lightenment faith in reason has ignored the single faculty—the imagination—necessary to vital rationality. Rather than a trivial adjunct to real life, art may be a prerequisite to reason and science.

To take another, and more irreverent, tack on the same theme, is there some hidden mystery lurking in the fact that many of the great art centers of Europe close around midday so that everyone can rest? Perhaps more art breeds the need for more naps. Or the capacity for one increases the capacity for the other. This conjecture is only half humorous.

To return to the domestic treatment of art; as dollars for public education become scarce in a time of rising deficits, and a well-rounded arts education has fallen by the wayside in many but the most affluent school districts; could nap education, surely much less expensive, fill the void? If not, why not? In a culture that idolizes equally the round-the-clock partying movie star and the round-the-clock working law firm partner, the need for sleep is a sign of weakness. Could there be a connection between our worship of the three-hour a night sleeper and our culture's general impatience with the fine arts? Or, to state the matter slightly differently, could the incredible vitality of our pop culture have something to do with the fact that we, with our Puritan work ethic, have failed to honor the deep value of sleep, or dreams, or art?

Should we be contemplating a legal regime for art distinct from the rest of copyright treatment? It depends on the answers to these four questions.

JURIMETRIC COPYRIGHT: FUTURE SHOCK FOR THE VISUAL ARTS

RUSS VERSTEEG*

I. INTRODUCTION

This paper addresses two seemingly disparate topics: computer law and visual arts law. In many respects the two domains could not be more different. Computers are the cutting edge. The visual arts are as old as the Lascaux caves. Computers operate at, literally, the speed of light. Most visual art is static. Computer programs derive their value chiefly from their ability to be copied in an instant and distributed to millions. Visual art achieves its primary value from its uniqueness. Both computer software and the visual arts rely on copyright law for their principal means of legal protection.[1] This paper asks: Does that common bond assist or hinder the visual artist?

Let me begin by stating my conclusion. I do not think that computer copyright decisions offer tremendous benefits for visual artists. This conclusion makes me a little nervous because I generally consider myself a copyright purist, holding fast to the theory that copyright doctrine ought to be stable, and neither relativistic nor changeable depending upon subject matter. My analysis of cases in this paper, however, leads me to recommend that the judiciary take special care to draft decisions narrowly when construing copyright in a computer context, and that judges be cautious and conservative when applying a rule developed for software copyright to cases involving the visual arts. Copyright concepts such as the idea/expression dichotomy, fixation, and originality must be considered malleable and be applied flexibly when these two different kinds of works of authorship are involved. In sum, a strict adher-

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[1] The 1976 Copyright Act defines a computer program as "a set of statements or instructions to be used directly or indirectly in a computer in order to bring about a certain result." 17 U.S.C. § 101 (1988). The Act also provides that one of the expressly recognized categories of works of authorship is "pictorial, graphic, and sculptural works." 17 U.S.C. § 102(a)(1988).

ence to computer copyright interpretations in the field of the visual arts does not appear to be an attractive prospect.

During the past twenty years the federal courts have undertaken a herculean task by interpreting copyright principles in the context of computer technology with no significant assistance from Congress.[2] This has proved a formidable assignment. Courts have had to rethink traditional copyright precepts in an entirely new universe: the universe of bits and bytes.

Computer technology has forced judges to reconsider, and in some cases to redefine, copyright doctrine in areas such as originality, authorship, fixation, substantial similarity, and the idea/expression dichotomy, to name just a few. This, however, has not been the first time that judges have had to interpret copyright law in the wake of new technology. The invention of both photography and the phonograph during the nineteenth century offered a similar challenge.[3] This paper examines three of the modifications that computer technology, at least arguably, has visited upon traditional copyright doctrine, and considers briefly what effects those changes *might* have on copyright in the context of the visual arts. Visual art unlike object code, source code, and screen displays, has long been considered protectable by American copyright law.[4] Visual art is like literary works in the sense that it is a traditionally recognized form of copyright authorship. This is so even though the chief value of visual art has been in its capacity to evoke unique and otherwise inexpressible perspectives. Computer programs, on the other hand, are not valuable as a means to thinking anew about our world but rather are valuable because of their functionality. The doctrinal changes that this paper examines are: 1) the idea/expression dichotomy, as reflected in *Lotus Development Corp. v. Paperback Software International*,[5] 2) originality, as that concept has been interpreted in *Atari Games Corp. v. Oman*[6] and *Feist Publications, Inc. v. Rural Telephone Service Co.*[7] and, 3) fixation, as seen in *MAI Systems Corp. v. Peak Computer Inc.*[8] I use these three computer-law cases to draw some conclusions about the interface between art and computer program protection under copyright law.

2 *See generally* Apple Computer, Inc. v. Franklin Computer Corp., 714 F.2d 1240 (3d Cir. 1983), *cert. dismissed*, 464 U.S. 1033 (1984); Computer Assocs. Int'l, Inc. v. Altai, Inc., 982 F.2d 693 (2d Cir. 1992); *see also* Arthur R. Miller, *Copyright Protection For Computer Programs, Databases, and Computer-Generated Works: Is Anything New Since CONTU?*, 106 HARV. L. REV. 977 (1993).

3 *See, e.g.*, Burrow-Giles Lithographic Co. v. Sarony, 111 U.S. 53 (1884) (holding that a photograph, created when its author posed the subject, arranged the background, and selected light and shade, was copyrightable subject matter); *see also* Heilman v. Levi, 391 F. Supp. 1106 (E.D. Wis. 1975) (discussing the principles that buttress the Sound Recording Act of 1971), *aff'd*, 583 F.2d 373 (7th Cir. 1978), *cert. denied*, 440 U.S. 959 (1979).

4 Bleistein v. Donaldson Lithographic Co., 188 U.S. 239 (1903) (finding that commercial circus posters are copyrightable); 17 U.S.C. § 5(g) (1909) (including works of art within the categories of protectable subject matter); 17 U.S.C. § 102(a)(5) (1988) (granting copyright protection to pictorial, graphic, and sculptural works).

5 740 F. Supp. 37 (D. Mass. 1990).

II. IDEA/EXPRESSION: *LOTUS*[9]

The distinction between idea and expression is one of the most difficult concepts in all of copyright jurisprudence.[10] The United States Supreme Court first examined this topic in 1879 in the landmark case *Baker v. Selden*.[11] The *Baker* court held that the plaintiff's accounting methods, which were embodied in novel accounting forms, were uncopyrightable. The accounting forms were uncopyrightable because the forms were "necessary incidents to the art"[12] of the plaintiff's accounting procedures. This concept is codified in the present copyright statute that states: "In no case does copyright protection for an original work of authorship extend to any idea, procedure, process, system, method of operation, concept, principle, or discovery, regardless of the form in which it is described, explained, illustrated, or embodied in such work."[13]

In *Lotus Development Corp. v. Paperback Software International*,[14] Judge Keeton wrote an extensive and thorough opinion that explains most of computer copyright jurisprudence up to 1990, when the case was decided.[15] Judge Keeton noted that computer programs are included among the original works of authorship that Congress expressly recognizes.[16] He determined that Congress did not intend to deal with computer programs any differently than

6 979 F.2d 242 (D.C. Cir. 1992).

7 499 U.S. 340 (1991).

8 991 F.2d 511 (9th Cir. 1993).

9 A number of the fundamental ideas presented in this section of the essay have their genesis in a prior article, Russ VerSteeg & Paul K. Harrington, *Nonobviousness as an Element of Copyrightability? (Or, Is the Jewel in the Lotus a Cubic Zirconia?)*, 25 U.C. DAVIS L. REV. 331 (1992).

10 Scholarly literature on this topic abounds. *See, e.g.*, Amy Cohen, *Copyright Law and the Myth of Objectivity: The Idea-Expression Dichotomy and the Inevitability of Artistic Value Judgments*, 66 IND. L.J. 175 (1990); Peter Spivack, *Does Form Follow Function? The Idea/Expression Dichotomy in Copyright Protection of Computer Software*, 35 UCLA L. REV. 723 (1988); Alfred Yen, *A First Amendment Perspective on the Idea/Expression Dichotomy and Copyright in a Work's "Total Concept and Feel,"* 38 EMORY L.J. 393 (1989).

11 101 U.S. 99 (1879).

12 *Id.* at 103.

13 17 U.S.C. § 102(b).

14 740 F. Supp. 37.

15 *Id.*

16 *Id.* at 48 (citing H.R. REP. No. 1476, 94th Cong., 2d Sess. 51 (1976)).

any other copyrightable subject matter.[17] Furthermore, Judge Keeton reaffirmed that what is protectable in a computer program is the programmer's expression, not the processes or methods embodied in the program.[18]

Paperback argued that the user interface of Lotus 1-2-3 could not be copyrightable because copyright could protect only the literal elements of the software program (such as the source code, object code, and documentation), not the nonliteral elements (such as the user interface). Judge Keeton, however, resolved that it was the idea/expression dichotomy that forms the boundary line between the copyrightable and the uncopyrightable, not the dichotomy between literal and non-literal. The law's protection extends only to expression; it does not "extend to any idea, procedure, process, system, method of operation, concept, principle, or discovery."[19]

In reaching his decision that the user interface of Lotus 1-2-3 was copyrightable, Judge Keeton formulated a new copyrightability standard and a test for applying that standard. Judge Keeton's copyrightability rule is as follows: "If . . . the expression of an idea has elements that go beyond all functional elements of the idea itself, and beyond the obvious, and if there are numerous other ways of expressing the non-copyrightable idea, then those elements of expression, if original and substantial, are copyrightable."[20]

In the field of the visual arts, a "conceptual separability test" has evolved to help judges draw the line between the functional elements of a design and the artistic elements of that design.[21] However, it is difficult to imagine what Judge Keeton meant when he said that, in order to be copyrightable, a work could not be "obvious." According to Keeton, "[w]hen a particular expression goes no farther than the obvious, it is inseparable from the idea itself. Protecting an expression of this limited kind would effectively amount to protection of the idea, a result inconsistent with the plain meaning of the statute."[22] Interestingly enough, the case that he cited for this proposition involves a work of visual art (an advertisement including a picture and simple directions for a picture hook).[23] Obviousness and nonobviousness are concepts that have been developed in patent law. A patent cannot be issued if the invention would have been obvious to a person of ordinary skill in the applicable art.[24] If patent concepts of nonobviousness are to serve as a guide for visual artists seeking copyright protection, the issue of whether something is nonobvious for copyright must, then, turn on a question analogous to the obviousness inquiry in patent law. One must ask whether the work in question would be obvious to someone—one who might be called the copyright analogue of a skilled mechanic—possessing ordinary skill in the type of subject matter at issue. In the field of visual arts, for example, courts would need to resolve a new threshold question: What people should serve as the copyright analogue of the skilled mechanic in patent law? Perhaps "artisans" or "craftspeople" would be the appropriate class of persons whose skills are sufficiently below the skill level of "artists" to be regarded as the benchmark for decision-making. In any event, a nonobviousness standard for copyrightability for the visual arts would wreak havoc on existing interpretations of copyrightability for artists.

Judge Keeton also formulated a three-step analytical model to draw the line between idea and expression.[25] In essence, the test grants copyright protection for all elements of an expression that are not essential to depict the idea. Numerous other courts had wrestled with the idea/expression enigma in a computer context but none had so forthrightly spelled out a test to be applied.[26] Subsequently, other courts have fashioned idea/expression tests in a

17 *Lotus*, 740 F. Supp. at 46-54.

18 *Id.* at 49.

19 *Id.* (quoting 17 U.S.C. § 102(b)); *see also* H.R. REP. No. 1476, 94th Cong., 2d Sess. 57 (1976), *reprinted in* 1976 U.S.C.C.A.N. 5659, 5670 (noting that computer programs are protected under § 102(b)).

20 *Lotus*, 740 F. Supp. at 59.

21 The doctrine of "conceptual separability" is now statutory. The Copyright Act provides that the design of a useful article, "shall be considered a pictorial, graphic, or sculptural work only if, and only to the extent that, such design incorporates pictorial, graphic, or sculptural features that can be identified separately from, and are capable of existing independently of, the utilitarian aspects of the article." 17 U.S.C. § 101.

See Mazer v. Stein, 347 U.S. 201 (1954); Kieselstein-Cord v. Accessories by Pearl, Inc., 632 F.2d 989 (2d Cir. 1980); Carol Barnhart, Inc. v. Economy Cover Corp., 773 F.2d 411 (2d Cir. 1985); Shira Perlmutter, *Conceptual Separability and Copyright in the Design of Useful Articles*, 37 J. COPYRIGHT SOC'Y 339 (1990).

22 *Lotus*, 740 F. Supp. at 58-59 (citing E.H. Tate Co. v. Jiffy Enter., Inc., 16 F.R.D. 571, 573 (E.D. Pa. 1954)).

23 E.H. Tate Co. v. Jiffy Enter., Inc., 16 F.R.D. 571 (E.D. Pa. 1954).

24 35 U.S.C. § 103 (1988).

25 Congress was acutely aware of the problem of distinguishing idea from expression when dealing with computer programs. In discussing the definition of "literary works," Congress said: "It also includes computer data bases, and computer programs to the extent that they incorporate authorship in the programmer's expression of original ideas, as distinguished from the ideas themselves." H.R. REP. No. 1476, *supra* note 19, at 54, *reprinted in* 1976 U.S.C.C.A.N. at 5667.

26 *See, e.g.*, Synercom Technology, Inc. v. University Computing Co., 462 F. Supp. 1003 (N.D. Tex. 1978); SAS Inst., Inc. v. S & H Computer Sys., Inc., 605 F. Supp. 816 (M.D. Tenn. 1983); E.F. Johnson v. Uniden Corp. of Am., 623 F. Supp. 1485 (D. Minn. 1985); Whelan Assocs., Inc. v. Jaslow Dental Lab., Inc., 797 F.2d 1222 (3d Cir. 1986), *cert. denied*, 479 U.S. 1031 (1987); Digital Communications v. Softklone Distrib., 659 F. Supp. 449 (N.D. Ga. 1987); J. Diane Brinson, *Copyrighted Software: Separating the Protected Expression from Unprotected Ideas, a Starting Point*, 29 B.C. L. REV. 803 (1988).

computer setting but those tests are, for the most part, very similar to the *Lotus* test.[27] The test has several steps:

> FIRST . . . the decisionmaker must focus upon alternatives . . . along the scale from the most generalized conception to the most particularized, and choose some formulation—some conception or definition of the "idea." . . .
>
> . . . .
>
> SECOND, the decisionmaker must focus upon whether an alleged expression of the idea is limited to elements essential to expression of *that* idea (or is one of only a few ways of expressing the idea) or instead includes identifiable elements of expression not essential to every expression of that idea.
>
> THIRD, having identified elements of expression not essential to every expression of the idea, the decisionmaker must focus on whether those elements are a substantial part of the allegedly copyrightable "work."[28]

If one were to apply this type of idea/expression dissection to a work of visual art, it would be possible to become convinced that many simple works of art are no longer copyrightable. Imagine, if you will, a typical still life oil painting. A bowl of nicely arranged fruit sits on a rustic oak table. What is the idea here? A bowl of fruit on a table, perhaps? What elements of the still life are *essential* to the still life? Arguably, just about everything: the table, the bowl, the fruit, the light and shadow. Okay, maybe some of the light and shadow is not *essential.* But are those elements *substantial*? Probably not. Perhaps this still life painting is not copyrightable after all because a judge could not distinguish the idea from its expression. If such is the case, perhaps we do not want to use this test, forged for application to a computer program, when evaluating the copyrightability of a work of visual art.

[27] *See, e.g.*, Computer Assocs. Int'l v. Altai, 982 F.2d 693 (2d Cir. 1992); Gates Rubber Co. v. Bando Am., Inc., 798 F. Supp. 1499 (D. Colo. 1992), *modified*, No. 92-S-136, 1992 U.S. Dist. LEXIS 13601 (D. Colo. Aug. 12, 1992). In *Altai*, the Second Circuit established a three-part test to determine substantial similarity. The first two steps, "abstraction" and "filtration," focus on the idea/expression dichotomy. "[I]n a manner that resembles reverse engineering on a theoretical plane, a court should dissect the allegedly copied program's structure and isolate each level of abstraction contained within it. This process begins with the code and ends with an articulation of the program's ultimate function." *Altai*, 982 F.2d at 707. The second step, "filtration," involves filtering out the protectable elements from the non-protectable (e.g., material in the public domain). *Id.* The third step, "comparison," involves comparing the protectable elements in the original work with the allegedly infringing work to see if they are substantially similar. *Id.* at 710.

[28] *Lotus*, 740 F. Supp. at 60-61.

III. FIXATION: *MAI SYSTEMS CORP. V. PEAK COMPUTER INC.*

Recently the speed and storage capacity of computers has forced judges to rethink notions of permanence. In short, these aspects of computer technology have driven at least one court to relax the fixation requirement for copyrightability. This easing of the degree of permanence necessary for copyrightability has the potential to alter the fixation requirement for visual artists.

The Copyright Act states that "[c]opyright protection subsists . . . in original works of authorship fixed in any tangible medium of expression . . . from which they can be perceived, reproduced, or otherwise communicated, either directly or with the aid of a machine or device."[29] The Act also provides:

> A work is "fixed" in a tangible medium of expression when its embodiment in a copy or phonorecord, by or under the authority of the author, is sufficiently permanent or stable to permit it to be perceived, reproduced, or otherwise communicated for a period of more than transitory duration.[30]

In *MAI Systems Corp. v. Peak Computer Inc.*, the Ninth Circuit Court of Appeals held that " 'copying' for purposes of copyright law occurs when a computer program is transferred from a permanent storage device to a computer's RAM [random access memory]."[31] Peak Computer personnel used MAI Systems software (primarily an operating system program) when they serviced the computers of customers who used MAI Computers.[32] Peak argued that loading the software into RAM did not constitute infringement because the information in RAM is not "fixed."[33] The Ninth Circuit disagreed, holding that the information in RAM was "sufficiently permanent or stable to permit it to be perceived, reproduced, or otherwise communicated for a period of more than transitory duration."[34] The court relied in part on the existence of § 117 of the Copyright Act. Section 117 creates an exception to infringement by permitting the owner of a computer program to make an archival copy and also to create another copy as long as "it is an essential step in the utilization of the computer program."[35]

[29] 17 U.S.C. § 102(a).

[30] *Id.* § 101.

[31] 991 F.2d at 518. A district court in Michigan recently reached substantially the same result in *Advanced Computer Services of Michigan v. MAI Sys. Corp.*, 845 F. Supp. 356 (E.D. Va. 1994).

[32] *MAI*, 991 F.2d at 518.

[33] *Id.*

[34] *Id.* (quoting 17 U.S.C. § 101).

[35] *Id.* at 518.

This *essential step* apparently refers to the creation of a second copy of the program into the computer's RAM. One copy remains on the disk and another copy is created in the RAM with which the user interfaces.

One curious thing about the holding in *MAI v. Peak*, is that it appears to conflict with statements in the House Report that accompanied the 1976 Copyright Act. The House Report notes that "the definition of 'fixation' would exclude from the concept purely evanescent or transient reproductions such as those projected briefly on a screen . . . *or captured momentarily in the 'memory' of a computer.*"[36]

The Ninth Circuit's holding in *MAI v. Peak*, that existence in RAM is sufficient to be fixed in a tangible medium of expression, may change our ideas about copyright protection for the visual arts. It has been suggested, for example, that ephemeral works such as ice sculptures or the kind of works created by the artist Christo would fail to meet the fixation requirement.[37] *MAI v. Peak*, however, suggests that transitory works of visual art may yet be subject to copyright protection because they, like information stored in a computer's RAM, are also, arguably, "sufficiently permanent or stable *to permit* [them] to be perceived, reproduced, or otherwise communicated for a period of more than transitory duration."[38] The key danger here, I think, is a practical one: proof. One of the most important reasons for requiring fixation in a more or less permanent form as a condition precedent to copyright protection is to ensure that a copyright claimant will be able to provide a court documentary evidence of the copyrightable subject matter.

[36] H.R. REP. No. 1476, *supra* note 19, at 53, *reprinted in* 1976 U.S.C.C.A.N. at 5666 (emphasis added).

[37] *See, e.g.*, Joan Infarinato, Note, *Copyright Protection for Short-Lived Works of Art*, 51 FORDHAM L. REV. 90, 112 n.127 (1982). The author also predicted that "[t]he proliferation of computer games may cause . . . courts to liberalize the fixation requirement." *Id.* at 113; *see also* Donald M. Millinger, *Copyright and the Fine Artist*, 48 GEO. WASH. L. REV. 354, 359 (1980). The work of artists such as Christo, whose 'Running Fence' and 'Wrapped Buildings' last only a few days or weeks, would not meet the [fixation] requirement because of its transitory duration."); Rhoda Berkowitz and Marshall Leaffer, *Copyright and the Art Museum*, 8 COLUM.-VLA J.L. & ARTS 249, 257 (1984) ("There are many works which involve great creativity, such as sand sculpture, a fence running along a countryside, a window display in a store, or a stage set, but which do not exist in a relatively permanent form. None of these works would meet the tangibility requirement.").

The House Report also indicates a legislative reluctance to grant protection in ephemeral works. It states "the definition of 'fixation' would exclude from the concept purely evanescent or transient reproductions such as those protected briefly on a screen, shown electronically on a television or other cathode ray tube, or captured momentarily in the 'memory' of a computer." H.R. REP. No. 1476, *supra* note 19, at 53, *reprinted in* 1976 U.S.C.C.A.N. at 5659.

[38] *MAI*, 991 F.2d at 517-18 (emphasis added) (quoting 17 U.S.C. § 101).

IV. ORIGINALITY: *ATARI & FEIST*[39]

In *Atari Games Corp. v. Oman*, (that is—*Atari v. Oman* III—a case that became something of a battle between the D.C. Circuit Court of Appeals and the Copyright Office—kind of like Rocky I, II, III, etc.), then Circuit Judge Ruth Bader Ginsburg analyzed Atari's early computer game, BREAKOUT.[40] The Register of Copyrights rejected registration of BREAKOUT on the basis that the game lacked originality.[41] The District Court affirmed. Twice the Circuit Court sent the case back to the Copyright Office for reconsideration. In *Atari v. Oman* III, Judge Ginsburg applied the copyright originality standard articulated in *Feist Publications, Inc. v. Rural Telephone Service Co.*[42] Although *Feist* itself was not a computer copyright case, it is likely that its rationale was driven, at least in part, by computer technology. The amazing speed with which a digital computer can alphabetize hundreds of thousands of names surely influenced the Court's concept of how we should assess originality as we enter the twenty-first century. In *Atari v. Oman* III, Judge Ginsburg embraced *Feist*'s teaching that in order to be original a work must possess a minimal degree of creativity.[43] To the extent that courts now have unfettered freedom to evaluate an artist's creativity, I am concerned because no one has adequately defined "creativity." And, in fact, when the Copyright Office proposed that "creativity" be made an express criterion for copyrightability in the initial draft bill of the 1976 Copyright Act, the drafters rejected the proposal, in part because they realized that every judge would have his or her own subjective view of what "creativity" was.[44] Judge Ginsburg, however, apparently believed that Atari's game was original and recognized that, as a matter of law, judges must be cautious to ensure that it be very easy to meet *Feist*'s creativity requirement for copyrightability.

In *Feist*, the United States Supreme Court unanimously held

[39] Several of the ideas regarding originality presented in this section of the essay first appeared in a prior article, Russ VerSteeg, *Rethinking Originality*, 34 WM. & MARY L. REV. 801 (1993).

[40] BREAKOUT is a rather simple computer game. The player controls a "paddle" that moves horizontally. When the paddle strikes an electronic "ball," the ball "flies" toward a "brick wall" of colored rectangles. When the ball strikes a colored rectangle, the rectangle disappears. The object of the game is to eliminate all of the colored rectangles.

[41] *Atari*, 979 F.2d at 243.

[42] 499 U.S. 340 (1991).

[43] *Id.* at 345.

[44] SUPPLEMENTARY REPORT OF THE REGISTER OF COPYRIGHTS ON GENERAL REVISION OF THE U.S. COPYRIGHT LAW: 1965 REVISION BILL, 89TH CONG., 1st SESS. 148 (Comm. Print 1965), *reprinted in* 4 OMNIBUS COPYRIGHT REVISION LEGISLATIVE HISTORY PART 6, at 3 (George S. Grossman ed., 1965).

that an alphabetized white page directory lacked the originality necessary to be copyrightable.[45] The Court explained that "[o]riginal, as the term is used in copyright, means only that the work was independently created by the author (as opposed to copied from other works), *and that it possesses at least some minimal degree of creativity.*"[46]

The Court concluded, however, that "[t]here remains a narrow category of works in which the creative spark is utterly lacking or so trivial as to be virtually nonexistent."[47] According to Justice O'Connor's opinion, an alphabetical listing of names was "devoid of even the slightest trace of creativity."[48]

The Court did not, however, explain just how it determined that Rural's white pages lacked the creativity requisite to elevate it to "original" status. Justice O'Connor never defined "creativity." Justice O'Connor did, however, mention several types of things that would be non-creative.[49] For example, things that are "mechanical," "entirely typical," "garden-variety," "obvious," "basic information," "mere selection," "an age-old practice, firmly rooted in tradition," "so commonplace . . . as to be expected as a matter of course," "practically inevitable," and/or a "time-honored tradition" are apparently candidates for things that lack the *Feist* Court's "*de minimis* quantum of creativity."[50]

As was the case with nonobviousness and the *Lotus* idea/expression test, applying the *Atari/Feist* creativity requirement to the visual arts presents substantial problems. Arguably, a typical art student's still life oil painting or sketch is mechanical, entirely typical, garden-variety, obvious, an age-old practice rooted in tradition, and so commonplace as to be expected as a matter of course. There is something about the thought of a judge trying to evaluate

45 *Feist*, 499 U.S. at 362.

46 *Id.* at 345 (emphasis added).

47 *Id.* at 359.

48 *Id.* at 362. The Court continued, stating:

> there is nothing remotely creative about arranging names alphabetically in a white pages directory. It is an age-old practice, firmly rooted in tradition and so commonplace that it has come to be expected as a matter of course. . . . It is not only unoriginal, it is practically inevitable. This time-honored tradition does not possess the minimal spark required by the Copyright Act and the Constitution.

Id. at 363.

49 *Id.* at 363.

50 *Id*; *see also* Marci A. Hamilton, *Justice O'Connor's Opinion in* Feist Publications, Inc. v. Rural Telephone Service Co.: *An Uncommon Though Characteristic Approach*, 38 J. COPYRIGHT SOC'Y 83, 89 (1990) (Regarding the Court's characterization of "time-honored" traditions as uncopyrightable, Professor Hamilton has remarked that "this may be read as suggesting that the standard of originality for compilations is novelty. This approach, of course, would signal a sea change in the way in which we analyze originality.").

an artist's creativity that is troubling. I think that it is the same thing that Justice Holmes found troubling when he said: "It would be a dangerous undertaking for persons trained only to the law to constitute themselves final judges of the worth of pictorial illustrations, outside of the narrowest and most obvious limits."[51]

Feist teaches us that "creativity" is an integral component of originality. If we are going to allow judges to critique the creativity or lack of creativity manifest in a work of visual art, I suggest that we find some objective definition of creativity and find it fast.

One sensible place to look is to a line of Second Circuit cases, illustrated by the case *Alfred Bell & Co. v. Catalda Fine Arts, Inc.*[52] Judge Frank, ruling on the originality of reproductions of old masters, said:

> nothing in the Constitution commands that copyrighted matter be strikingly unique or novel. . . . [A] 'copy of something in the public domain' will support a copyright if it is a 'distinguishable variation.' . . . all that is needed to satisfy both the Constitution and the [copyright] statute is that the 'author' contributed something more than a 'merely trivial' variation, something recognizably 'his own.'[53]

Consequently, the court held that Bell's mezzotint reproductions were original and copyrightable versions of the public domain paintings.[54] Thus, the *Alfred Bell* case articulates an originality test that asks two questions: 1) was the work created independently (i.e., not copied)?; and, 2) does the work contain a variation or variations that are more than trivial?[55]

Although an analysis of how one ought to determine whether an artist's variations are distinguishable or trivial is, by no means, a simple task,[56] I, for one, am more comfortable with judges trying to distinguish between trivial and distinguishable variations than having them try to distinguish between the creative and the non-creative.[57] Neither psychologists, educators, nor lawyers have been able

51 Bleistein v. Donaldson Lithographic Co., 188 U.S. 239, 251 (1903).

52 191 F.2d 99 (2d Cir. 1951).

53 *Id.* at 102-03 (footnotes and citations omitted).

54 *Id.* at 104. Judge Frank also explained that "intent" was not an element of originality, stating that Bell's variations from "the old masters" could be "inadvertent, [and] the copyrights would [still] be valid." *Id.* at 105. "A copyist's bad eyesight or defective musculature, or a shock caused by a clap of thunder, may yield sufficiently distinguishable variations. Having hit upon such a variation unintentionally, the 'author' may adopt it as his and copyright it." *Id.*

55 *Id.* at 102-03.

56 *See* VerSteeg, *supra* note 39, at 843-56.

57 *See id.* at 824-43 (examining definitions of "creativity").

to reach a consensus as to how "creativity" should be defined.[58] For example, when arguing that "creativity" ought not be made an express requirement for copyrightability in the Copyright Act of 1976, Irwin Karp, counsel for the Authors League of America remarked that arriving at a workable definition for "creativity" was a hopeless endeavor:

> you cannot avoid the conclusion that if you use the word "creative" you do come to a qualitative judgment, otherwise the word has no meaning at all. And I think . . . if you write "creative" into the act, you simply open the door to a morass of problems that can never be solved.[59]

Interestingly enough, in her analysis of originality in *Atari v. Oman* III, Justice Ginsburg did, in fact, rely on *Alfred Bell* to construe *Feist*'s creativity requirement: " 'no considerable uniqueness' is required, merely 'a distinguishable variation.' "[60] Thus, perhaps my fear is unfounded. If Justice Ginsburg is willing to analyze *Feist*'s creativity requirement in terms of *Alfred Bell*'s "trivial/distinguishable variation test," then perhaps we will be spared the irrational and arbitrary decision-making that one could so readily imagine might accompany a judge's evaluation of artistic creativity. As was noted above, using the language of *Feist*, a judge could easily conclude that an art student's still life oil painting was "mechanical," "entirely typical," "obvious," "an age-old practice firmly rooted in tradition," etc., and, therefore, not creative (and consequently not original and not copyrightable).

V. Conclusion

So where do these cases lead us? Computers have pushed courts to examine minutiae in copyright law more than ever before. The *Lotus* test for distinguishing between idea and expression may result in the denial of copyright protection for many deserving works of visual art. Its "obviousness" requirement—if interpreted to mean, as it does in patent law, that a work is not protectable if it is the kind of work that could have been executed

58 *Id.*

59 Omnibus Copyright Revision Legislative History Vol. 3, Part 2, 88th Cong., 1st Sess., Discussion and Comments on Report of the Register of Copyrights of the U.S. Copyright Law, Transcript of Meeting on the General Revision of the U.S. Copyright Law 14 (Comm. Print 1963).

60 *Atari*, 979 F.2d at 246. One of the things that makes *Atari v. Oman* III so interesting in this context is that it involves an evaluation of originality/creativity of a work of visual art exhibited in a computer screen display: a combination of computer copyright law and visual arts copyright law.

by someone of ordinary skill in the pertinent art—threatens to exclude numerous works of visual art from copyright protection. If the fixation analysis of *MAI Systems* is applied to the visual arts, many types of works that have previously gone unprotected by copyright will now come under the copyright umbrella. Lastly, the requirement of creativity espoused in *Feist* and *Atari* creates the real possibility that judges will take it upon themselves to play the part of art critic—measuring creativity by personal or parochial whim. Although I may personally agree with the outcomes of *Feist* and *Atari*, the requirement of creativity as an element of originality sets a dangerous precedent for judges whose aesthetic sensibilities might not be on par with Justices O'Connor and Ginsburg. As I stated at the outset, it is probably best for computer copyright decisions to be both drafted and construed narrowly.[61]

In his best selling book of almost a quarter century ago, Alvin Toffler explained that computers and our responses to them are having a dramatic impact.[62] Toffler wrote:

> It is vital to understand, moreover, that technological innovation does not merely combine and recombine machines and techniques. Important new machines do more than suggest or compel changes in other machines—they suggest novel solutions to social, philosophical, even personal problems. They alter man's total intellectual environment—the way he thinks and looks at the world.[63]

Interpretations of copyright in a computer framework have the potential to alter the way that we think about and look at copyright for the visual arts. Those who make copyright laws must be cautious lest the future shock of computer technology either expand the scope of copyright protection for ephemeral works beyond practical limits, or perhaps worse, rob visual artists of remuneration and protection for their creative contributions.

61 I am not advocating that separate standards of copyrightability should apply to different types of works. I am simply suggesting that courts must be cautious lest the computer copyright tail come to wag the larger copyright dog. It should be mentioned, however, that some courts and commentators have recognized distinct standards of originality to be associated with distinct types of subject matter. *See, e.g.*, Amsterdam v. Triangle Publications, Inc., 189 F.2d 104, 106 (3d Cir. 1951); 1 Paul Goldstein, Copyright §§ 2.21-2.2, 2.6-.61 (1989); Marshall Leaffer, Understanding Copyright Law §§ 2.9[A],[D], 2.10, 2.11[A] (1989); 1 Melville B. Nimmer & David Nimmer, Nimmer on Copyright §§ 2.01, 2.05[D], 2.08[A][3], [B], [C][2], [E], [G][3], 2.10[A][2], 3.03-.04 (1992); *see also* Dale P. Olson, *Copyright Originality*, 48 Mo. L. Rev. 29, 32 (1983) (criticizing the subject matter approach to evaluating originality).

62 Alvin Toffler, Future Shock 29 (1970).

63 *Id.*