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GAMES AND OTHER UNCOPYRIGHTABLE SYSTEMS

*Bruce E. Boyden**

INTRODUCTION

Games are deceptively simple objects of human culture.¹ They are familiar, commonplace, and often easy to learn: young children play them at an early age. For most people, games are a pastime, a form of recreation that involves relatively little preparation or time commitment.² They are thus the very opposite of work, and hardly comparable to such serious pursuits as scholarship or art.³

For all their seeming ingenuousness, however, games are also deeply puzzling. Defining games is a notoriously difficult enterprise.⁴ Scholars from several different disciplines have struggled to determine what the nature, or essence, of games really is. And the elusiveness of games poses problems for intellectual property law as well. Games seem to straddle the boundaries between copyright and patent, between author, performer, and reader, and between protected and unprotected material. Games are an entertainment medium on par with such copyrightable material as music, films, or novels. But games are also comprised of rules and instructions, like uncopyrightable recipes and patentable procedures. Games convey an experience of play to users, just as music and drama convey an aesthetic or narrative experience to viewers and listeners. But the experience of game

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¹ See generally ELLIOTT M. AVEDON & BRIAN SUTTON-SMITH, *THE STUDY OF GAMES* (1971); ROGER CAILLOIS, *MAN, PLAY, AND GAMES* (Meyer Barash trans., 1961); JOHAN HUIZINGA, *HOMO LUDENS: A STUDY OF THE PLAY-ELEMENT IN CULTURE* (Beacon Press 1955) (1949); BRIAN SUTTON-SMITH, *THE AMBIGUITY OF PLAY* (1997).

² There are, of course, exceptions: for example, professional chess players, Scrabble tournaments, and sports athletes who devote considerable time to honing their performance. But considered as a subset of all game play, these exceptions are rare.

³ Scholarship *about* games is thus a bit marginal in the academic world, and there is continual debate about whether games, and video games in particular, can qualify as art. See, e.g., CHRIS CRAWFORD, *THE ART OF COMPUTER GAME DESIGN*, at xi (1984); Daniel Radosh, Op-Ed., *The Play's the Thing*, N.Y. TIMES, Sept. 28, 2007, <http://www.nytimes.com/2007/09/28/opinion/28radosh.html>; Jeremy Reimer, *Roger Ebert Says Games Will Never Be as Worthy as Movies*, ARS TECHNICA (Nov. 30, 2005, 4:30 PM), <http://arstechnica.com/old/content/2005/11/5657.ars>.

⁴ See, e.g., LUDWIG WITTGENSTEIN, *PHILOSOPHICAL INVESTIGATIONS* paras. 66-67 (G.E.M. Anscombe trans., 3d ed. 1968).

play emerges primarily from the actions and choices of the players, whereas the aesthetic experience of music and drama is largely determined by the actions and choices of others.

Games therefore pose a number of challenges for copyright and patent law. Yet to date, intellectual property doctrine and scholarship has not really grappled with the slippery nature of games. Indeed, copyright has developed a very simple black-letter rule to handle them: games are not copyrightable.⁵ That rule begins to fall apart on close examination, however. It turns out that while games per se are not copyrightable, most of their constituent elements are: the board, pieces, cards, and even the particular expression of the rules.⁶ What could be the purpose of such a rule?

The case law sheds no further light on the problem. The origins of the rule against copyright in games are lost in the mists of time; even the earliest cases refer to the rule without discussion, as though it were obvious.⁷ A few scholars have more recently attempted to examine this bit of copyright lore but have not reached any firm conclusions.⁸ And the current trend in both case law and scholarship has been to focus on video games, which contain additional protectable elements such as software code, images, and plots.⁹ The underlying question of the copyrightability of games per se often passes by unnoticed.

⁵ *E.g.*, 1 MELVILLE B. NIMMER & DAVID NIMMER, NIMMER ON COPYRIGHT § 2.18[H][3][a], at 2-204.15 (2010).

⁶ *Id.* at 2-204.15 to .16.

⁷ *See* cases cited *infra* notes 21-27.

⁸ *See* Thomas M.S. Hemnes, *The Adaptation of Copyright Law to Video Games*, 131 U. PA. L. REV. 171, 232-33 (1982); Pamela Samuelson, *Why Copyright Law Excludes Systems and Processes from the Scope of Its Protection*, 85 TEX. L. REV. 1921, 1942-44 (2007).

⁹ The literature on copyright in video games is already voluminous. Early articles focused on the copyrightability of video games, but without sustained analysis of the traditional rule. *See, e.g.*, Alan R. Glasser, Comment, *Video Voodoo: Copyright in Video Game Computer Programs*, 38 FED. COMM. L.J. 103, 103-04 (1986); Hemnes, *supra* note 8, at 173-74; William Patry, *Electronic Audiovisual Games: Navigating the Maze of Copyright*, 31 J. COPYRIGHT SOC'Y U.S.A. 1, 4-5 (1983). Later articles have focused on more specific issues, such as the existence of virtual property rights, *see, e.g.*, Joshua A.T. Fairfield, *Virtual Property*, 85 B.U. L. REV. 1047, 1049-52 (2005); James Grimmelmann, *Virtual World Feudalism*, 118 YALE L.J. POCKET PART 126 (2009), <http://thepocketpart.org/ylj-online/property-law/740-virtual-world-feudalism>; F. Gregory Lastowka & Dan Hunter, *The Laws of the Virtual Worlds*, 92 CALIF. L. REV. 1, 50-51 (2004), the relationship between players and game developers, *see, e.g.*, Jack M. Balkin, *Virtual Liberty: Freedom to Design and Freedom to Play in Virtual Worlds*, 90 VA. L. REV. 2043, 2046-47 (2004); Dan L. Burk, *Electronic Gaming and the Ethics of Information Ownership*, 4 INT'L REV. INFO. ETHICS, Dec. 2005, at 39, 40; Joshua A.T. Fairfield, *The God Paradox*, 89 B.U. L. REV. 1017, 1018-19 (2009); Greg Lastowka, *User-Generated Content and Virtual Worlds*, 10 VAND. J. ENT. & TECH. L. 893, 894 (2008); Erez Reuveni, *On Virtual Worlds: Copyright and Contract Law at the Dawn of the Virtual Age*, 82 IND. L.J. 261, 264 (2007), or the rights of players to play or make modifications of game worlds, *see, e.g.*, Mia Garlick, *Player, Pirate, or Conducer? A Consideration of the Rights of Online Gamers*, 7 YALE J.L. & TECH. 422, 426 (2005); W. Joss Nichols, *Painting Through Pixels: The Case for a Copyright in Videogame Play*, 30 COLUM. J.L. & ARTS 101, 102 (2007); Tyler T. Ochoa, *Copyright, Derivative Works and Fixation: Is Galoob a Mirage, or Does the Form(Gen) of the Alleged*

This Article fills that gap. It concludes that the traditional doctrinal rule against copyright in games per se does, in the end, fit within the overall structure of copyright law. But the reasons why that is so are not obvious, and resolving the issue does more than simply locate the place of games in copyright doctrine. That is because games exist at the boundary of intellectual property law. Focusing on the precise nature of games—and why they are not within the scope of copyright—helps us define where those boundaries are,¹⁰ in the same way that focusing on whether beanbags are chairs or whether Pluto is a planet tells us something about the boundaries of our concepts of “chairs” and “planets.”

In particular, examining the basis for the rule against the copyrightability of games helps illuminate one of the most difficult issues in copyright law: the nature of the exclusions from copyrightability listed in § 102(b).¹¹ One of the least well-understood of those exclusions is the one for “systems.” Older courts barring copyright in various systems failed to define the term.¹² Modern courts tend to ignore it,¹³ and scholars have generally not given it any precise meaning.¹⁴

It turns out, however, that recent scholarship on games generally defines games as “systems”;¹⁵ that, in turn, provides an entry point for understanding what systems are and why they are excluded from copyright. Games scholars have described games as, essentially, a “state machine”: a

Derivative Work Matter?, 20 SANTA CLARA COMPUTER & HIGH TECH. L.J. 991, 1027-32 (2004); John Baldrica, Note, *Mod as Heck: Frameworks for Examining Ownership Rights in User-Contributed Content to Videogames, and a More Principled Evaluation of Expressive Appropriation in User-Modified Videogame Projects*, 8 MINN. J.L. SCI. & TECH. 681, 684-85 (2007).

¹⁰ Games also challenge important boundaries in patent law: they seem to exist right at the heart of one of the most debated topics in patent law today, which is whether information conveyed to humans is patentable. That issue manifests itself in the form of the so-called “printed matter” exception and “mental steps” doctrine in patent law, both of which have been applied to games. *See, e.g.*, 2 JOHN GLADSTONE MILLS III ET AL., PATENT LAW FUNDAMENTALS § 7.18 (2d ed. 2010). For an argument questioning the patentability of gameplay, see Shubha Ghosh, *Patenting Games: Baker v. Selden Revisited*, 11 VAND. J. ENT. & TECH. L. 871, 897-98 (2009). The question of the patentability of games is beyond the scope of this Article.

¹¹ *See* 17 U.S.C. § 102(b) (2006) (“In no case does copyright protection for an original work of authorship extend to any idea, procedure, process, system, method of operation, concept, principle, or discovery, regardless of the form in which it is described, explained, illustrated, or embodied in such work.”).

¹² *See, e.g.*, *Affiliated Enters., Inc. v. Gruber*, 86 F.2d 958, 961 (1st Cir. 1936); *Affiliated Enters., Inc. v. Gantz*, 86 F.2d 597, 598 (10th Cir. 1936); *Seltzer v. Sunbrock*, 22 F. Supp. 621, 630 (S.D. Cal. 1938).

¹³ *See, e.g.*, *Autoskill Inc. v. Nat’l Educ. Support Sys., Inc.*, 994 F.2d 1476, 1491 (10th Cir. 1993) (focusing on the distinction between idea and expression); *Toro Co. v. R & R Prods. Co.*, 787 F.2d 1208, 1211-12 (8th Cir. 1986) (stating that § 102(b) merely codifies the idea/expression dichotomy).

¹⁴ *See, e.g.*, Samuelson, *supra* note 8, at 1952 n.204 (citing 17 THE OXFORD ENGLISH DICTIONARY 496 (2d ed. 1989)).

¹⁵ *See, e.g.*, CRAWFORD, *supra* note 3, at 4; KATIE SALEN & ERIC ZIMMERMAN, RULES OF PLAY: GAME DESIGN FUNDAMENTALS 80 (2004).

means for correlating a range of permitted inputs (i.e., game moves) to a determinate set of outputs (i.e., changes in the game state).¹⁶ Games therefore do not communicate expression to the players so much as provide a forum for the gameplay experience to occur. The early cases on systems demonstrate a similar understanding of the term. Systems are shells that users fill with meaning; their primary purpose lies in that use, not in the communication of meaning from author to user. Systems are uncopyrightable because they are containers, not transmissions.¹⁷

Part I of this Article briefly explains the history and current state of copyright doctrine on games. Part II considers the form of games and concludes that they fall within at least one definition of “systems.” But that conclusion alone is not enough to determine whether games are uncopyrightable without knowing what sorts of systems are excluded under § 102(b). Part III therefore reviews the development of the exclusion of “systems” in copyright law, arguing that the “systems” identified in § 102(b) include games. Part IV then considers in more detail the reasons for the exclusion of both games and systems generally.

I. WHAT COPYRIGHT LAW SAYS ABOUT GAMES

For nearly a century, courts have uniformly held that games are not copyrightable.¹⁸ Courts have been considerably less forthcoming, however, with reasons for this doctrine. As Professor Pamela Samuelson has noted, “[t]he cases on games and rules are quite spare in analysis.”¹⁹ The rule emerged fully formed, without explanation, in the 1920s and 1930s, an era when opinions tended to be terse.²⁰ Many cases involved simple games without their own boards, playing pieces, or other equipment—roller derbies,²¹ promotional contests,²² basketball tournaments,²³ or bridge strategies²⁴—in which the plaintiff appeared to be attempting to protect against

¹⁶ See *infra* text accompanying notes 94-97.

¹⁷ See discussion *infra* Part IV.

¹⁸ See, e.g., *Hoopla Sports & Entm't, Inc. v. Nike, Inc.*, 947 F. Supp. 347, 354 (N.D. Ill. 1996); *Chamberlin v. Uris Sales Corp.*, 56 F. Supp. 987, 988 (S.D.N.Y. 1944), *aff'd*, 150 F.2d 512 (2d Cir. 1945); *Seltzer v. Sunbrock*, 22 F. Supp. 621, 630 (S.D. Cal. 1938); *Whist Club v. Foster*, 42 F.2d 782, 782 (S.D.N.Y. 1929); *Downes v. Culbertson*, 275 N.Y.S. 233, 243 (Sup. Ct. 1934); see also *NIMMER & NIMMER*, *supra* note 5, at 2-204.15 & nn.69-70 (citing cases).

¹⁹ Samuelson, *supra* note 8, at 1943.

²⁰ See, e.g., *Whist Club*, 42 F.2d at 782; *Downes*, 275 N.Y.S. at 243.

²¹ See *Sunbrock*, 22 F. Supp. at 630; *Seltzer v. Corem*, 107 F.2d 75, 77 (7th Cir. 1939) (following *Sunbrock*).

²² See *Morrissey v. Procter & Gamble Co.*, 379 F.2d 675, 678 (1st Cir. 1967); *Affiliated Enters., Inc. v. Gruber*, 86 F.2d 958, 959, 961 (1st Cir. 1936); *Affiliated Enters., Inc. v. Gantz*, 86 F.2d 597, 599 (10th Cir. 1936).

²³ See *Hoopla Sports*, 947 F. Supp. at 349.

²⁴ See *Russell v. Ne. Publ'g Co.*, 7 F. Supp. 571, 572 (D. Mass. 1934); *Whist Club*, 42 F.2d at 782.

use of a similar idea by a competitor. But even in cases involving more modern board games, such as Pass-The-Nuts,²⁵ Scrabble,²⁶ or Monopoly,²⁷ the copyrightability of the game in question received little attention.²⁸

The first case that mentioned such a rule in the United States was *Whist Club v. Foster*,²⁹ a 1929 case from the Southern District of New York. The case involved a suit by the Whist Club for infringement of its book, *Laws for Auction Bridge—1926*, against Foster and others, who had published *Foster's Simplified Auction Bridge (with the New Laws)*.³⁰ Judging from the titles of the books and the language of the opinion, it seems that what Foster had done was include the Whist Club's 1926 version of the rules of auction bridge in his book. But it is difficult to be certain of that or anything else about the case because the entire opinion takes up only one paragraph. It begins: "In the conventional laws or rules of a game, as distinguished from the forms or modes of expression in which they may be stated, there can be no literary property susceptible of copyright."³¹ The court provided no citations for this rule, perhaps indicating that it was already well-established. The court noted that although the defendant "restated the same set of conventional precepts" in his own words, "[t]his under all the authorities he was entitled to do, and neither the general acceptance of the rules as official, nor, if it were true, their rejection as officious, could have any bearing on this controversy."³² The *Whist Club* court unfortunately left it a mystery what "authorities" it had in mind.

²⁵ See *Durham Indus., Inc. v. Tomy Corp.*, 630 F.2d 905, 914-15 (2d Cir. 1980). In *Durham Industries*, the counterclaim defendant had copied a game in which the object was to get plastic "nuts" inside a container. The defendant relabeled the buttons with Disney characters in place of the counterclaimant's original set of animals. *Id.* at 914.

²⁶ See *Landsberg v. Scrabble Crossword Game Players, Inc.*, 736 F.2d 485, 489 (9th Cir. 1984) (finding that the plaintiff's Scrabble strategy guide contained "unprotectable ideas").

²⁷ See *Anti-Monopoly, Inc. v. Gen. Mills Fun Grp.*, 611 F.2d 296, 300 n.1 (9th Cir. 1979); see also *Allen v. Academic Games League of Am., Inc.*, 89 F.3d 614, 615-17 (9th Cir. 1996) (copyright case involving academic tournament games); *Affiliated Hosp. Prods., Inc. v. Merdel Game Mfg. Co.*, 513 F.2d 1183, 1188-89 (2d Cir. 1975) (copyright case concerning rulebook for Caroms).

²⁸ Since the early 1980s, a number of cases have considered the issue of copyright in video games. Early on, however, courts concluded that, in addition to protection for their software code, video games could be protected as audiovisual works, just like cartoons or films. See, e.g., *Stern Elecs., Inc. v. Kaufman*, 669 F.2d 852, 856 (2d Cir. 1982); see also *NIMMER & NIMMER*, *supra* note 5, § 2.18[H][3][b], at 2-204.16 to .17, 2-204.21 (citing cases); *Hemnes*, *supra* note 8, at 179 (citing cases). Relying on a facile analogy between video games and films, very few of these cases have invoked or considered the rule against the copyrightability of games.

²⁹ 42 F.2d 782 (S.D.N.Y. 1929).

³⁰ *Id.* at 782.

³¹ *Id.*

³² *Id.* *Whist Club* echoes a much later decision in which a private organization could not claim a copyright in its model codes after the codes were enacted by legislation. See *Veeck v. S. Bldg. Code Cong. Int'l, Inc.*, 293 F.3d 791, 793 (5th Cir. 2002) (en banc).

The likeliest point of origin for the rule is the *Rules and Regulations for the Registration of Claims to Copyright*, adopted by the Copyright Office in 1910, the year after Congress substantially revised the Copyright Act. The Copyright Act of 1909, unlike the 1976 Act, limited copyright to particular forms of works: books, maps, musical compositions, and so forth.³³ The regulations expressly excluded games from registration as books, as works of art, or as pictorial works.³⁴ The reasoning appears to have been that games are functional. For example, section 16(k) of the regulations, excluding games from registration as pictures, stated that “[a]rticles of utilitarian purpose do not become capable of copyright registration because they consist in part of pictures which in themselves are copyrightable, e.g., puzzles, games, rebuses, badges, buttons, buckles, pins, novelties of every description, or similar articles.”³⁵ The *Corpus Juris* entry on copyrights, published just a few years later, similarly grouped games with cases involving index systems as uncopyrightable “articles designed for physical use rather than to convey information or intellectual conceptions.”³⁶

Later cases added little to the analysis, often merely citing earlier decisions, including *Whist Club*, as authority for the rule. *Chamberlin v. Uris Sales Corp.*³⁷ is typical. The sum total of the court’s discussion of the issue is as follows: “[I]t is very doubtful if rules of a game can, in any event, be copyrightable subject matter.”³⁸ The court cited *Whist Club* and

³³ See Copyright Act of 1909, ch. 320, § 5, 35 Stat. 1075, 1076-77, *repealed by* Copyright Act of 1976, Pub. L. No. 94-553, 90 Stat. 2541 (codified as amended in scattered sections of 17 U.S.C.). The exclusivity of the list was challenged almost immediately by new forms of works. Motion pictures, for example, did not clearly fit within any of the original categories, so Congress amended the Act just three years later to add them. See Act of Aug. 24, 1912, Pub. L. No. 62-303, § 5, 37 Stat. 488, 488.

³⁴ U.S. COPYRIGHT OFFICE, BULL. NO. 15, RULES AND REGULATIONS FOR THE REGISTRATION OF CLAIMS TO COPYRIGHT §§ 5, 12, 16 (1910), *reprinted in* RICHARD ROGERS BOWKER, COPYRIGHT: ITS HISTORY AND ITS LAW 496-99 (1912).

³⁵ *Id.* § 16; see also *id.* § 5 (“The term ‘book’ cannot be applied to . . . [d]irections on scales, or dials, or mathematical or other instruments; puzzles; games; rebuses; labels; wrappers; formulae on boxes, bottles, and other receptacles of articles for sale or meant to accompany such articles.”); *id.* § 12 (“No copyright [as a work of art] exists in toys, games, dolls, advertising novelties, instruments or tools of any kind, glassware, embroideries, garments, laces, woven fabrics, or any similar articles.”).

³⁶ See 13 C.J. *Copyright and Literary Property* § 124 (1917). The *Corpus Juris* entry also cited early systems cases, such as *Amberg File & Index Co. v. Shea Smith & Co.*, 78 F. 479 (C.C.N.D. Ill. 1896), *aff’d*, 82 F. 314 (7th Cir. 1897). For a discussion of *Amberg*, see *infra* text accompanying notes 140-42. Another possible source for the rule is British case law, which was cited frequently on matters of copyright doctrine through the early decades of the twentieth century. Research for this Article did not turn up any early British cases on games that could have been relied on by the *Whist Club* court, however.

³⁷ 56 F. Supp. 987 (S.D.N.Y. 1944), *aff’d*, 150 F.2d 512 (2d Cir. 1945).

³⁸ *Id.* at 988. The *Chamberlin* court was asked to rule on the plaintiff’s claim that the defendant had copied his rules for the game acey-deucey. *Id.* The most significant problem the plaintiff faced was that he did not create the game; acey-deucey is a very old variant of backgammon that may have originated in India. See *id.*

two other cases, neither of which offered an extended analysis.³⁹ Perhaps due to the paucity of analysis, the influential treatise *Nimmer on Copyright* begins its discussion of copyright in games with a somewhat skeptical report of what prior cases have held: “*It is said* that games are not copyrightable, but this general proposition is subject to qualification.”⁴⁰

The qualifications Nimmer refers to are extensive. While a game itself may not be copyrightable, all of its constituent elements are. The board, box, or cards may be protected as graphic or pictorial works, or even maps;⁴¹ game pieces may be protected sculptural works; even a particular statement of the rules of a game can be given limited protection against verbatim copying.⁴² The limited nature of the rule against the copyrightability of games is, on its face, rather odd. Imagine there were a rule that “novels are not copyrightable,” but that a novel’s plot, characters, setting, dialog, and cover art all were. What would be the point of such a rule?⁴³

Two possibilities emerge from the cases. First, several cases describe games, and game rules,⁴⁴ as unprotectable ideas.⁴⁵ Copyright, as is well

³⁹ See *id.* (citing *Seltzer v. Sunbrock*, 22 F. Supp. 621 (S.D. Cal. 1938); *Downes v. Culbertson*, 275 N.Y.S. 233 (Sup. Ct. 1934)).

⁴⁰ See NIMMER & NIMMER, *supra* note 5, at 2-204.15 (emphasis added) (footnote omitted).

⁴¹ *Id.* at 2-204.15 to .16; see, e.g., *Richardson v. Miller*, 20 F. Cas. 722, 723 (C.C.D. Mass. 1877) (No. 11,791) (holding that the design of playing cards was copyrightable); *Gelles-Widmer Co. v. Milton Bradley Co.*, 132 U.S.P.Q. (BNA) 30, 35 (N.D. Ill. 1961) (holding that a set of flash cards was copyrightable), *aff’d*, 313 F.2d 143 (7th Cir. 1963).

⁴² NIMMER & NIMMER, *supra* note 5, at 2-204.16. Copyright protection in a particular expression of the rules is limited in order to prevent game designers from using their copyright to prohibit any other description of the same rules, which would give the game designer effective control over the game itself. See, e.g., *Allen v. Academic Games League of Am., Inc.*, 89 F.3d 614, 617 (9th Cir. 1996) (applying merger doctrine to rules); *Morrissey v. Procter & Gamble Co.*, 379 F.2d 675, 679 (1st Cir. 1967) (“We cannot recognize copyright as a game of chess in which the public can be checkmated.”).

⁴³ Considering the same questions, Thomas M.S. Hemnes concludes that the rule is a historical relic: “‘Copyright does not protect games’ is an example of a principle of law that may have grown larger and more rigid than the facts of the seminal cases warranted.” Hemnes, *supra* note 8, at 174. The Nimmer treatise similarly suggests that the rule may need to be revisited in the context of video games. See NIMMER & NIMMER, *supra* note 5, at 2-204.16 (“[T]he blanket rule of exclusion for games must be rethought as must so much else in the copyright arena insofar as it applies to works of technology heralded by the computer revolution.”).

⁴⁴ Most scholars of games locate the formal structure of games in the games’ rules. See, e.g., DAVID PARLETT, *THE OXFORD HISTORY OF BOARD GAMES* 3 (1999) (“[W]e may go further, and say ‘Every game is its rules,’ for they are what define it.”). For games that lack any specialized equipment—e.g., card games, word games, tag, etc.—this is self-evident.

⁴⁵ See, e.g., *Allen*, 89 F.3d at 617 (explaining that games “consist of abstract rules and play ideas” that are likely to merge with the expression of those rules and ideas (quoting *Midway Mfg. Co. v. Bandai-Am., Inc.*, 546 F. Supp. 125, 148 (D.N.J. 1982)) (internal quotation marks omitted)); *Landsberg v. Scrabble Crossword Game Players, Inc.*, 736 F.2d 485, 489 (9th Cir. 1984) (finding that Scrabble strategies were unprotectable ideas); *Anti-Monopoly, Inc. v. Gen. Mills Fun Grp.*, 611 F.2d 296, 300 n.1 (9th Cir. 1979) (“[B]usiness ideas, such as a game concept, cannot be copyrighted.”); *Morrissey v. Procter & Gamble Co.*, 262 F. Supp. 737, 738 (D. Mass.) (stating that the substance of a contest was not protectable), *aff’d*, 379 F.2d 675 (1st Cir. 1967); *Seltzer v. Sunbrock*, 22 F. Supp. 621, 630 (S.D. Cal. 1938)

known, protects only the expression of an idea, not the idea itself.⁴⁶ Drawing the line between idea and expression has long been recognized as devilishly difficult. But it is a task that is made even more challenging by the fact that the term “ideas” has something of a dual meaning in copyright law. On the one hand, it refers to information that is simply too general or abstract to qualify as protectable expression.⁴⁷ For example, a short summary of a much longer work, such as the one-sentence descriptions of potential films featured in the 1992 film *The Player*, is an “idea” in this sense.⁴⁸ But the term “ideas” is also often used as shorthand for matter excluded from copyrightability under a variety of doctrines, including not only ideas, but also facts, *scènes à faire*, and functional expression that might qualify as patentable subject matter.⁴⁹ Several of those doctrines have been collected in § 102(b) of the Copyright Act, which excludes ideas, procedures, processes, systems, methods of operation, concepts, principles, and discoveries from copyright protection.⁵⁰

To the extent that courts have employed the term “ideas” to mean that rules are too general or abstract to qualify as expression, the argument is unsatisfactory. A complete specification of a game’s rules is as detailed as the game gets. And often those rules can be fairly specific. The rules for the Wizards of the Coast board game *Axis & Allies*, for example, are 39 pages long and incredibly detailed.⁵¹ The rules for *Advanced Dungeons &*

(“Even if plaintiffs’ books be held to describe a game or sporting event, the rules thereof, as ideas, are not copyrightable.”); *Russell v. Ne. Publ’g Co.*, 7 F. Supp. 571, 572 (D. Mass. 1934) (holding that there was no copyright in a bridge problem that “illustrat[ed] a principle of play” and “the principles of contract bridge applicable to its solution”); *Downes v. Culbertson*, 275 N.Y.S. 233, 243 (Sup. Ct. 1934) (concluding that a system for playing contract bridge “is an idea” outside the scope of protection of both copyright and patent).

⁴⁶ *E.g.*, 1 PAUL GOLDSTEIN, *GOLDSTEIN ON COPYRIGHT* § 2.3, at 2:27 (3d ed. Supp. 2010) (citing 17 U.S.C. § 102(b) (2006)).

⁴⁷ *See id.* § 2.3.1, at 2:29 to :30; NIMMER & NIMMER, *supra* note 5, § 2.02, at 2-23.

⁴⁸ *See THE PLAYER* (Avenue Entertainment, Inc. 1992).

⁴⁹ Goldstein suggests that “idea” means all unprotected matter. *See GOLDSTEIN, supra* note 46, § 2.3.1, at 2:30 (internal quotation marks omitted).

⁵⁰ *See* 17 U.S.C. § 102(b) (“In no case does copyright protection for an original work of authorship extend to any idea, procedure, process, system, method of operation, concept, principle, or discovery, regardless of the form in which it is described, explained, illustrated, or embodied in such work.”).

⁵¹ *See* LARRY HARRIS, *AXIS & ALLIES: OPERATIONS MANUAL* (Jennifer Clarke Wilkes ed., 2004). For example, the rules provide for canals:

There are two canals on the game board A canal is not considered a space, so it doesn’t count against the number of spaces a unit can move. A canal doesn’t block land movement: Land units can move freely between Trans-Jordan and Anglo-Egypt.

If you want to move sea units through a canal, your side (but not necessarily your power) must control it at the start of your turn (that is, you can’t use it the turn you capture it). The Panama Canal is controlled by the side that controls Panama. The Suez Canal is controlled by the side that controls both Anglo-Egypt and Trans-Jordan. If one side controls Anglo-Egypt and the other controls Trans-Jordan, the Suez is closed to sea units.

Id. at 8. There are creative choices, or judgments, at work here, which is generally sufficient for a modern copyright. *See, e.g.*, *CCC Info. Servs., Inc. v. Maclean Hunter Mkt. Reports, Inc.*, 44 F.3d 61, 65 n.4,

Dragons are even longer, spanning several books.⁵² It appears that game rules are not “ideas” in the general and abstract sense of the term.

The other possible explanation that emerges from the case law is that games are uncopyrightable systems or processes.⁵³ Indeed, in designating game rules as unprotectable “ideas,” many of the cases may have actually been using that term more broadly to claim that games impermissibly cross over from copyrightable territory to patentable subject matter.⁵⁴ That is, some of the cases on games appear to have concluded that games fall within one of the five categories in § 102(b) devoted to drawing the line between patents and copyrights: procedures, processes, systems, methods of operation, and discoveries.⁵⁵

68 n.8 (2d Cir. 1994). For instance, the game designers could have decided to make canals count as a space for movement purposes or to allow ships to pass through when only one side of the canal is in a team’s possession. Indeed, it was a creative choice to put canals on the board at all.

⁵² See GARY GYGAX, *ADVANCED DUNGEONS & DRAGONS: DUNGEON MASTERS GUIDE* (rev. ed. 1979); GARY GYGAX, *ADVANCED DUNGEONS & DRAGONS: MONSTER MANUAL* (4th ed. 1979); GARY GYGAX, *ADVANCED DUNGEONS & DRAGONS: PLAYERS HANDBOOK* (6th prt. 1980).

⁵³ See *Seltzer v. Corem*, 107 F.2d 75, 76-77 (7th Cir. 1939) (holding that the rules for roller skating races were an uncopyrightable system); *Affiliated Enters., Inc., v. Gruber*, 86 F.2d 958, 961 (1st Cir. 1936) (holding that a system of staging games or contests was not copyrightable); *Affiliated Enters., Inc., v. Gantz*, 86 F.2d 597, 598 (10th Cir. 1936) (same); *Seltzer v. Sunbrock*, 22 F. Supp. 621, 630 (S.D. Cal. 1938) (holding that the rules for roller skating races were an uncopyrightable system); *Downes v. Culbertson*, 275 N.Y.S. 233, 242 (Sup. Ct. 1934) (holding that a system for playing contract bridge was not copyrightable). Nimmer summarizes the rule from the cases as “no copyright may be obtained in the system or manner of playing a game,” analogizing the rule to one barring copyright in “a system or manner of doing business.” See *NIMMER & NIMMER*, *supra* note 5, at 2-204.15 & n.70. Nimmer also states that copyright will not allow “a monopoly in the method of play itself, as distinguished from the form of instructions for such play.” *Id.* at 2-204.16.

⁵⁴ For example, the New York trial court in *Downes*, a case decided well prior to § 102(b)’s codification, held that Culbertson’s “system is an idea” that could not be protected under either copyright or patent. *Downes*, 275 N.Y.S. at 243.

⁵⁵ The term “discovery” is ambiguous: it could refer to factual information found (i.e., discovered) by the author, or it could refer to inventions, just as it is used in the Patent and Copyright Clause. See U.S. CONST. art. I, § 8, cl. 8 (giving Congress power “[t]o promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries”). Under either interpretation, there is at least a little redundancy with other portions of § 102. Under the discovery-as-invention reading, inventions *include* patentable processes, methods, and procedures, making those terms redundant to the extent they were intended to stand for patentable subject matter, although excluding inventions would add machines, manufactures, and compounds to the list. On the other hand, as Justice O’Connor explained in *Feist Publications, Inc. v. Rural Telephone Service Co.*, facts are not original and therefore not within the scope of copyright set forth in § 102(a), making an exclusion for discoveries-as-facts in § 102(b) unnecessary. See 499 U.S. 340, 347-48 (1991); *NIMMER & NIMMER*, *supra* note 5, § 2.03[E], at 2-36.4. The legislative history does not resolve this question, but the current Register of Copyrights has stated that she believes that Congress intended “discovery” to mean “inventions,” which is probably the correct reading. See Samuelson, *supra* note 8, at 1951 n.202.

For example, in *Seltzer v. Sunbrock*,⁵⁶ the plaintiff, Leo Seltzer, copyrighted two pamphlets describing fictional roller derbies—roller derbies that just happened to employ the same rules as the real-life roller derbies Seltzer was staging across the country.⁵⁷ The pamphlets were, in effect, an ingenious attempt to embed Seltzer's rules for his roller derby in an incontestably fictional, and therefore copyrightable, work. It seems likely that the reason for such an unusual presentation of the rules was that Seltzer already had some inkling that a more typical version of the rules would not be given copyright protection. But the tactic failed. The court held that “[w]hat Seltzer really composed was a description of a system for conducting races on roller skates,” and “[a] system, as such, can never be copyrighted,” only patented.⁵⁸

Likewise, in *Affiliated Enterprises, Inc. v. Gantz*⁵⁹ and *Affiliated Enterprises, Inc. v. Gruber*,⁶⁰ the plaintiff created a contest for promoting movie theatres called “Bank Night” and sued to stop others from holding similar contests without its permission.⁶¹ Both the First and Tenth Circuits rejected the claims, however, holding that the instructions for holding “Bank Night” contests were a “plan or system” and thus not within the scope of the plaintiff's copyright.⁶² *Affiliated Enterprises*'s copyright over those instructions gave it no exclusive right to the games that arose from those instructions.

The idea that games are systems is a promising theory for explaining why games are excluded from copyrightability. Even some game scholars, quite apart from any concern about copyright law, have described games as systems, as discussed further below. There are just two difficulties that

⁵⁶ 22 F. Supp. 621 (S.D. Cal. 1938).

⁵⁷ *Id.* at 623-25.

⁵⁸ *Id.* at 630; *see also id.* (“Nor is the system of staging a game or spectacle covered.”). In support of this argument, the court cited *Baker v. Selden*, 101 U.S. 99 (1879), *Brief English Systems, Inc. v. Owen*, 48 F.2d 555 (2d Cir. 1931), and *Eichel v. Marcin*, 241 F. 404 (S.D.N.Y. 1913). *Baker* and *Brief English Systems* are both systems cases, holding that instructional materials do not extend copyright to the art being taught. *Baker*, 101 U.S. at 101-02; *Brief English Sys.*, 48 F.2d at 556. But *Eichel* is not that kind of case at all; it is a case alleging similarities between two plays at a high level of abstraction. *See Eichel*, 241 F. at 409. *Eichel* is very much like the more famous *Nichols v. Universal Pictures Corp.*, 45 F.2d 119 (2d Cir. 1930). *See Nichols*, 45 F.2d at 122 (“A comedy based upon conflicts between Irish and Jews, into which the marriage of their children enters, is no more susceptible of copyright than the outline of *Romeo and Juliet*.”). That indicates that the *Sunbrock* court saw game rules as both a “system” and too abstract for copyright protection, in some important way.

Not happy with the result of the California litigation, Seltzer manufactured a case in Indiana against a willing defendant who admitted infringement. *See Corem*, 107 F.2d at 75-76 (“This is an exceedingly friendly suit.”). The district court did not catch on, but the Seventh Circuit reversed, expressly adopting the reasoning of *Sunbrock*. *Id.* at 77.

⁵⁹ 86 F.2d 597 (10th Cir. 1936).

⁶⁰ 86 F.2d 958 (1st Cir. 1936).

⁶¹ *Gruber*, 86 F.2d at 959-60; *Gantz*, 86 F.2d at 598-99.

⁶² *Gruber*, 86 F.2d at 961; *Gantz*, 86 F.2d at 598.

must be overcome. The first is that the nature of games is obscure. And the second is that no one can explain what a system is. The remainder of this Article will play these two mysteries off each other in order to arrive at an understanding of why games are systems and why such systems are not copyrightable.

II. WHY GAMES ARE SYSTEMS

Are games ideas, processes, or systems? Answering this question requires focusing on the nature of games. Defining games with even tolerable precision is an extraordinarily difficult task.⁶³ Games come in many different varieties. There are games played with boards and pieces, which can range from the relatively simple (e.g., Parcheesi, backgammon, chess, Go) to the incredibly complex (e.g., *Advanced Squad Leader*, *Drang nach Osten*).⁶⁴ Even board games with simple rules can produce extremely complex behavior—chess, as is well known, is difficult to play well. There are games that require only standard pieces of equipment not specific to the game: four square, hopscotch, card games, and tic-tac-toe. There are pen-and-paper role-playing games, in which players lead an imagined avatar through a fictional universe. There are parlor games (e.g., charades), word games, or children’s games (e.g., tag) that may require no equipment at all. There are sports, which combine the intellectual aspects of play with significant physical skill: football, basketball, and tennis are all games. And, of course, there are computer games, which not only replicate many of the forms of games listed above, but also add new games, possible only on a computer: first-person-shooters, flight simulators, adventure games, survival horror, real-time strategy, “god” games, and more.

It is somewhat difficult to craft a concise definition of games that accounts for all of this variety. Indeed, some scholars have despaired of defining “games” with precision.⁶⁵ It is important to keep in mind that all definitions are, to some extent, imprecise; even seemingly simple terms

⁶³ See PARLETT, *supra* note 44, at 1 (“[T]he word is used for so many different activities that it is not worth insisting on any proposed definition. All in all, it is a slippery lexicological customer, with many friends and relations in a wide variety of fields.”). Ludwig Wittgenstein famously chose games as an illustration of his argument that intrinsic definitions are impossible and that words are defined only by “family resemblances.” See WITTGENSTEIN, *supra* note 4, paras. 65-67 (internal quotation marks omitted).

⁶⁴ See *Advanced Squad Leader*, WIKIPEDIA, http://en.wikipedia.org/wiki/Advanced_Squad_Leader (last visited Nov. 10, 2010); *Europa (wargame)*, WIKIPEDIA, [http://en.wikipedia.org/wiki/Europa_\(wargame\)](http://en.wikipedia.org/wiki/Europa_(wargame)) (last visited Nov. 10, 2010). *Drang nach Osten*, part of the *Europa* series, was released in 1973 by Game Designers Workshop. *Europa (wargame)*, *supra*. It was, for a time, used widely as a metaphor in wargaming circles for a game so complex as to be nearly unplayable—the gaming equivalent of listening to Wagner’s entire *Ring* cycle in one sitting.

⁶⁵ See PARLETT, *supra* note 44, at 1.

such as “chair” have boundary cases.⁶⁶ For most purposes, it is adequate to have a definition that accounts for most uses in everyday language. However, some concepts are difficult to define even under those lax conditions. The wide variety of definitions posed for “games” indicates that it may be such a term. What possibly explains this is that games depend, for a significant portion of their attraction, on the aesthetic or entertainment experience generated by the game. Such a subjective component to the experience appears to make the definition of “art,” for example, difficult as well.

Nevertheless, a number of scholars have tried their hand at defining games.⁶⁷ Many of these efforts have occurred within the past two decades, as a burgeoning literature in the study of games has emerged, spurred in large part by the rise of video games as an entertainment medium. Several of the scholars writing in this area have attempted to define what it is that *all* games—video games, board games, and even simple games such as rock-paper-scissors—share in common. No single definition has achieved widespread acceptance. However, a few common elements stand out: *rules*, *space*, *players*, and *goals*.

A. *Rules*

The first element that game scholars largely agree on is that we define games by their rules. As discussed above, the rules of a game are sometimes thought of as instructions for playing the game, but they are not; rules do not tell players precisely what to do. Rather, they place broad constraints on what players can do and conversely define certain actions as valid within the scope of the game. The rules perform two other functions: they establish initial conditions, and they define end conditions, including victory.

Thus, the rules define the boundaries of the game, but they do not specify precisely what occurs during a game in play. Consider the rules for one of the simplest games there is: tic-tac-toe. The rules for tic-tac-toe can be easily stated:

1. Play occurs on a 3 by 3 grid of 9 empty squares.
2. Two players alternate marking empty squares, the first player marking Xs and the second player marking Os.
3. If one player places three of the same marks in a row, that player wins.
4. If the spaces are all filled and there is no winner, the game ends in a draw.⁶⁸

The rules for tic-tac-toe fulfill all of the conditions listed above. Rule 1 establishes the initial state of the game: a blank three-by-three grid. Rule 2

⁶⁶ For example, is a beanbag a chair? What about modern seats that have knee-rests but no back?

⁶⁷ For useful summaries, see JESPER JUUL, *HALF-REAL: VIDEO GAMES BETWEEN REAL RULES AND FICTIONAL WORLDS* 29-36 (2005); SALEN & ZIMMERMAN, *supra* note 15, at 73-80.

⁶⁸ SALEN & ZIMMERMAN, *supra* note 15, at 128.

defines the permitted and valid moves; for example, a player cannot mark two “X’s” at a time, nor can she write the letter “B.” Rule 3 defines the victory condition, and with it the goal of the game. Finally, Rule 4 provides for end conditions other than victory.

None of these rules tell the first player precisely what to do—where to mark his or her “X.”⁶⁹ Each player is confronted with a range of options when he or she first moves, and it is out of the choices the player makes that game play emerges. But almost every player soon learns that the number of successful strategies for tic-tac-toe is extremely limited. Indeed, a single algorithm can describe the optimal strategy for each side that, if followed, produces inescapable draws.⁷⁰ The discovery of this feature of the game is precisely the point at which children lose interest in playing tic-tac-toe.⁷¹ A game that offers no meaningful choice is hardly a game at all.⁷²

B. *Space*

Second, games are instantly recognizable by participants and spectators as occurring within some sort of separate domain. The Dutch cultural historian Johan Huizinga was the first to focus on this odd quality of games. Although his focus was on play in general, much of what Huizinga wrote was applicable to games, which are in some sense a subset of play. According to Huizinga, play is “a stepping out of ‘real’ life into a temporary sphere of activity with a disposition all of its own.”⁷³ The separation is both temporal and spatial:

All play moves and has its being within a play-ground marked off beforehand either materially or ideally, deliberately or as a matter of course. . . . The arena, the card-table, the magic circle, the temple, the stage, the screen, the tennis court, the court of justice, etc., are all in form and function play-grounds, i.e. forbidden spots, isolated, hedged round, hallowed, with-

⁶⁹ In addition, none of the rules tell the players how to determine who moves first—that is what Katie Salen and Eric Zimmerman call an “implicit rule,” one of the innumerable rules players implicitly adopt when they play games like tic-tac-toe. *See id.* at 130. The formal, constitutive rules are thus surrounded by a penumbra of informal, implicit rules. Another implicit rule might be that each player has to move within a reasonable time.

⁷⁰ *See id.* at 235.

⁷¹ This moment of discovering the meaning of futility was memorably dramatized in the film, *WarGames*. *See* *WAR GAMES* (Metro-Goldwyn-Mayer Studios Inc. 1983).

⁷² Chutes & Ladders presents a different example of this phenomenon. Like tic-tac-toe, Chutes & Ladders presents the illusion of choice that dissipates as one grows older. But in Chutes & Ladders, the choice is not obviated by learning the decisive strategy, but rather by discovering the lack of control over random events. That is, progress in Chutes & Ladders is completely determined by randomly generated numbers. This is significantly different from gambling, where the choice and size of the wager are within the control of the player.

⁷³ HUIZINGA, *supra* note 1, at 8.

in which special rules obtain. All are temporary worlds within the ordinary world, dedicated to the performance of an act apart.⁷⁴

Huizinga's notion of the "magic circle" in which games take place has been profoundly influential among game theorists.⁷⁵ It is a shorthand way of expressing the somewhat mysterious transformation of real space into an imaginary "game-space," where actions are suddenly understood and invested with new social meanings, without the need for much in the way of introductory explanations or explicit signals.⁷⁶ As one game theorist has put it:

"Players and fans and officials of any game or sport develop an acute awareness of the game's 'frame' or context, but we would be hard pressed to explain in writing, even after careful thought, exactly what the signs are. After all, even an umpire's yelling of 'Play Ball' is not the exact moment the game starts."⁷⁷

This feature of games is not unique to games—many social situations are attended by subtle social cues that indicate that a separate or unique set of rules are in play. Huizinga himself recognized this in analogizing games to rituals such as marriage ceremonies or court proceedings.⁷⁸ Even less formalized social situations, such as dates or parties, have context-specific rules governing behavior. What is interesting about games, at least for our purposes, is that the "magic circle" of the bounds of the game designates a collectively imagined space in which the game rules have effect. Those rules hold sway by a sort of illusion; the effect can be dispelled by an ostentatious refusal to play along—a spoil-sport, in other words—or by a call from a player for a "time out"—a request to step outside the magic circle and its assigned roles.⁷⁹ But so long as the rules have sway, they not only govern the behavior of the players, but they provide the meaning of

⁷⁴ *Id.* at 10.

⁷⁵ See, e.g., SALEN & ZIMMERMAN, *supra* note 15, at 95; Edward Castronova, *The Right to Play*, 49 N.Y.L. SCH. L. REV. 185, 185 (2004); Joshua A.T. Fairfield, *The Magic Circle*, 11 VAND. J. ENT. & TECH. L. 823, 824-25 (2009). The "magic circle" was just one of several play environments listed by Huizinga in *Homo Ludens*, evidently referring to a circle drawn by a sorcerer in attempting to cast a spell (or at least by someone pretending to be a sorcerer). See HUIZINGA, *supra* note 1, at 10; see, e.g., Michael D. Bailey, *From Sorcery to Witchcraft: Clerical Conceptions of Magic in the Later Middle Ages*, 76 SPECULUM 960, 973-74 (2001) (discussing the use of "magic circles" in sorcery). Huizinga's notion of "play" was fairly broad, including, for example, lawsuits. See HUIZINGA, *supra* note 1, at 10. A note about terminology: this Article uses the terms "game theorists" and "game theory" to refer to the study of games, not to the study of decision making pioneered by mathematicians such as John von Neumann and John Nash.

⁷⁶ See HUIZINGA, *supra* note 1, at 9 (explaining that play "contains its own course and meaning").

⁷⁷ SALEN & ZIMMERMAN, *supra* note 15, at 94 (quoting Stephen Sniderman, *Unwritten Rules*, LIFE OF GAMES, Oct. 1999, at 2, 4, <http://www.gamepuzzles.com/tlog/tlog4.htm>).

⁷⁸ See HUIZINGA, *supra* note 1, at 18, 76, 83.

⁷⁹ Huizinga notes that the word "illusion" itself comes from Latin roots meaning "in-play." See *id.* at 11 (internal quotation marks omitted).

what happens within the game-space.⁸⁰ Game rules, in other words, are very far from simple instructions.

C. *Players*

A third feature of games is that they necessarily have one or more players. This may not initially appear to distinguish games from any other form of expression that needs to be performed: both music and plays require “players” for audiences to hear; even films and sound recordings require mechanical players for audiences to perceive. But the relationship between players and games is more existential than that. Players are necessary for the full realization of games in a way that musicians, actors, DVD players, and MP3 players are not.

Before proceeding further, it is important to make a critical distinction between different uses of the word “game,” one that even the game studies literature tends to overlook. A “game” can refer to the materials and information necessary to play the game—the “game-in-the-box,” so to speak, or the game form. This is likely the sense in which the term is used in the legal rule that “games are not copyrightable.” But “game” can also refer to a single instance of a game—the “game in play.” Both senses of the term are so familiar that we barely notice them. Chess is a game; but we also play a game of chess, meaning the particular moves made by two players on a particular occasion. Chess is a form of a game which, when played, produces many instances of games of chess.⁸¹

In defining games to require players, game theorists seem to most clearly have the second definition of “game” in mind—games in play, or instances of games.⁸² A game in play clearly needs players, or nothing will happen. But game forms also presuppose the existence of players. A game form is incomplete without play; it establishes the conditions for game play,

⁸⁰ See *id.* at 9.

⁸¹ For example, one of the most famous games of chess is game 3 of the World Chess Championship in 1972, in which Bobby Fischer turned the tide against Boris Spassky and won with innovative play as Black. A list of the actual moves Fischer and Spassky made on that occasion can be easily located on the web. See, e.g., *Match of the Century*, BOBBY-FISCHER.NET, http://www.bobby-fischer.net/match_of_the_century.htm (last visited Nov. 11, 2010).

⁸² Jesper Juul, Katie Salen and Eric Zimmerman, and Greg Costikyan all explicitly cite players as an element of a game. See JUUL, *supra* note 67, at 36; SALEN & ZIMMERMAN, *supra* note 15; Greg Costikyan, *I Have No Words & I Must Design*, INTERACTIVE FANTASY, 1994, reprinted in THE GAME DESIGN READER: A RULES OF PLAY ANTHOLOGY 192, 196 (Katie Salen & Eric Zimmerman eds., 2006). Others refer to games as an “activity” or an “exercise” rather than a material object. See CLARK C. ABT, SERIOUS GAMES 6 (1970) (emphasis omitted); AVEDON & SUTTON-SMITH, *supra* note 1, at 405 (emphasis omitted). Bernard Suits, by contrast, defines “to play a game,” rather than “game” itself, which at least implicitly recognizes the distinction. See BERNARD SUITS, THE GRASSHOPPER: GAMES, LIFE AND UTOPIA 34, 41 (1978). David Kelley similarly defines games as a “form of recreation.” DAVID KELLEY, THE ART OF REASONING 50 (1990) (emphasis omitted).

but not its particulars. Games thus require players in a more substantial way than musical works, plays, films, and sound recordings do. A DVD requires a player to convey its expression to an audience, but the player does not add to the content on the DVD in any way; that content is fixed in the disk. Even the contributions of musicians and actors, who unquestionably add something to a work as they convey it to the audience, are relatively modest; the work conveyed is for the most part the work fixed in the sheet music or script. But a game is an empty shell until it is played. As noted above, the rules of a game and its equipment provide the boundaries and meaning of play, but not the play itself—the most important aspect of a game, its *raison d'être*.

D. *Goals*

Finally, games have goals, that is, endpoints or victory conditions—something that the players strive to attain. This is another feature of games that makes them superficially similar to processes. But the goal in a game stands in an odd relationship to the game—it, like much else about the game, is defined by the rules. That is, it is a part of the game, rather than something external to it. This is completely different from a patentable process, which is “an operation or series of steps leading to a useful result.”⁸³ The “useful result” of a process is some need that preexisted the process—indeed, that unmet need is typically what spurred the creation of the process in the first place. Game rules, by contrast, define the games’ objectives, which have meaning only *within* the “magic circle.” There is no value to having three “X’s” in a row other than winning a game of tic-tac-toe. The victory conditions exist purely for the purpose of playing the game.⁸⁴

The goals of games likewise distinguish them from copyrightable works as well. Authors may have goals for their works—to entertain, to provoke, to educate. And readers may also have goals in approaching a work—sometimes the same goal as the author. But in games, the goals drive the way in which the game unfolds, while it is unfolding. This is fundamentally different from other works. The goals that a member of the audience has may affect how that person chooses to think about a work as it

⁸³ 1 DONALD S. CHISUM, CHISUM ON PATENTS § 1.03, at 1-109 (2010). The exact nature of the “useful result” necessary for a patentable process was recently reviewed by the Supreme Court. *See Bilski v. Kappos*, 130 S. Ct. 3218 (2010). In *Bilski*, the Court rejected the Federal Circuit’s limitation of patentable processes to those that are tied to a machine or transform tangible matter into a different state or thing. *See id.* at 3226-27. However, the Court declined to identify its own test for patentable processes, holding the specific invention at issue in *Bilski* too abstract to be patentable under any standard. *See id.* at 1329-30.

⁸⁴ *Cf. SUITS*, *supra* note 82, at 32 (“[G]ames require obedience to rules which limit the permissible means to a sought end, and where such rules are obeyed just so that such activity can occur.”).

is playing, but those goals do not affect the work itself. The work itself is like a path through a maze that has been mapped out by the author and is only gradually revealed to the audience. The audience may have different thoughts along the way, but the path remains unchanged. A game, however, is just the maze. The players choose one of innumerable paths through it.⁸⁵ The goals of a game provide the only guidance the game gives; they, in conjunction with the rules, help to establish a structure, but they do not provide content.⁸⁶ Games are a forum for *players*, rather than authors, to exercise meaningful choice as to how the game will play out.

E. *Games as Systems*

Recent scholarship on games has attempted to meld these various elements of games by describing games as “systems” in which they all come together. For example, Professor Katie Salen and Eric Zimmerman define games as “a system in which players engage in an artificial conflict, defined by rules, that results in a quantifiable outcome.”⁸⁷ Game scholars are hardly alone in reaching this conclusion. Several cases, including some of the earliest cases on games, also imply that games are systems,⁸⁸ although none clearly state that notion as the basis for their exclusion from copyright law. Copyright scholars have expressed uncertainty on the issue but have speculated that the basis for the exclusion may well be that games are systems.⁸⁹

That would appear to clinch the issue; games are systems, and they are therefore excluded under § 102(b). The difficulty with this resolution is that no one has determined precisely what a “system” is. In both the game literature and the copyright literature, “system” has been defined by referencing the first, most general definition in the dictionary. Salen and Zimmerman rely on the first definition they found on Dictionary.com:

⁸⁵ Tic-tac-toe, one of the simplest games, offers 211,568 possible paths. JUUL, *supra* note 67, at 60.

⁸⁶ For example, Juul has noted that nothing in the rules of the computer game Counter-Strike specifies that it must be played as a team game. JUUL, *supra* note 67, at 89. What makes it a cooperative game is that the goals produce that sort of play; cooperative play is an emergent property of Counter-Strike because of the way the goals are structured. *See id.* at 89-90.

⁸⁷ SALEN & ZIMMERMAN, *supra* note 15; *see also* CRAWFORD, *supra* note 3, at 4 (“[A] game is a closed, formal system that subjectively represents a subset of reality.”). Juul defines games similarly: “A game is a rule-based system with a variable and quantifiable outcome, where different outcomes are assigned different values, the player exerts effort in order to influence the outcome, the player feels emotionally attached to the outcome, and the consequences of the activity are negotiable.” JUUL, *supra* note 67, at 36 (emphasis omitted).

⁸⁸ *See* cases cited *supra* note 53.

⁸⁹ *See* NIMMER & NIMMER, *supra* note 5, at 2-204.15 n.70 (“Likewise, copyright may not be claimed in a system or manner of doing business.”); Samuelson, *supra* note 8, at 1944 (“Although the game case law did not invoke the system, method, or process exclusions from copyright, this cluster of cases is consistent with these exclusions.”).

“A group of interacting, interrelated, or interdependent elements forming a complex whole.”⁹⁰ Copyright scholar Pamela Samuelson likewise relies heavily on the first definition in *The Oxford English Dictionary*: “[A] set or assemblage of things connected, associated, or interdependent, so as to form a complex unity; a whole composed of parts in orderly arrangement according to some scheme or plan”⁹¹

The problem with these definitions is that they are hopelessly overbroad. Defining “systems” as any group of interrelated elements forming a complex whole would sweep in not only games, but almost all copyrightable works as well. Games would be indistinguishable from puzzles, plays, movies, novels, music, machines, factories, trees, galaxies, or innumerable other objects. Whatever game scholars and copyright law mean by the term “system,” it cannot be all sets of interdependent things forming complex unities. Fortunately there is a wide variety of other definitions to choose from. *The Oxford English Dictionary* lists eleven primary definitions, classified into three categories.⁹² Even simpler dictionaries list five or more separate definitions.⁹³ The challenge is to identify which of these definitions best corresponds to the use of the term in the games literature and in cases finding systems to be uncopyrightable.

The word “system” is used in a number of different contexts. “System” can refer to a group of parts that work together to achieve the same goal or general function, such as, in anatomy, the nervous system or digestive system, or, for computers, an operating system. It can also refer to a set of interacting agents or things that is the subject of study: for example, an ecosystem or economic system. In some cases, “systems” may be relatively isolated from other objects: for example, a solar system only weakly interacts with neighboring bodies. But in other cases, the boundaries of a “system” may be somewhat arbitrary. In physics and thermodynamics, a system is simply the portion of the universe under analysis, which may have more or less interaction with its surroundings. “System” can refer to a

⁹⁰ SALEN & ZIMMERMAN, *supra* note 15, at 50. The definition on Dictionary.com has since been revised slightly. *Compare id.* (“A group of interacting, interrelated, or interdependent elements forming a complex whole.”), with *System*, DICTIONARY.COM, <http://dictionary.reference.com/browse/system> (last visited Nov. 11, 2010) (defining system as “an assemblage or combination of things or parts forming a complex or unitary whole”).

⁹¹ Samuelson, *supra* note 8, at 1952 n.204 (quoting 17 THE OXFORD ENGLISH DICTIONARY 496 (2d ed. 1989)) (internal quotation marks omitted). The problem is not limited to copyright and games scholarship. An entire body of scientific inquiry—systems theory—is founded on an extremely broad definition of what comprises a “system”: “a set of entities with relations between them.” See Alexander Backlund, *The Definition of System*, 29 KYBERNETES 444, 444 (2000) (quoting BÖRJE LANGEFORS, *ESSAYS ON INFOLOGY* 55 (Bo Dahlbom ed., 1995)) (internal quotation marks omitted). For a general overview of systems theory, see Francis Heylighen & Cliff Joslyn, *What Is Systems Theory?*, PRINCIPIA CYBERNETICA WEB (Nov. 1, 1992), <http://pespmc1.vub.ac.be/SYSTHEOR.html>.

⁹² See THE OXFORD ENGLISH DICTIONARY, *supra* note 91, at 496-98.

⁹³ See, e.g., RANDOM HOUSE WEBSTER’S COLLEGE DICTIONARY 1308 (2d ed. 1997).

set of interacting or interdependent parts that produce determinate outcomes: a system of government or a judicial system, for example. It can also refer to networks or decision trees: betting systems, rail systems, or systems of belief. It can refer to a set of rules for classifying or communicating information: the metric system, the Linnaean classification system, a system of notation, or a system of signaling.

The last several types of systems have something in common with games. As Professor Jesper Juul has argued, games are more than just systems, broadly defined; they are what computer scientists call a “state machine.”⁹⁴ “Briefly stated, a state machine is a machine that has an *initial state*, accepts a specific amount of *input events*, changes state in response to inputs using a *state transition function* (i.e., rules), and produces specific outputs using an *output function*.”⁹⁵ Games perform all of these functions, according to their rules. The initial state of the game is specified by the rules as a particular arrangement of board and pieces, players and field, or deck of cards. The rules also define a set of permissible inputs: moves or plays.⁹⁶ The game changes state as a result of those inputs, again in ways defined by the rules. For example, when a player in tic-tac-toe moves by marking an “X,” the rules provide that the game state changes in a particular way: an “X” is placed on the grid, and it becomes the second player’s turn.⁹⁷ Finally, games provide outputs back to the players about how the game state is changed. In a simple game like tic-tac-toe, the state of the game is fully revealed to both players, but in other games, such as poker, the players may be given more limited information.

Games are thus a means of transforming a large but constrained set of inputs into a correlated and defined set of outputs. That is, for each input X in the proper form entered in state S, a game, via its rules, will produce a designated output Y and a transition to state S₁. While there are a large number of possible inputs to choose from, each input will, given the state the game is in, produce a determinate output. As it turns out, games share this feature with many of the types of “systems” listed above. A system of notation is a means of coding or transcoding words or other elements of language: for example, a shorthand system will identify one, and only one,⁹⁸ correct way of transcribing a particular word. The metric system transforms

⁹⁴ See JUUL, *supra* note 67, at 60. For an explanation of state machines in computer science, see BRAN SELIC, GARTH GULLEKSON & PAUL T. WARD, REAL-TIME OBJECT-ORIENTED MODELING § 8.2.1 (1994).

⁹⁵ JUUL, *supra* note 67, at 60.

⁹⁶ See *id.* at 63.

⁹⁷ See *id.* at 60 (“When you play a game, you are interacting with the state machine that is the game. In a board game, this state is stored in the position of the pieces on the board; in sports, the game state is the score *and* the players; in computer-based games, the state is stored in memory and then represented on screen.”).

⁹⁸ Some words may have alternative notations, just as there are alternative spellings in ordinary language. However, if there are too many alternative spellings, the system will break down.

a variety of measurements of certain quantities into a prescribed number of units of different types (e.g., meters for length, kilograms for weight, etc.). A betting system uses rules to match information about the cards in play to particular wagers. A judicial system uses laws and procedures to transform disputes into binding resolutions. A physical system follows the laws of physics in turning an initial state into subsequent states.

In other words, a system is a mechanism or set of rules for transforming a given range of inputs into particular outputs. It is, in essence, a type of look-up table. Provided with a certain input from a range of possible inputs, the look-up table provides a particular response, one that transforms the input in some way. It correlates information or actions on the one side to corresponding information or actions on the other. But we have not answered the question of whether that explains why games are not copyrightable until we figure out whether *that type of system* is the sort that copyright law excludes. So, what sorts of systems are uncopyrightable?

III. WHAT COPYRIGHT LAW SAYS ABOUT SYSTEMS

Section 102(b) of the Copyright Act bars copyright from extending to “any idea, procedure, process, system, method of operation, concept, principle, or discovery.”⁹⁹ Most courts and scholars have located the basis for the exclusion of games in § 102(b), if not in its literal terms, then at least somewhere in its penumbra. Section 102(b) is therefore the logical starting point for determining what categories of material are excluded from copyrightable material. This Part will begin by examining post-1978 case law interpreting the scope of § 102(b). This Part then examines the text of the statute itself in light of its legislative history. Finally, this Part looks to pre-1978 cases involving “systems” to glean the meaning of that term in particular.

A. *Current Case Law on “Systems”*

The initial difficulty with divining the meaning of any of the terms in § 102(b) is that court interpretation of that provision is in a severe state of disarray. Like games, § 102(b) is ill-understood and has not been the focus of much rigorous scholarly or judicial analysis.¹⁰⁰ Indeed, many courts

⁹⁹ 17 U.S.C. § 102(b) (2006).

¹⁰⁰ At least, not until very recently. Pamela Samuelson has attempted to rectify this problem with an article devoted specifically to determining the purpose and extent of the exclusions contained in § 102(b). See Samuelson, *supra* note 8, at 1923; see also Pamela Samuelson, *Questioning Copyrights in Standards*, 48 B.C. L. REV. 193, 195-96 (2007) (arguing that coding standards are uncopyrightable systems). There is some indication that her effort to recover the lost meaning of § 102(b) is already

simply ignore the text of § 102(b) altogether. That is, several courts have decided to simplify their interpretive task by reading § 102(b) as simply codifying the idea/expression dichotomy. Many of the modern cases involve numbering schemes for parts or services. For example, the Eighth Circuit in *Toro Co. v. R & R Products Co.*¹⁰¹ rejected a claim of copyright over the numbering system for lawnmower parts, but not because of § 102(b).¹⁰² The *Toro* court dismissed the district court's attempt to exclude the parts numbers as a "system."¹⁰³ Such a "literal application of the section's language," the court held, "cannot stand."¹⁰⁴ Instead, the *Toro* court read § 102(b) as "nothing more than a codification of the idea/expression dichotomy."¹⁰⁵ A sufficiently creative system would be copyrightable, the court concluded.¹⁰⁶ The problem with the *Toro* parts numbers, according to the Eighth Circuit, was that they were randomly assigned and thus lacked the necessary creativity.¹⁰⁷

Several courts have followed *Toro's* holding that § 102(b) does nothing other than codify the idea/expression dichotomy. For example, the Tenth Circuit has held that § 102(b) requires no more than filtering out abstract ideas.¹⁰⁸ According to another panel of the same court, protectable expression contained within a system or method of operation does not need

paying dividends. *See* R.W. Beck, Inc. v. E3 Consulting, LLC, 577 F.3d 1133, 1144 (10th Cir. 2009) (citing Samuelson, *supra* note 8, at 1923, 1944-52).

¹⁰¹ 787 F.2d 1208 (8th Cir. 1986). The *Toro* opinion was written by a senior Second Circuit judge, Judge Timbers, sitting by designation. *See id.* at 1209 n.*.

¹⁰² *Id.* at 1212.

¹⁰³ *Id.* (internal quotation marks omitted).

¹⁰⁴ *Id.*

¹⁰⁵ *Id.* at 1211. The *Toro* court relied in part on the legislative history of the 1976 Act for this conclusion. *See id.* at 1211-12 ("Section 102(b) in no way enlarges or contracts the scope of copyright protection under the present law. Its purpose is to restate . . . that the basic dichotomy between expression and idea remains unchanged." (alteration in original) (quoting H.R. REP. NO. 94-1476, at 57 (1976), *reprinted in* 1976 U.S.C.C.A.N. 5659, 5670) (internal quotation marks omitted)). As noted earlier, however, "idea" is often used in copyright law as a general term meaning all material uncopyrightable under one of the § 102(b) exclusions. Evidence that Congress was using the word in this broad sense can be found elsewhere on the same page of the legislative history, where Congress made clear that one intent behind § 102(b) was "to make clear . . . that the actual processes or methods embodied in [a computer] program are not within the scope of the copyright law." H.R. REP. NO. 94-1476, at 57, *reprinted in* 1976 U.S.C.C.A.N. 5659, 5670.

The *Toro* court likely drew its understanding of § 102(b) from the Nimmer treatise, which was edited by Melville B. Nimmer until his death in 1985. Nimmer had a dim view of categorical exceptions to copyright, and he believed that *Baker v. Selden*, 101 U.S. 99 (1879), had been sharply limited by *Mazer v. Stein*, 347 U.S. 201 (1954). *See* Samuelson, *supra* note 8, at 1956. Despite the seeming breadth of the exclusions in § 102(b), Nimmer read it as only denying copyright in abstract ideas. *See id.* at 1953.

¹⁰⁶ *See Toro*, 787 F.2d at 1213 ("A system that uses symbols in some sort of meaningful pattern, something by which one could distinguish effort or content, would be an original work.").

¹⁰⁷ *See id.*

¹⁰⁸ *See* Autoskill Inc. v. Nat'l Educ. Support Sys., Inc., 994 F.2d 1476, 1491 (10th Cir. 1993).

to be excluded under § 102(b).¹⁰⁹ And although the Third Circuit has never ruled directly on the question, a number of its judges appear to agree that creative systems are copyrightable and that the only inquiry under § 102(b) is whether the work has unprotectable ideas.¹¹⁰

The result of these cases is that many courts read the eight terms in § 102(b)—idea, procedure, process, system, method of operation, concept, principle, or discovery—as essentially eight instances of the word “idea.” This would make § 102(b) an even more redundant list than the order for six fish in a famous *Sesame Street* skit: “Fish, fish, fish, fish, fish, fish.”¹¹¹ And it has generated a welter of confusing opinions, as courts have attempted to fit uncopyrightable systems or processes under other types of exclusions, such as ideas, *scènes à faire*, or lack of creativity.

However, the solution is not as simple as recognizing that § 102(b) contains eight different terms. Even those courts that have taken the text of § 102(b) seriously have had difficulty interpreting it. For example, the Eleventh Circuit, noting that “copyright law is principally statutory,” looked to the text of § 102(b) as a source of exceptions in *Warren Publishing, Inc. v. Microdos Data Corp.*¹¹² There, the district court, which had found the plaintiff’s work to be copyrightable, made matters easier by explicitly identifying it as a “system.”¹¹³ The *Warren Publishing* court explained that while merely calling something a “system” doesn’t make it uncopyrightable, it does “*if the characterization is accurate.*”¹¹⁴ But the court then punted on the ultimate question of whether the work in suit was

¹⁰⁹ *Mitel, Inc. v. Iqtel, Inc.*, 124 F.3d 1366, 1372 (10th Cir. 1997) (disagreeing with the First Circuit’s exclusion of methods of operation in *Lotus Development Corp. v. Borland International, Inc.*, 49 F.3d 807, 816 (1st Cir. 1995), *aff’d per curiam by an equally divided Court*, 516 U.S. 233 (1996)). It is worth noting that the Tenth Circuit is fractured on this issue. Although *Autoskill* and *Mitel* followed *Toro*, other panels of the Tenth Circuit have held that functional material such as processes or systems are properly excluded under § 102(b), apparently ignoring intra-circuit precedent. *See, e.g.*, *R.W. Beck, Inc. v. E3 Consulting, LLC*, 577 F.3d 1133, 1144-45 (10th Cir. 2009); *Gates Rubber Co. v. Bando Chem. Indus., Ltd.*, 9 F.3d 823, 836 (10th Cir. 1993).

¹¹⁰ *See Southco, Inc. v. Kanebridge Corp.*, 390 F.3d 276, 288-89 (3d Cir. 2004) (en banc) (Becker, J., concurring) (distinguishing *American Dental Ass’n v. Delta Dental Plans Ass’n*, 126 F.3d 977 (7th Cir. 1997), because there the numbering system was creative); *id.* at 294 (Roth, J., dissenting) (suggesting that the only basis for exclusion is as an idea).

¹¹¹ *See* Steven Strogatz, *From Fish to Infinity*, N.Y. TIMES OPINIONATOR (Jan. 31, 2010, 9:30 PM), <http://opinionator.blogs.nytimes.com/2010/01/31/from-fish-to-infinity> (internal quotation marks omitted).

¹¹² 115 F.3d 1509, 1514 (11th Cir. 1997); *see also* *Lotus Dev. Corp. v. Borland Int’l, Inc.*, 49 F.3d 807, 815 (1st Cir. 1995) (excluding menu commands as a “method of operation” under § 102(b) (internal quotation marks omitted)).

¹¹³ *See Warren*, 115 F.3d at 1516. The plaintiff’s work was a catalog of cable systems, indexed by the “principal community” they served, which was evidently a novel and useful way to organize such listings. *Id.* at 1511-12, 1516.

¹¹⁴ *Id.* at 1514 n.13.

in fact a “system,” finding alternative grounds on which to base its opinion.¹¹⁵

Similarly, the Seventh Circuit has been particularly active in excluding functional aspects of expression from copyright protection.¹¹⁶ However, it too has had difficulty determining the precise meaning of each of the eight terms in § 102(b). In *Publications International, Ltd. v. Meredith Corp.*,¹¹⁷ the court held that a book of recipes was not protectable expression, but it was unclear why, calling the recipes alternately a “procedure, process, [or] system,” or perhaps an idea.¹¹⁸ In *American Dental Ass’n v. Delta Dental Plans Ass’n*,¹¹⁹ the Seventh Circuit grappled with whether a code of dental procedures constituted a “system.”¹²⁰ Judge Frank Easterbrook, writing for the court, began by asking: “[W]hat could it mean to call the Code a ‘system’?”¹²¹ As its only answer to that question, the *American Dental Ass’n* court noted that the code “does not come with instructions for use, as if the Code were a recipe for a new dish,” nor did it “facilitate monopoly of the subject-matter being described.”¹²² Implicitly, the court thus held that instructions or monopolization of a practical endeavor are the hallmarks of a system, but it did not positively define “system.”¹²³

In fact, no modern case defines precisely what is meant by the term “system” in § 102(b) or indicates how a “system” might differ from a “process,” “procedure,” or “method of operation.” Since Congress intended only to codify existing law in § 102(b), it is worthwhile to revisit older cases involving systems to determine what it was that was being excluded and to compare those systems to games.

¹¹⁵ Specifically, the court held that Warren’s list of community cable systems lacked originality because Warren attempted to list every community, without making any selection. *Id.* at 1517-19. Warren then identified “principal communities” by contacting each cable operator and collecting that information from them. *See id.* at 1519-20.

¹¹⁶ 1 HOWARD B. ABRAMS, *THE LAW OF COPYRIGHT* § 3:33, at 3-64 (2009).

¹¹⁷ 88 F.3d 473 (7th Cir. 1996).

¹¹⁸ *See id.* at 481 (alteration in original) (quoting 17 U.S.C. § 102(b) (2006)) (internal quotation marks omitted).

¹¹⁹ 126 F.3d 977 (7th Cir. 1997).

¹²⁰ *See id.* at 977.

¹²¹ *Id.* at 980. Delta Dental’s brief had not shed much light on this issue, noting only that the ADA had itself described the Code as a “system” and analogizing the Code to the Bluebook, which Delta Dental claimed was uncopyrightable. *See* Brief of Defendant-Appellee Delta Dental Plans Ass’n at 51-55, *American Dental Ass’n v. Delta Dental Plans Ass’n*, 126 F.3d 977 (7th Cir. 1997) (No. 96-4140).

¹²² *Id.* at 980-81.

¹²³ Similarly, the Second Circuit rejected the idea that a form listing nine categories to track in judging pitching performance were a “system”: “Kregos has not devised a system He does not present his selection of nine statistics as a method of predicting the outcome of baseball games.” *Kregos v. Associated Press*, 937 F.2d 700, 706 (2d Cir. 1991). The *Kregos* court thus seems to have concluded that “systems” are only things that issue predictions; forms that direct users to fill in selected types of facts for use in making their own judgments or predictions are not “systems.”

B. *The Origins of the Exclusion*

Section 102(b) had its origins in a long line of cases dating back to at least the Supreme Court's 1879 decision in *Baker v. Selden*.¹²⁴ A number of those cases, including *Baker* itself, involved what were described as "systems," which the courts held uncopyrightable. The "systems" in those cases bear considerable resemblance to "state machines": they are means for transforming inputted information into a different form. The history behind the exclusion of "systems" in § 102(b) thus confirms that games are "systems" as that term is defined in copyright law.

Baker v. Selden arose out of Charles Selden's attempt to obtain copyright protection for his system for double-entry bookkeeping.¹²⁵ He wrote a book in 1859 explaining his system, which contained in it a number of blank forms to be used in conjunction with the system.¹²⁶ W.C.M. Baker, another bookkeeper from Ohio, published his own book in 1867, setting forth a similar, but not exactly identical, system, using similar forms.¹²⁷ The Supreme Court held that Selden's copyright in his book did not extend to his system.¹²⁸ Selden's copyright gave him the exclusive right to his *explanation* of his system, but he could not prevent anyone from using the system itself; that was the exclusive domain of patent law.¹²⁹ And to the extent that forms similar to Selden's were needed in order to use his system, Selden could not prevent the copying of those either.¹³⁰

Selden's system allowed an auditor for a county government to track various accounts on a single page. An auditor, that is, would input financial transactions of various types, and by using the system and accompanying forms, that information would be transformed so that it was displayed back to the auditor in a comprehensible way.¹³¹ In other words, Selden's system acted like a "state machine," just like games do.

¹²⁴ 101 U.S. 99 (1879).

¹²⁵ See *id.* at 99-100. For excellent background on the case, see Pamela Samuelson, *The Story of Baker v. Selden: Sharpening the Distinction Between Authorship and Invention*, in *INTELLECTUAL PROPERTY STORIES* 159, 159-65 (Jane C. Ginsburg & Rochelle Cooper Dreyfuss eds., 2006). A number of scholars have expounded on *Baker*'s holding. See, e.g., Samuelson, *supra* note 8, at 1928-36; Lloyd L. Weinreb, *Copyright for Functional Expression*, 111 HARV. L. REV. 1149, 1171-76 (1998).

¹²⁶ *Baker*, 101 U.S. at 99-100.

¹²⁷ Samuelson, *supra* note 125, at 161.

¹²⁸ *Baker*, 101 U.S. at 107.

¹²⁹ *Id.* at 101-02.

¹³⁰ *Id.* at 103 ("And where the art it teaches cannot be used without employing the methods and diagrams used to illustrate the book, or such as are similar to them, such methods and diagrams are to be considered as necessary incidents to the art, and given therewith to the public; not given for the purpose of publication in other works explanatory of the art, but for the purpose of practical application.").

¹³¹ Unfortunately for Selden, it appears that Baker's system was even better at this than his was. See Samuelson, *supra* note 125, at 161-62.

Several post-*Baker* cases involved similar systems. For example, a number of cases denied copyrights in systems for the presentation of information, which was the sort of system involved in *Baker*. In *Aldrich v. Remington Rand, Inc.*,¹³² the plaintiff sold a “Tax Record System” to local governments for performing property revaluations for tax purposes, including sample forms for use with the system.¹³³ The court denied Aldrich’s claim that the defendants infringed his work by using some of the forms.¹³⁴ In *Burnell v. Chown*,¹³⁵ the plaintiff, in essence, devised a system to produce credit reports, using a key of five different letters to denote creditworthiness.¹³⁶ The court held that a competitor who used a similar system, with similar symbols, had not infringed.¹³⁷ “The most that can be claimed on behalf of the plaintiff is that the defendant has appropriated his scheme, device, conception, and idea for gathering and imparting this particular information.”¹³⁸ As the Second Circuit declared in another case, these cases hold that the copyright owner “has no monopoly upon information, or the purveying of information by a broad general method.”¹³⁹

Similarly, copyright protection does not extend to systems that are expressly designed to allow others to organize information. For example, in *Amberg File & Index Co. v. Shea Smith & Co.*,¹⁴⁰ the plaintiff devised “Amberg’s Directory System of Indexing,” which was essentially “a mechanism or device for the storage of letters so that they can be preserved and conveniently found afterward.”¹⁴¹ The court found the indexing system uncopyrightable because “[u]ntil the purchaser of a set of these ‘indexes’ commences to use the same, by putting written documents between the leaves, such indexes signify nothing.”¹⁴² Along the same lines are the blank forms cases: blank graph paper for temperature recording devices and blank to-do lists for use with personal organization systems are not copyrightable.¹⁴³

¹³² 52 F. Supp. 732 (N.D. Tex. 1942).

¹³³ *Id.* at 733 (internal quotation marks omitted).

¹³⁴ *See id.*

¹³⁵ 69 F. 993 (C.C.N.D. Ohio 1895).

¹³⁶ *See id.* at 993.

¹³⁷ *Id.* at 997-98.

¹³⁸ *Id.* at 997.

¹³⁹ *Guthrie v. Curlett*, 36 F.2d 694, 696 (2d Cir. 1929) (ruling that condensed freight tariff indexes were not infringed by similar indexes).

¹⁴⁰ 78 F. 479 (C.C.N.D. Ill. 1896), *aff’d*, 82 F. 314 (7th Cir. 1897).

¹⁴¹ *Id.* at 479-80.

¹⁴² *Id.* at 480.

¹⁴³ *See Brown Instrument Co. v. Warner*, 161 F.2d 910, 910-11 (D.C. Cir. 1947) (finding that blank charts for use in temperature and pressure recording devices were not copyrightable); *Taylor Instrument Cos. v. Fawley-Brost Co.*, 139 F.2d 98, 99-100 (7th Cir. 1943) (finding that blank charts for use in temperature recording devices were not copyrightable); *Januz Mktg. Commc’ns v. Doubleday & Co.*, 569 F. Supp. 76, 81 (S.D.N.Y. 1982) (finding that blank forms for maintaining to-do lists were not

Courts have also held systems of notation to be uncopyrightable. In *Perris v. Hexamer*,¹⁴⁴ the Supreme Court held that the author of a copyrighted map could not prevent the makers of other maps from using the same symbols to denote various features.¹⁴⁵ In *Brief English Systems, Inc. v. Owen*,¹⁴⁶ the plaintiff owned the copyright in several books and pamphlets setting forth “The Steno-Short-Type System,” which was “a system of shorthand which uses for its symbols or characters only the letters of the English alphabet and punctuation marks.”¹⁴⁷ The defendant published a book that taught a similar system.¹⁴⁸ The Second Circuit held that “[t]here is no literary merit in a mere system of condensing written words into less than the number of letters usually used to spell them out. Copyrightable material is found, if at all, in the explanation of how to do it.”¹⁴⁹ In *Freedman v. Grolier Enterprises, Inc.*,¹⁵⁰ the plaintiff claimed ownership over a notation system for evaluating hands in bridge, which he claimed was infringed by the defendants’ cards.¹⁵¹ The court held that the notation system was an idea and that putting the values on the cards was the only way of expressing it.¹⁵²

Although not always designated as “systems,” courts have excluded business and government plans from copyrightability as well. In *Long v. Jordan*,¹⁵³ the plaintiff claimed that his copyrighted description of a system for paying out pensions—the “Ray System”—was infringed by a California initiative that sought to establish such a system.¹⁵⁴ The Ray System involved placing redemption stamps on the back of a card as each payment was made.¹⁵⁵ Long sought to enjoin the state government from printing and distributing the text of the proposed constitutional amendment.¹⁵⁶ The court rejected the claim, holding that “a copyright on an exposition of a system of government cannot prevent the use of that system as intended.”¹⁵⁷ In *Conti-*

copyrightable). The *Taylor Instrument* court held that the charts in that case “neither teaches nor explains the use of the art. It is an essential element of the machine; it is the art itself.” 139 F.2d at 100.

¹⁴⁴ 99 U.S. 674 (1878).

¹⁴⁵ See *id.* at 676.

¹⁴⁶ 48 F.2d 555 (2d Cir. 1931).

¹⁴⁷ *Id.* at 555 (internal quotation marks omitted).

¹⁴⁸ *Id.* at 556.

¹⁴⁹ *Id.*; see also *Griggs v. Perrin*, 49 F. 15, 15-16 (C.C.N.D.N.Y. 1892) (ruling that there was no copyright in a system of stenography).

¹⁵⁰ 179 U.S.P.Q. (BNA) 476 (S.D.N.Y. 1973), *aff’d*, 495 F.2d 1367 (2d Cir. 1974) (unpublished table decision).

¹⁵¹ *Id.* at 477.

¹⁵² *Id.* at 478.

¹⁵³ 29 F. Supp. 287 (N.D. Cal. 1939).

¹⁵⁴ *Id.* at 287 (internal quotation marks omitted).

¹⁵⁵ *Id.* at 288.

¹⁵⁶ *Id.* at 287.

¹⁵⁷ *Id.* at 290.

ental Casualty Co. v. Beardsley,¹⁵⁸ Beardsley authored a pamphlet setting forth the “Beardsley Plan,” which enabled corporations to insure against the loss of stock certificates, including the necessary forms.¹⁵⁹ Continental, a competitor, obtained a declaratory judgment that it was entitled to use the form “for the function for which it was designed.”¹⁶⁰ *Crume v. Pacific Mutual Life Insurance Co.*¹⁶¹ involved a plan for reorganizing a bankrupt insurance company.¹⁶² The plaintiff claimed that an agreement published by the defendant (and apparently required by the California Insurance Commissioner) infringed on his plan.¹⁶³ The court dismissed the claim.¹⁶⁴

Courts have also excluded contests and betting systems from copyright protection. *Briggs v. New Hampshire Trotting & Breeding Ass’n*¹⁶⁵ involved the plaintiff’s brochure describing “a betting system whereby patrons selected winning horses for each of the seven consecutive races, from the second through the eighth race.”¹⁶⁶ The winnings were distributed among those who got the most right, as determined by IBM adding machines.¹⁶⁷ The court dismissed the action, citing the rule against protection of “sports, games, or similar systems.”¹⁶⁸ Other courts have refused to extend copyright in the description of a contest or quiz show to contests or quiz shows using the same format.¹⁶⁹

In all of these situations, the owners of a copyright in a form, description, or set of instructions were attempting to extend their copyright to material for which the *user* of the work provided the essential content, not its author. That is what made them systems. They were, without that input, empty shells, waiting to be filled. Selden’s system conveyed nothing about the finances of a county government until it was filled in. The Amberg

¹⁵⁸ 151 F. Supp. 28 (S.D.N.Y. 1957), *modified and aff’d*, 253 F.2d 702 (2d Cir. 1958).

¹⁵⁹ *Id.* at 30-31 (internal quotation marks omitted).

¹⁶⁰ *See id.* at 33, 45.

¹⁶¹ 140 F.2d 182 (7th Cir. 1944).

¹⁶² *Id.* at 182-83.

¹⁶³ *Id.* at 183.

¹⁶⁴ *See id.* at 184-85. Similarly, advertising formats have also been denied protection, usually being described as methods. *See Kaeser & Blair, Inc. v. Merchs.’ Ass’n*, 64 F.2d 575, 576-77 (6th Cir. 1933) (stating that a “system or method” of selling stationery was not copyrightable); *Gaye v. Gillis*, 167 F. Supp. 416, 417-18 (D. Mass. 1958) (denying copyright protection for blank coupons to sell dunning services); *S. S. White Dental Co. v. Sibley*, 38 F. 751, 752 (C.C.E.D. Pa. 1889) (stating that a “plan of advertising” artificial teeth through a numbered chart was not copyrightable); *Ehret v. Pierce*, 10 F. 553, 553, 555 (C.C.E.D.N.Y. 1880) (denying copyright protection for a sample card of paint chips).

¹⁶⁵ 191 F. Supp. 234 (D.N.H. 1960).

¹⁶⁶ *Id.* at 235.

¹⁶⁷ *Id.*

¹⁶⁸ *Id.* at 236-37.

¹⁶⁹ *See Richards v. Columbia Broad. Sys., Inc.*, 161 F. Supp. 516, 518 (D.D.C. 1958) (holding that the format for a quiz show was not protected); *Lewis v. Kroger Co.*, 109 F. Supp. 484, 485, 487 (S.D. W. Va. 1952) (finding that the plaintiff’s copyright in a description of a newspaper contest could not prevent the defendants from running similar contests).

index was a series of empty folders until it actually had something to index. Burnell's credit reporting system reported on nothing until credit histories were added. The Steno-Short-Type System stood by mute until there was a speech or deposition to transcribe. The Briggs betting system needed bettors and horse races to be implemented. All of that content was supplied during the use of the system, not by the system itself.

Games are systems in exactly the same way. A game, as sold, is only a game *form*; the content necessary for an *instance* of the game comes from the players. That is, the game form establishes the environment for play—the game space—and it defines permissible moves and the conditions for winning or drawing. But the game itself is supplied by the players. Games are systems in the same way that the excluded schemes in the cases above were systems, and it was that history that Congress drew upon in adopting § 102(b) of the Copyright Act.

There is still an unresolved question, however. Games are systems, but they also produce entertainment, just like other copyrightable works. Indeed, the Third Circuit and other courts have suggested that there may be such things as copyrightable systems.¹⁷⁰ Determining whether games are copyrightable thus requires tracing the boundaries of the § 102(b) exclusion.

C. “Systems,” “Processes,” and “Ideas” in § 102(b)

The games literature suggests that games are systems—in particular, a type of system known as a “state machine”—and the history of copyright law supports this conclusion. With this step in the argument behind us, it is worth returning to § 102(b) to determine to what extent systems can be distinguished from, on the one hand, the other exclusions in § 102(b), and on the other, copyrightable expression. It turns out that the exclusion of “systems” in § 102(b), as exemplified by games, performs a function that none of the other excluded categories perform; but the distinction between systems and expression is surprisingly difficult.

Section 102(b) bars copyright in “any idea, procedure, process, system, method of operation, concept, principle, or discovery.”¹⁷¹ Congress added it to the Copyright Act of 1976, as the legislative history states, in order to codify existing law, not to create new exclusions to copyrightability.¹⁷² The exceptions listed in § 102(b) fall into at least two

¹⁷⁰ See *supra* note 110 and accompanying text.

¹⁷¹ 17 U.S.C. § 102(b) (2006).

¹⁷² See H.R. REP. NO. 94-1476, at 57 (1976) (stating that § 102(b) was intended “to restate, in the context of the new single Federal system of copyright, that the basic dichotomy between expression and idea remains unchanged”), reprinted in 1976 U.S.C.C.A.N. 5659, 5670. As Samuelson notes, “[t]he legislative history does not reveal why these specific words of exclusion were chosen for § 102(b).

general categories: discerning between the specific expression of an idea and more abstract and general descriptions of the same (i.e., ideas, concepts, and principles); and distinguishing between copyrightable expression and useful practices (i.e., procedures, processes, systems, methods of operation, and discoveries). In other words, § 102(b) codifies the idea/expression dichotomy and the boundary between copyrightable and patentable subject matter.¹⁷³

The first problem with trying to analyze whether games fall under § 102(b) is that the precise meanings of the eight terms in § 102(b) are obscure. Several of the terms seem synonymous. This is particularly true for the first word in the list, “idea,” which is sometimes used as a catch-all term for all eight of the exclusions in § 102(b).¹⁷⁴ But it is also unclear exactly how “ideas” are distinct from “concepts” and “principles.” The dictionary definition of “idea” includes both “concepts” and “principles,” and copyright law often uses the term “idea” to mean any general statement or abstract truth. But “idea” is also often used in a narrower sense in copyright law to mean a highly generalized summary of a copyrighted work that captures the underlying thought being expressed.¹⁷⁵ As for “principle,” the legislative history of § 102(b) sheds some light on what Congress’s concerns may have been. Early reports indicate that Congress was concerned that “mathematical principles” would not be copyrightable.¹⁷⁶ Presumably, the § 102(b) exclusion for “principles” reflects that concern, and also probably encompasses scientific principles as well: rule-like statements about the fundamental properties of nature and mathematics, no matter how detailed.¹⁷⁷ The meaning of “concept” is unclear, but it could be

although all but two had been explicitly mentioned during the legislative debate.” Samuelson, *supra* note 8, at 1951.

¹⁷³ Section 102(b) may also include the fact/expression dichotomy, through its reference to “discover[ies].” See 17 U.S.C. § 102(b).

¹⁷⁴ See, e.g., Samuelson, *supra* note 8, at 1952 (noting the use of “[i]dea” in legislative history to mean all of § 102(b)’s exclusions (internal quotation marks omitted)).

¹⁷⁵ The legislative history indicates concern that such summaries not be included as copyrightable subject matter. Early in the revision effort, a key report specifically identified “plans,” “formats and synopses of television series and the like,” and “color schemes” as unprotectable. See H.R. REP. NO. 89-2237, at 43-44 & 44 n.1 (1966), *reprinted in* 11 OMNIBUS COPYRIGHT REVISION LEGISLATIVE HISTORY (George S. Grossman ed., 2001). For example, Gene Roddenberry evidently sold *Star Trek* to NBC by describing it as “‘Wagon Train’ to the stars”—that is, it would be a series that, like *Wagon Train*, featured the adventures of a single set of characters in a different location every week. E.g., Iain Blair, *Trek’s a Treat: Why Starship Enterprise Crew Stays Together*, CHL TRIB., Dec. 7, 1986, at L24 (internal quotation marks omitted). That synopsis of *Star Trek* is not itself protectable under copyright law—in other words, the *Star Trek* copyright does not extend to prevent all other science fiction television shows from using the same format.

¹⁷⁶ See H.R. REP. NO. 89-2237, at 43-44 & 44 n.1, *reprinted in* 11 OMNIBUS COPYRIGHT REVISION LEGISLATIVE HISTORY, *supra* note 175.

¹⁷⁷ See *id.*

a variant of “principle,” such as a theory that has not yet been well-established enough to be a “principle.”

Some cases appear to hold that games or game rules are uncopyrightable under one of these three exceptions because they are abstract. However, none of the three exceptions applies. Games and game rules are not “ideas” in the narrow sense; they are not general synopses of some larger, more detailed work. And although game rules might bear some superficial resemblance to the laws of nature or mathematics, they are not “principles,” in that game rules are completely synthetic and arbitrary. The purpose of keeping scientific laws and mathematical equations or proofs uncopyrightable is that they express truths about the world that, like facts, are essential building blocks for knowledge. Game rules have no such relationship to truth; they are manufactured out of whole cloth with the sole objective of producing entertainment, the same as any other art form.

Thus, if games are uncopyrightable under one of the existing exclusions in § 102(b),¹⁷⁸ it is because they are procedures, processes, systems, methods of operation, or discoveries. The last of these exclusions can be quickly eliminated: under either of the possible definitions of “discovery,” it is clear that games are not discoveries.¹⁷⁹ Less clear is whether games might be procedures, processes, or methods of operation. Although § 102(b) is said to delineate the boundary between patent and copyright, the terms used are evidently not borrowed directly from patent law. Patent law has long categorized inventions into four primary types: machines, manufactures, compositions of matter, and processes.¹⁸⁰ Section 102(b), on the other hand, uses three terms that are all interchangeable under patent law (i.e., processes, procedures, and methods), another term that originally encompassed all patentable inventions of any type (i.e., discoveries), and finally a term that doesn’t seem to directly correspond to any

¹⁷⁸ As Samuelson notes, it is not clear whether § 102(b) was intended to be an exhaustive list of exclusions from copyrightability, or merely an illustrative one. See Samuelson, *supra* note 8, at 1921 n.4. Commentators have gone both ways. See, e.g., William F. Patry, *Copyright and Computer Programs: It’s All in the Definition*, 14 CARDOZO ARTS & ENT. L.J. 1, 36-37 (1996) (exhaustive); Robert L. Bocchino Jr., Note, *Computers, Copyright, and Functionality: The First Circuit’s Decision in Lotus Development Corp. v. Borland International, Inc.*, 9 HARV. J.L. & TECH. 467, 477 (1996) (illustrative). If illustrative, it is possible that games fit within some unlisted exception to copyrightability. Samuelson herself concludes that even if games do not fall within one of the specified exclusions in § 102(b), the case law “is consistent with” the system, method, or process exclusions. Samuelson, *supra* note 8, at 1944. Given the conclusion of this Article that games are uncopyrightable systems, it is unnecessary to resolve this issue here.

¹⁷⁹ Games are not facts, or necessarily fact-based, thus ruling out the more modern meaning of discovery; nor are games necessarily one of the types of inventions not listed elsewhere in § 102(b): machines, manufactures, or compositions of matter. See 35 U.S.C. § 101 (2006).

¹⁸⁰ See *id.*

type of invention (i.e., systems).¹⁸¹ It seems clear that to the extent § 102(b) codifies the boundary between copyright and patent, it does so in terms that draw their meaning from somewhere other than patent law.¹⁸²

Even if the § 102(b) exceptions are read as ordinary words, rather than patent terms of art, the precise exceptions are still difficult to distinguish from each other. The ordinary dictionary definitions of “procedures” and “processes” are fairly close. However, there is a slight difference: a “procedure” connotes a series of steps to be undertaken by a human being following instructions, whereas a “process” can be something automated or naturally occurring.¹⁸³ Section 102(b) also bars copyright in “method[s] of operation,”¹⁸⁴ presumably methods of operating a machine or device. Although some games, such as computer games and some board games, involve something that might be described as a machine, it is hardly the case that all games involve machinery. Furthermore, even where a machine is involved, game rules do much more than instruct the player how to operate a machine; they also define legal moves and conditions of victory.¹⁸⁵ The bar against “methods of operation” would therefore not justify a prohibition on all copyright in games.

However, because games are comprised of rules—that is, instructions—it might seem more plausible that they are uncopyrightable processes or procedures. A “process” in patent law is a series of steps to accomplish a certain result.¹⁸⁶ Games might be thought of as such “processes,” namely, a series of steps necessary to produce entertainment for the players.¹⁸⁷ But there are two problems with this hypothesis. First,

¹⁸¹ Some patent cases involve what are described as “systems,” which typically refers to processes implemented in software on a machine. See 6 CHISUM, *supra* note 83, § 18.07[6][c][iv], at 18-1570 to -1572.

¹⁸² “Systems,” in the sense of state machines, are probably patentable as an element of a process, as that term—a series of steps producing a useful result—is used in patent law. See *NTP, Inc. v. Research in Motion, Ltd.*, 418 F.3d 1282, 1318 (Fed. Cir. 2005). Interacting with the system might be one step in the process, just like use of a machine might be a step in a process. But that does not mean that systems or machines are processes, or tell us what sorts of things are excluded by the use of the term “system” in copyright law.

¹⁸³ See WEBSTER’S NEW WORLD DICTIONARY OF AMERICAN ENGLISH 1072 (3d coll. ed. 1988) (defining procedure as “the sequence of steps to be followed” and process as “a continuing development involving many changes”).

¹⁸⁴ 17 U.S.C. § 102(b).

¹⁸⁵ *But see* *Jeffrey v. Cannon Films Inc.*, 3 U.S.P.Q.2d (BNA) 1373, 1380 (C.D. Cal. 1987) (finding that rules for an arm wrestling tournament were a method of operation).

¹⁸⁶ See *NTP*, 418 F.3d at 1318.

¹⁸⁷ It might also be thought that game rules identify a series of steps necessary to play the game, or perhaps to win. But if it is a necessary element for a process that it be directed at achieving some result, neither playing the game nor winning would seem to satisfy that condition. Playing the game is merely making moves permitted by the rules—in other words, following the steps identified by the process. Following the process cannot be the “result” that is achieved by following the process—that would be circular. “Winning” might seem more tangible, except that winning is defined by the game rules them-

thinking of a game as a process relies on too facile an analogy between game rules and instructions. As discussed above,¹⁸⁸ the rules of a game are not instructions for play in the same way that recipes are instructions for making a cake; they do not fully specify what occurs during play. Game rules are thus not a “process” or “procedure” for carrying on a game. Consider the game Scrabble. The rules provide the initial state of the game: two or more players, seven tiles per player randomly drawn from the fixed set of 100 tiles, and a procedure to determine who goes first. The rules then state that it is the first player’s turn, and they place some boundary constraints on what the player may do (e.g., he or she must place a word on the center square and may only use ordinary English words). But within those very broad constraints, the rules do not specify at all what word the player should put down. He or she is free to put down “it” or “tea” or “hate” or “tithe,” all from the same draw of seven tiles. The second player has even more freedom. If a computer were executing the Scrabble “process,” it would grind to a halt without further input.

Thus, although games have rules or instructions, those instructions do not provide a “series of steps” for the player to follow. Rather, they set limits on player actions, and they define what is inside those limits as permissible moves. That is, they establish the game-space, or “magic circle,” but they do not tell the player what to do inside of it. Indeed, exploring that space, by making moves in the game, is what it means to “play” the game.¹⁸⁹ The fewer options a player has, the less game-like a given activity becomes.

But there is an even deeper problem with classifying games as processes, one that points to a fundamental difficulty with all of the § 102(b) patentability exclusions. If “process” is broad enough to encompass games as methods of producing entertainment, then that exception would swallow forms of works that are clearly copyrightable. Two venerable forms of copyrighted works come in the form of instructions: sheet music and scripts for plays.¹⁹⁰ The notes, lyrics, and other notations on sheet music instruct musicians how to play the composition; a script instructs actors how to perform a play, giving them their lines and stage directions.¹⁹¹

selves. The game would then be a process for achieving an arbitrary result defined by the process itself. As both of these examples show, the end-state of the process must be defined in terms of some result external to the game in order for it to be a patentable process.

¹⁸⁸ See *supra* Part II.A.

¹⁸⁹ See JUUL, *supra* note 67, at 63.

¹⁹⁰ Copies of sound recordings and audiovisual works similarly carry instructions for appropriate playback devices.

¹⁹¹ It is true that sheet music or a script does not tell the performers absolutely everything they need to know to play a piece. Sheet music does not tell a trumpet player how to sound the various notes, how to play staccato or glissando, how fast *molto allegro* is, or precisely how softly to play at any given moment. But recipes contain similar lacunae—what is a “pinch”? How does one “fold,” or “whip”? What are chives? See 1 DONALD E. KNUTH, *THE ART OF COMPUTER PROGRAMMING* 6 (3d ed. 2d prtg.

If that is the case, then why are music and plays copyrightable? Even the terminology used to describe all three activities indicates similarity. Games, music, and dramatic works are all “played” by “players” who follow the instructions they are given. The Copyright Act clearly recognizes the play of music or a script as within the scope of the copyright owner’s exclusive rights—the right of public performance.¹⁹² Yet there is no general rule that music is not copyrightable or that plays are not copyrightable.

Copyright scholars have addressed this puzzle, to the extent they have addressed it at all, by adding a hidden distinction to § 102(b) that performs the work of distinguishing between copyrightable and uncopyrightable processes: § 102(b) bars copyright in processes that are purely functional. As Professor Dennis S. Karjala has described the dividing line:

Information is the subject matter of copyright—works that have no function other than to inform, entertain, or present an appearance to human beings. *Function* is the subject matter of patent—works that do have a function beyond informing, entertaining, or presenting an appearance to human beings, including methodologies for gathering, organizing, and presenting information accurately and efficiently.¹⁹³

That is, § 102(b) excludes a work based on its function. Works that convey information—in the form of education, entertainment, or aesthetics—are within the domain of copyright. Works that perform any other function are excluded.

By that logic, it appears as though games are not uncopyrightable after all. Although games are systems, they, like music and plays, have the function of entertaining their users. That is, games are systems that entertain, just like sheet music is a process that entertains. That would yield some unexpected results. If games are copyrightable just like music and plays, then that would mean that a public performance of the game—for example, playing the game in public—would infringe on the copyright. Playing chess in the park would be permissible, but only because chess is in the public domain. Playing Scrabble in the park would not be.¹⁹⁴

It turns out that the distinction drawn between copyrightable and uncopyrightable processes and systems is not quite adequate. Focusing on what it would mean to “perform” a game helps demonstrate where the line should be.

1997). Yet a recipe is widely recognized to be a procedure or process. *See, e.g., Publ’ns Int’l, Ltd. v. Meredith Corp.*, 88 F.3d 473, 481 (7th Cir. 1996).

¹⁹² *See* 17 U.S.C. § 106(4) (2006).

¹⁹³ Dennis S. Karjala, *Distinguishing Patent and Copyright Subject Matter*, 35 CONN. L. REV. 439, 524 (2003).

¹⁹⁴ Unless Scrabble has lost its copyright. *See* Bruce Boyden, *Thoughts on the Scrabulous Lawsuit, Part II: The Mystery of Alfred Mosher Butts*, PRAWFSBLAWG (Aug. 4, 2008, 12:43 PM), <http://prawfsblawg.blogs.com/prawfsblawg/2008/08/thoughts-on-t-1.html> (concluding that Scrabble’s author may have failed to comply with the 1909 Act’s notice requirement).

IV. PERFORMANCE AND PLAY

Part III concluded that games are systems, but that that alone is not enough to say that they are uncopyrightable. Music and plays are copyrightable processes, and games, music, and plays all bear some resemblance to each other. They can all be “played” by “players” following their instructions or rules. They are all conveyed by either processes or systems, the sole function of which, in each case, is to produce entertainment. Nevertheless, the traditional rule is that games are not copyrightable, while music and plays are. The reason is that the nature of the transmission of information from creator to audience is importantly different in a game as compared to music and plays. The copyrightable expression of a game does not extend to the gaming experience in the same way expression reaches the core of the musical or play-watching experience.

Understanding the difference between games and other media requires tracing that experience back to its source. That is, it requires a close examination of the difference between playing a game and playing a song or other copyrighted work. While playing a musical composition is a performance of that song, playing a game is not a “performance” of the game, even though the similar terminology would suggest that it is. The reason for this, however, remains unclear in the cases and the copyright literature.¹⁹⁵

Most of the cases involving non-electronic games have involved suits against the creators of competing works for infringement of the reproduction right.¹⁹⁶ However, at least a few courts have had occasion to consider whether playing a copyrighted game is a “performance” of the game. If so, then playing such a game in public without authorization from the owner would infringe on the owner’s copyright,¹⁹⁷ unless the player had a valid fair use defense.¹⁹⁸ The idea seems on its face implausible, and it received

¹⁹⁵ Lloyd L. Weinreb has suggested that the reason is mere path dependence: books and plays have traditionally been held to be copyrightable, and games and other materials have traditionally been held to be uncopyrightable. *See* Weinreb, *supra* note 125, at 1204-05. Although Weinreb’s insight is important in understanding modern copyright law, as this Article argues in Part IV, there is a deep doctrinal distinction at work here.

¹⁹⁶ *See* 17 U.S.C. § 106(1) (granting the copyright owner the exclusive right to reproduce the work). The other exclusive rights of a copyright owner under the current Act are to prepare derivative works, to distribute copies of the work to the public, to publicly perform the work (by means of digital audio transmission or otherwise), and to publicly display the work. *Id.* § 106(2)-(6).

¹⁹⁷ The display of the copyrighted pictorial or graphic elements of the game would not constitute an infringing public display of the work because of the “first sale” doctrine. *See id.* § 109(c) (“[T]he owner of a particular copy lawfully made under this title, or any person authorized by such owner, is entitled, without the authority of the copyright owner, to display that copy publicly . . . to viewers present at the place where the copy is located.”). While the first sale doctrine also applies to distribution, allowing the owner of a copy to transfer it to someone else, it does not apply to performance. *See id.* § 109(a).

¹⁹⁸ *See id.* § 107.

little attention before it arose with respect to video games.¹⁹⁹ In *Seltzer v. Sunbrock*, for example, Seltzer, the plaintiff, attempted to claim that the defendants' roller derbies were infringing public performances of the work contained in Seltzer's somewhat fictionalized version²⁰⁰ of the rules for his roller derbies.²⁰¹ The court rejected this claim for a number of reasons, among them that the running of a race in accordance with a set of rules is not a dramatic performance: "The mere fact that the race as staged is entertaining or thrilling or arouses great excitement cannot in itself change the essential nature of the composition so as to make it a drama."²⁰² Other than the race itself, there was no evidence that the defendants had copied any of the fictionalized elements of Seltzer's rules.²⁰³

More recently, the Ninth Circuit rejected the argument that game play is a performance, for reasons that are worth examining in detail. In *Allen v. Academic Games League of America, Inc.*,²⁰⁴ the plaintiff, Allen, was the author of several academic board games and the organizer of a tournament for high school students to play academic games, including his own.²⁰⁵ The individual defendants had formerly been associated with Allen but had split with him in order to organize their own competing tournament, under the

¹⁹⁹ One court reached the counterintuitive result that playing an arcade game was a public performance of the game. See *Red Baron-Franklin Park, Inc. v. Taito Corp.*, 883 F.2d 275, 279 (4th Cir. 1989). *Red Baron* was soon overturned by congressional statute. See Computer Software Rental Amendments Act of 1990, Pub. L. No. 101-650, § 803, 104 Stat. 5134, 5135. That measure was temporary and has since expired, to little fanfare. 2 NIMMER & NIMMER, *supra* note 5, § 8.15[I], at 8-207. As the Nimmer treatise notes, the bizarre result of *Red Baron* was that an arcade video game could not be used for its sole purpose without a license directly from the manufacturer. See *id.* The facts of the case may have influenced this result: *Red Baron* involved grey-market goods. See *Red Baron*, 883 F.2d at 277.

²⁰⁰ Seltzer distributed a pamphlet in connection with his races that contained a two-and-a-half page description of an imaginary race, with passages such as the following: "Here comes an ambitious youngster trying to steal a lap on the field. He is challenged by the others who increase their pace and make it impossible for him to accomplish his desire. He settles back in his original position, winded and flushed with excitement." *Seltzer v. Sunbrock*, 22 F. Supp. 621, 624 (S.D. Cal. 1938) (internal quotation marks omitted).

²⁰¹ See *id.* at 623.

²⁰² *Id.* at 630; see also *Seltzer v. Corem*, 107 F.2d 75, 77 (7th Cir. 1939) (adopting the court's conclusions in *Sunbrock*).

²⁰³ *Sunbrock*, 22 F. Supp. at 631. Furthermore, the court expressed doubt about the originality of Seltzer's description of and rules for a roller derby:

Were plaintiffs' contention to prevail in this case, might not the author of a copyrighted novel, containing a vivid and colorful description of one of the earlier football games, enjoin any future student body from employing the customary devices and patterns of the modern rooting section[?] As every enthusiast knows, the waving pom-poms, the quickly shifting color patterns, the intermission stunts, and in fact most of the much cherished atmosphere of college football has been associated with regattas, folk festivals, and outdoor sports since time immemorial. And does not the "brek-ek-ek-ex, co-ax, co-ax" of the college yell date back at least to the antiphonal chant of Aristophanes' *Frogs*?

Id.

²⁰⁴ 89 F.3d 614 (9th Cir. 1996).

²⁰⁵ *Id.* at 615.

name “Academic Games League of America (AGLOA).”²⁰⁶ AGLOA’s tournaments featured some of Allen’s games.²⁰⁷ Allen sued, claiming that playing his games in AGLOA tournaments constituted infringing public performances.²⁰⁸ Allen’s argument was simple: his games were copyrighted; the defendants’ tournaments featured contestants playing his games in public;²⁰⁹ and § 101 of the Copyright Act defines “perform” as “to recite, render, *play*, dance, or act” a work.²¹⁰ Playing Allen’s copyrighted work in public was therefore an infringement of his rights.²¹¹

Deciding the case on the briefs, the Ninth Circuit rejected Allen’s argument.²¹² The court first noted that the term “play” in § 101 “has generally been limited to instances of playing music or records” and that courts have not extended the definition to playing games.²¹³ “To do so would mean interpreting the Copyright Act in a manner that would allow the owner of a copyright in a game to control when and where purchasers of games may play the games,”²¹⁴ the court reasoned, which is of course the natural consequence of a public performance right. “[T]his court will not place such an undue restraint on consumers.”²¹⁵ That flat declaration, however, is merely a conclusion, not an argument. In support of it, the court offered only this: “Whether privately in one’s home or publicly in a park, it is understood that games are meant to be ‘played.’”²¹⁶

The meaning of this Delphic pronouncement is unclear.²¹⁷ Movies and CDs are meant to be played as well, but the owners of the copyrights in

²⁰⁶ *Id.*

²⁰⁷ *Id.*

²⁰⁸ *Id.* at 615-16.

²⁰⁹ *Id.* at 616.

²¹⁰ 17 U.S.C. § 101 (2006) (emphasis added) (internal quotation marks omitted).

²¹¹ *See Allen*, 89 F.3d at 616.

²¹² *See id.* The court noted an applicable fair use defense, but declined to rule solely on that basis. *See id.* at 617-18. AGLOA was a non-profit corporation, and the tournaments were held “for encouraging education among young students.” *Id.* at 615, 617. That alone would not establish fair use, but the court did not examine the argument in detail. *See id.* at 617. *But see* 2 NIMMER & NIMMER, *supra* note 5, § 8.14[B][2], at 8-190.1 n.34.4 (suggesting that the fair use argument was likely valid).

²¹³ *Allen*, 89 F.3d at 616 (internal quotation marks omitted).

²¹⁴ *Id.*

²¹⁵ *Id.* The Nimmer treatise criticizes the court for construing the meaning of “play.” *See* 2 NIMMER & NIMMER, *supra* note 5, § 8.14[B][2], at 8-190.1 n.34.4 (internal quotation marks omitted). Although the defendants apparently did not raise the argument, they had an excellent defense to any claim that they were performing a copyrighted literary work: § 110 of the Copyright Act permits “performance of a nondramatic literary . . . work . . . without any purpose of direct or indirect commercial advantage and without payment of any fee or other compensation for the performance to any of its performers, promoters, or organizers, if . . . there is no direct or indirect admission charge.” 17 U.S.C. § 110(4) (2006). However, Allen could have revoked their ability to host future tournaments featuring his games on written notice. *See id.* § 110(4)(B).

²¹⁶ *Allen*, 89 F.3d at 616.

²¹⁷ David Nimmer has suggested that the court was making an implied license argument: sale of a copyrighted board game may be thought to include an implied license to play it in public. *See* 2 NIMMER

those have public performance rights. Yet the court's statement appears to capture an ineffable truth about games. Although it is no linguistic accident that the noun "play" means a dramatic work and that the verb "to play" can either mean to perform a song, operate an entertainment device, or engage in a fun activity, there is a crucial difference between these four meanings. Playing a game is the way that the game is experienced. Watching a game or reading the rules, while possibly entertaining activities, are not the same as playing a game. Games are meant to be played in the same way that movies are meant to be watched and books are meant to be read. None of those things—playing a game, watching a movie, or reading a book—are performances.

"Playing" a movie or CD in public, or performing a play, is an act of communication. The operator or performers are engaged in an activity that is intended to transmit the expression in the work to third parties. When a movie or CD or play is performed in violation of the owner's rights, it is not the person apprehending the work—the viewer or listener—who is liable for infringement, but rather the person communicating the work—the theater owner or acting company. That is because the rights of public distribution, performance, and display regulate only the transmission of works from one person to another, and not the experience of the work itself. Games are meant to be played, and playing one does not violate any of the rights of a game's copyright owner.

This feature of copyright law is another example of what Professor Timothy Wu has called copyright's little-recognized "communications policy."²¹⁸ The policy outlined here, however, goes well beyond that

& NIMMER, *supra* note 5, § 8.14[B][1], at 8-190.1 n.34.4. But there are two problems with this argument as a rule for games generally. First, not every game designer might reasonably expect that his or her games will be publicly performed, such that failure to disclaim a license necessarily implies it. That is, not all games are typically played in tournaments. *See Allen*, 89 F.3d at 615 (stating that Allen conducted such tournaments himself). Second, an implied license can typically be defeated by making the limitation express. *But see Diamond v. Am-Law Publ'g Corp.*, 745 F.2d 142, 146, 148 (2d Cir. 1984) (finding that terms attached to a letter to the editor were ineffective).

Another alternative, suggested by a district court in rejecting an argument that playing a video game in a cyber-cafe was not a public performance, is that *Allen* held that "whether the performance is fee-based is an important factor in determining whether the performance is public." *Valve Corp. v. Sierra Entm't Inc.*, 431 F. Supp. 2d 1091, 1097 (W.D. Wash. 2004). This seems to be a strained reading of *Allen*, however, which appears to have held that game play is not a performance of any kind, no matter where it occurs. Furthermore, even if the *Allen* court did attempt to draw a distinction between fee-based performances and other performances, it is an unconvincing one. Absent a fair use defense or the exclusions in 17 U.S.C. § 110, a performance of a work "at a place open to the public or at any place where a substantial number of persons outside of a normal circle of a family and its social acquaintances is gathered" infringes whether or not a fee is charged for admission. *See* 17 U.S.C. § 101 (defining what it means to perform a work "publicly"). A vague sense of camaraderie will not ordinarily convert strangers into the "normal circle of a family and its social acquaintances."

²¹⁸ *See* Timothy Wu, *Copyright's Communications Policy*, 103 MICH. L. REV. 278, 279 (2004) (emphasis omitted).

delineated by Wu. Wu argues that while the core of copyright law addresses the incentives due to creators, the variegated exceptions and additions to the basic provisions of copyright law can only be explained as a form of “communications policy”—regulation of “competition among rival disseminators.”²¹⁹ Wu argues that the recent expansion of this policy beyond disseminators to end-users is a particularly troubling development.²²⁰ But if the argument of this Article is correct, a significant portion of the core of copyright law is based on a type of “communications policy”—policy governing when expression may be communicated to others and under what terms.²²¹ One of those terms is that the private experience of copyrighted works is beyond the scope of the owner’s rights.

There is expression in games, music, and plays, and all three media communicate that expression to their intended audiences. The difference between the three, however, is the connection between the expression that is contained, or “fixed,”²²² in the work and the intellectual experience of the audience. Music and plays encode and transmit a protected aesthetic or intellectual experience from author to audience. Games, however, do not transmit the game-playing experience; they merely create the conditions for it to occur. The game-playing experience arises out of the interaction between the players and the game. That experience is therefore not transmitted through the medium of the game materials; it emerges in game play. In other words, while the fixed expression in sheet music and scripts for plays “contains” the music or the play, the fixed expression in a game—the rules, the board, etc.—allows too much flexibility to actually “contain” any particular instance of a game.

This is true even though sheet music, scripts, and other works allow considerable flexibility in performance, as should be apparent to anyone who has ever seen different productions of *Hamlet* or compared Leonard Bernstein’s dirge-like version of “Lacrimosa” from Mozart’s “Requiem” to the faster pacing of other versions. Performers add their own contributions to a work during performance such that each performance of a work is somewhat different. Musicians may choose the tempo or add emphasis; actors supplement the dialog with delivery, facial expressions, and body

²¹⁹ *Id.* (emphasis omitted).

²²⁰ *See id.* at 356-57. Similarly, Julie E. Cohen has argued that copyright law has a fast-disappearing public/private distinction. *See* Julie E. Cohen, *Comment: Copyright's Public-Private Distinction*, 55 CASE W. RES. L. REV. 963, 963-64 (2005). This includes, among other things, a “right to read anonymously.” *See* Julie E. Cohen, *A Right to Read Anonymously: A Closer Look at “Copyright Management” in Cyberspace*, 28 CONN. L. REV. 981, 982 (1996). The argument here is somewhat different. It is not that the acts in private are insulated from copyright liability, or that users have any right to prohibit copyright owners from learning their identities, but rather that the scope of copyright does not reach the mental apprehension of a work, whether that occurs publicly or privately.

²²¹ Only the reproduction right and the derivative works right lack explicit restriction to the public sphere. *See* 17 U.S.C. § 106.

²²² *See id.* § 101 (internal quotation marks omitted) (defining when a work is “fixed”).

language. Variations in performance are not the only potential source of variation in the experience of a work. The individual members of the audience may approach a given work differently, deriving their own meaning from the expression, such that each person's experience of the work is slightly different.

Nevertheless, the aesthetic or intellectual experience in each instance is substantially similar; Bernstein's "Lacrimosa" is still "Lacrimosa," and most listeners will identify it as such. The reason is that the contributions of performers and audience members to the experience are tightly constrained by the expression that is fixed in the work itself. A work of authorship conveys specific information in a set pattern or sequence. For example, a musical work sets out the notes to be played in a certain order. "Lacrimosa," for example, conveys the melody in the soprano part through the notes "A," "F," "D," "D," "C#," and every performance of it will contain something similar.

Games are different. The core of a particular instance of a game is composed of the moves or plays that the players make on that occasion. But those moves or plays vary considerably from one game to the next, depending on such factors as player strategies and random events. One game of chess is not like another game of chess.²²³ The sequence of events can vary considerably. A chess player may choose any of twenty different initial moves, leading to hundreds of possible openings and nearly an infinite number of possible games. The only similarity in the game creator's expression between two game sessions is in the elements of the game that were used—the rules sheet, the game board, the pieces, or the cards. In other words, the game's constituent elements may be copyrightable, but the game itself is not.

The most evident difference between games, music, and plays is in how they are typically communicated to the audience. Music and plays are normally communications *through* the "players" *to* an audience of other people. There are exceptions, of course; someone may purchase sheet music purely to play at home. In that case, it would be a private performance and beyond the scope of the copyright.²²⁴ But the basis for the protection of music and plays—as well as books, films, art, and all the rest—is that the author is given the exclusive right to communicate those expressions to the public, through reproduction, adaptation, public distribution, public performance, and public display. With games, the communication of the

²²³ For example, Spassky-Fischer game 3 of the 1972 World Chess Championship was a far different game than Spassky-Fischer game 13. Intriguingly, some chess players have attempted to claim copyright in their games. 2 WILLIAM F. PATRY, PATRY ON COPYRIGHT § 4:20, at 4-77 (2010). Players do not own any copyright in their games in play either. *See infra* note 225.

²²⁴ Alternatively, a musical performance might be for the purposes of a competition in which the primary purpose of the performance is to judge the performer's skill, rather than appreciate the aesthetic qualities of the work performed. But the point here is that these are atypical examples.

game designer's expression, in the rules and game equipment, largely ends with the players, who do not convey the game designer's expression further. The moves that the players make within the constraints of the game are not typically designed to communicate with an audience, but rather to achieve a goal: winning the game.²²⁵ That is, game play is not expressive.²²⁶ A game session is therefore not a "performance" of the expression in the game, public or private; it is outside the scope of copyright altogether. That is the purpose of the black-letter rule.

There is a deeper point here, one that clarifies the distinction between copyrightable material and uncopyrightable systems or processes. Judges and scholars alike have drawn that line by distinguishing between expression that informs or entertains and functional expression.²²⁷ But informing or entertaining is itself a function, and a work or a machine that has those functions may still be an uncopyrightable system or process. For example, a software DVD player contains a number of uncopyrightable processes, even though the purpose of that player, and the ultimate purpose of the processes, is to entertain. Other systems, such as the code of procedures in *American Dental Ass'n v. Delta Dental Plans Ass'n* or the blank form in *Kregos v. Associated Press*,²²⁸ have the purpose of informing. Drawing the line between informational and non-informational functions allows back into copyright a large amount of material that was previously excluded.

The problem arises from looking at works in the abstract, as either functional or expressive outside of any context of use. Copyrighted works are communications. The key element that is missing from these analyses is therefore to look at *both ends* of the communication and to determine whether the expression that is transmitted from author to user is the primary source of meaning. In other words, is the material in question directly communicating some message to the user? Or is it being used instrumentally to perform some other task? Systems or procedures for which the user himself supplies the critical informational or creative inputs

²²⁵ This is why players do not have a copyright in the game-in-play, either—like sports athletes, their activity does not bear meaning; it is engaged in primarily to win the game, not to impart information or aesthetic values to the audience. See *Nat'l Basketball Ass'n v. Motorola, Inc.*, 105 F.3d 841 (2d Cir. 1997) (finding sports games not copyrightable).

²²⁶ Again, counterexamples are possible. A game session might be part of an avant-garde artistic performance. See, e.g., Matthew Mirapaul, *Take That, Monica! Kapow, Chandler!*, N.Y. TIMES (Mar. 3, 2003), <http://www.nytimes.com/2003/03/03/arts/design/03MATT.html> (performance of "Quake/Friends"). But such endeavors are an atypical use of a game.

²²⁷ See, e.g., Karjala, *supra* note 193, at 524; Weinreb, *supra* note 125, at 1204-05; see also GOLDSTEIN, *supra* note 46, § 2.3.1.1, at 2:30 (including as uncopyrightable ideas "the principle or method of operation that makes a work useful if it is a functional work"). *Baker v. Selden* and its progeny generally drew a line between expression that teaches an art and expression that is used in the art itself. See *Baker v. Selden*, 101 U.S. 99, 102 (1879).

²²⁸ 937 F.2d 700 (2d Cir. 1991).

are uncopyrightable—for example, games, sports,²²⁹ systems of notation, blank forms, or codes of dental procedures, the purpose and principal use of which is merely to translate dental procedures into five-digit codes.²³⁰

CONCLUSION

Games are uncopyrightable systems. The age-old doctrinal rule against the copyrightability of games is not an anachronism; it is deeply embedded in the structure of copyright law. Copyright excludes systems where the informational or entertainment value that is extracted from the work is supplied by the users, not the author. Games, like other systems, establish the arena for use—the “magic circle”—but the experience of play is supplied by the players, not the game designer. Copyright has long excluded such “state machines” from its protection. It is only relatively recently, in the confusion wrought by software and widespread litigation over commercial guides, that this doctrine has come under significant scrutiny.

The deep roots of the rule against the copyrightability of games have important consequences not just for games, but for all systems. For games, in particular video games, it means that any simple analogy between games and other media should be rejected. Even video games, despite being comprised of software, audiovisual elements, plots, graphics, and characters, nevertheless have an uncopyrightable core: the actual play of the game. For systems, the rule against the copyrightability of games demonstrates why systems are generally uncopyrightable and why that term has special significance. The term is not merely a synonym for “idea,” or “process.” Systems are shells into which users pour meaning. While they may contain expression themselves, that expression is there merely to facilitate the meaning added by the user. Copyright properly excludes them.

²²⁹ See *Nat'l Basketball Ass'n*, 105 F.3d at 846 (“Sports events are not ‘authored’ in any common sense of the word.”).

²³⁰ See *Am. Dental Ass'n v. Delta Dental Plans Ass'n*, 126 F.3d 977, 977 (7th Cir. 1997). Under this analysis, *American Dental Ass'n* and *Kregos* were wrongly decided.