotus' profits. But this is circular reasoning: broadly speaking, every limitation on copyright or privileged use diminishes the reward of the original creator. Yet not every writing is copyrightable or every use an infringement. The provision of reward is one concern of copyright law, but it is not the only one. If it were, copyrights would be perpetual and there would be no exceptions.

[50] The present case is an unattractive one for copyright protection of the menu. The menu commands (e.g., "print," "quit") are largely for standard procedures that Lotus did not invent and are common words that Lotus cannot monopolize. What is left is the particular combination and sub-grouping of commands in a pattern devised by Lotus. This arrangement may have a more appealing logic and ease of use than some other configurations; but there is a certain arbitrariness to many of the choices.

[51] If Lotus is granted a monopoly on this pattern, users who have learned the command structure of Lotus 1–2–3 or devised their own macros are locked into Lotus, just as a typist who has learned the QWERTY keyboard would be the captive of anyone who had a monopoly on the production of such a keyboard. Apparently, for a period Lotus 1–2–3 has had such sway in the market that it has represented the *de facto* standard for electronic spreadsheet commands. So long as Lotus is the superior spreadsheet—either in quality or in price—there may be nothing wrong with this advantage.

[52] But if a better spreadsheet comes along, it is hard to see why customers who have learned the Lotus menu and devised macros for it should remain captives of Lotus because of an investment in learning made by the users and not by Lotus. Lotus has already reaped a substantial reward for being first; assuming that the Borland program is now better, good reasons exist for freeing it to attract old Lotus customers: to enable the old

customers to take advantage of a new advance, and to reward Borland in turn for making a better product. If Borland has not made a better product, then customers will remain with Lotus anyway.

[53] Thus, for me the question is not whether Borland should prevail but on what basis. Various avenues might be traveled, but the main choices are between holding that the menu is not protectable by copyright and devising a new doctrine that Borland's use is privileged. No solution is perfect and no intermediate appellate court can make the final choice.

[54] To call the menu a "method of operation" is, in the common use of those words, a defensible position. After all, the purpose of the menu is not to be admired as a work of literary or pictorial art. It is to transmit directions from the user to the computer, i.e., to operate the computer. The menu is also a "method" in the dictionary sense because it is a "planned way of doing something," an "order or system," and (aptly here) an "orderly or systematic arrangement, sequence or the like." Random House Webster's College Dictionary 853 (1991).

[55] A different approach would be to say that Borland's use is privileged because, in the context already described, it is not seeking to appropriate the advances made by Lotus' menu; rather, having provided an arguably more attractive menu of its own, Borland is merely trying to give former Lotus users an option to exploit their own prior investment in learning or in macros. The difference is that such a privileged use approach would not automatically protect Borland if it had simply copied the Lotus menu (using different codes), contributed nothing of its own, and resold Lotus under the Borland label.

[56] The closest analogue in conventional copyright is the fair use doctrine....

[57] But a privileged use doctrine would certainly involve problems of its own. It might more closely tailor the limits on copyright protection to the reasons for limiting that protection; but it would entail a host of administrative problems that would cause cost and delay, and would also reduce the ability of the industry to predict outcomes. Indeed, to the extent that Lotus' menu is an important standard in the industry, it might be argued that any use ought to be deemed privileged.

[58] In sum, the majority's result persuades me and its formulation is as good, if not better, than any other that occurs to me now as within the reach of courts. Some solutions (e.g., a very short copyright period for menus) are not options at all for courts but might be for Congress. In all events, the choices are important ones of policy, not linguistics, and they should be made with the underlying considerations in view.

NOTES

1. The First Circuit in *Lotus* makes an analogy to VCRs to explain why it thinks the menu command hierarchy is a method of operation: "Just as one could not operate a buttonless VCR, it would be impossible to operate Lotus 1-2-3 without employing its menu command hierarchy. Thus the Lotus command terms are not equivalent to the labels on the VCR's buttons, but are instead equivalent to the buttons themselves." Consider whether this analogy is apt. Do these labels do anything without the mechanisms underlying them? Is Lotus's complaint that Borland took its menu structure, sequence, and organizations about the location and arrangement of the "buttons" or the "buttons" themselves?

2. Just as there are other forms of protection for industrial designs, there are other forms of protection for computer software: primarily patent and trade secrecy protections. Patent law protects inventions that are novel, nonobvious, and useful. 35 U.S.C. §§ 101-103. Patents are granted after successfully undergoing examination by the Patent and Trademark Office to ascertain that an invention meets patentability conditions and the description in the patent application satisfies certain disclosure requirements. *Id.* §§ 112, 131. The patent right permits the patentee to exclude others from practicing the invention claimed in the patent for a term of typically twenty years from the date the patent application was filed. *Id.* § 154(a). In recent years, the U.S.

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Supreme Court has made it harder to get software patents by reining in the rules of patentable subject matter. *Alice Corp. Pty. Ltd. v. CLS Bank Int'l*, 134 S. Ct. 2347 (2017); *Bilski v. Kappos*, 561 U.S. 593 (2010).

Trade secret law generally protects information (broadly defined) that derives independent economic value from not being generally known or readily ascertainable by others, and is subject to reasonable efforts to maintain its secrecy. UNIFORM TRADE SECRETS ACT § 1(4) (1985). One who has a valid trade secret cannot protect it from use against anyone, but only one who has misappropriated the trade secret. *Id.* §§ 1-3. For example, reverse engineering or independent discovery are legitimate ways to acquire a trade secret. *Chicago Lock Co. v. Fanberg*, 676 F.2d 400, 405 (9th Cir. 1982). As long as the information stays unknown to the requisite degree, it remains protectable, so trade secret protection can in theory last for a long time. On the attractiveness of using trade secrecy to protect software, see Jeanne C. Fromer, *Machines as the New Oompa-Loompas: Trade Secrecy, the Cloud, Machine Learning, and Automation*, 94 N.Y.U. L. REV. 706 (2019); Sonia K. Katyal, *The Paradox of Source Code Secrecy*, 104 CORNELL L. REV. 1183 (2019).

3. Over the past few decades, **open-source software** has become a prominent part of the world of software. Copyright holders in open-source software releases the source code under a license that grants all users the right to study, modify, and distribute the software. Open-source software authors do not renounce their copyright rights but rather use them to enforce the open availability of the source code. Two of the most popular open-source licenses are the GNU General Public License and the Apache License.

Supporters of the open-source software movement claim multiple advantages over traditional software. First, they claim that open-source software will be of a higher quality because the source code's openness makes it quicker and easier to fix bugs and create ever better variations and versions of the software. Second, open-source proponents argue that open software is cheaper to acquire and maintain. For more on the open-source movement, copyright law, and economics, see Robert W. Gomulkiewicz, *How Copyleft Uses License Rights to Succeed in the Open Source Software Revolution and the Implications for Article 2B*, 36 HOUS. L. REV. 179 (1999); David McGowan, *Legal Implications of Open-Source Software*, 2001 U. ILL. L. REV. 241.

4. In *Oracle America, Inc. v. Google Inc.*, 750 F.3d 1339 (Fed. Cir. 2014), the Federal Circuit understood copyrightability of a "method of operation" differently than the First Circuit had in *Lotus*. In that case, Oracle claimed that Google infringed Oracle's copyrights in its Java Application Program Interface (API) when Google included Oracle's so-called "declaring code" in the implementation of Java that it uses in its Android mobile operating system as a way to achieve some level of compatibility for programmers. The purpose of the Java API is to define and implement in advance a set of common operations that programmers can use in their software. The method's functionality is defined by the method's implementing code, which consists of the step-by-step instructions the computer follows to carry out the declared operation. Oracle's declaring code names each operation (or "method") contained in the API and defines how the methods are organized within Java. The declaring code allows developers to create references to the API methods in their software code, which in turn tell the computer where to go to run the methods. API methods are invoked in a particular format—`java.package.Class.method()`—which mirrors the organization of the declaring code. Therefore, the APIs can be used in any Java project as long as the declaring code stays constant. Google had copied the declaring code in 37 Java API packages, as listed in Figure 40, into its Android operating system. The Federal Circuit held that the Java declaring code was indeed a method of operation but held that "the [copyright] protection accorded a particular expression of an idea" is not extinguished "merely because that expression is embodied in a method of operation." In the Federal Circuit's view, if the implementation of a particular method of operation involves some creative choice, then it will be copyrightable.

The court also ruled that even though the only way to write Java-compatible APIs is to copy the Java declaring code, the merger doctrine did not bar protection of the declaring code. It explained that "copyrightability and the scope of protectable activity are to be evaluated at the time of creation, not at the time of infringement.

The focus is, therefore, on the options that were available to [Oracle] at the time it created the API packages. Of course, once [Oracle] created 'java.lang.Math.max,' programmers who want to use that particular package have to call it by that name. But ... nothing prevented Google from writing its own declaring code, along with its own implementing code, to achieve the same result. In such circumstances, the chosen expression simply does not merge with the idea being expressed."

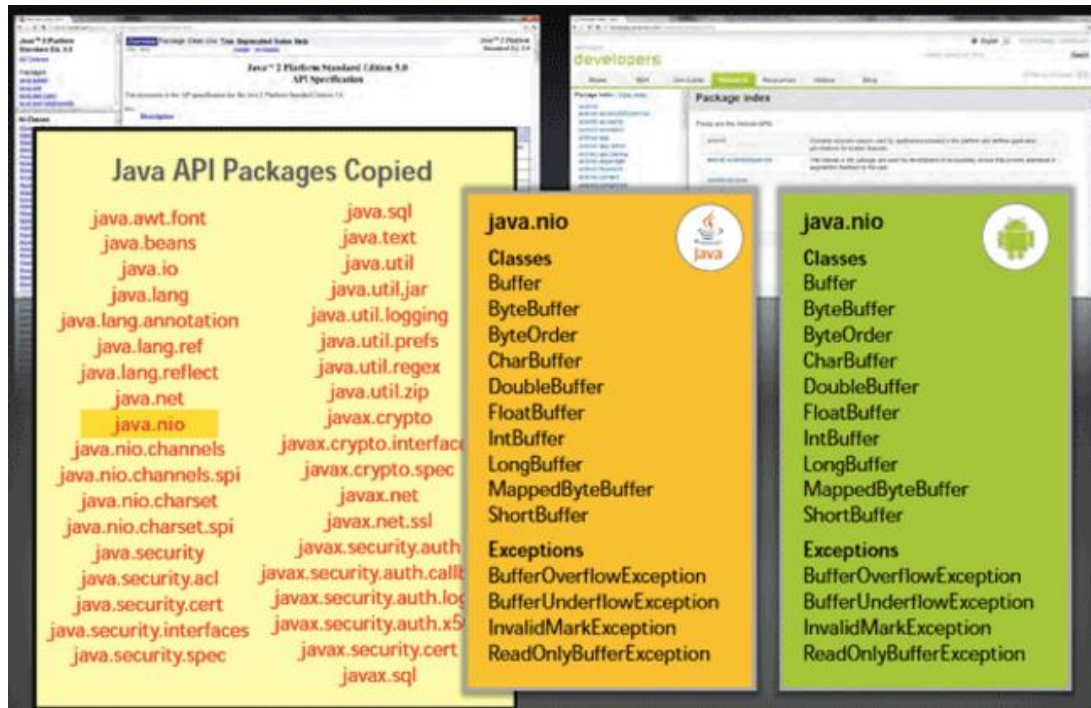


Figure 40: Java API packages at issue

Do you agree that the declaring code is a “method of operation”? If so, does § 102 permit that it be protectable by copyright law? (Look carefully at the text of § 102(b), and, in particular, the provision’s final clause.) Is the Federal Circuit right to apply the merger doctrine at the moment of copyrightability rather than at the time of copying? The Supreme Court granted certiorari in this case but ultimately ruled in Google’s favor on grounds of fair use. (You will read that decision in Chapter VI.) The Federal Circuit’s decision is therefore irrelevant, even if it still technically stands. The Supreme Court’s decision repeatedly cited *Lotus* approvingly. What does that say about the continuing vitality of the Federal Circuit’s decision on copyrightability? For an analysis of the copyrightability following the Supreme Court’s fair use ruling, see Mark A. Lemley & Pamela Samuelson, *Interfaces and Interoperability After Google v. Oracle*, 100 TEX. L. REV. 1 (2021). In a post-*Google* decision, the Federal Circuit held that non-literal aspects (particularly its input formats and output designs) of a suite of software used for data access, management, analysis, and presentation are not copyrightable. *SAS Inst., Inc. v. World Programming Ltd.*, 64 F.4th 1319 (Fed. Cir. 2023).

5. Architectural Works

Until 1990, U.S. copyright law did not specifically provide protection for architectural works. Until that time, in theory, buildings could be protected as pictorial, graphic, or sculptural works, but they were subject to exacting separability analysis as useful articles. Architectural plans and drawings themselves could be protected as pictorial, graphic, or sculptural works, but others could build from these plans and drawings. *Imperial Homes Corp. v. Lamont*, 458 F.2d 895 (5th Cir. 1972).

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That all changed in 1990 when Congress expanded copyright protection by adding § 102(a)(8) with its specific protection for “architectural works” as a category of works of authorship. Architectural Works Copyright Protection Act of 1990, Pub. Law 101-650, 104 Stat. 5089. Congress added this protection to comply with the Berne Convention, which requires protection of architectural works and to which the United States had acceded in 1989. Berne Convention (Paris text), art. 2(1); H.R. REP. NO. 101-735, 101st Cong., 2d Sess. 4 (1990). The new law also added to § 101 a definition of architectural works:

An “architectural work” 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.

Although the statute did not define a “building,” the legislative history indicates that the term includes “habitable structures such as houses and office buildings. It also covers structures that are used, but not inhabited, by human beings, such as churches, pergolas, gazebos, and garden pavilions.” H.R. REP. NO. 101-735, 101st Cong., 2d Sess. 4 (1990).

Note that this new protection applies only to architectural works created on or after December 1, 1990. Architectural Works Copyright Protection Act of 1990, § 706(1).

Additionally, an architectural work need not be built to qualify for copyright protection. It merely needs to be fixed in any tangible medium of expression, as required by § 102(a). Architectural plans thus qualify to fix an architectural work.

As you read this case, think about what the originality requirement means for an architectural work. Consider also whether and how the statutory definition in § 101 limits protection for building designs.

James E. Zalewski v. Cicero Builder Dev., Inc.

754 F.3d 95 (2d Cir. 2014)

WESLEY, J.:

[1] This case calls on us to explore the limits of copyright protection for architectural works. Plaintiffs–Appellants are James Zalewski, an architect, and Draftics, Ltd., the company through which he does business. Zalewski asserts that he created and then licensed numerous designs for colonial homes to two construction companies. He alleges that these companies and their contractors infringed his copyright in these designs by using them in ways the licenses did not permit and after the licenses had expired.... Defendants principally contend that their designs do not copy the protected elements of Plaintiff’s designs....

[2] In the 1990s, Plaintiff James Zalewski was self-employed as an architect doing business through the firm Draftics, Ltd. During this period, he granted Defendants T.P. Builders and Cillis Builders licenses to use several colonial home designs he had created. According to Zalewski, after the licenses expired, T.P. hired Defendant V.S. Sofia Engineering and Defendant DeRaven Design & Drafting and Cillis hired DeRaven to customize his designs for their customers and continued marketing his designs, or customized versions thereof, without his consent. Defendant Cicero Builders built two houses using DeRaven designs that were allegedly based on Plaintiff’s originals.

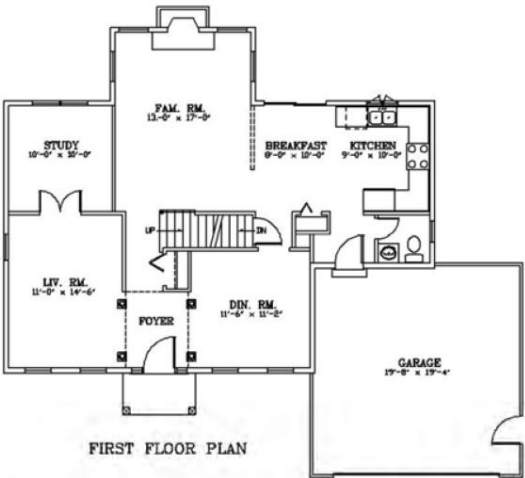


Mirror image of copyrighted DRA217 design

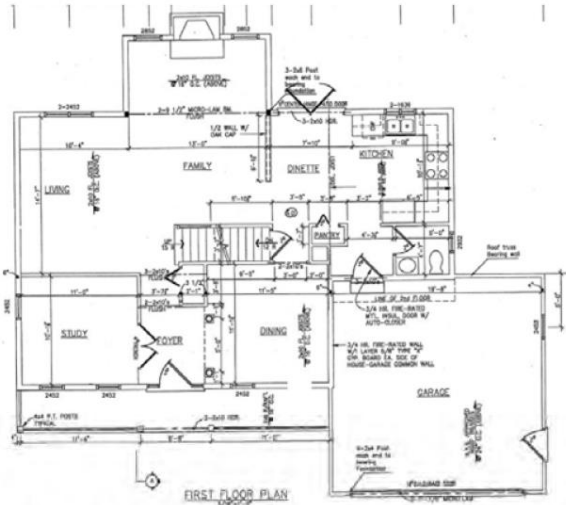


19 Timber Lane infringing design

Figure 41: sample Zalewski design (left) and sample defendant design (right)



Mirror image of copyrighted DRA217 design



19 Timber Lane infringing design (Peripheral dimension data cropped to facilitate side-by-side comparison)

Figure 42: sample Zalewski design (left) and sample defendant design (right)

[3] Zalewski filed the first of these now consolidated actions in July 2010 in the United States District Court for the Northern District of New York, alleging that Defendants infringed the copyright in his original designs. Zalewski asserts that, in building the homes and customizing the designs, Defendants copied the overall size, shape, and silhouette of his designs as well as the placement of rooms, windows, doors, closets, stairs, and other architectural features....

[4] [T]he court granted judgment to all ... defendants and denied Zalewski’s cross-motion for summary judgment....

[5] What aspects of Zalewski’s designs are protectable? A fundamental rule of copyright law is that it protects only “original works of authorship,” those aspects of the work that originate with the author himself. Everything else in the work, the history it describes, the facts it mentions, and the ideas it embraces, are in the public domain free for others to draw upon. It is the peculiar expressions of that history, those facts, and those ideas that belong exclusively to their author. Thus, any author may draw from the history of English-speaking peoples, but no one may copy from *A History of the English-Speaking Peoples*. Any artist may portray the Spanish Civil War, but no one may paint another *Guernica*. And anyone may draw a cartoon mouse, but there can be only one Mickey.

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[6] Numerous doctrines separate protectable expression from elements of the public domain. For example, the doctrine of “scènes-à-faire” teaches that elements of a work that are indispensable, or at least standard, in the treatment of a given topic—like cowboys, bank robbers, and shootouts in stories of the American West—get no protection. Similarly, the “merger doctrine” instructs that some ideas can only be expressed in a limited number of ways—single words or colors for example. When expression is so limited, idea and expression “merge.” Expressions merged with ideas cannot be protected, lest one author own the idea itself.

[7] The central question of this case is how to apply these and related doctrines to separate the protectable from the unprotectable in architectural works. Defendants urge us to chart a different course. They view Plaintiff’s designs as a compilation of various architectural features that individually and collectively do not merit copyright protection. They rely on the Eleventh Circuit case of *Intervest Construction, Inc. v. Canterbury Estate Homes, Inc.*, 554 F.3d 914 (11th Cir. 2008), and the Supreme Court’s doctrine governing “compilations” set out in *Feist*...

[8] In *Intervest*, the Eleventh Circuit applied [*Feist*] to architecture. It held that all copyrighted works are either “creative, derivative, [or] compiled,” that is original, variations on an original, or compilations of unoriginal material. According to *Intervest*, each kind of work gets varying levels of protection. The court then relied on the similarity between the statutory definitions of “compilation” and “architectural work” to conclude that architectural works fall into the “compiled” category, and are thus entitled to only a “thin” copyright based solely on their arrangement and coordination of unoriginal and uncopyrightable elements. On facts similar to those here, the *Intervest* court held that any copying of the plaintiff’s house designs went only to standard architectural features arranged in standard ways. In other words, any copying was not wrongful.

[9] While we agree with the outcome in *Intervest*, we disagree with its reasoning. “Creative,” “derivative,” and “compiled” may be useful concepts in some cases, but we reject the idea that works always fall neatly into one of these categories. Every kind of work at some level is a compilation, an arrangement of uncopyrightable “common elements.” No individual word is copyrightable, but the arrangement of words into a book is. No color is copyrightable, but the arrangement of colors on canvas is. Likewise, doors and walls are not copyrightable, but their arrangement in a building is. Some architectural designs, like that of a single-room log cabin, will consist solely of standard features arranged in standard ways; others, like the Guggenheim, will include standard features, but also present something entirely new. Architecture, in this regard, is like every art form.

[10] Moreover, we see little support in the statute for *Intervest*’s use of categories. Although the statutory definitions of “compilations” and “architectural works” both speak of an “arrangement” or “to arrange” and refer to “standard features” or “preexisting material,” architectural works and compilations are not the only works that are defined with reference to their discrete—and perhaps uncopyrightable—elements.¹⁶ For example, the statute defines “Literary works” as “words, numbers, or other ... symbols” arranged in “books, periodicals” or other media; “Sound Recordings” as “a series of musical, spoken, or other sounds”; a “computer program” as “a set of statements or instructions”; and “Motion Pictures” and “Audio Visual works” as “series of related images.” As we have explained, the merger doctrine will often render these discrete elements un-

¹⁶ Additionally, the definitions of “architectural work” and “compilation” have little else in common. The statute defines an “architectural work” as “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.” A “compilation” is a “work formed by the collection and assembling of preexisting materials or of data that are selected, coordinated, or arranged in such a way that the resulting work as a whole constitutes an original work of authorship.”

copyrightable. *Softel v. Dragon Med. & Scientific Commc'ns*, 118 F.3d 955, 964 (2d Cir. 1997) (explaining that “the words that constitute a literary work are not copyrightable, yet ... a collection of words” may be).¹⁷

[11] Labeling architecture a compilation obscures the real issue. Every work of art will have some standard elements, which taken in isolation are un-copyrightable, but many works will have original elements—or original arrangements of elements. The challenge in adjudicating copyright cases is not to determine whether a work is a creative work, a derivative work, or a compilation, but to determine what in it originated with the author and what did not. *Intervest* fails to do this. It compares the floor plans of the two houses, focusing only on the narrow arrangement and coordination of what it deems “standard ... features” and intuits that there was no copying of the arrangement. But it fails to provide any analysis of what made a feature “standard” and unprotectable. Hence, we find it of little assistance here.

[12] Courts should treat architectural copyrights no differently than other copyrights. This is what Congress envisioned, and it is an approach we have employed before....

[13] In *Peter F. Gaito Architecture, LLC v. Simone Development Corp.*, 602 F.3d 57 (2d Cir. 2010), ... we held that copying of architecture that was light, airy, and transparent, as well as design parameters and generalized notions of where to place functional elements, went only to ideas and not protected expression. [Yet] in *Sparaco v. Lawler, Matusky, Skelly, Engineers LLP*, 303 F.3d 460 (2d Cir. 2002), we held that although a construction site preparation plan was preliminary in the sense that it pertained to the early phases of construction, it was extremely detailed and thus more than a mere idea.

[14] Determining the boundaries of copyright protection in non-traditional areas of creative expression, like architecture, is not something new. A number of our cases have applied copyright doctrines in other unusual contexts. In *Altai*, for example, we had to determine for the first time what elements of a computer program are protectable. To do so, we simply applied the usual copyright doctrines of merger, public domain, and scènes-à-faire to these new circumstances. For example, we held that the merger doctrine would apply when “efficiency concerns ... so narrow the practical range of [coding options] as to make only one or two forms of expression workable....” Similarly, we applied the doctrine of scènes-à-faire because “in many instances it is virtually impossible to write a program ... without employing standard techniques.” Consequently, we held that coding dictated by mechanical specifications, industry design standards, market demands, and usual programming practices also did not get copyright protection.

[15] All of these principles apply equally well to architecture. Efficiency is an important architectural concern. Any design elements attributable to building codes, topography, structures that already exist on the construction site, or engineering necessity should therefore get no protection.

[16] There are scènes-à-faire in architecture. Neoclassical government buildings, colonial houses, and modern high-rise office buildings are all recognized styles from which architects draw. Elements taken from these styles should get no protection. Likewise, there are certain market expectations for homes or commercial buildings. Design features used by all architects, because of consumer demand, also get no protection.

[17] Our prior architecture cases support this approach. In *Sparaco*, we held that there can be no copyright in a plan insofar as it merely represents the topography of a building site. Topography is an un-copyrightable

¹⁷ The legislative history also supports this view. When Congress added architectural works to the list of copyrightable subject matter, it made clear that it wanted architectural works analyzed no differently than other works and differentiated between architectural works that present “original design elements” and those that do not. *Intervest* contravenes Congress’ intent by treating architectural works differently than other works and failing to determine what in architecture—beyond mere arrangement—is copyrightable.

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“fact.”¹⁸ In *Attia [v. Society of N.Y. Hospital]*, 201 F.3d 50 (2d Cir. 1999), we recognized that generalized notions of where to place functional elements, how to route the flow of traffic, and methods of construction are unprotectable. Architects cannot claim that good engineering is original to them—or at least can get no copyright protection for it.¹⁹ Finally, in *Gaito Architecture*, we held that there is no copyright in a building plan’s design parameters. Constraints placed on an architect by the way her client plans to use the building do not originate with the architect....

[18] After considering these principles and reviewing the designs in question, we conclude that even if Defendants copied Zalewski’s plans, they copied only the unprotected elements of his designs. Plaintiff’s principal argument is that Defendants’ designs are so close to his that Defendants must have infringed. He is correct that the designs are, in many respects, quite close, but this is not enough. It proves at most copying, not wrongful copying.

[19] First, many of the similarities are a function of consumer expectations and standard house design generally. Plaintiff can get no credit for putting a closet in every bedroom, a fireplace in the middle of an exterior wall, and kitchen counters against the kitchen walls. Furthermore, the overall footprint of the house and the size of the rooms are design parameters dictated by consumer preferences and the lot the house will occupy, not the architect.

[20] Finally, most of the similarities between Plaintiff’s and Defendants’ designs are features of all colonial homes, or houses generally. So long as Plaintiff was seeking to design a colonial house, he was bound to certain conventions. He cannot claim copyright in those conventions. Great artists often express themselves through the vocabulary of existing forms. Shakespeare wrote his Sonnets; Brahms composed his Hungarian Dances; and Plaintiff designed his colonial houses. Because we must preserve these forms for future artists, neither iambic pentameter, nor European folk motifs, nor clapboard siding are copyrightable.

[21] Plaintiff makes no attempt to distinguish those aspects of his designs that were original to him from those dictated by the form in which he worked. For example, Zalewski claims that the “front porches are the same design, size, and in the same location.” But a door centered on the front of the house is typical of many homes, and colonials in particular.²⁰ Moreover, there are subtle differences in the paneling, size, and framing of Plaintiff’s and Defendants’ doors. These differences are not great, but given the constraints of a colonial design, they are significant. The same is true of the windows and garage doors that Plaintiff claims are identical. They are quite similar in location, size, and general design, but again, the similarities are due primarily to the shared colonial archetype. The window panes, shutters, and garage-door paneling all have subtle differences. Likewise, the designs’ shared footprint and general layout are in keeping with the colonial style. There are only

¹⁸ We do not doubt that topography will often inspire, or indeed require, original architectural solutions that will be worthy of copyright. Frank Lloyd Wright’s *Fallingwater* is a prominent example. There may also be original ways of representing existing topography. The topography itself, however, is uncopyrightable. If two architects submit competing bids for the same project, one cannot assert that the other’s design infringed his copyright because their designs include reference to the same topography or share similarities dictated by that topography. One expects competent architects to accurately represent a construction site.

We note that this only applies to existing topography, however, because existing topography is an uncopyrightable fact. An architect may be able to copyright his original proposals for alterations to the topography. On the other hand, such alterations may be dictated by good engineering practice or a customer requirement, in which case they may not be copyrightable. We leave exploration of these issues to future cases.

¹⁹ The functional aspects of a work are governed by patent law, not copyright law. See *Baker v. Selden*, 101 U.S. 99 (1879).

²⁰ Defendants have helpfully included in the record excerpts from several treatises, which describe the basics of colonial architecture. The features of prominent architectural styles, particularly of home designs, are matters with which we are familiar and of which we can take judicial notice. Although Plaintiff insists that his houses are not in the colonial style, he offers no argument or evidence on this point, merely assertion. We find these assertions incredible.

so many ways to arrange four bedrooms upstairs and a kitchen, dining room, living room, and study downstairs. Beyond these similarities, Plaintiff's and Defendants' layouts are different in many ways. The exact placement and sizes of doors, closets, and countertops often differ as do the arrangements of rooms.

[22] Although he undoubtedly spent many hours on his designs, and although there is certainly something of Plaintiff's own expression in his work, as long as Plaintiff adhered to a pre-existing style his original contribution was slight—his copyright very thin. Only very close copying would have taken whatever actually belonged to Plaintiff. Copying that is not so close would—and in this case did—only capture the generalities of the style in which Plaintiff worked and elements common to all homes. Defendants' houses shared Plaintiff's general style, but took nothing from his original expression....

[23] For the foregoing reasons, the district court's ... order ... granting summary judgment ... [is] AFFIRMED....

NOTES

1. Originality in some architectural works, such as the Spaceship Earth structure at the Epcot theme park, shown in Figure 43, can readily be established solely based on the "overall form" of the building, as per § 101.

Establishing originality this way is harder for other architectural works. Note how *Zaleski* underscores that the originality of architectural works can also stem from "the arrangement and composition of spaces and elements in the design, but does not include individual standard features," as set out in § 101. This statutory language seems to suggest analysis of originality in a manner akin to compilations, something some courts point out but which *Zaleski* partially resists.



Figure 43: Spaceship Earth structure at Epcot Theme Park

2. One reason that Congress added architectural works as a category of copyrightable subject matter rather than include them as a subcategory of pictorial, graphic, and sculptural works was to avoid the need for a complicated separability analysis for architectural works. H.R. REP. NO. 101-735, 101st Cong., 2d Sess. 4 (1990).

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Does that mean that functional aspects of architectural works are protectable, so long as they are original? How does *Zalewski* analyze functional elements of architectural works?

3. There are some specific concerns about protecting architectural works under copyright law. For one thing, a building's owner might not own copyright in the building. As such, the building owner might be prohibited from modifying or destroying a protected building. For this reason, Congress provided an exception to copyright law:

[T]he owners of a building embodying an architectural work may, without the consent of the author or copyright owner of the architectural work, make or authorize the making of alterations to such building, and destroy or authorize the destruction of such building.

17 U.S.C. § 120(b). Another concern with copyright protection for architectural works is that members of the public might not be able to take photographs that include a protected building without infringing the copyright in the building. To avoid such broad liability, Congress provided another exception to copyright law:

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.

Id. § 120(a). Note that for this exception to apply, the building must be "located in or ordinarily visible from a public place."
