

Reconceptualizing Copyright's Merger Doctrine

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I. Introduction

Surprisingly little has been written about the merger doctrine of U.S. copyright law, under which courts sometimes find original expression in a work of authorship to be “merged” with the idea expressed, when that idea is incapable of being expressed, as a practical matter, in more than one or a small number of ways.¹ To be true to the principle that copyright law does not extend its protection to ideas,² courts have held in numerous cases that the merged expression is unprotectable by copyright law.³

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¹ Relatively few law review articles have discussed the merger doctrine at any length. *See, e.g.*, Dan L. Burk, *Method and Madness in Copyright Law*, 2007 Utah L. Rev. 587; Shubha Ghosh, *Legal Code and the Need for a Broader Functionality Doctrine in Copyright*, 50 J. Cop. Soc’y 71 (2003); Stephen Preonas, *Mergicide, When Good Copyrights Go Bad: A Recommendation for a Market-Based, Defendant-Centric Approach to the Merger Doctrine in the Context of Compilations*, 11 Intell. Prop. L. Bull. 89 (2006); Timothy S. Teter, Note, *Merger and the Machine: An Analysis of the Pro-Compatibility Trend in Computer Software Copyright Cases*, 45 Stan. L. Rev. 1061 (1993). These articles consider merger in relation to specific subject matters.

² 17 U.S.C. §102(b) (2012). It is not just abstract ideas, but other unprotectable elements in works of authorship that may be subject to merger. *See infra* Part II(F).

³ *See, e.g.*, 4 Melville B. Nimmer & David Nimmer, Nimmer on Copyright, §13.03[B][3] (2015). The merger doctrine emerged as a common law concept in the U.S. case law. It is not explicitly recognized in copyright internationally; however, like the “proto-merger” cases discussed *infra* Section II.A., courts in other countries have used merger-like reasoning in finding that certain elements of works are unprotectable under copyright law. For example, recently the U.K. Court of Appeal approved a lower court’s finding that under the Information Society Directive, Council Directive 2001/29/EC, 2001 O.J. (L 167), software elements “dictated by” technical function do not satisfy the originality requirement. *See SAS Inst. Inc. v. World Programming Ltd.* [2013] EWCA Civ 1482, [31]-[33], available at <http://www.bailii.org/ew/cases/EWCA/Civ/2013/1482.html> (citing an ECJ opinion in Case C-393/09, *Bezpečnostní softwarová asociace v. Ministerstvo kultury*, [2011] FSR 18, [49], which concluded that the criterion of originality is not met when “the different methods of implementing an idea are so limited that the idea and the expression become indissociable”). *See also* STANLEY LAI, THE COPYRIGHT PROTECTION OF COMPUTER SOFTWARE IN THE UNITED KINGDOM 49

Copyright treatise authors have differing views about the doctrine. William Patry's treatise disparages merger as "the doctrine that is not,"⁴ although it devotes fourteen pages to debunking it as "merely a denial that defendant has copied protectable material."⁵ Paul Goldstein's treatise is more concise about the merger doctrine,⁶ but also more accepting of it as a sound limitation on copyrights.⁷ The Nimmer treatise regards merger as "an indispensable fixture of copyright doctrine,"⁸ although taking a narrower view of its scope than the Goldstein treatise.⁹

This Article is based upon a close review of 150 judicial opinions that discuss and/or apply the core principle that underlies what is now widely known as the merger doctrine.¹⁰ Several myths

(2000) (discussing possible application of merger in U.K. law). Full consideration of the merger doctrine equivalents in other copyright jurisdictions, however, is beyond the scope of this Article.

⁴ 2 William F. Patry, *Patry on Copyright*, §4:46, at 4-140 (2015).

⁵ *Id.* at 4-141 to -42. If there is only one way to express an idea, Patry believes there is insufficient originality to support a copyright. *Id.* at 4-146.

⁶ 1 Paul Goldstein, *Goldstein on Copyright*, § 2.3.2 (2015) (devoting eleven pages to the merger doctrine). *See also id.*, § 2.15 at 2:178.

⁷ *Id.* at 2:36 to -38.

⁸ Nimmer, *supra* note 3, § 13.03[B][3] at 54.

⁹ For example, Goldstein regards merger as precluding copyright in a merged work, Goldstein, *supra* note 6, at § 2.3.2 at 2:38.1, although recognizing that courts sometimes apply merger "to determine the scope of copyright rather than the existence of protectable subject matter." *Id.* The Nimmer treatise says that "the better view" is to treat merger as a defense to infringement claims, not as undermining the copyrightability of the work at issue. Nimmer, *supra* note 3, at § 13.03[B][3] at 55-56. Based on my study of the merger cases, Goldstein has the sounder interpretation. *See infra* Part II(E). Nimmer has more recently tempered his view on this issue. Email communication, David Nimmer, Feb. 10, 2016.

¹⁰ So as not to be swayed by the treatises' interpretation of the merger doctrine, I had my research staff gather the judicial decisions cited in the treatises on this doctrine. I then read those decisions, other decisions cited in those cases, and subsequent cases citing the cases already gathered. I did not read the treatises' treatment of the merger doctrine until after I had read 150 decisions that interpret this doctrine. I characterize 26 of them (all decided before 1983) as "proto-merger" cases because although these decisions do not use the term "merger," later cases and the treatises cite them as merger cases. The proto-merger cases used one of the variant formulations of the underlying principle of merger, discussed *infra* notes 21-24 and accompanying text. I have excluded from the study some cases that the treatises cite in discussing the merger doctrine because the decisions did not apply the core principle. To get into my sample, it was not enough merely to mention the merger doctrine or the possibility that idea and expression might sometimes be inseparable. (For example, I did not include *Sid & Marty Krofft Television Prods., Inc. v. McDonald's Corp.*, 562 F.2d 1157, 1167 (9th Cir. 1977), even though the Ninth Circuit mentioned "unity of idea and expression" in its opinion.)

have arisen in the case law about the merger doctrine. One is that the Supreme Court's decision in *Baker v. Selden* gave birth to the merger doctrine. A second is that merger can only be found when there is no other way to express an idea than the way the plaintiff did. A third is that merger is rare and available only in cases involving functional works or works depicting things found in nature. A fourth is that merger is only available as to "hard" ideas that are building blocks of knowledge. A fifth is that merger does not present a copyrightability issue, but is only a defense to a claim of infringement. A sixth is that there is only one type of merger, that in which abstract ideas and expressions are inseparable. A seventh is that defendants cannot base a merger defense on constraints imposed by creative choices made by the plaintiff. An eighth is that merger must be judged as of the time when the first work was created and cannot happen over time. Part II dispels these myths. Part III discusses merger in relation to other copyright doctrines, such as scenes a faire, originality, and the exclusion of processes embodied in copyrighted works. Part IV considers various functions of the merger doctrine, such as averting unwarranted monopolies, policing the boundaries between copyright and patent law, and enabling the ongoing progress of knowledge. Part V concludes.

II. Dispelling Several "Myths" about Merger

Copyright's merger doctrine has been interpreted in various ways in judicial decisions. Perhaps because it is a relatively new doctrine, courts have not always had a clear understanding about its scope. Some misconceptions about merger exist in the case law. This Part aims to dispel eight myths about the merger doctrine that can be found in judicial opinions interpreting it.

A. *Baker v. Selden* Did Not Originate the Merger Doctrine

Contrary to the view of some authorities, the idea/expression merger doctrine did not originate in the Supreme Court's 1879 decision in *Baker v. Selden*.¹¹ It was instead born, as such and so

Qualifying decisions had to give serious attention to the doctrine or discuss the narrow range of possible expressions or functionality constraints as a rationale for limiting copyright protection. Forty-three of the 150 decisions in this study are software cases. However, the number of software cases that discuss and apply merger may be larger than this. I reviewed most, but not all, of the 389 cases that cite to *Computer Assocs. Int'l, Inc. v. Altai, Inc.*, 982 F.2d 693, 707-08 (2d Cir. 1992), which directed courts to regard efficient designs as subject to merger. (The citation count reflects federal cases with copyright headnotes in the Lexis Advance database as of July 2015.) The number of cases that mention the merger doctrine is much larger than 150, but I believe the sample I studied constitutes a large portion of the relevant cases, even if not exhaustive.

¹¹ 101 U.S. 99 (1879). See e.g., *Arica Inst., Inc. v. Palmer*, 970 F.2d 1067, 1075 (2d Cir. 1992) (tracing the merger doctrine to *Baker*); *Whelan Assocs., Inc. v. Jaslow Dental Lab, Inc.*, 797 F.2d 1222, 1235-36 (3d Cir. 1986). See also *Nimmer, supra* note 3, at § 2.18 [D][1]. The merger doctrine has also sometimes been said to have originated in *Morrissey v. Procter & Gamble Co.*, 379 F.2d 675 (1st Cir. 1967). See Douglas Lichtman, *Copyright as a Rule of Evidence*, 52 Duke L.J. 683, 735 (2003). As will soon become evident, idea/expression merger is not the only kind of

named, in decisions in the *Apple Computer, Inc. v. Franklin Computer Corp.* case.¹² In *Franklin*, the manufacturer of a computer designed to compete with the Apple II argued that it was necessary to copy the Apple II operating system (OS) programs exactly so that its computer could run application programs written for the Apple II.

If other programs can be written or created which perform the same function as an Apple's operating system program, then that program is an expression of the idea and hence copyrightable. In essence, this inquiry is no different than that made to determine whether the expression and idea have merged, which has been stated to occur where there are no or few other ways of expressing a particular idea.¹³

Because Franklin had conceded that it could have rewritten at least some of the OS programs and the District Court had not made a finding that the Apple programs could not be rewritten, the Third Circuit's rejection of that merger defense was sound.¹⁴ Since *Franklin*, however, the merger doctrine has had a very robust life in the U.S. copyright case law.¹⁵

There were, of course, precursors to the merger doctrine—designated here as “proto-merger” cases—prior to *Franklin*. These cases tended to focus on one or a combination of the following concerns: a necessity to utilize the same or similar expressions, functionality as dictating certain expressions, the inevitability of similarities, or lack of originality because of the narrow range of alternative expressions.¹⁶

merger that courts have recognized. See *infra* Part II-F for a discussion of various types of merger.

¹² 545 F. Supp. 812, 823 (E.D. Pa. 1982), *rev'd*, 714 F.2d 1240, 1253 (3d Cir. 1983). Franklin's lawyers introduced the term “merge” into the literature. See Brief for Appellee at 8, 18, *Franklin*, 714 F.2d 1240 (No. 82-1582), *reprinted in* 1982 Computer Law Reporter 681, 689, 694. An expert witness for Franklin may have used the term in his testimony. *Id.* at 8, *reprinted at* 689. The brief indicates that Apple's expert witness “conceded that he could *not* distinguish the ideas from their expression in the works in suit,” and that “courts do not and should not protect expression if doing so protects ideas.” *Id.* at 18, *reprinted at* 694 (emphasis in the original). The brief cites four of the proto-merger cases. *Id.* The District Court seemed convinced by this argument, *Franklin*, 545 F. Supp. at 823-25, but the Third Circuit was not. *Franklin*, 714 F.2d at 1253.

¹³ *Franklin*, 714 F.2d at 1253.

¹⁴ *Id.* The court observed that achieving compatibility with another program may be “a commercial and competitive objective” of firms such as Franklin, but opined that this “does not enter into the somewhat metaphysical issue of whether particular ideas and expressions have merged.” *Id.* Compatibility defenses on merger grounds have generally fared better than this dictum suggests, and are discussed *infra* notes 163-65 and accompanying text.

¹⁵ My sample includes 117 merger decisions since *Franklin*.

¹⁶ An English proto-merger case was *Kenrick & Co. v. Lawrence & Co.*, 25 Q.B. 99, 101, 103 (1890) (rejecting copyright in drawing of human hand with pencil to illustrate for illiterate

The earliest proto-merger case seems to have been *Emerson v. Davies*, which involved a claim of copyright infringement arising from similarities in instructional texts on arithmetic.¹⁷ In it, Justice Story noted that “[t]he figures of geometry must necessarily resemble each other in all works; and in a great degree, this applies to the figures of architecture or building where they are descriptions of things in use.... Where two works describe the figures of roofs in use, they must necessarily produce resembling figures.”¹⁸ An infringement ruling could not rest on these kinds of necessary similarities, although there were other similarities between the two works that were significant enough to justify sending the case to the jury.

Baker v. Selden is another proto-merger case involving necessary similarities. The Supreme Court held in *Baker* that the copyright in Selden’s book protected his *explanation* of the novel bookkeeping system he had invented, but it did not extend to the bookkeeping *system* itself or to the forms that instantiated that system.¹⁹ This statement in *Baker* is typically cited in support of the contention that *Baker* gave birth to merger doctrine: “where the [useful] art [a work] teaches cannot be used without employing the methods and diagrams used to illustrate the

people how to mark a voting ballot because “it is impossible to treat [the subject] in any other way,” and expressing concern about copyright conferring an unwarranted monopoly if plaintiff succeeded). Early copyright law treatises acknowledged some necessary resemblance among works of identical subject matter or based on similar sources, although their focus was more on the independent labor and creation of works as copyrightable. *See, e.g.*, GEORGE TICKNOR CURTIS, A TREATISE ON THE LAW OF COPYRIGHT 258-59 (1847) (“The question therefore [is] whether the defendant has . . . copied from the plaintiff’s work . . . or whether the resemblances are merely accidental, and naturally or necessarily grew out of the subject”); EATON S. DRONE, A TREATISE ON THE LAW OF PROPERTY 205-08 (1879) (“There cannot be exclusive property in a general subject, or in the method of treating it”); ARTHUR W. WEIL, AMERICAN COPYRIGHT LAW 417 (1917) (“In many cases, where, for example, common materials are treated, resemblance is to be expected rather than to be deemed suspicious.”)

¹⁷ 8 F. Cas. 615 (C.C. Mass. 1854) (No. 4,436).

¹⁸ *Id.* at 622. In the Westlaw and Lexis databases, no subsequent case cites to *Emerson* for this proposition. Rather, Justice Story’s opinion is better known and cited for other statements, and in recent years numerous fair use cases have quoted a passage beginning “In truth, in literature, in science and in art, there are, and can be, few, if any, things, which, in an abstract sense, are strictly new and original throughout.” *See, e.g.*, *Campbell v. Acuff-Rose Music, Inc.*, 510 U.S. 569, 575 (1994).

¹⁹ 101 U.S. 99 (1879). *Baker* should be understood as a case about the protectability of explanations and the unprotectability of useful arts, such as bookkeeping systems, that might be embodied in copyrighted works. It is not a case about the distinction between ideas and expressions, or even about merger. *See, e.g.*, Pamela Samuelson, *Why Copyright Law Excludes Systems and Processes from the Scope of Its Protection*, 85 Tex. L. Rev. 1921, 1924-36 (2007); Pamela Samuelson, *Baker v. Selden: Sharpening the Distinction Between Authorship and Invention*, in *Intellectual Property Stories* 189-90 (Rochelle C. Dreyfuss & Jane C. Ginsburg, eds. 2006).

book, or such as are similar to them, such methods and diagrams are to be considered *necessary incidents* to the art, and given therewith to the public.”²⁰ The interpretation of *Baker* as a merger case is not implausible, although that was not the main message the Court sought to convey.

Several post-*Baker* proto-merger decisions focused on the necessity (or not) for the defendant to use the same or very similar expressions in creating a later work. Most of the “necessity” cases involved defendants who reimplemented the same method or system as the plaintiff.²¹ Although most of the “necessity” proto-merger cases cited *Baker* for some propositions, only two quoted the “necessary incidents” paragraph.²² Some did not cite to *Baker* at all.²³

²⁰ *Baker*, 101 U.S. at 103 (emphasis added). See, e.g., *Whelan*, 797 F.2d at 1235-36 (quoting this language).

²¹ See, e.g., *Caddy-Imler Creations, Inc. v. Caddy*, 299 F.2d 79, 82 (9th Cir. 1962) (books on system of teaching math to children); *Crume v. Pacific Mut. Life Ins. Co.*, 140 F.3d 182 (7th Cir. 1944) (pamphlets on method of reorganizing insolvent life insurance companies); *Gaye v. Gillis*, 167 F. Supp. 416 (D. Mass. 1958) (coupon books for method of debt collection); *Borden v. General Motors Corp.*, 28 F. Supp. 330 (S.D.N.Y. 1939) (movie involving necessary similarities in methods of engaging sales prospects and rules of persuasion described in plaintiff’s work). Two proto-merger cases involved game and contest rules, and the respective courts found that the necessary similarity of the rules were not infringing. *Affiliated Hosp. Prods., Inc. v. Merdel Game Mfg. Co.*, 513 F.2d 1183, 1188-89 (2d Cir. 1975) (game rule book); *Morrissey v. Procter & Gamble*, 379 F.2d 675, 679 (1st Cir. 1967) (sweepstakes contest rules).

²² *Crume*, 140 F.3d at 183-84; *Long v. Jordan*, 287 F. Supp. 287, 289-90 (N.D. Cal. 1939) (quoting *Baker* at length in denying copyright in the plaintiff’s old age pension plan, although not giving any special attention to the “necessary incidents” language, and concluding that “a copyright on an exposition of a system of government cannot prevent the use of that system as intended [which] necessarily involves the adoption of legislation outlining the system and defining its methods of operation”). Although not directly relying on the “necessary incidents” language in *Baker*, the court in *Freedman v. Grolier Entrep., Inc.*, 179 U.S.P.Q. (BNA) 476, 478 (S.D.N.Y. 1973), held a notation system for playing bridge was uncopyrightable because “[w]hen an idea is so restrictive that it necessarily requires a particular form of expression, that is, when the idea and its expression are functionally inseparable, to permit the copyrighting of the expression would be to grant the copyright owner a monopoly of the idea.” The proposition for which *Freedman* cited *Baker*, though, was that “[o]nly through a patent may an individual hold a monopoly of the art, or idea, so disclosed.” *Id.*, n.2. *Caddy-Imler Creations, Inc. v. Caddy*, 299 F.2d 79, 82 (9th Cir. 1962), cited to *Baker* once, quoting it as saying that a “copyright is not infringed by an expression of the idea which is substantially similar where such similarity is necessary because the idea or system being described is the same,” although the correct attribution is *Gaye v. Gillis*, 167 F. Supp. 416, 418 (D. Mass. 1958) (citing *Baker*, among others). *Continental Casualty Co. v. Beardsley*, 253 F.2d 702, 704-06 (2d Cir. 1958), which involved bond forms published in a pamphlet, cited to *Baker* but denied its relevance.

²³ See, e.g., *Miner v. Employers Mutual Liability Insurance Co. of Wisconsin*, 229 F.2d 35, 35 (D.C. 1956) (finding that “others remain free to compete by offering similar [insurance policy]

A second approach taken in the proto-merger case law was for courts to say that the works or elements alleged to be infringed were unprotectable by copyright law insofar as they were dictated by functional considerations. In *Decorative Aides Corp. v. Staple Sewing Aides Corp.*, for instance, the plaintiff sued for infringement, alleging that the defendant had copied an illustrative diagram and a set of instructions used on the packaging of its products to show and explain how to make pleats for draperies and insert hooks on the back to hang the drapes on rods.²⁴ While there were strong similarities between the plaintiff's and defendant's diagrams and instructional language, the court concluded they were "dictated by functional considerations," and hence unprotectable by copyright law.²⁵ To rule otherwise would, in effect, have given the plaintiff an unwarranted monopoly over the unpatented, uncopyrightable drapery product.²⁶

A third approach emerged in *Herbert Rosenthal Jewelry Corp. v. Kalpakian*,²⁷ in which the Ninth Circuit ruled that the defendants had not infringed the plaintiff's copyright because the idea of a jeweled bee pin was "indistinguishable" from its expression.²⁸ There was "no greater

coverages"); *Dorsey v. Old Surety Life Ins. Co.*, 98 F.2d 872, 873-74 (10th Cir. 1938) (finding similar insurance policy provisions not infringing); *Chautauqua Sch. of Nursing v. National Sch. of Nursing*, 238 F. 151, 153 (2d Cir. 1916) ("It is a startling proposition to say that the complainant has secured the monopoly for 28 years of stating in separate categories and illustrating pictorially the successive steps of this very well known operation."); *PIC Design Corp. v. Sterling Precision Corp.*, 231 F. Supp. 106, 111 (finding tabular information in competing catalogs necessarily similar); *Brightley v. Littleton*, 37 F. 103, 104 (E.D. Pa. 1888) (finding blank legal forms compliant with state laws "necessarily have close resemblance"). None of the proto-merger cases cites to *Emerson v. Davies* either.

²⁴ 497 F. Supp. 154, 156-57 (S.D.N.Y. 1980).

²⁵ *Id.* at 157. See also *Durham Indus., Inc. v. Tomy Corp.*, 630 F.2d 905, 915 (2d Cir. 1980) (shapes of certain toys dictated by utilitarian considerations); *Freedman*, 179 U.S.P.Q. 476, 478 (S.D.N.Y. 1973) ("use of descriptive notations was dictated by the bidding system"). Some post-*Franklin* cases have also emphasized functional constraints. See, e.g., *Southco, Inc. v. Kanebridge Corp.*, 390 F.3d 276, 284 (3d Cir. 2004) (part names and numbers); *Victor Lalli Enterps. v. Big Red Apple, Inc.*, 936 F.2d 671, 673 (2d Cir. 1991) (compilation of horse race information).

²⁶ *Decorative Aides*, 497 F. Supp. at 158.

²⁷ 446 F. 2d 738 (9th Cir. 1971). *Kalpakian* is characterized as a "famous" merger case in *Nimmer*, *supra* note 3, § 13.03[B][3] at 52.

²⁸ *Kalpakian*, 446 F.2d at 741. See also *Guthrie v. Curlett*, 36 F.2d 694, 695-96 (2d Cir. 1929) (similarities in consolidated freight index were inevitable); *Kepner-Tregoe, Inc. v. Carabio*, 203 U.S.P.Q. 124, 131-34 (BNA) (E.D. Mich. 1979) (describing plaintiff's copyright as "thin" due to limited ways to express its instructional concepts, nevertheless finding infringement as to some materials); *Synercom Tech., Inc. v. University Computing Co.*, 462 F. Supp. 1003, 1013 (1978) (N.D. Tex. 1978) (analogizing a computer input format to a "figure-H" standardized format that "once chosen, [] is the only pattern which will work in a particular model."). Some later cases

similarity between the pins of the plaintiff and defendants than is inevitable from the use of the jewel-encrusted bee forms in both.”²⁹ The inseparability of the idea and expression meant that Kalpakian was free to copy Rosenthal’s expression because otherwise copyright law would confer on Rosenthal a monopoly on the idea of creating jewel-encrusted bee pins.³⁰

A fourth approach focused on the paucity of viable alternative expressions as evidence that the work in question did not satisfy copyright’s originality standard. Consider, for instance, *Signo Trading Co. v. Gordon*, in which Gordon copied the Signo’s translation of 850 words and 45 phrases from English to Arabic and transliteration of those Arabic words and short phrases into Roman letters with phonetic spellings for the defendant’s electronic translation product.³¹ The court acknowledged that translations are generally copyrightable, but decided that Signo’s translations lacked originality because “[o]nce it is determined what dialect is to be used, the translation of the word list, consisting primarily of single words, is a fairly mechanical process requiring little or any originality.”³² The transliterations were likewise unoriginal. “The phonetic spelling of foreign words, using standard Roman letters, simply does not embody sufficient originality to be copyrightable.”³³ Courts have sometimes commingled merger and lack of originality to justify non-infringement rulings in later cases.³⁴

The pre-*Franklin* proto-merger decisions that adopted one or more of these variants can fairly be characterized as merger cases today because that is the term on which courts have converged on “merger” as the doctrinal name with which to describe instances which ideas or other unprotectable elements are incapable of being expressed in more than a few ways. While the holding in *Baker* is consistent with the merger doctrine, *Baker* cannot fairly be said to have given birth to it.³⁵

cite to *Kalpakian* for the “indistinguishable” test for what is now known as merger. See, e.g., *Sid & Marty*, 562 F.2d at 1167-68.

²⁹ *Kalpakian*, 446 F.2d at 741.

³⁰ *Id.* Although the quoted language from *Kalpakian* suggests that Rosenthal’s copyright was invalid, another court upheld Rosenthal’s claim of infringement against an exact copy of the jeweled bee pin. See *Herbert Rosenthal Jewelry Corp. v. Grossbardt*, 436 F.2d 315 (2d Cir. 1970).

³¹ 535 F. Supp. 362 (N.D. Cal. 1981). Gordon had hired Signo to translate these words and phrases from English to Arabic and then transliterate them. Gordon later abrogated the agreement and used the translations and transliterations anyway. Signo registered its claim of copyright in the translations and transliterations and then sued. *Id.* at 363. Any copyright in the words and phrases would have been owned by Gordon because it had compiled them.

³² *Id.* at 364.

³³ *Id.*

³⁴ See *infra* Part III((B)).

³⁵ Only 13 of the 24 post-*Baker* proto-merger cases cite to *Baker* at all. One of these cited *Baker* only to say that the decision was inapplicable. *Continental Casualty*, 253 F.2d at 704. As noted earlier, only one of the proto-merger cases quoted the “necessary incidents” language, while one other paraphrased that part of *Baker*. See *supra* note 22 and accompanying text. The other

B. Merger May Be Found Even if There is More Than One Way to Express an Idea

Courts have sometimes dismissed merger defenses out of hand if convinced that there is more than one way to express a particular idea, fact, or function.³⁶ Under this strict interpretation of merger, second- and third-generation authors would be compelled to use those alternative expressions to avoid infringement, seemingly without regard to other factors, such as efficiency considerations or the reasonableness of the alternatives.³⁷ This view would reserve merger for circumstances in which there is a true unity of expression and ideas.³⁸ This is, however, a distinctly minority view in the merger case law; the now prevalent, even if not universally accepted, view is that merger can and should be found when there are some, albeit a limited number, of alternative ways to express certain ideas, facts, or functions.

The first and most widely cited case adopting this broader view of merger was *Morrissey v. Procter & Gamble Co.*³⁹ Morrissey sent Procter & Gamble (P&G) a pamphlet setting forth sweepstakes contest rules with an offer to license use of its contents. Some time later, P&G initiated a sweepstakes contest printed on boxes of Tide detergent. Because the wording of Tide's contest rule 1 was virtually identical to the first rule in Morrissey's pamphlet, he sued for infringement.⁴⁰

cases cite *Baker* for various other propositions, such as the need to get a patent to protect ideas or useful arts embodied in copyrighted works. *Morrissey v. Procter & Gamble*, 379 F.2d 675, 679 (1st Cir. 1967), cited to *Baker* in support of its oft-quoted statement "We cannot recognize copyright as a game of chess in which the public can be checkmated."

³⁶ See, e.g., *Oracle of Am. v. Google Inc.*, 750 F.3d 1339, 1354-57, 1360-62 (Fed. Cir. 2014); *Yurman Design, Inc. v. PAJ, Inc.*, 262 F.3d 101, 111 (2d Cir. 2001) ("if there is just one way to express an idea, the idea and expression are said to merge"); *Thimbleberries, Inc. v. C&F Enters., Inc.*, 142 F. Supp.2d 1132, 1137-39 (D. Minn. 2001) (no merger as to Christmas wreath design for quilts).

³⁷ See, e.g., *American Dental Ass'n v. Delta Dental Plans Ass'n*, 126 F.3d 977 (7th Cir. 1997) (rejecting merger defense for reuse of standard names of dental procedures and numbers assigned to those procedures). I have criticized the ADA decision as unsound and inconsistent with later decisions on numbering systems. See Pamela Samuelson, *Questioning Copyright in Standards*, 48 B.C. L. Rev. 193, 200-03, 213-15 (2007).

³⁸ A few cases decided after *Baker*, but before *Franklin*, have spoken of a "unity of idea and expression" as a limit on the scope of copyright protection. See, e.g., *Atari Inc. v. North American Philips Consumer Electronics Corp.*, 672 F.2d 607, 616 (7th Cir. 1982); *Sid & Marty*, 562 F.2d at 1167. That formulation has largely died out in the case law, although a few cases still use that phrase. See, e.g., *Gentieu v. Tony Stone Images, Inc.*, 255 F. Supp.2d 838, 849-50 (N.D. Ill. 2003).

³⁹ 379 F.2d 675 (1st Cir. 1967). As in *Kalpakian*, 446 F.2d at 640-41, the appellate court in *Morrissey* raised the proto-merger defense sua sponte because it was not satisfied with the lower court's rationale for ruling in P&G's favor. *Morrissey*, 379 F.2d at 677.

⁴⁰ The court quoted both rules and highlighted the minor variations in language. *Id.* at 678.

The First Circuit affirmed summary judgment for P&G. Although the trial court had questioned the originality of Morrissey's rule,⁴¹ the appellate court observed that P&G's "own proof... established that there was more than one way of expressing even this simple substance."⁴² Yet, the court was wary of granting relief to Morrissey because a topic such as his Rule 1 was one that "'necessarily requires,' ...if not only one form of expression, at best only a limited number."⁴³ In such a case, "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."⁴⁴

Although Morrissey had not published all possible variations of this sweepstakes rule, the First Circuit concluded that "the matters embraced in Rule 1 are so straightforward and simple that we find this limiting principle to be applicable."⁴⁵ As a consequence, copyright did "not extend to the subject matter at all, and plaintiff cannot complain even if his particular expression was deliberately adopted."⁴⁶ Copyright is not "a game of chess in which the public can be checkmated."⁴⁷ Others should be free to express sweepstakes contest rules without having to license them from Morrissey.

⁴¹ *Id.* The trial court decided that P&G had independently created its sweepstakes rule. *Id.* at 677-78. The First Circuit was not persuaded by the independent creation defense because Morrissey had proffered proof that he had mailed his pamphlet to P&G. *Id.*

⁴² *Id.* at 678. The First Circuit declined to apply "the principle of a stringent standard for showing infringement which some courts apply when the subject matter involved admits of little variation in the form of expression," under which P&G might have been liable because of the nearly identical wording. *Id.*, citing to *Dorsey*, 98 F.2d at 874.

⁴³ *Morrissey*, 379 F.2d at 678 (quoting *Sampson & Murdock Co. v. Seaver-Radford Co.*, 140 F. 539, 541 (1st Cir. 1905). I did not include *Sampson* in the merger decisions sample because although the opinion recognized that "even use of the same phraseology [should not infringe], either because the topic necessarily requires it or through mere incidental coincidences of expression," *id.*, this and similar statements in *Sampson* were dicta, irrelevant to the holding in the case.

⁴⁴ *Id.*, citing to *Baker v. Selden* as a comparable case. Courts have generally declined to say how many alternative expressions must exist to undermine a merger defense. *See, e.g.*, *N.Y. Mercantile Exchange, Inc. v. Intercontinental Exchange, Inc.*, 497 F.3d 109, 117 n.9 (2d Cir. 2007). One court has said that "one author cannot appropriate for himself the exclusive right to one of [nine possible forms of expression] without the most pernicious consequences on the opportunity for creative expression." *Apple Computer, Inc. v. Microsoft Corp.* 799 F. Supp. 1006, 1034 (N.D. Cal. 1992), *aff'd in relevant part*, 35 F.3d 1435 (9th Cir. 1994).

⁴⁵ *Morrissey*, 379 F.2d at 679.

⁴⁶ *Id.*

⁴⁷ *Id.*

The Nimmer treatise has long characterized *Morrissey* as a “questionable extension of the merger doctrine,”⁴⁸ seemingly because there was more than one way to express the idea of sweepstakes contest rules.⁴⁹ Although the current version of the Nimmer treatise remains faithful to the treatise’s earlier criticism of *Morrissey*, it now seems to accept that “merger may apply ‘when there is a limited number of ways to express the idea.’”⁵⁰ *Morrissey* has been widely followed in the subsequent case law.⁵¹

Courts in numerous merger cases have taken into account whether the alternative expressions were inferior in some way, such as because they were less efficient,⁵² impractical,⁵³ unreasonable,⁵⁴ illogical,⁵⁵ or contrary to industry expectations.⁵⁶ Courts have been wary of forcing later authors to adopt inferior expressions or to engage in needless variations.⁵⁷

C. Merger Is Not Rare and Arises in Many Types of Cases

On occasion, courts have said that merger of idea and expression is “rare” and generally only to be found in cases involving works having a utilitarian function or works depicting things found in nature.⁵⁸ Merger is, however, not at all rare. Merger defenses were partly or wholly successful in over half of the cases in my sample.

Yet, it is accurate to say that merger defenses have met with considerable success in functional work cases.⁵⁹ Merger has, for example, sometimes been a complete defense to claims of

⁴⁸ See Nimmer, *supra* note 3, at § 13.03[B][3] at 58; *Kepner-Tregoe, Inc. v. Carabio*, 203 U.S.P.Q. (BNA) 124, 129 (E.D. Mo. 1979) (quoting the same language from the 1978 edition of the Nimmer treatise).

⁴⁹ *Morrissey*, 379 F.2d at 678.

⁵⁰ Nimmer, *supra* note 3, at § 13.03[B][3] at 58, quoting *NYMEX*, 497 F.3d 109, 117 n. 19.

⁵¹ See, e.g., *Kepner-Tregoe*, 203 U.S.P.Q. at 129 (adopting *Morrissey*’s view that a limited number of alternative expressions should suffice). See also Goldstein, *supra* note 6, at § 2.3.2 at 2:36-37; Patry, *supra* note 4, at § 4:46 at 4-143 to -44.

⁵² See, e.g., *Computer Assocs. Int’l, Inc. v. Altai, Inc.*, 982 F.2d 693, 707-09 (2d Cir. 1992).

⁵³ See, e.g., *Matthew Bender & Co. v. Kluwer Law Book Publishers, Inc.*, 672 F. Supp. 107, 110 (S.D.N.Y. 1987).

⁵⁴ See, e.g., *ATC Distrib. Group, Inc., v. Whatever-It-Takes Transmissions & Parts, Inc.*, 402 F.3d 700, 707 (6th Cir. 2005).

⁵⁵ See, e.g., *Southco*, 390 F.3d at 283-84.

⁵⁶ See, e.g., *Matthew Bender & Co. v. West Publ’g Co.*, 151 F.3d 674, 685-86 (2d Cir. 1998).

⁵⁷ Normative justifications for invoking merger in such circumstances are explored in Part IV.

⁵⁸ See, e.g., *Kay Berry, Inc. v. Taylor Gifts, Inc.*, 421 F.3d 199, 209 (3d Cir. 2005) (merger rare and generally found in functional work cases); *Yankee Candle Co. v. Bridgewater Candle Co.*, 259 F.3d 25, 26 (1st Cir. 2001) (merger generally found as to works depicting nature).

⁵⁹ Merger defenses have been more successful in functional work cases than in cases involving artistic or fanciful works.

infringement in computer program cases,⁶⁰ although more often, merger has been found as to some aspects of programs that plaintiffs have alleged were infringed.⁶¹ Merger defenses have often, although not always, succeeded in other functional work cases, such as those involving forms, charts, and contracts.⁶²

In the relatively few depiction-of-nature cases, merger defenses have met with mixed success. Kalpakian's defense in the jeweled bee case succeeded,⁶³ as did another case involving the swish of the tail of a taxidermied fish.⁶⁴ However, even when merger defenses were not successful,⁶⁵ courts have treated copyrights in works depicting things found in nature to be "thin," so that generally only exact or near-exact copying will result in infringement.⁶⁶

The range of cases in which merger defenses have been at least partly and sometimes fully successful is, though, much broader than these two categories of cases. Merger defenses have succeeded in cases involving broadcast programs,⁶⁷ teaching materials,⁶⁸ advertisements,⁶⁹

⁶⁰ *Lexmark Int'l, Inc. v. Static Control Components, Inc.*, 387 F.3d 522, 540-41 (6th Cir. 2004) (exact copying excused on merger grounds because necessary to achieving compatibility).

⁶¹ *See, e.g., Manufacturers Techs., Inc. v. Cams, Inc.*, 706 F. Supp. 984 (D. Conn. 1989) (merger defense successful as to some elements of user interface).

⁶² *See, e.g., Utopia Provider Sys., Inc. v. Pro-Med Clinical Sys., LLC*, 596 F.3d 1313 (11th Cir. 2010) (forms); *Coates-Freeman Assoc., Inc. v. Polaroid Corp.*, 792 F. Supp. 879 (D. Mass. 1992) (chart); *Crume v. Pac. Mut. Life Ins., Co.*, 140 F.2d 182 (7th Cir. 1944) (insurance document). *But see* *Bucklew v. Hawkins, Ash, Baptie & Co.*, 329 F.3d 923 (7th Cir. 2003) (rejecting merger defense as to one form).

⁶³ *Kalpakian*, 446 F.2d at 741.

⁶⁴ *See, e.g., Hart v. Dan Chase Taxidermy Supply Co.*, 967 F. Supp. 70 (N.D.N.Y. 1997) (finding merger after remand for more detailed factual findings on the merger issue).

⁶⁵ *See, e.g., Kay Berry*, 421 F.3d at 209 (reversing summary judgment to give plaintiff an opportunity to prove that her rock sculpture was not "the unavoidable expression of a common idea"); *Concrete Mach. Co. v. Classic Lawn Ornaments, Inc.*, 843 F. 2d 600 (1st Cir. 1988) (reversing denial of preliminary injunction and remanding for fact-finding paying closer attention to details of similarities and differences in depictions of animals).

⁶⁶ *See, e.g., Satava v. Lowry*, 323 F.3d 805 (9th Cir. 2003) (idea and expression in glass jellyfish sculpture had not merged, but copyright was not infringed). *See also* *Ets-Hokin v. Skyy Spirits, Inc.*, 323 F.3d 763 (9th Cir. 2003) (photograph of vodka bottle not invalid because of merger, but also not infringed).

⁶⁷ *See, e.g., Rice v. Fox Broad. Co.*, 330 F.3d 1170 (9th Cir. 2003) (revelations of magic tricks).

⁶⁸ *See, e.g., Palmer v. Braun*, 287 F.3d 1325 (11th Cir. 2002) (teaching materials for course on raising consciousness).

⁶⁹ *See, e.g., Sun Media Sys., Inc. v. KDSM, LLC*, 564 F. Supp.2d 946 (S.D. Iowa 2008) (advertising mailers).

banners,⁷⁰ games,⁷¹ architectural works,⁷² aesthetic designs of labels,⁷³ legal texts,⁷⁴ maps,⁷⁵ and compilations of information.⁷⁶

D. Merger May Be Found As to “Soft” Ideas And Not Just to Building Blocks of Knowledge.

One well-known decision, *CCC Information Services v. MacLean Hunter Market Reports*, has interpreted the merger doctrine as applicable when the allegedly infringed elements constituted building blocks of knowledge that were manifestations of “hard” ideas.⁷⁷ Judge Leval’s decision gave the impression that merger was or should be available to limit the scope of copyright only when a case involved building blocks and hard ideas.⁷⁸

Judge Leval was correct that merger has sometimes been successfully invoked as a defense when copyright owners have sought to extend protection to a work, or to elements of a work, that constitute building blocks of knowledge. In *Ho v. Taflove*, for instance, the Seventh Circuit relied in part on the merger doctrine in ruling that a complex equation and related figures that the plaintiffs had devised were unprotectable by copyright law.⁷⁹ Merger defenses have, however, been successful in many cases that did not involve building blocks of knowledge.⁸⁰

⁷⁰ See, e.g., *Small v. Exhibit Enters., Inc.*, 364 F. Supp.2d 648 (E.D. Mich. 2005) (stadium hanging banners).

⁷¹ See, e.g., *Landsberg v. Scrabble Crossword Game Players*, 736 F.2d 485 (9th Cir. 1984) (game strategy handbook).

⁷² See, e.g., *Zalewski v. Cicero Builder Dev. Inc.*, 754 F.3d 95 (2d Cir. 2014) (merger considerations limited copyright in architectural design).

⁷³ See, e.g., *Yankee Candle*, 259 F.3d 25 (fruit and flower designs for candles).

⁷⁴ See, e.g., *Veeck v. S. Bldg. Code Cong. Int’l*, 293 F.3d 791 (5th Cir. 2002) (building code enacted into law).

⁷⁵ See, e.g., *Kern River Gas Transmission Co. v. Coastal Corp.*, 899 F.2d 1458 (5th Cir. 1990). *But see* *Mason v. Montgomery Data, Inc.*, 967 F. 2d 135 (5th Cir. 1992).

⁷⁶ See, e.g., *Warren Publ’g v. Microdos Data Corp.*, 115 F.3d 1509, 1518, n.27 (11th Cir. 1997) (merger as viable ground for denying copyright to cable television system guide). *But see* *CCC Info. Servs. v. MacLean Hunter Mkt. Rep.*, 44 F.3d 61 (2d Cir. 1994) (rejecting merger defense for compilation of red book values for used cars). This article discusses *Warren*, *infra* notes 211-13 and accompanying text, and *MacLean Hunter*, *infra* notes 77-85, 97-110 and accompanying text.

⁷⁷ 44 F.3d 61, 68-70 (2d Cir. 1994). The trial court in *MacLean Hunter* had ruled that the Red Book’s compilation of car valuations was unprotectable by copyright law on merger grounds. *Id.* at 68.

⁷⁸ See *infra* notes 106-10 and accompanying text.

⁷⁹ 648 F.3d 489, 499 (7th Cir. 2011).

⁸⁰ See, e.g., *Yankee Candle*, 259 F.3d at 35 (candle design); *Kalpajian*, 446 F.2d at 741 (jeweled bee); *Hart*, 967 F. Supp. at 73 (taxidermied fish).

More problematic was Judge Leval's attempt to define merger in relation to "soft" and "hard" ideas.⁸¹ The former were said to be copyright-protectable insofar as they were infused with the author's personal taste or opinion, whereas the latter, because they lacked such infusions, were unprotectable copyright under the merger doctrine.⁸² The only authority the court cited in support of this proposition was *Kregos v. Associated Press*, decided a few years before by a different panel of Second Circuit judges.⁸³ Although *Kregos* may have inspired this distinction, it did not espouse the soft/hard idea conception of merger.

There is no basis in the Copyright Act of 1976 or the case law interpreting it for making a distinction between soft and hard ideas. All ideas, whether soft or hard, personal or impersonal, are unprotectable by copyright law under 17 U.S.C. § 102(b). Fortunately, this peculiar and erroneous approach to the merger doctrine has rarely been adopted in subsequent cases.⁸⁴ The Second Circuit has, moreover, backed away from it.⁸⁵ Still, a review of *Kregos* and *MacLean Hunter* provides some insights into why that court once regarded a distinction between hard and soft ideas as a plausible way to conceptualize the merger doctrine.

Kregos created a form consisting of nine categories of statistics about baseball pitching past performances. After licensing his pitching form to a number of newspapers, *Kregos* had sought AP as a client. AP declined, choosing instead to publish a competing form that *Kregos* argued infringed his rights.

The District Court gave three main reasons for rejecting the protectability of this work. First, the form lacked sufficient originality to qualify for protection, given the existence of other pitching forms with similar elements.⁸⁶ Second, any originality in his selection and arrangement of data had merged with his idea about predicting game outcomes.⁸⁷ Third, the pitching form

⁸¹ Judge Leval did not use the word "hard" in relation to building blocks, but contrasted building blocks with "soft ideas," which were those ideas suffused with personal opinion. *Id.* at 71-72. The logical inference is that Judge Leval thought that building blocks were "hard" ideas. He regarded this distinction as necessary because "[g]iven the nature of compilations, it is almost inevitable that the original contributions of the compilers will consist of *ideas*." *Id.* at 70 (emphasis in the original).

⁸² *Id.* at 69-70.

⁸³ 937 F.2d 700 (2d Cir. 1991).

⁸⁴ *But see* *Health Grades, Inc. v. Robert Wood Johnson Univ. Hosp., Inc.*, 643 F. Supp.2d 1226, 1236-37 (D. Colo. 2009) (hospital health ratings held protectable); *Barclay's Capital, Inc. v. Theflyonthewall.com, Inc.*, 700 F. Supp.2d 310, 344 (S.D.N.Y. 2010), *rev'd on other grounds*, 650 F.3d 876 (2d Cir. 2011) (news).

⁸⁵ *See NYMEX*, 497 F.3d 109, discussed *infra* notes 139-44 and accompanying text.

⁸⁶ *Kregos v. Associated Press*, 731 F. Supp. 113, 117-19 (S.D.N.Y. 1990), *rev'd*, 937 F.2d 700 (2d Cir. 1991).

⁸⁷ *Kregos*, 731 F. Supp. at 119.

was an unprotectable “blank form,” which was unprotectable under precedents going back to *Baker*.⁸⁸

A split Second Circuit reversed, ruling that Kregos was entitled to go to trial to establish that his selection and arrangement was an original compilation of data.⁸⁹ Judge Newman, writing for the majority, observed that Kregos had not presented his creation as a method of predicting the outcome of baseball games, but rather as a means to provide information that “newspaper readers should consider in making their own predictions of [game] outcomes.”⁹⁰ There being numerous ways that compilers could select and arrange baseball statistics to offer readers ideas about possible outcomes, Judge Newman concluded there was no merger of idea and expression.⁹¹

He “confessed some unease” about this ruling “because of the risk that protection of selections of data...have the potential for according protection to ideas.”⁹² However, he allayed this concern by observing that as long as such selections “involve matters of taste or personal opinion,” as Kregos’ selection of data arguably did, “there is no serious risk that withholding the merger doctrine will extend protection to an idea.”⁹³

He contrasted the facts in *Kregos* with a hypothetical claim that a doctor might make that he/she owned a copyright in a list of symptoms of a disease. Insofar as this doctor conceived of this selection as “a useful identifier of the disease,” then a court should find idea/expression merger so that other doctors could employ the same list for diagnostic purposes.⁹⁴

Judge Newman regarded *Kregos* as falling in the middle of a spectrum, consisting, at one end, of selections based purely on personal taste, and at the other, those that were products of some deterministic or mechanical processes. Kregos obviously thought his selection had some predictive power, but he “left it to all sports page readers to make their own judgments as to the likely outcomes from the sets of data he has selected.”⁹⁵ Judge Newman regarded the nine

⁸⁸ *Id.* at 120-21.

⁸⁹ *Kregos*, 937 F.2d at 703-08. Judge Sweet wrote a powerful dissent from the court’s ruling on the merger defense. *See id.* at 711-16.

⁹⁰ *Kregos*, 937 F.2d at 706.

⁹¹ *Id.* at 706-07. The level of abstraction at which one assesses what idea is being expressed can have important consequences for the success or failure of a merger defense. *See, e.g.*, Goldstein, *supra* note 6, at § 2.3.2 at 2:37. In *Kregos*, Judge Newman went higher up the abstractions hierarchy than was probably warranted.

⁹² *Kregos*, 937 F.2d at 707.

⁹³ *Id.*

⁹⁴ *Id.* I agree that a list of symptoms to diagnose a disease should not be copyright-protectable under 17 U.S.C. § 102(b) as component elements of a diagnostic system.

⁹⁵ *Id.* Kregos’ lawyer must have cleverly characterized readers of the Kregos form as the real judges of likely outcomes to make Kregos’ choices seem more expressive. But as in *Baker*, the Kregos form was an embodiment of a method, which should have been held unprotectable by

categories set forth in the Kregos form as his opinions about useful information,⁹⁶ but it is questionable whether a form consisting of nine categories of data should be copyrightable under the blank forms exclusion established in *Baker*.⁹⁷

The main question in *MacLean Hunter* was whether estimates of used car prices published in the Red Book were unprotectable “facts” under the Supreme Court’s decision in *Feist Publications, Inc. v. Rural Telephone Service Co.*⁹⁸ Judge Leval distinguished *Feist* as a case about discovered facts (i.e., telephone numbers).⁹⁹ The Red Book used car prices were, by contrast, not “reports of historical prices nor mechanical derivations of historical prices,” but rather the product of “professional judgment and expertise” as well as predictions about competition among cars over time.¹⁰⁰ The Red Book “expresses a loose judgment that values are likely to group together with greater consistency within a defined region than without,” producing a number that is “necessarily both approximate and original.”¹⁰¹ The Second Circuit later distanced itself from this analysis.¹⁰²

A second issue in *MacLean Hunter* was whether the expression of used car values in the Red Book had merged with ideas expressed. Setting the stage for consideration of this issue, Judge Leval acknowledged the need to reconcile two contradictory copyright “imperatives,” one calling for protection for creations that advance knowledge, such as compilations, and the other calling for limits on the protection of such creations in order to advance knowledge.¹⁰³ He worried that “virtually nothing will remain of the protection accorded by the statute to compilations” if the court ruled in favor of *MacLean Hunter*’s merger defense.¹⁰⁴ The merger

copyright law under *Baker* and 17 U.S.C. § 102(b). The existence of other methods of predicting baseball game outcomes should not make Kregos’ copyrightable.

⁹⁶ Judge Newman warned, however, that a compilation such as Kregos’ would enjoy at best a limited scope of protection. *Id.* at 704. Kregos ultimately failed in his copyright claim against AP because AP’s pitching form used different labels for some categories of data and some different categories from those in Kregos’ form. *Kregos v. Associated Press*, 3 F.3d 656 (2d Cir. 1993).

⁹⁷ See, e.g., Samuelson, *Baker Story*, *supra* note 20, at 185-86

⁹⁸ 499 U.S. 340 (1991). The District Court in *MacLean Hunter* ruled against the copyright claim because it viewed the used car values as unprotectable facts. *MacLean Hunter*, 44 F.3d at 66. It also ruled against protectability on merger and lack of originality grounds. *Id.* at 68.

⁹⁹ *Id.* at 67. Telephone numbers are not really “discovered” facts. Telephone companies make them up and arbitrarily assign them to telephone customers. *Feist*’s distinction between discovered and created facts is questionable. See, e.g., Justin Hughes, *Created Facts and the Flawed Ontology of Copyright Law*, 83 Notre Dame L. Rev. 43 (2007); Wendy J. Gordon, *Reality as Artifact: From Feist to Fair Use*, 55 Law & Contemp. Probs. 93 (1992).

¹⁰⁰ *MacLean Hunter*, 44 F.3d at 66-67.

¹⁰¹ *Id.* at 67.

¹⁰² See *infra* notes 139-44 and accompanying text.

¹⁰³ *Id.* at 68-69.

¹⁰⁴ *Id.* at 70. Surely this statement was an exaggeration.

doctrine should not go against “the express command of the copyright statute” to protect original compilations.¹⁰⁵

Judge Leval observed that copyright law does not extend protection to ideas because allowing free access to ideas is critically important to the ongoing advancement of knowledge.¹⁰⁶ This observation led him to conceptualize merger as a doctrine that should be invoked when building blocks of knowledge were at stake.¹⁰⁷ The opinion characterized *Kregos* as having distinguished between “two categories of ideas,” hard ones “that undertake to advance the understanding of phenomena or the solution of problems, such as the identification of the symptoms that are most useful in identifying the presence of a particular disease,” and soft ones “that merely represent an author’s taste or opinion,” which “therefore do not materially assist the understanding of future thinkers.”¹⁰⁸

Judge Leval regarded the Red Book used car prices as ideas “of the soft type,” which should not be excluded from protection under the merger doctrine.¹⁰⁹ “To the extent that protection of the Red Book would impair the free circulation of any ideas, these are ideas of the weaker category, infused with opinion.”¹¹⁰ *MacLean Hunter* thus seemingly regarded merger as applicable only when the public needed free access to those hard ideas that are building blocks of knowledge.

Even if one regards the outcomes in *Kregos* and *MacLean Hunter* to be sound,¹¹¹ the latter decision’s conceptualization of merger as available only when hard ideas, that is, building blocks of knowledge, are at stake, is questionable in light of the dozens of merger cases not involving building blocks of knowledge. Such a distinction is, moreover, untenable because

¹⁰⁵ *Id.*

¹⁰⁶ *Id.* at 68-69.

¹⁰⁷ *Id.* at 71.

¹⁰⁸ *Id.* The opinion does not expressly use the word “hard,” but it contrasted building block ideas and “soft” ideas. “Hard” seems the appropriate adjective to designate the contrast.

¹⁰⁹ *Id.* at 71-72.

¹¹⁰ *Id.* at 72-73. Judge Leval wrote that the Red Book opinions “explain nothing, and describe no method, process or procedure,” *id.* at 73. This suggests that the valuations were not expressive in a copyright sense. The Ninth Circuit unfortunately followed *MacLean Hunter* in *CDN Inc. v. Kapes*, 197 F.3d 1256, 1260-61 (9th Cir. 1999) (coin valuations held copyright-protectable because not mechanically derived). *See also Health Grades*, 634 F. Supp.2d at 1234 (ratings for hospital quality held copyrightable; merger defense rejected relying on *MacLean Hunter*).

¹¹¹ I agree with the dissent in *Kregos* that the Second Circuit should have affirmed summary judgment for AP on merger grounds or as a blank form. *MacLean Hunter* was a harder case from an economic standpoint because CCC had created a database containing all of the used car prices in the Red Book and competed directly with *MacLean Hunter*’s book, usurping the market for an electronic version of the compilation. The holding in *MacLean Hunter* would have been easier to justify had the Supreme Court in *Feist* not rejected sweat-of-the-brow copyrights. *Feist*, 499 U.S. at 359-61.

courts would inevitably flounder in attempting to determine in a principled way which ideas were hard or soft.¹¹² To some people, baseball statistics are building blocks of knowledge, while for others, they are not. Besides, merger is not about hard or soft ideas, nor about building blocks of knowledge alone. It is about the existence of constraints on the practical range of authorial expressions in a wide variety of contexts.

E. Merger Sometimes Presents a Copyrightability Issue and Is Not Just a Defense to Infringement

Kregos is one of several cases that have hewed to the Nimmer treatise's preferred conception of the merger doctrine: that it may sometimes be a viable defense to claims of infringement, but it should not be a basis for challenging the copyrightability of a work (or some aspects of a protected work).¹¹³ While the context within which merger generally is raised is in the throes of infringement litigation, it is simply not true that merger is only a defense to infringement and never a limit on copyrightability.¹¹⁴

As Judge Sweet observed in his dissent in *Kregos*, "Nimmer notwithstanding, the majority of cases have rejected this [merger as defense only] approach and instead followed the method...under which merger is used as a reason for denying all copyright protection to the plaintiff and thereby excusing the defendant's use of a similar or even identical expression."¹¹⁵ Judge Sweet would have upheld the District Court's ruling that *Kregos*' idea for aiding predictions of baseball game outcomes had merged with the expression of the nine categories of statistics.¹¹⁶

Further support for the proposition that merger sometimes presents a copyrightability issue comes from the U.S. Copyright Office whose Compendium of Copyright Office Practices

¹¹² See, e.g., Miriam Bitton, *Protection for Informational Works After Feist Publications, Inc. v. Rural Telephone Service Co.*, 21 Fordham Intell. Prop. Media, & Ent. J. 611, 659-60 (2011) (criticizing the soft-hard distinction of *MacLean Hunter* as "problematic" because it would inject subjective considerations into merger analysis); Burk, *supra* note 1, at 616 (criticizing *MacLean Hunter* for "doing enormous violence to the structure of the copyright system" by treating copyright as a general misappropriation statute); Preonas, *supra* note 1, at 93-94 (criticizing *MacLean Hunter* as too subjective to be workable). See also James Grimmelman, *Three Theories of Copyright in Ratings*, 14 Vand. J. Ent. & Tech. L. 851, 876-880 (2012) (criticizing *MacLean Hunter* because used car valuations are useful, treated as facts, and not just personal opinions).

¹¹³ *Kregos*, 937 F.2d at 705, citing to Nimmer, *supra* note 3, at § 13.03[B][3].

¹¹⁴ Goldstein supports the view that merged expression is uncopyrightable: "As traditionally conceived, the merger doctrine determines whether the work is copyrightable; if the idea and expression of a jeweled bee pin merge, the pin's creator has no copyright." Goldstein, *supra* note 6, at § 2.3.2 at 2:38.1.

¹¹⁵ *Kregos*, 937 F.2d at 715. Judge Sweet cited five cases in support of this proposition. *Id.*

¹¹⁶ *Id.* at 716.

identifies merger as one of the bases on which the Office may refuse registration applications.¹¹⁷ The Office has, moreover, sometimes refused to register claims of copyright in works that it regarded as instances of idea/expression merger. For example, the Office once refused to register a claim of copyright in the Pong videogame because the Office regarded the simple paddle and ball game as dictated by functionality.¹¹⁸ Atari Games, its developer, challenged the Office's refusal and convinced the appellate court that the Office had erred in its dictated-by-functionality ruling.¹¹⁹ But the court seemed to accept that the Office could reject registration applications on merger or dictated-by-functionality grounds.

In litigation, merger as a copyrightability issue arises in three contexts. Sometimes, courts decide that merger precludes the plaintiff's claim of copyright in a work as a matter of law, which has the effect of invalidating it. In *Lexmark Int'l, Inc. v. Static Control Components, Inc.*, for instance, the Sixth Circuit ruled that a computer program whose installation in printer cartridges was essential to enable the cartridges to function in the plaintiff's printer system was unprotectable by copyright law because of a merger of function and expression.¹²⁰

A second context has been when defendants challenge the copyrightability of a work on merger grounds, but courts decide that that issue must go to trial to give the plaintiff an opportunity to show how varied the expressive alternatives are. In *Hart v. Dan Chase Taxidermy Supply Co.*, for instance, the District Court initially ruled that merger precluded copyright protection for Hart's taxidermied mannequins of fish (claimed as sculptures), disposing of the case on a motion to dismiss.¹²¹ Hart contended on appeal that there were many ways to depict taxidermied fish and persuaded the appellate court that the District Court had decided the merger issue "too early."¹²² After trial on the merits, the District Court ruled once again that merger precluded

¹¹⁷ U.S. Copyright Office, *Compendium of U.S. Copyright Office Practices* at § 313.3(B) (3d Ed. 2015). Rob Kasunic, who heads the group that is in charge of registration, has confirmed that the Office does sometimes refuse registration on idea/expression merger grounds. Courts have sometimes recognized that the Office may not always be in a good position to judge how narrow or broad is the range of expressive alternatives. *See, e.g., NEC Corp. v. Intel Corp.*, 10 U.S.P.Q.2d 1177, 1179 (N.D. Cal. 1989).

¹¹⁸ *Atari Games Corp. v. Oman*, 888 F.2d 878, 879-80 (D.C. Cir. 1989). Courts feel more comfortable, however, denying infringement claims on merger grounds when the Office has refused registration, *see, e.g., Ophthalmic Research Assoc. v. SARcode Corp.*, 2013 WL 2247584 at *2-3 (D. Mass. 2013).

¹¹⁹ *Atari Games*. 888 F.3d at 886. The court remanded the matter to the Office for further consideration of its registration decision.

¹²⁰ 387 F.3d 522, 540-42 (6th Cir. 2004). *See also NYMEX*, 497 F.3d at 117 (merger precluded copyright protection for NYMEX settlement prices); *Kern River*, 899 F.2d at 1464 (maps of gas pipeline held unprotectable because of merger).

¹²¹ *Hart v. Dan Chase Taxidermy Supply Co.*, 884 F. Supp. 71, 76-77 (N.D.N.Y. 1995).

¹²² *Hart v. Dan Chase Taxidermy Supply Co.*, 86 F.3d 320, 321 (2d Cir. 1996). *See also Merritt Forbes & Co. v. Newman Investment Sec., Inc.*, 604 F. Supp. 943 (S.D.N.Y. 1985) (trial needed to determine if bond offering documents were functionally constrained).

protection because there were, in fact, very limited alternative ways to portray taxidermied fish, even as to the swish of the tail.¹²³

A third and the most common context is when the defendant has copied some component of the plaintiff's admittedly copyrightable work and defends that copying on the ground that the part copied was not "copyrightable," that is, not within the scope of protection that copyright law provided to the plaintiff's work.

An exemplary case is *ATC Distribution Group, Inc. v. Whatever It Takes Transmission & Parts, Inc.*¹²⁴ ATC owned a copyright in a catalog of hardware parts. The defendant copied part names and numbers from ATC's catalog for its sales brochure to sell parts in competition with ATC. Whatever-It-Takes did not challenge the validity of copyright in ATC's catalog, but contended that the part names and numbers were not protectable expression, even if there were many different ways to name transmission parts and assign numbers to them.¹²⁵ The Sixth Circuit agreed, saying that "[f]or almost all types of creativity claimed by ATC, there is only one reasonable way to express the underlying idea."¹²⁶ The assignment of numbers to the parts was "essentially random."¹²⁷ To require the defendant to use alternatives would be "extremely inefficient."¹²⁸

Thus, while merger is usually raised as a defense to claims of infringement, it may, in appropriate cases, result in a challenge to the validity of the plaintiff's copyright.¹²⁹ More typical, however, are merger defenses that focus on the scope of protection that copyright law

¹²³ *Hart v. Dan Chase Taxidermy Supply Co.*, 967 F. Supp. 70, 73 (N.D.N.Y. 1997), *aff'd mem.*, 152 F.3d 918 (2d Cir. 1998). The Second Circuit has spoken on the standard of review: "While the question of merger can be described as a legal one, entitled to *de novo* review, it generally entails an application of the law to specific works. As such, it is usually highly fact-dependent." 152 F.3d at *1. In many cases, however, courts decide merger defenses on motions for summary judgment. *See, e.g., ATC*, 402 F.3d at 702-03; *Veeck*, 293 F.3d at 794.

¹²⁴ 402 F.3d 700 (6th Cir. 2005).

¹²⁵ *ATC* relied heavily on *American Dental Ass'n v. Delta Dental Plans Ass'n*, 126 F.3d 977 (7th Cir. 1997) (upholding claim of copyright in compilation of names of dental procedures and numbers associated with them). The *ADA* case is discussed *infra* notes 249-61 and accompanying text.

¹²⁶ *ATC*, 402 F.3d at 708-09.

¹²⁷ *Id.*

¹²⁸ *Id.* Efficiency considerations and needless variation functions of the merger doctrine are discussed *infra* notes 289-99 and accompanying text.

¹²⁹ *See supra* notes 114-20 and accompanying text. Merger as a basis for undermining the copyrightability of the plaintiff's work is most appropriate when functionality considerations limit the expressive alternatives available to the second comer, as when efficiency or interoperability constraints exist. *See infra* Part IV-E.

affords to rights holders.¹³⁰ Courts generally put the burden of proof of non-merger on plaintiffs because to establish a prima facie case of infringement requires proof that the defendant appropriated original expression from the plaintiff's work.¹³¹

F. Idea/Expression Merger Is Not the Only Kind of Merger

It is well-established in the merger case law is that expressions sometimes merge with the ideas an author is expressing. When that happens, merger renders the work (or some part of it) unprotectable by copyright law or results in the scope of copyright so thin that only exact or near-exact copying will infringe. Some courts seem to think that abstract-idea/expression merger is the only kind of merger that copyright law recognizes.¹³² This view is incorrect.

At least five other types of merger can be found in the copyright case law. A fact/expression merger doctrine was recognized in the Second Circuit's decision in *N.Y. Mercantile Exchange, Inc. v. Intercontinental Exchange, Inc.*¹³³ A law/expression merger doctrine is implicit in the Fifth Circuit's decision in *Veeck v. S. Bldg Code Cong. Int'l.*¹³⁴ A process/expression merger doctrine has been considered in some computer program cases.¹³⁵ Insofar as one regards *Baker* as a merger case, it would be an instance of system/expression merger because the selection and

¹³⁰ See, e.g., *Ho*, 648 F.3d at 498 (equations and figures not within scope of copyright protection on merger grounds). The Ninth Circuit considers merger to be part of the analytic dissection of its "extrinsic test" for infringement. See *Apple Computer, Inc. v. Microsoft Corp.*, 35 F.3d 1435, 1442-44 (9th Cir. 1994). "Analytic dissection is relevant not only to the copying element of a copyright infringement claim, but also to the claim's ownership element. One aspect of the ownership element is the copyrightability of the subject matter and, more particularly, the scope of whatever copyright lies therein." *Brown Bag Software v. Symantec Corp.*, 960 F.2d 1465 (9th Cir. 1992).

¹³¹ Although courts occasionally speak of merger as an affirmative defense, see, e.g., *Ets-Hokin*, 323 F.3d at 764, most courts put the burden of proof on plaintiffs when a merger issue arises. See, e.g., *Ho*, 648 F.3d at 499; *Yankee Candle*, 259 F.3d at 36. See also Goldstein, *supra* note 6, at § 2.3.2; Mark A. Lemley & Mark P. McKenna, *Scope*, 57 Wm. & Mary L. Rev. (forthcoming 2016) (recommending judicial hearing to determine scope of IP rights to avoid inconsistencies in making judgments about validity, infringement and defenses in IP cases).

¹³² See, e.g., *Oracle*, 750 F.3d at 1365-67 (Fed. Cir. 2014); *Whelan*, 797 F.2d at 1235-36. I have elsewhere criticized both of these decisions on this and other grounds. See Pamela Samuelson, *Functionality and Expression in Computer Programs*, 31 Berkeley Tech. L.J. (forthcoming 2016).
¹³³ 497 F.3d 109 (2d Cir. 2007).

¹³⁴ 293 F.3d 791 (5th Cir. 2002).

¹³⁵ See, e.g., *Gates Rubber Co. v. Bando Chem. Indus., Ltd.*, 9 F.3d 823, 837-38 (10th Cir. 1993) (articulating the "process-expression dichotomy" and explaining that under merger, "copyright protection is denied to expression that is inseparable from or merged with the ideas, processes, or discoveries underlying the expression"). See also Steven R. Englund, Note, *Idea, Process, or Protected Expression? Determining the Scope of Copyright Protection of the Structure of Computer Programs*, 88 Mich. L. Rev. 866, 877 (1990).

arrangement of columns and headings in Selden’s forms book were instantiations of his bookkeeping system.¹³⁶ When artistic elements of pictorial, graphic and sculptural works have merged with (i.e., are inseparable from) their utilitarian elements, those works are uncopyrightable.¹³⁷

Let’s start with the fact/expression distinction. The Second Circuit found itself in a tight spot in the *NYMEX* case because the plaintiff relied heavily on *MacLean Hunter* in support of its theory that ICE infringed NYMEX copyrights. ICE, which ran an Internet-based trading system, made use of the end-of-day settlement prices NYMEX promulgated as to future contracts for energy products traded on its exchange. NYMEX claimed that these settlement prices were not simply the result of the last trade of the day or an average of trades made during the day because its professionals considered various factors and made careful judgments about specific prices. It contended that the resulting prices were NYMEX’s opinions and as worthy of copyright protection as the used car valuations in *MacLean Hunter*.¹³⁸

Distancing itself from *MacLean Hunter*, the Second Circuit in *NYMEX* concluded that the settlement prices were the exchange’s “sound and reasonable opinion of the fair market value for each NYMEX contract as of the close of open outcry trading on the NYMEX floor each day.”¹³⁹ Even if there was some originality in the NYMEX assessment—an issue the court choose not to decide—these created facts merged with their expression, and hence, NYMEX’s claim failed.¹⁴⁰

It mattered in *NYMEX* that the Commodities Futures Trading Commission required NYMEX to record and disseminate these settlement prices.¹⁴¹ Other actors in the marketplace, ICE among them, treated the NYMEX settlement prices as statements of “empirical reality, an economic fact about the world.”¹⁴² The court observed that NYMEX did not need copyright incentives to produce the settlement prices, and NYMEX could not show that alternative settlement prices

¹³⁶ See *supra* note 19 and accompanying text.

¹³⁷ See, e.g., *Brandir Int’l, Inc. v. Cascade Pac. Lumber Co.*, 834 F.2d 1142 (2d Cir. 1987) (bicycle rack held uncopyrightable because its utility was inseparable from its functionality). See also *Burk*, *supra* note 1, at 591 (recognizing the inseparability of art and functionality in pictorial and sculptural works as a type of merger).

¹³⁸ *NYMEX*, 497 F.3d at 110-112.

¹³⁹ *Id.* at 117. The court repudiated as *dicta* statements in *MacLean Hunter* that used car valuations were themselves original creations protectable by copyright. It construed the *MacLean Hunter* ruling as resting on CCC’s wholesale appropriation of *MacLean Hunter*’s creative selection and arrangement of data. *Id.* at 115, n.5. See also *Barclay’s Capital Inc. v. Theflyonthewall.com*, 650 F.3d 876, 877 (2d Cir. 2011) (characterizing investment brokers’ ratings for particular stocks as unprotectable facts).

¹⁴⁰ *NYMEX*, 497 F.3d at 115-17.

¹⁴¹ *Id.* at 111.

¹⁴² *Id.* at 115.

would be substantially dissimilar to those it had created.¹⁴³ In effect, *NYMEX* held that any original expression in the formulation of settlement prices had merged because the prices were held out and treated in the marketplace as facts.¹⁴⁴

Veeck illustrates the merger of law and expression.¹⁴⁵ Southern Building Code Congress Int'l (SBCCI), a non-governmental standards body, publishes model building codes that set forth rules to govern the construction of various components of buildings (e.g., plumbing and heating systems). SBCCI encourages towns to adopt its codes as law and makes money by selling copies of the codes to interested parties in jurisdictions that have adopted the codes. After the towns of Anna and Savoy, Texas, adopted the 1994 edition of SBCCI's Standard Building Code as the law governing construction of buildings in those towns,¹⁴⁶ Peter Veeck posted the code on his website. When SBCCI objected, Veeck sought a declaratory judgment that his posting of the laws of Anna and Savoy did not infringe copyright. SBCCI countersued for infringement.¹⁴⁷

The Fifth Circuit, in a split en banc opinion, held that insofar as the building code had become the law of these jurisdictions, it had become a "fact" that had merged with the code's expression.¹⁴⁸ Once enacted, the codes "are the unique, unalterable expression of the 'idea' that constitutes local law."¹⁴⁹ It is essential to use "the precise wording of laws" in order for courts and those whom the laws will govern to be able to interpret the laws properly.¹⁵⁰ "Veeck could not express the enacted law [of Anna and Savoy] in any other way."¹⁵¹ To vary expression of the law from its actual text would lack authoritativeness.

¹⁴³ *Id.* at 118.

¹⁴⁴ The Second Circuit framed this in conventional idea/expression terms, but the case should be understood as a fact/expression merger case. *See also* *Banxcorp v. Costco Wholesale Corp.*, 978 F. Supp.2d 280, 300-11 (S.D.N.Y. 2013) (fact/expression merger found as to interest rate assessments, although alternative assessments existed).

¹⁴⁵ 293 F.3d 791 (5th Cir. 2002). *See also* *Bldg. Off. & Code Adm. v. Code Tech., Inc.*, 628 F.2d 730 (1st Cir. 1980) (reversing a preliminary injunction forbidding a competitor to publish a privately developed model building code that had been adopted as law by the state of Massachusetts). The copyrightability of privately drafted codes that have been adopted as law is once again in litigation in *ASTM Int'l v. Public.Resource.org*, Case No. 1:13-cv-01215 (D. D.C. 2013). *See also* *Int'l Code Council, Inc. v. Nat'l Fire Protection Ass'n, Inc.*, 2006 WL 850879 at * 16 (N.D. Ill. 2006) (rejecting merger defense as to unenacted building code).

¹⁴⁶ *Veeck*, 293 F.3d at 793.

¹⁴⁷ A separate ground for the en banc court's ruling was that the enacted codes could not be protected by copyright law because due process considerations required public access to law. *Id.* at 796-800. *See also* *BOCA*, 628 F.2d at 734 (relying on public access to enacted code-as-law in reversing preliminary injunction).

¹⁴⁸ *Veeck*, 293 F.3d at 801-02.

¹⁴⁹ *Id.* at 801.

¹⁵⁰ *Id.*

¹⁵¹ *Id.* at 802.

The Fifth Circuit’s characterization of enacted codes as “facts” might suggest that *Veeck* should be understood as a fact/expression merger case. However, this interpretation is unpersuasive because the normal meaning of “fact” does not encompass highly detailed specifications such as those found in SBCCI’s code.¹⁵² A better way to understand *Veeck* is as a law/expression merger case.¹⁵³

Process/expression merger has been recognized in some computer program cases. The Court of Appeals for the Federal Circuit (CAFC) first articulated the concept of process/expression merger in *Atari Games Corp. v. Nintendo of Am, Inc.*¹⁵⁴ Atari created videogames that it wanted to run on Nintendo’s platform. Nintendo sought to thwart unlicensed game developers from taking a free ride on the popularity of its platform by adopting an authentication protocol—a kind of digital handshake exchange between the platform software and videogame software—that had to be successfully executed for games to run on that platform.

Atari reverse-engineered the Nintendo software to discern the details of this digital handshake and used what it learned to make its games compatible with the Nintendo machines. The CAFC accepted that if use of the exact Nintendo code was necessary to achieve compatibility with the Nintendo platform, a process/expression merger would exist, and that code would be unprotectable by copyright law.¹⁵⁵ However, because Atari Games had appropriated more than was necessary to achieve compatibility, the CAFC held that it had infringed the Nintendo copyright.¹⁵⁶ Other software cases have recognized process/expression merger as well.¹⁵⁷

One reason why courts are sometimes confused about copyright’s merger doctrine is that courts use the term “idea” in at least two different ways: one, as a description of those abstract concepts and principles in copyrighted works that are not within the scope of that law’s protection, and second, as a metaphor for various types of unprotectable elements embodied

¹⁵² If an enacted building code can be said to be a “fact,” it must be understood as a created fact, not among the discovered facts that the Supreme Court has said are unprotectable by copyright law. *Feist*, 499 U.S. at 347.

¹⁵³ *But see* Ghosh, *supra* note 1, at 73-74 (arguing for a broader functionality-merger doctrine in copyright law that would encompass the law and its interpretation). See *infra* Part IV(D) for further discussion of laws and rules as constraints on expression in other merger cases.

¹⁵⁴ 975 F.2d 832 (Fed. Cir. 1992).

¹⁵⁵ *Id.* at 839-40.

¹⁵⁶ *Id.* at 840.

¹⁵⁷ See, e.g., *Lexmark Int’l, Inc. v. Static Control Components, Inc.*, 387 F.3d 522, 535, 540 (6th Cir. 2004) (merger of method of operation and expression in toner cartridge program precluded copyright protection); *Mitek Holdings, Inc. v. Arce Eng’g Co.*, 89 F.3d 1548, 1556, n.19 (11th Cir. 1996) (recognizing potential merger of method and expression); *Bateman v. Mnemonics, Inc.*, 79 F.3d 1532, 1545-46 (11th Cir. 1996) (accord); *Harbor Software, Inc. v. Applied Sys., Inc.*, 925 F. Supp. 1042, 1049 (S.D.N.Y. 1996) (finding some process/expression merger in software). See also *PRG-Schultz Int’l, Inc. v. Kirix Corp.*, 2003 WL 22232771 *4 (N.D. Ill. 2003) (recognizing process/expression merger in non-software context).

in copyrighted works, such as the procedures, processes, systems, methods of operation, facts, and functions understood to be outside the scope of copyright under § 102(b).¹⁵⁸

Some courts seem to think that abstract ideas are the only types of unprotectable elements in protected works and that merger can only occur as to abstract ideas (in the narrow sense of this term) and expressions as to which no alternatives are possible.¹⁵⁹ But it is also possible to conceive of idea/expression merger as a metaphorical umbrella under which fall more specific types of merger such as fact/expression, law/expression, and process/expression merger. For the sake of greater clarity in the law, it may be better for courts to recognize the existence of distinct types of merger so that this confusion can be avoided.

G. Merger Is Appropriate When a Plaintiff's Design Choices Constrain the Defendant's Choices.

Merger of idea and expression is usually found when courts become convinced that both the plaintiff and the defendant had few expressive alternatives when developing the works at issue in the copyright lawsuit. Often, the nature of the subject matter—for instance, writing rules for sweepstakes contests—constrain the expressive choices available to both authors. The merger doctrine is important to ensure that the first author who expressed that idea is not the only one who has the right to create works on that same idea.

But what if the defendant contends that its expressive choices were constrained by design choices that the plaintiff made?¹⁶⁰ Courts have sometimes opined that the only constraints that matter are those that limited the expressive alternatives available to the author of the first work.¹⁶¹ That view is, however, another myth about merger. Courts and commentators have been receptive to arguments that first author's design choices may sometimes constrain a second author's expressive choices, and this too may result in a finding of merger.¹⁶²

¹⁵⁸ See, e.g., Goldstein, *supra* note 6, at § 2.3.2.

¹⁵⁹ See, e.g., *Whelan*, 797 F.2d at 1235-36.

¹⁶⁰ One thoughtful study has concluded that the constraints copyright imposes on second comers' design choices actually promote creativity. See Joseph P. Fishman, *Creating Around Copyright*, 128 Harv. L. Rev. 1333 (2015). Fishman's points may be well taken when applied to imaginative works of art and literature, but merger is a useful doctrine to limit copyright as to more modestly creative or functional works to avoid the risk of unwarranted monopolies and forcing second comers to engage in needless variation.

¹⁶¹ *Oracle*, 775 F.3d at 1365-67.

¹⁶² See, e.g., Goldstein, *supra* note 6, at § 2.3.2.1 (citing Ninth Circuit cases focused on constraints on second comer choices and characterizing Second Circuit decisions as "hospitably inclined" to judging merger "at the time the expression was copied rather than the time it was created"); Preonas, *supra* note 1, at 97-98. Exemplary cases are discussed *infra*. Goldstein notes that the Federal Circuit's *Oracle* decision had "[o]stensibly" followed Ninth Circuit precedents. I have argued elsewhere that the *Oracle* decision is inconsistent with Ninth Circuit precedents. See, e.g., Samuelson, *Functionality & Expression*, *supra* note 19.

Considered as a merger case, *Baker v. Selden* provides one example. Anyone, including Baker, who wanted to write about or print forms to implement Selden's bookkeeping system would have to select and arrange columns and headings in the same or a substantially similar way as Selden did.

More recent merger cases further have taken account of second-comer constraints. Whatever-It-Takes could have developed its own part name and numbers, but if it wanted to let customers know that its parts were interchangeable with ATC's, it had no practical alternative but to use the same names and numbers. Similarly, ICE had to use the NYMEX settlement prices to operate its Internet-based trading system. In order for Taflove to write a scientific article about Ho's equation and new model of a physical phenomenon, he had to be able to use Ho's creations. In each of these cases, the plaintiffs had choices about how to depict their conceptions.

Computer program cases also present second-comer constraint issues. In *Computer Associates Int'l, Inc. v. Altai, Inc.*, for instance, the Second Circuit recognized that programmer design decisions may be constrained by the existence of parameter lists that subsequent programmers must reimplement in their own code for their software to be compatible with existing programs.¹⁶³ In several subsequent cases, courts have ruled in favor of compatibility defenses, relying on the merger doctrine or merger-like analyses.¹⁶⁴ Even exact copying of program code may sometimes be excused when necessary to achieving interoperability among programs.¹⁶⁵

H. Merger Can Happen Over Time

In most instances, courts make judgments about merger based on the existence of constraints at the time of creation of the work(s) at issue. But some cases have recognized that merger of expression and idea or function can happen over time. That is, a work, or some component elements of it, may embody enough original expression, when created, to qualify for copyright protection, but that expression may merge with idea, fact, or function over time because it has become law or otherwise necessary to accomplish a functional task.¹⁶⁶

¹⁶³ 982 F.2d 663, 707-10 (2d Cir. 1992).

¹⁶⁴ See, e.g., *Lexmark Int'l, Inc. v. Static Control Components, Inc.*, 387 F.3d 522, 535-40 (6th Cir. 2004) (program code essential for compatibility held unprotectable by copyright law on merger grounds); *Sega Enters. Ltd. v. Accolade, Inc.*, 977 F.2d 1519, 1522-24 (9th Cir. 1992) ("functional requirements for achieving compatibility" not protectable by copyright law).

¹⁶⁵ *Lexmark*, 387 F.3d at 535-40. *Lexmark* is discussed *infra* notes 172-78 and accompanying text.

¹⁶⁶ See, e.g., Peter S. Menell, *An Analysis of the Scope of Copyright Protection for Application Programs*, 41 Stan. L. Rev. 1045, 1066-67, 1101 (1989); Preonas, *supra* note 1, at 105-07 (calling it "mergercide"); Teter, *supra* note 1, at 1088-97 (calling it "dynamic merger"). See also Goldstein, *supra* note 6, at §2.3.2.1 at 2:41 (discussing application of merger to de facto standards).

In *Veeck*, for instance, the Fifth Circuit acknowledged that prior to the enactment of SBCCI's building code as law in a particular jurisdiction, SBCCI had full copyright protection in the document in which the code was embodied. But once enacted into law, the copyright could not be enforced against someone who was merely stating what the law was. "[A]s *law*, the model codes enter the public domain and are not subject to the copyright holder's exclusive prerogatives," although "[a]s model codes, however, the organization's works retain their protected status."¹⁶⁷

The Fifth Circuit relied on the merger doctrine as a basis for holding that *Veeck* had not infringed copyright by posting the building code on the Internet.¹⁶⁸ It did not matter how original SBCCI's code was, how many alternative ways there might be to express building code ideas, or whether other model building codes existed to demonstrate the existence of other ways to express model building code ideas. Nor did it matter that SBCCI claimed to need copyright protection to have adequate incentive to create and update its model building codes. What mattered was that once enacted, the law could not be spoken or published except by use of exactly the same words.

Another example is computer program code that might well be expressive at one point in time, but become unprotectable at a later time. The National Commission on New Technological Uses of Copyrighted Works (CONTU), which endorsed copyright as a form of intellectual property protection for computer programs, identified copyright's idea/expression identity (i.e., merger) doctrine as an important limiting principle in software copyright cases.¹⁶⁹ CONTU observed that "[i]n 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."¹⁷⁰ CONTU believed that the idea/expression identity doctrine could be invoked when someone "threaten[ed] to block the use of ideas or program language previously developed by others when that use is necessary to achieve a certain result."¹⁷¹ CONTU plainly endorsed the concept of such identity (or merger in today's parlance) as one that could arise over time, and indeed, it has.

A case in point is *Lexmark Int'l, Inc. v. Static Control Components, Inc.*¹⁷² Lexmark manufactures printers and printer cartridges. To enforce its policy that certain customers must buy replacement cartridges from it and to thwart competitors from selling replacement cartridges

¹⁶⁷ *Veeck*, 293 F.3d at 800 (emphasis in the original).

¹⁶⁸ *Id.* at 800-02.

¹⁶⁹ Nat'l Comm'n on New Technological Uses of Copyrighted Works, Final Report 20 (1979) (referring to the "idea-expression identity" doctrine that "provides that copyrighted language may be copied without infringing where there is but a limited number of ways to express a given idea").

¹⁷⁰ *Id.* (emphasis added).

¹⁷¹ *Id.*

¹⁷² 387 F.3d 522 (6th Cir. 2004).

for use in its printers, Lexmark installed a program on a chip for each cartridge designed to exchange information with another program embedded in the Lexmark printer to authenticate that a Lexmark cartridge was installed that printer; this authentication sequence served as a lock-out code.¹⁷³ Lexmark registered its claim of copyright in the printer and printer cartridge programs with the U.S. Copyright Office.¹⁷⁴ Static developed and sold chips to Lexmark's competitors who wanted to provide customers with alternative (and cheaper) replacement cartridges. Static's chips contained exact copies of the code embedded in Lexmark's printer cartridges. Lexmark claimed Static's copying of that code constituted infringement.¹⁷⁵

The Sixth Circuit accepted that there was some originality in the Lexmark software, and that there was more than one way that Lexmark might have designed this program initially.¹⁷⁶ Lexmark's expert testified about alternatives that Static could have used, but court characterized them as "inefficient and repetitive."¹⁷⁷ The court concluded that efficiency and compatibility considerations had so narrowed the range of practical options that Static's copying of the code was warranted under the merger doctrine.¹⁷⁸

The court did not expressly say that this was a merger-over-time case, but it would seem that the Lexmark program was initially copyrightable—indeed, the Copyright Office registration certificate was prima facie evidence that the program was protectable by copyright—but that it had become uncopyrightable over time when Static needed to copy it in order to make chips that would work in Lexmark printers. The function of the program and whatever expression it embodied had, in other words, merged because of the necessity for Static and other follow-on creators to use the same code to enable competition in uncopyrightable printer cartridges.

III. Merger in Relation to Other Copyright Doctrines

¹⁷³ *Id.* at 528-30.

¹⁷⁴ *Id.* at 530.

¹⁷⁵ *Id.* at 529. Lexmark also claimed that Static Control violated the anti-circumvention rules under 17 U.S.C. § 1201(a)(2) because the latter's chips bypassed the authentication sequence between software in the cartridge and software in the printer that Lexmark had designed to ensure that only its cartridges could run in its printers. The Sixth Circuit ruled against the anti-circumvention claim as well. *Id.* at 544-50.

¹⁷⁶ *Id.* at 536-38.

¹⁷⁷ *Id.* at 540.

¹⁷⁸ *Id.* at 539-43. *See also Sega*, 977 F.2d at 1528-32 (finding trademark security system code to be too functional to be protectable); *PRG-Schultz Int'l, Inc. v. Kirix Corp.*, 2003 WL 22232771 (N.D. Ill. 2003) (relying on merger and § 102(b) to deny copyright protection to plaintiff's auditing program).

The merger doctrine is often the sole focus in decisions applying it, but courts often intermix merger with other limiting doctrines, such as scenes a faire and the unprotectability of facts.¹⁷⁹ Courts sometimes perceive the other doctrines as overlapping with merger, but in some cases, courts invoke multiple doctrines when seemingly unsure which doctrine would provide the soundest grounding for the court's decision.¹⁸⁰

A. Merger and Scenes a Faire

It has long been recognized that some similarities between or among works are to be expected and should be considered non-infringing.¹⁸¹ This may result when two or more works depict the same subject,¹⁸² when they draw from common sources,¹⁸³ when they conform to certain rules,¹⁸⁴ or when they aim to achieve the same objective.¹⁸⁵ Over time, "scenes a faire" has become the doctrinal moniker used in copyright cases to express that such common element similarities do not support a finding of infringement.¹⁸⁶

The merger and scenes a faire doctrines are unquestionably similar and overlap in some respects.¹⁸⁷ Both doctrines serve as limits on the scope of copyright protection. In some cases,

¹⁷⁹ The examples of doctrinal redundancy in copyright law discussed in this section contrasts with anti-redundancy principles commonly found in patent law. *See, e.g.*, John D. Golden, *Redundancy: When Law Repeats Itself*, 94 Tex. L. Rev. (forthcoming 2016).

¹⁸⁰ *See, e.g.*, *Southco*, 390 F.3d at 282-85.

¹⁸¹ *See, e.g.*, George Ticknor Curtis, *A Treatise on the Law of Copyright* 170-71, 258-59 (1847); Eaton S. Drone, *A Treatise on the Law of Literary Property in Intellectual Productions* 205-08 (1879).

¹⁸² *See, e.g.*, *Franklin Mint Corp. v. Nat'l Wildlife Art Exchange, Inc.*, 575 F.2d 62, 64 (3d Cir. 1978) (no infringement because similarities in paintings of cardinals were due to their depicting the same subject).

¹⁸³ *See, e.g.*, *Emerson*, 8 F. Cas. at 621 (books on arithmetic likely to draw from common sources).

¹⁸⁴ *See, e.g.*, *Allen v. Academic Games League of Am.*, 89 F.3d 614 (9th Cir. 1996) (rules of same games).

¹⁸⁵ *See, e.g.*, *Crume v. Pac. Mutual Life Ins. Co.*, 140 F.2d 182 (7th Cir. 1944) (pamphlets on method by which insolvent life insurance companies could reorganize).

¹⁸⁶ For an extended discussion of the origins and significance of the scenes a faire doctrine, *see* Leslie A. Kurtz, *Copyright: The Scenes a Faire Doctrine*, 41 Fla. L. Rev. 79 (1989). Kurtz traces this doctrine to Judge Yankwich's decision in *Cain v. Universal Pictures Co.*, 47 F. Supp. 1013, 1017 (S.D. Cal. 1942) (movie said to copy scene from plaintiff's novel). *See also* Rene Yankwich *Originality in the Law of Intellectual Property*, 11 F.R.D. 457 (1951). As originally conceptualized, scenes a faire referred to "scenes which *must* follow a certain situation." *Id.* at 462 (emphasis in the original). This conception of scenes a faire is closer to the conception of merger that has evolved over time.

¹⁸⁷ *See, e.g.*, Goldstein, *supra* note 6, at § 2.3.2.2 at 2:42 (characterizing scenes a faire as a "closely related doctrine" to merger). Goldstein regards merger as applying mainly in factual

it is difficult to tell the two doctrines apart. Courts and commentators sometimes get them mixed up or apply both at the same time without being precise in distinguishing between them.

The merger and scenes a faire doctrines are, however, distinct in their essential character. With merger, the core issue is whether there are, practically speaking, more than a few alternative ways to express particular ideas or functions. The core issue in scenes a faire cases, by contrast, is whether certain elements in common between two works are indispensable in works of that kind, common in the industry, or otherwise to be expected in works of that kind.¹⁸⁸

Merger and scenes a faire seemingly overlapped in *CMM Cable Rep, Inc. v. Ocean Coast Props., Inc.*¹⁸⁹ CMM had developed promotional materials for a contest that it licensed to numerous radio stations.¹⁹⁰ The contest promised to pay listeners their hourly wage if they called the station within a certain time after their names were announced by the station. WPOR decided to run the same contest without licensing promotional materials from CMM. The First Circuit affirmed a ruling of non-infringement because although there were striking similarities in the supporting materials that CMM had developed and those that WPOR had used, there was no infringement because the doctrines of merger and scenes a faire limited the scope of copyright; the identified similarities were to be expected if one was running the same contest.¹⁹¹

and functional work cases, whereas scenes a faire has significance primarily in fictional cases. *Id.* While Goldstein's observation may be generally true, there are certainly more than a few merger cases involving other types of works. *See, e.g., Kapalkian*, 446 F.2d at 742. Many factual and functional works have scenes a faire elements. *See, e.g., cases infra* notes 195-98 and accompanying text. In the realm of video games, two cases pre-dating *Franklin* invoked merger considerations in addition to scenes a faire concepts. *See Atari, Inc. v. Amusement World, Inc.*, 547 F. Supp. 222, 229 (D. Md. 1981) (finding similarities between competitors' video games were inevitable and dictated by the requirements of the game); *Atari, Inc. v. N. Am. Phillips Consumer Elecs. Corp.*, 672 F.2d 607 (7th Cir. 1982) (citing *Kalpakistan* and *Morrissey* and considering scenes a faire doctrine but nevertheless finding likelihood of success of plaintiff's infringement claim).

¹⁸⁸ *See, e.g., Hoehling v. Universal City Studios, Inc.*, 618 F.2d 972, 979 (2d Cir. 1980) (standard elements in works about Nazi Germany were not within the scope of copyright protection).

¹⁸⁹ 97 F.3d 1504 (1st Cir. 1996).

¹⁹⁰ CMM's radio station customers typically spent about \$30,000 per campaign for use of CMM's materials. *Id.* at 1508.

¹⁹¹ *Id.* at 1518-22. The contest method was unprotectable under § 102(b) and standard elements of radio promotion contests were unprotectable as scenes a faire. The court relied upon its earlier *Morrissey* decision as holding that copyright does not protect contests or standard elements of such contests. *Id. See also Rice v. Fox Broad. Co.*, 330 F.3d 1170 (9th Cir. 1993) (intermixing merger and scenes a faire doctrines as to program about revealing magic trick secrets).

Another case in which merger and scenes a faire concepts were intermixed as limits on copyright scope was *Landsberg v. Scrabble Crossword Game Players*.¹⁹² Landsberg developed a systematic strategy for playing Scrabble that contributed to his success as a champion for Southern California. Landsberg committed this strategy to writing and sent his manuscript, along with a request for permission to use the term “Scrabble” in marketing his work, to Selcher & Righter Co (S&R) who owned IP rights in the game. Instead of licensing or buying the manuscript from Landsberg, S&R hired another expert Scrabble player to write a handbook on Scrabble strategy and sent him Landsberg’s manuscript. Landsberg sued for copyright infringement based on substantial similarities between the two game strategy handbooks. The trial court upheld Landsberg’s claim and granted his request for an award of actual and exemplary damages. The Ninth Circuit reversed because of stock elements in both works and the narrow range of expression available to both authors.¹⁹³ In the absence of verbatim or very close paraphrasing, there was no actionable infringement.¹⁹⁴

In other cases, however, courts have been able to distinguish merger and scenes a faire, although not always applying the concepts consistently. In *Computer Associates Int’l, Inc. v. Altai, Inc.*,¹⁹⁵ the Second Circuit stated that efficient structural elements of computer programs should be unprotectable by copyright under the merger doctrine, even if other options were available, because “efficiency concerns may so narrow the practical range of choice as to make only one or two forms of expression workable options.”¹⁹⁶ The Nimmer treatise and later decisions have endorsed this position.¹⁹⁷

Altai also properly invoked the scenes a faire doctrine as a limit on the scope of copyright protection when programmer choices were constrained by industry demands or widely accepted programming practices.¹⁹⁸ However, the Second Circuit in *Altai* should have called upon the merger doctrine, not scenes a faire, when programmer choices are “dictated by”

¹⁹² 736 F.2d 485 (1984).

¹⁹³ *Id.* at 488-489. I count *Landsberg* as a merger case because although the court did not expressly invoke the merger doctrine, it twice emphasized the narrow range of possible expressions available to both authors, which is characteristic of merger cases. And as is common in merger cases, the scope of copyright was limited to verbatim or near-verbatim copying. *See, e.g., Kregos*, 3 F.3d 656.

¹⁹⁴ *Landsberg* was, however, able to recover under an implied-in-fact license theory. *Landsberg v. Scrabble Crossword Game Players, Inc.*, 802 F.2d 1193 (1986).

¹⁹⁵ 982 F.2d 693 (2d Cir. 1992).

¹⁹⁶ *Id.* at 708.

¹⁹⁷ The Second Circuit, in fact, relied on the Nimmer treatise as authority for use of this test. *Altai*, 982 F.2d at 708-10, citing Nimmer, *supra* note 3, § 13.03 [F][2] (software design elements that are “dictated by logic or efficiency” are unprotectable under the merger doctrine). *See, e.g., Productivity Software Int’l, Inc. v. Healthcare Techn., Inc.* 37 U.S.P.Q.2d 1036, 1040-41 (S.D.N.Y. 1995).

¹⁹⁸ *Altai*, 982 F.2d at 709-10. *Altai* and its progeny show that the scenes a faire doctrine has important applications in functional work cases.

external factors such as “(1) the mechanical specifications of the computer on which a particular program is intended to run, [and] (2) compatibility requirements of other programs with which a program is intended to run...”¹⁹⁹ Merger is the more appropriate doctrine to apply when design choices are “dictated by” such external factors.²⁰⁰ Scenes a faire is the doctrine that is most appropriate when common element similarities are to be expected in works of that kind.

B. Merger and Originality

Courts often intersperse originality and merger considerations in ruling on copyright claims.²⁰¹ In *BellSouth Adver. & Pub’g Co. v. Donnelly info. Pub’g, Inc.*, for instance, the developer of a competing yellow pages product was charged with infringing copyright because its directory was substantially in the arrangement of business types and individual businesses within each type as in BAPCO’s directory.²⁰² The court concluded that BAPCO’s arrangement was unoriginal, and besides, that arrangement was the “only one way to construct a useful business directory, [so] the arrangement has ‘merged’ with the idea of a business directory.”²⁰³ The court also considered the heading structure of a classified business directory to be “dictated by functional considerations and common industry practice,” so the differences that Donnelly introduced in its directory headings sufficed to avoid infringement.²⁰⁴

Merger considerations have sometimes been incorporated into judicial standards for assessing originality. In *Matthew Bender & Co. v. West Pub’g Co.*, the Second Circuit ruled that various types of modifications that West routinely made to judicial opinions (such as abbreviating certain words and fixing inaccurate citations) did not satisfy copyright requirements.²⁰⁵ Hence that Bender’s use of the exact texts as printed in West books did not infringe copyright. The court indicated that creativity required for copyright “is a function of (1) the total number of options available, (2) external factors that limit the viability of certain options, and (3) prior uses

¹⁹⁹ *Altai*, 982 F.2d at 709-10.

²⁰⁰ *Altai* relied upon the Nimmer treatise’s characterization of these two types of elements as unprotectible under the scenes a faire doctrine. *Id.* I have argued elsewhere that constraints imposed by the need to interoperate with other programs should be dealt with under the merger doctrine. See Samuelson, *Functionality and Expression*, *supra* note 132, Part IV.

²⁰¹ Recall that some proto-merger cases rejected copyright claims on unoriginality grounds if there were no viable options for expressing certain ideas. See *supra* notes 31-33 and accompanying text.

²⁰² 999 F.2d 1436 (11th Cir. 1993).

²⁰³ *Id.* at 1442.

²⁰⁴ *Id.* at 1443. See also *Fin. Control Assoc., Inc. v. Equity Builders, Inc.*, 799 F. Supp. 11-3 (D. Kan. 1992) (denying preliminary injunction because of lack of originality and merger in mortgage prepayment materials).

²⁰⁵ 158 F.3d 674 (2d Cir. 1998).

that render certain selections ‘garden variety.’”²⁰⁶ Under this standard, West’s adaptations to judicial opinions it published did not satisfy this originality standard which was tailored to take merger considerations into account.

C. Merger and Section 102(b) Functionality Exclusions

The merger doctrine is often explained as a principle derived from the exclusion of ideas from the scope of copyright protection.²⁰⁷ As codified in § 102(b) of the 1976 Act, that provision states that “[i]n no case does copyright protection...extend to any idea, procedure, process, system, method of operation, or discovery, regardless of the form in which it is...embodied in [a protected] work.”²⁰⁸ Linking merger with the idea exclusion is true so far as it goes, but the merger doctrine has also been invoked in numerous cases in which a second author’s design choices were constrained by a process or system embodied in a first author’s work.²⁰⁹

Baker is, of course, a canonical example, but numerous cases decided under the 1976 Act recognize an overlap between merger and the exclusion of functions from the scope of copyright law.²¹⁰ In *Warren Pub’g v. Microdos Data Corp.*, the Eleventh Circuit rejected a claim of copyright in a compilation of facts about cable television systems because its only creativity lay in Warren’s system of selecting communities for inclusion in its directory.²¹¹ That system was, the court held, unprotectable by copyright law under § 102(b).²¹² In a footnote, the court offered the the merger doctrine as an alternative ground precluding protection for Warren’s compilation.²¹³

²⁰⁶ *Id.* at 682-83. *See also* *Matthew Bender & Co. v. Kluwer Law Book Publishers, Inc.*, 672 F. Supp. 107, 110 (S.D.N.Y. 1987) (“While in theory there are numerous ways to place this information [about personal injury lawsuit awards] in chart form, from a practical point of view, the number of ways to organize this information in a useful and accessible manner is limited.”)

²⁰⁷ *See, e.g., Whelan*, 797 F.2d at 1235-36.

²⁰⁸ 17 U.S.C. § 102(b).

²⁰⁹ Among proto-merger cases, *see, e.g., Freedman*, 179 U.S.P.Q. at 478 (“the system of bidding effectively dictates the single number notation used by plaintiff”); *Chautauqua Sch. of Nursing v. National Sch. of Nursing*, 238 F. 151 (2d Cir. 1916) (no infringement because of necessary similarities in instructional materials on hypodermic injection procedures). *See also supra* notes 163-65 and accompanying text.

²¹⁰ For the sake of brevity, I will use the word “function” to express the exclusions of procedures, processes, systems and methods of operation expressed in § 102(b). The term “discovery” in § 102(b) should also be understood as a functionality exclusion, as the U.S. Constitution uses it to identify the inventions in the useful arts for which Congress has the power to grant exclusive rights for limited times. U.S. Const., art. 8, § 8, cl. 8.

²¹¹ 115 F.3d 1509 (11th Cir. 1997).

²¹² *Id.* at 1517-18.

²¹³ *Id.* at 1518, n. 27. The court also held that the compilation lacked originality. *Id.* at 1519-21. The District Court in *Oracle of Am., Inc. v. Google Inc.*, 872 F. Supp.2d 974 (N.D. Cal. 2012), *rev’d*, 750 F.3d 1339 (Fed. Cir. 2014) also relied on merger as an alternative ground to its ruling

Continental Micro, Inc. v. HPC, Inc. is a second example.²¹⁴ Continental Micro sued HPC because it copied Continental's compilation of measurement data about the depth and space of key configurations. The court held that § 102(b) precluded protection because the compilation constituted "sets of directions designed to enable locksmiths to accurately cut keys," akin to the recipes that a recent Seventh Circuit decision had held to be unprotectable procedures.²¹⁵ The court also relied upon the merger doctrine because "[p]laintiff's depth and space data state the exact settings for locksmiths to use in cutting keys with the 1200cm machine," and "[i]f the numbers are changed, the idea they express changes—and presumably a less perfect key is cut."²¹⁶ To rule otherwise would undermine the boundary between the copyright and patent systems.²¹⁷

Southco is a third example.²¹⁸ As in *ATC*, the claim of infringement arose because the defendant copied the plaintiff's parts numbering system. The Third Circuit intermixed lack of originality, merger, and the exclusion of systems and words and short phrases as bases for denying Southco's claim, saying "the Southco product numbers are not 'original' because each number is rigidly dictated by the rules of the Southco system."²¹⁹ The Southco numbers were, in the court's view, "purely functional" and hence unprotectable by copyright law.²²⁰

While these are not the only examples of cases that intermix merger and § 102(b)'s exclusion of functionality,²²¹ the examples given illustrate the point well.²²²

that the Java API method headers at issue were unprotectable under § 102(b). *Oracle*, 872 F. Supp.2d at 998. I have argued elsewhere that the Federal Circuit's reversal on both § 102(b) and merger grounds was erroneous. See Samuelson, *Functionality and Expression, supra* note 132, Parts III & IV.

²¹⁴ 1997 WL 309028 (N.D. Ill. 1997).

²¹⁵ *Publ'ns. Int'l, Ltd. v. Meredith Corp.*, 88 F.3d 473, 480 (7th Cir. 1996), cited in *Continental Micro*, 1997 WL 309028 at *1-2.

²¹⁶ *Id.* at 2.

²¹⁷ *Id.*, n.3.

²¹⁸ 390 F.3d 276 (3d Cir. 2002).

²¹⁹ *Id.* at 282. The court noted that Southco did not claim copyright in the system. *Id.*

²²⁰ *Id.* at 284. See also *ATC*, 402 F.2d at 709-10. But see *Toro Co. v. R&R Prods. Co.*, 787 F.3d 1208 (8th Cir. 1986) (rejecting merger defense for parts numbering system, but ruling against Toro's claim because part numbers were unoriginal).

²²¹ See also *Ho*, 648 F.3d at 497-99 (equation); *Mitek Holdings, Inc. v. Arce Eng'g Co.*, 89 F.3d 1548, 1556-57 (11th Cir. 1996) (command structure for computer program); *CMM*, 97 F.3d at 1518-20 (contest); *Bellsouth Adver. & Publ'g Corp. v. Donnelly Info. Publ'g, Inc.*, 999 F.2d 1436, 1442 (11th Cir. 1993) (yellow pages); *Coates-Freeman Assoc., Inc. v. Polaroid Corp.*, 792 F. Supp. 879, 884-86 (D. Mass. 1992) (leadership chart); *Sinai v. Calif. Bureau of Auto. Repair*, 25 U.S.P.Q. 2d 1809, 1811, n.1 (N.D. Cal. 1992) (manual on car emissions system); *Shifter v. Lokar, Inc.*, 2010 WL 126181 at *6 (D. Colo. 2010) (instructions to install after-market auto performance parts).

D. Merger and Other Doctrines

Courts have invoked various other copyright doctrines that, under the facts of particular cases, have seemingly overlapped with or served as alternative grounds to merger rulings. In *Continental Micro*, for instance, the court regarded the measurement data for key configurations to be unprotectable facts, and the plaintiff's compilation of this data to lack originality, as well as being subject to merger and a § 102(b) exclusion.²²³ In *Veeck*, merger seemingly overlapped with an alternative ground for denying the copyrightability of a building code after its enactment into law that relied on due process of law considerations.²²⁴

Copyright protection is also not available for words and short phrases. On occasion, this exclusion has seemingly overlapped with merger as well. In *Hutchins v. Zoll Medical Corp.*, for instance, the litigants were competitors in the business of supplying software designed to train people to do cardiopulmonary resuscitation.²²⁵ Zoll used twenty-some phrases in the display for its software that were the same or substantially similar to those that Hutchins had developed for his software.²²⁶ The appellate court invoked both the words-and-short phrases and merger doctrines in rejecting Hutchins' claim of copyright infringement.²²⁷

Sometimes merger has overlapped with the doctrine that excludes blank forms from copyright protection. An example is *Utopia Provider Systems, Inc. v. Pro-Med Clinical Systems, LLC*.²²⁸ Utopia claimed copyright in a set of 56 templates designed for use by emergency room physicians to record their encounters with patients.²²⁹ Pro-Med had for some time licensed the templates from Utopia, but then decided to compete with Utopia by selling templates that were identical to Utopia's. When Utopia sued for infringement, Pro-Med challenged the copyrightability of the templates. Because "each of the forms calls for the same information

²²² See also *supra* notes 154-57 and accompanying text, featuring examples of process/expression merger.

²²³ *Continental Micro*, 1997 WL 309028 at *1-2. The fact/expression merger cases are discussed *supra* notes 138-44 and accompanying text.

²²⁴ *Veeck*, 293 F.3d at 794-800.

²²⁵ 430 F. Supp. 2d 24 (D. Mass. 2006), *aff'd*, 492 F.3d 1377 (Fed. Cir. 2007).

²²⁶ *Id.* at 1384-85.

²²⁷ *Id.* See also *Southco*, 390 F.3d at 285 (analogizing part numbers and words and short phrases); *CMM*, 97 F.3d at 1519-21 (no copyright in phrases for promotional contest).

²²⁸ 596 F.3d 1313 (11th Cir. 2015). See also *PortionPac Chemical Corp. v. SaniTech Systems, Inc.*, 217 F. Supp.2d 1238, 1247-49 (M.D. Fla. 2002) (some copying from sanitation reference manual excused on merger and blank form grounds).

²²⁹ The Copyright Office issued a registration certificate for the plaintiff's compilation. *Utopia*, 596 F.3d at 1317-18. Each template consisted of 2-3 page charts for different types of ailments.

that any responsible physician would ask a patient with the given ailment,” the court held that the forms lacked originality under the blank forms rule.²³⁰

Necessity to make use of some or all of the plaintiff’s work has lain at the heart of many merger cases, but it also arises at time in fair use cases as well.²³¹ In *Arica Inst. v. Palmer*, the Second Circuit upheld the defendant’s reuse of an illustration as necessary to explain a theory on fair use grounds after rejecting a merger defense.²³² In *Coates Freeman Assoc., Inc. v. Polaroid Corp.*, the court relied on fair use as well as the merger doctrine in ruling against a copyright claim based on copying a chart that depicted decision-making styles.²³³

The frequency with which courts in merger cases express concern about unwarranted monopolies suggests that this doctrine may also overlap to some degree with copyright misuse.²³⁴ However, none of the merger cases in this study relied on misuse.

E. Merger Doctrine Misapplied?

For the most part, the merger case law is quite consistent and coherent.²³⁵ On occasion, however, judicial dissenters or commentators have questioned whether the merger doctrine was misapplied.²³⁶ This section presents three types of possible misapplications: one in which a court applied the merger doctrine when an alternative copyright doctrine might have been

²³⁰ *Id.* at 1322-24. The merger doctrine, as such, was not invoked, but the court emphasized the narrow range of expressions likely to be found in such forms, which is why I consider *Utopia* to be a merger case. *Baker* originated the blank form exclusion from copyright as a matter of U.S. copyright law. See Samuelson, *Baker Story*, *supra* note 20, at 185-86.

²³¹ See, e.g., Nimmer, *supra* note 3, at § 13.03[B][2] at 58 (recognizing that necessity may arise in fair use as well as merger cases); *Sega Enterps. Ltd. v. Accolade, Inc.*, 977 F.2d 1510, 1522 (9th Cir. 1992) (decompilation was only method available to discern internal interface of computer program).

²³² *Arica*, 970 F.2d at 1076-79.

²³³ *Coates Freeman*, 792 F. Supp.2d at 885-87 (finding merger and fair use in reuse of chart).

²³⁴ See, e.g., Brett Frischmann & Dan Moylan, *The Evolving Common Law Doctrine of Copyright Misuse*, 15 Berkeley Tech. L.J. 865, 913 (2000).

²³⁵ I have no quarrel with the outcome or reasoning in the overwhelming majority of cases that rejected merger defenses. I agree with the Nimmer treatise’s criticism of *McIntosh v. Northern Cal. Universal Enters. Co.*, 670 F. Supp.2d 1069 (E.D. Cal. 2009) (rejecting merger defense as to copyright in map showing subdivision of lots) and *C.B. Fleet Co. v. Unico Holdings, Inc.*, 510 F. Supp.2d 1078 (S.D. Fla. 2007) (rejecting merger defense in case about product descriptions of bowel cleansing despite evidence of independent testing to produce best instructions). Nimmer, *supra* note 3, at § 13.03[B][3] at 54, nn. 163.7 and 163.11. I regard the CAFC decision in *Oracle v. Google*, as well as *Kregos*, *MacLean Hunter*, and *CDN v. Kapes*, to be cases whose merger analysis was flawed.

²³⁶ See, e.g., *Kregos*, 937 F.2d 711-16 (Sweet dissenting). See *supra* notes 86-96 and accompanying text for my critique of *Kregos*.

more appropriate; a second in which the merger doctrine was not applied, but should have been; and a third in which the court rejected a merger defense that should have been upheld.

The merger doctrine has sometimes come to the rescue in cases that might have been decided on other doctrinal grounds. In *Kern River Gas Transmission Co. v. Coastal Corp.*, the litigants were competing in the market for construction of an interstate pipeline to transmit natural gas.²³⁷ Kern drew lines for its proposed route for the pipeline on government survey maps and submitted them to the Federal Energy Regulatory Commission (FERC) and other state and federal agencies for approval. While Kern's application was pending, the defendant copied portions of these maps in support of its own application to build a pipeline along the same corridor. While the defendant's application was pending, FERC staff approved the Kern routing of the corridor, and subsequently approved the defendant's application to build the pipeline.²³⁸

Kern sued for infringement and sought a preliminary injunction to stop further use of the maps and to impound copies of the infringing maps that had already been made.²³⁹ The trial court ruled that the idea expressed in some of the maps (i.e., a pipeline route) was inseparable from its expression and that the defendant had made fair use of other maps that were copyrightable.²⁴⁰ The appellate court decided that none of Kern's maps were copyrightable on the merger grounds,²⁴¹ saying that "the lines Kern River created express in the only effective manner the idea of the pipeline's location."²⁴² While the court was right to affirm the non-infringement ruling, a more conventional doctrinal approach would have relied on progeny of *Baker v. Selden* that preclude copyright protection for functional designs, which the pipeline route unquestionably was.²⁴³

Merger was strangely missing from the analysis in *SmithKline Beecham Consumer Healthcare, L.P. v. Watson Pharm., Inc.* in which the court reached the right result, but the merger doctrine would have provided a sound doctrinal basis for the ruling.²⁴⁴ SmithKline sued Watson for infringement because the wording on Watson's labels for its generic product was virtually identical to and copied from the SmithKline labels for the latter's pioneering drug. Watson

²³⁷ 899 F.2d 1458 (5th Cir. 1990).

²³⁸ *Id.* at 1459-61.

²³⁹ *Id.* at 1459.

²⁴⁰ *Id.* at 1461-63.

²⁴¹ *Id.* at 1463-64.

²⁴² *Id.* at 1464.

²⁴³ *See, e.g., Taylor Instr. Co. v. Fawley-Brost Co.*, 139 F.2d 98 (7th Cir. 1943) (chart for use in temperature recording machine not copyrightable subject matter); *Muller v. Triborough Bridge Authority*, 43 F. Supp. 298 (S.D.N.Y. 1942) (bridge design not within scope of copyright in drawing). Another case in which *Baker* progeny might have had more utility than merger was *Kohus v. Mariel*, 328 F.3d 848 (6th Cir. 2003) (remanding for trial on whether defendant's drawing of a safety latch for a children's play-yard was too similar to the plaintiff's or whether similarities were dictated by efficiency, industry standards, or safety considerations).

²⁴⁴ 211 F.3d 21 (2d Cir. 2000).

argued that the Food & Drug Administration (FDA) required that the language on drug product labels go through an approval process, and once approved, the wording on all labels for drugs of that kind had to be the same or virtually so.²⁴⁵ The court considered fair use and implied license as bases for limiting Watson's liability.²⁴⁶ In the end, it decided that the purposes of the Hatch-Waxman legislation, which aimed to facilitate generic drug entry, would be undermined if SmithKline succeeded.²⁴⁷ Merger would have been a sound doctrinal basis for this ruling because FDA policy limited the range of expressive alternatives available to Watson.

A surprising number of cases have claimed copyright protection in name and numbering systems. Most of these copyright claims have failed, largely on merger and lack of originality grounds.²⁴⁸ However, a taxonomy of names and associated numbers was held copyright-protectable in *American Dental Ass'n v. Delta Dental Plans Ass'n*.²⁴⁹ ADA has long claimed copyright in its Code on Dental Procedures and Nomenclature. In the mid-1990s Delta decided to publish its own directory of dental procedures, which included the standard names and numbers assigned to each procedure taken from the ADA code.²⁵⁰ ADA objected to this appropriation, and sued Delta for copyright infringement. After Delta prevailed in the District Court in its challenge to the copyrightability of the ADA coding system,²⁵¹ ADA appealed. The Seventh Circuit in an opinion by Judge Easterbrook ruled in ADA's favor in a colorful, if deeply flawed decision.²⁵²

²⁴⁵ The FDA initially indicated that the same label requirement did not require identical language, but after a preliminary injunction issued, it changed its position, saying that there was very little leeway in what the label could say and the use of identical language should be lawful. *Id.* at 24-25.

²⁴⁶ *Id.* at 25. An amicus brief submitted on behalf of the United States argued for the implied license theory. *Id.* But the court declined to adopt either theory. *Id.*

²⁴⁷ *Id.* The court thought it would be wasteful to require new clinical trials and a lengthy new approval process. In considering the purposes of the copyright and Hatch-Waxman laws, the court decided the case was better resolved by recognizing that the Hatch-Waxman law's purpose would be undermined if the court ruled for SmithKline. *Id.* at 26-28. The court made a point of saying that its ruling did not invalidate the SmithKline copyright, for it might be enforced against use of the label text in non-label advertising. *Id.* at 29.

²⁴⁸ See, e.g., *ATC*, 402 F.3d at 707-10 (merger, lack of originality); *Southco*, 390 F.3d at 282-86 (merger, lack of originality); *Toro Co. v. R&R Prods. Co.*, 787 F.2d 1208, 1213 (8th Cir. 1986) (lack of originality); *RBC Nice Bearings, Inc. v. Peer Bearing Co.*, 676 F. Supp.2d 9, 23 (D. Conn. 2009) (merger); *R&B, Inc. v. Needa Parts Mfg., Inc.*, 418 F. Supp.2d 684, 695 (E.D. Pa. 2005) (rejecting copyright claim in part numbers for lack of originality, following *Southco*).

²⁴⁹ 126 F.3d 977 (7th Cir. 1997). See also *Practice Mgmt. Info. Corp. v. American Med. Ass'n*, 121 F.3d 516, 518-21 (9th Cir. 1997) (upholding copyright in a similar AMA coding system for medical procedures, but holding that AMA had misused this copyright).

²⁵⁰ *ADA*, 126 F.3d at 977.

²⁵¹ *Id.* at 978 (discussing the trial court ruling).

²⁵² *Id.* at 978-79 (making a slippery slope argument that a wide range of works would be rendered uncopyrightable if the trial court ruling was upheld).

The main ground on which Judge Easterbrook attacked the trial court ruling was to emphasize how little originality was necessary to satisfy copyright law's standards.²⁵³ In his view, each name of a dental procedure (for instance, guided tissue regeneration—nonresorbable barrier, per site, per tooth) was creative enough to be copyrightable because alternative names could have been given instead.²⁵⁴ Likewise, each number assigned to the names was original because of alternative possibilities.²⁵⁵

Although Judge Easterbrook mentioned the merger doctrine only in passing, the court's reliance on the existence of alternative names and numbers implicitly embraced the narrow conception of merger.²⁵⁶ Judge Easterbrook also dismissed the contention that the functionality of the ADA coding system had any bearing on its copyrightability.²⁵⁷ Because the ADA coding system was not a "how to" system such as Baker's bookkeeping system, Judge Easterbrook insisted it was not the kind of system that was beyond copyright protection under § 102(b).²⁵⁸

The existence of alternatives is, of course, one factor relevant to the copyrightability of a taxonomy such as ADA's. Several considerations, however, weigh against Judge Easterbrook's ruling. For one thing, there is no more expressiveness in the names of dental procedures or numbers assigned to each name than in the assignment of names and numbers to the hardware parts and numbers in the *ADA* and *Southco* cases. Indeed, there is even less expressiveness in the ADA name and numbering system because the main purpose for developed that system was to enable dentists to enter the appropriate number assigned for each dental procedure on insurance forms to facilitate reimbursement for services performed for patients.²⁵⁹ To make the reimbursement system viable, it was necessary to standardize the names and numbers.²⁶⁰ As a practical matter, Delta Dental did not have reasonable alternative ways to communicate about these procedures. Judge Easterbrook failed to comprehend the

²⁵³ *Id.* at 979.

²⁵⁴ *Id.* Judge Easterbrook failed to recognize just how narrow was the range of available options for names to give to dental procedures. He seemed willing to treat each name as an original work of authorship. *Id.* In *Southco*, the United States submitted an amicus brief challenging the *ADA* decision in this respect. See Brief Amicus Curiae of the United States of America In Support of Appellee Kanebridge Corp. at 24-26.

²⁵⁵ *ADA*, 126 F.3d at 979. It would be more apt to say that there were several alternative numbering systems ADA could have used. In my view, none of these systems should be copyright-protectable. See, e.g., Brief English Systems v. Owen, 48 F.2d 555 (2d Cir. 1931) (shorthand system not protectable by copyright law).

²⁵⁶ *Id.* ("The Code's descriptions don't 'merge with the facts' any more than a scientific description of a butterfly attributes is part of a butterfly.") The narrow view of merger is discussed *supra* notes 158-59 and accompanying text.

²⁵⁷ *Id.* at 980-81.

²⁵⁸ *Id.* at 981.

²⁵⁹ *Id.* at 980-81.

²⁶⁰ *Id.* at 981.

larger meaning of the *Baker* decision or to recognize that functionality limits copyrights in some texts.²⁶¹ The reasoning in the *ADA* decision has been repudiated in subsequent appellate court rulings in numbering system cases.

IV. The Functions of Merger in U.S. Copyright Law

The merger doctrine in U.S. copyright law performs a significant number of important functions. Foremost among them has been preservation of opportunities for meaningful competition. But merger has taken on several other functions within U.S. copyright law as well.

A. Promoting Competition

The competition at stake in merger cases has sometimes been between creative works themselves, as in *Kalpakian*. Underlying the court's holding that the idea and expression of jeweled bee pins were indistinguishable was its concern that copyright should not confer on Rosenthal a monopoly on the making and selling such pins just because it was the first jeweler to offer this product in the marketplace.²⁶² The competition between copyrighted works at issue has sometimes been, as in *Baker*, focused not so much on ideas, but on unprotectable methods or systems embodied in the plaintiffs' works.²⁶³ Merger tends to narrow the scope of protection available to protected works, so that competitors can offer alternative works to the public.²⁶⁴

Quite often, however, the competition at stake in merger cases has involved uncopyrightable subject matters. In *Kern River*, the real battle between the parties was not about competition in the market for maps. Kern's lawsuit was merely a "harassing skirmish" in the litigants' competition over the construction of pipelines for transmitting natural gas.²⁶⁵ In *SmithKline*, the

²⁶¹ See, e.g., Samuelson, *Questioning Copyright*, *supra* note 37, at 200-03, 213-15. See also *Victor Lalli Enterps., Inc. v. Big Red Apple, Inc.*, 936 F.2d 671, 673 (2d Cir. 1991) (compilation unprotectable because "purely functional"); *Decorative Aides*, 497 F. Supp. at 157 (instructional materials dictated by functional considerations).

²⁶² See *supra* notes 27-30 and accompanying text. See also *Yankee Candle Co. v. Bridgewater Candle Co.*, 259 F.3d 25 (1st Cir. 2001) (competing candle designs); *Landsberg*, 436 F.2d at 487-88 (competing books about game strategy).

²⁶³ *Baker*, 101 U.S. at 102. See also *CMM*, 97 F.3d at 1519-20 (limited ways to express radio promotion contest). Similar issues arise in software cases. See, e.g., *Apple Computer, Inc. v. Microsoft Corp.*, 35 F.2d 1435, 1439 (9th Cir. 1994) (merger precluded protection as to some aspects of the Apple graphical user interface).

²⁶⁴ See, e.g., *Apple Computer, Inc. v. Microsoft Corp.*, 35 F.3d 1435, 1439 (virtual identity needed to show infringement of Apple's graphical user interface because of unprotectable and licensed elements); *Crume*, 140 F.2d at 184 (narrow scope of protection for pamphlet on plan to reorganize insolvent insurance companies).

²⁶⁵ *Kern River*, 899 F.3d at 1462. See also *Decorative Aides*, 157 F.3d 262 (2d Cir. 1981) (drapery-related product instructions); *Shifter LLC v. Lokar, Inc.*, 2010 WL 126181 (D. Colo. 2010) (after-

plaintiff's goal in the litigation was to stop the defendant from selling drugs in competition with the plaintiff copyright claim, not to protect the commercial value of the expressiveness of the working on the plaintiff's product labels.²⁶⁶ In *Continental Micro*, competition in the key-cutting industry was at stake.²⁶⁷

B. Promoting Access to Information

Another cluster of merger cases has recognized the interests of second comers and the public at large in broader public access to information. In *ATC*, for instance, what was plainly at stake was whether Whatever-It-Takes could inform prospective customers that it was selling transmission parts that were compatible with ATC's parts by using the same part names and numbers as the ATC catalog.²⁶⁸

In other cases, the information at issue was of a much different order. In *NYMEX*, for instance, the copyright claim aimed to prevent the operator of an Internet trading platform to reuse data about end-of-day settlement prices for commodities sold on the plaintiff's exchange that were necessary inputs to facilitate transactions on ICE's platform. Merger enabled ICE to use this data without paying a license fee to NYMEX.

The interests of the public in access to commercially significant information may also be at stake in merger cases. In *Banxcorp v. Costco Wholesale Corp.*, the plaintiff sued Costco for infringement because its ads featured national interest rate averages that Banxcorp had created.²⁶⁹ Banxcorp offered evidence of the existence of other and different estimates of national interest rates to defeat the merger defense, but the court was not persuaded that this made Banxcorp's estimates protectable by copyright law. The "range of expression is not wide enough...to prevent application of the merger doctrine."²⁷⁰ Having held the information out as though it was a fact, Banxcorp was foreclosed from claiming otherwise.²⁷¹

Even when commerce is not at stake, the merger doctrine has sometimes freed up second comers to reuse knowledge from previous work in a new work. In *Ho v. Taflove*, for instance, the court invoked the merger doctrine as a basis for denying the plaintiffs' claim of

market auto performance parts); *RBC Nice Bearings, Inc. v. Peer Bearing Co.*, 676 F. Supp.2d 9 (D. Conn. 2009) (competition among ball bearing makers over measurement data)

²⁶⁶ *SmithKline*, 211 F.3d 21, 30 n.5 (2d Cir. 2000) (noting the danger of monopoly lurking in some copyright cases involving claims of infringement as to product labels).

²⁶⁷ *Continental Micro*, 1997 WL 309028 at *2.

²⁶⁸ *ATC*, 402 F.3d at 709. *See also Southco*, 390 F.3d at 284 (allowing reuse of hardware part numbers).

²⁶⁹ 978 F. Supp.2d 280 (S.D.N.Y. 2013). Banxcorp, like NYMEX before it, had relied on *MacLean Hunter* in support for a claim of copyright in original information that was the product of considered judgment. *Id.* at 301.

²⁷⁰ *Id.* at 310.

²⁷¹ *Id.* at 303.

infringement for copying a complex equation and figures to model how electrons behave under certain conditions in the defendants' journal article.²⁷²

Even when no new work has been created, merger may sometimes defeat copyright claims brought against those who disseminate merged expression. Recall that merger allowed Veeck to post the SBCCI building code on the Internet to enable the people of Anna and Savoy, Texas, to have access to the law that governed construction in those towns.²⁷³

C. Promoting Freedom of Expression

Curiously missing from the rationales that courts have used to justify ruling in favor of merger defenses are the freedom of expression interests of subsequent creators. The Supreme Court has characterized the idea/expression distinction as an important "built in" limit on copyright that accommodates First Amendment free speech and free expression interests.²⁷⁴ While the Court has not expressly mentioned the merger doctrine, this corollary principle of the idea/expression distinction should be recognized as important to fostering expressive opportunities for creators over time.

Second-generation authors who want to teach or write about the same content as earlier authors have freedom of speech and expression interests in doing so, and the merger doctrine may provide a way to exercise this freedom.²⁷⁵ The common invocation of unwarranted monopolization of ideas as a justification for merger would seem implicitly to recognize freedom of expression interests.²⁷⁶ Yet, none of the merger cases in this study expressed the freedom of expression interests of later authors in a straightforward manner as a rationale for limiting the scope of copyright through the merger doctrine.

D. Recognizing Constraints Imposed by Laws or Rules

Merger has quite often been found when laws or regulations limit the range of expressive alternatives. State laws, for example, sometimes require use of certain standard contractual

²⁷² *Ho*, 648 F.3d at 498-99. *See also* *Woods v. Resnick*, 725 F. Supp.2d 809, 821 (W.D. Wis. 2010) (merger precluded protection for equations used in software).

²⁷³ *See supra* notes 145-53 and accompanying text.

²⁷⁴ *See, e.g.*, *Eldred v. Ashcroft*, 537 U.S. 186, 219 (2003).

²⁷⁵ *See, e.g.*, *Ho*, 648 F.3d at 499 (reuse of equations and figures in later article); *Palmer v. Braun*, 287 F.3d 1325 (11th Cir. 2002) (consciousness-raising course materials); *Kepner-Tregoe, Inc. v. Carabio*, 203 U.S.P.Q. 124 (E.D. Mich. 1979) (management training materials). On occasion, courts have applied the fair use doctrine instead of merger to deny relief to plaintiffs. *See, e.g.*, *Arica*, 970 F.2d at 1076-79 (rejecting merger defense, but upholding reuse of chart on ego fixations in later work as fair use).

²⁷⁶ *See, e.g.*, *Morrissey*, 379 F.2d at 678-79.

terms.²⁷⁷ The contents of bid documents may be similarly constrained by federal regulations.²⁷⁸ When federal regulations require generic drug products to have the same wording on their labels as that approved for a pioneer drug, reuse of the wording is permissible.²⁷⁹ Architects need to comply with building codes that may narrow the range of expressive alternatives.²⁸⁰ Some cases treat game or contest rules as similarly constrained and subject to merger.²⁸¹

The merger doctrine has sometimes been invoked as a way to manage the boundaries between the copyright and patent regimes.²⁸² In *Kalpakian*, for instance, the Ninth Circuit said that if Rosenthal wanted a monopoly over a product concept such as a jeweled bee, it would have to get a patent. From copyright law, all it could get was protection against copying of the expression in the work.²⁸³ “Obviously a copyright must not be treated as an equivalent to a patent lest long continuing private monopolies be conferred over areas of gainful activity without first satisfying the substantive and procedural prerequisites to the grant of such privileges.”²⁸⁴ In some cases, merger came to the rescue when plaintiffs brought copyright lawsuits against competitors for copying creations for which these plaintiffs had initially sought patent protection.²⁸⁵

The merger doctrine has sometimes been used to avert encroachment on the public domain. In *Affiliated Hospital Prods., Inc. v. Merdel Game Mfg. Co.*, for instance, the Second Circuit rejected an infringement claim based on similarities in the rulebooks for games depicted in the

²⁷⁷ See, e.g., *Dorsey*, 98 F.2d at 873. See also *Brightley v. Littleton*, 37 F. 103, 104 (E.D. Pa. 1888) (“all forms prepared in pursuance of [state law requirements]...must necessarily have close resemblance,” although finding infringement in that case). A merger defense may be sent to a jury to determine if use of the same language was necessary because of legal consequences if the expression was varied. See, e.g., *R.W. Beck, Inc. v. E3 Consulting, LLC*, 577 F.3d 1133 (10th Cir. 2009).

²⁷⁸ *Project Dev. Group, Inc. v. O.H. Materials Corp.*, 766 F. Supp. 1348 (W.D. Pa. 1991).

²⁷⁹ *SmithKline*, 211 F.3d at 23.

²⁸⁰ See, e.g., *Harvester, Inc. v. Rule Joy Trammell & Rubio, LLC*, 716 F. Supp.2d 428, 440 (E.D. Va. 2010).

²⁸¹ See, e.g., *CMM*, 97 F.3d at 1519-20; *Allen*, 89 F.3d at 618; *Morrissey*, 379 F.2d at 678. See also *Hoopla Sports & Entm’t, Inc. v. Nike, Inc.*, 947 F. Supp. 347, 354 (N.D. Ill. 1996).

²⁸² See, e.g., *Kohus v. Mariol*, 328 F.3d 848, 858 (6th Cir. 2003) (latch for children’s playground); *Forest River, Inc. v. Heartland Recreational Vehicles, LLC*, 753 F. Supp.2d 753, 759 (N.D. Ill. 2010) (floor plan for recreational vehicle); *Continental Micro*, 1997 WL 309028 at *2, n.3 (key shape data); *Kepner-Tregoe*, 203 U.S.P.Q. at 132 (problem-solving process). See also Goldstein, *supra* note 6, at § 2.3.2 at 2:37.

²⁸³ *Kalpakian*, 446 F.2d at 740-41.

²⁸⁴ *Id.* at 741.

²⁸⁵ See, e.g., *Guthrie*, 36 F.2d at 694 (noting that Guthrie’s earlier patent claim against Curlett based on copying of a consolidated freight index had failed); *Freedman*, 179 U.S.P.Q. at 478, n.2. Baker had also sought, but apparently not gotten, a patent for his bookkeeping system. See *Samuelson, Baker Story*, *supra* note 19, at 174.

plaintiffs' and defendants' work.²⁸⁶ The games and rules were, in its view, in the public domain; moreover, "the simplicity of the games makes the subject matter extremely narrow, and the distinction between substance and arrangement blurs."²⁸⁷ The court was concerned that "a contrary result would prevent publication of the rules of any simple game unless the second entrant in the field developed his rules solely through watching the game being played; a result which would afford protection to the game itself."²⁸⁸ It mattered that Merdel had not engaged in verbatim copying and had improved the clarity of some prose about the game rules.²⁸⁹

E. Avoiding Needless Variation and Enabling Efficiency and Standardization

A significant, if somewhat less well recognized, function of merger in U.S. copyright case law has been to avoid needless variation in expression in works of authorship.²⁹⁰ The conventional strategy that plaintiffs use to defeat merger defenses has been to proffer some alternative ways that ideas or functions can be expressed. The existence (or not) of alternative ways to explain, illustrate, or otherwise depict of ideas or functions should, of course, be considered when merger defenses have been mounted. But this should not be the only consideration when defendants raise merger defenses.

There may be good reason to be skeptical about alternatives, especially in cases involving relatively simple or technical contents.²⁹¹ In some cases, merger has excused exact copying from the plaintiff's work,²⁹² although more often, courts rely upon nontrivial differences in explication when rejecting expansive copyright claims on merger grounds.²⁹³ In assessing how much weight to give to alternatives, courts often take into account whether the choice(s) made

²⁸⁶ 185 F.2d 1183, 1188-89 (2d Cir. 1975). *Affiliated Hospital* is a proto-merger case, so it does not expressly mention merger, but it cites *Morrissey* for its similar ruling. *Id.* at 1189, n.11.

²⁸⁷ *Id.* at 1188.

²⁸⁸ *Id.* at 1189.

²⁸⁹ *Id.* at 1188-89.

²⁹⁰ See, e.g., *Kepner-Tregoe*, 203 U.S.P.Q. at 131, 134 (finding "no societal value" in alternative ways to depict simple ideas through "outlandish methods using eccentric styles" and recognizing that "where an explanation of a technical matter is at issue, the simpler the language, the more nearly idea and expression coincide").

²⁹¹ See, e.g., *Morrissey*, 379 F.2d at 678.

²⁹² See, e.g., *ATC*, 402 F.3d at 709 ("extremely inefficient" to require competitor to develop alternative names and numbers for its transmission parts); *Ophthalmic Research Assoc., Inc. v. SARcode Corp.*, 2013 WL 2247584 (D. Mass. 2013) (merger precluded protection for simple instructions for eye drop procedure, despite existence, in theory, of "an infinite number of ways" to express this procedure, because "practically speaking" granting relief would give exclusive right to procedure).

²⁹³ See, e.g., *Landsberg*, 736 F.2d at 489; *Cooling Sys. & Flexibles, Inc. v. Stuart Radiator, Inc.*, 777 F.2d 485, 491-93 (9th Cir. 1985) ("extremely narrow" range of possible expressions in radiator parts catalog so differences precluded finding of substantial similarity).

by plaintiffs were logical, reasonable, practical, customary, useful, or effective.²⁹⁴ If so, defendants are generally free to make the same or very similar choices.

In cases involving more complex ideas, courts may also take into account the need of subsequent authors to use the same language to effectuate their purpose. In *Crume v. Pac. Mut. Life Ins., Inc.*, both the plaintiff and defendant had published brochures describing a method for reorganizing insolvent insurance companies.²⁹⁵ In response to the argument that similar language in the defendant's brochure supported a finding of infringement, the Seventh Circuit observed:

To hold that an idea, plan, method or art described in a copyright[ed work] is open to the public but that it can be used only by employment of different words or phrases which mean the same thing, borders on the preposterous. It is to exalt the accomplishment of a result by indirect means which could not be done directly.²⁹⁶

Application of the merger doctrine prevents this preposterous result.²⁹⁷ There would be very little creativity or expressive benefit in requiring every document describing this method to use different expressions when the nature of the method significantly limits the range of reasonable and logical ways to discuss the method.

Efficiency considerations also have some bearing on the range of viable alternative expressions. This has been widely recognized in software copyright cases,²⁹⁸ but efficiency as a constraint on authorial design choices has been understood for a long time.²⁹⁹ Efficiency is, of course, a kind of functionality that copyright law has conventionally excluded from its scope. If a first programmer adopts the most efficient way to structure software to accomplish certain tasks, later programmers should not be forced to utilize inferior designs. The merger doctrine serves to enable reuse of efficient designs in copyrighted works.³⁰⁰

Courts have considered merger defenses in a number of cases when defendants rely on the emergence of industry standards as a factor supporting the defense. In some cases, adopting or

²⁹⁴ See *supra* notes 52-57 and accompanying text.

²⁹⁵ 140 F.2d 182 (7th Cir. 1944). *Crume* is a proto-merger case, so it did not expressly mention merger. See *supra* notes 21-22 and accompanying text.

²⁹⁶ *Id.* at 184-85. See also *Beardsley*, 253 F.2d at 705 (quoting *Crume*).

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²⁹⁸ See, e.g., *Altai*, 982 F.2d at 707-08. See also *Lexmark*, 387 F.3d at 539 (efficiency considerations bore on need to copy first programmer's code for printer cartridge authentication).

²⁹⁹ See, e.g., *Freedman*, 179 U.S.P.Q. at 478 (placement of symbols on playing cards); *Borden v. Gen. Motors Corp.*, 28 F. Supp. 330, 332 (S.D.N.Y. 1939) (movie about sales techniques).

³⁰⁰ See, e.g., *Nimmer*, *supra* note 3, at § 13.03[F][2] (identifying logic and efficiency as design constraints relevant to merger defenses).

conforming to industry standards has been excused under the merger doctrine.³⁰¹ The case law is more mixed when second comers have copied elements of existing works that have become de facto standards.³⁰²

Lotus Dev. Corp. v. Borland Int'l, Inc. provided an opportunity to address the copyright significance of de facto standards in computer program cases.³⁰³ The First Circuit did not directly address this issue. It decided instead that the command structure of the Lotus 1-2-3 spreadsheet program was an unprotectable method of operating a spreadsheet program under § 102(b) of the 1976 Act, analogizing it to the buttons used to control a video cassette recorder.³⁰⁴

Merger would have been a viable alternative basis for this First Circuit's holding because the selection and arrangement of the commands played a crucial role in the macro command facility of the Lotus program.³⁰⁵ Users of the Lotus program could use the commands to construct macros (i.e., mini-programs) so they could more easily perform commonly executed sequences of functions. This feature of 1-2-3 allowed users to invoke these sequences with just one keystroke, rather than having to retype each command in sequence, over and over again, every time the sequence was needed to update the user's records.³⁰⁶

³⁰¹ See, e.g., *Bender v. West*, 158 F.3d at 682, 685 (legal industry standards); *Plains Cotton Coop. Assoc. v. Goodpasture Computer Serv., Inc.*, 807 F.2d 1256, 1262 (5th Cir. 1987) (cotton market industry standards).

³⁰² Cf. *Apple Computer, Inc. v. Microsoft Corp.*, 799 F. Supp. 1006, 1032-35 (N.D. Cal. 1992), *aff'd*, 335 F.3d 1435 (9th Cir. 1994) (reuse of graphical user interface elements excused because they had become industry standards); *Lotus Dev. Corp. v. Paperback Software Int'l, Inc.*, 740 F. Supp. 37, 79 (D. Mass. 1990) (to allow defendants to reuse spreadsheet command hierarchy because it was a de facto standard would flip "copyright on its head"). *Paperback* and its dictum are questionable given that the First Circuit reversed a later copyright ruling involving the same command hierarchy in *Lotus Dev. Corp. v. Borland Int'l, Inc.*, 49 F.3d 807 (1st Cir. 1995). The Goldstein treatise is more receptive than the Nimmer treatise about de facto standards as relevant a basis for merger defenses. Cf. Goldstein, *supra* note 6, § 2.3.2.1 (analogizing merger as a doctrine that may limit copyright scope for de facto standards to genericide doctrine of trademark law); Nimmer, *supra* note 3, at § 13.03[F][2][e] (quoting at length from *Paperback* decision rejecting de facto standards as limit on copyright). See also Menell, *supra* note 166, at 1101; Teter, *supra* note 1, at 1088 (merger doctrine should preclude copyright protection for de facto standards).

³⁰³ 49 F.3d 807 (1st Cir.), *aff'd by an equally divided Court*, 516 U.S. 233 (1995).

³⁰⁴ *Id.* at 815-17.

³⁰⁵ The First Circuit mentioned the merger doctrine in a footnote, suggesting that the short descriptions of the Lotus commands (known as "long prompts") might be subject to merger. *Id.* at 816, n. 9.

³⁰⁶ The *Borland* decision discusses the macro facility, *id.* at 818.

Borland recognized that Lotus customers would be reluctant to switch to its new Quattro Pro (QP) spreadsheet program unless they could port over macros they had constructed in 1-2-3. So Borland developed a user interface that emulated the macro functionality of the Lotus program. The emulation interface presented the exactly the same commands in exactly the same order as the Lotus user interface because that was necessary in order for user-constructed 1-2-3 macros to be executed in the Borland program.³⁰⁷

The First Circuit recognized that important third-party spillover effects were at stake. Users should not have to rewrite macros, which after all were “the user’s own work product,” every time they used a different program.³⁰⁸ Judge Boudin’s concurrence recognized the lock-in effects of a ruling in Lotus’ favor. He noted that users of 1-2-3 had not only made significant investments in constructing macros, but had also invested in learning the Lotus commands.³⁰⁹ It was hard for him to see “why users 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.”³¹⁰

Lotus had benefited from its first-mover advantage, but its users should be “able to take advantage of a new advance and to reward Borland in turn for making a better product,”³¹¹ as it would logically have to do to lure Lotus users away from 1-2-3. In this respect, the *Borland* opinion “seem[s] to apply a principle analogous to the merger doctrine, to the effect that, because there was only one menu hierarchy that would allow users to operate the spreadsheet program in substantially the same way, the menu hierarchy (unlike the underlying code) could not acquire copyright protection.”³¹² Unfortunately, the Supreme Court was unable to resolve the question about whether de facto standards affected the copyright status of the work or its scope in the *Borland* case.³¹³

V. Conclusion

³⁰⁷ *Id.* at 821 (Boudin, J. concurring) (“Borland is merely trying to give former Lotus users an option to exploit their own investment...in macros.”)

³⁰⁸ *Id.* at 818.

³⁰⁹ *Id.* at 821.

³¹⁰ *Id.* See also *Synercom Tech., Inc. v. Univ. Computing Co.*, 462 F. Supp. 1003, 1008-13 (N.D. Tex. 1978) (standardization as reason to limit scope of protection for input formats for engineering program).

³¹¹ *Borland*, 49 F.3d at 821.

³¹² Brief for the United States as Amicus Curiae, *Google Inc. v. Oracle Am., Inc.*, on petition for a writ of certiorari to the United States Court of Appeals for the Federal Circuit, Case No. 14-410, at 20.

³¹³ *Lotus Dev. Corp. v. Borland Int’l, Inc.*, 516 U.S. 233 (1995) (equally divided Court affirmed the First Circuit ruling).

This article’s coverage of the merger cases confirms that this doctrine has become, as the Nimmer treatise aptly put it, “an indispensable fixture” of U.S. copyright law.³¹⁴ It is the product of common law adjudication and a successful one at that. As a limiting principle of U.S. copyright law, merger has been applied in a wide array of circumstances and serves numerous beneficial functions or purposes.

Merger is and should be found when when authors are faced, as a practical matter, with a limited number of ways to express ideas, facts, functions, and the like. Very often the constraints that narrow the range of possible expressions affect both parties to a copyright litigation. However, constraints on the design choices available to subsequent authors should also be considered in adjudicating merger claims, especially when efficiency or interoperability issues have been raised. Although merger most often affects the scope of protection—as when a defendant copied original material from the plaintiff’s work that, because of constraints on expressiveness, are not within the scope of protection available to the plaintiff’s work—merger may invalidate the claim of copyright protection in the plaintiff’s work in some instances, as the Goldstein treatise attests and as David Nimmer now recognizes.³¹⁵

Why, though, did “merger” become the universal moniker for the concept? The proto-merger cases offered precursor terminology relying on four somewhat overlapping, somewhat distinct criteria: an underlying necessity to copy, functional dictates, indistinguishability, and unoriginality.³¹⁶ Each of the proto-merger concepts, though, had a limited scope. The high degree of similarity between the litigated jeweled bee pins in the *Kalpakian* case, for instance, was not due to functional dictates, nor was it necessary in the same way that reuse of the layout of Selden’s forms was needed to practice his peculiar method of keeping books. Rosenthal’s pin was also original enough to satisfy copyright’s modest standard. Indistinguishability was, then, a better way to frame the limited expressive alternatives problem presented in that case.

Indistinguishability, though, would not work in other proto-merger contexts. Baker’s forms were somewhat distinguishable from Selden’s, so that term would not support the Court’s conclusion in *Baker*. P&G’s Rule 1 was not dictated by functionality, and the existence of other differently expressed rules showed that the near-exact wording in *Morrissey* was not necessary. None of the proto-merger terms was broad enough to serve the emergent purpose of limiting the scope of copyright when a narrow range of expressive alternatives existed.

The term “merger,” once enunciated in *Franklin*, had the advantage of being a capacious term under which the various proto-merger concepts could be accommodated. This may explain why that term caught on to express the limiting principle that merger has become. Once the major treatises adopted sections so titled, and cases such as *Altai* endorsed merger as the doctrinal hook for limiting copyright when efficiency considerations narrowed later design choices,

³¹⁴ Nimmer, *supra* note 3, § 13.03[B][3] at 54.

³¹⁵ See *supra* note 9.

³¹⁶ See *supra* notes 16-34 and accompanying text.

merger became the standard term to express the narrow-range-of-expressive-alternatives principle.³¹⁷

Another factor contributing to the rise of merger as a limiting principle of U.S. copyright law may well have been the reluctance of courts to embrace in a meaningful way the functionality exclusions of § 102(b), that is, the procedure, process, system, and method of operation exclusions, especially in computer program cases.³¹⁸ The Nimmer treatise contributed to this reluctance by its characterization of *Baker* as a case about the idea/expression merger doctrine, not about the unprotectability of systems and methods embodied in copyrighted works and component elements of the systems or methods, such as the forms that instantiated Selden's system.³¹⁹

Several of the proto-merger cases were *Baker* progeny in the § 102(b) functionality-exclusion sense because they involved claims of infringement arising from similarities attributable to use of the same unprotectable system or method.³²⁰ Recharacterizing them as merger (or in my terminology proto-merger) cases is as plausible as recharacterizing *Baker* as a merger case.³²¹

Merger thus filled a gap as a limiting principle of copyright during a period in which courts took a relatively narrow view of the functionality exclusions of § 102(b).³²² It is no wonder, then, that some courts have come to view merger and § 102(b) to be overlapping and to provide alternative bases for rulings that limited the scope of copyright.³²³ As courts become more comfortable with applying the functionality exclusions of § 102(b), it is possible that merger will not be as readily called upon as happened under the sway of Nimmer's interpretation of *Baker*. In some computer program cases, for instance, courts have become more comfortable applying

³¹⁷ The proto-merger terms do, however, still appear in some of the cases. *See, e.g., Southco*, 390 F.3d at 282-85 (blending unoriginality and functional-dictates into merger analysis).

³¹⁸ *See, e.g., Whelan*, 797 F.2d at 1235-36; *Oracle*, 750 F.3d at 1359-68.

³¹⁹ Nimmer, *supra* note 3, at § 2.18. I have elsewhere explained that Nimmer's narrow interpretation of *Baker* and § 102(b) is erroneous. *See Samuelson, Why Copyright Law Excludes Systems and Processes, supra* note 20, at 1953-61. David Nimmer has informed me that the 2016 version of the treatise will offer a substantially different interpretation of *Baker* and § 102(b), but he acknowledges that some courts have ruled on cases based on this erroneous interpretation. The *Oracle* decision is a prime example. *See Samuelson, Functionality and Expression, supra* note 132, Part III.

³²⁰ *See supra* notes 21-22 and accompanying text.

³²¹ *See, e.g., Goldstein, supra* note 6, at § 2.3.2 (citing *Freedman*).

³²² *ADA* is among the non-software copyright cases that have given an unduly narrow interpretation to the § 102(b) system exclusion. *See supra* notes 256-58 and accompanying text.

³²³ *See supra* Part III-C.

§ 102(b) exclusions, as well as relying on merger for excluding efficient design elements or otherwise unexpressive elements from the scope of copyright.³²⁴

From a procedural standpoint, the merger case law presents an interesting intersection of validity, infringement, and defense determinations arising in copyright cases. Merger is typically raised when a first author claims a second author infringed her rights. While defendants typically raise merger as a defense, this generally results in judges undertaking a serious analysis of copyright validity and scope. The burden of proof is and should be on the plaintiff to show the existence, as a practical matter, of a wide enough variety of expressive alternatives that the law should impose an obligation on the defendant to have adopted one of them rather than copying from the plaintiff.³²⁵

By dispelling various myths that have occasionally cropped up about the merger doctrine and demonstrating the wide range of its applications, this article aspires to lift judicial consideration of merger defenses out of the narrow focus taken in some cases. It celebrates the evolving utility of the merger doctrine in mediating conflicts between and among the interests of first and second-generation authors, of third parties affected by those disputes, and of the public who would otherwise suffer the consequences of unwarranted monopolies over information or products.

³²⁴ See, e.g., *Gates Rubber Co. v. Bando Chem. Indus.*, 9 F.3d at 823, 834 (10th Cir. 1993); *Real View LLC v. 20-20 Techns., Inc.*, 683 F. Supp.2d 147, 154-56 (D. Mass. 2010); *Harbor Software, Inc. v. Applied Sys., Inc.*, 925 F. Supp. 1042, 1048-51 (S.D.N.Y. 1996).

³²⁵ See *supra* note 131 and accompanying text. See also Lemley & McKenna, *supra* note 131 (arguing for scope hearings in IP cases); Zahr Said, *Reforming Copyright Interpretation*, 28 Harv. J. L. & Tech. 469 (2015) (proposing claim construction in copyright cases).