THE ADAPTATION OF COPYRIGHT LAW TO VIDEO GAMES

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Video games are big business. The earliest games appeared in the early 1970s, and by 1981, a single game, "Pac-Man," had generated \$150 million in sales over a thirteen month period and \$1 billion in revenues for arcade operators in the course of a year. Sales of another game, "Scramble," totaled \$20 million over a two month period during 1981. Games played in arcades have become so popular that the manufacturers have felt constrained to protest, perhaps too much, that the games are not "reprehensible diversions for idlers."

As the video game business has grown, video game competition has grown as well. "Galactic Invaders" wars with "Galaxian"; "Asteroids" and "Meteors" collide; "Pac-Man" contends with "K.C. Munchkin." Video game owners and licensees are eager to stake out their market shares, resorting in part to suits and threats of suits to achieve their business goals. One video game purveyor, Atari, actually fielded a nationwide advertising campaign warning that it "registers the audiovisual works associated with its games," that it "considers its games proprietary," and that it will "vigorously [enforce] these copyrights."

Despite the hopes of Atari and its kind that the courts will protect their market penetration, video games themselves are in many ways perversely unsuited to traditional forms of legal protection, particularly protection against copyright infringement. The owner of the copyright

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¹ One of the first video games was "Pong," which was introduced in 1972. Washington Post, Mar. 11, 1982, at DC1 (District Weekly), col. 1.

² See Atari, Inc. v. North American Philips Consumer Elecs. Corp., 2 COPYRIGHT L. REP. (CCH) ¶ 25,363, at 17,045-46 (N.D. Ill. Dec. 4, 1981), rev'd, 672 F.2d 607 (7th Cir.), cert. denied, 51 U.S.L.W. 3258 (U.S. Oct. 4, 1982).

³ See Wall St. J., Mar. 12, 1982, at 25, col. 3.

⁴ See Stern Elecs., Inc. v. Kaufman, 669 F.2d 852, 854 (2d Cir. 1982).

⁵ Lippman, Warner's Atari Video Games are a Rocketship to Riches, Washington Post, Nov. 8, 1981, at F1, col. 1.

⁶ See cases discussed infra text accompanying notes 85-90, 106-22, 124-42.

⁷ See the Atari advertisement appearing in the November 1981 issue of Creative Computing. CREATIVE COMPUTING, Nov. 1981, at 99. Despite the amount of litigation on copyright in video games, suprisingly little has been written on the subject. However, a useful overview of the subject, including a detailed discussion of the interplay of the games and the computer software used to operate them, is Jones, Video Game Litigation and the 1976 Copyright Act: The Idea of Games, the Expression of Aliens and the Underlying Computer Software, 1 J. COPYRIGHT, ENTERTAINMENT AND BOOK LAW 17 (1982).

in a popular game such as Pac-Man may be as jealous of its method and pattern of play as he is about the particular colors and shapes of the game's "gobbler" and "ghost monsters." Furthermore, creation of the game's method of play may involve significant creativity of the type the Copyright Act is intended to protect. But affording protection to the game's method of play is, at least superficially, inconsistent with venerable principles of copyright law, in particular, those stating that it does not protect "games," "methods of operation," "ideas," and "utilitarian" aspects of pictorial works. The limits of copyright protection

The distinction between "ideas" and "expressions of ideas" is found in § 102(b) of the Copyright Act, which declares: "[i]n 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." 17 U.S.C. § 102(b) (1976 & Supp. V 1981). By implication, only the expression of ideas, of methods of operation, and the like receive protection. The policy that copyright does not protect ideas is a vestige of an historically much broader exception to copyright protection. See infra notes 216-25 and accompanying text. See generally B. KAPLAN, AN UNHURRIED VIEW OF COPYRIGHT, 1-38 (1967) (noting, at 14, that copyright once included only the exclusive right to copy the original text and did not include any right to derivative works).

Like a theorem of geometry, the proposition that copyright protects only the expression of ideas has corollaries. One is that copyright protects the design of a utilitarian work only to the extent that the design incorporates "pictorial, graphic, or sculptural features that can be identified separately from, and are capable of existing independently of, the utilitarian aspects of the article." 17 U.S.C. § 101 (1976 & Supp. V 1981). A second is that copyright does not protect games. See 1 M. NIMMER, NIMMER ON COPYRIGHT § 2.18[H][3] (1982) (citing Chamberlin v. Uris Sales Corp., 56 F. Supp. 987 (S.D.N.Y. 1944), aff'd, 150 F.2d 512 (2d Cir. 1945)); see also Morrissey v. Procter & Gamble Co., 379 F.2d 675 (1st Cir. 1967); Affiliated Enters., Inc. v. Gruber, 86 F.2d 958 (1st Cir. 1936). In practice, this seems to mean that copyright does not inhere in the rules for a game, although the more arbitrary aspects of the game, such as the graphics and pictorial design of a board game, may be afforded copyright protection. See infra text accompanying notes 20-27. One rationale for the dogma is that the rules of a game are its idea and copyright does not protect ideas, but only their expression. An alternative formulation, probably derived from Baker v. Selden, 101 U.S. 99 (1879), is that the rules of a game are "utilitarian" and therefore outside the scope of copyright protection. See generally 1 M. NIMMER, supra, § 2.18. Related to this is the view that protection for a game's method of play or rules would require a patent. See 1 M. NIMMER, supra, § 1.08[E], at 1-55 to 1-56. Although unusual, patent protection for a game is not unheard of. The Parker Brothers Company originally protected its rights in the game Monopoly by means of a patent. See Anti-Monopoly, Inc. v. General Mills Fun Group, 611 F.2d 296, 299

⁸ See *infra* text accompanying notes 124-42 for a more detailed description of Pac-Man and its comparison with the similar game K.C. Munchkin.

⁹ See infra text accompanying notes 212-15, 246-49; Copyright Act of 1976, 17 U.S.C. §§ 101-810 (1976 & Supp. V 1981). The Constitution empowers Congress to grant authors and inventors monopolies to "promote the Progress of Science and useful Arts..." U.S. CONST. art. 1, § 8, cl. 8. But the Constitution requires such monopolies to be "for limited Times." Id. If the author's monopoly over a copyrighted work or patented invention were not limited, it would stifle the very progress it is designed to foster. In the case of patents, Congress has chosen to limit severely their duration—a patent lasts only 17 years—while permitting the patent to preempt all other appropriation of the same "invention," no matter how expressed. See 35 U.S.C. § 154 (Supp. V 1981). The duration of copyright protection is very long—more than the life of a man. See 17 U.S.C. § 302 (1976 & Supp. V 1981) (for works created on or after January 1, 1978, copyright endures for the author's lifetime plus 50 years, unless the work is a work for hire or is an anonymous or pseudonymous work, in which case it endures for 75 years from the date of creation, whichever is less). Nevertheless, the scope of copyright protection does not extend any further than the expression of ideas found in the copyrighted work. See infra note 10.

must therefore be stretched if they are to serve the interests of video game proprietors.

Against the backdrop of the blackletter law that "copyright does not protect games," this paper will review recent decisions in which courts wrestled for the first time with copyright protection for video games.¹¹ It will be seen that the early decisions swing widely between cases in which courts disregarded or paid only lip service to the established dogmas, resulting in extreme overprotection for the games, and other cases in which courts applied the blackletter rules so unbendingly that they provide little or no protection for the games. It will be argued that the courts' difficulty in finding a good fit between copyright law and the facts in video game cases is the direct result of three pitfalls of copyright adjudication: the surprisingly persistent fiction that "ideas" and "expresions" may be distinguished a priori without examining the context in which the subject works are created and the policies underlying copyright protection; the use of copyright to remedy trademark infringement and other forms of unfair competition; and the use of the "ordinary observer test" as a prescription for copyright remedies rather than as a criterion for infringement. Some suggestions will be made for avoiding these pitfalls, both in video game cases and elsewhere. Based on the courts' struggle to adjust copyright law to video games, some conclusions will also be drawn about the process by which law reshapes

⁽⁹th Cir. 1979).

¹¹ All video games are based on complicated computer programs, usually embedded in a microprocessor chip. It is possible to copy a computer-based game by copying the underlying program. In Data Cash Sys., Inc. v. JS&A Group, Inc., 628 F.2d 1038 (7th Cir. 1980), for example, the plaintiff alleged infringement of copyright in a computer program capable of playing chess. The court held that copyright in the program had been lost under the Copyright Act of 1909 by failure to place a copyright notice on the microprocessor chip embodying the program. *Id.* at 1042-44. However, it is also possible to replicate significant features of a video game without copying the program used by the copyright holder to operate the game. As the court said in *Stern Elecs., Inc. v. Kaufman*:

[[]Registering the program] would not have prevented a determined competitor from manufacturing a "knock-off" of "Scramble" that replicates precisely the sights and sounds of the game's audiovisual display. This could be done by writing a new computer program that would interact with the hardware components of a video game to produce on the screen the same images seen in "Scramble," accompanied by the same sounds. Such replication is possible because many different computer programs can produce the same "results," whether those results are an analysis of financial records or a sequence of images and sounds.

⁶⁶⁹ F.2d 852, 855 (2d Cir. 1982) (discussing copyright registration of video game "Scramble"). The underlying computer program may be protected by one or more of copyright, trade secret law, or (arguably) a patent. See Rilee, The Protection of Property Rights in Computer Software, 19 PUB. ENT. ADVERT. & ALLIED FIELDS L.Q. 265, 269 (1980); Jones, supra note 7, at 22-26, 44-48. A discussion of the various means for protection of the underlying program is beyond the scope of this Article. All of the video game cases discussed in the text involve alleged infringement of copyright in a video game without alleged infringement or conversion of the copyright holder's rights (if any) in the computer program used to operate the game. Cf. Williams Elecs., Inc. v. Artic Int'l, 685 F.2d 870, 872, 876-77 (3d Cir. 1982) (infringement of computer program alleged).

itself in a new environment.

I. BACKGROUND—VIDEO GAMES COMPARED WITH "LEADING CASES" ESTABLISHING THE BLACKLETTER LAW THAT COPYRIGHT DOES NOT PROTECT GAMES

"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. For example, in Chamberlin v. Uris Sales Corp., 12 the plaintiff claimed copyright in a game called "Acy-Ducy" and unsuccessfully attempted to enjoin the sale of the defendant's similar game. The proof showed that "the game, with some variations, is the old Maskee game of India, taught to plaintiff by his grandmother, when he was eight years of age."13 The plaintiff alleged that he had added a few new twists to the old game, but these few twists did not persuade the court that he deserved credit for an original work of authorship.¹⁴ Furthermore, the court doubted whether the similarity of the defendant's rules and board to the plaintiff's proved that the defendant had copied the plaintiff's game, because each party's rules and board "applied to a well known game played by many for many years."15 Thus, the court's holding could be explained on either of two grounds sufficient in themselves-that the game was not an original work of authorship or that copying had not been proven-without reaching the question whether copyright can extend to a game under circumstances when these other elements of infringement are proven.

Another venerable game case is Affiliated Enterprises, Inc. v. Gruber. In Gruber, the "game" was a very simple promotional device used to attact patrons to movie theaters and other establishments by offering prizes selected on the basis of names and numbers drawn out of a receptacle. In denying relief, the court did not even reach the infringement issue because the plaintiff had failed properly to plead copyright infringement. In Court also dismissed the plaintiff's closely related unfair competition claim, commenting that protection of such an elementary principle for the distribution of prizes would grant "a mo-

 ¹² 56 F. Supp. 987 (S.D.N.Y. 1944), aff'd, 150 F.2d 512 (2d Cir. 1945), cited in 1 M.
 NIMMER, supra note 10, § 2.18[H][3], at 2-212 n.69.
 ¹⁸ 56 F. Supp. at 988.

¹⁴ See id. ("the parts claimed by plaintiff to be original with him have not been shown to be such.").

¹⁶ 86 F.2d 958 (1st Cir. 1936), *cited in* 1 M. NIMMER, *supra* note 10, § 2.18 [H][3], at 2-212 n.70.

¹⁷ See 86 F.2d at 959.

¹⁸ See id. at 961.

nopoly to the plaintiff, preventing any other person from entering the field."¹⁹ This case is often cited for the proposition that copyright does not protect games, but at most, the case holds that an action for unfair competition will not lie for copying an artless commercial gimmick.

Despite the limitations of these "leading" cases, the principle that copyright does not protect games has embedded itself in the law, subject to one major exception-graphic and pictorial aspects of games (such as the visual designs of game boards and playing cards) are said to be copyrightable, as long as their copyright does not create a monopoly on the "method of play."20 An example of a recent case exemplifying the method-of-play/nonessential graphics distinction is Durham Industries, Inc. v. Tomy Corp.²¹ Among other things, the case involved counterclaims by Tomy that Durham's game "Mickey Mouse Peanut Putter" infringed Tomy's copyright in a game called "Pass the Nuts." The court found that Pass the Nuts and Mickey Mouse Peanut Putter were "mechanically identical and structurally similar," each involving the use of push-buttons to move an object from starting point to goal.²² However, the court described Durham's artwork for each game as "totally different" from Tomy's.23 Tomy's Pass the Nuts was "designed to make it appear as if a bear, a rabbit, a monkey and a squirrel are attempting to throw an acorn from the ground up to the top of a tree."24 By contrast, Durham's Mickey Mouse Peanut Putter "features Mickey Mouse, Minnie Mouse, Donald Duck and Pluto engaged in a game of golf."25 Tomy argued that its copyrights protected the "sculpture" of each game, but the court rejected this argument, holding that Tomy had failed to identify any "sculptural" features which were not also utilitarian.26

Cases such as *Durham Industries*, *Chamberlin*, and *Gruber* lend themselves readily to the distinctions between ideas and expressions (or games and their graphics) drawn by the statutory and blackletter copyright law. A first characteristic shared by the rules and methods of play of the games in these leading cases is that they either were in the public

¹⁹ Td

²⁰ 1 M. NIMMER, supra note 10, § 2.18[H][3].

^{21 630} F.2d 905 (2d Cir. 1980).

²² Id. at 914.

²³ Id. By analogous reasoning, the court also concluded that Durham's game "Mickey Mouse Star Ship" had not infringed copyright in Tomy's "Drive Yourself Crazy." Id.

²⁴ Îd.

²⁵ Id.

²⁶ Id. at 914-15. See 17 U.S.C. § 101 (1976 & Supp. V 1981) (definition of "Pictorial, graphic and sculptural works") ("the design of a useful article [can be protected as such a] pictorial, graphic, or sculptural work only if, and only to the extent that, such design incorporates pictorial, graphic, or sculptural features that can be identified separately from, and are capable of existing independently of, the utilitarian aspects of the article.").

domain or displayed a dismally low level of originality. Chamberlin is the most extreme example, because the copyright holder in that case failed completely to show any original work of authorship in the "Acy-Ducy" game he sought to protect. Lack of originality characterizes the games in the other leading cases as well. Using a steering wheel to direct a toy car along a road, using a series of levers to push an object toward a goal, and offering prizes on the basis of names or numbers selected out of a receptacle are such elementary ideas that one might question whether they constitute "original works of authorship" appropriate for protection under the Copyright Act.²⁷

A second characteristic is that, unlike the methods of play, the graphic elements in these games do reflect originality. Examples are the animals in Pass the Nuts and the familiar Walt Disney figures in Mickey Mouse Peanut Putter. Combining this with the lack of originality found in the games' rules, it is easy to conclude that copyright protection should extend to the games' graphics, but not to their methods of play.²⁸

A third characteristic, related to the first, is that the plaintiffs in the leading cases failed to show (and, indeed, probably could not show) that they had made substantial investments in the games they sought to protect. One guesses that thinking up a lottery based on names and numbers picked out of a receptacle or inventing Pass the Nuts required little more than a few minutes of the author's time. The Copyright Act does not require any significant investment as a prerequisite to copyright protection. However, most plaintiffs in infringement cases seek injunctive relief, which requires a showing of irreparable harm. With good reason, courts routinely consider the size of the investment a plaintiff stands to lose in assessing the question of irreparable harm.²⁹ An injunction in effect confers a long-term monopoly³⁰ for the copyrighted work and any "substantially similar" work;31 a court would therefore be reluctant to issue an injunction unless the plaintiff can show a substantial investment of time or money or both. As a practical matter, therefore, the size of a plaintiff's investment figures importantly in many copyright infringement actions.

²⁷ See 17 U.S.C. § 102(a) (1976 & Supp. V 1981) ("Copyright protection subsists . . . in original works of authorship fixed in any tangible medium of expression"). For a discussion of the relevance of originality to copyright, see infra notes 246-49 and accompanying text.

²⁸ See supra note 26 (quoting the distinction made in the Copyright Act at 17 U.S.C. § 101 (1976 & Supp. V 1981) between the graphic and the utilitarian aspects of useful articles).

²⁹ See, e.g., Atari, Inc. v. North American Philips Elecs., Inc., 672 F.2d 607, 620 (7th Cir.), cert. denied, 51 U.S.L.W. 3258 (U.S. Oct. 4, 1982).

³⁰ See supra note 9.

³¹ For a discussion of "substantial similarity," see generally *infra* note 75 and *infra* text accompanying notes 232 & 289-302.

A fourth characteristic, best seen in *Durham Industries*, is that the games in these leading cases easily lend themselves to, and become paradigms for, the seemingly self-evident distinction between the games' "utilitarian" aspects, including their methods of play, and their more arbitrary and "pictorial" features. In Tomy's and Durham's games of moving objects toward goals using levers, for example, one can describe the way the games are played without referring to the bears, rabbits, and Disney cartoon characters Tomy and Durham employed to add interest and appeal to the simple structure of the games.

Video games place great pressure on the statutory and blackletter formulations because they have none of the above characteristics. Take first the question of originality in the games' methods of play.³² The very idea of a video game did not exist until only a very few years ago,³³ and the games' methods of play have become extremely complicated. The *Durham Industries* court described Pass the Nuts in three sentences totalling sixty-four words.³⁴ In *Atari, Inc. v. North American Philips Consumer Electronics Corp.*³⁵ the appellate court's description of the video game "Pac-Man" required six paragraphs totalling more than 700 words,³⁶ and its description of the competing game, "K.C. Munchkin" required at least equal verbal space.³⁷ Although not discussed explicitly in *North American Philips*, it was implicit that substantial portions of the games' methods of play were not in the public domain and were invented out of whole cloth by their authors.³⁸

An additional distinction between video games and the games in the leading cases is that the authors of video games invest at least as much of their talent and originality in the creation of new rules and methods of play as in the games' more arbitrary audiovisual effects. For this reason, the graphics/rules-of-play distinction that appears in the context of video games may save the chaff while discarding the wheat—it would protect the occasionally mundane aspects of the games such as the shapes of their characters and the beeping sounds they emit while throwing the games' original and intriguing rules into the public

³² This Article is concerned primarily with nonmimicking video games such as Pac-Man, K.C. Munchkin, and Galaxian, all of which are described *infra* text accompanying notes 85-90, 124-42. Such games should be distinguished from video versions of public domain games such as baseball and basketball. For video versions of the latter games, originality in the basic rules of play is obviously lacking.

³³ One of the first video games was introduced in 1972. See supra note 1.

³⁴ See 630 F.2d at 914.

⁸⁵ 672 F.2d 607 (7th Cir.), cert. denied, 51 U.S.L.W. 3258 (U.S. Oct. 4, 1982).

³⁶ See id. at 610-11.

³⁷ See id. at 611-13.

³⁸ See the lower court's discussion of the method by which the author created K.C. Munchkin. 2 COPYRIGHT L. REP. (CCH) ¶ 25,363, at 17,047-48 (N.D. III. Dec. 4, 1981).

³⁹ See id.

domain.

A third distinction is that video games can be costly and time consuming to create. Atari invested more than \$1.5 million in "licensing, developing, and advertising its 'Pac-Man' home video game." In Stern Electronics, Inc. v. Kaufman, the district court found that "[d]evelopment of a new game requires substantial investment and takes between eight months to a year." Just as the cost of creation is substantial, the windfall to a successful infringer can be shocking. In Stern Electronics, for example, the plaintiff had \$20 million in sales during the period from March 1981 to May 1981. The defendant, who was able to sell its "knock-off" game for \$650 less per game than the plaintiff, threatened to divert to itself a significant portion of these lucrative sales. Such substantial investments by the copyright holders and potential windfalls for the infringers generate powerful equity arguments for granting speedy and broad injunctive relief to the copyright holders.

A final distinction between video games and the games in the leading cases is that in many video games the rules of play are partially disguised (from a copyright standpoint) in the games' audiovisual elements. One of the rules of Pac-Man, for example, is that the "gobbler" may consume "monsters" if the "monsters" are blue. Without careful analysis of the game, one would describe the color of the monsters as a graphic element of the game, rather than as part of a rule of play. Similarly, the district court in North American Philips described K.C. Munchkin as utilizing in its play "a practically infinite number of mazes," appearing on a videoscreen. The mazes are certainly "graphic," but as the lower court had noted, they affect "play tactics and technique."

⁴⁰ Id. at 17,046.

^{41 523} F. Supp. 635 (E.D.N.Y. 1981), aff'd, 669 F.2d 852 (2d Cir. 1982).

^{42 523} F. Supp. at 638.

⁴⁸ See id.

⁴⁴ Id. An illegal copying of a video game is "known in the trade as a 'knock-off.' " 669 F.2d at 855. The district court described counterfeit models as "knock-ups," rather than "knock-offs," perhaps confusing illicit reproduction in the biological and computer programming fields. The slip was rectified by the court of appeals, which otherwise affirmed.

⁴⁵ North American Philips, 672 F.2d at 611.

^{46 2} COPYRIGHT L. REP. (CCH) ¶ 25,363, at 17,046; see also 672 F.2d at 611 n.1 (describ-

ing "an almost indefinite variety of mazes.").

⁴⁷ 2 COPYRIGHT L. REP. (CCH) ¶ 25,363, at 17,046. The Copyright Act proscribes relief for "sculptural" features that cannot be "identified separately from, and are capable of existing independently of, the utilitarian aspects of the article." 17 U.S.C. § 101 (1976 & Supp. V 1981) (definition of "Pictorial, graphic, and sculptural works"). If video games were considered graphic works, and if the rules of play were considered "utilitarian" for purposes of the Copyright Act, then copyright protection of video games could be very limited indeed. Cf. 1 M. NIMMER, supranote 10, § 2.18 [H][3]. However, courts invariably characterize video games as audiovisual works rather than as graphic works. See, e.g., North American Philips, 2 COPYRIGHT L. REP. (CCH) ¶

In sum, strong equities favor the video game copyright holder; originality is found in the games' rules, and a video game's rules tend to be imbedded in its graphics. As will be seen, this combination of factors resulted in early and surprisingly broad protection for copyright in video games.

II. CASES APPLYING COPYRIGHT LAW TO VIDEO GAMES

A. Technical Considerations⁴⁸

Before addressing the interesting question of the scope and nature of copyright protection for video games, it will be necessary to discuss briefly the more dreary issues related to the statutory requirements of fixation and registration. These issues include whether copyright inheres in the game itself or in the computer program generating the game and how one goes about registering a copyright claim.

It has become virtually a requirement of sound legal practice for defendants in video game cases to include in their pleadings the argument that "the original work of authorship is the computer program" which directs play of the game, 49 and not the game itself. This argument has been uniformly unsuccessful. Every court addressing the issue has held that video games are entitled to copyright protection as audiovisual works independent of the underlying programs. 50 In Stern Electronics, Inc. v. Kaufman,51 for example, the Second Circuit held that the "visual and aural features of the audiovisual display are plainly original variations sufficient to render the display copyrightable even though the underlying written program has an independent existence

^{25,363,} at 17,045; see also cases cited infra note 50; Copyright Act § 102(a)(6), 17 U.S.C. § 102(a)(6) (1976 & Supp. V 1981) (subject matter of copyright, "motion pictures and other audiovisual works"). Section 101 of the Copyright Act provides that:

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

¹⁷ U.S.C. § 101 (1976 & Supp. V 1981). Moreover, unlike the definition of pictorial works in § 101 of the Copyright Act, 17 U.S.C. § 101 (1976 & Supp. V 1981), § 102 of the Act, 17 U.S.C. § 102 (1976 & Supp. V 1981) does not require the expression of an idea to be "capable of existing independently of" the idea itself. But see infra note 170 and text accompanying note 231.

⁴⁸ The issues of fixation and deposit requirements discussed in this section appear in more

detail and from a different standpoint in Jones, supra note 7, at 27-35.

Atari, Inc. v. Amusement World, Inc., 547 F. Supp. 222, 226 (D. Md. 1981).

See, e.g., Stern Elecs., Inc. v. Kaufman, 669 F.2d 852, 856-57 (2d Cir. 1982); Amusement World, 547 F. Supp. at 226-27; Midway Mfg. Co. v. Dirkschneider, 543 F. Supp. 466, 479-80 (D. Neb. 1981); see also supra note 47 (citing sections of the Copyright Act pertaining to audiovisual works).

⁵¹ 669 F.2d 852 (2d Cir. 1982), aff'g 523 F. Supp. 635 (E.D.N.Y. 1981).

and is itself eligible for copyright."52 The court of appeals also noted that the defendants' argument overlooked the fact that original authorship occurred when "[s]omeone first conceived what the audiovisual display would look like and sound like,"58 rather than at the later point when the program was written.54

A second refrain added to most defendants' pleadings is the argument that the audiovisual displays in video games lack the requirement of "fixation" because the sequence of sounds and images varies each time the game is played, depending upon the player's actions.⁵⁶ This defense has also been unavailing. The court in Stern Electronics found that "the repeated appearance of the same sequence of numerous sights and sounds in each play of the game defeats" the argument based on the player's participation.⁵⁷ In Atari, Inc. v. Amusement World, Inc.⁵⁸ the district court found the fixation requirement satisified by the game's printed circuit board, "since the 'work,' the audiovisual presentation, can be communicated from the printed circuit board with the aid of the video game's display screen."59 In Amusement World, the court summarily rejected a closely related challenge to video game copyrightability. The defendants argued that a "video tape of one game sequence" is not a "complete copy" of the work for purposes of the deposit requirements of the Copyright Act. 60 In rejecting this argument, the court rea-

^{52 669} F.2d at 856.

⁶⁴ The copyright holders in Stern Electronics did not register the computer program that operates the game, probably for two reasons. First, registration of the program would not protect the game because "it would not have prevented a determined competitor from manufacturing a 'knock-off' of 'Scramble' that replicates precisely the sights and sounds of the game's audiovisual display . . . by writing a new computer program . . . to produce on the screen the same images . . . accompanied by the same sounds." 669 F.2d at 855. Second, most owners of computer programs attempt to protect them as trade secrets because copyright does not protect the sequence of instructions to a computer which constitutes the program's value. See Comment, Copyright Protection for Computer Programs, 47 TENN. L. REV. 787, 797-98, 802-03 (1980). An essential element of a tort action for misappropriation of a trade secret is that the information be a secret not within the public domain, and the deposit required for copyright registration can constitute a disclosure inconsistent with such secrecy. See Warrington Assocs., Inc. v. Real-Teim Eng'g. Sys., Inc., 522 F. Supp. 367, 368-69 (N.D. Ill. 1981). But see Williams Elecs., Inc. v. Artic Int'l, Inc., 685 F.2d 870 (3d Cir. 1982) (instance in which copyright holder registered both audiovisual effects and program underlying a game; copyright protection given to the underlying computer program). See generally Jones, supra note 7, at 46-48.

^{55 17} U.S.C. § 102(a) (1976 & Supp. V 1981).

⁵⁶ See, e.g., Stern Elecs., 669 F.2d at 855-56.

⁸⁷ Id. at 856. The videotapes used for copyright deposit were by necessity tapes of particular plays of the game, because the actual sequence of images and sounds, and even the game's duration, vary each time the game is played depending upon the actions taken by the player. See id. at ' 855; see also Williams Elecs., 685 F.2d at 873-75; Midway Mfg. Co. v. Artic Int'l, Inc., 2 COPY-RIGHT L. REP. (CCH) ¶ 25,337, at 16,888 (N.D. Ill. June 2, 1981) ("When plaintiff applied for its copyright, it submitted two video tapes of the game Galaxian being played.").

⁵⁸ 547 F. Supp. 222 (D. Md. 1981). ⁵⁹ Id. at 226.

⁶⁰ Id.; see 17 U.S.C. § 408 (1976 & Supp. V 1981).

soned that the videotape is "alternative identifying material" which is an appropriate deposit, "[g]iven the bulkiness and cost of the actual video game"62

Although the courts' decisions on the foregoing issues seem unexceptionable, a more subtle question related to the concept of derivative works may lurk behind the issue of fixation. The video tape of a single play of a game such as Scramble is comparable to the video tape of a performance of a play. Each performance of a play will be somewhat different, depending as it does on the actors' performances, just as the play of a video game depends on the player's moves. If the performance is fixed in a tangible medium such as a film or videotape, it may be considered a derivative work which under the Copyright Act is separate from the underlying script. 63 Copyright in the derivative work is limited to the original elements in the derivative work not found in the original work.⁶⁴ Registration of a work is a prerequisite to suing for its infringement, 65 and one might question whether registration of the limited original elements in a particular play of the game-a derivative work—provides a sufficient basis on which to sue for infringement of the unregistered underlying work. It is impossible to register every possible play of a game—the number is probably infinite—and the alternative of registering the computer programs which operate the games is unpalatable for the games' owners because it could jeopardize their protection of the programs as trade secrets. 66 Furthermore, as the Stern Electronics court of appeals noted, 67 registration of the program might not prevent the creation of similar audiovisual displays using different computer programs.

These dilemmas may have academic interest, but the purpose of copyright registration is to facilitate, not impede, the enforcement of copyrights. For this reason, it would be inconsistent with the scheme of the Copyright Act to imperil all protection for the games because of the logical impossibility of "fixing" and registering anything more than an example of a play of a game. The games are undeniably works of authorship and creativity to which copyright ought to accord some protec-

^{61 37} C.F.R. §§ 202.20(d), 202.21 (1982).

⁶² 547 F. Supp. at 227. The court did not inquire whether these "identifying materials" identified a derivative work—namely the performance of the game by a particular player. For another case rejecting a defendant's argument on the fixation and deposit issues, see Williams Elecs., Inc. v. Artic Int'l, Inc., 685 F.2d 870, 873-75 (3d Cir. 1982).

⁶³ See 17 U.S.C. § 103 (1976 & Supp. V 1981).

⁶⁴ See 17 U.S.C. § 103(b) (1976 & Supp. V 1981); 1 M. NIMMER, supra note 10, § 3.04 (Scope of Protection for a Derivative or Collective Work).

⁶⁵ See 17 U.S.C. § 411 (1976 & Supp. V 1981).

⁶⁶ See supra note 54.

⁶⁷ See 669 F.2d at 855.

tion. As long as the registered materials provide a sufficient foundation on which to base a finding of substantial similarity between the copyrighted and accused works, objections to the precise form of registration (that the tape of a play of the game is a derivative work, that it does not constitute a "fixation" of the game itself, and the like) descend to the level of quibbles and have been quite properly rejected by the courts. The Amusement World court brushed aside these technicalities with an elegant rationale: it found that the tape of a play of a game should be considered "alternative identifying materials" sufficient to meet the registration requirements.⁶⁸

There is, however, an important qualification to the Amusement World rationale. If the deposited tapes were insufficient to provide a basis for comparing the allegedly infringed work with the accused work, then the action for infringement would fail, not because of a defect in fixation or registration, but because the registrant would not be able to prove substantial similarity between the copyrighted and accused works. It is to the more substantive matter of the assessment of substantial similarity between video games that we will now turn.

B. Cases Finding Infringement

Of the earliest decisions applying copyright law to video games, the leading example is the district court opinion in *Stern Electronics*, *Inc. v. Kaufman.*⁶⁹ The plaintiff, Stern, held an exclusive North and South American sublicense for the video game "Scramble."⁷⁰ The district court described Scramble as follows:

Stern's video game, "Scramble"... presents on a screen a series of images projected by a cathode ray tube which depicts a space-ship simultaneously trying to navigate a mountainous airspace, destroy enemy fuel depots, evade deadly ground fire, and prevail in any aerial dogfight, while at the same time watching carefully over a diminishing fuel supply. In essence, the work is a movie in which the viewer participates in the action as the fearless pilot controlling the spaceship.⁷¹

Like other video games, Scramble had been registered with the Copyright Office as an audiovisual work, using a videotape of the game to satisfy the deposit requirements of the Copyright Act.⁷²

⁶⁸ See 547 F. Supp. at 226.

^{69 523} F. Supp. 635 (E.D.N.Y. 1981), aff'd, 669 F.2d 852 (2d Cir. 1982).

⁷⁰ Id. at 637. The game had been created by a Japanese corporation, Konami Industry Co., Ltd. Id.

⁷¹ Id. at 638-39.

⁷² See 669 F.2d at 854; 17 U.S.C. § 407(a) (1976 & Supp. V 1981). For a discussion of the

One of the defendants, Omni Video Games, Inc., marketed a competing video game called "Scramble 2."⁷⁸ The district court compared the two games as follows:

At the hearing, this court viewed a videotape of plaintiff's "Scramble" and defendants' "Scramble 2." The sequence of images and sounds that appears on the screen when the game has started — the "play mode" — is virtually identical in the two games. The sequence of images that appears on the screen when the game is not being played — the "attract mode" — is slightly different. The Omni game's attract mode uses different wording than Stern's and begins in a different phase. These differences in the attract mode certainly indicate that the games are not identical, but the two games are substantially similar."

Based on its finding of substantial similarity,⁷⁵ the district court found a probability that Stern would succeed on the merits and entered an order granting Stern sweeping injunctive relief. The court preliminarily enjoined Omni "from infringing in any manner plaintiff's copyright in the audiovisual work entitled 'Scramble.' "⁷⁶ The court also impounded "all of [the] defendants' 'Scramble 2' video games or any other copies of plaintiff's 'Scramble' audiovisual work that infringe plaintiff's copyright and are under defendants' control."⁷⁷ Finally, the court found that the defendants had infringed Stern's trademark rights in the mark "Scramble" and enjoined the defendants from further use of that mark.⁷⁸ From a defendant's point of view, the preliminary relief was calamitous.

Considering the potency of its remedies, the district court's decision on the nature and scope of Stern's copyright in the game Scramble is less than convincing. The court failed completely to address the question whether the similarity it saw between "Scramble" and "Scramble 2" was the necessary consequence of their being based on the same idea, employing the same method of play. In particular, the court did not inquire whether any video game about the trials and tribulations of

Copyright Act registration and deposit requirements in the video game context, see supra notes 48-68 and accompanying text.

⁷⁸ See Stern Elecs., 523 F. Supp. at 637.

⁷⁴ Id. at 639

⁷⁶ A work which is not identical to a copyrighted work can still infringe the copyrighted work if the two works are "substantially similar." See 3 M. NIMMER, supra note 10, § 13.03[A]. See also infra text accompanying notes 232 & 289-302. The Stern court of appeals did not reach the issue of substantial similarity. See 669 F.2d at 857.

^{76 523} F. Supp. at 641-42.

⁷⁷ Id. at 642.

⁷⁶ See id. Although the first person to use a trademark generally has prior rights on the mark and Omni had been first to use the mark "Scramble," the court found for Stern on the ground that Omni's prior use had not been in good faith. See id. at 641; see also 669 F.2d at 857.

a spaceship moving through enemy territory would necessarily be at least as similar to Stern's game as Scramble 2 was. If so, then there would be a strong argument that Stern was improperly seeking to protect the idea of a game involving a "space-ship" in enemy territory. The court based its holding that the games were substantially similar on its impression that the two games were similar in appearance rather than on an analysis of the difficult problem of applying the idea/expression distinction in the video game setting.⁷⁹

Other early cases finding copyright infringement of video games posed similar issues of substantial similarity, and the courts' opinions in those cases contained analogous failures to address the idea/expression issue. For example, in Atari, Inc. v. Armenia, Ltd., 80 plaintiff Atari charged that the defendants' video game "War of the Bugs" infringed Atari's copyright of its game "Centipedes." Concluding that the two games were substantially similar, the court acknowledged that the similarity between the two games did not extend to "the color and shape of the objects and so on." The points of similarity the court found were in such aspects as how the "worms" "travel" and how the "shots" are "fired," elements that could easily be characterized as "methods of operation" for purposes of section 102(b) of the Copyright Act. 83

This finding might have led to the conclusion that Armenia had

⁸⁰ 2 COPYRIGHT L. REP. (CCH) ¶ 25,328 (N.D. III. Nov. 3, 1981). The opinion, which is published as the transcript of a decision rendered from the bench, draws an interesting comparison between biological categories and the levels on which the two games were similar:

I may say, if I may make a little homely example, if I were a biologist and the machines were animals, belonged to the animal kingdom in place of being machines and belonged to the material world, shall we say—and I were a biologist and there was a controversy concerning homeds [sic], I would have to find that both of these machines where homo sapiens; in other words, they were both, at least members of the same type or species.

I think I would have to go further — I know I would have to go further from all of the evidence in front of me and find that they belonged to the same family.

I would even have to go further but not as far as counsel for the plaintiff says — they are not identical twins. In fact, they are not twins at all, but, in my judgment, they are brothers.

Id. at 16,845. The court concluded:

And having examined all of the evidence, as I have said, I find that the plaintiff has shown, first, that there is substantial similarity between the accused device or devices and the plaintiff's device or machine, or whatever you wish to call it, and so similar that the court in viewing them, except for the color and the shape of the objects and so on, they are very similar [sic].

Id.

⁷⁹ See 523 F. Supp. at 639; see also infra text accompanying notes 211-15; cf. Amusement World, 2 COPYRIGHT L. REP. (CCH) ¶ 25,347, at 16,961-62 ("[I]t is not enough to observe that there are a great number of similarities in expression between the two games. It is necessary to determine whether the similar forms of expression are forms of expression that simply cannot be avoided in any version of the basic idea").

⁸¹ Id.

⁸² Id.

⁸³ See 17 U.S.C. § 102(b) (1976 & Supp. V 1981).

copied only the methods of operation for Atari's Centipedes, implying that no action for copyright infringement should lie.⁸⁴ As in Stern Electronics, however, exactly the opposite occurred. The Armenia court found for the plaintiff without even attempting to draw a distinction between the games' methods of play on the one hand and their more arbitrary graphic elements on the other. By failing to distinguish the games' rules from their graphics, the court's decision enjoining Armenia from selling War of the Bugs could be interpreted as granting Atari a long-term monopoly on bug games, just as Stern Electronics appears to grant Stern an equally long-term monopoly on spaceship games.

In other instances, allegations of video game infringement did not engage as vividly the problem of distinguishing idea and expression. In Midway Mfg. Co. v. Dirkschneider,85 the plaintiff alleged infringement by the defendants of three games at once: "Galaxian" (by the defendants' "Galactic Invaders" and "Kamikaze III"), "Pac-Man" (by "Mighty Mouth") and "Rally-X" (by "Rally-X").86 The court found that "[a] comparison of the defendants' games and the plaintiff's games shows that the games are virtually identical."87 In support of this result, the court provided a convincing recitation of identical features, descending even to such particulars as the way the wings of Galaxian's and Galactic Invaders' aliens "extended upward in a stationary position" as the aliens "swoop[ed] down on the defense ship."88 As in Stern Electronics, the Dirkschneider court also found a likelihood that defendants had infringed plaintiff's trademarks.89 The court found that nonfunctional features of Midway's games, such as the shape and appearance of the characters in Midway's games, had acquired a secondary meaning so that "the ordinary consumer viewing the attract mode would likely think the game being advertised was the plaintiff's."90

A different form of infringement was alleged in Midway Manufacturing Co. v. Artic International, Inc., 91 and, correspondingly, the court's holding shows a different sort of overbreadth. Defendant Artic

⁸⁴ See supra note 10 and accompanying text.

⁶⁵ 543 F. Supp. 466 (D. Neb. 1981).

se See id. at 472-77. The Dirkschneider court found fixation in the games' printed circuit boards, see id. at 480, and found the Copyright Act's deposit requirement satisfied by Atari's deposits of videotapes of "each of its games in their attract and play modes," id. at 480-81. Presaging Amusement World, Dirkschneider also recognized that ideas are not copyrightable, but found that "[t]he plaintiff's copyrights cover the plaintiff's audiovisual expression of various game ideas [including] the distinctive color and design of the space ships and other players, as well as the sounds accompanying the playing of the games." Id. at 480.

⁸⁷ Id. at 482.

⁸⁸ Id.

⁸⁹ See id. at 484-90.

⁹⁰ Id. at 488.

⁹¹ 2 COPYRIGHT L. REP. (CCH) ¶ 25,337 (N.D. Ill. June 2, 1981).

allegedly marketed a speed-up kit for plaintiff Midway's video game "Galaxian." Artic moved for summary judgment on the ground that it had "not copied plaintiff's work or induced others to copy that work." Midway countered that "an infringement arises regardless of whether defendant itself has copied the protected work" and that "the sale of the speed-up kits enables others to make and perform unauthorized alterations of plaintiff's copyrighted material." Midway's theory was that playing Galaxian with the speed-up kit produced visual images "substantially similar to the visual images originally copyrighted," thus "creating an unauthorized derivative work." Midway did not allege that it marketed or intended to market any similar speed-up kits.

To approach this issue, the court examined at length the Copyright Act's policies of rewarding individuals for their "unique creative efforts" and of providing "an incentive for individuals to engage in artistic endeavors by forbidding any other person from copying their original expression of ideas." The court omitted to mention the countervailing policy of limiting the scope of the protected rights so that other authors are not crowded out of arenas for the exercise of their creative efforts. In its opinion denying the defendant's motion for summary judgment, the court said:

As noted, the copyright law is designed to reward creative and artistic endeavors. It gives the author the exclusive right to distribute copies of that work and make derivative works from the original. If defendant's device is designed and used solely to modify plaintiff's visual image, then plainly defendant's device would only have value because of plaintiff's particular copyrighted audio visual work. Defendant, thus, by selling its device reaps the benefits of plaintiff's artistic endeavor. Such conduct would be violative of

⁹² See id. at 16,884, 16,890-92. Midway also alleged that Artic sold "electronic devices that are intended to simulate Midway's Galaxian and Pac-Man games." Id. at 16,844. The court's opinion dealt, inter alia, with Artic's motion for summary judgment, and therefore assumed, for purposes of that motion, that Midway's allegations were true.

⁹³ Id. at 16,890.

⁹⁴ Id. The issue raised was similar to the contributory infringement issues in the Betamax case, Universal City Studios, Inc. v. Sony Corp., 659 F.2d 963 (9th Cir. 1981), cert. granted, 102 S. Ct. 2926 (1982) (No. 81-1687). Only the district court decision in Sony, 480 F. Supp. 429 (C.D. Cal. 1979), aff'd in part and rev'd in part, 659 F.2d 963 (9th Cir. 1981), was available when the Midway v. Artic court rendered its opinion. See 2 COPYRIGHT L. REP. (CCH) ¶ 25,337, at 16,892.

^{95 2} COPYRIGHT L. REP. (CCH) ¶ 25,337, at 16,891.

⁹⁶ Id. at 16,890.

⁹⁷ Cf. Nichols v. Universal Pictures Corp., 45 F.2d 119, 122 (2d Cir. 1930) (L. Hand, J.) (holding there was no copyright infringement when similarities between two plays were only in the ideas and not in the expression), cert. denied, 282 U.S. 902 (1931).

§ 106(2) [of the Copyright Act].98

This dicta is remarkable in that it ignores the fact that Artic's speed-up kit was not sold as, and apparently could not be used as, a substitute for Midway's Galaxian game. 99 Thus, the sale of the speedup kit could not have reduced Midway's Galaxian sales, even if, as the court hypothesized, the speed-up kit could only be used with the Galaxian game. Indeed, the speed-up kit could be expected to enhance Galaxian sales, because the added challenge of greater speed probably made the game attractive to a broader segment of the video game market.

The Galaxian speed-up kit has a converse analogy in the field of literature. Difficult literary books such as James Joyce's Ulysses and Finnegans Wake have spawned commentaries such as Gilbert's James Joyce's Ulysses¹⁰⁰ and Tindall's A Reader's Guide to Finnegans Wake. 101 One might consider these commentaries to be Joyce slowdown kits. They explain Joyce's works in a way that makes them more accessible to the ordinary reader. Indeed, many readers might not purchase Joyce's books if such assistance were not available. Like the Galaxian speed-up kit, commentaries such as James Joyce's Ulysses are useful solely as a result of the underlying work. The commentaries have no value in connection with any other work. Thus, to use the Midway v. Artic court's phrase, the commentator's work "would only have value because of [the original author's] copyrighted . . . work," and the commentator thus "reaps the benefits of the [original author's] artistic endeavor."102 Should one therefore conclude that literary commentators and critics must obtain the permission of the holders of copyright in the works on which they comment?

Both tradition and the Copyright Act hold that off-shoots such as commentary, criticism, and parody are not infringing, 103 despite the fact

^{98 2} COPYRIGHT L. REP. (CCH) ¶ 25,337, at 16,891. The court also said that "if defendant's device is one which enhances all video games, it would be anomalous to apply the copyright laws to inhibit its distribution." Id. Note that section 106(2) of the Copyright Act grants the owner of a copyright exclusive rights to prepare derivative works. See 17 U.S.C. § 106(2) (1976 & Supp. V

See id. at 16,884 (The speed-up kits were described as "devices that are designed to be inserted into Midway's Galaxian game to speed up and otherwise alter the play of the game"). 100 S. GILBERT, JAMES JOYCE'S ULYSSES (1930).

¹⁰¹ W. TINDALL, A READER'S GUIDE TO FINNEGANS WAKE (1969). Tindall's book reprints excerpts from FINNEGANS WAKE with permission. See W. TINDALL, supra, at iv. The author has examined the certificates of copyright registration for both the Gilbert and Tindall works. Neither is described in its certificate as a derivative work.

 ^{102 2} COPYRIGHT L. REP. (CCH) ¶ 25,337, at 16,891.
 103 See 17 U.S.C. § 107 (1976 & Supp. V 1981) ("the fair use of a copyrighted work . . . for purposes such as criticism [and] comment . . . is not an infringement of copyright"); L. SELT-ZER, EXEMPTIONS AND FAIR USE IN COPYRIGHT 43-45 (1978); 3 NIMMER, supra note 10, § 13.05[C]; KAPLAN, supra note 10, at 68-69.

that such works are fundamentally parasitic on the work of the original author. The commentary must not paraphrase or quote so extensively that it becomes a substitute for the original, 104 but this consideration does not even arise in the case of of the Galaxian speed-up kit, because the purchaser of the speed-up kit cannot use it unless he also purchases a copy of the Galaxian game. If the *Midway v. Artic* court's analysis were applied to literature, all commentary, criticism, and parody would require a license from the original copyright holder. Not all criticism is friendly; not all parody is kind. One can imagine that authors would grant licenses for such works on a very selective basis indeed.

C. Cases Finding No Infringement

The dicta quoted above from Midway v. Artic is perhaps the most extreme example of the expanded copyright protection courts are willing to provide for the owners of video games. Similar disregard for the traditional bounds of copyright is, as we have seen, evident in Stern Electronics v. Kaufman and Atari v. Armenia. Not all courts, however, have overlooked traditional principles in applying copyright to video games. One of the most thoughtful opinions attempting to apply those principles in this new context is Atari, Inc. v. Amusement World, Inc. 106 In Amusement World, Atari, again the plaintiff, and in this case the owner of a video game called "Asteroids," sought to enjoin defendants "from manufacturing or distributing any product in violation of plaintiff's copyright." In particular, Atari alleged that Amusement World's video game "Meteors" was substantially similar to, and therefore an infringement of, Atari's Asteroids. 108

The court did not satisfy itself with infringement analysis based on a superficial impression of the similarities between the games, nor did it focus on the conduct of the parties. Instead, it catalogued twenty-two "design features" which the games shared and nine respects in which the games differed.¹⁰⁹ The similarities identified by the court ranged from those as general as the fact that both games presented an "overhead view of the battle field"¹¹⁰ to those as minute as the fact that

¹⁰⁴ See 17 U.S.C. §§ 107(3) - 107(4) (1976 & Supp. V 1981) (factors bearing on question of fair use include "amount and substantiality of the portion used in relation to the copyrighted work as a whole" and "the effect of the use upon the potential market for or value of the copyrighted work").

¹⁰⁵ See supra notes 69-84 and accompanying text.

^{108 547} F. Supp. 222 (D. Md. 1981).

¹⁰⁷ Id. at 224.

¹⁰⁸ See id.

¹⁰⁹ Id. at 224-25.

¹¹⁰ Id. at 225.

"[t]here is a two-tone beeping noise in the background throughout the game, and the tempo of the noise increases as the game progresses."

The nine differences included, for example, the facts that "'Meteors' is in color, while 'Asteroids' is in black and white," "the rocks in 'Meteors' appear to tumble as they move across the screen," and "the pace of the 'Meteors' game is faster at all stages."

12

The Amusement World court went beyond earlier decisions such as Stern Electronics and Midway v. Artic by examining carefully the questions whether the plaintiff was claiming copyright in an idea and whether the two games could be considered "substantially similar" without rending the delicate veil separating ideas from their expressions. The court first rejected the defendants' contention that Atari's copyright claim was void in its entirety because it attempted to monopolize "the idea of a video game in which the player fights his way through asteroids and spaceships." In rejecting this contention, the court said:

Thus, when plaintiff copyrighted his particular expression of the game, he did not prevent others from using the idea of a game with asteroids. He prevented only the copying of the arbitrary design features that makes [sic] plaintiff's expression of this idea unique. These design features consist of the symbols that appear on the display screen, the ways in which those symbols move around the screen, and the sounds emanating from the game cabinet. Defendants are entitled to use the idea of a video game involving asteroids, so long as they adopt a different expression of the idea—i.e., a version of such a game that uses symbols, movements, and sounds that are different from those used in plaintiff's game.¹¹⁴

The quoted passage is one of the more careful and explicit judicial efforts to apply the idea/expression dichotomy to video games, and it spelled defeat for Atari's infringement action. The court observed that the mere fact that "there are a great number of similarities in expression" between Meteors and Asteroids does not imply infringement of one by the other. Instead, "[i]t is necessary to determine whether the similar forms of expression are forms of expression that simply cannot be avoided in any version of the basic idea of a video game involving space rocks." The court held that "most of these similarities [between the two games] are inevitable, given the requirements of the idea

¹¹¹ Id. at 224.

¹¹² Id. at 225.

¹¹³ Id. at 227.

¹¹⁴ Id.

¹¹⁶ Id. at 229.

¹¹⁶ Id. (Footnote omitted).

of a game involving a spaceship combatting space rocks and given the technical demands of the medium of a video game."¹¹⁷ On this ground, the court denied Atari's motion for a preliminary injunction and entered judgment for the defendant.¹¹⁸

Although the Amusement World court's readiness to tackle the idea/expression distinction is laudable, one might question whether the court's holding does not rest on an overbroad view of the idea of a space rocks game. In effect, the court assumed that every rule of play must be an "idea" for purposes of section 102(b) of the Copyright Act. It is worth asking whether this necessarily follows. An important attribute of "ideas" for purposes of section 102(b) appears to be generality. 119 Such generality is probably present in "the idea of a video game in which a player fights his way through asteroids and spaceships."120 By. comparison, some of the twenty-two points of similarity identified by the court are so particularized that they could more easily be said to involve the "expression" of the basic idea rather than an idea in themselves. Examples are the two-tone beeping noise which increases in frequency as each game progresses, the "three sizes of rocks" employed by each game, and the pattern of asteroid decay in each game: "[w]hen hit, a large rock splits into two medium rocks, a medium rock splits into two small ones, and a small rock disappears."121 On the other hand, many other points of similarity, including for instance the player's control of one space ship under attack by enemy ships, the shared rule that "[w]hen a rock hits the player's spaceship, the ship is destroyed," and the joint feature that "[t]he player's ship and enemy ships shoot projectiles"122 seem by their generality to be better candidates for the "idea" category.

These considerations suggest that although some aspects of Meteors may have infringed Asteroids' expression, in other respects the games deserved to coexist. It is not unprecedented for courts to tailor relief in copyright infringement cases to the precise outlines of the area of infringement, and a selection of the most particularized items on the court's list of similarities could have been used to define an injunction limited to improperly copied "expression." The Amusement World

¹¹⁷ Id.

¹¹⁸ See id. at 230.

¹¹⁹ See infra text accompanying notes 229-31.

¹²⁰ Amusement World, 547 F. Supp. at 227.

¹²¹ Id. at 224.

¹²³ Id.

¹³³ See Breffort v. I Had a Ball Co., 271 F. Supp. 623, 625-26 (S.D.N.Y. 1967) (issuing an injunction against infringing plaintiff's work, but expressly excluding from the injunction certain noninfringing uses of music and lyrics); 3 M. NIMMER, supra note 10, § 14.06[B], at 14-53 ("The defendant may be able to avoid a permanent injunction if the infringing portion of defendant's

court, however, does not appear to have even considered such relief, and, by making a unitary finding of noninfringement, the court's holding blurs the very distinction between idea and expression that it had been so careful to draw in its opinion.

Few courts have held for the defendant in a case of alleged video game infringement. One is Amusement World, and another is the district court's opinion, subsequently reversed, in Atari Inc. v. North American Philips Consumer Electronics Corp. 124 In North American Philips, Atari and its co-plaintiff, Midway Manufacturing Co., alleged, among other things, that North American's game K.C. Munchkin infringed Atari's and Midway's rights in Pac-Man. 125 In a lengthy opinion, the district court denied plaintiffs' prayer for a preliminary injunction "barring defendants... from advertising, distributing, displaying, performing, selling, or offering for sale, the 'K.C. Munchkin' home video game, or in any other manner violating plaintiffs' exclusive rights under the copyright in the 'Pac-Man' audio-visual work." 126

As in Amusement World, the district court opinion in North American Philips compared the two works in great detail. The court found both Pac-Man and K.C. Munchkin to be "maze-chase" games¹²⁷—each game features on its video screen a maze or mazes.¹²⁸ The player in each game controls a "central character" which moves through the maze, gobbling "dots" as it moves.¹²⁹ A further similarity is that the central character in each game is subject to attack by other figures (called by the district court "munchers" for K.C. Munchkin and "goblins" for Pac-Man).¹³⁰ These attacking figures are not controlled by the player.¹³¹ The object of each game is to score points by causing

work can be removed without destroying the usefulness of the remainder of the work."). See generally infra text accompanying notes 303-15.

^{124 2} COPYRIGHT L. REP. (CCH) ¶ 25,363 (N.D. III. Dec. 4, 1981), rev'd, 672 F.2d 607 (7th Cir.), cert. denied, 51 U.S.L.W. 3258 (U.S. Oct. 4, 1982). The court of appeals opinion is discussed infra text accompanying notes 161-209. Another case finding no infringement of the Pac-Man game is Atari, Inc. v. Williams, 2 COPYRIGHT L. REP. (CCH) ¶ 25,412 (E.D. Cal. Dec. 28, 1981)

<sup>1981).

128</sup> Atari holds an assignment of the exclusive right to copy Pac-Man in home-video games; Midway holds similar rights to Pac-Man as a coin operated arcade game. See 2 COPYRIGHT L. REP. (CCH) ¶ 25,363, at 17,045. North America's game K.C. Munchkin was marketed as a home-video game. See id.

¹²⁶ Id. (quoting plaintiffs' prayers for relief). This requested relief was eventually entered, following the court of appeals reversal. See infra text accompanying note 197.

¹²⁷ 2 COPYRIGHT L. REP. (CCH) ¶ 25,363, at 17,046.

¹²⁸ In K.C. Munchkin, there is "variability of mazes," whereas in Pac-Man the maze is fixed throughout the play. *Id.*

¹²⁹ Id. at 17,046-47.

character in both games as "goblins" and called the other figures in both games "monsters" or "ghost monsters." See infra text accompanying notes 175-78. The appellate court used its similarity of terminology to support its finding of infringement. See 672 F.2d at 617-18.

¹⁸¹ See 2 COPYRIGHT L. REP. (CCH) ¶ 25,363, at 17,046.

the central character to gobble the dots while at the same time avoiding the goblins or munchers. 132

Based on these similarities, the court might have immediately concluded, as the courts did in Stern Electronics and Armenia, 133 that Pac-Man and K.C. Munchkin were "substantially similar." Like the Amusement World court, 134 however, the North American Philips court also catalogued and analyzed the area of dissimilarity. The maze in K.C. Munchkin is more rectangular with more horizontal passage-ways than the maze in Pac-Man. 135 Pac-Man's central character is yellow and appears only in profile; 136 K.C. Munchkin's is blue with horns and a smile that, under attack, turns to a frown. He shows himself both in profile and full-face. 137 The four "goblins" in Pac-Man have eyes and appendages. The "munchers" in K.C. Munchkin "are much 'spookier' than the goblins in Pac-Man," having vacant eyes and more dramatically animated, longer legs. 138 K.C. Munchkin munchers are colored red, green, and yellow, while Pac-Man's are red, blue, turquoise, and orange. 139

All of the foregoing differences might be characterized as involving only the "graphic" aspects of the games. The court also identified differences "from the point of view of play of the two games." In Pac-Man, the goblins move "upward out of a fixed center 'box' into the maze," while K.C. Munchkin's "first mode of play shows the center of the maze as a box changing the open side by ninety degrees every two or three seconds." There are several hundred stationary dots in Pac-Man, while K.C. Munchkin has but twelve dots that move. K.C. Munchkin's dots also accelerate as their brethren are consumed until the last dot is moving as fast as the central character. As the court put it, the last dot "cannot be caught by overtaking it; it must be munched by strategy." Another equally fundamental difference is that the K.C. Munchkin player can "draw on the screen whatever walls he wishes to cause in the maze, thus creating a continuously changing maze from game to game." 142

¹³³ In Pac-Man, points can also be scored by consuming goblins when they have turned blue. See id.

¹⁸⁸ See supra text accompanying notes 69-84.

¹⁸⁴ See supra text accompanying notes 106-23.

¹⁸⁵ See 2 COPYRIGHT L. REP. (CCH) ¶ 25,363, at 17,046.

¹³⁶ See id. at 17,046-47.

¹⁸⁷ See id.

¹³⁸ Id.

¹⁸⁹ See id.

¹⁴⁰ Id. at 17,047.

¹⁴¹ Id.

¹⁴² Id.

On the equities, the district court opinion in North American Philips is unique among video game cases in the detail with which it examined the process by which the defendants created and marketed the accused work. It was admitted that Mr. Ed Averett, the creator of K.C. Munchkin, had seen and played Pac-Man before completing his design of K.C. Munchkin. 143 It was further admitted that the defendant North American had initially attempted to obtain a license for Pac-Man from the plaintiff Midway and asked Mr. Averett to develop K.C. Munchkin only after Midway had rebuffed its licensing overtures. 144 In anticipation of the plaintiffs' infringement claims, North American asked Averett to alter the shapes and colors of K.C. Munchkin's central character and munchers "to get away from even a cosmetic similarity to the colors in 'Pac-Man.' "145

North American's and Averett's conduct in creating K.C. Munchkin, as described in the preceding paragraph, could cut either way. On the one hand, it was clear that the defendants avoided marketing a product identical to Pac-Man. On the other hand, one could argue that, having failed to secure a license for Pac-Man, North American had tried to market a product as close to Pac-Man as possible, thus endeavoring to profit from Pac-Man's obvious success without paying a royality to Pac-Man's owners. 146 One crucial difference, however, distinguishes the North American Philips defendants from those in cases such as Stern Electronics and Dirkschneider. That is the fact that North American took extraordinary measures to avoid creating the impression that its game and Pac-Man came from the same source. The court described these measures as follows:

Internal instructions were issued within the company to avoid use of all trade names, trademarks, or trade definitions of others in connection with the game promotion. Specifically, instructions given were for the purpose of avoiding any reference to the "Pac-Man" game. On October 27 and November 27, 1981, memoranda

and Run," before starting work on K.C. Munchkin and presumably before seeing Pac-Man. See id. at 17,047, 17,050. The district court opinion suggests that some aspects of the earlier game may have been incorporated into K.C. Munchkin. See infra text accompanying note 158. Without explanation for its different finding of fact, the Court of Appeals stated, "Mr. Averett also played PAC-MAN at least once before begining work on K.C. Munchkin." 672 F.2d at 613. The court's failure to explain the basis on which it reached this differing finding of fact is particularly troubling since the independent creation of K.C. Munchkin's predecessor prior to the creation of Pac-Man was a fact explicitly relied on by the district court in reaching its noninfringement conclusion. See 2 COPYRIGHT L. REP. (CCH) ¶ 25,363, at 17,050. See generally infra text accompanying

¹⁴⁴ See 2 COPYRIGHT L. REP. (CCH) ¶ 25,363, at 17,047.

¹⁴⁸ Id. at 17,048.

¹⁴⁶ The Seventh Circuit opinion made the latter inference. See 672 F.2d at 619.

were addressed to its sales force in which North American stressed that it did not want "others to misapply our game names and trademarks to their games. Likewise, we should not use other people's trademarks or game names to refer to our own games [sic]." The advertisements used referred to the "K. C. Munchkin" video game cartridge, its packaging for that cartridge, and the instruction manual; it did not include any material which could reasonably result in confusion with "Pac-Man." 147

When an independent distributor, "Minnesota Fats, the Video King" advertised K.C. Munchkin as "a Pac-Man type game," a North American representative rapidly contacted Video King "for the purpose of attempting to get that company to delete any reference of [sic] 'Pac-Man' game in any future advertisement." In sharp contrast, the defendants in Stern Electronics attempted in bad faith to establish a first use of the work "Scramble" and then called their product "Scramble 2," all in an obvious effort to trade off the goodwill of Stern's "Scramble." Similarly, the defendants in Dirkschneider had chosen for one of their infringing games the same name plaintiff used—"Rally X"—and otherwise infringed Atari's trademarks. Is In these respects, the conduct of the defendants in North American Philips compares favorably with that of the defendants in Stern Electronics and Dirkschneider, and may have helped to push the court away from a finding of infringement.

Following such an extensive review of relevant facts, the district court's analysis of the infringement issue is disappointing and unconvincing. The court acknowledged that "'[c]opying' proscribed by copyright law means more than tracing original [sic], line by line; to some extent it includes appropriation of artist's [sic] thought in creating his own form of expression." This seems to acknowledge the accepted principle that a work can be "reproduce[d] . . . in copies" in violation of the owner's exclusive rights under section 106(1) of the Act¹⁵² if the infringer makes a "substantially similar" copy. But the court next declares, "[s]ince plaintiffs cannot prove copying, they advance the theory

¹⁴⁷ 2 COPYRIGHT L. REP. ¶ 25,363, at 17,048. The opinion of the Court of Appeals omitted these facts entirely. See 672 F.2d 607 (7th Cir. 1982).

^{148 2} COPYRIGHT L. REP. ¶ 25,363, at 17,049. The court properly observed that "[t]he advertisement by Minnesota Fats referring to 'K.C. Munchkin' as 'a Pac-Man type game' did not confuse one game with the other." *Id.* at 17,050. *But cf.* Invicta Plastics (U.S.A.) Ltd. v. Mego Corp., 523 F. Supp. 619 (S.D.N.Y. 1981) (enjoining under the Lanham Act ((Trade-Mark Act of 1946) July 5, 1946, ch. 540, 60 Stat. 427 (codified in scattered sections of 15 U.S.C.)) even truthful comparisons of the defendant's games with the plaintiff's).

¹⁴⁹ See Stern Elecs., 523 F. Supp. at 640-41; see also supra note 78 and accompanying text.

¹⁵⁰ See supra notes 89-90 and accompanying text.

¹⁶¹ 2 COPYRIGHT L. REP. (CCH) ¶ 25,363, at 17,050.

¹⁵² 17 U.S.C. § 106(1) (1976 & Supp. V 1981).

that 'K.C. Munchkin' is substantially similar to 'Pac-Man.' "158 This statement incorrectly suggests that a substantially similar work could infringe a copyrighted work even if it were proven that the substantially similar work had been created independently of the copyrighted work. The statement also overlooks the principle that "copying may be inferred where the defendant had access to the copyrighted work and the accused work is substantially similar to the copyrighted work." Having gotten its copyright analysis off to a bad start, the court concluded:

But evidence in this record shows that "K.C. Munchkin" is not substantially similar to "Pac-Man." In fact, it has been established in the proceeding that [the] defendants created their game from a source they had utilized before "Pac-Man" came into existence; the maze defendants utilized is different, and the way their game is played is different from plaintiffs' "Pac-Man." ¹⁵⁶

The court's conclusion thus repeats the error of its premise. If K.C. Munchkin was created before Pac-Man came into existence, then no prior access could be shown and the question of substantial similarity would be irrelevant. On the other hand, the court's recitation of facts had stated: "Prior to embarking on the development of his game, Mr. Averett, in the company of a North American executive, saw a 'Pac-Man' in an Atlanta, Georgia airport arcade." In context, this seems to mean that Averett saw Pac-Man before he started to develop K.C. Munchkin, but after he had created another maze-chase game called "Take the Money and Run," whose maze configuration is rectangular and almost identical with that in 'K.C. Munchkin.' Thus, the plaintiffs had shown access, but only with respect to any parts of K.C. Munchkin created after Averett saw Pac-Man in the Atlanta airport.

Besides the court's failure to focus on the issue of access, its onesentence analysis of the issue of substantial similarity is wholly inadequate. Because Averett had evidently created a maze-chase game, Take the Money and Run, before seeing Pac-Man, the case raised the issues: (i) whether some of the similarities between K.C. Munchkin and Pac-Man were created before Averett had access to Pac-Man; and (ii) if the

¹⁸³ 2 COPYRIGHT L. REP. (CCH) ¶ 25,363, at 17,050.

¹⁸⁴ Such a suggestion would directly contradict the principle that copyright infringement, unlike patent infringement, requires copying. See 3 M. NIMMER, supra note 10, § 13.01, at 13-3.

North American Philips, 672 F.2d at 614.
 COPYRIGHT L. REP. (CCH) ¶ 25,363, at 17,050.

¹⁸⁷ Id. at 17,048.

¹⁸⁸ See id. at 17,047.

¹⁵⁹ Id.

answer to (i) is "yes," what relief, if any, should be accorded to the plaintiffs—should the marketing of K.C. Munchkin in its entirety be enjoined, or should the injunctive relief be limited to those elements created after Averett gained access to Pac-Man. The court did not so much as acknowledge the existence of these issues. Instead, it made a blanket finding that "evidence in this record shows that 'K.C. Munchkin' is not substantially similar to 'Pac-Man.'" "160"

The plaintiffs promptly appealed the district court's denial of their motion for a preliminary injunction. Considering the limitations of the district court's reasoning, it is not surprising that the appeal was successful. What is surprising, however, is that the court of appeals' careful exposition of copyright law did not provide the basis for a more compelling decision on the issue of infringement.

D. The Seventh Circuit Opinion in North American Philips

The Seventh Circuit's opinion in North American Philips is undoubtedly the preeminent case to date on the issue of copyright protection for video games. The court's exposition of the standard principles of copyright law is thorough and accurate. The court properly begins by noting that "copying" may be proven by a combination of access and substantial similarity. The court endorses the traditional view that substantial similarity should be assessed through the eyes of the "ordinary observer," stating, "the test is whether the accused work is so similar to the plaintiff's work that an ordinary reasonable person would conclude that the defendant unlawfully appropriated the plaintiff's protectible expression by taking material of substance and value." The court states that its analysis should avoid "analytic dissection and expert testimony," focusing instead on the "total concept and feel" of the copyrighted work. Finally, the court observes that, unlike a patent, copyright protects only the expression of the author's ideas and therefore "does not extend to games as such," but only to pictorial or graphic portions of games. Thus, the court set for itself the task of attempting "to distill the protectible forms of expression in PAC-MAN

¹⁶⁰ Id. at 17.050

¹⁶¹ See 672 F.2d at 614. The court did not, however, examine the factual question of the timing of the defendant's access as carefully as it might have. See infra text accompanying notes 179-84.

¹⁶² Id. at 614. For criticism of the "ordinary observer" test, see infra text accompanying notes 282-302.

¹⁶³ Id. (quoting Arnstein v. Porter, 154 F.2d 464, 468 (2d Cir. 1946)).

¹⁶⁴ Id. (quoting Roth Greeting Cards v. United Card Co., 429 F.2d 1106, 1110 (9th Cir.

<sup>1970)).

168</sup> Id. at 615 (citing 1. M. NIMMER, supra note 10, § 2.18 [H][3], at 2-212, and Stern Elecs., 669 F.2d at 856).

from the game itself."166

To tackle this difficult question, the court employed two basic tools of copyright analysis. One is Learned Hand's famous "abstractions test":

Upon any work, and especially upon a play, a great number of patterns of increasing generality will fit equally well, as more and more of the incident is left out. The last may perhaps be no more than the most general statement of what the play is about, and at times might consist only of its title; but there is a point in this series of abstractions where they are no longer protected, since otherwise the playwright could prevent the use of his "ideas," to which, apart from their expression, his property is never extended. 187

The second is the concept of scenes a faire, meaning "incidents, characters or settings which are as a practical matter indispensable, or at least standard, in the treatment of a given topic." Scenes a faire do not enjoy protection, even if they are too particularized to be considered ideas. One reason for this rule is, as the North American Philips court suggests, that scenes a faire may be so closely connected with the underlying, unprotected idea that they become indistinguishable from it. 169 An additional reason may be that the author of the copyrighted work does not deserve credit and protection for aspects of his work that could have been copied from other works, even if he invented them without copying and even if the defendant actually copied them from the copyrighted work. Thus, the scenes a faire exception furthers the Copyright Act's policy of protecting only original works of authorship. 170

¹⁶⁶ Id

¹⁶⁷ Nichols v. Universal Pictures Corp., 45 F.2d 119, 121 (2d Cir. 1930), cert. denied, 282 U.S. 902 (1931), quoted in North American Philips, 672 F.2d at 615-16.

¹⁶⁸ North American Philips, 672 F.2d at 616 (quoting Alexander v. Haley, 460 F. Supp. 40, 45 (S.D.N.Y. 1978)).

¹⁶⁹ See id.

¹⁷⁰ See infra text accompanying notes 246-49. An additional element in the court's exposition of copyright law is the proposition that when expression and idea are indistinguishable, only verbatim copying will be protected. See North American Philips, 672 F.2d at 616-17. The court uses Herbert Rosenthal Jewelry Corp. v. Kalpakian, 446 F.2d 738 (9th Cir. 1971) as an example of this principle. Although the Kalpakian case has been cited for this proposition, see, e.g., Sid & Marty Krofft Television Prods., Inc. v. McDonald's Corp., 562 F.2d 1157, 1167-68 (9th Cir. 1977), the Kalpakian opinion actually suggests the reverse. In Kalpakian the plaintiff claimed that the defendant had infringed the design of the plaintiff's copyrighted "jeweled bee pin." The court held for the defendant, commenting that "[w]hen the 'idea' and its 'expression' are thus inseparable, copying the 'expression' will not be barred, since protecting the 'expression' in such circumstances would confer a monopoly of the 'idea' upon the copyright owner free of the conditions and limitations imposed by the patent law." 446 F.2d at 742. On the other hand, this dicta may have exceeded the requirements for the court's holding, since the accused and copyrighted bee-pins were not identical. See id. at 741. See generally infra text accompanying notes 228-32.

Using these tools, the court found that many similarities between Pac-Man and K.C. Munchkin were not protected expression. The court described the "idea" of Pac-Man in "abstract" terms as follows:

PAC-MAN is a maze-chase game in which the player scores points by guiding a central figure through various passageways of a maze and at the same time avoiding collision with certain opponents or pursuit figures which move independently about the maze. Under certain conditions, the central figure may temporarily become empowered to chase and overtake the opponents, thereby scoring bonus points.¹⁷¹

The court resolved to protect only the "audio component and the concrete details of the visual presentation [that] constitute the copyrightable expression of that game 'idea.' "172 The court also identified certain "standard game devices" as unprotected scenes a faire. These included a "wrap around" feature, 173 the use of a maze, a scoring table, and dots that provide "a means by which a player's performance can be gauged and rewarded"174

Having carved out an unprotected domain of ideas and scenes a faire, the court nevertheless found infringement on the basis of K.C. Munchkin's "substantial appropriation of the PAC-MAN characters."176 This appropriation was found to inhere in each game's use of "goblins" and "ghost monsters," and in the "portrayal" of those characters including their styles, movements and qualities such as "role reversal" and "regeneration." The court brushed aside the differences between the games, particularly the concept of moving dots, the variation in mazes, and certain changes in "facial features and colors of the characters,"177 reasoning that the ordinary observer test requires a court to focus on "the overall similarity rather than minute differences," that "the nature of the alteration . . . only tends to emphasize the extent to which [the defendant] deliberately copied from the plaintiff's work," and that the "undiscriminating" audience for video games "would be disposed to overlook" minor differences in detail, since the "main attraction of a game such as PAC-MAN lies in the stimulation provided by the intensity of the competition."178

¹⁷¹ North American Philips, 672 F.2d at 617.

¹⁷³ Id.

¹⁷³ Id. The "wrap around" feature is a method of operation by which the gobbler can exit via a "tunnel" at one side of the video screen and re-appear on the opposite side of the screen.

¹⁷⁴ Id.

¹⁷⁸ Id.

¹⁷⁶ Id. at 618.

¹⁷⁷ Id.

¹⁷⁸ Id. at 618-19. The court further supported its finding that the plaintiff was likely to succeed on the merits on the ground that retailers and clerks—"lay observers"—had described

Taken by itself, the court of appeals opinion is convincing and generally consistent with the policies of the Copyright Act. On close examination, however, one finds that the court's legal analysis goes smoothly only because the court suppressed untidy facts. The appellate court's violence with the facts is most evident on the issue of access. On this issue, which had also stymied the district court, the court of appeals declared that "[after] view[ing] Pac-Man in an airport arcade [and] after discussing the strengths and weaknesses of the PAC-MAN game and its increasing popularity, [Mr. Averett and a North American Philips representative] decided to commence development of a modified version "179 The court further said, "Mr. Averett also played PAC-MAN at least once before beginning work on K.C. Munchkin."180 On these same issues, the district court had said, "[oln at least one occasion before completing his design, [Mr. Averett] played a 'Pac-Man,' "181 and in its conclusion said, "it has been established in this proceeding that defendants created their game from a source they had utilized before 'Pac-Man' came into existence . . . "182 As already noted, if the game Take the Money and Run was created before Mr. Averett had access to Pac-Man, then the plaintiffs had failed to prove prior access with respect to any features of K.C. Munchkin that were included in Take the Money and Run. Unlike the question of substantial similarity, for which the court of appeals may be "in as good a position as the district court to decide,"183 the question of the time of Averett's access is an issue of fact on which the district court may be reversed only if clearly erroneous.¹⁸⁴ Incredibly, the court of appeals gave no explanation whatsoever for its statements of fact which contradicted the findings of the lower court on the central issue of the time of Averett's access to Pac-Man.

In another part of its opinion, the court of appeals remarked that "[t]he parties stipulated . . . to access." The parties had filed a

K.C. Munchkin as a "Pac-Man type game." Id. at 619; see also supra note 148 and accompanying text.

¹⁷⁹ North American Philips, 672 F.2d at 613.

¹⁸⁰ Td.

¹⁸¹ 2 COPYRIGHT L. REP. (CCH) ¶ 25,363, at 17,048.

¹⁸² Id. at 17,050.

¹⁸³ North American Philips, 672 F.2d at 614.

¹⁸⁴ See Menominee Rubber Co. v. Gould, Inc., 657 F.2d 164, 166 (7th Cir. 1981), cited in North American Philips, 672 F.2d at 613. It is ironic that only ten months prior to its North American Philips decision, the Seventh Circuit had made it a point to hold that a preliminary injunction should not be issued without an evidentiary hearing to test the credibility of the plaintiff's witnesses. See Swiderek v. Medeco Security Locks, Inc., 2 COPYRIGHT L. REP. (CCH) 1 25,402 (7th Cir. May 26, 1981).

North American Philips, 672 F.2d at 614. The text of the stipulation provided:

^{1.} Validity of the copyright-in-suit is not contested for the purposes of this hearing.

^{2.} The audio-visual work covered by the copyright-in-suit is a series of images

three-page stipulation with the district court in connection with Atari's motion for a preliminary injunction. Contrary to the appellate panel's implication, the stipulation did not expressly state that the defendants had "access" for copyright purposes. Instead, the stipulation recited a sequence of facts related to access. Taken together, and out of the context of the lower court's findings about Take the Money and Run, the sequence might have provided the basis for inferring access. However, drawing such an inference seems inappropriate when, as in this case, the lower court based its finding—that some of K.C. Munchkin was created before Averett's exposure to Pac-Man-on approximately two days of testimony during which both the plaintiff and the defendant presented several witnesses. 186 At the very least, this suggests that the court of appeals should have remanded the case to determine whether the stipulation should not have been withdrawn in light of the district court's findings, or whether, on the other hand, the district court's findings should be revised in light of the stipulation.187

On the question of the similarity between the two games, the comparison between the appellate and lower court's opinions is equally unsettling. The district court observed distinctive dissimilarities between the games' characters. The colors were different; K.C. Munchkin's monsters were "spookier," and the central figure in K.C. Munchkin was more developed as a character, showing frowns and smiles. None of these distinctions impressed the appellate panel, which be-

which appear on the television screen of Midway's Pac-Man coin-operated video game and associated sounds.

4. The K.C. Munchkin game was designed thereafter, in Spring and Summer, 1981.

7. The introduction of the K.C. Munchkin game was a careful, conscious decision by North American.

8. North American plans to ship quantities of the "K.C. Munchkin" game to distributors and dealers over the next six months.

186 This fact is based on the author's conversations with counsel for both parties to the North American Philips litigation.

There is certainly a lesson to be learned here on the deleterious effect that stipulated facts can sometimes have on judicial performance. Presumably, the court of appeals was entitled to rely on facts stipulated by the parties. On the other hand, it is extraordinary to ignore the detailed findings of a judge who sat through two days of testimony.

188 See supra text accompanying notes 135-39.

^{3.} The person at North American who was principally responsible for the design of the K.C. Munchkin game at issue here and the person in charge of home video product development for North American saw a Midway Pac-Man coin-operated video game at an airport in New York City in February, 1981. These persons have reported that they do not recall playing the Pac-Man game at that time.

^{5.} Before coming out with their K.C. Munchkin game, North American approached plaintiff Midway and inquired whether a license under the Pac-Man copyright for the home video market could be obtained.

^{6.} Midway responded to North American that exclusive home video rights under the Pac-Man copyright had already been licensed to Atari, and therefore could not be licensed by Midway to North American.

lieved (without adducing any proof) that the audience for video games "is fairly undiscriminating insofar as their concern about more subtle differences in artistic expression."189 The court of appeals also assumed (again without proof) that "[t]he main attraction of a game such as PAC-MAN lies in the stimulation provided by the intensity of the competition."190 If true, this assertion should have led to the conclusion that the significant differences in the way the games played would favor a finding that the games were not substantially similar. But the court of appeals instead held that similarities in "expression" are more significant from a copyright standpoint than are dissimilarities in play. 191 In all, one is left with the distinct impression that the court's finding of substantial similarity was based entirely on the court's uncritical impression of the similarities between the games. The court's conclusion of infringement thus seems to have been uninfluenced by its sophisticated copyright analysis based on the idea/expression distinction and the concept of scenes a faire. 192

The appellate court's simplified and stylized version of the facts allowed it to push aside the really difficult aspect of the K.C. Munchkin/Pac-Man case: K.C. Munchkin, although superficially similar to Pac-Man, was in some respects a different game, created in part before its creator had ever seen Pac-Man. For this reason, Learned Hand's "abstraction" continuum did not apply—the amount of similarity between the games did not increase uniformly as the level of abstraction increased. At a highly abstract level, K.C. Munchkin and Pac-Man were similar: both were maze-chase games in which the player scores points by consuming dots and avoiding monsters. At a middle level, they were dissimilar-K.C. Munchkin had variable, programmable mazes, moving dots, and more need for "strategy." At a superficial level they were again similar—according to the court of appeals, at least, the characters looked the same in each game. The court was not oblivious to the presence of this problem. It acknowledged that "[t]he defendants and the district court order stress that K.C. Munchkin plays differently because of the moving dots and the variety of maze configurations from which the player can choose."193 The court dismissed this unsettling fact, however, in a blizzard of rhetoric. It declared that the

¹⁸⁹ North American Philips, 672 F.2d at 619.

¹⁹⁰ Id.

¹⁹¹ See id.

The court of appeals should not be faulted too harshly for this impressionistic approach, since it is consistent with a traditional ("ordinary observer") style of decision in copyright cases. The "ordinary observer" test employed by the court has the most august credentials, see infra text accompanying notes 282-87, but is subject to serious shortcomings, see infra text accompanying notes 298-302.

¹⁹³ North American Philips, 672 F.2d at 619.

"focus" of a copyright action is on "similarities in protectible expression"; that "no plagiarist can excuse the wrong by showing how much of his work he did not pirate"; and that "[i]t is irrelevant that K.C. Munchkin has other game modes which employ various maze configurations," because "[t]he only mode that concerns this court is the one that uses a display most similar to the one in PAC-MAN." The court's tone in addressing the most substantial issue it faced thus had the sound of the prosecutor's summary in a murder trial. K.C. Munchkin was not merely the accused work, and North American Philips not merely the defendant in a civil proceeding brought by a multi-million dollar corporation: the defendant was a plagiarist and all aspects of K.C. Munchkin should be disregarded except those tending to prove its resemblance to Pac-Man.

Based on its sanitized reading of the facts, the court of appeals was able to direct the district court to enter an equally sterile preliminary injunction "against continued infringement of plaintiffs' copyright." 195 In the context of the court of appeals' opinion, this command required the defendant to be "enjoined from marketing K.C. Munchkin," 196 and on March 5, 1982, the district court entered an order enjoining and restraining the defendants "from advertising, distributing, displaying, performing, selling or offering for sale a video game cartridge known as 'K.C. Munchkin', or in any other manner violating plaintiffs' exclusive rights under the copyright in the Pac-Man audiovisual work."197 The Seventh Circuit panel declared pridefully that the injunction would "preserve the integrity of the copyright laws which seek to encourage individual effort and creativity by granting valuable enforceable rights."198 The court awarded itself this ovation without pausing to measure the impact of its injunction on the effort and creativity of persons who, like Mr. Averett, create maze-chase games that will compete with, and possibly improve upon, Pac-Man. Pac-Man had sales of \$150 million between October of 1980 and December 1981, 199 and K.C. Munchkin had been in production for that entire period of

¹⁹⁴ Id. Why this should be irrelevant is difficult to understand. At least, it suggests that only the similar game features should be enjoined, not that K.C. Munchkin is as a whole infringing.

¹⁹⁵ Id. at 621.

¹⁹⁶ Id. at 620.

¹⁹⁷ See the district court's order on remand, Atari, Inc. v. North American Philips Consumer Elecs. Corp., No. 81 C 6434 (N.D. Ill. March 5, 1982), reprinted in North American Philips Consumer Elecs. Corp., Petition for a Writ of Certiorari to the U.S. Court of Appeals for the Seventh Circuit app. E, at E1, Atari, Inc. v. North American Philips Consumer Elecs. Corp., 672 F.2d 607 (7th Cir.), cert. denied, 51 U.S.L.W. 3258 (U.S. Oct. 4, 1982).

¹⁹⁸ North American Philips, 672 F.2d at 620.

¹⁹⁹ See supra note 2 and accompanying text.

time—since August of 1980.²⁰⁰ Under these circumstances, it is fictional for the appellate court to have concluded that the effort and creativity of the makers of Pac-Man would not be rewarded and the "integrity of the copyright laws" would be lost, unless K.C. Munchkin was enjoined. The court's injunction may have protected the size of Pac-Man profits, but it surely was not necessary for their existence.

One can only surmise that the court's rhetorical flourishes served to assuage discomfort over its artificially uncomplicated holding. That holding was required by two assumptions: first, that K.C. Munchkin as a whole either infringed Pac-Man or did not, and second, that the plaintiff's rights in Pac-Man could only be protected by copyright. As will be discussed at length later in this Article, neither of these assumptions is valid.201 As one alternative, the court could have found that only certain aspects of K.C. Munchkin infringed Pac-Man. The court of appeals based its finding of infringement primarily on the similarities between the Pac-Man and K.C. Munchkin "characters." It has sometimes been held that one may claim copyright infringement in the unauthorized copying of a character, even if in the accused work the character participates in a wholly different plot.²⁰³ The typical remedy for "character infringment" is to enjoin the infringer's use of the infringing characters, while leaving the defendants free to employ different characters in the service of the same or a similar plot. Thus, a finding that K.C. Munchkin's characters were "substantially similar" to Pac-Man's and therefore infringing would have required the defendants to change the appearance of K.C. Munchkin's "muncher" and "monsters," while preserving for public enjoyment K.C. Munchkin's programmable mazes, moving dots, and other unique features.

A problem in the character infringement approach is that the character must be "sufficiently developed to command copyright protection."²⁰⁴ One might question whether the stylized, geometrical figures that constitute Pac-Man's characters meet this criterion. Even if they

²⁰⁰ See North American Philips, 2 COPYRIGHT L. REP. (CCH) ¶ 25,363, at 17,048.

²⁰¹ See infra text following note 263.

²⁰² The court said, "it is the substantial appropriation of the PAC-MAN characters that requires reversal of the district court." North American Philips, 672 F.2d at 617.

²⁰³ See, e.g., Goodis v. United Artists Television, Inc., 425 F.2d 397, 406 (2d Cir. 1970); Nichols v. Universal Pictures Corp., 45 F.2d 119, 121 (2d Cir. 1939); Warner Bros., Inc. v. American Broadcasting Cos., 530 F. Supp. 1187, 1193 (S.D.N.Y. 1982); United Artists Corp. v. Ford Motor Co., 483 F. Supp. 89, 93 (S.D.N.Y. 1980); 3 M. NIMMER, supra note 10, § 2.12, at 2-169. Kaplan has questioned the possibility of character infringement in its entirety, arguing that "literary characters, in plays as in novels, achieve their distinctness in large part by being made to react to the particular flux of incident in the particular milieu." B. KALPAN, supra note 10, at 51. He leaves the door open for infringement "as between pictorial characters," id., but even there warns of "trouble in setting proper bounds to their protection." Id. at 52.

²⁰⁴ 3 M. NIMMER, supra note 10, § 2.12, at 2-171.

do not, however, there is a second alternative to the appellate court's blanket finding of copyright infringement. If one accepts the district court's conclusion that K.C. Munchkin and Pac-Man were significantly different maze-chase games (so that Hand's continuum of abstractions does not apply), and if one further believes that the Pac-Man "characters" are too rudimentary to qualify for copyright protection, then the superficial similarities between the otherwise differing games suggest that the defendant's real offense may have been more in the nature of trademark infringement and unfair competition than in the nature of copyright infringement.205 Indeed, Pac-Man's central "gobbler" character has become a recognized symbol apparently having great value²⁰⁶ independent of its function in the game itself. Assuming that the plaintiffs in North American Philips could show that they began using the distinctive features of the Pac-Man characters before the defendant began to market K.C. Munchkin, a confusing similarity in appearance between K.C. Munchkin's characters and Pac-Man's could provide a basis for relief both at common law,207 under state statutes,208 and under section 43(a) of the Lanham Act.²⁰⁹ Such relief could prevent

Judging from the frequency and breadth of its use, its value is clear. There is, for example, a Pac-Man cartoon series, and the author recently discovered that there is even a Pac-Man ice cream bar. The bar is in the shape of the Pac-Man gobbler, and its shape and name are duly licensed to the ice cream manufacturer by Midway Manufacturing Corp., one of the plaintiffs in North American Philips.

²⁰⁷ See R. CALLMAN, THE LAW OF UNFAIR COMPETITION, TRADEMARKS AND MONOPOLIES § 2.01 (4th ed. 1981). Note that the action could lie regardless of whether the plaintiffs had registered the character as trademark. See id. at § 2.01 n.2.

²⁰⁸ See Lanham Act § 43; 15 U.S.C. § 1125 (1976). At least one court has suggested that the criteria for trademark infringement may be the same as those for "substantial similarity" under the Copyright Act. See Warner Bros. Inc. v. American Broadcasting Cos., 530 F. Supp. 1187, 1198 (S.D.N.Y. 1982). This equivalance may be true for the trademark issue of "confusing similarity" and the copyright issue of "substantial similarity." As discussed in the text, however, the policies of trademark protection are different from those of copyright protection. For this reason, a geometrical form such as Pac-Man's central character (a circle with a v-shaped notch cut in it) might be too simple to enjoy protection as a "character" protected by copyright but may nevertheless be a "strong" trademark (analagous to such well-known marks as the McDonald arches, the Shell Oil Company shell, and the CBS "eye") because its very simplicity gives it distinctiveness and a propensity for immediate recognition. Strength of a mark refers to "its tendency to identify the goods sold under the mark as emanating from a particular . . . source." McGregor-Doniger, Inc. v. Drizzle, Inc., 599 F.2d 1126, 1131 (2d Cir. 1979). Thus, if the threshold criteria of confusing substantial similarity is met by two figures, trademark law may protect them as "marks" while copyright law would not protect them as "characters." It has been expressly held that "ingredients" of products which are sold as entertainment, such as the Dallas Cowboys Cheerleaders' uniform, the Star Wars characters, and comic book characters such as "Aquaman" may be protected under § 43(c) of the Lanham Act. See D.C. Comics, Inc. v. Filmation Associates, 486 F. Supp. 1273, 1277 (S.D.N.Y. 1980). For an example of a court finding trademark infringement in the appropriation of video game characters, see Midway Mfg. Co. v. Dirkschneider, 543 F. Supp. 466 (D. Neb. 1981) (discussed supra text following note 85).

²⁰⁸ See, e.g., 1964 Uniform Deceptive Trade Practices Act § 2, ILL. REV. STAT., ch. 121 ½, § 312 (Supp. 1982) (claimed by Atari to have been violated by the *North American Philips* defendants).

²⁰⁹ Section 43 of the Lanham Act, 15 U.S.C. § 1125 (1976), is generally considered to be a

North American Philips from unfairly appropriating to its own advantage the good will associated with the famous Pac-Man "characters" while at the same time allowing the distribution of a maze-chase game having K.C. Munchkin's unique playing features. Had the court of appeals focused on these considerations, its interpretation of the facts in its *North American Philips* opinion might have been less strained and its conclusion more convincing and just.

III. Some Suggestions for Improved Copyright Analysis

All of the opinions described above were rendered during the years 1981 and 1982.²¹⁰ During that brief span the courts swung sharply between overbroad and overnarrow scope of protection for the games. In some early opinions (Stern Electronics district court opinion, Armenia, Artic International, and Dirkschneider) courts granted sweeping relief to the copyright claimants, often paying little or no attention to the traditional limitations on copyright protection for games. In other opinions (Amusement World, and the North American Philips district court opinion) the older dogmas that copyright does not protect "ideas" and "games" were reasserted so strongly that the courts found noninfringement in the face of surprisingly numerous and specific points of identity between the copyrighted and allegedly infringing games. In still other cases (Stern Electronics and North American Philips court of appeals opinions), the courts appeared to overextend copyright law to remedy trademark infringement. None of these opinions presents a convincing balancing of the interests protected by copyright law.

In several video game cases, the courts' holdings on the issue of infringement were by no means foregone conclusions. North American Philips is perhaps the best example, because in a detailed opinion the district court had found Pac-Man and K.C. Munchkin not substantially similar, only to have its finding on this issue of fact reversed by the court of appeals. Likewise, the points of similarity between the plaintiff's and defendant's games in Amusement World were so extensive that a reasonable person might easily have concluded that the defendant's game had infringed the plaintiff's, although the court, in a scholarly opinion, held otherwise. Despite the differing conclusions that

grab-bag for types of unfair competition that may not fall into a recognized category of trademark infringement. See, e.g., Berlitz School of Languages of America, Inc. v. Everest House, 619 F.2d 211 (2d Cir. 1980); Smith v. Chanel, Inc., 402 F.2d 562 (9th Cir. 1968).

Two more recent video game copyright decisions, Williams Elecs., Inc. v. Artic Int'l. Inc., 685 F.2d 870 (3d Cir. 1982), and Midway Mfg. Co. v. Bandai-America, Inc., 546 F. Supp. 125 (D.N.J. 1982) were rendered while this Article was being edited, and are referred to in several footnotes.

could reasonably be reached from the facts both in North American Philips and in Amusement World, the outcome in both cases was a complete victory for one party over the other, like a verdict of guilty or not guilty.

It has already been remarked that the peculiar characteristics of video games could be expected to place great pressure on the established copyright dogmas that a distinction may be drawn betwen ideas and expressions, and that ideas, and more particularly games, should not enjoy copyright protection. The considerable variations of outcomes in the video game cases reflect the courts' efforts to respond to this pressure, sometimes giving in to the claims for protection too quickly, and at other times failing adequately to acknowledge them. Some back-andforth movement of this kind is inevitable whenever the law seeks to mold itself to a new environment. It is the thesis of this Article, however, that the swings of precedent in the early video game cases have been too wide. Their breadth, it is submitted, is the direct result of several largely unrecognized, but nevertheless pervasive habits of copyright adjudication, all of which incline the courts to grant or deny relief on an all-or-nothing basis. The following sections of the Article will describe how these habits have become pitfalls to the elaboration of copyright law in new settings such as video games. Suggestions for avoiding these pitfalls will also be made.

A. Ideas and Expressions²¹¹

In video game cases such as the appellate court decisions in Stern Electronics and North American Philips, the courts' application of copyright law resulted in overbroad protection for the video games. The principle that is supposed to stand as a bulwark against such overbroad protection is that copyright does not protect "ideas." Unfortunately, the courts' employment of this concept in the video game cases has been inhibited in two ways, both of which make the idea/expression distinction at best a stilted instrument of policy. The first is that the courts have generally excluded or overlooked evidence extrinsic to the accused and copyrighted games that might have helped them decide what forms of taking may be called the taking of "ideas." The second is that the courts have assumed that anything one might call a "rule of play" is an "idea" and therefore outside the scope of copyright protection. To these errors we will now turn.

²¹¹ For a general discussion of the application of the idea/expression distinction to video games, see Jones, supra note 7, at 35-43.

1. The Idea/Expression Distinction, Scenes a Faire, and a Sense of Context

a. Copyright Policy Considerations

As has already been observed, the central problem of copyright law is to reconcile and balance interests in, on the one hand, rewarding individuals for their "unique creative efforts,"212 and, on the other hand, making authors' "ideas freely accessible to the public so that they may be used for the intellectual advancement of mankind,"213 thus promoting "the Progress of Science and useful Arts."214 Some might question the contribution of video games to the intellectual advancement of mankind, but copyright protection is blind to such normative considerations, 215 and one of the most impressive aspects of the video game phenomenon is the burst of creativity this new medium has fostered. To inhibit such vigorous creative activity by threatening each variation and improvement of an initial work with costly infringement liability would be wholly inconsistent with the Copyright Act policy of promoting diversity and advancement. To expose video game authors to uncontrolled expropriation of the fruits of their labors by the marketing of knock-off games would be equally inconsistent with the Copyright Act policy of rewarding creative efforts.

The idea/expression distinction aspires to resolve, or at least to stand as a proxy for, these competing policy considerations. Copyright protects expression (thus rewarding authors) while thrusting ideas into the public domain (thus promoting science and the useful arts). Historically, the public domain encompassed far more territory than that bounded by the modern concept of the copyright "idea." The first genuine copyright legislation (following overthrow of the Stationers' Company's monopoly) was the Statute of Anne, 217 enacted in 1709, which accorded to an author and his assigns "the sole liberty of print-

²¹² Midway Mfg. Co. v. Artic Int'l, Inc., COPYRIGHT L. REP. (CCH) ¶ 25,337, at 16,890 (N.D. Ill. June 2, 1981).

²¹³ 3 M. NIMMER, supra note 10, § 13.03[A], at 13-19; see L. SELTZER, EXEMPTIONS AND FAIR USE IN COPYRIGHT 3-17 (1978).

²¹⁴ U.S. CONST. art. I, § 8, cl. 8; see Becker v. Loew's, Inc., 113 F.2d 889 (7th Cir. 1943); Eichel v. Marcin, 241 F. 404 (S.D.N.Y. 1917); 3 M. NIMMER, supra note 10, § 13.03[A], at 13-18; supra note 9.

²¹⁵ See Mitchell Bros. Film Group v. Cinema Adult Theater, 604 F.2d 852 (5th Cir. 1979), cert. denied, 445 U.S. 917 (1980) (holding, inter alia, that obscene content is not a bar to copyrightability).

This synopsis of copyright history is based on the account in B. Kaplan, supra note 10, at

<sup>1-38.

217</sup> An act for the encouragement of learning, by vesting the copies of printed books in the author's [sic] or purchasers of such copies, during the times therein mentioned, 1709, 8 Anne, ch. 19.

ing and reprinting" a book.218 In a series of cases decided between 1720 and 1785, the English courts held that translations, abridgements, and improved editions of informational works such as maps, histories, and dictionaries (all certainly "derivative" works in the modern sense)219 did not infringe the earlier, copyrighted works on which they were based.²²⁰ Justice Kaplan proposes two principles on which these cases may have been based. First, the courts would hold against infringement if the defendant had added to or improved upon the original work. In the case of an abridgement of Hawkesworth's Voyages, the defendant "was not only exculpated but congratulated for reducing Hawkesworth and preserving the substance in different language perhaps better than the original."221 Second, the courts would hold against infringement if they found that the defendant's work did not "interfere unduly with the normal economic exploitation of the copyright."222 Whatever the rationale, the effect of such cases was to restrict copyright infringement essentially to verbatim copying of the entire original work.

Nineteenth century decisions in England and in the United States preserved the rules that permitted translations and abridgements. However, the dike separating actionable verbatim copying from all other forms of taking suffered a steady erosion under the influence of expansive copyright legislation, ²²³ judicial elaboration of the concept of "substantial" taking, ²²⁴ and scholarly criticism of the early limitations on copyright protection. ²²⁵ The modern exception to liability for the taking of "ideas" appears to have emerged as a fall-back levee against the flood of unlimited protection which otherwise would have ensued once a remedy for nonverbatim copying was recognized.

Reflecting these developments, our present Copyright Act reverses the historical presumption favoring all but verbatim copying. Section 102(b) of the Act extends protection to all aspects of an "original work of authorship" except "any idea, procedure, process, system, method of

²²² Id. at 17. This consideration has survived as one of the criteria for fair use in the Copyright Act. See 17 U.S.C. § 107(4) (1976 & Supp. V 1981).

²¹⁸ Id. § 1.

²¹⁹ See 17 U.S.C. § 101 (1976 & Supp. V. 1981) (definition of a "derivative work").

²²⁰ See B. KAPLAN, supra note 10, at 9-17.

²²¹ Id at 12.

by varying, adding to, or diminishing from the main design," B. KAPLAN, supra note 10 at 20 (quoting from 8 Geo. 2, ch. 13 § 1 (1735), and the 1870 amendment to the United States copyright laws extended protection to translations and dramatizations of copyrighted works. See Act of July 8, 1870, ch. 230, §86, 16 Stat. 186, 212 (discussed in B. KAPLAN, supra note 10, at 32).

²²⁴ See B. KAPLAN, supra note 10, at 20.

²²⁵ See Justice Kaplan's comments on Justice Storey, B. KAPLAN, supra note 10, at 28-29. See generally Kaplan's remarks on the reflection in the law of the cultural transformation from classical virtues (which emphasized the importance of imitation) to the romantic ideal (emphasizing new creation and individuality), id. at 22-25.

operation, concept, principle, or discovery" that is "described, explained, illustrated or embodied" in the work.²²⁶ Thus, the logic of the Copyright Act is like a Venn diagram in which the "universe" includes all aspects of the work. Copyright protection extends to the whole universe except for the area within the universe carved out by the phrase "any idea, procedure, process, system, method of operation, concept, principle or discovery." Where, as in the case of video games, ideas are not easily distinguished from their expressions, the difficulty of identifying ideas combined with the logic of the Copyright Act (universal protection, except for ideas) foretells an area of protection that may expand beyond the bounds set by copyright policy.²²⁷

For convenience, courts typically use the word "idea" as a short-hand for the longer list in section 102(a).²²⁸ Like any English word drafted into the service of the law, the word "idea" has acquired a special copyright meaning. It is a relatively narrow meaning, the contours of which can be perceived in certain axioms of copyright protection. One such axiom is that, with rare exceptions,²²⁹ the verbatim copying of an entire work constitutes infringement of the work.²³⁰ Of necessity, a verbatim copy incorporates each and every "idea" in the original work, and punishing the verbatim copier therefore punishes one form of copying of ideas. It is assumed, however, that an "idea" for copyright purposes is capable of expression in a way different from the way it was expressed in the original work. This assumption is by no means obvious,²³¹ but it forms the basis for reasoning that one may

²²⁶ 17 U.S.C. § 102(b) (1976 & Supp. V 1981). For the designs of "useful articles" which also fall within the definition of "pictorial, graphic, and sculptural works," the Act conditions operation of this presumption on satisfaction of the requirement that the pictorial, graphic, and sculptural features of such works be "identified separately from, and . . . capable of existing independently of, the utilitarian aspects of the article." 17 U.S.C. § 101 (1976 & Supp. V 1981) (definition of pictorial, graphic and sculptural works). However, all courts have characterized video games as audiovisual works, to which the limitation expressed in § 101 for copyright in pictorial, graphic, and sculptural works which are also "useful articles" probably does not apply.

This has been true in the video game cases despite the traditional rule that when ideas and expressions cannot be distinguished, copyright protects only against vebatim copying. See supra note 170.

²²⁸ See 17 U.S.C. § 102(a) (1976 & Supp. V 1981).

²²⁹ One exception is the verbatim copying of blank forms. See 37 C.F.R. § 202.1(c) (1982); see also Baker v. Selden, 101 U.S. 99, 107 (1879) ("The conclusion to which we have come is, that blank account-books are not the subject of copyright"). However, even this exception has been questioned. See 1 M. NIMMER, supra note 10, § 2.18[C]. Another exception may be the verbatim copying of a very elementary idea. See supra note 170 (jeweled bee pin).

²³⁰ See North American Philips, 672 F.2d at 614 n.6, 616 (implying that review is not required when copying is verbatim); supra note 170.

Reverting to the ordinary meaning of "idea," one might question, for example, whether the "idea" of "To be or not to be" is capable of expression in different words. Could any paraphrase (e.g., "I can't decide whether to act or to remain passive") express the same idea? Cf. Morrissey v. Proctor & Gamble Co., 379 F.2d 675, 678-79 (1st Cir. 1967) (holding that a rule which has a limited number of forms of expression is not copyrightable); Sid & Marty Krofft

penalize the verbatim copier without unlawfully extending protection to the ideas in the original work.

A second axiom is that a work which is not a verbatim copy, but which is "substantially similar" to the original work, may also be an infringement. To be "substantially similar" to the original work, the infringing work must express the same things as the original work, albeit with different words, sounds, or images. The recognition that a "substantially similar" work may infringe the original therefore implies that capability of expression in more than one way is a necessary, but not a sufficient condition for qualification as an "idea" for copyright purposes. To qualify as an idea, what has been expressed differently in the original and in the substantially similar work must also attain a minimum level of generality. This principle forms the basis for Learned Hand's famous "abstractions test."

Combined, the logic of the Copyright Act (universal protection, except for ideas) and the narrow meaning of the copyright "idea" carry an important implication. If it is difficult to identify the ideas embodied in the copyrighted work, or if one cannot effectively separate the ideas from the expression, then the "ideas" exception becomes a null set and copyright protection expands to include all aspects of the copyrighted work. In such circumstances, the idea/expression distinction, historically the next line of defense against overbroad protection once copyright actions for nonverbatim copying had been recognized, and the modern embodiment of the public policy favoring use and exploitation of copyrighted works, fails its purpose. This is exactly what seems to have happened in video game cases, particularly Stern Electronics (district court), Armenia, and Artic International, in which the courts did not even attempt to separate the games' ideas from their expressions and, as a result, granted the plaintiffs sweeping equitable relief. The task of separating ideas from expressions is particularly difficult with regard to video games, in which the rules of play are often imbedded in, and are in some ways indistinguishable from, the games' graphics. 233 The results in cases such as Stern Electronics, Armenia, and Artic, are thus the predictable sum of adding the nature of the games to the logic of the Copyright Act.

Video game cases are not the only types of cases in which ideas are

Television Prods., Inc. v. McDonald's Corp., 562 F.2d 1157 (9th Cir. 1977). See generally B. KAPLAN, supra note 10, at 45-56 (questioning idea/expression analysis as applied, for example, to the fine arts).

²⁸² See supra note 167 and accompanying text.

²³³ It will be recalled that this is one of the differences between video games and the leading cases establishing the blackletter rule that copyright does not protect games. *See supra* notes 45-47 and accompanying text.

so difficult to separate from their expression that the distinction seems unhelpful as an arbiter of copyright policy. For graphic works such as paintings and sculptures the distinction is especially inept; it is perhaps in recognition of this that Congress reversed the Act's logic for "pictorial, graphic, and sculptural works," granting their expression protection only if "capable of existing independently of" the "utilitarian" aspects of the work.234 Justice Kaplan has argued persuasively that the identification of "ideas" in musical works, particularly modern works lacking in melody, is equally futile.235 Arguably, it would be better to do without the distinction altogether.²³⁶ Considering that the Copyright Act is only six years old, and considering that there had been calls for a revision of copyright law for more than thirty years before its passage, 237 the thought of discarding the idea/expression distinction entirely must be considered a utopian dream at best. For the time being, we are stuck with the Act's use of the idea/expression dichotomy to modulate the scope of copyright protection, and we will have to make the best of it. Fortunately, the Act's list of idea-like elements is not one of these legal bugs encased in the amber of a statute.²³⁸ The Act leaves

In determining whether the use made of such a work in any particular case is a fair use the factors to be considered shall include —

(1) the purpose and character of the use, including whether such use is of a commercial nature or is for nonprofit educational purposes;

(2) the nature of the copyrighted work;

(3) the amount and substantiality of the portion used in relation to the copyrighted work as a whole; and

(4) the effect of the use upon the potential market for or value of the copyrighted work.

17 U.S.C. § 107 (1976 & Supp. V 1981). For historical examples of the consideration of such factors, see B. KAPLAN, supra note 10, at 11-21, discussing Gray v. Russell, 10 F. Cas. 1035, 1038-39 (C.C.D. Mass. 1839) (No. 5728) (Story, J.) (considering importance of part taken); Wilkins v. Aikin, 34 Eng. Rep. 163 (Ch. 1810) (discussing relevance of borrower's profit motive); Dodsley v. Kinnersley, 27 Eng. Rep. 270 (Ch. 1761) (discussing effect of infringing work on sales of copyrighted work). For limited borrowings which exceed the policy limits, the ideal act we are imagining might sanction the grant of royalties to the copyright holder as a less restrictive alternative to injunctive relief. In effect, the concept of substantial similarity would be subsumed into the doctrine of fair use.

Revisions of the Copyright Act of 1909 were under serious discussion at least since the 1940's. See, e.g., Chafee, Reflections on the Law of Copyright (pts. 1 & 2), 45 COLUM. L. REV. 503, 719 (1945).

²³⁸ Contrast § 117 of the Act, as originally passed, which attempted to freeze the law of computer uses of copyrighted works at its 1977 state of development.

Notwithstanding the provisions of sections 106 through 116 and 118, this title does not afford to the owner of copyright in a work any greater or lesser rights with

 ^{234 17} U.S.C. § 101 (1976 & Supp. V 1981); see also B. KAPLAN, supra note 10, at 54-56.
 235 See B. KAPLAN, supra note 10, at 53.

²³⁶ Perhaps a better approach would recognize that no single formulation can hope to strike the policy balance across the whole range of "works" by which humans reach out to each other through their senses, and would instead substitute a set of factors, shifting in importance as one moves from one type of work to another. Such factors would probably include the nature and substantiality of the taking, the purpose of the taking, and the impact of the taking on the market for the copyrighted work. These are similar to the Act's criteria for fair use, located in § 107:

plenty of room for development of the idea of an "idea"; by framing discussion in terms of "ideas" and "expressions," the court's freedom of consideration is restricted, but not entirely lost.

One must, then, find ways to make ideas and expressions effectuate the desired policy even in those cases, like video game cases, in which they are not ideal intellectual tools. A careful examination of the way courts have used these tools in more traditional cases can provide some insight — both in showing techniques that may work for the more unusual cases and in showing why some standard techniques will not work.

b. Scenes a faire

One of the most important tools used to strike the policy balance in traditional cases is the concept of scenes a faire. Using this device, courts inquire whether the copyrighted and allegedly infringing works are more similar to each other than they are to other works of the same genre. In a traditional case, such as the alleged infringement of a novel, courts dig into their own knowledge and experience to provide the necessary information about other works. O'Neill v. Dell Publishing Co., Inc.²³⁹ is a good example. In O'Neill, the plaintiff claimed that his unpublished manuscript "Return to Nowhere" had been infringed by the defendant's published book Ghost Boat. Both novels used the device of a submarine that mysteriously disappears, only to reappear at a much later time. The court immediately placed this theme in a literary context familiar both to the court and (presumably) to anyone reading the opinion:

As the district court noted, Return to Nowhere uses the Rip Van Winkle theme of a sleep that lasts for years. Instead of taking place in the Catskill Mountains and being induced by strong drink quaffed during a game of "bowls" with little men, the sleep in Return To Nowhere takes place off the coast of Alaska when a submarine with its entire crew is trapped under a massive ice formation. Un-

respect to the use of the work in conjunction with automatic systems capable of storing, processing, retrieving, or transferring information, or in conjunction with any similar device, machine, or process, than those afforded to works under the law, whether title 17 or the common law or statutes of a State, in effect on December 31, 1977, as held applicable and construed by a court in an action brought under this title.

Act of Oct. 19, 1976, Pub. L. No. 94-553, tit. I, § 101, 90 Stat. 2541, 2565 (1976) (current version at 17 U.S.C. § 117 (1976 & Supp. V 1981)).

²³⁹ 630 F.2d 685 (1st Cir. 1980). For another example, see Warner Bros., Inc. v. American Broadcasting Cos., 530 F. Supp. 1187 (S.D.N.Y. 1982) (holding that the television show *The Greatest American Hero* does not infringe "Superman" based in part on comparison of those works with other works of the superhero genre).

like old Rip, however, the submariners do not age as the years pass. When awakened from their frozen state, they are the same age as when the submarine dove under the ice pack on one Christmas Eve, 1942, to avoid Japanese destroyers.²⁴⁰

By drawing an analogy to the story of Rip Van Winkle, the court showed that the idea of a character who disappears and mysteriously returns at a later time was already in the public domain and not available for copyright protection. After summarizing the plot of each book in some detail, the court affirmed the district court's summary judgment for the defendant, holding that the similarities between the two works were only on the level of unprotected ideas.²⁴¹

A similar use of context appears in a more recent decision, Warner Brothers, Inc. v. American Broadcasting Cos., ²⁴² in which the court held that the television series The Greatest American Hero had not infringed copyright in the "Superman" comic books, television series, and movies. In that case, the central characters in the accused and infringing works shared many features: "Super-strength," "Super-hearing," "Super-vision," "Super-speed," "Super-breath," "Invulnerability," "The ability to Fly," an "Alter-ego," and a "Costume." However, the court reviewed generally the literature of "super heroes," finding that many of them also had capes, tightfitting uniforms, role reversals, and so on. At most, the hero in The Greatest American Hero was only marginally more similar to Superman than it was to the other works of the super-hero genre. The court therefore found for the defendant.

Courts often equate scenes a faire with the "idea" of the copyrighted and accused works.²⁴⁴ This equation is an instance of legal fiction, or at least legal exaggeration. For example, the cape typically worn by comic book superheroes has no discernable intrinsic connection with the idea of a creature having extraordinary powers. (By contrast, bulging muscles and a trim physique might claim such a connection.) The cape is more fairly described as a literary convention or device that probably has an historical rather than a logical explanation. Clearly, scenes a faire and ideas are often not synonymous, and thus recitation of the principle that ideas are not protected does not adequately explain denial of protection to scenes a faire. More plausible alternative expla-

²⁴⁰ O'Neill, 630 F.2d at 687.

²⁴¹ See id. at 690.

²⁴² 530 F. Supp. 1187 (S.D.N.Y. 1982). An additional factor supporting the court's finding of noninfringement is that the *Hero* series parodies Superman. As Kaplan has noted, parody often requires a high degree of similarity to be effective. *See* B. KAPLAN, *supra* note 10, at 69.

²⁴³ Warner Bros., 530 F. Supp. at 1190-92.

²⁴⁴ See, e.g., North American Philips, 672 F.2d at 616.

nations come to mind. One is that the standard assumption that access plus substantial similarity implies copying does not obtain when the substantial similarity between the works lies in their use of conventional devices: the author of an accused work could have copied the devices from any number of sources, not only from the copyrighted work.245 Suppose, though, that the plaintiff could prove beyond question that the defendant copied a device, such as the superhero cape, from the plaintiff's copyrighted work. Once again, infringement should not lie, for two reasons. First, the device cannot be used to distinguish the copyrighted work from others in the marketplace, because by definition the device appears in works other than the copyrighted work. The purpose of protecting the market for copyrighted works would not be served by protecting a feature that is incapable of inducing a person to use the copyrighted work in preference to other, similar works. A second reason relates to the concept of originality.²⁴⁶ In copyright, the requirement of originality is thought to be essentially trivial. The copyright registration — which is not reviewed substantially by the Copyright Office — constitutes prima facie evidence of originality, 247 and the burden is on the defendant to prove absence of originality.248 The concept of scenes a faire, however, gives content to this otherwise trivial requirement. It would be incredible for an author (who presumably is reasonably widely read) to claim that he invented out of whole cloth a standard literary (or video game) device that he could have taken from any number of previously published works.249 Thus, a court can deny relief under the scenes a faire concept without at the same time overtly

²⁴⁵ See B. KAPLAN, supra note 10, at 44.

²⁴⁶ Both courts and commentators have been leery of introducing to copyright any doctrine as stringent as the criterion of novelty in patent law. Compare Hein v. Harris, 175 F. 875 (C.C.S.D.N.Y. 1910), aff'd, 183 F. 107 (2d Cir. 1910) (Hand, J., applying an "invention" test) with Fred Fisher, Inc. v. Dillingham, 298 F. 145 (S.D.N.Y. 1924) (Hand, J., avoiding a strict test of novelty). These cases are discussed in B. KAPLAN, supra note 10, at 41-44. See also 3 M. NIMMER, supra note 10, § 16.08[B], at 16-58. The courts have avoided such a doctrine with good reason—as Kaplan puts it, "[i]f [novelty] is a difficult, perhaps an illusory, measure in the field of mechanical improvements, how much harder would it be in literature or the other arts." B. KAPLAN, supra note 10, at 43. Copyright "originality" differs from patent "novelty," in that the former requires only that the author did not copy from the prior art, whereas the latter requires that he could not have. See Filmon Process Corp. v. Spellright Corp., 274 F. Supp. 312, 313 (D.D.C. 1967) (patent law requires the applicant to be first inventor as well as an original one), aff'd, 404 F.2d 1351 (D.C. Cir. 1968); Russell v. Trimfit, Inc., 428 F. Supp. 91, 93 (E.D. Pa. 1977) (copyright protects from copying only whereas patent protects from any infringement), aff'd, 568 F.2d 770 (3d Cir. 1978); Fred Fisher, Inc., 298 F. at 150; see also B. KAPLAN, supra note 10, at 43-44.

²⁴⁷ See Midway Mfg. Co. v. Bandai-America, Inc., 546 F. Supp. 125, 139 (D.N.J. 1982).

²⁴⁹ This is like the grounds on which Judge Hand held for the plaintiff in *Fred Fisher, Inc.*: he believed that the accused author, Jerome Kern, did not remember taking from the plaintiff's copyrighted song "Dardanella," but concluded that the taking must have been unconscious. *See* 298 F. at 147.

expanding the concept of originality or upsetting the presumption of originality arising from registration.

Scenes a faire thus play a vital role in cases in which courts attempt to draw the line between actionable and permissible borrowing. The identification of standard literary devices for the copyrighted work's genre provides the context in which the author created his work and in which the work will be presented to its audience. With an eve on this context, the court may with a steadier hand draw a line between idea and expression responsive to copyright policy. The context gives the court a feel for what the author created, and for which he therefore deserves a reward. It also helps the court to judge what type of infringement would adversely affect sales of the work. One might say that in a case like O'Neill or Warner Brothers the idea/expression distinction loses its arid metaphysical quality — what Kaplan calls its "abacadabra"250 —and becomes tangible. If Hand's continuum frames the discussion of ideas and expressions, scenes a faire fill in the picture. adding perspective and horizon. At the same time, scenes a faire subtly expand the exception to copyright protection by intimating the more sensitive issues of originality and novelty. To use an old metaphor, when effectively used, scenes a faire put meat on the bare bones of the Copyright Act's idea/expression scheme.

If scenes a faire are so helpful in drawing the idea/expression line, why haven't they assisted courts in drawing that line in the video game context? The answer lies in the manner by which courts habitually acquaint themselves with the relevant context. As exemplified by O'Neill, for traditional literary works courts examine the copyrighted and allegedly infringing works against the background of their own literary knowledge. Expert testimony and time-consuming testimony on "extrinsic" issues such as comparisons of the copyrighted and accused works with other works of a similar type are disfavored. The O'Neill court rejected the plaintiff's request for additional discovery, commenting, "[i]t is difficult to understand how additional evidence, whatever it might be, could change the written words of the two novels." The court concluded:

Nor can the testimony of an expert provide what is clearly lacking.

²⁵⁰ B. KAPLAN, supra note 10, at 56.

²⁶¹ See, e.g., Nichols v. Universal Pictures Corp., 45 F.2d 119, 123 (2d Cir. 1930). But see Franklin Mint Corp. v. Nat'l Wildlife Art Exchange, Inc., 575 F.2d 62, 66 (3d Cir.) (expert testimony admitted on conventions in ornithological art), cert. denied, 439 U.S. 880 (1978); Sid & Marty Krofft Television Prods., Inc. v. McDonald's Corp., 562 F.2d 1157, 1164 (9th Cir. 1977) (commenting that "analytical dissection and expert testimony are appropriate" to determine whether ideas in two works are substantially similar).

²⁶³ O'Neill, 630 F.2d at 690.

Although we may not be qualified literary critics, we are fitted by training and experience to compare literary works and determine whether they evidence substantial similarity. We share Learned Hand's feeling that, in this type of case, expert evidence ought generally to be excluded.²⁵³

The exclusion of extrinsic evidence and of expert testimony is appropriate for traditional literary and audiovisual works because the court's own expertise provides the context within which the line between idea and expression may be assayed intelligently. One may question, however, whether courts are "fitted by training and experience to compare"254 very new forms of expression such as video games. The wide swings of precedent in video game cases suggest that they are not. Missing in many video game opinions is a confident sense of the extent to which two video games are more or less similar to each other than they are to other video games.²⁵⁵ Missing also is a sense of the "public domain" and "scenes a faire" for video games. 286 If, as has been suggested, context and scenes a faire help to give substance and particularity to the otherwise vacant concept of an "idea," then courts that lack a sense of context will have difficulty filling in a region of unprotected "ideas" for video games. 257 To return to the Venn diagram analogy, the "ideas" exception to the Copyright Act's otherwise universal protection becomes a null set, and the extreme overbreadth of the holdings in cases such as Stern Electronics, and Armenia may result. To put it more simply, any two video games will appear similar to a judge who has seldom seen, much less played, a video game. To the video game connoisseur, which many of the players — the video game "audience" seem to be, the same two games may exhibit intriguing differences. By analogy, if one rarely views TV soap operas, any two soap operas might seem highly and infringingly similar. Only persons who regularly watch soap operas seem to appreciate the unique features of each.

²⁵³ Id

²⁵⁴ Id.

²⁵⁶ But see Midway Mfg. Co. v. Bandai-America Inc., 546 F. Supp. 125 (D.N.J. 1982), in which the court compares Midway's "Galaxian" game with a preexisting work, "Space Invaders," and with Bandai's subsequent game, also called "Galaxian." Compare id. at 144 with id. at 146-47.

²⁵⁶ Cf. North American Philips, 672 F.2d at 617 ("Certain expressive matter in the Pac-Man work, however, should be treated as scenes a faire and receive protection only from virtually identical copying.").

The only courts that seem to have successfully undertaken this task are the Seventh Circuit in the *North American Philips* case, see 672 F.2d at 617 (describing the abstract "idea" underlying the Pac-Man "maze chase" game, quoted supra in the text accompanying note 171), and the opinion of the District Court in *Bandai-America*, see 546 F. Supp. at 148 (describing the idea of Midway's Galaxian game: "it is an outer space video game in which the player controls a rocket ship defending itself against a swarm of computer-controlled attacking aliens who attempt to bomb and collide with the player's ship.").

One may conclude that the protection for video games has often been overbroad, and that the occasional discussions of ideas in the video game cases have been hollow and unsatisfying in part because, on the one hand, the courts' experience with the games is too limited to take judicial notice of standard devices comparable to the Rip Van Winkle theme of literature and, on the other hand, the courts have been deterred by precedent and habit from supplementing their own knowledge with extrinsic evidence and expert testimony.

Several of the video game cases provide a notable exception to this trend, in that they carefully distill the unprotected ideas from the copyrighted video games, and acknowledge that copyright protection cannot extend to those ideas. Thus, in North American Philips and in Bandai-America the ideas in Pac-Man and Galaxian were abstracted and described. These opinions are also unusual in their attempts to "consider the nature of the protected material and the context in which it appears" as an additional step toward distinguishing ideas from protectible expression. It is perhaps from this sense of "context" that the court in North American Philips asserted that "[t]he main attraction of a game such as Pac-Man lies in the stimulation provided by the intensity of the competition."²⁶⁰

It is submitted that in unusual contexts, such as video games, the admission of evidence, both expert and otherwise, about other works similar to the copyrighted and accused works, should become standard practice.²⁶¹ Such evidence would provide valuable information about the standard devices (*scenes a faire*) found in games similar to the ones involved in the suit at hand. Such evidence would also allow the courts to place their comparison of the copyrighted and allegedly infringing games into the context in which the games are actually created and played.²⁶² The routine use of such evidence would guard against over-

²⁶⁸ See supra text accompanying note 171 and supra note 257.

North American Philips, 672 F.2d at 619; see also Bandai-America, 546 F. Supp. at 149.
 North American Philips, 672 F.2d at 619; see supra notes 190-92 and accompanying text.

²⁶¹ It is generally said that proving substantial similarity, to which such evidence would be directed, is part of the plaintiff's burden of proof in an infringement action. See 3 M. NIMMER, supra note 10, § 13.01[B], at 13-6. However, the nature of these issues would require the plaintiff to prove a negative—that the similarities between the accused and copyrighted works cannot be explained by a genre, scenes a faire, and the like. For this reason, the most telling evidence on either of these points is likely to be introduced by the defendant.

An example of the effective use of such testimony in a copyright case is Franklin Mint Corp. v. Nat'l Wildlife Art Exchange, Inc., 575 F.2d 62 (3d Cir.) cert. denied, 439 U.S. 880 (1978), discussed supra note 251. In another case, Midway Mfg. Co. v. Bandai-America, Inc., 546 F. Supp. 125 (D.N.J. 1982), the court liberally entertained evidence of games similar to those before it, but considered that evidence only on the narrow issue of copyright originality. See, e.g., id. at 151. The court did not expressly use the evidence of other works to identify unprotected scenes a faire, although it achieved the same effect by limiting its injunctive relief to the "original" elements of the copyrighted work (Pac-Man). See id. at 153.

broad copyright protection, and at the same time facilitate a less metaphysical and more policy-oriented approach to infringement issues. Over time, as the courts' experience catches up with new medium, the need for such evidence can be expected to diminish.

2. Not all Rules are Copyright Ideas

One may criticize all of the video game decisions rendered to date for their failure to provide convincing analyses of the issue of substantial similarity. Even decisions such as those in Amusement World and at the trial and appellate levels in North American Philips, which minutely compare the games in question, fail to explain why they drew where they did the line between ideas and expressions. However, the early decisions' reluctance to apply dogmatically to video games the principle that "copyright does not protect games" is more justifiable. As a direct consequence of the facts that video games are a new field and that their creation requires enormous effort and expense.²⁶³ original works of authorship are evident in the games' rules and methods of play. The authors of K.C. Munchkin, for example, invented out of whole cloth the programmable maze and the moving, accelerating dots which are central to the play of K.C. Munchkin.²⁶⁴ They also created such nonessential "graphic" or "pictorial" features of the game as the face on the central character and "spookier" goblins.265

The time and investment required to create a game like Pac-Man or K.C. Munchkin, coupled with the fact that creativity tends to be centered in the games' rules rather than their graphics, suggest that it may be appropriate for copyright protection to reach some aspects of the games' "methods of play." Any protection for method of play would be a departure from the blackletter law that copyright does not protect games. However, to protect only the shapes and facial expressions of the munchkins and munchers might be an inadequate inducement to, and reward for, the creation of a game such as K.C. Munchkin or Pac-Man. If the scope of protection is not broad enough to encourage the creation of new games, then creativity will be deterred just as surely as it will be deterred by an overbroad protection of existing games.

²⁶³ See supra text accompanying notes 39-44; see also the North American Philips district court's description of the creation of K.C. Munchkin, 2 COPYRIGHT L. REP. (CCH) ¶ 25,363, at 17,046-48.

²⁶⁴ See North American Philips, 2 COPYRIGHT L. REP. (CCH) ¶ 25,363, at 17,046-47. The court's opinion notes that Mr. Averett had invested in an earlier maze-chase game called "Take the Money and Run," see id. at 17,047, but the opinion does not indicate whether this game antedated Pac-Man, nor does it indicate whether any other maze-chase game had preceded the development of Pac-Man.

²⁶⁶ See id. at 17,046-47; supra text accompanying notes 136-38 & 188.

It should be possible to extend copyright protection to some rule-like aspects of video games without doing great violence to the statutory principles that copyright does not protect "ideas" and "methods of operation." As noted above, an "idea" for copyright purposes must have a minimum level of generality. Not all of the rules and methods of play of a video game necessarily reach this level of generality. An example of a very particularized rule is the principle in the Asteroids game that when hit a large rock splits into two medium rocks, which when hit split into smaller rocks, which when hit again disappear. For reasons already discussed at length, deciding whether this rule ought to be protected requires some knowledge of similar games employing similar rules (i.e., knowledge of context), but it seems likely that such a rule might be protected without savaging the principle that copyright does not protect "ideas." In other words, not all rules and methods of play are necessarily "ideas" for copyright purposes. 267

On the other hand, the broad statutory prohibition against any protection for "any idea, procedure, process, system, method of operation, concept, principle or discovery" must not be short changed. The purpose of copyright is to foster creativity, and this purpose will be achieved in the highest degree if protection is no broader than necessary to create an incentive for the creation of new works. In the context of video games, this suggests that, at most, only the most narrowly particular method of play or rule should qualify for copyright protection.

As discussed above, the Seventh Circuit in North American Philips thoughtfully applied the idea/expression distinction to the video games before it, considering doctrines such as scenes a faire and the policies underlying the Copyright Act. Yet the court's analysis utlimately failed, extending such broad protection to the plaintiffs' Pac-Man that it appeared to require many original features of the defendants' K.C. Munchkin game to be abandoned as well.²⁶⁹ This result

²⁶⁶ See supra text accompanying note 121.

The Copyright Act proscribes protection for "sculptural" features that cannot be "identified separately from, [or be] capable of existing independently of, the utilitarian aspects of the article." 17 U.S.C. § 101 (1976 & Supp. V 1981) (definition of pictorial, graphic, and sculptural works). If video games were considered graphic works, and if the rules of play were considered "utilitarian" for purposes of the Copyright Act, then copyright protection of video games could be very limited indeed. Cf. 1 M. NIMMER, supra note 10, § 2.18[H][3][a]. Note, however, that courts invariably characterize video games as audiovisual works, and that § 102(a) of the Copyright Act does not require the expression of an idea to be "capable of existing independently of" the idea itself. See supra text accompanying note 50; see also 1 M. NIMMER, supra note 10, § 2.18[H][3][b].

²⁶⁸ 17 U.S.C. § 102 (b) (1976 & Supp. V 1981).

²⁶⁹ North American Philips has since introduced a new game, "K.C.'s Krazy Chase!" that incorporates some aspects of the mazes developed for K.C. Munchkin. See Blanchet, Drats! Avoid them or you're out of Luck, Philadelphia Inquirer, Nov. 7, 1982, at P8, col. 1.

reflects two further difficulties in video game copyright adjudication that lead courts to create overbroad remedies on behalf of plaintiffs whose copyrights have been to some degree infringed: the use of copyright to remedy trademark infringement, and the "ordinary observer test" as a prescription for remedies, rather than as a litmus test of infringement. To these errors we will now turn.

B. Copyright Infringement, Inequitable Conduct, and Unfair Competition

One of the lessons of the video game cases is that allegations of copyright infringement are often accompanied by circumstances suggesting trademark infringement or other unfair methods of competition. In Stern Electronics, the defendant had adopted "Scramble 2" as a mark for the game accused of violating Stern's copyright in the game "Scramble." Scramble 2 is not only so similar to Scramble that a buyer would assume that the products came from the same source; the use of the numeral "2" also suggests that the defendant's game was a later or better edition that should be purchased in preference to the plaintiff's game.²⁷⁰ In Dirkschneider, the defendants had for one game adopted the plaintiff's mark (Rally X) exactly and for another game had adopted a mark (Galactic Invaders) very similar to the plaintiff's (Galaxian). The court also found trademark infringement in the defendant's appropriation of the plaintiff's game characters.²⁷¹ With regard to North American Philips, a strong argument can be made that if the creators of K.C. Munchkin had transgressed, the wrong lay in their appropriation of Pac-Man's characters, seen as trademarks, rather than in the infringement of Pac-Man's copyright.272

If one judges by what the courts said in these cases, the trademark infringement issues seem to be treated as an after thought at best,²⁷³ riding on the coat tails of the courts' copyright infringement holdings. In *Stern Electronics* and *Dirkschneider*, the courts addressed trademark issues only briefly toward the ends of the opinions; the *North American*

²⁷⁰ It is generally said that trademark law serves two purposes: protecting the public against false designation of origin and protecting the goodwill of the person who is first to use the mark in connection with particular goods or services. The defendant's conduct in *Stern Electronics* was flagrantly inconsistent with both of these policies. It traded off the plaintiff's goodwill, and also carried the implication that the plaintiff's product was outmoded. *See supra* text accompanying note 78.

²⁷¹ See supra text accompanying notes 89-90.

²⁷² See supra text accompanying notes 204-10.

²⁷³ See, e.g., Williams Elecs., Inc. v. Artic Int'l, Inc., 685 F.2d 870, 871 (3d Cir. 1982), in which the court noted that "[t]he district court . . . severed plaintiff's claims of copyright infringement from its claims of trademark infringement and unfair competition. . . . These latter claims have not yet been adjudicated."

Philips courts omitted altogether any explicit consideration of the Pac-Man characters as trademarks. Most striking is the fact that no court in a video game case has found for the defendant on one type of infringement, but for the plaintiff on the other.

Rather than distinguish and separate their considerations of copyright and trademark issues, the courts have tended to decide both questions together,²⁷⁴ often basing their decisions on an implicit characterization of the defendant as a "good guy" or a "bad guy."²⁷⁵ Again, the practical effect of this habitual all-or-nothing approach is that good guys are exonerated and bad guys punished, even when such an outcome considered more dispassionately may seem oversimplified.

Equitable considerations about the quality of a litigant's conduct may be appropriate to consideration of alleged trademark infringement, but less so to alleged copyright infringements. Trademark law and section 43(a) of the Lanham Act²⁷⁶ share the broad purposes of protecting a first user's exclusive right to profit from the goodwill he has generated and of protecting the public against "false designations of origin."²⁷⁷ Thus, trademark law recognizes a right in the first user of a mark to make all of the profit derived from the goodwill associated with a mark and to prevent unfair or deceptive use of the same or confusingly similar marks by other persons. By contrast, protection for the economic interests of the copyright owner is more limited. The owner's profits are not an end in themselves, but only a means to the constitutional goal of encouraging the development of "science and the useful arts."²⁷⁸ In a case such as North American Philips, the fact that the

Another example of a video game case in which trademark and copyright claims are joined is Midway Mfg. Co. v. Bandai-America, Inc., 546 F. Supp. 125 (D.N.J. 1982). Willams Electronics, Inc. v. Artic Int'l, Inc., 685 F.2d 870, 877 (3d Cir. 1982) is an exception because in that case the court severed the trademark and copyright issues.

This apparent preoccupation with the parties' conduct might result in part from the fact that the defendants in several cases were guilty of highly inequitable practices. In Stern Electronics, for example, the defendants chose, under circumstances that showed bad faith, a confusingly similar mark for a work that was already dangerously similar to the plaintiffs' copyrighted works. See supra note 78 and text accompanying notes 78 & 149. In a close case, such conduct might easily tip the balance against the defendants, who will find it difficult under the circumstances to make high-minded public policy arguments about the evils of overbroad copyright protection. Conversely, policy justifications for conduct that may damage a plaintiff's economic interests will always be more persuasive when urged by a defendant whose conduct otherwise shows solicitude for the public good by avoiding confusing trademarks and other forms of unfair competition. See supra text accompanying notes 149-50.

²⁷⁶ 15 U.S.C. § 1125(a) (1976).

²⁷⁷ See Warner Bros. Co. v. American Broadcasting Cos., 530 F. Supp. 1187-95 (S.D.N.Y. 1982). Compare 15 U.S.C. § 1125(a) (1976) (statutory protection against false designations of origin) with 1 R. CALLMAN, supra note 207, § 1.24 (discussing protection of public from deception as one of the goals of trademark law). See generally 3 R. CALLMAN, THE LAW OF UNFAIR COMPETITION, TRADEMARKS AND MONOPOLIES § 67.5 (3d ed. Supp. 1981) (explaining public policy bases for protection against trademark infringement and unfair competition).
278 See supra text accompanying notes 212-14.

copyright holders made \$150 million during a thirteen month period when the accused work was also on the market²⁷⁹ does not diminish the trademark interest in safeguarding the amount of the claimant's profits. By contrast, \$150 million seems sufficient to reward and encourage the creation of a video game. The copyright policies may therefore be consistent with allowing the alleged infringement to continue.

The copyright concept of character infringement could function in some cases as a half-way house between copyright and trademark analvsis. As discussed in connection with North American Philips, a court may find character infringement even if the accused work involves similar characters in an entirely different "idea," or plot, as long as the characters are "sufficiently developed to command copyright protection."280 On the other hand, trademark protection is available for symbols and shapes that are too stylized and simplified to qualify for protection as copyrighted "characters." Indeed, the best trademarks tend to be very simple. By contrast, copyright focuses its protection on details; oversimplified features of a work are often geometrical and abstract, falling toward the "ideas" end of Hand's abstraction continuum. Trademark and unfair competition law thus provide protection both to types of creations (simplified marks) and in types of situations (where the plaintiff has been amply rewarded despite the alleged infringement) in which the argument for copyright protection might be comparatively weak.

Because the goals of trademark and copyright protection are so different, the courts should not permit the equitable considerations appropriate to trademark law unduly to influence their decisions on copyright issues. When the copyright issues are as unusual as they are in video game cases, any confusion of the two issues will inevitably interfere with the development of a consistent copyright analysis for video games. A more desirable alternative would be to provide separate remedies for trademark and copyright infringement.²⁸¹ In appropriate cases, this might be done by enjoining the defendant's use of the plaintiff's trademarks and granting damages for infringement or unfair competition, while at the same time holding (if true) that part or all of the defendant's work is not "substantially similar" to the plaintiff's for copyright infringement purposes.

²⁷⁹ See supra text accompanying note 199-200.

²⁸⁰ See supra text accompanying notes 202-09.

²⁸¹ See, e.g., Midway Mfg. Co. v. Bandai-America, Inc., 546 F. Supp. at 154-55.

C. The Ordinary Observer Test

The all-or-nothing character of relief in many copyright cases has already been associated with shortcomings in the application of the idea/expression distinction and with the use of copyright law to remedy trademark infringement. Perhaps the most potent source of all-or-nothing relief, however, is the "ordinary observer test" for substantial similarity. This test has had a variety of manifestations. In its purest and perhaps earliest form, it states that actionable copyright infringement may only be found if the ordinary, reasonable lay person would detect the plagiarism without the aid of critical analysis or expert testimony. 282 Two leading cases, Arnstein v. Porter, 283 and Sid & Marty Krofft Television Productions, Inc. v. McDonald's Corp., 284 modified the original statement of the test by recognizing that expert testimony and "dissection" may be appropriate for some limited purposes. In Arnstein, the Second Circuit separated the question of copying from the question of infringement. The court held that when "there is evidence of access and similarities exist," "analysis (dissection) is relevant, and the testimony of experts may be received," to aid the trier of fact in determining whether "the similarities are sufficient to prove copying."285 The court held, however, that once copying is established, the issue of "unlawful appropriation" must be decided by "the response of the ordinary lay [observer]; accordingly, on that issue, 'dissection' and expert testimony are irrelevant."288 In Krofft, the Ninth Circuit appeared to lump together the questions of copying and infringement (applying the ordinary observer test to both), but allowed expert testimony and dissection for the limited purpose of determining whether there was substantial similarity as to the "general idea" contained in the two works, 287

²⁸³ See Harold Lloyd Corp. v. Witwer, 65 F.2d 1, 18 (9th Cir. 1933), cited in 3 M. NIM-MER, supra note 10, § 13.03[E], at 13-40 to 13-41.

^{283 154} F.2d 464 (2d. Cir. 1946).

³⁸⁴ 562 F.2d 1157 (9th Cir. 1977).

²⁸⁵ Arnstein, 154 F.2d at 468.

²⁸⁶ Id

^{**}Krofft, 562 F.2d at 1164-66. Nimmer criticizes Krofft on the ground that similarity in the works' "general ideas" is irrelevant to infringement, since copyright does not protect "general ideas" in any event. See 3 M. NIMMER, supra note 10, § 13.03[E], at 13-49 n.121.3. In this, Nimmer is surely correct, although the mistake he identifies is so elementary that it is difficult to believe that the Ninth Circuit meant what it said. It seems more likely that the court meant to allow expert testimony to help bridge the gap between a basic work (perhaps a novel) and its derivatives (movies, plays). Considered in this way, the Krofft test is directed at the problem that mainly troubles Nimmer about the ordinary observer test — that the layman might not, without expert coaching, perceive that a difference between the copyrighted and accused works might be required by the technical demands of a different medium and might not, therefore, weigh against infringement. See 3 M. NIMMER, supra note 10, § 13.03[E], at 13-45. Nimmer's point may be valid on the issue of proof of copying, but one might question why technically required differences

Subject to variations like those in Arnstein and Krofft, and despite persistent criticism,²⁸⁸ the courts have continued placing great emphasis on the uncritical reactions of the "ordinary lay observer." Although typically stated as a unitary "test" for substantial similarity,²⁸⁹ the ordinary observer approach is a complex of several policy decisions about the nature of, and proper remedies for, copyright infringement. Fundamentally, it embodies a philosophy about the nature of copyright protection. That is, courts have emphasized the reactions of the lay observer because they have found that copyright is intended to protect the copyright holder's market, which, the courts assume, is comprised of "ordinary observers." The identification between the market for copyrighted work and the ordinary observer is so strong that the "ordinary observer test" is also referred to as the "audience test," 290 reflecting the belief that the audience for a copyrighted work and the ordinary observer are essentially the same.

The test is invariably categorized as a method for determining whether the accused work infringes the copyrighted work. However, the test also carries implications about the proper remedies for infringement. This second dimension is not stated explicitly in the published opinions, but it may be perceived in the curious manner by which courts ask their hypothetical ordinary observer to compare the accused and infringed works. Courts say that infringement will be found only if the accused work's "general design, style and tone . . . is such that an average lay observer would be likely to recognize [it] as having been derived from [the copyrighted work]." Pursuing this theme, courts remind themselves not to assess the two works "hypercritically or with meticulous scrutiny," but to determine instead "whether the accused work has captured the 'total concept and feel' of the copyrighted work." The test thus requires the hypothetical ordinary observer to

should not weigh against infringement as much as whimsical differences. The author of the accused work put in the additional effort in either case, and it seems unfair to penalize him for meeting the technical demands of his medium. Ridden far enough, this train of thought can lead one to question why the author of, for example, a novel should not be required to write a screen-play before he acquires rights in the movie derived from his novel, particularly when extensive revision is required and the novel and movie share little more than title, character names, and highlights of plot. But this raises the general question of protection for derivative works, which is beyond the scope of this Article. See generally B. KAPLAN, supra note 10, at 56-58; id. at 6-12 (historical nonprotection of abridgements).

²⁸⁸ See 3 M. NIMMER, supra note 10, § 13.03[E], at 13.41-.46.

³⁸⁹ See, e.g., North American Philips, 672 F.2d at 614.

²⁸⁰ See 3 M. NIMMER, supra note 10, at § 13.03[E].

Jack Lenor Larsen, Inc. v. Dakotah, Inc., 452 F. Supp. 99, 100 (S.D.N.Y. 1978).
 Krofft, 562 F.2d at 1164 (quoting Stonesifer v. Twentieth Century-Fox Film Corp., 140 F.2d 579, 582 (9th Cir. 1944)).

²⁹³ North American Philips, 672 F.2d at 614 (quoting Roth Greeting Cards v. United Card Co., 429 F.2d 1106, 1110 (9th Cir. 1970)).

consider each work in its entirety so as to ascertain not its details but, so to speak, its gestalt.

This holistic approach to infringment is not a logically required implication of the selection of the ordinary observer as the principal judge of copyright infringement: surely the lay observer is capable of judging whenever a chapter of an accused work is similar to a chapter of the copyrighted work. Whatever its origins, however, this explicit element of the test for infringement has come to bear a vital implicit message about the proper remedy for infringement. If the ordinary and reasonable person finds the accused and copyrighted works to vary in overall design, the defendant gets off scot free, no matter how many details he may have borrowed from the plaintiff. If the ordinary person finds the works to be the same, the powerful equitable remedies of the Copyright Act (injunction, and impoundment or destruction of infringing copies) are oftentimes applied to the whole accused work, regardless of how many noninfringing elements it may also contain.294 This implication about infringement remedies is the silent partner of the ordinary observer test for infringement itself.

The "ordinary observer" test is thus at once both an impressionistic approach to the issue of actionable infringement and a wholesale approach to the remedy for infringement. In each aspect, it serves useful purposes. In the first place, it is — and should be —a sine qua non for copyright infringement. The "ordinary observer" is, of course, a projection of the trier of fact (usually the judge himself).295 If to his untrained but presumably impartial and perspicacious eye the works do not appear to be similar, and if he is not led to believe that the accused work copied substantially from the copyrighted one, then it can be argued that the copying, if any, was either too slight or too subtle to be the proper subject of copyright protection. Copyright is designed in part to protect the income of an author's work. Often, the economic success of a work (a novel, a play, a movie, a television series, a how-to book) will depend on whether "ordinary" people like the judge or members of a jury will buy it, watch it, or use it. In such cases, copyright protects the market for the work among "ordinary observers," and if they would not perceive the accused work as a substitute for the original, then the

²⁹⁴ Midway Mfg. Co. v. Bandai-America, Inc., 546 F. Supp. 125 (D.N.J. 1982) is an exception to the generalization. In that case the court tailored the relief more carefully.

restraining order or preliminary injunction, so that the trier of fact in every one of these cases has been a federal district court judge. For works such as video games, which have a profitable life measured in months rather than years, see North American Philips, 672 F.2d at 620, and Stern Electronics, 523 F. Supp. at 638, it is likely that the ordinary observer will always be the judge, since the fighting issue of market share will have disappeared before a trial can be had.

economic harm potentially caused to the copyrighted work becomes attenuated and the strength of the justification for banning the accused work diminishes.²⁹⁶ Thus, for many works, there is sound justification in policy for stressing the ordinary observer's reaction.

The ordinary observer approach has secondary benefits as well. It encourages judicial economy and avoids interminable expert testimony. A procession of English professors (or computer programmers) on the witness stand, each competing with the other for the most precious comparison between the accused and copyrighted works, is a judge's nightmare that probably exerts a powerful disincentive against expert testimony and "dissection." The test may also afford a court a psychological advantage in the exercise of judicial discretion. As mentioned above, the test allows the judge to project his personality into the shell of the "ordinary observer." In that guise, the judge can exercise personal judgment — which is surely indispensable to his work — without relinquishing the court's outward appearance of impartiality. Thus, the test protects the judge against the dangers of stating openly, "I think these works are so similar I would as soon buy the accused one as the copyrighted one" and allows himself to say instead, "The court finds that an ordinary lay observer would as soon buy one as the other."297

The ordinary observer test's wholesale approach to relief may also help to defer infringement. If a would-be plagiarist knows that any borrowing from a copyrighted work could jeopardize his entire work, including even those portions that are original, he may be assisted in overcoming the temptation to profit from the success of others. Thus, the in terrorem effect of a wholesale approach may reduce the need for authors (who by reputation are impecunious) to file expensive lawsuits to protect their copyrighted works.

Despite these many advantages, the ordinary observer test has profound limitations. Nimmer, for example, argues that the test may fail to uncover instances of copying, such as the conversion of a novel into a derivative work such as a movie, in which "the immediate and spontaneous observations of a person untrained in the special requirements and techniques of the play, the novel, the short story, and the motion picture, may fail to note similarities which, if analyzed and dissected, would be only too apparent."298 The application of the ordinary observer test in the video games cases suggests that in other circum-

See 3 M. NIMMER, supra note 10, § 13.05[A][4], at 13-64.
This psychological advantage may help to explain the prevalence of "ordinary observer" or "ordinary reasonable man" tests in many areas of the law. See 3 NIMMER, supra note 10, § 13.03[E], at 13-43 (comparing the ordinary observer test in copyright with similar tests in torts and criminal law, among others).

³ M. NIMMER, supra note 10, § 13.03[E], at 13-45. But see supra note 287.

stances it may incline the court too much in the direction of finding infringement. The most avid video game users seem to be pre-teens and teen-agers, not the middle-aged adults who occupy the federal bench and jury box. As discussed above in connection with scenes a faire, two games that appear similar (and perhaps equally pointless) to a distinguished member of the federal judiciary might to the thirteen year old enthusiast show stimulating and laudable diversity. Furthermore, the games are created by computer programmers, a breed notorious for the opacity of its language and processes to the "ordinary observer." The "ordinary observer"—the judge—might not have a good sense as to whether one work was "copied" from another. He would need expert testimony to help resolve the issue.

As exemplified by Amusement World and by the court of appeals decision in North American Philips, the all-or-nothing relief implied by the ordinary observer test cuts across the line between idea and expression, no matter how carefully the court's opinion may have been to draw that line. This blurring is undesirable for several reasons. It can be unjust. In Amusement World, the copyright holder obtained no relief, even though some aspects of its game Asteroids had obviously been copied by the creator of the accused work Meteors. At the opposite extreme, the appellate decision in North American Philips deprived the defendants of any reward for their creation of the many unique features in K.C. Munchkin — features the district court had found to be challenging and, one infers, superior to similar features in Pac-Man. Thus, the in terrorem effect of the wholesale approach tends to deter the creation of new video games and to foster monopolization by the first promoter of each type of game. The superior of each type of game.

Finally, the wholesale approach to infringement and relief can retard the development of a consistent body of law in any new area such as copyright protection for video games. This effect is evident in the video game decisions rendered to date. If one considers together cases as diametrically opposed as, on the one hand, Stern Electronics, Armenia, and the North American Philips court of appeals opinion, and on the other hand, Amusement World, and the North American Philips district court opinion, it is most difficult to advise a client what it may and

See Krofft, 562 F.2d at 1166 ("both plaintiffs' and defendants' works are directed to an audience of children. This raises the particular factual issue of the impact of the respective works upon the minds and imaginations of young people.").

See, e.g., the district court's comment that in K.C. Munchkin, unlike in Pac-Man, the last

³⁰⁰ See, e.g., the district court's comment that in K.C. Munchkin, unlike in Pac-Man, the last dot "cannot be caught by overtaking it, it must be munched by strategy." North American Philips, 2 COPYRIGHT L. REP. (CCH) ¶ 25,163, at 17,047. See generally supra text accompanying notes 134-42.

³⁰¹ See supra text following note 84.

may not do in creating and marketing video games. To borrow a phrase from physics, the test is dynamically unstable. A slight push one way or the other seems capable of toppling the entire case one way or the other. When the law is in such a state, the lawyer's only safe advice is to avoid similarity with existing games altogether. This is undoubtedly what the pioneers in the field would like, but it is wholly inconsistent with the Copyright Act's policy of distinguishing ideas and expressions, protecting the latter, and at the same time opening the way for creativity in and development of the former.

These limitations suggest that, at least in untried situations such as video game cases, and especially in assessing requests for equitable relief, courts should relegate the ordinary observer test to a more limited role. In most cases, similarity between the accused and copyrighted works as seen by the court (wearing its guise as "ordinary observer") ought to remain the touchstone, the sine qua non for infringement. The video game cases suggest, however, that additional questions must be answered before an ultimate finding of copyright infringement may be reached, and before relief may be entered. In some cases, such as the North American Philips court of appeals opinion, the superficial similarity that an ordinary observer would perceive between the games leads to the question whether the infringement lay in the appropriation of the plaintiff's copyright or of its trademarks. In other cases, such as Stern Electronics, the preliminary finding of similarity between the games should have provided the basis for asking whether the similarity lay in the unprotected realm of ideas and scenes a faire. In still other cases, such as Amusement World, the finding that there was similarity, and that some of it lay in the realm of ideas, should not have precluded a consideration whether other elements of the accused work had improperly appropriated the copyrighted work's expression.

A better approach in each of these cases would have been to treat the ordinary observer's reaction as a preliminary inquiry. Both the question of copying and the ordinary observer test for substantial similarity should ideally be followed by consideration of several other issues. The analysis would include the following questions: (i) has copying or access been proved; (ii) would the ordinary observer consider the works to be similar; (iii) is the similarity confined to the trademark-like elements in the work; (iv) does the remaining similarity inhere in the works' ideas or in the expression of those ideas; (v) if the similarity is in the realm of copyrighted expression, can relief be entered that will

³⁰⁸ It might be necessary to make an exception even to this limited role for the ordinary observer in the instances in which the copying could be observed only by technical analysis of the copyist's medium. See 3 M. NIMMER, supra note 10, § 13.03, at 13-45. But see supra note 287.

remedy the appropriation of the copyrighted work's expression without interfering with the public interest in the exploitation of the work's ideas?

The suggestion of a program for discussion like the foregoing one is inevitably more stilted than a convincing legal opinion could or should be. It can serve, however, as a checklist for considerations that are relevant and important and that, if one judges from the video game cases, are often overlooked. In practice, it would yield remedies in copyright infringement cases which are now more narrowly drawn but perhaps more frequently awarded than has been typical in the past. The following section of this Article will consider whether such remedies are consistent with the Copyright Act.

D. Targeting the Remedy to the Wrong

The moral of the preceding sections of this Article is that habits of copyright adjudication have inclined the courts toward all-or-nothing remedies for infringement, and that such remedies are inimical to the policies underlying copyright protection. The alternative would be more carefully tailored infringement remedies. It is worth inquiring whether such remedies are feasible as a practical matter and whether support for them can be found in the remedial provisions of the Copyright Act.

Let us suppose we have the following case. The plaintiff alleges copyright infringement of a video game. The court has read this Article and has taken to heart the recommendations made above. It has reached the following tentative conclusions. Access has been proven, and the "ordinary observer" would find the accused and copyrighted works to be similar. The defendant has been guilty of trademark infringement, but after carefully excising the trademarks from the accused work there remain elements similar to the copyrighted work. The court has heard both extrinsic evidence and expert testimony comparing these remaining elements with standard devices found in similar games. On the basis of the context provided by this evidence, the court finds that some of the remaining elements are unprotected "ideas," some are material created by the defendant, and others are "expression" subject to copyright protection and copied from the plaintiff's copyrighted work. What should the court do?

Relief can be patterned on one of three models. The court could find that the accused work as a whole infringes the copyrighted work. This would lead to an injunction banning further marketing of the accused work and ordering the destruction of all copies in the defendant's possession. Alternatively, the court could find infringement only with respect to the individual elements in the accused work that are similar

to elements in the copyrighted work. This would suggest an injunction against further marketing of any work that included those elements and, possibly, ordering the destruction of any copies of the accused work in the defendant's possession that included those elements. Finally, the court could find the copying to be *de minimus*, accord the plaintiff no injunctive relief, but perhaps award the plaintiff nominal damages.

Perhaps the most important question is how large a portion of the accused work represents plagiarized material, and whether anything of value would remain if the copied portion were excised. If, on the one hand, the improperly copied material is a tiny fraction of the entire accused work, then no injunctive relief might be entered at all, because any injunction would impose an unfair hardship on the defendant. At the opposite extreme, there would be no point in attempting to salvage any part of a work that was plagiarized virtually in its entirety. The extraordinary copying described by the court in *Dirkschneider* may be an example of the latter extreme.³⁰³

In many cases, the copying can be expected to fall between these poles. Examples of video game cases in which the accused work was partially copied from the copyrighted work, but contained substantial amounts of other material that was either original or not subject to copyright protection, are North American Philips and Amusement World. In such cases, a strong argument can be made that relief that is targeted to the infringing elements is in fact mandated by the Copyright Act. Section 502 of the Act empowers the court to "grant temporary and final injunctions on such terms as it may deem reasonable to prevent or restrain infringements of a copyright."304 This language plainly contemplates a flexible and "reasonable" application of injunctive relief. The destruction or impoundment of copies "made or used in violation of the copyright owner's exclusive rights" pursuant to section 503805 seems more suited to eradication of the defendant's work as a whole, but even with regard to that language there may be room for flexibility. Destruction or impoundment is not required by the Act: section 503 provides that the court "may" order such relief. 306 Furthermore, a video game, unlike a published book or record, can be modified without destroying the entire device. For example, a court might order the impoundment or destruction of the microchips that operate a

³⁰³ See supra text accompanying notes 85-90.

⁸⁰⁴ 17 U.S.C. § 502(a) (1976 & Supp. V 1981).

⁵⁰⁵ 17 U.S.C. § 503(a) (1976 & Supp. V 1981).

³⁰⁶ See id.

game, 307 while allowing the defendant to keep the devices to which the chips are connected and to replace the chips with new chips embodying programs for games that do not include the game's infringing features. These statutory considerations thus support the view that, whenever possible, injunctive relief should be limited to the infringing elements in the accused work.808

Courts are fond of reciting that "no plagiarist can excuse the wrong by showing how much of the work he did not pirate,"809 and it might be felt that limited forms of injunctive relief would not sufficiently punish an infringer. The Copyright Act suggests, however, that Congress wished to emphasize damages and criminal penalties, not injunctions, as the preferred means of punishing infringement. For willful infringement, the Act provides startling statutory damages of up to \$50,000, even if no actual damages can be shown, 310 and criminal penalties of up to \$250,000 or five years imprisonment, or both. ** Using these tools, a genuinely punitive blow can be dealt to any infringer even if injunctive relief is limited to the infringing elements of the accused work. Aside from the draconian statutory damage provisions, congressional intent that the Act's damage provisions be a preferred method of punishment is also seen in the Act's provisions for the allocation of an infringer's profits. Congress recognized that it may not as a practical matter be possible to determine what portion of a defendant's profits were "attributable to the infringement." The Copyright Act has resolved this problem in favor of the plaintiff by requiring the plaintiff to prove only "the infringer's gross revenue," placing on the infringer the burden of proving "the elements of profit attributable to factors other than the copyrighted work."818 One can conclude that Congress intended to punish infringers through damages, and, where appropriate, criminal prosecution, while leaving the door open to comparatively nonpunitive forms of injunctive relief.

Undoubtedly there will be cases in which the infringing elements in the accused work are so interwoven with the noninfringing elements

³⁰⁷ See supra note 11.

⁸⁰⁸ For an example of a video game case in which injunctive relief was limited to certain elements of the copyrighted and accused works, see Midway Mfg. Co. v. Bandai-America, Inc., 546 F. Supp. 125 (D.N.J. 1982).

³⁰⁹ Sheldon v. Metro-Goldwyn Pictures Corp., 81 F.2d 49,56 (2d Cig.), cert. denied, 298 U.S. 669 (1936), quoted in North American Philips, 672 F.2d at 619.

³¹⁰ See 17 U.S.C. § 504(c)(2) (1976 & Supp. V 1981). ³¹¹ See 17 U.S.C. § 506(a) (1976 & Supp. V 1981) (making willful infringement for commercial advantage or private financial gain a crime); Piracy and Counterfeiting Amendments Act of 1982, Pub. L. No. 97-180, § 3, 96 Stat. 91, 93 (to be codified at 18 U.S.C. § 2319) (specifying criminal penalties).

^{312 17} U.S.C. § 504(b) (1976 & Supp. V 1981).

³¹⁸ Id.

that the court could not issue an injunction directed against only the infringing elements without rewriting the entire work. Such cases, however, are probably the exception rather than the rule, at least in the video game context. If one judges by the meticulous detail with which the courts segregated and categorized infringing and noninfringing features in cases such as Amusement World, Dirkschneider, and the two North American Philips, opinions, the identification of infringing features in an injunction should not be viewed as an impossible task. It might raise the spectre of a defendant attempting to skirt around the edges of the list thereafter, but this risk is present whenever injunctive relief is entered. On balance, the risk of an end-run around the terms of the injunction seems a small price to pay for an outcome that is otherwise more consistent with the rights of the parties and with the policies supporting copyright protection.

In sum, the interplay of the Copyright Act injunction and damage provisions strongly supports the conclusion that, whenever possible, courts should enter limited injunctive relief while at the same time punishing willful infringement by the imposition of statutory damages and by the liberal application of the Act's provisions regarding the measure of actual damages.

IV. END NOTES

Early in this Article, video games were compared with the situations in the leading cases cited for the blackletter rule that "copyright does not protect games." There were many differences, all pointing toward greater protection for video games. Those differences forecast that the application of law to facts in video game cases would not be smooth sailing. The cases bore out that prediction. The courts could be seen struggling to accommodate the need for protection for the games to the proscriptions against protecting games, rules, and ideas. One finds in this struggle support for a few generalizations about the process by which the law shapes and transforms itself in a new environment. Some of these generalizations are widely accepted; others may be less so.

The first is that, in the absence of clear guidelines from precedent or statute, courts find it easier to decide cases by comparing the equitable nature of the parties' conduct than by interpreting the precedents and statutes in the new context. Thus, many of the seminal video game decisions, including particularly the early decisions in *Stern Electronics* and *Artic International*, but also including the Seventh Circuit's deci-

³¹⁴ In the fine arts, separately identifying the protected and copyrighted elements may be much more difficult, even impossible. See B. KAPLAN, supra note 10, at 56.

sion in North American Philips, focus on the relative merits of the conduct of the parties rather than on the copyright issues. This tendency provides the basis for the maxim that it is more important (particularly for a plaintiff) to argue the facts than the law. One might say that the equitable tail tends to wag the legal dog.

A second is that legal dogma often functions to limit equitable claims in the interest of public policy. The principle that copyright does not protect ideas is a good example of a legal rule performing this function. It serves to protect the salutory constitutional interest favoring the development of the useful arts. But it is usually asserted against the claims of a party who has been in some sense cheated. Plagiarism is not an agreeable occupation, and arguing that the creator of an accused work stole "only" the plaintiff's ideas hardly mitigates the perceived fault. The courts must recognize, however, the public interest behind which the "plagiarist" defends his conduct if the policies of the Copyright Act are to be served.

A third generalization, derived from the first two, is that a dramatic expansion of legally recognized rights can occur in any new setting where old dogmas cannot be applied with ease, where the plaintiff has a strong (even self-righteous) claim for protection, and where the defendant can be characterized as having "profited at the plaintiff's expense," been "unjustly enriched," "stolen the plaintiff's idea," or engaged in any other inequitable conduct. Again, video game cases such as Stern Electronics and North American Philips provide vivid examples of this process at work.

That courts are disposed to provide remedies for new wrongs is a lively creative force, without which the law would stagnate, and lawyers would probably go hungry. No set of formulas or suggestions can or should pretend to eliminate it. Courts can, however, take steps to soften the disruptive impact strong equitable claims have on old legal rules. For one thing, they can spread the strain of new claims for protection over more than one legal right. By drawing on closely related areas of the law — in copyright cases, concepts such as character infringement, trademark, and unfair competition — the tendency to overstretch a single legal right by asking it to do too much work, and to remedy too many wrongs, might be avoided. Courts can also resist the temptations of an "all-or-nothing" approach. As the video game cases amply demonstrate, such an approach seldom fairly balances the claims of the parties and often interferes with the consistent and proportionate development of the law.

