COPYRIGHT PROTECTION FOR ARCHITECTURE AFTER THE ARCHITECTURAL WORKS COPYRIGHT PROTECTION ACT OF 1990

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INTRODUCTION

On December 1, 1990, President Bush signed into law the Architectural Works Copyright Protection Act (AWCPA).¹ The AWCPA implements an important change in the treatment of architecture under American intellectual property law, explicitly extending American copyright protection, for the first time, to completed architectural works.

The AWCPA extends protection to a very broad class of architectural works.² However, Congress carefully limited the scope of the protection enjoyed by these works.³ The interplay between the AWCPA's broad subject matter and its limited protection presents several interpretive questions. Furthermore, problems of substantial similarity,⁴ appropriate forms of relief,⁵ works for hire,⁶ joint authorship,⁷ and assignment of rights⁸ are only a few of the questions likely to arise.

1. Pub. L. No. 101-650, §§ 701-706, 104 Stat. 5133 (1990) (codified at scattered sections of 17 U.S.C.A.) (West Supp. 1992). Congress passed the AWCPA as part of the Judicial Improvements Act of 1990, Pub. L. No. 101-650, along with two other important pieces of intellectual property protection, the Visual Artists Rights Act of 1990, Pub. L. No. 101-650, §§ 601-610, 104 Stat. 5128 (1990) (codified at scattered sections of 17 U.S.C.A.) (West Supp. 1992), and the Computer Software Rental Amendment Act of 1990, Pub. L. No. 101-650, §§ 801-805, 104 Stat. 5134 (1990) (codified at scattered sections of 17 U.S.C.A.) (West Supp. 1992). The Visual Artists Rights Act grants certain visual artists the rights of "attribution" and "integrity." The right of attribution ensures that artists are correctly identified with the works they create. The right of integrity allows these artists to protect their works against modifications and destruction that are prejudicial to their honor or reputations. See generally Robert Gorman, *The Visual Artists Rights Act of 1990*, 38 J. COPYRIGHT SOC'Y 233 (1991). The Computer Software Rental Amendment Act grants computer software an exception to the "first sale" doctrine of copyright, preventing the owners of computer software from renting, lending, or leasing their programs for commercial advantage. Taken together, these three pieces of legislation represent the most significant revisions to American intellectual property law since the Copyright Act of 1976.

2. See *infra* Parts II(C)-(F).

3. See *infra* Part III.

4. See *infra* Part IV(A).

5. See *infra* Part III(C).

6. See *infra* Part IV(B)(1).

7. See *infra* Part IV(B)(2).

8. See *infra* Part IV(B)(3).

This Note, intended as a guide to the provisions of the AWCPA, makes several specific recommendations to the courts and the practitioners who will be asked to craft an interpretive framework for the AWCPA. For the AWCPA to serve effectively the needs of society and the architectural profession, courts must carefully limit the scope of copyright protection of architectural works. Interpreters of the AWCPA must not overextend the AWCPA as if it were the only form of intellectual property protection for architecture. Indeed, as will be shown, the AWCPA provides only a small portion of the protection needed to stimulate the creativity of the architectural profession. The AWCPA should be viewed as a discrete part of a larger, more comprehensive scheme of intellectual property protection for architecture; as such, it should not be allowed to encroach upon the domain of patent, trademark, and local historic preservation laws.

This Note concludes that the AWCPA, and the multi-faceted scheme of intellectual property protection for architecture of which it is a part, is well tailored to protect the societal interest in architectural creativity. Progress and creativity in the architectural profession are best served by limiting the copyright protection available to architectural works. Additionally, the approach taken by Congress yields useful lessons for possible reform of the law governing other types of applied art.

I. BACKGROUND OF THE ARCHITECTURAL WORKS COPYRIGHT PROTECTION ACT

A. *Architecture, Society, and the Purposes of Copyright Law*

The importance of architecture as an art form is unquestioned.⁹ For thousands of years, western cultures considered architecture their single most important art form.¹⁰ Architects throughout history have viewed their craft as both expressing and driving culture.¹¹ Architecture and

9. See WALTER GROPIUS, *THE NEW ARCHITECTURE AND THE BAUHAUS* 39-40 (P. Shand Morton trans., 1935) ("Architecture and design in a general sense are consequently matters of paramount concern to the nation at large."). Gropius, one of the great figures in twentieth-century architecture, also urged against the perception of architecture as somehow less valuable artistically than the other arts, calling this "one of our fatal legacies from a generation which arbitrarily elevated some of its branches above the rest as the 'Fine Arts.'" *Id.*

10. See, e.g., TALBOT HAMLIN, *ARCHITECTURE THROUGH THE AGES* 30, 115, 153 (rev. ed. 1953) (tracing the central place of architecture in society from the culture of ancient Egypt through the Renaissance and beyond). Only during the Renaissance did painting and sculpture emerge as rivals to architecture in artistic significance. See *id.* at 324.

11. See GROPIUS, *supra* note 9, at 17-18 ("A breach has been made with the past, which allows us to envisage a new aspect of architecture corresponding to the technical civilization of the age we live in; . . . although the outward forms of the New Architecture differ fundamentally in an organic sense from those of the old, they are not the personal whims of a handful of architects . . . but simply the inevitable logical product of the intellectual, social and technical conditions of our age.").

society have a profoundly interdependent relationship. Architecture expresses the values of its cultural context; at the same time it helps create the culture that it inhabits.¹²

Architecture plays more than just an aesthetic role in society. For example, architecture performs invaluable utilitarian functions: Intelligent and creative architectural design makes everyday tasks infinitely easier. Architecture is also one of the most important service industries in the United States.¹³ In addition to its direct economic importance, architecture also promotes scientific advancement: The needs of architecture provided the impetuses for such varied technical advancements as the flush toilet, the elevator, reinforced concrete, plate glass, and the air conditioner, to name only a few.¹⁴

The social importance of architecture led most European nations to extend some copyright protection to architectural works.¹⁵ The scope of the protection offered by these nations ranges from quite limited to very broad protection.¹⁶ In contrast, the United States has continually resisted extending copyright protection to architecture.¹⁷

American reluctance to extend copyright protection to architecture originated in the policy objective that drives American copyright law. Unlike European copyright laws, which are grounded in the natural rights of authors in their works,¹⁸ American intellectual property laws serve the constitutionally mandated purpose, "To promote the Progress

12. See ROBERT A.M. STERN, *NEW DIRECTIONS IN ARCHITECTURE* 7 (1977) (discussing the Modernist architects of the first part of this century, who deeply believed in the ability of architects to mold and improve lifestyles and transform society).

13. The architectural and engineering professions grossed revenues of over \$62 billion in 1988 and more than \$73 billion in 1989. CENSUS BUREAU, U.S. DEPARTMENT OF COMMERCE, 1991 STATISTICAL ABSTRACT OF THE UNITED STATES 785 (1991) (Table No. 1380).

14. JOSEPH HUDNUT, *ARCHITECTURE AND THE SPIRIT OF MAN* 220-30 (1949).

15. SAM RICKETSON, *THE BERNE CONVENTION FOR THE PROTECTION OF LITERARY AND ARTISTIC WORKS: 1886-1986*, at 253-57 (1987); Natalie Wargo, Note, *Copyright Protection for Architecture and the Berne Convention*, 65 N.Y.U. L. REV. 403, 409-12 (1990).

16. Wargo, *supra* note 15, at 413-39. The Berne Convention does not mandate completely uniform copyright laws among member nations. Wargo's note provides an excellent review of the different intellectual property protections offered to architectural works by the various member nations of the Berne Convention.

17. See COPYRIGHT IN WORKS OF ARCHITECTURE: REPORT OF THE REGISTER OF COPYRIGHTS 71-140 (1989) [hereinafter COPYRIGHT OFFICE REPORT] (reviewing various failed attempts from 1905 to 1988 to add architecture to subject matter of copyright law).

18. Berne Convention for the Protection of Literary and Artistic Property, Sept. 9, 1886, art. 6bis, 828 U.N.T.S. 221, 235 (Paris revision, July 24, 1971) [hereinafter Berne Convention]. By basing their laws on an inherent natural right of authors to claim authorship and to control exploitation of the works that they create, the intellectual property laws of most European and many other nations are broader in scope than American intellectual property laws. For example, the Berne nations recognize the rights of paternity and integrity for copyrighted works, regardless of the effect of these rights on society. See *id.* This contrasts with American copyright law, which subordinates the needs of artists to the needs of society. See *infra* note 20 and accompanying text.

of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries."¹⁹ Consistent with this constitutional objective, American intellectual property law is based on benefiting the *public*, not the artist.²⁰ Copyright and patent protection are not rights, but rather privileges, statutorily granted to serve the interests of society in encouraging artistic and scientific advancement.²¹ The limited monopoly granted to authors and inventors is granted only to provide an incentive for further creativity.²² As stated by the Supreme Court:

The monopoly privileges that Congress may authorize are neither unlimited nor primarily designed to provide a special private benefit. Rather, the limited grant is a means by which an important public purpose may be achieved. It is intended to motivate the creative activity of authors and inventors by the provision of a special reward, and to allow the public access to the products of their genius after the limited period of exclusive control has expired.²³

Prior to 1990, Congress resisted extension of copyright protection to architectural works, on the theory that such protection would not encourage creativity in the architectural profession. This failure to extend

19. U.S. CONST. art. I, § 8, cl. 8. This clause provides the basis for federal patent and copyright legislation. The federal trademark regulations codified in the Lanham Act, 15 U.S.C. §§ 1051-1127 (1988), are based on the Congressional power to regulate interstate commerce, U.S. CONST. art. I, § 8, cl. 3. Trademark law is generally categorized as a type of unfair competition regulation, and not as a form of intellectual property protection. Despite these different constitutional origins, this Note discusses trademark alongside patent and copyright law.

20. *Twentieth Century Music Corp. v. Aiken*, 422 U.S. 151, 156 (1975) ("Creative work is to be encouraged and rewarded, but private motivation must ultimately serve the cause of promoting broad public availability of literature, music, and the other arts. . . . [T]he ultimate aim is, by this incentive, to stimulate artistic creativity for the general public good."); *Mazer v. Stein*, 347 U.S. 201, 219 (1954) ("The economic philosophy behind the clause empowering Congress to grant patents and copyrights is the conviction that encouragement of individual effort by personal gain is the best way to advance public welfare through the talents of authors and inventors in 'Science and useful Arts.'").

21. This fundamental purpose remains unchanged notwithstanding the American decision to join the Berne Convention, an international intellectual property treaty that recognizes the moral rights of an author in the works he produces. (For a description of the Berne Convention, see *infra* note 25.) Congress has made it very clear that the United States' decision to join Berne in no way indicates an acceptance of the idea of moral rights. See S. REP. NO. 352, 100th Cong., 2d Sess. 10 (1988), reprinted in 1988 U.S.C.A.N. 3706, 3715 (American adherence to Berne Convention not intended to change the status quo regarding moral rights). However, recent lively Congressional debate over the colorization of motion pictures and the enactment of the Visual Artists Rights Act of 1990 represent some small movement towards the recognition of moral rights under American intellectual property law. See, e.g., H.R. 2400, 100th Cong., 1st Sess. (1987) (unenacted bill preventing unauthorized colorization of black-and-white motion pictures); Film Disclosure Act of 1992, S. 2256, 102nd Cong., 2d Sess. (1992) (pending legislation requiring colorized films to bear notice that film has been altered); Visual Artists Rights Act of 1990, Pub. L. No. 101-650, §§ 601-610, 104 Stat. 5128 (1990) (codified at scattered sections of 17 U.S.C.A.) (West Supp. 1992).

22. *Twentieth Century Music*, 422 U.S. at 156.

23. *Sony Corp. of Am. v. Universal City Studios, Inc.*, 464 U.S. 417, 429 (1984).

protection was based on the idea that architecture was a utilitarian work, and therefore not worthy of copyright protection.²⁴ American intellectual property law does not protect utilitarian works, believing that progress and creativity are retarded by preventing useful objects from being available to others to use, adapt, or modify.

The decision by the United States in the 1980s to become a member of the Berne Convention for the Protection of Literary and Artistic Works (the Berne Convention)²⁵ forced a reexamination of the conception of architecture as a utilitarian work under American law.²⁶ Congress determined that in order for the United States to comply fully with

24. Useful articles, that is, those works that share both an artistic and a utilitarian nature, have proven the most difficult works to fit within the former Copyright Act of 1909, 35 Stat. 1075 (1909), or the current Copyright Act of 1976, 17 U.S.C. §§ 101-914 (1988). Works having dual artistic and utilitarian roles present conceptual difficulties for an intellectual property regime that draws many of its substantive distinctions between artistic expression and utilitarian function. The "separability test" is the tool used to shape coherent copyright doctrine in the field of useful articles. The Copyright Act of 1976 codified the separability test, which states that if a pictorial, graphic, or sculptural work is of primarily utilitarian function, only its nonfunctional elements are eligible for copyright protection. 17 U.S.C. § 101 (1988) (definition of pictorial, graphic, or sculptural works); see also COPYRIGHT OFFICE, LIBRARY OF CONGRESS, COMPENDIUM II: COMPENDIUM OF COPYRIGHT OFFICE PRACTICES, ¶ 505, at 505.03 (1984) (describing standards used by Copyright Office in applying the separability test to three-dimensional useful articles); Louis Altman, *Intellectual Property Law and the Construction Industry, Part II*, 71 J. PAT. & TRADEMARK OFF. SOC'Y 600, 650-54 (1989) (discussing cases in which building design was held to be protectible).

Despite the seeming simplicity of the separability test, it has proven difficult to apply in practice. Courts have struggled to delineate the dividing "line between unprotectible industrial designs and protectible pictorial, graphic, and sculptural works." *Architectural Design Protection: Hearings on H.R. 3990 and 3991 Before the Subcomm. on Courts, Intellectual Property and the Administration of Justice of the House Comm. on the Judiciary*, 101st Cong., 2d Sess. 60-61 (1990) [hereinafter *Hearings on the AWCPA*] (statement of Ralph Oman, Register of Copyrights). Consensus in the application of the test has been elusive, and the cases have generated many disputed opinions. *Kieselstein-Cord v. Accessories by Pearl, Inc.*, 632 F.2d 989 (2d Cir. 1980), and *Carol Barnhart Inc. v. Economy Cover Corp.*, 773 F.2d 411 (2d Cir. 1985), are two of the most significant cases. The circuit court panels in both of these cases split 2-1, and the decisions included vigorous and carefully reasoned dissents. Both the majority opinions and the dissents have generated well-founded favorable commentary. For a review of the separability test and different attempts to come to grips with its application, see Shira Perlmutter, *Conceptual Separability and Copyright in the Designs of Useful Articles*, 37 J. COPYRIGHT SOC'Y 339 (1990).

25. *Supra* note 18, 828 U.N.T.S. at 221. The Berne Convention is the most important of the international copyright treaties. Originally adopted in 1886, the Convention is currently accepted by eighty-five nations, including all industrialized nations except China and Russia. For a detailed history of the Berne Convention, see RICKETSON, *supra* note 15. The most important provision of the Berne Convention is its guarantee that foreign copyright holders will be able to appear before the courts of another signatory nation to allege piracy of their copyrighted work. Berne Convention, *supra* note 18, art. 5, para. 1, 828 U.N.T.S. at 223.

26. Although the United States had considered joining the Berne Convention on several occasions, it was not until the mid-1980s that the United States decided to join. Substantive differences between the Convention and existing American copyright law caused the American reluctance to join the agreement. The Berne Convention has a broader subject matter definition than U.S. copyright law, compare Berne Convention, *supra* note 18, art. 2, para. 1, 828 U.N.T.S. at 227 with 17

the Berne Convention—which protects architecture alongside other artistic works²⁷—American copyright law would have to recognize the artistic value of architecture by extending copyright protection to architectural works.²⁸

Any protection offered by the AWCPA must ultimately serve the constitutional objectives of our intellectual property laws.²⁹ Interpreters of the AWCPA and related provisions of the copyright and patent laws must therefore be conscious of how a system of legal protections can help encourage artistic and scientific progress in architectural design.³⁰

On the other hand, interpreters of the AWCPA must be cognizant of the fact that overbroad copyright protection of architectural works will frustrate, rather than advance, the purpose of the copyright laws.³¹ Extension of the AWCPA beyond its carefully limited scope will retard progress and creativity in the architectural profession. The architectural design process relies upon the process of limited copying and incremental innovation; that is, it depends upon some degree of copying from past forms. This process is one that the AWCPA's interpreters must comprehend and respect.

U.S.C. § 102(a) (1988); it gives authors greater control of subsequent use of their works, Berne Convention, *supra* note 18, art. 5, para. 2, 828 U.N.T.S. at 223; and it dispenses with formalities, Berne Convention, *supra* note 18, art. 6bis, 828 U.N.T.S. at 235. Most troubling to American copyright law is the Convention's recognition of the "moral rights" of authors in their works. *Id.* Import considerations created another barrier to American adherence. 134 Cong. Rec. S14,557 (daily ed. Oct. 5, 1988) (statement of Sen. Orrin G. Hatch).

27. For a discussion of the protection required under the Berne Convention, see *infra* notes 64-67 and accompanying text.

28. Not all copyright scholars agreed that the Berne Convention mandated the changes in the Copyright Act that became the AWCPA. See *infra* notes 63-67 and accompanying text for a discussion of this point.

29. Jurists have long debated the appropriate way to interpret statutes, without reaching any consensus. However, almost all of them agree that the policy objectives of a law must play a significant role in interpreting that statute. See, e.g., *Dickerson v. New Banner Inst., Inc.*, 460 U.S. 103 (1983) (statutory interpretation must be guided by the plain language of the statute and by the policy objectives underlying its provisions).

30. But it does not necessarily follow that once an art form is recognized as important to society, it should automatically be accorded broad legal protection. See Stephen Breyer, *The Uneasy Case for Copyright: A Study of Copyright in Books, Photocopies, and Computer Programs*, 84 HARV. L. REV. 281, 284-91 (1970) (arguing that increased copyright protection is not necessary to create incentives for original artistic expression); Liuda J. Lacey, *Of Bread and Roses and Copyrights*, 1989 DUKE L.J. 1532 (examining incentives for artists to create, and how legal norms can best provide such incentives).

31. American courts have consistently ruled that intellectual property rights should be withheld if granting such rights would hinder progress and creativity. See *Mazer v. Stein*, 347 U.S. 201, 217-19 (1954) (holding that allowing copyright in the functional elements of a lamp would hinder creativity and progress in the useful arts); *Atlantic Works v. Brady*, 107 U.S. 192, 200 (1882) (holding that allowing patent in "every trifling device" or technological advance was never the purpose of patent law).

B. *Creativity and the Architectural Design Process*

An examination of the interrelationship between architecture, society, creativity, and the design process demonstrates that architectural creativity consists of the recombination of separate elements into forms that express both the new context of the work and the originality of the architect. Legal norms that encourage incremental innovation and novel recombination of existing forms will foster such creativity, and benefit society.

Architects rarely come up with wholly original designs. Designs for buildings do not emerge fully conceived from the imagination of architects as Athena sprang from the head of Zeus. Some borrowing from existing sources is absolutely essential.³² The character of a building is created by the combination of different elements in a specific context. These elements can include a brick wall, an arch, a bay window, a marble floor, an asymmetrical corner, and a curtain wall of glass to create the illusion of space, to name only a fraction of the individual elements available for use in an architectural design. Known as the architectural "vocabulary," these elements may be either familiar or unfamiliar, and can be combined in an almost infinite variety of ways.

Figure 1, which appears as an appendix to this Note, is taken from the interior of an English manor of the eighteenth century. The example identifies some of the many individual elements selected and arranged by the architects. Taken individually, none of these elements are original. Entire sections of the work, when viewed in isolation, such as the ceiling or the colonnade, bear striking similarities to previous works. However, these sections are subsumed into an original and harmonious whole when combined with the other sections of the work.

Cesar Pelli's World Financial Center in New York City (Figure 2) provides a more recent example of the same principles. Pelli recombines basic elements of modern skyscraper architecture—the glass curtain wall, setback design, enclosed glass atriums, and sheer granite walls with flush windows—to create a distinctive work. The four buildings have sheer granite walls for the lower floors, which gradually take on more glass surface at each setback. Setbacks are positioned to maximize lines of sight for surrounding buildings and serve to make the proportions of these elements the focus of the design. Atop the sleek modern forms of each building, Pelli juxtaposes the historicist element of a pyramidal or

32. See Elizabeth K. Brainard, Note, *Innovation and Imitation: Artistic Advance and the Legal Protection of Architectural Works*, 70 CORNELL L. REV. 81, 92 (1984); Joseph Giovannini, *Architectural Imitation: Is It Plagiarism?*, N.Y. TIMES, Mar. 17, 1983, at C1.

doined top. Again, it is the architect's choice of the combination of elements that creates the character of the work.

As the above examples illustrate, architectural creativity consists of appropriating elements from the architectural vocabulary,³³ and re-arranging them in a more useful or more aesthetically pleasing way.³⁴ The incremental innovation that can transform art may be very slow and subtle. Originality and creativity can take as limited a form as placing an existing design in a new context.³⁵ A unique combination of borrowed elements from a series of designs may represent an artistic advance.³⁶ Small alterations in a previous design may constitute a significant utilitarian or aesthetic advance. Courts must therefore refrain from acting on the assumption that creativity is mutually exclusive of copying.

In governing an art form that relies on copying, intellectual property law faces a dilemma. On one hand, the law must provide protection to architects, in order to encourage them to recombine existing elements in increasingly useful ways and to create new individual elements that will add to the creativity of their profession. On the other hand, the law must not protect too much, such that other architects will be deprived of the use of existing forms and of the chance to adapt them for use in other contexts. Thus the difficulty for intellectual property law is determining

33. See JAMES M. FITCH, *AMERICAN BUILDING: THE HISTORICAL FORCES THAT SHAPED IT* (1973); Brainard, *supra* note 32, at 92-95. Robert A.M. Stern, one of the most influential American architects of the past thirty years, has stated: "As long as the source is good, I steal. Not in the sense of taking away from another architect—he is not poorer because of a theft but is in fact more influential. We copy, borrow, and derive motifs from other architects. Artists have always quoted other artists." Giovannini, *supra* note 32, at C1, C6.

34. "Lines, curves, angles, and squares are some of the 'geometric words' used by an architect in his technical writings. . . . Every architectural plan, drawing, and design is an amalgam of lines, curves, angles, and squares. . . . It is the *arrangement* of the lines, curves, angles, and squares which enables the architect to *express* his artistic personality." Arthur S. Katz, *Copyright Protection of Architectural Plans, Drawings, and Designs*, 19 LAW & CONTEMP. PROBS. 224, 242 (1954); see also *Park-In-Theatres, Inc. v. Perkins*, 190 F.2d 137, 139-42 (9th Cir. 1951) (novelty for purposes of patent law can result from combination of disparate unpatentable elements); *Loew's Drive-In Theatres, Inc. v. Park-In Theatres, Inc.*, 174 F.2d 547 (1st Cir.), *cert. denied*, 338 U.S. 822 (1949).

35. For example, the AT&T building in New York City has a unique and powerful presence on the Manhattan skyline by virtue of architect Philip Johnson's use of a familiar form, the "Chippendale" broken pediment normally used in interior architecture and furniture, in the unfamiliar setting of the top of a skyscraper. Similarly, Johnson used the familiar pointed turrets and flying buttresses of Gothic architecture to create the PPG complex in Pittsburgh. The originality of the design of the PPG buildings lies in the fact that the familiar forms, usually created out of stone, are instead rendered in the unfamiliar material of glass.

However, it should be noted that in the field of music, courts have been unwilling to accept arguments that infringement does not consist in borrowing existing forms and placing them into new contexts. See, e.g., *Grand Upright Music Ltd. v. Warner Bros. Records*, 780 F. Supp. 182, 185 (S.D.N.Y. 1991) (holding that hip-hop artist infringed musical copyright by "sampling" easy-listening song to use in rap song).

36. Brainard, *supra* note 32, at 93-94.

at what point the novel recombination of preexisting ideas should constitute protectible artistic expression.

The architectural profession already has many independent incentives to creativity. The presence of such incentives argues against broad intellectual property law protection for architectural works. Regarding the limited monopolies American copyright law grants artists in their creations, the Supreme Court has stated, "the economic philosophy behind the [copyright clause of the Constitution] is the conviction that encouragement of individual effort by personal gain is the best way to advance public welfare"³⁷ Architects, however, often do not need limited monopolies in their creations in order to receive personal gain. These monopolies are highly appropriate for works such as literary and musical works that "lack autonomous means of appropriating the fruits of [the artist's] high-risk investment in creations that attain commercial success."³⁸ In contrast, in the architectural profession the creative mind possesses independent means for recouping the costs of innovation. Architects rarely price their services on the assumption that a design will be copied and reused. The cost of one set of architectural plans almost always includes the architect's total costs incurred on that project, plus a reasonable profit. This contrasts with books and musical recordings, for which the sale of only one copy usually would not cover the cost of production.

So in the area of architecture that values creativity most highly, namely the area of one-time, high-profile projects in major competitions, an architect will likely have sufficient incentive to be creative. The financial reward to the architect for being creative will be provided by winning the commission, not by later reproductions of the work.³⁹ This is also the area of the profession that may benefit most from a broad allowance of self-referential "quoting" from other architectural sources.

On the other hand, the type of architectural work that *would* benefit from intellectual property law protection is that which is easily reproducible and therefore particularly vulnerable to free riders. Architects who generate reproducible designs would have greater incentives for creativity if reproductions of their designs provided them with financial reward. Indeed, the more reproducible a building is, the more likely it is that the

37. *Mazer v. Stein*, 347 U.S. 201, 219 (1954).

38. J.H. Reichmann, *Design Protection and the Legislative Agenda*, LAW & CONTEMP. PROBS., Spring 1992, at 281, 291; see J.H. Reichmann, *Design Protection and the New Technologies: The United States Experience in a Transnational Perspective*, 19 U. BALT. L. REV. 6, 135-44 (1989).

39. It would be these later reproductions that patent, copyright, and trademark law would regulate.

architect designed the building with the economic incentive of reproductions in mind. To allow direct copying of, for example, single-family houses and small- or medium-sized industrial buildings, which are the most likely to be built around standardized plans, would be to diminish an architect's economic incentive to create popular, standardized works. But again, architects usually price their services with the assumption that their designs will not be copied and reused, and thus do not depend on intellectual property law protection for incentives to creativity.

An additional argument against broad intellectual property protection for architecture is that the profession is regulated by itself and by the market. More than other artistic professions, architecture is dependent on individual clients.⁴⁰ As a practical matter, the party that commissions an architectural work will have much greater input in the work produced than would the consumers of other types of copyrightable works.⁴¹ Although the peers of an architect may value originality and creativity, the client may not.⁴² Even the most highly respected architect must find a client in order to construct a design.⁴³ A survey of 600 large commercial architectural clients found that the professional qualities that led these clients to hire a particular architectural firm were: the ability to complete a project on budget, the ability to make a building function, the ability to complete a design on time, and the ability to work with the client.⁴⁴ Aesthetic quality, within which creativity would be included,

40. DANA CUFF, *ARCHITECTURE: THE STORY OF PRACTICE* 33 (1991); Magali S. Larson et al., *The Professional Supply of Designs: A Descriptive Study of Architectural Firms*, in PROFESSIONALS AND URBAN FORM 251, 252 (Judith R. Blau et al. eds., 1983); Magali S. Larson, *Emblem and Exception: The Historical Definition of the Architect's Professional Role*, in PROFESSIONALS AND URBAN FORM, *supra*, at 49, 50.

41. Compare, for example, the standard form contracts for recording artists or authors of books, which give the artist far greater creative control over the work, with the standard contracts used in the architectural profession. Compare ENTERTAINMENT INDUSTRY CONTRACTS: NEGOTIATING AND DRAFTING GUIDE Form 160-1, cls. 3.01, 4.01 (Donald C. Farber gen. ed., 1991) (form recording contract commonly leaves recording artist with broad artistic control over completed work so long as work is commercially or technically satisfactory) with American Institute of Architects, Document B141, Standard Form of Agreement Between Owner and Architect art. 2 (14th ed. 1987) [hereinafter AIA Standard Form Contract] (owner of building participates in, and must assent to, all aspects of design), reprinted in AMERICAN BAR ASSOCIATION, DESIGN AND CONSTRUCTION CONTRACTS 87 (1988).

42. Larson et al., *supra* note 40, suggest that small architectural firms may value user satisfaction and long-lasting aesthetic value more than large firms, which are reported to be more sensitive to economic needs and efficiencies. *Id.* at 274 (citing Judith Blau, *Beautiful Buildings and Breaching the Laws*, 12 J. Soc. 110, 127 (1976)).

43. As the great Philip Johnson, principal designer of such works as the AT&T Building in New York, the Pittsburgh Plate Glass Center in Pittsburgh, and the IDS Center in Minneapolis stated: "[M]aking more money . . . is, really, the first consideration of any architect." David W. Dunlap, *A Graceful Move 'Upstairs'*, N.Y. TIMES, May 23, 1982, § 8, at 6.

44. CUFF, *supra* note 40, at 55.

ranked tenth in this survey, mentioned by only 21% of those surveyed.⁴⁵ Clearly, the architectural market cannot be relied upon to deter copying and to encourage creativity. Yet the fact remains that the architectural market values creativity.⁴⁶ Architects who exhibit originality in their works will be more valued by their market, and among their peers, than those who do not.⁴⁷

Different types of architectural works have different incentives for creativity. Creativity in some of these works will be greatly assisted by the economic incentives provided by the copyright laws. Although protection is needed, this protection must recognize the realities of architectural design. Architectural creativity takes many forms. More so than some of the other arts, architecture relies upon some copying of existing forms at almost all levels. Overbroad copyright protection will stifle, rather than promote, creativity.

II. SUBJECT MATTER OF THE ARCHITECTURAL WORKS COPYRIGHT PROTECTION ACT

A. *The State of the Law Prior to the Architectural Works Copyright Protection Act*

The core provisions of the AWCPA, sections 702(a) and 703 of Public Law 101-650, amend the Copyright Act of 1976 to include "architectural works" within the subject matter protected by the Act.⁴⁸ Prior to the AWCPA, copyright law did not protect completed buildings from infringement.⁴⁹ Only architectural *plans* received copyright protection.⁵⁰

45. *Id.*

46. James B. Bucher, Comment, *Reinforcing the Foundation, The Case Against Copyright Protection for Works of Architecture*, 39 EMORY L.J. 1261, 1269 (1990) (citing JUDITH R. BLAU, ARCHITECTS AND FIRMS: A SOCIOLOGICAL PERSPECTIVE ON ARCHITECTURAL PRACTICE 13 (1984)).

47. Bucher, *supra* note 46, at 1269; Larson et al., *supra* note 40, at 273-75.

48. Prior to amendment by the AWCPA, § 102(a) of the Copyright Act of 1976 read:

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

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

17 U.S.C. § 102(a) (1988). The terms used in § 102(a) are defined in § 101.

49. Although it protected architectural plans, the Copyright Act did not have a subject matter category that protected completed three-dimensional architectural works. Completed structures were instead considered "useful articles" and were therefore subject to the separability test discussed *supra* note 24. See *Donald Frederick Evans & Assocs. v. Continental Homes Inc.*, 785 F.2d 897, 901 n.7 (11th Cir. 1986).

Pre-AWCPA caselaw firmly established that architectural plans, drawings, and models are subject to copyright.⁵¹ However, three-dimensional completed structures could not be copyrighted.⁵² The troubling result was that the unauthorized construction of a building from copyrighted plans did not constitute infringement.⁵³

50. Section 5(i) of the 1909 Copyright Act included "[d]rawings or plastic works of a scientific or technical character" within the class of protectible subject matter, a definition that courts interpreted to include architectural plans. Copyright Act of 1909, § 5(i), 35 Stat. 1075, 1077 (1909) (repealed 1976); see also *Imperial Homes Corp. v. Lamont*, 458 F.2d 895, 898 (5th Cir. 1972); *Herman Frankel Org. v. Wolfe*, 184 U.S.P.Q. 819 (E.D. Mich. 1974); *Herman Frankel Org. v. Tegman*, 367 F. Supp. 1051, 1053 (E.D. Mich. 1973); MELVILLE B. NIMMER & DAVID NIMMER, *NIMMER ON COPYRIGHT* § 2.08[D] n.162 (1991) [hereinafter *NIMMER ON COPYRIGHT*] and cases cited therein.

The Copyright Act of 1976 protects "pictorial, graphic, and sculptural works," a class that includes "technical drawings, diagrams, and models." 17 U.S.C. § 101. The House Report accompanying the Act hoped to clarify any ambiguities by stating, "An architect's plans and drawings would, of course, be protected by copyright." H.R. REP. NO. 1476, 94th Cong., 2d Sess. 55 (1976), reprinted in 1976 U.S.C.C.A.N. 5659, 5668. The Berne Convention Implementation Act of 1988 went further, adding "architectural plans" to the Copyright Act as an explicitly protected class of subject matter. Berne Convention Implementation Act of 1988, Pub. L. No. 100-568 § 4(a)(1)(A), 102 Stat. 2853, 2854 (1988) (amending 17 U.S.C. § 101).

51. Conceptually, architectural plans, drawings, and models are easy to fit within the Copyright Act. Such plans are the tangible expression of an idea, and are not excluded from protection because they are "useful articles." Because the only utilitarian function of an architectural plan is to convey information regarding the manner and form in which a building may be constructed, plans can not be considered a "useful article." *Demetriades v. Kaufmann*, 680 F. Supp. 658, 664 (S.D.N.Y. 1988); see *State Farm Fire & Cas. Ins. Co. v. White*, 777 F. Supp. 952 (N.D. Ga. 1991) (discussing whether insurance policy that covered loss of "tangible property" covered architectural plans). See generally *NIMMER ON COPYRIGHT*, *supra* note 50, § 2.08[D] n.164.1 and cases cited therein; David E. Shipley, *Copyright Protection for Architectural Works*, 37 S.C. L. REV. 393 (1986).

52. See *Evans & Assocs.*, 785 F.2d at 897 (buildings considered useful articles); see also *supra* note 24 for a discussion of the separability test and the treatment of useful articles under copyright law.

53. *Imperial Homes*, 458 F.2d at 899 (copyright in architectural plans does not "clothe their author with the exclusive right to reproduce the dwelling pictured."); *Acorn Structures, Inc. v. Swantz*, 657 F. Supp. 70, 75 (W.D. Va. 1987) (a building is an "idea" under the Copyright Act of 1976, and is thus unprotectible; construction of a building from unauthorized plans does not constitute copyright infringement), *rev'd*, *Swantz v. American Inst. of Architects*, 842 F.2d 1292 (4th Cir. 1988); *Tegman*, 367 F. Supp. at 1053 ("A person cannot, by copyrighting plans, prevent the building of a house similar to that taught by the copyrighted plans. One does not gain a monopoly on the ideas expressed in the copyrighted material by the act of registering them for copyright."); see also *Scholz Homes, Inc. v. Maddox*, 379 F.2d 84, 86 (6th Cir. 1967); *Schuchart & Assocs. v. Solo Serve Corp.*, 540 F. Supp. 928, 941 (W.D. Tex. 1982); *DeSilva Constr. Corp. v. Herrald*, 213 F. Supp. 184, 195-96 (M.D. Fla. 1962); *Muller v. Triborough Bridge Auth.*, 43 F. Supp. 298, 299 (S.D.N.Y. 1942).

These cases centered their reasoning on the idea/expression dichotomy first enunciated in *Baker v. Selden*, 101 U.S. 99 (1879), and subsequently recognized by Congress in § 102(b) of the Copyright Act. That section provides:

Although buildings themselves could not be protected, the separable decorative elements on these structures did qualify for copyright protection.⁵⁴ However, protection of separable decorative elements is relatively ineffective for most works of modern architecture, including many of the most original buildings of our era: During the post-World War II period, modern architectural style increasingly incorporated the utilitarian aspects of a structure *as* the aesthetic appeal of the building. The fundamental tenet of International Style architecture is "form follows function."⁵⁵ The separability test leaves little protection to architects and other designers who follow this axiom.⁵⁶ As one commentator noted, under the old separability test, "the less exuberant the architecture, the less likely the building would be to meet the 1976 statute's definition."⁵⁷ "Busy" architectural styles such as Beaux-arts likely would receive protection, whereas stark, simple architectural styles such as International Style likely would not.

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 a work.

17 U.S.C. § 102(b) (1988). The holder of the copyright in the plans was considered to hold a copyright only in the expression (the plans) of the idea (the concept of a building taking the shape specified), and did not have any copyright in the idea alone. *See id.* Copying a building by viewing it, or by any means other than actually copying, or using, the plans, therefore only constituted copying an "idea." Reproducing a building by observing, measuring, drawing, or photographing an existing building, without using copyrighted plans, would be classified as non-infringing reverse engineering. Only by copying plans could one copy the expression within which those ideas were embodied. *See id.* Merely stealing the plans would not create a cause of action under copyright, although the copyright holder could still maintain a cause of action against the thief under the state law governing conversion. *See infra* note 130 and sources cited therein.

54. Because copyright law treated buildings as useful articles, buildings could not receive copyright protection. However, the separability test did allow individual, theoretically detachable decorative elements to seek copyright protection. *See supra* note 24. Such elements include, for example, decorative reliefs on the side of a building, specific types of pediments or cornices, gargoyles, and original window designs, provided that these elements met the standard of originality. *Hearings on the AWCPA, supra* note 24, at 61-62. *But see Imperial Homes*, 458 F.2d at 899 (copyright in plans did not give architect claim on any features of the structure that those plans detail). However, architects could not seek copyright in elements that were in common use prior to January 1, 1978, the effective date of the Copyright Act of 1976. 17 U.S.C. § 301(a) (1988).

55. *See* WILLIAM J.R. CURTIS, *MODERN ARCHITECTURE SINCE 1900*, at 38 (1982).

56. Because the separability test, as currently formulated, does not protect the functional elements of a design, those architectural forms whose aesthetic form is nothing but the expression of the functional design of the building would not find protection under the test. For example, many of the most distinctive and original elements of Mies van der Rohe's Seagram Building in New York, such as its exposed structural steel I-beams, would be unprotected.

57. Jane C. Ginsberg, *Copyright in the 101st Congress: Commentary on the Visual Artists Rights Act and the Architectural Works Copyright Protection Act of 1990*, 14 COLUM.-VLA J.L. & ARTS 477, 491 (1990); *see also* Wargo, *supra* note 15, at 451-54 (discussing limited usefulness of separability standard).

B. *Congressional Motivation for the Architectural Works Copyright Protection Act*

That copyright law allowed construction of a building as long as plans were not copied was troubling to some.⁵⁸ However, the failure of copyright law to protect completed architectural works did not cause significant problems, as architects and clients successfully used contract law to avoid disputes.⁵⁹ Although the separability test proved difficult to apply to architectural works, such difficulty was shared by all works of applied art. In fact, architects expressed wariness of the effect of copyright protection on their ability to use elements from the work of other architects;⁶⁰ many prominent architects argued *against* adoption of all or parts of the AWCPA.⁶¹ Thus the AWCPA was not passed to satisfy a perceived need of the architectural profession. Rather, the impetus for the AWCPA was the perceived treaty requirements arising out of American adherence to the Berne Convention.⁶²

During and after the American decision to join the Berne Convention, commentators debated whether adherence to the Convention required modification of existing domestic copyright law regarding architecture.⁶³ The Berne Convention requires, at a minimum, its signatory nations to protect completed architectural works from infringement.⁶⁴ This requirement conflicted with existing American caselaw

58. See, e.g., Philip J. Infantino, Note, *Copyright Wrong: The United States' Failure to Provide Copyright Protection for Works of Architecture*, 47 WASH. & LEE L. REV. 1103 (1990).

59. Rights to use, copy, and reproduce the work of an architect are contractually defined, and generally remain exclusively with the architect. The American Institute of Architects' (AIA) standard form contract grants such exclusive rights to architects. AIA Standard Form Contract, *supra* note 41, art. 6.1. These contract rights are not preempted by the Copyright Act, and have proved successful in ordering the rights between the various parties to an architectural project. See *infra* note 129. The major drawback of relying on contract law to order rights is that contract provisions only extend to parties in privity. Third parties remain unaffected by an allocation of rights in a contract.

60. *Hearings on the AWCPA*, *supra* note 24, at 111, 115-16 (testimony and prepared statement of David Daileda on behalf of the AIA) ("Our concern is that the well-accepted traditions of reference and limited borrowing of elements and details should not be suppressed.").

61. *Id.* at 14, 20-23 (statement of architect Michael Graves); *id.* at 110-12 (statement of David Daileda, on behalf of the AIA).

62. As with most intellectual property legislation over the past two decades, the driving force behind the legislation was Representative Robert W. Kastenmeier, Chairman of the House Subcommittee on Courts, Intellectual Property and the Administration of Justice. See generally Symposium, *Copyright and Legislation: The Kastenmeier Years*, LAW & CONTEMP. PROBS., Spring 1992, at 3.

63. See, e.g., Bucher, *supra* note 46; Infantino, *supra* note 58; Wargo, *supra* note 15.

64. Article 2(1) of the Paris text of the Berne Convention requires member nations to extend copyright protection to "works of . . . architecture; illustrations, . . . plans, sketches and three-dimensional works relative to . . . architecture." Berne Convention, *supra* note 18. The fact that the text of the treaty distinguishes "architectural works" from plans and models indicates that "architectural works" include the completed architectural work. Were it otherwise, "architectural works"

establishing that American copyright extended only to architectural plans, and not to completed architectural works.⁶⁵ Adherence to the Convention—even under the United States' intended "minimalist" approach to adherence⁶⁶—would require the addition of completed architectural works to the categories of protected subject matter under American copyright law.⁶⁷

C. "Architectural Work" and "Building" Defined

Section 703 of the AWCPA provides that "architectural works" be added to the list of "works of authorship" enumerated in section 102 of the Copyright Act. To avoid the interpretive difficulties that are the necessary companion of section 102's use of conceptually broad terms, Congress carefully defined the term "architectural works" in section 101:

An "architectural work" is the design of a building as embodied in any tangible medium of expression, including a building, architectural

would be bereft of meaning. The periodic interpretive guidelines to the Berne Convention promulgated by the World Intellectual Property Organization (WIPO) are similarly unambiguous that completed architectural works are protected by the treaty. WORLD INTELLECTUAL PROPERTY ORGANIZATION, GUIDE TO THE BERNE CONVENTION FOR THE PROTECTION OF LITERARY AND ARTISTIC WORKS (PARIS ACT, 1971) 16 (1978).

Beyond this minimum requirement for protection, the Berne Convention allows wide latitude in both the subject matter protected and in the scope of protection offered. Wargo, *supra* note 15, at 415-39. The various member nations of the Berne Convention have taken disparate approaches in enforcement and application of the architectural copyright provisions. *Id.*

65. See *supra* notes 49-57.

66. Wargo, *supra* note 15, at 407 n.18-19.

67. Some commentators have disputed that the Berne Convention requires protection of completed architectural works. See *Berne Convention Implementation Act of 1987: Hearings on H.R. 1623 Before the Subcomm. on Courts, Civil Liberties, and the Administration of Justice of the House Comm. on the Judiciary*, 100th Cong., 1st & 2nd Sess. 689, 693 (1988) (testimony of Barbara Ringer, former Register of Copyrights); *id.* at 667 (testimony of Paul Goldstein, Professor of Law, Stanford University); Bucher, *supra* note 46, at 667. However, a brief examination of the history of the architecture provisions of the Berne Convention removes any doubt that the treaty mandates protection for completed architectural works. Although the member nations of the Berne Convention resisted at first, the Berne Convention has protected architectural works as early as the 1908 Berlin Revision. RICKETSON, *supra* note 15, at 146, 229. Like the United States, the signatory nations of the Berne Convention were slow to accept the copyrightability of architecture. Following the 1908 revision, all of the Berne member nations, with the exception of Norway, enacted legislation giving completed architectural works copyright protection. *Id.* at 256; Wargo, *supra* note 15, at 413. The subject matter provisions governing architecture remained fundamentally unchanged through the revisions of the Treaty in 1948 and 1971.

Given the facial clarity of the Berne Convention, it might at first seem puzzling that during the Congressional debates on the American decision to adhere to the Convention, some critics stated that it did not require copyright protection for completed architectural works. However, the signatory nations of the Convention take widely disparate approaches to enforcing the provisions of the treaty, and have never had uniform laws regulating the copyrightability of architecture. These different approaches may have confused the issue for these commentators. More thorough histories of the Berne Convention are included in RICKETSON, *supra* note 15, and in Wargo, *supra* note 15, at 409-14.

plans, or drawings. The work includes the overall form as well as the arrangement and composition of spaces and elements in the design, but does not include individual standard features.⁶⁸

Under this definition, the AWCPA protects only the design of "buildings." However, many architectural works are not "buildings." The original version of the AWCPA, H.R. 3990, protected not only buildings, but also other "three-dimensional structures."⁶⁹ This proposed category would have included "cases where architectural works [are] embodied in innovative structures that defy easy classification."⁷⁰ The House Subcommittee chose to delete this phrase from the final version of the bill, reasoning that the phrase would extend protection to "interstate highway bridges, cloverleaves, canals, dams, and pedestrian walkways," none of which the Subcommittee felt were worthy of copyright protection.⁷¹ On the other hand, a limitation to "buildings" seems to leave out a great many structures normally considered to be works of architecture. Architecture critic Paul Goldberger has stated that the two greatest works of architecture in New York City are Central Park and the Brooklyn Bridge,⁷² neither of which would receive protection under the AWCPA. Golf courses, gardens, tunnels, bridges, overpasses, fences, and walls are only a few of the structures designed by architects that would not fit the common definition of "building." Unless courts interpreting the AWCPA contort the definition of "building" well beyond its generally accepted limits, architects designing these other structures will not find copyright protection under the new subject matter category for architectural works.⁷³

Congress intended that the term "building" have a broad meaning to compensate for the exclusion of "other three-dimensional structures" from the scope of the AWCPA. The drafters therefore explicitly stated that the term "building" was not to be limited to structures inhabited by

68. Architectural Works Copyright Protection Act, Pub. L. No. 101-650, § 702(a), 104 Stat. 5133, 5133 (1990) (amending 17 U.S.C. § 101).

A work need not be designed by an architect in order to be considered a work of architecture. Copyright law looks to the character of the work created, and not to the status of the author of that work, in determining the appropriate subject matter category. Engineers, unlicensed architects, or laymen can all qualify as "authors" of a copyrightable building. See *Hearings on the AWCPA*, *supra* note 24, at 73 n.35 (statement of Ralph Oman, Register of Copyrights).

69. H.R. 3990, 101st Cong., 2d Sess. § 2(a) (1990), reprinted in *Hearings on the AWCPA*, *supra* note 24, at 3, 4.

70. H.R. REP. NO. 735, 101st Cong., 2d Sess. 19-20 (1990), reprinted in 1990 U.S.C.C.A.N. 6935, 6950-51.

71. *Id.*

72. PAUL GOLDBERGER, *THE CITY OBSERVED: NEW YORK* 27 (1979).

73. These works will have to seek protection under 17 U.S.C. § 102(a)(5) as "pictorial, graphic [or] sculptural works." However, in order to qualify for protection as a § 102(a)(5) "sculptural work," a work must satisfy the separability test for utilitarian objects. See *supra* note 24.

humans.⁷⁴ Rather, the term was also to cover "structures that are used, but not inhabited, by human beings, such as churches, pergolas, gazebos, and garden pavilions."⁷⁵ The legislative history provides few clues for defining the line between protected "buildings" and unprotected "other three-dimensional structures." This Note proposes that two categories of completed architectural works be excluded from the definition of "architectural work." First, structures whose form is dictated by engineering considerations should be excluded. Second, works such as gardens and parks, that are not enclosed structures, but rather organizations of space, should also be excluded.

Protection of the first category of works would be inconsistent with the goals of copyright law. The works identified by Congress as unprotectible—bridges, dams, canals, walkways, and similar works—are works whose overall forms are generally dictated by engineering considerations. In this respect, the form of these structures do not embody the creative expression of an author. These designs merely express the laws of physics and structural engineering applied to a certain context.

Congress accepted architect Michael Graves's descriptive terms for two types of architectural language: "internal" and "poetic." "Internal" language consists of those elements that are dictated and "determined by pragmatic, constructional, and technical requirements."⁷⁶ As such, these elements cannot express the creative mind of the architect. "Poetic" language, on the other hand, is "responsive to issues external to the building, and incorporates the three-dimensional expression of the myths and rituals of society."⁷⁷ The structures seen by Congress as unprotectible are all defined by what Graves described as "internal" language. Congress intended the AWCPA to protect only what Graves described as "poetic" language.⁷⁸

Permitting copyright in designs not dictated by pragmatic concerns, but not protecting the functionally dictated designs, is reminiscent of the tests used to define functionality in trademark cases. Under trademark law, a design is considered *de jure* functional if it is "the best or one of a few superior designs available."⁷⁹ When an architect has little choice in a

74. H.R. REP. NO. 735, *supra* note 70, at 20, reprinted in 1990 U.S.C.C.A.N. at 6951.

75. *Id.*

76. *Id.* at 18-19, reprinted in 1990 U.S.C.C.A.N. at 6949-50 (quoting statement of architect Michael Graves).

77. *Id.*

78. *Id.* The legislative history further states, "[T]echnology is not art The key to the art of architecture is the conviction and sensitivity with which technology and function are interpreted aesthetically, in solutions of a practical social purpose." *Id.* at 18, reprinted in 1990 U.S.C.C.A.N. at 6949 (quoting ADA L. HUXTABLE, *ARCHITECTURE ANYONE?* (1986)) (alteration in original).

79. *In re Morton-Norwich Prods., Inc.*, 671 F.2d 1332, 1341 (C.C.P.A. 1982).

design, and when that design is dictated not by the architect's artistic mind but instead by the laws of physics or some contextual necessity, courts consider that design functional for trademark purposes. This test views artistic expression as lying in the choice the artist makes from among equally functional options in solving a design problem. Although it may perform some function, a design qualifies as copyrightable expression if it represents such a choice.⁸⁰

Organizations of space, such as gardens, parks, and golf courses, comprise the second category of works that should not be protected by the AWCPA. Works that are not enclosed by any structure, although perhaps requiring much time, effort, and expense for an architect to prepare, and having a large potential for copying, simply cannot be considered buildings. Barring a revision in the definition of architectural works in section 101, only a distorted application of "building" will protect these works.⁸¹

If a work does qualify as a "building," it may also qualify as a section 102(a)(5) "sculpture." Prior to passage of the AWCPA, monumental, nonfunctional works of architecture received protection under section 102(a)(5) as "sculptural works."⁸² This provision remains unaffected by the AWCPA. Works such as the Statue of Liberty, the Washington Monument, and the Gateway Arch continue to receive section 102(a)(5) protection as sculptural works. As a result, the AWCPA offers dual protection to such works, as Congress intended such nonfunctional works to be within the definition of both section 102(a)(5) "sculptural works" and section 102(a)(8) "architectural works."⁸³

What the AWCPA does not protect, however, are some of the most profitable works produced by architects. Over the past twenty years, architects have used their skills to design a wide variety of household items. Teapots, electric razors, telephones, and other items have all received a great deal of attention from architects.⁸⁴ For an entire generation of Americans, these architect-designed items have become totems of success.⁸⁵ Their designers have blurred the line between architecture, art,

80. This approach is consistent with the general structure of our intellectual property laws. Patent law, not copyright, is the province of designers who create more efficient approaches to engineering questions. The most efficient solutions to pragmatic problems should be removed from the palette of elements available to designers only under the more stringent requirements of patent law. See discussion of patent law *infra* notes 100-09 and accompanying text.

81. However, the *plans* for such works could be copyrighted.

82. H.R. REP. NO. 735, *supra* note 70, at 20 n.43, *reprinted in* 1990 U.S.C.C.A.N. at 6951 n.43.

83. *Id.* at 20, *reprinted in* 1990 U.S.C.C.A.N. at 6951.

84. For example, architects Michael Graves and Alvar Aalto have designed, respectively, now-famous teapots and vases. Bruce Handy, *Yuppie Porn*, *SPY*, Dec. 1987, at 60.

85. *Id.*

and industrial design. However, these objects, though designed by prominent architects, will not qualify as section 102(a)(8) architectural works, and must instead qualify as section 102(a)(5) sculptural works.⁸⁶ As in all copyright law, it is the nature of the work, and not the profession of the author, that determines the copyrightability of the work.

D. "Original" and "Not Wholly Functional" Designs

To be protected under the AWCPA, a structure must first qualify as a "building"; it must then satisfy a two-part test to establish that its design is first, original, and second, not wholly functional. As stated by the House:

A two-step analysis is envisioned. First, an architectural work should be examined to determine whether there are original design elements present, including overall shape and interior architecture. If such design elements are present, a second step is reached to examine whether the design elements are functionally required. If the design elements are not functionally required, the work is protectible without regard to physical or conceptual separability. As a consequence, contrary to the Committee's report accompanying the 1976 Copyright Act with respect to industrial products, the aesthetically pleasing overall shape of an architectural work could be protected under this bill.⁸⁷

Defining originality stands as one of the major interpretive difficulties underlying the AWCPA. In order to fulfill legislative intent and the purposes of copyright law, the standard for originality should be very modest. The legislative history states explicitly that "the proposed legislation incorporates the general standards of originality applicable for all other copyrightable subject matter. This standard does not include requirements of novelty, ingenuity, or aesthetic merit."⁸⁸ Moreover, one of the oldest and most fundamental principles of American copyright law is that originality shall not be conditioned on a judicial evaluation of artistic worth.⁸⁹ For AWCPA purposes, originality can take many forms: the use of unoriginal individual elements in original ways, the combination of new elements with old elements, and the placement of the otherwise banal into new and original contexts. As the drafters of the AWCPA stated in the legislative history:

The phrase "arrangement and composition of spaces and elements" recognizes that: (1) creativity in architecture frequently takes the form of a selection, coordination, or arrangement of unprotectible elements

86. Sculptural works, unlike architectural works, are subject to the separability test. See *supra* note 24.

87. H.R. REP. NO. 735, *supra* note 70, at 20-21, reprinted in 1990 U.S.C.C.A.N. at 6951-52.

88. *Id.* at 21, reprinted in 1990 U.S.C.C.A.N. at 6952.

89. See *Bleistein v. Donaldson Lithographing Co.*, 188 U.S. 239, 251 (1903); *Tennessee Fabricating Co. v. Moultrie Mfg. Co.*, 421 F.2d 279 (5th Cir.), *cert denied*, 398 U.S. 928 (1970).

into an original, protectible whole; (2) an architect may incorporate new, protectible design elements into otherwise standard, unprotectible building features; and (3) interior architecture may be protected.⁹⁰

This broad definition of architectural design comports with the conception of architecture, discussed earlier, as a combination of disparate elements.⁹¹ The drafters seem to have contemplated that the originality and the artistic impact of a work cannot be evaluated outside of the context in which that work appears.⁹²

Demonstrating nonfunctionality may be even more problematic. As stated above, in recent years application of the separability test has plagued attempts to define objects as either functional or nonfunctional.⁹³ Although Congress intended to avoid applying the separability test to architectural works,⁹⁴ this two-step analysis for AWCPA protection could conceivably be interpreted to revive the separability test.

A narrow interpretation of "functionally required" best serves the purposes of copyright law and the architectural profession. Elements of an architect's design that are not dictated by functional considerations can be used to express the architect's creativity. If these elements are used in a particularly aesthetically or commercially pleasing way, the architect should be given the opportunity to profit from reuse of that particular combination of elements.

E. *Individual Design Elements*

Although the AWCPA protects an overall design of an architectural work, the Act does not protect the individual standard features used in that work.⁹⁵ The drafters believed that "[a] grant of exclusive rights in such features [such as common windows, doors, and other staple building components] would impede, rather than promote, the progress of architectural innovation."⁹⁶ Copyright protection is inappropriate for

90. H.R. REP. NO. 735, *supra* note 70, at 18, *reprinted in* 1990 U.S.C.C.A.N. at 6949.

91. *See supra* Part I(B).

92. *See* STANLEY ABERCROMBIE, *ARCHITECTURE AS ART* 87-97 (1984) ("Architecture never exists in a vacuum; it is touched on all sides by its context.").

93. *See supra* note 24.

94. H.R. REP. NO. 735, *supra* note 70, at 20, *reprinted in* 1990 U.S.C.C.A.N. at 6951.

95. "An 'architectural work' . . . includes the overall form as well as the arrangement and composition of spaces and elements in the design, *but does not include individual standard features.*" AWCPA § 702(a), 17 U.S.C.A. § 101 (West Supp. 1992) (emphasis added).

96. H.R. REP. NO. 735, *supra* note 70, at 18, *reprinted in* 1990 U.S.C.C.A.N. at 6949.

For example, the John Hancock Building in Chicago could be protected, but the X-shaped steel beams that rise along its side would not be protected, because they are functionally determined. Frank Lloyd Wright could have sought copyright protection for his Fallingwater house, but this copyright would not extend to the functionally determined elements such as the cantilevered terrace. Interpretive problems may develop in determining exactly when a feature is protected and when it is not protected. Congress intended that functionality have a narrow reach.

these individual design elements. Architects must be allowed to experiment with recombining individual features in new and creative ways.

As explained above in Part I(B), architectural design consists of the rearrangement of individual elements of the architectural "vocabulary." Architectural creativity and progress are served by making these individual elements freely available for use and adaptation by others. A door, window, or roof design can be transformed into an original form by placing it in a different context, or by recombining it with different elements. Preventing architects from reusing these elements would be analogous to depriving authors of the use of standard "stock characters" in their novels or screenplays,⁹⁷ or to depriving these same authors of the use of standard plot lines in their works.⁹⁸ Because almost all of the design elements in an architectural work serve some functional purpose, a broad definition of "functionally required" will preclude vast portions of architectural works from enjoying protection. If courts define "functionally required" broadly, the AWCPA will take on a very limited scope. However, it should be remembered that the test envisioned by Congress is that a design element must be functionally *required* in order to disqualify an architectural work from protection. As stated above, the conception of functionality anticipated by Congress is quite narrow, and recalls the test used in trademark law.⁹⁹ If a design element is merely one of many

97. See generally Dean P. DeNiro, *Protecting Characters Through Copyright Law: Paving a New Road upon Which Literary, Graphic and Motion Picture Characters Can All Travel*, 41 DEPAUL L. REV. 359 (1992); Michael T. Helfand, Note, *When Mickey Mouse Is as Strong as Superman: The Convergence of Intellectual Property Laws to Protect Fictional Literary and Pictorial Characters*, 44 STAN. L. REV. 623 (1992).

98. Two recent examples of the use of standard plot lines come quickly to mind. The first is the recent glut of "body-switching" movies, in which an older character temporarily inhabits the body of a younger character. See, e.g., 18 AGAIN (New World Pictures 1988); ALL OF ME (Universal 1984); BIG (20th Century-Fox 1988); LIKE FATHER, LIKE SON (Tri-Star Pictures 1987); VICE VERSA (Columbia Pictures 1988). These films all added something new to the art form, even though they were based on the same plot structure, derived from previous forms, such as *Freaky Friday*, and may even have a common genesis in plots first established in *The Prince and the Pauper*.

The second is the seemingly ubiquitous motion picture plot line featuring two initially incompatible and very different characters who are placed into a situation in which they are forced to cooperate. Invariably, the characters become best friends, and learn something about themselves in the process. See, e.g., 48 HOURS (Paramount Pictures 1982); LETHAL WEAPON (Warner Bros. 1987); MIDNIGHT RUN (Universal Pictures 1988). The similarities in this type of film can be truly striking. For example, in both *Twins* and *Rain Man*, the main character discovered a long-lost brother. The main character initially dislikes his new-found brother, and is forced into a cross-country car ride. On their ride across country, the two learn to look beyond their differences and forge a close relationship. RAIN MAN (United Artists 1988); TWINS (Universal Pictures 1988).

99. See *supra* notes 79-80 and accompanying text. It also recalls the approach of the district court in *East/West Venture v. Wurmfield Assocs.*, 722 F. Supp. 1064 (S.D.N.Y. 1989). In *East/West*, the court addressed a claim that a building's design was *dictated* by the configuration of the property on which it stood, by the presence and location of preexisting structures on the property, and by economic and zoning constraints. The court asked whether, "if a property is of such a unique

equally useful elements that might have been chosen, then there seems little reason to categorize such elements as functionally "required."

Although separable elements do not receive protection under section 102(a)(8), designers of such elements are not without protection. The separable decorative elements of an architectural work may still qualify for protection under section 102(a)(5) as "sculptural works." Additionally, a designer of separate elements may instead choose to seek patent protection for those separate elements.

The subject matter covered by patent law overlaps much of the subject matter of copyright and federal trademark law.¹⁰⁰ Like copyright law, American patent law is constitutionally grounded in the purpose of promoting progress in "science and the useful arts." Despite this common genesis, patent law differs greatly from copyright and trademark law in substance. The limited scope of patent law,¹⁰¹ its narrow protection,¹⁰² and its shorter term¹⁰³ all reflect its subject matter. Unlike copyrighted objects, patented objects are generally more adaptable for use in other forms; more important, allowing others to tinker with, adapt, and use patented objects in new ways advances the arts and sciences. Consequently, the law makes it harder for these articles to qualify for protection, and those articles that do qualify for protection receive only shorter and more limited protection.

Patent law recognizes two types of patents: "utility" and "design" patents.¹⁰⁴ Design patents contain significant overlap with copyright and

nature that its plans relating to development scheme and basic design features must be substantially identical, . . . the first architect to design plans [has] a right to prevent the use of plans incorporating such scheme and features." The court held that an architect can only show infringement if "something unique in the plans not demanded by the uniqueness of the site must be copied." *Id.* at 1068.

100. The subject matter of patent law includes "processes," "machines," "manufactures," and "compositions of matter." 35 U.S.C. § 101 (1988). These categories can include a completed architectural work, separate elements of that work, and the processes and methods used in construction of similar works. Louis Altman, *Intellectual Property Law and the Construction Industry, Part I*, 70 J. PAT. & TRADEMARK OFF. SOC'Y 491, 491-99 (1988).

101. The rights and remedies available to patent holders also differ from those available through copyright or trademark. Patent law confers only the rights to "make, use, or sell" a design, distinct from the right to copy or otherwise reproduce a work conferred by copyright. 35 U.S.C. § 103.

102. To be eligible for patent protection, an object must be "novel," *id.* § 102(a), and its design must have been "non-obvious to one of ordinary skill in the relevant craft." *Id.* § 103. The novelty requirement creates an absolute monopoly. If a second architect creates a design independent of a prior patent holder's identical design, the second inventor would be liable for patent, but not copyright, infringement. While the novelty requirement serves to grant broader protection than would be available under copyright, the patent requirement of non-obviousness makes a patent harder to qualify for than a copyright.

103. A design patent runs only for a term of fourteen years. *Id.* § 173. Non-design patents run for a term of seventeen years. *Id.* § 154.

104. Utility patents are issued for objects and processes with a utilitarian function. Design patents, in contrast, are issued for ornamental designs for articles of manufacture. *Bonito Boats, Inc. v.*

trademark law. Like utility patents, the subject of a design patent must be novel,¹⁰⁵ original,¹⁰⁶ and non-obvious to a person of ordinary skill in the art.¹⁰⁷ Unlike utility patents, design patents must not serve a primarily functional or utilitarian purpose.¹⁰⁸ Design patent protection of "ornamental" works provides the necessary protection for the individual elements of architectural design.¹⁰⁹

F. *Architectural Works Distinguished from Architectural Plans*

For the sake of clarity, the drafters' definition of an "architectural work" explicitly included works embodied in "architectural plans, or drawings."¹¹⁰ Thus an architectural work need not be constructed in order to receive protection. "[A] work of architecture may be embodied in the built design—the constructed three-dimensional building—or in plans, drawings, or in 'any tangible medium of expression,' such as a blueprint or a computer disk."¹¹¹ The original version of the bill referred

Thunder Craft Boats, Inc., 489 U.S. 141, 147-48 (1989). Architects would be likely to seek a utility patent for innovative processes, methods of construction, or utilitarian advances. New materials used in the construction of architectural works unambiguously fit within the patentable category of compositions of matter. New types of steel and concrete can be patented, as can new non-structural materials such as glass or carpeting. Tools, machines, and other mechanical implements used in the construction of architectural works are patentable as "machines." Similarly, "processes" include innovative methods of constructing architectural works. See generally Altman, *supra* note 100, at 491-501.

105. 35 U.S.C. § 102.

106. *Id.*

107. *Id.* § 103.

108. *Id.* § 171; Power Controls Corp. v. Hybrinetics, Inc., 806 F.2d 234, 238 (Fed. Cir. 1986); Barofsky v. General Elec. Corp., 396 F.2d 340, 342 (9th Cir. 1968), *cert. denied*, 393 U.S. 1031 (1969).

109. Some examples of separable elements of architectural works that have qualified for design patent protection are lighting fixtures, Day-Brite Lighting, Inc. v. Sandee Mfg. Co., 126 U.S.P.Q. 32 (N.D. Ill. 1960) (holding patent valid and infringed), *rev'd*, 286 F.2d 596 (7th Cir.) (holding patent invalid on prior art grounds), *cert. denied*, 366 U.S. 963 (1961); handrailings, Blumcraft of Pittsburgh v. Citizens & S. Nat'l Bank, 286 F. Supp. 448 (D.S.C. 1968) (holding patent valid and infringed), *rev'd*, 407 F.2d 557 (4th Cir.) (holding patent invalid on prior art grounds), *cert. denied*, 395 U.S. 961 (1969); patterned floor tiles, *In re Bartlett*, 300 F.2d 942 (C.C.P.A. 1962); and settings of plate glass in store fronts, Kawneer Co. v. Pittsburgh Plate Glass Co., 109 F. Supp. 228 (W.D. Mich. 1952) (holding patent invalid on prior art grounds). In addition, entire buildings can qualify for patent protection, provided they meet the statutory requirements of novelty, originality, and non-obviousness. See Altman, *supra* note 100, at 497-98.

110. AWCPA § 702(a), 17 U.S.C.A. § 101 (West Supp. 1992); see also H.R. REP. No. 735, *supra* note 70, at 19, *reprinted in* 1990 U.S.C.C.A.N. at 6950.

111. H.R. REP. No. 735, *supra* note 70, at 19, *reprinted in* 1990 U.S.C.C.A.N. at 6950 (emphasis added). As long as the idea for the building has been embodied in some tangible medium of expression, such as plans or drawings, an unconstructed architectural work is protectible under 17 U.S.C. § 106(a)(8). For a pre-AWCPA case that discusses the point at which infringement is implicated, see East/West Venture v. Wurmfield Assocs., 722 F. Supp. 1064 (S.D.N.Y. 1989). Requiring that a building be built before infringement is implicated would be to find infringement only at the point at which economic waste would become great enough to militate against many forms of relief.

only to architectural work "as embodied in" buildings.¹¹² To avoid any potential ambiguity, the drafters clarified the scope of protected subject matter by including "plans" within the definition. However, it should be noted that this explicit enumeration was unnecessary. Prior to the enactment of the AWCPA, section 102(a)(5) of the Copyright Act of 1976 protected architectural plans, drawings, and models.¹¹³ In no way did Congress intend the AWCPA to subsume any of the protections offered by section 102(a)(5).¹¹⁴ As a result, an architect possesses two separate copyrights for a completed architectural work: a copyright in the constructed building as defined in section 102(a)(8), and a copyright in the plans and drawings, protected within section 102(a)(5). "The bill's intention is to keep these two forms of protection separate. . . . Either or both of these copyrights may be infringed and eligible separately for damages."¹¹⁵ Claims of infringement may be made regardless of whether the infringer gained access through copying the completed work or copying the plans.¹¹⁶

Allowing multiple forms of relief, as the AWCPA does, is a necessary concomitant of the idea/expression dichotomy upon which American copyright law is based. The same idea may be expressed in several media, each of which is separately eligible for copyright protection.¹¹⁷ A copyright holder may enjoy greater success in proving the access element of an infringement action based on infringement of the completed work, as opposed to infringement of the plans.¹¹⁸ As a matter of proof, it will

112. H.R. 3990, *supra* note 69, § 2(a), reprinted in *Hearings on the AWCPA*, *supra* note 24 at 4.

113. 17 U.S.C. §§ 101, 102(a)(5) (1988); see *supra* Part II(A).

114. "Protection for architectural plans, drawings, and models as pictorial, graphic or sculptural works under section 102(a)(5), title 17, United States Code, is unaffected by this bill." H.R. REP. No. 735, *supra* note 70, at 19, reprinted in 1990 U.S.C.C.A.N. at 6950.

115. *Id.*

116. A copyright holder may prefer to bring a claim under § 102(a)(8), because access might be easier to establish. See *infra* note 118. Copyright law relies on the concept of "access" to establish infringement. As the Register of Copyrights stated at the Subcommittee Hearings, and as has developed in the caselaw, where a three-dimensional work meets the standard for protection, infringement may lie regardless of whether access to the three-dimensional work is obtained from a two-dimensional or three-dimensional depiction thereof. *Hearings on the AWCPA*, *supra* note 24, at 67-68; H.R. REP. No. 735, *supra* note 70, at 19, reprinted in 1990 U.S.C.C.A.N. at 6950.

117. For example, a song is eligible for a copyright in both the actual sound recording, 17 U.S.C. § 102(a)(7) (1988), and in the underlying musical composition, *id.* § 102(a)(2).

118. A copyright infringement action requires proof of two elements: ownership of a valid copyright by the plaintiff and copying, by the defendant, of constituent elements of the work that are original. *Feist Publications v. Rural Tel. Serv.*, 111 S. Ct. 1282, 1296 (1991). As actual copying by the defendant is difficult to prove, courts rely on the concepts of access and substantial similarity to impute copying. In most cases, a plaintiff must prove both access to and substantial similarity with the copyrighted work. However, courts have found copying to have occurred even without access if the similarity between the works is so striking and substantial as to preclude the possibility of independent creation of the work by the defendant. *NIMMER ON COPYRIGHT*, *supra* note 50, § 13.02[B]; see *id.* § 13.02[B] n.20 (citing cases in which courts found copying without access); *id.*

generally be easier to demonstrate access to a completed structure or a work in progress than to prove access to plans. The completed structure will usually be visible to the public, whereas plans will not generally be accessible.¹¹⁹ If a copyright holder prevails on claims of infringement of both the completed work and the plans, reduction of an award of damages would prevent a windfall of double remuneration.¹²⁰

III. SCOPE OF PROTECTION AND RELIEF UNDER THE ACT

The most striking aspect of the AWCPA is the limited scope of the protection it affords to architectural works. Responding to pragmatic concerns, Congress chose to deprive architectural works of protections offered to other copyrightable works. Holders of copyrights in architectural works can neither prevent alteration and destruction of their works, nor prevent the production of two-dimensional pictorial copies of the work. Congress correctly viewed alteration and destruction of a building by its owner to be practical necessities. However, allowing the production of pictorial copies of the work may prove to be an overbroad provision that deprives an architect of a potentially valuable right in derivative works.

A. *Alteration and Destruction of Architectural Works*

Only four of the five exclusive rights granted under section 106 of the Copyright Act of 1976 make sense when applied to architecture: the right to transform or adapt the work into another form¹²¹ ("the derivative works right"); the right to make copies of the protected work¹²² ("the right of reproduction"); the right to distribute copies of the protected work to the public¹²³ ("the distribution right"); and the right to display the work publicly¹²⁴ ("the display right").

§ 13.01[B] n.27 (citing cases in which courts found direct evidence of copying); see also Alan Latman, "Probative Similarity" as Proof of Copying: Toward Dispelling Some Myths in Copyright Infringement, 90 COLUM. L. REV. 1187, 1194-95 (1990) (discussing elements of proof in copyright infringement cases).

119. It should be noted that a plaintiff may not even have to prove actual access. See NIMMER ON COPYRIGHT, *supra* note 50, § 13.02[A]. However, courts are wary of finding infringement based on this "double circumstantial evidence" of copying. *Id.*; see *Morse v. Fields*, 127 F. Supp. 63 (S.D.N.Y. 1954) (despite striking similarities between works, court refused to find that copying of magazine article occurred absent a showing of access).

120. H.R. REP. NO. 735, *supra* note 70, at 19, reprinted in 1990 U.S.C.C.A.N. at 6950.

121. 17 U.S.C. § 106(2) (1988).

122. *Id.* § 106(1).

123. *Id.* § 106(3).

124. *Id.* § 106(5). The Copyright Act grants holders of copyrights in musical and dramatic works the additional exclusive right to perform the work publicly. *Id.* § 106(4). However, this right has no application to architectural works.

The AWCPA severely limits the copyright holder's derivative works right. AWCPA section 704(a) adds a new section, section 120(b), to the Copyright Act:

ALTERATIONS TO AND DESTRUCTION OF BUILDINGS—Notwithstanding the provisions of section 106(2), the owners of a building embodying an architectural work may, without the consent of the author or copyright owner of the architectural work, make or authorize the making of alterations to such building, and destroy or authorize destruction of such building.¹²⁵

Congress viewed this limitation as a practical necessity. In order to perform its utilitarian functions, a building must be able to adapt and change. Conditioning changes on the approval of the original architect may lead to frustrating delays.

The original draft of the AWCPA had allowed a building owner to make only "minor" or "necessary" changes without first receiving the permission of the architect.¹²⁶ However, at the urging of architect Michael Graves, Congress expanded the owner's right to include the right to make *any* changes to the structure for any reason, and to include the right to order the destruction of the building. Congress accepted Graves's argument that if the architect retained the right to approve changes to the structure, building owners would demand that architects assign their copyright in the structure over to the owner.¹²⁷ In this respect, the AWCPA demonstrated the necessity of soliciting the active participation of affected professionals in drafting legislation in the often arcane realm of intellectual property.

It should be noted that under the AWCPA, an architect who feels strongly that he must retain the right to approve alterations in his work may still reserve that right as a matter of contract law.¹²⁸ Contract

The display right may prove important when applied to architectural plans. Because the AWCPA includes architectural plans within the definition of architectural work, the copyright holder of architectural plans, and not the building owner, will have the exclusive right to display the architectural plans at museums, on the premises of the building, or in other public places. *But see Hearings on the AWCPA, supra* note 24, at 69 (statement of Ralph Oman, Register of Copyrights) (claiming that architecture should not have display right). In the event that a building owner wishes to display the plans to the building, or make some use of the plans for any reason other than constructing the building, the building owner should retain an express assignment of this right from the architect in their contract.

125. 17 U.S.C.A. § 120(b) (West Supp. 1992).

126. See H.R. 3990, *supra* note 69, § 4(a), reprinted in *Hearings on the AWCPA, supra* note 24, at 3, 5-6.

127. *Hearings on the AWCPA, supra* note 24, at 16 (statement of architect Michael Graves).

128. State law claims of conversion, misappropriation, and unjust enrichment also remain available to architects.

claims will continue to play an important role in regulating rights between architects, clients, and others, and are not preempted by the Copyright Act.¹²⁹ In fact, it is chiefly due to the effectiveness of the parties in ordering their rights through enforceable contracts that copyright claims regarding architectural works have not arisen frequently in federal court.¹³⁰

In addition, local landmark and historic preservation laws will protect a work whose aesthetic appearance is considered too valuable to alter. Local landmark and historic preservation laws are an often overlooked, but increasingly important, legal protection for architectural works. These laws will help make up for the AWCPA's failure to prevent alteration or modification of the buildings thought by the local community to be of the most aesthetic or historic worth. The AWCPA explicitly upholds such local laws, stating that the Copyright Act shall not preempt "[s]tate and local landmarks, historic preservation, zoning, or building codes, relating to architectural works protected under [17 U.S.C.] section 102(a)(8)."¹³¹ As a practical matter, this means that state law will continue to play an important role in regulating the construction, modification, and destruction of architectural works.

Respect for local landmark laws is founded on principles of federalism. Questions of how and when to construct or destroy buildings are questions of local concern. Similarly, questions of which buildings are considered aesthetically or historically worthy of preservation are questions that a local governing board is far better qualified to answer than federal officials or federal judges. Aesthetic merit is intrinsically contextual. A particular building may have extraordinary merit in one setting that it would lack in another setting. Permitting the use of federal statutes to prevent destruction or modification of buildings would distort the purposes of copyright law, and infringe on valid local concerns. The Copyright Act, the Lanham Act, and the Patent Act are not federally created norms of artistic merit, and are not based on the moral rights of

129. The Copyright Act preempts only those state law rights that are "equivalent to copyright." 17 U.S.C. § 301(b) (1988). Defining the boundaries of equivalency to copyright has proven problematic. See *Donald Frederick Evans & Assocs. v. Continental Homes, Inc.*, 785 F.2d 897, 913-15 (11th Cir. 1986); NIMMER ON COPYRIGHT, *supra* note 50, § 1.01[B][1];

130. See *Hardin & Choy, Inc. v. Autumn Shelter, Inc.*, 1988 WL 156,273 (N.D. Cal. Dec. 7, 1988) (granting summary judgment motion on copyright infringement and conversion claims because contract provision allowed purchasers of plans to transfer any rights in plans to third parties); *Whitney, Atwood, Norcross Assocs. v. Architect's Collaborative Inc.*, 18 U.S.P.Q.2d 1243 (D. Mass. Jan. 4, 1991) (ambiguously worded contract provision governing copyright ownership of architectural plans precludes Rule 12(b)(7) motion to dismiss).

131. AWCPA § 705, 17 U.S.C.A. § 301(b)(2), (4) (West Supp. 1992).

an author. Federal protection of architectural works can only be countenanced if that protection will serve the societal goals identified in the Constitution: to encourage creativity in the useful arts (for copyright and patent law) and to regulate interstate commerce (for trademark law). Claims that an architectural work must be protected based on the intrinsic worth of that work and its value to the local community, are not relevant to federal intellectual property laws. Such claims are questions of local concern, best answered by local authorities.

B. *Reproduction of Architectural Works*

The AWCPA also limits the copyright holder's right of reproduction. The new section 120(a) states that:

PICTORIAL REPRESENTATIONS PERMITTED—The copyright in an architectural work that has been constructed does not include the right to prevent the making, distributing, or public display of pictures, paintings, photographs, or other pictorial representations of the work, if the building in which the work is embodied is located in or ordinarily visible from a public place.¹³²

This provision is included both as a practical necessity and as a means to discourage trespass by tourists who try to photograph buildings not visible from a public vantage point. Enforcing limitations on the presence of copyrighted buildings in the foreground or background of photographs would prove impossible. Tourists and others inevitably would want to take photographs of landmark buildings. Questions about this ability of the public to take photographs or otherwise to make two-dimensional reproductions of architectural works have been hotly debated in discussions of the copyrightability of architecture.¹³³

132. AWCPA § 704(a), 17 U.S.C.A. § 120(a) (West Supp. 1992).

133. See *Hearings on the AWCPA*, *supra* note 24, at 70-71 (statement of Ralph Oman, Register of Copyrights) (two-dimensional representations are not necessary to provide architects with the economic incentives for creativity); *id.* at 125 (statement of David K. Perdue on behalf of the American Institute of Architects) (supporting basic idea of limiting two-dimensional reproductions, but expressing fear that overbroad protection will allow infringing reproduction of copyrighted plans); *id.* at 138 (statement of Richard Carney on behalf of the Frank Lloyd Wright Foundation) (noting that commercial use of models and photographs of architectural works deprives architects of the "fruits of [their] labor . . . without compensation").

As early as 1906, debate over the ability to photograph buildings derailed the initial discussions of adding architectural works to the legislation that eventually became the Copyright Act of 1909. See COPYRIGHT OFFICE REPORT, *supra* note 17, at 76-78; 3 LEGISLATIVE HISTORY OF THE 1909 COPYRIGHT ACT 179-83 (E. Fulton Brylawski & Abe Goldman eds., 1976).

Failure to grant the right to prohibit photographs and other two-dimensional reproductions to holders of copyrights in architectural works demonstrates the United States' minimalist approach to compliance with the Berne Convention. Nations adhering to the Berne Convention split as to whether architects are allowed to control the production of two-dimensional reproductions of their works. For example, the United Kingdom, Denmark, Finland, and Cyprus permit two-dimensional reproductions of architectural works. Wargo, *supra* note 15, at 431. Belgium, Germany, and France

The most severe criticism of section 120(a) is that it deprives architects of needed protection by being unnecessary and overbroad in its permissiveness.¹³⁴ Section 120(a) allows the production of even *commercial* representations of architectural works. As a result, section 120(a) deprives architects of a potentially lucrative source of secondary income on their most notable works. The issue is somewhat confused by the fact that copyright holders may control the production of three-dimensional reproductions of a completed building, but may not control the production of two-dimensional reproductions.¹³⁵ This distinction may prove very important to the sale of souvenirs and other mementos from tourist attractions. Commentators have justly criticized the "dubious" reasons for depriving an architect of a share in the income from two-dimensional souvenirs, but allowing him to profit from commercially produced three-dimensional souvenirs.¹³⁶ A better solution might have been to prohibit two-dimensional reproductions, and to rely on the "fair use" provisions of the Copyright Act to prevent only commercial reproductions.

The field may become further confused by the fact that "sculptures" are still protected from unauthorized two-dimensional reproductions. Copyright holders in monumental nonfunctional works of architecture will be able to enjoin production of photographs and other two-dimensional reproductions. For this reason, it would be to the advantage of an architect to categorize a work, if possible, as a section 102(a)(5) "sculptural work" instead of as a section 102(a)(8) "architectural work." Similarly, separable design elements that qualify as section 102(a)(5)

do not, although Germany makes an exception for architectural works located on public roads and Belgium makes an exception for two-dimensional reproductions necessary to the reporting of public events. *Id.* at 432 & n.163. The French cases have generated some unusual results. *Id.* at 432 & n.165 (citing the *Last Tango in Paris* litigation, in which the filmmakers, who set many scenes in recognizable architectural spaces, avoided a verdict of infringement only because the spaces were not absolutely recognizable; and also citing a case arising under the French civil code, and not French copyright law, in which the artist Bernard Buffet was ordered to pay damages to the owner of a house depicted in a Buffet painting). For overviews of how various nations treat architecture under their intellectual property laws, see COPYRIGHT OFFICE REPORT, *supra* note 17, at 157-93; Ginsberg, *supra* note 57, at 496 n.74; Michael Huet, *Architecture and Copyright*, UNESCO COPYRIGHT BULL. Vol. XIX, No. 4, at 14 (1985).

As elsewhere, Congress sought to provide only the minimum protection required to comply with the Berne Convention. See, e.g., Wargo, *supra* note 15, at 407 n.18-19.

134. Ginsberg, *supra* note 57, at 494-97 (stating that principles of fair use adequately protect the interest of the public to make pictorial representations for noncommercial purposes, and disputing the wisdom of depriving the copyright holder of the right to control the commercial exploitation of copyrighted architectural works).

135. It should be noted that the new § 120(a) does not apply to the production of two-dimensional copies of § 106(a)(5) architectural plans or models. See *Hearings on the AWCPA*, *supra* note 24, at 70 n.32. If it did, § 120(a) would allow the copying of plans, thus depriving authors of their valuable right in the reproduction of plans.

136. Ginsberg, *supra* note 57, at 495.

"sculptural works" enjoy protection from unauthorized two-dimensional reproductions. Thus, under the AWCPA, a manufacturer could commercially market postcards and posters of the Cathedral of Notre Dame in Paris (were the Cathedral copyrighted under American copyright law), but could not market posters or postcards of the famous gargoyles attached to the Cathedral.

C. *Forms of Relief Available Under the Act*

Once a copyright holder determines what claim will be brought, the litigant must then determine what form of relief will be sought. The Copyright Act of 1976 provides several forms of relief: injunctive relief,¹³⁷ statutory¹³⁸ and actual damages,¹³⁹ recovery of the defendant's profits,¹⁴⁰ and impounding¹⁴¹ or destroying¹⁴² infringing copies. Injunctive relief and destruction present particular problems when applied to architectural works. As enacted, the AWCPA permits copyright holders to seek injunctive relief against the construction of infringing buildings, even if construction has already begun. Much of the debate over H.R. 3990 focused on the question of whether injunctive relief was an appropriate remedy for infringement.¹⁴³ As originally drafted, section 4 of H.R. 3990 permitted injunctive relief only when construction had not "substantially begun."¹⁴⁴ The architectural community supported this pragmatic view, arguing that the economic waste attendant to the destruction of buildings already under construction should preclude the granting of injunctions in most cases.¹⁴⁵

Although Congress eventually decided to allow injunctive relief under the AWCPA,¹⁴⁶ defendants may still suggest equitable reasons

137. 17 U.S.C. § 502(a) (1988).

138. *Id.* § 504(c).

139. *Id.* § 504(b); see *Intown Enters. v. Barnes*, 721 F. Supp. 1263, 1266-67 (N.D. Ga. 1989) (plaintiff may recover profits on houses that it would have sold but for defendant's duplication of copyrighted architectural plans and use of infringing copies to build identical houses, it may also recover defendant's profits not accounted for in computing actual damages); see also *Robert R. Jones Assocs. v. Nino Homes*, 858 F.2d 274, 280-81 (6th Cir. 1988) (same).

140. 17 U.S.C. § 504(b); see *Robert R. Jones Assocs.*, 858 F.2d at 280-81 (plaintiff may get infringer's profits where profits exceed actual damages); *Joseph J. Legat Architects v. United States Dev. Corp.*, No. 84C8803, 1991 WL 38714 (N.D. Ill. Mar. 20, 1991).

141. 17 U.S.C. § 503(a).

142. *Id.* § 503(b).

143. H.R. REP. NO. 735, *supra* note 70, at 13-14, reprinted in 1990 U.S.C.C.A.N. at 6944-45.

144. H.R. 3990, *supra* note 69, § 4, reprinted in *Hearings on the AWCPA*, *supra* note 24, at 5.

145. H.R. REP. NO. 735, *supra* note 70, at 13 (statements of Michael Graves and AIA); *Hearings on the AWCPA*, *supra* note 24, at 18-19, 117.

146. H.R. REP. NO. 735, *supra* note 70, at 13-14, reprinted in 1990 U.S.C.C.A.N. at 6944-45.

why an injunction should not be issued.¹⁴⁷ In discussing the availability of permanent injunctive relief under the Copyright Act of 1976, the United States Court of Appeals for the Second Circuit stated *en banc* that "[a]ll now agree that injunction is not the automatic consequence of infringement and that equitable considerations always are germane to the determination of whether an injunction is appropriate."¹⁴⁸ In the past, some courts have refused to issue injunctions barring future construction of buildings based on copyrighted plans.¹⁴⁹

Discussing the availability of injunctive relief for architectural works, the House Subcommittee noted that "architectural works may present issues different than other forms of authorship. Architectural works are the only form of copyrightable subject matter that is habitable."¹⁵⁰ The Subcommittee noted that granting an injunction after construction had begun would lead to the waste of substantial pre-construction costs, and would create an added unpredictability for the many parties involved in construction, such as the financial backers of the project, the subcontractors, materials suppliers, and the unions.¹⁵¹ However, the Subcommittee did not consider these economic factors to be significant enough to warrant a departure from the general rule that injunctive relief is an appropriate remedy for copyright infringement.¹⁵² The Subcommittee noted that many of the same economic arguments could be made for denying an injunction for a motion picture project, but none for denying an injunction for copyright infringement of a screenplay or completed film.¹⁵³ As an equitable remedy, an injunction will still require balancing the possibility of waste and other economic harms against the availability of alternative remedies.

147. The Subcommittee shared Graves's and the AIA's concerns about economic waste in addressing the injunction issue. The AIA argued for the exercise of discretion by a judge in determining the appropriateness of injunctive relief, stating that although it was conceivable that the very existence of a building would be an irreparable harm to a copyright holder, a judge in an injunctive proceeding should weigh the public policy considerations regarding economic waste against the interests of the copyright holder. *Id.* at 13, reprinted in 1990 U.S.C.C.A.N. at 6944; *Hearings on the AWCPA*, *supra* note 24, at 117.

148. *New Era Publications Int'l v. Henry Holt, Co.*, 884 F.2d 659, 661 (2d Cir. 1989) (*en banc*), *cert. denied*, 493 U.S. 1094 (1990).

149. See *Nucor Corp. v. Tennessee Forging Steel Serv., Inc.*, 476 F.2d 386, 393 (8th Cir. 1973) (stating in dicta that an injunction should be issued only if "minimum construction had begun"); *Edgar H. Wood Assocs. v. Skene*, 197 N.E.2d 886, 896 (Mass. 1964) (no injunction given the excessive hardship to the defendant).

150. H.R. REP. NO. 735, *supra* note 70, at 13, reprinted in 1990 U.S.C.C.A.N. at 6944.

151. *Id.* at 13-14, reprinted in 1990 U.S.C.C.A.N. at 6944-45.

152. *Id.* at 14, reprinted in 1990 U.S.C.C.A.N. at 6945.

153. *Id.* at 14 n.28, reprinted in 1990 U.S.C.C.A.N. at 6945 n.28.

The economic waste accompanying an injunction against construction of an architectural work may preclude injunctive relief. Construction of a building requires significant costs by investors, banks, and tenants. These parties would all be greatly affected by an injunction against construction of an infringing building. Destruction of an infringing building entails even greater potential losses. Large economic costs, such as land acquisition costs, accompany a construction project long before construction begins. Compliance with local zoning and construction regulations, and engineering and legal fees impose similar costs. An injunction will disturb the repayment schedule of construction loans and other forms of financing. Statutory or actual damages, or a return of profits, may be more appropriate forms of relief for infringements of architectural works.

If an injunction is not granted, courts still have broad authority to fashion appropriate relief under the Copyright Act. For example, if injunctive relief would impose an undue hardship on the infringer, a court may instead require payment of a reasonable license fee for use of the copyright.¹⁵⁴ Similarly, destruction of an infringing copy may be ordered, although it is difficult to imagine that a court *would* order destruction, given the tremendous economic waste.¹⁵⁵

A copyright holder must also determine against whom a claim for relief should be pursued. Copyright law accepts claims of contributory infringement and vicarious liability.¹⁵⁶ These doctrines serve to transfer liability to the ultimate beneficiaries of infringement. The doctrines of vicarious liability and contributory infringement are generally applicable to all copyright claims, and have found specific application in cases involving copyright in architectural plans.¹⁵⁷

Courts find vicarious liability “[w]hen the right and ability to supervise [the infringer] coalesce with an obvious and direct financial interest

154. 17 U.S.C. § 405(b).

155. NIMMER ON COPYRIGHT, *supra* note 50, § 14.08 (citing cases holding that destruction should be avoided to prevent “needless waste and best serve the ends of justice”).

156. The Copyright Act of 1976 does not expressly include provisions for third-party liability for infringement. *Sony Corp. of Am. v. Universal City Studios, Inc.*, 464 U.S. 417, 434-35 (1984). The Semiconductor Chip Protection Act of 1984 includes provisions for third-party liability. 17 U.S.C. § 905(3). However, these provisions are limited in application to semiconductors, and are not applicable to other copyright works. *See Aitken, Hazen, Hoffinan, Miller, P.C. v. Empire Constr. Co.*, 542 F. Supp. 252, 261-62 (D. Neb. 1982) (defendant development company held not liable for copyright infringement when contractor copied and used plaintiff's blueprints to construct building for defendant). Nonetheless, courts have long accepted that the doctrines of both vicarious liability and contributory infringement should be encompassed by American copyright laws. *Sony*, 464 U.S. at 435.

157. *Deintriades v. Kaufinan*, 690 F. Supp. 289, 292 (S.D.N.Y. 1988); *Aitken, Hazen*, 542 F. Supp. at 261-62; *Herinan Frankel Org. v. Tegman*, 367 F. Supp. 1051, 1054 (E.D. Mich. 1973).

in the exploitation of copyrighted materials.”¹⁵⁸ If an architect infringes a copyrighted design, the clients of that architect may be liable for a claim of vicarious liability. Whether an architectural client would be found liable would depend upon the level of control exerted by that client. Although not dealing with architectural works, some copyright infringement cases suggest that the level of control must be relatively high.¹⁵⁹ Lack of actual knowledge that the primary actor is engaging in infringing conduct will not protect the secondary actor from vicarious liability.¹⁶⁰ Developers, investors, and contractors may also be subject to claims of vicarious liability. However, a plaintiff would have a more difficult time demonstrating that these parties exerted the requisite level of control over the architect.

If a party does not have the relatively high level of “control” over the primary infringer needed to make a showing of vicarious liability, a contributory infringement claim may still be brought. In this way, a contractor or client who did not exercise a great deal of control over the architect may be found liable for an infringing design by the architect. Two types of contributory infringement exist: conduct that furthers the infringement, and contribution of the means to infringe.¹⁶¹ A party who, “with knowledge of the infringing activity, induces, causes or materially contributes to the infringing conduct of another, may be held liable as a

158. *Shapiro, Bernstein & Co. v. H.L. Green Co.*, 316 F.2d 304, 307 (2d Cir. 1963). This standard illustrates the close connection of vicarious liability with the tort doctrine of respondeat superior. See also H.R. REP. NO. 1476, 94th Cong., 2d Sess. 159 (1976) (noting that violators of the copyright owner's exclusive rights are infringers, including those who can be considered related or vicarious infringers), reprinted in 1976 U.S.C.C.A.N. 5659, 5775.

159. See *Sony*, 464 U.S. at 437 n.18 (defendant must have some degree of control or supervision over the individual directly responsible for the infringement); *Demetriades*, 690 F. Supp. at 292-93 (realtors who arranged sale of land not liable because their financial interest in the infringing conduct was insufficient to establish vicarious liability).

160. See *Italian Book Corp. v. Palms Sheepshead Country Club*, 186 U.S.P.Q. 326 (E.D.N.Y. 1975) (nightclub owner liable for copyright infringement by orchestra that had rented premises, despite owner's lack of knowledge); *Chappel & Co. v. Frankel*, 285 F. Supp. 798 (S.D.N.Y. 1968) (where record manufacturer and distributor reproduced music compositions without licenses, defendant's lack of knowledge was irrelevant to issue of whether he participated in the infringement); see also *Rexnord, Inc. v. Modern Handling Sys., Inc.*, 379 F. Supp. 1190, 1196 (D. Del. 1974) (defendant liable for infringement by printer even if defendant had instructed printer not to infringe when defendant supplied copyrighted materials to printer). Lack of knowledge of infringing conduct may, however, effect the availability of certain remedies. See NIMMER ON COPYRIGHT, *supra* note 50, § 13.08.

161. See *Cable/Hoime Communications Corp. v. Network Prods., Inc.*, 902 F.2d 829, 845-47 (11th Cir. 1990) (despite lack of any direct participation in infringement, promoter of pirate chip held liable as having contributed to infringement).

'contributory infringer.'"¹⁶² Knowledge of *and* participation in the infringing conduct are prerequisites to a finding of contributory infringement.¹⁶³ The contribution of the party to the infringement must be relatively high.¹⁶⁴ The doctrine of contributory infringement was not intended to allow a plaintiff to bring a claim against all those who participated in the design process. Within the context of architectural infringement, the United States District Court for the Southern District of New York refused to allow a claim of contributory infringement against a real estate broker who had purchased the land upon which an infringing building was built,¹⁶⁵ reasoning that the real estate broker did not have "*substantial* involvement" in the infringement.¹⁶⁶ The court stated that a "simple knowledge and benefit test would . . . ensnar[e] individuals far too remotely or tangentially involved"¹⁶⁷

IV. AUTHORSHIP AND COPYING: ESTABLISHING THE STATUTORY ELEMENTS OF A CLAIM FOR INFRINGEMENT UNDER THE ACT

A claim for copyright infringement has two elements: (1) proof of ownership of a valid copyright, and (2) proof of copying of constituent

162. *Gershwin Publishing Corp. v. Columbia Artists Management, Inc.*, 443 F.2d 1159, 1162 (2d Cir. 1971). Compare *MacMillan Co. v. I.V.O.W. Corp.*, 495 F. Supp. 1134 (D. Vt. 1980) (shopping center owner liable under theory of contributory infringement after arranging for contractor to prepare drawings, then knowingly allowing the contractor's working drawings to be used in final plans prepared by others) with *Hernan Frankel Org. v. Tegman*, 367 F. Supp. 1051, 1054 (E.D. Mich. 1973) (dismissing clients of architect as parties to copyright suit because they played no role in copying of plans in question) and *Aitken, Hazen, Hoffman, Miller, P.C. v. Empire Constr. Co.*, 542 F. Supp. 252, 261-62 (D. Neb. 1982) (finding engineer and lumber company that participated in infringing construction not liable absent knowledge on their part of copyright infringement) and *Schuchart & Assocs. v. Solo Serve Corp.*, 220 U.S.P.Q. 170 (W.D. Tex. 1983) (finding no contributory infringement by defendant corporation because it had no knowledge of infringement until after copying took place).

There are limits to the reach of contributory infringement. The party must have been "in a position to control the use of copyrighted works by others and had authorized the use without permission from the copyright owner." *Sony*, 464 U.S. at 437. But see *id.* at 488 n.39 (Blackmun, J., dissenting) (finding that actual "control" need not be shown).

163. *Demetriades v. Kaufman*, 690 F. Supp. 289, 293 (S.D.N.Y. 1988).

164. See *id.* at 293-94 (even if knowledge is found, slight involvement of realtors in infringing conduct is not enough to establish contributory infringement). The *Demetriades* court indicated that had the defendants made available the drafting facilities or other copying equipment by which the plans or building were copied, they might have been treated less sympathetically. *Id.*

165. *Id.* at 289.

166. *Id.* at 294.

167. *Id.* The *Demetriades* court cautioned that contributory infringement could be found if the real estate agent had some degree of control or contacts with the primary infringer for the purpose of providing direct assistance in the copying process.

elements of the work that are original.¹⁶⁸ Ownership of a valid copyright originates in authorship, although the author may assign or transfer ownership to another party. The differing roles of architect, client, architectural firm, engineers, and others in any architectural design raise questions of authorship of the original elements in that design. Proving the element of copying also presents interpretive questions when applied to architectural works. In general, evidence of actual copying is difficult to find. Given these difficulties, courts look to whether the defendant had access to the copyrighted work, and whether the allegedly infringing work bears a "substantial similarity" to the copyrighted work. If both access and substantial similarity are found, copying will be inferred.

A. *Substantial Similarity, the Standard for Infringement, and the Rule of Trademark Law*

Substantial similarity has proven to be one of the most problematic issues in copyright litigation. In the oft-cited words of Judge Learned Hand, "[t]he test for infringement of a copyright is of necessity vague."¹⁶⁹ Melville Nimmer notes that "the determination of the extent of similarity which will constitute a *substantial* and hence infringing similarity presents one of the most difficult questions in copyright law, and one which is the least susceptible of helpful generalizations."¹⁷⁰ For all copyrightable works, some degree of similarity must be tolerated. Creativity and progress would be impossible without limited forms of copying. The purposes of the copyright laws would be frustrated if designers and authors could not adapt, modify, or otherwise improve existing forms. The difficulty arises in determining when similarity between works is minor and permissible, and when similarity is "substantial" and actionable.¹⁷¹

The architectural design process presents special problems in defining the line between permissible and actionable similarity. As discussed earlier, architectural design is the arrangement of individual pieces of the architectural vocabulary into a coherent whole.¹⁷² More than other forms of artistic expression, architecture relies on copying of existing

168. *Feist Publications, Inc. v. Rural Tel. Serv. Co.*, 111 S. Ct. 1282, 1296 (1991). See generally NIMMER ON COPYRIGHT, *supra* note 50, § 13.01-.03 (outlining the types of evidence necessary to prove "ownership" and "copying").

169. *Peter Pan Fabrics, Inc. v. Martin Weiner Corp.*, 274 F.2d 487, 489 (2d Cir. 1960).

170. NIMMER ON COPYRIGHT, *supra* note 50, § 13.03[A], at 13-23.

171. Easy cases exist, and would be similar to *Arthur Rutenberg Corp. v. Dawney*, 647 F. Supp. 1214 (M.D. Fla. 1986) (finding an infringement where defendants pressured architect to modify architectural plans until they were "substantially similar" to copyrighted plans).

172. See *supra* text accompanying notes 32-34.

forms. Architects have long copied individual elements, patterns of arrangement, and spatial forms from other works, in a process known as "quoting." Although in rare cases architects create completely new forms, more commonly, architects express their originality through the arrangement of preexisting forms.¹⁷³

1. *Comprehensive Nonliteral Similarity.* Given the reliance of architecture on copying existing forms, courts will struggle in determining when a similarity is considered "substantial" under the AWCPA. Cases that arose outside of the context of architectural works may provide a useful framework for analysis. Nimmer's authoritative treatise on copyright law distinguishes two types of substantial similarity: "comprehensive nonliteral similarity"¹⁷⁴ and "fragmented literal similarity."¹⁷⁵ The framework provided by this conceptual division should be applied to architectural works. Comprehensive nonliteral similarity exists when "the fundamental essence or structure of one work is duplicated in another."¹⁷⁶ Literal or verbatim copying need not be found for a finding of comprehensive nonliteral similarity. Similarly, section 703 of the AWCPA explicitly protects the overall shape of a building. The legislative history of the AWCPA states that "the aesthetically pleasing overall shape of an architectural work could be protected under this bill."¹⁷⁷ This would apply to the general arrangement of elements into an architectural work.

Most of the copyright infringement cases related to architectural plans involve straightforward situations in which the entire design, in all its details, was copied. When not all of the details are copied, the question of substantial similarity becomes more difficult. A showing of comprehensive nonliteral similarity would be difficult to demonstrate. For example, the Chrysler Building and the Empire State Building (see Figure 3) stand ten blocks apart from each other in New York City. Both are tall buildings sheathed in light-colored stone, with many setbacks; both incorporate Art Deco decorative styles on their interiors and exteriors; both buildings have indented windows emphasizing the verticality of the structures, and metal spires reaching to the sky. If these two structures were built today, could William Van Alen, architect of the Chrysler

173. See *supra* notes 33-34 and accompanying text.

174. NIMMER ON COPYRIGHT, *supra* note 50, § 13.03[A][1].

175. *Id.* § 13.03[A][2]. Nimmer's terminology has been picked up by several courts. See *Walker v. Time Life Films, Inc.*, 784 F.2d 44 (2d Cir.), *cert. denied*, 476 U.S. 1159 (1986); *Universal Athletic Sales Co. v. Salkeld*, 511 F.2d 904 (3d Cir.), *cert. denied*, 423 U.S. 863 (1975); *S & H Computer Sys., Inc. v. SAS Inst., Inc.*, 568 F. Supp. 416 (M.D. Tenn. 1983).

176. NIMMER ON COPYRIGHT, *supra* note 50, § 13.03[A][1].

177. H.R. REP. NO. 735, *supra* note 70, at 21, *reprinted in* 1990 U.S.C.C.A.N. at 6952.

Building, claim that the combination of elements of the Empire State Building constitute comprehensive nonliteral similarity to his building?

In answering this question, one must look to the degree to which the architect's creativity is expressed in the combination of elements. Courts must isolate the elements, or combination of elements, that are most expressive of the architect's creativity. For example, the fact that both the Chrysler and Empire State Buildings use a setback design is not greatly expressive of their architects' creativity, as a setback design was required of tall buildings under New York's zoning laws during the 1920s and 1930s, and was at the time also the most effective way to solve the construction problems faced by tall buildings. In addition, the metal spires were also used for reasons of functionality (i.e., to allow for use as radio towers). A court assessing comprehensive nonliteral similarity should first separate out the design elements that are functionally *required*, and evaluate substantial similarity on the basis of the original design elements that are expressive of the architect's creativity.¹⁷⁸

The exact proportions chosen by the respective architects would be the element most expressive of the architect's creativity, and should therefore be the focus of an analysis based on comprehensive nonliteral similarity. From a policy perspective, this helps to encourage architectural creativity. Architects must be allowed to tinker with existing copyrighted designs, making small but significant changes in order to improve these designs and adapt them to new contexts.¹⁷⁹

Certainly, at some point, similarity of the overall design of a building rises to the level of infringement. However, trademark law may provide a more appropriate forum, with a lower threshold for a showing of infringement. At some point when not all of the elements of an architectural work are copied, an architect's original artistic expression will not lie in a single, specific design. Rather, a certain combination of elements will be the "signature" of that architect. By varying this combination of elements to individual circumstances, an architect may be able to create a

178. See discussion of the *East/West* case, *supra* note 99, in which the court found that infringement cannot be found for elements of an architectural design dictated by the configuration of the property.

179. See *Wickham v. Knoxville Int'l Energy Exposition, Inc.*, 555 F. Supp. 154 (E.D. Tenn. 1983), *aff'd*, 739 F.2d 1094 (6th Cir. 1984). In this case, two architects designed world's fair centerpieces featuring spheres atop nonfunctional towers. The court found that there was no substantial similarity, in light of the differences in proportions and shapes of the spheres. "Plaintiff seems to be asserting that he has the exclusive right to design and erect a tower with a spherical building on top of it. The use of towers in architectural design is certainly not unique. . . . Likewise the incorporation of a spherical structure into the design is no more than an 'idea.'" *Id.* at 156. The architectural drawings in Figure 4 show the similarities between the two designs for the "Sunsphere" that were nonetheless insufficient to rise to the level of substantial similarity.

valuable ongoing franchise.¹⁸⁰ Protectible artistic expression may lie in the basic combination of elements.¹⁸¹

When an architect creates a "signature" style, copyright law must be careful not to prevent other architects from improving on his designs. When an architect makes significant alterations or modifications to an existing, copyrightable style, that new design should not be considered to infringe the earlier design.

2. *Trademark Protection of Architectural Works.* A "signature" style of an architect is more properly protected under trademark law. Trademark law, not copyright law, is the appropriate forum for designs that tend to confuse the relevant marketplace. Reproduction of the most distinctive aspects of an architect's style may confuse the *architectural* marketplace. Confusion of a limited group can constitute the confusion required under the Lanham Act.¹⁸² Confusion does not require that the identity of the trademark holder be known. Courts should realize that architecture is itself a service business, and that in some limited situations, a building design may take on secondary meaning and become a means of identification of origin susceptible to confusion and deception. Trademark law is qualitatively different from patent and copyright.¹⁸³

Property in the use of a trade-mark . . . bears very little analogy to that which exists in copyrights or in patents for new inventions or discoveries, as they are not required to be new, and may not involve the least invention or skill in their discovery or application. Phrases, or even words in common use, may be adopted for the purpose, if, at the time of their adoption, they were not employed by another to designate the same or similar articles of production or sale.¹⁸⁴

180. "Often repetition of [an architect's] basic designs is the means whereby he collects the bulk of his fees." John F. Gisl, Comment, *Copyright Protection for Architectural Structures*, 2 U.S.F. L. REV. 320, 327 (1967-68).

181. One commentator has cited Frank Lloyd Wright's Prairie Houses as an example of such repetition. The Prairie Houses are residential structures, designed with the environmental considerations of the Midwest in mind, that had the common design elements of low overhanging roofs, broad rows of casement windows, large open fireplaces made of stone, open floor plans, and natural materials such as locally available wood and stone. Brainard, *supra* note 32, at 95 n.110. The combination of these elements created a distinctive and very popular style, which Wright reproduced many times, deriving a lucrative income therefrom. Many architects imitated this basic style.

182. See *Joseph J. Legat Architects v. United States Dev. Corp.*, 625 F. Supp. 293, 299-300 (N.D. Ill. 1985) (likelihood of confusion may be shown if subcontractors and future readers of the Department of Housing and Urban Development and County Planning Board records could be confused).

183. Federal trademark law, unlike patent and copyright law, is not constitutionally grounded in the encouragement of the "useful arts." The Lanham Act is instead founded on the federal power to regulate interstate commerce, serving the policy purpose of avoiding confusion or deception in the marketplace and protecting identifying symbols. *Anti-Monopoly, Inc. v. General Mills Fun Group*, 611 F.2d 296, 300-01 (9th Cir. 1979).

184. *McLean v. Fleming*, 96 U.S. 245, 254 (1877).

The general federal unfair competition provision, section 43(a) of the Lanham Act, proves the most useful provision for a finding of trademark infringement of architectural works.¹⁸⁵ The protectible "trade dress" of an object can include such diverse product features such as its design, size, shape, color, packaging, labels, graphics, or service business features such as the retail decor of an establishment, its architectural features, its layout and floor plan, and even the uniforms of the employees.¹⁸⁶ Eligibility for trade dress protection is established by showing that the trade dress is nonfunctional and inherently distinctive.¹⁸⁷ Infringement is shown by a use that would create the likelihood of confusion.

Functionality is the most significant hurdle for trademark protection of architectural works. Trade dress features are not eligible for trademark registration if they are primarily functional or utilitarian in nature.¹⁸⁸ The easiest cases involve external, largely nonfunctional

185. Section 43(a) provides:

- (a) Any person who, on or in connection with any goods or services, or any container for goods, uses in commerce any word, term, name, symbol, or device, or any combination thereof, or any false designation of origin, false or misleading description of fact, or false or misleading representations of fact, which—
 - (1) is likely to cause confusion, or to cause mistake, or to deceive as to the affiliation, connection, or association of such person with another person, or as to the origin, sponsorship, or approval of his or her goods, services, or commercial activities by another person, or
 - (2) in commercial advertising or promotion, misrepresents the nature, characteristics, qualities, or geographic origin of his or her or another person's goods, services, or commercial activities,
 shall be liable in a civil action by any person who believes that he or she is or is likely to be damaged by such act.

Lanham Act § 43(a), 15 U.S.C. § 1125(a) (1988).

The fact that an object is three-dimensional poses no bar to fitting something within the scope of the Lanham Act. See, e.g., JEROME GILSON, TRADEMARK PROTECTION AND PRACTICE § 1.02[1] (1991) (giving example of the Pepperidge Farm Goldfish Cracker, SN # 73-705,855, as an illustration of a registrable three-dimensional trademark). Three-dimensional objects can be "goods," "symbols," "devices," or "combinations thereof" for the purposes of the Act.

186. See *Two Pesos, Inc. v. Taco Cabana, Inc.*, 112 S. Ct. 2753, 2755 (1992) (distinctive Mexican motif of restaurant protectible as trade dress); GILSON, *supra* note 185, § 7.02[7][c] & n.116.

187. *Two Pesos*, 112 S. Ct. at 2757-58.

188. *In re Honeywell, Inc.*, 532 F.2d 180 (C.C.P.A. 1976) (thermostat cover functional and therefore not registrable for trademark); see also *Keene Corp. v. Paraflex Indus., Inc.*, 653 F.2d 822, 824 (3d Cir. 1981) (outdoor luminaire design functional and therefore not protected by trademark). Patent law, and not trademark, is the vehicle for protecting functional designs. Allowing functional objects to receive trademark protection would be inconsistent with the purpose of trademark law: to promote fair competition. This purpose would be frustrated by granting trademark protection to subject matter such as functional designs, whose presence in the marketplace would encourage competition. Competition is assisted, not harmed, by free access to functional aspects of a design that might be needed by others to improve their products. See *Stormy Cline Ltd. v. ProGroup, Inc.*, 809 F.2d 971, 977-78 (2d Cir. 1987) (patent law, and not trademark, is proper forum for protection of functional design); *Paraflex*, 653 F.2d at 824 (trademark should not be used to grant a limited monopoly in features that would fail to qualify for patent protection); *Freddie Fuddruckers, Inc. v. Ridgeline, Inc.*, 589 F. Supp. 72, 77 (N.D. Tex. 1984) (public interest in increasing competition

decorative elements on architectural structures.¹⁸⁹ More difficult cases involve claims of trademark infringement of the entire constructed design of a structure. Some authorities have viewed the inherent functionality of all works of architecture as a significant barrier to trademark protection of buildings and other completed architectural works.¹⁹⁰ This represents far too broad a conception of functionality.¹⁹¹ A design should be

provides policy justification for functionality requirement), *aff'd mem.*, 783 F.2d 1062 (5th Cir. 1986).

189. External architectural features that have been found copyrightable include: the coloring of a fence used by a company that rents fences, *In re Eagle Fence Rentals, Inc.*, 231 U.S.P.Q. 228 (T.T.A.B. 1986); a jagged line design on the exterior of an automobile tune-up business, *Precision Tune, Inc. v. Tune-A-Car, Inc.*, 611 F. Supp. 360 (W.D. La. 1984); the use of a broad red band across a store front, *United Cigar Stores Co. of Am. v. United Confectioners*, 113 A. 226 (N.J. Ct. Err. & App. 1921) (infringer was on same store block as trademark claimant). Interior architectural features are similarly subject to trademark. However, the cases involving interior architectural design elements have proven more difficult for trademark claimants to win, as courts have been reluctant to deprive competitors of necessary design elements and themes. Courts have indicated that the use of specific design elements may be enjoined, but that the use of general design themes may not be enjoined. *See Warehouse Restaurant, Inc. v. Customs House Restaurant, Inc.*, 217 U.S.P.Q. 411 (N.D. Cal. 1982) (permanently enjoining use of "particular item of interior decor" of dining booths encased in packing crates, but permitting general elements of Polynesian theme in restaurant); *Associated Hosts of Cal. v. Moss*, 207 U.S.P.Q. 973 (W.D.N.C. 1979) (temporarily enjoining the operation, construction, and franchising of defendant's restaurants that were substantially identical copies of the entire theme of plaintiff's restaurant), *appeal dismissed*, 726 F.2d 480 (9th Cir. 1984). *But see T.G.I. Friday's, Inc. v. International Restaurant Group, Inc.*, 405 F. Supp. 698, 705 (M.D. La. 1975), *aff'd*, 569 F.2d 895 (5th Cir. 1978) (refusing to enjoin use of turn-of-the-century decor in restaurants, including use of Tiffany lamps, stained glass, tin pictures, and other features, even though court found that "Saturday's 'trade dress' mirrors that of Friday's"). *See generally Altman, supra* note 24, at 650-54 (listing relevant cases).

190. The Trademark Office, for example, takes a very limited view, stating in the Manual of Examining Procedure of the United States Patent and Trademark Office that "the configuration of an actual three-dimensional building, in and of itself, is not registerable [for trademark protection], since as a building it would be no more than functional, as housing." *MANUAL OF EXAMINING PROCEDURE OF THE UNITED STATES PATENT AND TRADEMARK OFFICE* § 1301.08 (1983). However, caselaw does not support the view of the Trademark Office. *See Altman, supra* note 24, at 652-54.

191. When an architectural design is dictated by structural, engineering, or other practical necessities, that design should be found functional and unprotectible for trademark purposes. *See Fotomat Corp. v. Photo Drive-Thru, Inc.*, 425 F. Supp. 693, 704-08 (D.N.J. 1977) (holding that Fotomat booths were not infringed as competitor's booths were similar only in functional aspects, and different in nonfunctional aspects). When a design is not dictated by these practical necessities, or when a design represents the choice of one of many equally functional options available to solve the same design problem, then that design should be considered nonfunctional and therefore protectible.

In many cases, an architectural design is not functionally dictated. *See White Tower Sys., Inc. v. White Castle Sys. Corp.*, 90 F.2d 67 (6th Cir.) (upholding finding of trademark infringement after finding that use of castle design was not functionally required for hamburger restaurant), *cert. denied*, 302 U.S. 720 (1937). An architect and client will often have a wide variety of possible solutions to the same design problem, all of equal utility. In such cases, when the architect chooses a particular design from a wide variety of equally useful alternatives, functionality does not act as a bar to competition, and should not bar trademarkability. *See Taco Cabana Int'l, Inc. v. Two Pesos, Inc.*, 932 F.2d 1113, 1119 (5th Cir. 1991) ("The wide range of . . . design options allows a producer

considered *de jure* functional if it is "the best or one of a few superior designs available."¹⁹² When an architect's design is the most functional solution to a particular design problem, then patent law, not trademark, is the appropriate forum for protection. Courts must analyze the functionality of architectural works consistent with the core policy consideration underlying the functionality exception: whether permitting trademark protection of a design with secondary meaning will deprive competitors of a design necessary for them to compete. Competitors should be allowed to use individual design elements that do not, in themselves, contain secondary meaning.¹⁹³ Protection should be afforded to "a combination of visual elements 'that, taken together, . . . may create a distinctive visual impression,'" even if some of these elements are functional.¹⁹⁴

Once a test for functionality is established for architectural works, the next question is how to determine which works have a "distinctive character" and "secondary meaning." These elements are easiest to establish in the case of franchises of commercial enterprises.¹⁹⁵ However, application of this test to buildings would be strictly limited by the statutory requirements of non-obviousness, novelty, and secondary meaning. Only a very small number of designs could fulfill these standards.

3. *Fragmented Literal Similarity.* Fragmented literal similarity also presents problems when applied to architectural works. The difficulty here is that the architectural design process has long accepted the "quoting" of individual design elements. The fact that the AWCPA excludes "individual standard features" from protection is one indication that claims of fragmented literal similarity with respect to architectural works should not be heard. Architects must be allowed to copy individual elements. However, the copying of *groups* of elements may rise to the level of substantial similarity. When several elements are combined into

to appropriate a distinctive identity without unduly hindering his competitors' ability to compete.' Taco Cabana's *particular integration of elements* leaves a multitude of alternatives to the upscale Mexican fast food industry that would not prove confusingly similar to Taco Cabana's trade dress.") (quoting *Sicilia Di R. Biebow & Co. v. Cox*, 732 F.2d 417, 426 n.7 (5th Cir. 1984) (emphasis added), *aff'd on other grounds*, 112 S. Ct. 2735 (1992)).

192. *Taco Cabana*, 932 F.2d at 1119 n.6; *In re Morton-Norwich Prods., Inc.*, 671 F.2d 1332, 1341 (C.C.P.A. 1982).

193. See *Chevron Chem. Co. v. Voluntary Purchasing Groups, Inc.*, 659 F.2d 695, 703 (5th Cir. 1981), *cert. denied*, 457 U.S. 1126 (1982).

194. *Fuddrucker, Inc. v. Doc's B.R. Others, Inc.*, 826 F.2d 837, 842-43 (9th Cir. 1987) (quoting *Chevron Chemical*, 659 F.2d at 703).

195. See, e.g., *White Tower Sys.*, 90 F.2d at 67 (plaintiff's white castle-shaped building was peculiar to its business and protected by trademark); *Fotomat Corp. v. Cochran*, 437 F. Supp. 1231 (D. Kan. 1977) (shape of roof of plaintiff's photo developing services drive-in was distinctive and arbitrary, therefore meriting trademark protection).

a portion of a building, this combination may rise to the level of an expression of the architect's creativity. As with comprehensive nonliteral similarity, no hard and fast rules can be stated for the determination of when fragmented literal similarity rises to the level of infringement. The qualitative value of the quoted elements to the overall work is one important factor. If the quantity of the quoted material is relatively small, but is qualitatively important to the overall work, substantial similarity may be found.¹⁹⁶

The challenge for courts is to craft a standard for fragmented literal similarity that will protect the original and creative expression of architects without removing design elements from the palette available to other architects. In addressing themselves to this challenge, courts must keep in mind the practical needs of the architectural profession in incremental innovation and in the quoting of existing works. Courts should also keep in mind that design patent and trademark are alternative forms of protection. Design patent or trademark law will often be a more appropriate means to protect the elements that would be protected by fragmented literal similarity. For example, the broken pediment crowning the AT&T Building in New York is only one isolated element of that building. Allowing copyright of this element would preclude use of this feature in *all* buildings, potentially preventing new, creative uses of this form. The impact of copyright protection would be very great, because the long term of copyright protection and the absolute prohibition of copyright on all uses of the copyrighted work are significant constraints.¹⁹⁷ A better, less restrictive forum for the protection of such works would be trademark protection. AT&T could seek trademark protection of the pediment against other buildings that cause confusion or disparagement of AT&T's unique corporate icon, without invoking the broader protection of copyright.¹⁹⁸ Design patent law would also be available, although the statutory requirement of non-obviousness might make patent impossible to achieve.¹⁹⁹

196. *Roy Export Co. v. Columbia Broadcasting Sys., Inc.*, 503 F. Supp. 1137 (S.D.N.Y. 1980) (copying one minute and fifteen seconds from motion picture sufficient to establish substantial similarity), *aff'd*, 672 F.2d 1095 (2d Cir.), *cert. denied*, 459 U.S. 826 (1982); *Meredith Corp. v. Harper & Row, Publishers, Inc.*, 378 F. Supp. 686, 690 n.12 (S.D.N.Y.) ("[E]ven a small usage may be unfair if it is of critical importance to the work as a whole . . ."), *aff'd*, 500 F.2d 1221 (2d Cir. 1974); *Henry Holt & Co. v. Liggett & Myers Tobacco Co.*, 23 F. Supp. 302 (E.D. Pa. 1938) (copying three sentences in advertisement sufficient to establish "substantial" similarity).

197. *See Herman Frankel Org. v. Tegman*, 367 F. Supp. 1051, 1054 (E.D. Mich. 1973) ("This result protects against copying of copyrighted material, yet does not change the copyright act into a patent act and give the person holding the copyright a monopoly on the ideas there expressed.").

198. Trademark protection is limited to preventing the use of a trademarked item in the same market. Copyright does not include any such limitation.

199. *See supra* notes 100-09 and accompanying text.

B. *Authorship*

Authorship is the other element of a claim of copyright infringement. The architect, client, architectural firm, and engineers involved in an architectural project all play different roles in the design and construction process. The level of participation of each party varies for each project: their very roles vary with each project. Because each party contributes to the design, questions of authorship arise.

One does not have to be a licensed architect to be a copyright "author."²⁰⁰ Many parties contribute to the production of an architectural design.²⁰¹ In this respect, the creative process for architecture is closer to that of filmmaking or the theater than to novel writing, painting, sculpture, or songwriting.²⁰² The client, the financial backer, the engineer, the contractor, and the ultimate inhabitants of a project all have a voice in the design process. Although all of these parties may make some claim to have played some part in the design, only in unusual design relationships will anyone other than the architect be the one to coordinate the ideas of these parties and give them spatial expression.²⁰³

Prior to the AWCPA, courts addressed many of the most important questions relating to the authorship of architectural works. In fact, architectural works have been the focus of some of the most frequently cited cases regarding works for hire and joint authorship. However, these cases arose in the context of copyright in architectural *plans*. Analysis of issues of authorship in completed architectural works present somewhat different factual characteristics. Completion of architectural works, as distinct from architectural plans, requires the involvement of a greater number of parties. Those parties who become involved, including engineers and contractors, may in effect take over the project, and may merely consult with the architect when ambiguities arise. However, an analysis of the relevant legal standards indicates that the end result will be the same as it was before the extension of copyright to completed works—that only in unusual architect-client-contractor relationships will authorship be found in parties other than the architect.²⁰⁴

200. The constitutional and statutory conception of an "author" requires no special training, level of skill, or professional or public recognition. See *Goldstein v. California*, 412 U.S. 546, 561 (1973) ("author" to be broadly construed to effectuate constitutional purpose of copyright laws).

201. CUFF, *supra* note 40, at 13 ("The fundamental point is a simple one: the design of our built environment emerges from collective action.").

202. *Id.* at 56.

203. *Id.* at 61.

204. However, this analysis must always be done on a case-by-case basis. The relationship between client, architect, and architectural firm in individual cases continues to define the ownership of the copyright.

1. *Works for Hire.* The Copyright Act recognizes that all works “prepared by an employee within the scope of his or her employment” are considered to be “works made for hire.”²⁰⁵ Classification as a work for hire carries important substantive consequences. If a work is considered a work for hire, “the employer or other person for whom the work was prepared is considered the author for [copyright] purposes, and, unless the parties have expressly agreed otherwise in a written instrument signed by them, owns all of the rights comprised in the copyright.”²⁰⁶ Works for hire questions arise when architectural firms or clients claim ownership of the copyright in the work of an employed architect. Works for hire disputes thus bear upon a plaintiff’s ability to demonstrate ownership of a valid copyright and a defendant’s ability to assert a defense that a plaintiff architect lacked copyright ownership.²⁰⁷ Classification of an architectural work as a work for hire also affects the duration of the copyright.²⁰⁸ Determining the proper author is important if the architect and the employer are from different nations, as the copyrightability of an architectural work is determined by the nationality or domicile of its author if the work is not published in the United States.²⁰⁹ A work for hire created with the United States Government as the employer is not eligible for copyright protection.²¹⁰

Usually, an architect works alone, or as a member of a partnership or architectural firm. An individual architect may have a formal long-term employment agreement with a firm, or a more informal short-term relationship. The architect may work on the entire structure, or on discrete parts of the project. The individual architect, or his firm, is hired by the client. The client and architect may have an ongoing relationship, which may even be exclusive. In some cases, architectural departments may be divisions of larger non-architectural companies, working exclusively for one client. In all of these relationships, the client may or may

205. 17 U.S.C. § 101 (1988). The Copyright Act recognizes a second category of works, those “specially ordered or commissioned for use as a contribution to a collective work,” to be works for hire. *Id.* However, these collective works are limited to clearly defined subject matter categories, of which architecture is not a part.

206. *Id.* § 201(b).

207. See *M.G.B. Homes, Inc. v. Ameron Homes, Inc.*, 903 F.2d 1486, 1490 (11th Cir. 1990) (works for hire doctrine may arise as a defensive tactic); *Easter Seal Soc’y v. Playboy Enters.*, 815 F.2d 323, 333 (5th Cir. 1987), *cert. denied*, 485 U.S. 981 (1988).

208. The normal copyright term is for the life of the author plus fifty years. 17 U.S.C. § 302(a). The term for works for hire is seventy-five years from the first publication of the work, or one hundred years from the date of creation, whichever expires first. *Id.* §§ 302(c), 303.

209. *Id.* § 104(b)(1), (b)(5).

210. *Id.* § 105.

not be the ultimate owner of the finished work. One study of the architectural profession concluded that "[a]rchitects, more than other professionals, remain tied to their patrons."²¹¹

A reexamination of these cases in light of the 1989 Supreme Court redefinition of the works for hire standard in *Community for Creative Non-Violence v. Reid*²¹² indicates that courts will refuse to find the normal architect-client relationship to be one subject to the works for hire doctrine. Disputes in works for hire cases generally arise in determining whether an architect was an employee or whether the architect was an independent contractor. The Court stated in *CCNV v. Reid* that "[i]n determining whether a hired party is an employee under the general common law of agency, we consider the hiring party's right to control the manner and means by which the product is accomplished."²¹³ An important element to note in this standard is that it looks to the right to control the *manner* and *means* of production, and not to the right to control the product itself.²¹⁴ The *CCNV v. Reid* Court did not find it determinative that CCNV directed much of Reid's work.²¹⁵ Rather, the Court looked to many factors indicative of lack of control over means and methods of production, such as the artist's supplying his own tools and workplace, the fact that the employer hired the artist for a fixed period of time with no right to assign additional projects, payment upon completion of a specific job, retention by the artist of discretion in determining his work schedule and compensation of assistants, and payment of payroll taxes or employment benefits usually associated with an employer-employee relationship.²¹⁶

As applied to the architectural profession, this standard indicates that architects hired by clients for individual projects will not be considered to have produced works for hire.²¹⁷ Only unusual architect-client relationships will provide the client with control over the manner and

211. CUFF, *supra* note 40, at 33.

212. 490 U.S. 730 (1989).

213. *Id.* at 751.

214. NIMMER ON COPYRIGHT, *supra* note 50, § 5.03[B], at 5-21.

215. 490 U.S. at 752.

216. *Id.* at 752-53.

217. See *Joseph J. Legat Architects v. United States Dev. Corp.*, 625 F. Supp. 293, 297-99 (N.D. Ill. 1985) (despite defendant's contractual authority to approve or veto the plans, the inability to supervise and control the architect's work placed case outside the work for hire doctrine); *Meltzer v. Zoller*, 520 F. Supp. 847, 857 (D.N.J. 1981) (homeowner not "author" under work for hire doctrine, even though he prepared sketches for, and otherwise gave ideas to, architect). But see *Robert R. Jones Assocs. v. Nino Homes*, 686 F. Supp. 160 (E.D. Mich. 1987) (involving copyright holder who generated ideas and concepts, then hired an architect to execute plans and drawing; court noted that the builder who provided the ideas was the copyright holder, but did not indicate in its opinion whether his status as author was the product of law or by assignment of rights by contract), *aff'd on other grounds*, 858 F.2d 274 (6th Cir. 1988).

means, therefore subjecting the work produced to the works for hire doctrine.²¹⁸ The custom of the architectural profession is for the architect, and not the client, to retain ownership in the drawings and plans prepared.²¹⁹ Works produced by architects employed by architectural firms will, however, be considered works for hire. The usual architect-architectural firm relationship contains elements of control of the means and manner of production. A closer question may be presented by architectural firms, or independent architects, who work primarily or exclusively with one client. Standards will emerge as the *CCNV v. Reid* criteria are applied on a case-by-case basis. Of course, employment agreements between architects and their firms, and between architects and their clients, may alter the ownership of copyrights.

The AWCPA's recognition of completed architectural works as copyrightable subject matter will allow contractors who hire architects to be considered authors of the completed architectural work under the works for hire doctrine. Contractors will have the control over the manner and means of production of the completed work, as required in the *CCNV v. Reid* test. However, contractors will still be unable to claim copyright in the architectural plans prepared by the architect, because the contractor will not generally have the requisite level of control over preparation of the plans. When a contractor hires an architect, these parties may determine that having one party own the copyright in the completed work and the other party own the copyright in the plans is a confusing or otherwise troublesome situation. An assignment of rights by one party is the best way to avoid this problem.

A separate problem is posed by later revisions to completed buildings: Should these revisions be considered architectural works of their own, and therefore worthy of their own copyrights, or should these revisions be considered "supplementary works" "revising . . . or assisting in the use of the other work . . ."?²²⁰ In this respect, architecture poses special problems to copyright law in that it is the one subject matter category of copyright most likely to be revised at a later date.

218. See *Aitken, Hazen, Hoffman, Miller, P.C. v. Empire Constr. Co.*, 542 F. Supp. 252, 258 (D. Neb. 1982) (builder did not have right to control and direct detail and means of work of the architect; therefore he could not satisfy requirements of works for hire doctrine).

219. AIA Document B141, the standard form contract for architects, which is jointly sponsored by the AIA, general contractors, and realtors, provides for ownership by the architect. AIA Standard Form Contract, *supra* note 41, art. 6. The Southern District of New York has recognized this to be the standard of the profession. See *Kunycia v. Melville Realty Co.*, 755 F. Supp. 566, 572 (S.D.N.Y. 1990). But see *Intown Enters. v. Barnes*, 721 F. Supp. 1263, 1264 (N.D. Ga. 1989) (architect found to fall within work for hire doctrine when working for client). One should also note that the custom of the industrial design profession, whose members sometimes function as architects, is to transfer ownership and rights in plans to the client. *Kunycia*, 755 F. Supp. at 568 n.1.

220. 17 U.S.C. § 101 (1988).

The most famous recent example of a revision is the Whitney Museum of American Art in New York City. Hoping to expand its available floor space, the Whitney asked Michael Graves to create an additional wing to Michel Breuer's original museum. Given the limited space at Whitney's Manhattan site, Graves proposed a design that was physically attached to both the side and the top of the original building. Critics and others felt that Graves's design significantly altered Breuer's historical building, and turned to the New York Landmark Law for protection. The copyright question raised in this dispute was who could claim authorship in the new addition. A strict application of the doctrine of supplementary works indicates that Breuer, and not Graves, should be considered the author of the new addition.²²¹ Authority borrowed from other subject matter provisions of the Copyright Act also indicates that these works should be considered supplementary works.²²²

2. *Joint Authorship.* The Copyright Act recognizes the concept of the "joint work," that is, a work "prepared by two or more authors with the intention that their contributions be merged into inseparable or interdependent parts of a unitary whole."²²³ Authorship in the *entirety* of the joint work is held equally and indivisibly by each contributor.²²⁴ Joint authors must intend, during preparation of the work, that their work be a joint effort.²²⁵ The "intention that their contribution be merged" need not be in writing,²²⁶ and the contribution of each author does not have to be qualitatively or quantitatively equivalent, or prepared in similar ways or with any day-to-day contact with the other authors.²²⁷ Some clients have attempted to be considered joint authors of the building they have commissioned. However, the cases establish that normal

221. A supplementary work is:

a work prepared for publication as a secondary adjunct to a work by another author for the purpose of introducing, concluding, illustrating, explaining, revising, commenting upon, or assisting in the use of the other work, such as forewords, afterwords, pictorial illustrations, maps, charts, tables, editorial notes, musical arrangements, answer material for tests, bibliographies, appendixes, and indexes.

Id. There are six other categories of specially commissioned works that could be categorized as works for hire, but which have no relevance to architectural works. *See id.*

222. *Id.*

223. *Id.*

224. *Id.*; *see* *Meltzer v. Zoller*, 520 F. Supp. 847, 857 (D.N.J. 1981).

225. *Edward B. Marks Music Corp. v. Jerry Vogel Music Co.*, 140 F.2d 266, 267 (2d Cir. 1944); *see also* *Ashton-Tate Corp. v. Ross*, 916 F.2d 516, 522 (9th Cir. 1990) (joint authorship of a prior work not itself sufficient to make developer joint author of derivative work); NIMMER ON COPYRIGHT, *supra* note 50, § 6.03 ("The essence of joint authorship is a joint laboring in furtherance of a preconceived design.").

226. NIMMER ON COPYRIGHT, *supra* note 50, § 6.03.

227. *Edward B. Marks Music Corp. v. Jerry Vogel Music Co.*, 42 F. Supp. 859, 863-64 (S.D.N.Y. 1942), *aff'd*, 140 F.2d 266 (2d Cir. 1944).

client participation does not transform a client into an author of an architectural work.²²⁸ The AWCPA does nothing to change this principle. Because this question is addressed on a case-by-case basis, unusual architect-client relationships could lead to different results.

A more interesting question is posed by architects working together. Different architects or firms may divide design responsibilities for interiors, exteriors, or the structural design of a building. Because the AWCPA refers to the entire building as the protectible "architectural work," and does not consider individual parts of a building to be separately protectible, architects working together would likely be considered joint authors.

3. *Assignment.* All or part of the author's copyright in an architectural work may be assigned or otherwise transferred.²²⁹ The custom of the trade has been for the architect to retain copyright in his work, rather than to assign his rights to the client or owner of the work.²³⁰ Given the limited scope of the rights granted in the AWCPA, this will probably continue to be the custom of the trade. Architects testified before Congress that if the AWCPA gave architects too many rights in the completed work, architects would be asked to assign their copyrights in the finished work to the clients.²³¹ This concern resulted in the provisions of section 704(a) of the AWCPA, granting the owners of a building the right to alter or destroy buildings without the consent of the architect.²³²

Under the AWCPA, assignment of rights may be appropriate in many circumstances. A builder who commissions an architect to design homes for a multi-unit development may want to have the architect assign the right of reproduction if the builder contemplates expansion of the development beyond its original scope. By doing so, the builder will be able to retain a consistent or uniform design for the houses of the development. The owners of a landmark work may want to retain the right to create three-dimensional reproductions of the work if models or other souvenir reproductions of the work have some marketability. Any

228. *E.g.*, *M.G.B. Homes, Inc. v. Ameron Homes, Inc.*, 903 F.2d 1486 (11th Cir. 1990) (holding that house builder who submitted thumbnail sketches of house floor plan to drafting company, reviewed work in progress, and had final approval authority, was not a coauthor of copyrighted final floor plan for purposes of Copyright Act).

229. 17 U.S.C. § 201(d)(2) (1988); *id.* § 101 (definition of "transfer of copyright ownership").

230. See AIA Standard Form Contract, *supra* note 41.

231. See *Hearings on AWCPA*, *supra* note 24, at 16 (statement of architect Michael Graves).

232. AWCPA § 704(a), 17 U.S.C.A. § 120(b) (West Supp. 1992). It should be noted that had this provision not been passed, owners and clients would still have been able to assign their right to make alterations or to destroy the work, but retain their other copyrights.

assignment or conveyance must be in writing and signed by the owner of the rights conveyed or the owner's agent.²³³ Although an author may validly assign rights in works not yet created,²³⁴ a conveyance of rights in all works which the author may thereafter create without any time or other limitation will be held invalid as contrary to public policy.²³⁵ Assignment of copyright may be validly made through a mortgage.²³⁶ Banks and other lenders providing construction loans for architectural works in progress may therefore want to include an assignment of copyrights held by the builder, in order for the bank to have the right to complete the work upon default without infringing on the debtor's copyright. If the builder does not have any copyright in the work, a bank should demand a security interest in the builder's right of first use of the copyrighted use.²³⁷

V. CONCLUSION

Both art form and utilitarian object, architecture is the paradigm example of a work of applied art. The AWCPA represents one approach to solving the intellectual property problems presented by useful objects. The subject matter of the AWCPA is broad. All "buildings" enjoy protection. Only those elements of a work that are functionally required are excluded from protection. This avoids application of the troublesome separability test, the cause of so much confusion in copyright law. In fact, if courts fully accept the architectural maxim that "form follows function," no elements of an architectural design would be found to be wholly functional.

The more useful an article is, the more likely it is that copyright protection of that article will interfere with its use. Congress anticipated problems, specific to architectural works, that would result from extending full copyright protection to all architectural works. As a result, the broad subject matter category of the AWCPA enjoys only limited protection. Aware of the needs of building owners, Congress provided for the alteration and destruction of architectural works. In addition, Congress permitted two-dimensional reproductions of architectural works. While diluting the rights of an author, these provisions are practical necessities for works that must be altered in order to perform their

233. 17 U.S.C. § 204(a) (1988).

234. *See Bartsch v. Metro-Goldwyn-Mayer, Inc.*, 391 F.2d 150 (2d Cir.) (upholding assignee's right to televise a play because the assignee had been granted the right to exhibit "motion picture photoplays . . . or any process analogous thereto"), *cert. denied*, 393 U.S. 826 (1968).

235. NIMMER ON COPYRIGHT, *supra* note 50, § 10.03[A].

236. *Id.* § 10.05.

237. Altman, *supra* note 24, at 628-29.

utilitarian functions and that are visible to the general public. This approach—protection of a broad subject matter, but limited protection for that subject matter, so as not to interfere with the use of those works—makes good sense for, and should be applied to, other useful works.

The AWCPA provides architects with greater and more uniform protection for their works than they previously enjoyed. Architects now have the exclusive right to build from their designs; because reverse engineering now constitutes infringement, architects will release many more of their unexecuted designs. With full copyright protection, architects no longer have to rely on contract law to order their rights. The copyright protection afforded by the AWCPA is more effective than contract law, since it does not rely on privity. Moreover, as a federal statute, the AWCPA provides uniform national standards for relief.

The major interpretive questions revolve around the definitions of “functionality” and “substantial similarity.” These terms must be defined in a way that serves the constitutional purpose of the copyright law: to promote progress in the arts and sciences. Architectural progress has always relied upon incremental innovation and the borrowing of elements from existing works. Copyright protection must be evaluated with cognizance of both the needs of the architectural profession, and of the alternative protections offered by trademark law, design patent law, and local historic preservation laws—and with the understanding that creativity in the architectural profession will be hindered, not helped, by overbroad copyright protection.

FIGURE 1

195. Egyptian Hall, Holkham, Norfolk. Lord Burlington and William Kent, c. 1735

FIGURE 2

Battery Park City, New York. Cesar Pelli.

PAUL GOLDBERGER, THE SKYSCRAPER 159 (1981). Photograph by Kenneth Champlin, courtesy of Cesar Pelli and Associates.

FIGURE 3

The Chrysler Building in New York City, 1930

The Empire State Building in New York City, 1931

PAUL GOLDBERGER, *THE SKYSCRAPER* 81, 84 (1981). *Chrysler Building* photograph by William Van Alen, courtesy of Wurts Bros.-Photo. *Empire State Building* photograph courtesy of Wurts Bros.-Photo.

FIGURE 4

Marc Cardoso's Tower of Power

Wickham v. Knoxville Int'l Energy Exposition, Inc., 555 F. Supp. 154, App., Figs. 1, 3 (E.D. Tenn. 1983).