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ARCHITECTURE AND DYSFUNCTION

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United States copyright law has long prohibited protection of the functional. The addition of architecture as protected subject matter in 1990 did little to change this fundamental tenet: added begrudgingly by Congress as a necessary condition of the United States' accession to the Berne Convention, courts quickly began limiting the scope of protection for architectural works by developing a "functionally determined" standard that filtered out design elements dictated by efficiency, necessity, or any other external factors from copyright protection—in language that increasingly echoed similar functionality analyses for "useful articles" in copyright cases involving industrial design (and similar abstraction/filtration/comparison analyses in computer software cases).

Architecture and industrial design have much in common, not because both are fundamentally about aestheticizing the useful, but because both practices have long been engaged in a practice of subverting the very usefulness of the designs they produce—or at least what our expectations of usefulness are—for consumer consumption. Yet despite the long-standing prevalence of dysfunctional designs, they have been little explored in the design law literature: perhaps because it complicates our understanding of what functionality is and what should rightfully be excluded from copyright protection; perhaps because it challenges policy justifications for excluding certain design features as capitalizing on the innate, preexisting human desire for beauty and symmetry; and perhaps because it refutes the notion that architecture or industrial design is fundamentally dual-nature, both functional and nonfunctional. What if it, instead, were only the latter?

This Chapter examines the history of dysfunctional designs in architecture, and argues that current doctrine whittling away the already thin scope of protection granted to architecture by categorically filtering out every design choice responding to some external element (zoning laws, cost, client expectations) fundamentally misses the point. There is, nonetheless, much creative freedom, and choice, that happens within these constraints. In shifting consumer demands towards the ugly, the discomfiting, and the inconvenient, dysfunctional designs do not merely exploit existing consumer preferences—rather, they create them, anew.

Keywords: copyright, architecture, fashion, useful articles, industrial design, design law

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INTRODUCTION

It is an adage well known in U.S. copyright law that purely useful articles cannot be protected.¹ The addition of architecture as protected subject matter in 1990 did little to change this fundamental tenet: added begrudgingly by Congress as a necessary condition of the United States' accession to the Berne Convention, courts quickly began limiting the scope of protection for architectural works by developing a “functionally determined” standard that filtered out design elements dictated by efficiency, necessity, or any other external factors from copyright protection—in language that increasingly echoed similar functionality analyses for “useful articles” in copyright cases involving industrial design.²

Architecture and industrial design have much in common, not because both are fundamentally about aestheticizing the useful, but because both practices have long been engaged in a practice of *subverting* the very usefulness of the designs they produce—or at least what our expectations of usefulness are—for consumer consumption. Yet despite the long-standing prevalence of dysfunctional designs, they have been little explored in the design law literature: perhaps because it complicates our understanding of what functionality is and what should rightfully be excluded from copyright protection; perhaps because it challenges policy justifications for excluding certain design features as capitalizing on the innate, preexisting human desire for beauty and symmetry; and perhaps because it refutes the notion that architecture or industrial design is fundamentally dual-nature, both functional and nonfunctional. What if it, instead, were only the latter?

This Chapter examines the history of dysfunctional designs in architecture, and argues that current doctrine whittling away the already thin scope of protection granted to architecture by categorically filtering out every design choice responding to some external element (zoning laws, cost, client expectations) fundamentally misses the point. There is, nonetheless, much creative freedom, and choice, that happens within these constraints. In shifting consumer demands towards the ugly, the discomfiting, and the inconvenient, dysfunctional designs do not merely exploit existing consumer preferences—rather, they create them, anew.

Section 1 will first discuss U.S. copyright law's prohibition on copyrighting useful articles, before detailing how and why architecture circumvented this rule to find a place on the specifically-enumerated list of protectable subject matter within the copyright statute upon the U.S.'s accession to the Berne Convention in 1989. It will then discuss the functionality screens³ that courts began developing in response, filtering out elements determined by external factors such as zoning requirements, client demands, or cost limitations. Section 2 will then explore a design practice little discussed in the legal literature, of *dysfunction*: of beginning with external factors such as zoning requirements or client demands before either purposefully subverting them, as in designing a master bedroom for a client in which the marital bed is purposefully split into two with a glass partition, or else creating unexpected results from the predetermined, as in strictly

¹Jane C. Ginsburg, “‘Courts Have Twisted Themselves Into Knots’: U.S. Copyright Protection for Applied Art,” *Columbia Journal of Law & the Arts* 40 (2016): 2-3.

²*Infra* Section 1.

³ The term “functionality screens” was coined by Mark Lemley and Christopher Buccafusco to refer to the different doctrines that courts have developed to exclude or filter out functional elements in copyright, trademark, and design patent law. Christopher Buccafusco & Mark A. Lemley, “Functionality Screens,” *Virginia Law Review* 103 (2017): 1339.

following the required zoning envelope to create a startling building shape that was deemed one of the boldest pieces of architecture to emerge in years (and, ultimately, passed over by the museum board for making board members uncomfortable). Section 3 will consider what implications dysfunctional design may have for the field of architecture, industrial design, and art—and what it may reveal about normative and aesthetic judgments in copyright.

I. ARCHITECTURE AND THE PROHIBITION ON COPYRIGHTING USEFUL ARTICLES

The strictly utilitarian is not copyrightable. Relegated instead to the province of patent (including design patent laws), both copyright and trademark law had long carved out purely utilitarian features from its protection.⁴ Section 101 of the Copyright Act provides that the “design of a useful article...shall be considered a pictorial, graphic, or sculptural work only if, and only to the extent that, such design incorporates pictorial, graphic, or sculptural (“PGS”) features that can be identified separately from, and are capable of existing independently of, the utilitarian aspects of the article.”⁵ In the everyday practice of architecture, disputes most often arose because architects found their drawings—which are protectable as PGS works under the Copyright Act—used as plans to erect buildings.⁶ In these cases, courts would note that a copyright in the architectural drawing itself did not extend to built structures, as the latter constituted a useful article better fit for the province of patent law.⁷ Thus, only to the extent that the building’s features had separable design elements could those be protected.⁸ As Mark Lemley and Christopher Buccafusco put it, “[w]hile an occasional gargoyle or visual motif might receive copyright protection, the creativity involved in designing and constructing buildings did not. Decisions about the layout of rooms, for example, were uniformly treated as, at most, aesthetic choices that were inseparable from function.”⁹

For those architects who longed to be “free of the separability conundrum presented by the useful articles doctrine applicable for pictorial, graphic, and sculptural works,” the Architectural Works Copyright Protection Act of 1990 (“AWCPA”) did just that, by extending copyright protection to those built structures, themselves.¹⁰ Yet just how and why should buildings receive

⁴ Some scholars have traced copyright’s prohibition on protection of the strictly utilitarian to the Supreme Court’s 1879 decision in *Baker v. Selden*, which invoked one of the earliest examples of the channeling doctrine—or, ensuring that each type of intellectual property is channeled to the correct category (patent, copyright, or trademark). See Peter S. Menell & Ella Corren, “Design Patent Law’s Identity Crisis,” *Berkeley Technology Law Journal* (2021) (citing *Baker v. Selden*’s language that to grant the author of the book an exclusive right “when no examination of its novelty has ever been officially made, would be a surprise and a fraud upon the public” because “[t]hat is the province of letters-patent, not of copyright”). For similar language in the trademark context, see *Qualitex v. Jacobson Products Co.*, 514 U.S. 159, 165 (1995) (“‘In general terms, a product feature is functional,’ and cannot serve as a trademark, ‘if it is essential to the use of purpose of the article or if it affects the cost or quality of the article.’”).

⁵ 17 U.S.C. § 101.

⁶ See *T-Peg, Inc. v. VT. Timber Works, Inc.*, 459 F.3d 97, 109-10 (1st Cir. 2006).

⁷ See *RJ Control Consultants, Inc. v. Multiject, LLC*, No. 20-1009, 2020 WL 6878106, at *6 (6th Cir. Nov. 23, 2020) (noting that protection for an architectural drawing as a pictorial, graphic, or sculptural work “does not extend to the use of those drawings to create the useful article described in those drawings, as patent law—with its stricter standards requiring novelty—governs such use protection”).

⁸ See *Home Design Servs., Inc. v. David Weekley Homes, LLC*, 548 F. Supp. 2d 1306, 1312 (M.D. Fla. 2008) (noting that while copyright would not protect a window, it would protect the design on a window).

⁹ Christopher Buccafusco & Mark A. Lemley, “Functionality Screens.”

¹⁰ U.S. Congress, House, Committee on the Judiciary, *Copyright Amendments Act of 1990*, 101st Cong., 2d sess., 1990, H.R. Rep. 101-735, 21 (1990), reprinted in 1990 U.S.C.C.A.N. 6935 [hereinafter H.R. Rep. No. 101-735]; Architectural Works Copyright Protection Act, Pub. L. No. 101-650, § 701–06, 104 Stat. 5133 (codified in scattered

such *sui generis* protection under a law that eschewed the functional? After all, perhaps nothing seems as practical as the very buildings that house us.

The answer is that the AWCPA was a necessary component of the United States' formal accession to the Berne Convention, the most important international copyright treaty and one that other industries attempting to fight piracy abroad—the motion picture and music industries, more specifically—were keen to join.¹¹ On the other hand, Continental law had long recognized the copyrightability of architecture.¹² Fitting architecture into a United States copyright law long antagonistic to the protection of the purely utilitarian, in other words, was a necessary evil to get at what domestic content industries really wanted—protection against the piracy of books, movies, and music.¹³

If architecture and U.S. copyright law seemed strange bedfellows—and, indeed, the old Modernist adage “form follows function”¹⁴ continues to be cited by courts and design law scholarship questioning the feasibility of separating the aesthetic from the useful¹⁵—then it should come as no surprise that the only working architect to testify before Congress in support of the AWCPA was a firm opponent to the modernist tradition. That architect, Michael Graves, was one of a growing number of architects ushering in a new era of postmodern architecture, and issuing strong rebukes of the modernist ethos. As Graves wrote in an essay cited extensively in the legislative history of the AWCPA, “In its rejection of the human or anthropomorphic representation of previous architecture, the Modern Movement undermined the poetic form in favor of nonfigural, abstract geometries.”¹⁶ Graves' preferred “anthropomorphic” or “poetic” architecture, on the other hand, was derived from the seminal book that ushered in a new era of postmodernism in architecture: *Learning from Las Vegas* by the architects Denise Scott Brown and Robert Venturi.¹⁷

Scott Brown and Venturi's work derided modernist architects from having become detached from the humanist—i.e., the use of popular symbols and symbolism in architecture.¹⁸ What Graves calls anthropomorphism is really a return to the forgotten symbols that animated so much of building throughout history: some connection of building elements with humanity itself, with man at its center.¹⁹ What Scott Brown and Venturi called for—and what Graves further expanded upon in his own, subsequent work—was the use of signs, symbols, appendages, and allusions in architecture—an “inclusion of the everyday in our environment.”²⁰ There is a “value

sections of 17 U.S.C.).

¹¹ Orrin G. Hatch, “Better Late Than Never: Implementation of the 1886 Berne Convention,” *Cornell International Law Journal* 22, no. 2 (1989): 179; David E. Shipley, “The Architectural Works Copyright Protection Act at Twenty: Has Full Protection Made a Difference?,” *Journal of Intellectual Property Law* 18, no. 1 (2010): 4.

¹² Sam Ricketson, *The Berne Convention for the Protection of Literary and Artistic Works* (Kluwer, 1987): 253-57.

¹³ Hatch, “Better Late Than Never,” 179 (describing the increasing amount of piracy in the United States in the decade leading up to the United States' accession to the Berne Convention, which served as a prelude to the passage of the AWCPCA).

¹⁴ Justice Breyer's dissent in *Star Athletica* invoked this adage, while attributing it to Frank Lloyd Wright. *Star Athletica, L.L.C. v. Varsity Brands, Inc.*, 137 S. Ct. 1002, 1037 (2017). The phrase, however, is most often attributed to the famous modernist architect Louis Sullivan. See *supra* note 18.

¹⁵ See Peter S. Menell & Ella Corren, “Design Patent Law's Identity Crisis.”

¹⁶ Michael Graves, “A Case for Figurative Architecture,” in *Buildings and Projects 1966-1981* (1982), 11.

¹⁷ Robert Venturi, Denise Scott Brown & Steven Izenour, *Learning from Las Vegas: The Forgotten Symbolism of Architectural Form* (Cambridge: MIT Press, 1977).

¹⁸ *Ibid.*, 7.

¹⁹ Graves, “A Case for Figurative Architecture,” 12 (noting one example of an anthropomorphic allusion as comparing a column to a man).

²⁰ Venturi, Scott Brown, and Izenour, *Learning from Las Vegas*, 53.

to symbolism,” Venturi and Scott Brown wrote, a value that has been lost in modernist architecture, a lost poetry.²¹

It is remarkable how well Congress internalized the language of postmodernist architecture. “The intent of the legislation,” the legislative history of the AWCPA states, “is to protect what Mr. Graves calls ‘poetic language,’” or architecture that is “responsive to issues external to the building, and incorporates the three-dimensional expression of the myths and rituals of society.”²² Critically, the House Report noted that protection should not extend to “functionally determined elements.”²³

I have, in my previous work, explored how the internalization of the postmodernist ethos indelibly privileged only one type of architectural style—the postmodern style—over all others.²⁴ While the AWCPA was, in theory, meant to dispense with the complicated functionality analyses other objects of industrial design were subjected to in favor of a broader, more forgiving rule for architecture, in practice, courts following its enactment began quick work in setting limitations that would dramatically whittle away at its scope. Courts began applying the same type of filtration that had been used for software (another controversial category for copyright protection) in the architecture context.²⁵ Design choices that were motivated by “efficiency, necessity, or [other] external factors,” including cost, were filtered out as unprotectable.²⁶ Likewise, other courts held that design elements dictated by functionality, efficiency, consumer preference, zoning requirements, building codes, pre-existing building conditions, and industry standards were unprotectable.²⁷ And in yet another twist, other courts began to resurrect the conceptually confusing “conceptual separability” test that courts had used for PGS works for architectural works²⁸—the very thing that the enactment of the AWCPA had meant to avoid.²⁹

So as it turns out, protection for architecture was easy enough for Graves’ postmodernism’s signs, appendages, and anthropomorphic forms. This accepted postmodern form, the “decorated shed,” *applied* symbols, or extraneous ornamentality, to otherwise conventional buildings.³⁰ In elevating “image over process or form,” postmodernist design was, in fact, gargoyles—all the way down.

What both the legislative history of the AWCPA and the subsequent case law privileging appendages and superfluous adornment arguably leaves outside of the ambit of protection is all other styles—not just the high modernism of the post-World War II era, but contemporary styles

²¹ Ibid, 72.

²² U.S. Congress, House, Committee on the Judiciary, *Copyright Amendments Act of 1990*, 101st Cong., 2d sess., 1990, H.R. Rep. 101-735, 19 (internal quotation marks omitted).

²³ Ibid, 21.

²⁴ See Xiyin Tang, “Narrativizing the Architectural Copyright Act: Another View of the Cathedral,” *Texas Intellectual Property Law Journal* 21 (2013): 33.

²⁵ See *Trek Leasing, Inc. v. United States*, 66 Fed. Cl. 8, 12 (2005) (“Once the protectable aspects of the plaintiff’s work are identified, they may be compared with the allegedly infringing work to determine copyright liability....This approach is very much like the abstraction-filtration-comparison test applied with regard to computer programs.”).

²⁶ Ibid., 17.

²⁷ See *Thomson v. HMC Grp.*, 2015 WL 11256775 at *12 (C.D. Cal. 2015); *Harvester, Inc. v. Rule Joy Trammell + Rubio, LLC*, 716 F. Supp. 2d 428, 445 (E.D. Va. 2010); *Dream Custom Homes, Inc. v. Modern Day Const., Inc.*, 773 F. Supp. 2d 1288, 1300 (M.D. Fla. 2011); *Buttner v. RD Palmer Enterprises, Inc.*, No. 5:13-cv-0342, 2015 WL 1472084, at *7 (N.D.N.Y. Mar. 31, 2015).

²⁸ *Humphreys & Partners, L.P. v. Lessard Design, Inc.*, 43 F. Supp. 3d 644, 661 (E.D. Va. 2014), *affirmed*, 790 F.3d 532 (4th Cir. 2015) (“It is settled that [the plaintiff] is ‘obliged to show’ that the features of its design are ‘conceptually separable’ from the design’s ‘utilitarian aspects’ in order to demonstrate the validity of the copyright.”).

²⁹ See *supra* note 10.

³⁰ Venturi, Scott Brown, and Izenour, *Learning from Las Vegas*, 87.

developed by such visionary, working architects such as Rem Koolhaas, Bjarke Ingels, Bernard Tschumi, and Peter Eisenmann. Their works have been variously labeled as deconstructivist, structuralist, or, simply, disjunctive.³¹ What do these works look like, and how should these works be protected, if at all? I shall first describe the architecture of disjunction, which was formulated, in a Hegelian swing, as a reaction to the postmodernist reaction against modernism, in the following Section, before concluding with how and why disjunctive architecture bears import for design law.

II. DYSFUNCTIONAL DESIGNS

While design law scholars today seem fixated on the “form follows function” mantra synonymous with the modernist architect Louis Sullivan, contemporary industrial design, in fact, has moved far beyond this simplistic reduction of 21st century design to its 20th century forefathers.³² Indeed, what many of the most well-known architects working today—Rem Koolhaas, Bjarke Ingels, Bernard Tschumi, Peter Eisenman—share in common is a dedication to subverting functionality. Tschumi, in his seminal work *Architecture and Disjunction*, notes that postmodernism, in rejecting modernism and Le Corbusier’s dictate that homes are machines for living in, turned to “surface readings, signs, metaphors...often to the exclusion of spatial or programmatic concerns.”³³ As postmodernism took hold in the ‘80s, Tschumi writes, “[p]rogrammatic concerns were rejected as leftovers from obsolete functionalist doctrines.”³⁴ As the previous Section discussed, this turn—towards ornamentality and surface decoration—was helpful for the passage of the AWCPA, but, to Tschumi, it impoverished the internal, unique language of architecture. “If writers could manipulate the structure of stories in the same way as they twist vocabulary and grammar, couldn’t architects do the same, organizing the program in a similarly objective, detached, or imaginative way?” Tschumi asks.³⁵ “For if architects could self-consciously use such devices as repetition, distortion, or juxtaposition in the formal elaboration of walls, couldn’t they do the same thing in terms of the activities that occurred within those walls?”³⁶ The disjunction between the built form and the purpose it’s supposed to serve fascinated Tschumi, for in showing that the “relation between program and building could be...contrived and artificial,” it “rejected all functionalist leanings.”³⁷ And therein lies the dialectical: in rejecting the notion that buildings should serve the needs of its inhabitants, “architects were questioning, attacking, or outright rejecting modern movement orthodoxy.”³⁸

What resulted from the attacks on modernist orthodoxy were buildings that made the functional dysfunctional. Consider, for example, the classic example of the master bedroom. The relationship between form (the bedroom) and function (a room for a couple to sleep in) was subverted in Peter Eisenman’s House VI, in which the architect placed a glass strip down the middle of the bedroom,

³¹ This is perhaps best embodied in the famous work by the architect Bernard Tschumi, *Architecture and Disjunction* (1994), the title of which inspired this Chapter.

³² See Keith Aoki, “Contradiction and Context in American Copyright Law,” *Cardozo Arts and Entertainment Law Journal* 9 (1991): 384 (“Courts have clung to incoherent distinctions which have grown increasingly abstract with each new case, religiously invoking the phrase ‘form follows function.’”).

³³ Bernard Tschumi, *Architecture and Disjunction* (Cambridge: MIT Press, 1994), 140.

³⁴ *Ibid.*, 141.

³⁵ *Ibid.*, 146.

³⁶ *Ibid.*

³⁷ *Ibid.*, 147.

³⁸ *Ibid.*

forcing the couple to sleep on opposite sides of the room.³⁹ On the one hand, a glass partition might appear to just be a standard feature of any home that is not subject to protection. But the specific decision to locate the partition right through the heart of the master bedroom challenges this simple conclusion—suggesting that this design choice should be copyrightable.⁴⁰ Indeed, in designing the home, Eisenman stated that he purposefully wished to subvert the idea of form following function, creating a home not to serve the client but instead to force the client to adapt to the home.⁴¹

Consider another example of a structure that is built in alleged adherence to local zoning ordinances. Under the line of cases that have filtered out design elements dictated by zoning requirements, the shape of a building that conforms to the maximum allowable space under zoning guidelines would seem to fall strictly on the side of unprotectability.⁴² But what actually followed from the architect Rem Koolhaas's most strict adherence to zoning laws, in his proposal for the new Whitney museum, was a building shaped "like a gigantic cat's paw."⁴³ The design appeared to consciously accept and rigorously adhere to existing, external landmark preservation requirements—an act of obedience, even banality.⁴⁴ Yet it was also deemed simultaneously "aggressive" and "one of the boldest pieces of architecture to emerge in years."⁴⁵ Tellingly, it was ultimately rejected for making the museum's board of directors uncomfortable, in favor of the designs of another architect who is "known for putting clients at ease."⁴⁶

Other architecture firms working in the same tradition as Rem Koolhaas likewise begin with external elements such as zoning laws, borrowed airspace, and required setbacks to challenge the very notion that beginning with the pre-determined must mean ending with a limited number of expected results. The firm MVRDV's 2001 proposal for the Eyebeam Institute in Chelsea, for example, noted that the overall shape of the building—"the maximum building volume," was "achieved by strictly following the permitted zoning envelope."⁴⁷ But in so doing, the resulting volume "allow[ed] for limitless expansion and mutation," resulting in a "catalogue of hollow, inhabitable 'beams'," a "large interior void" that resembled a beehive or a modern-day cathedral.⁴⁸ Following the pre-determined in fact created unexpected results.

These examples showcase the vast, complicated space between anthropomorphic, symbolist forms that elevated image over function—a chair shaped like a human hand, a building shaped like a duck—and modernist works that molded form to function. Is a building dictated by external factors like zoning guidelines functional if strict adherence to it created a bold figure that subverted all ideas of what a museum on Park Avenue should look like? Should copyright law protect the seemingly straightforward placement of a glass wall dividing a room if that wall divides the heart of the marital bed?⁴⁹ What should copyright law do with these misfits? I take up this question in the final Section of this Chapter.

³⁹ Suzanne Frank, *Peter Eisenman's House VI: The Client's Response* (Watson-Guptill Publications, 1994), 54.

⁴⁰ See *infra* Section 3.

⁴¹ Peter Eisenman, *Houses of Cards* (Oxford: Oxford University Press, 1987).

⁴² See *supra* Section 1.

⁴³ Nicoulai Ouroussoff, "Uptown or Down? The Whitney Museum's Identity Crisis," *New York Times*, November 2, 2006, <https://www.nytimes.com/2006/11/02/arts/design/02whit.html>.

⁴⁴ *Ibid.*

⁴⁵ *Ibid.*

⁴⁶ *Ibid.*

⁴⁷ See Eyebeam Institute, MVRDV, <https://www.mvrdv.nl/projects/138/eyebeam-institute>.

⁴⁸ *Ibid.*

⁴⁹ While standard features like walls or windows might not be protectable in and of themselves, the selection and arrangement of these standard elements might be. See *Intervest Const., Inc. v. Canterbury Estate Homes, Inc.*, 554 F.3d 914, 919 (11th Cir. 2008).

III. DYSFUNCTIONALITY AND THE LAW

Design law scholars often set forth two justifications for the prohibition on copyrighting the functional: one, channeling these features into other aspects of the intellectual property law system, and two, competitive need. The former seeks to set boundaries between the various forms of IP, by arguing that patent law (either design patent or utility patent law) is better equipped to make assessments about protectability and infringement than copyright—or, for that matter, trademark law, which has similar prohibitions on claiming trademark protection over functional designs.⁵⁰ But arguments along these lines do often blur into the latter concern, which is focused on the freedom that competitors have to make use of a design feature—or the lack of an ability by one party to claim monopoly rights in it.⁵¹ Part of the concern with using copyright and/or trademark's lower thresholds to protectability as a "backdoor patent" is that it allows owners to receive a lengthy, potentially perpetual term of protection—and shut out competitors who, too, wish to take advantage of the useful feature—while contributing precious little to innovation overall.⁵²

Copyright's internal limitations, such as the useful articles doctrine, should in theory police this opportunism. The Copyright Act defines a useful article as "an article having an intrinsic utilitarian function that is not merely to portray the appearance of the article or to convey information."⁵³ A beautiful sculpture is "useful" because it enlivens the room it sits in, but since the function is derived purely from its expressive, or informational, qualities, it does not constitute a "useful article" in that sense. The useful articles doctrine, then, is boundary-drawing—between beautiful, expressive works that should be protected under copyright law and potentially also beautiful, but functional, works that are rightfully the province of patent law. Likewise, in trademark law, both the much-derided aesthetic functionality doctrine and the utilitarian functionality doctrine do much the same thing: police boundaries as it does prevent anti-competitive conduct.⁵⁴

Thus, even as the very point of the AWCPA was to exempt architecture from these particular functionality doctrines, the concerns that animated courts' subsequent development of abstraction-

⁵⁰ See Rebecca Tushnet, "Shoveling a Path After *Star Athletica*," *UCLA Law Review* 66 (2019): at 1228-29 ("One reason the copyright/design patent divide is so important is that the infringement standard for design patent is regularly more rigorous than it is for copyright..."). Trademark law's functionality doctrine does much the same thing. See, e.g., *Traffix Devices, Inc. v. Mktg. Displays, Inc.*, 532 U.S. 23 (2001) (existence of an expired utility patent is strong evidence of the functionality, and hence unprotectability, of trade dress); see also Mark P. McKenna, "An Alternate Approach to Channeling?," *William and Mary Law Review* 51 (2009): 875.

⁵¹ See *ibid.* (noting that because copyright is ill equipped to set boundaries for works in which form and function are one, this limits the freedom that competitors in the market have—and could lead to anticompetitive overclaiming by the plaintiff); Christopher Buccafusco and Jeanne C. Fromer, "Fashion's Function in Intellectual Property Law," *Notre Dame Law Review* 93, no. 1 (2017): 65 (noting that while Congress understood that visually appealing useful works would be unprotected by copyright, "it considered this appropriate in light of the risks to competition posed by more expansive copyright protection and the availability of design patents for industrial designs. Congress concluded that leaving some works with expressive features unprotected by copyright was preferable to allowing functional objects to gain lengthy legal protection while avoiding the high inventive threshold and careful examination of the patent system").

⁵² See generally Christopher Buccafusco and Jeanne C. Fromer, "Fashion's Function in Intellectual Property Law."

⁵³ 17 U.S.C. § 101.

⁵⁴ See Mark P. McKenna, "(Dys)functionality," *Houston Law Review* 48 (2011): 834 (on the channeling function of utilitarian functionality); Robert Bone, "Trademark Functionality Reexamined," *Journal of Legal Analysis* 7, no. 1 (2015): 183 (recognizing that "market competition can be impaired by protecting aesthetic trade dress just as much as it can by protecting utilitarian trade dress").

filtration-comparison doctrines that filter out functionally-determined design elements are, fundamentally, the same. As the Second Circuit noted in filtering out design elements responsive to consumer expectations, “[t]he functional aspects of a work are governed by patent law, not copyright law.”⁵⁵

Delineating this general boundary—between unprotectable functionality and protectable expression—seems easy in theory, but difficult to execute in practice. As it turns out, nobody can quite agree on what constitutes functional design, and why. Jeanne Fromer and Christopher Buccafusco argues that, in fashion designs, components of a garment “should be treated as functional not only if they are mechanically or technologically functional, but also if they are valued for their ability to influence the way that the wearer is perceived.”⁵⁶ They reason that because these design elements are “dependently valuable for their ability to affect the perception of another object,” they are thus reliant on “some external element to make it appear differently.”⁵⁷

In this sense, Fromer and Buccafusco’s concern is similar to other insights that have been made in the trademark functionality context.⁵⁸ As Justin Hughes argued, a product feature should be deemed aesthetically functional if it “appeals to cognitive, psychological, or aesthetic biases in consumers that exist *regardless of (and prior to) anything the trademark creator or owner has done*.”⁵⁹ Allowing one producer to monopolize these design elements is fundamentally anticompetitive, because there is a “substantial, acculturated, preexisting response among consumers for” these particular designs—reasons having nothing to do with the innovations of the producer.⁶⁰ Likewise, Fromer and Buccafusco conclude that conferring protection to design elements that influence the way that the wearer is perceived confers “a substantial competitive advantage on the designer-plaintiff, *one that Congress did not intend to confer and that the designer did not earn*.”⁶¹

As it turns out, this underlying policy concern—that a designer could use copyright (or trademark)’s lengthy protections to gain a competitive advantage that is *fundamentally unearned*, owing nothing to the designer—is exactly the driving reasoning behind courts’ development of various filtering mechanisms in architecture copyright cases. After all, it’s right there in the test—“externally determined” design elements *are not protectable*.⁶² As the Second Circuit put it, the architect “*get[s] no credit*” for design elements that “are a function of consumer expectations.”⁶³

The argument that design elements that are reliant on external elements or preexisting consumer responses should not be protectable can also be explained by appealing to copyright and trademark’s own internal rules. As the Supreme Court famously put it, “The *sine qua non* of copyright is originality.”⁶⁴ And elements dictated by external factors—such as existing consumer

⁵⁵ *Zalewski v. Cicero Builder Dev., Inc.*, 754 F.3d 95, 106 (2d Cir. 2014).

⁵⁶ Christopher Buccafusco and Jeanne C. Fromer, “Fashion’s Function in Intellectual Property Law”: 70.

⁵⁷ *Ibid.* at 70 & 75.

⁵⁸ *See ibid.* at 60 (“By taking advantage of the nature of human vision, these design techniques alter the way we see things in the world.”).

⁵⁹ Justin Hughes, “Cognitive and Aesthetic Functionality in Trademark Law,” *Cardozo Law Review* 36 (2015): 1273-74.

⁶⁰ *Ibid.* at 1281.

⁶¹ Christopher Buccafusco and Jeanne C. Fromer, “Fashion’s Function in Intellectual Property Law”: 53 (emphasis added).

⁶² *Supra* notes 25 & 26.

⁶³ *Zalewski v. Cicero Builder Dev., Inc.*, 754 F.3d 95, 106 (2d Cir. 2014) (emphasis added).

⁶⁴ *Feist Publications, Inc. v. Rural Telephone Service Co., Inc.*, 499 U.S. 340, 345 (1991).

demands—are not original to the designer.⁶⁵ In trademark, designs that are purchased because they appeal to some preexisting bias in consumers, rather than for their source-identifying function, are simply not functioning as trademarks.⁶⁶

But dysfunctional design challenges these seemingly straightforward conclusions. On one level, these designs are reliant on or responsive to external elements like viewer perception, consumer expectations or demands, and zoning laws. On the other hand, rather than appealing to existing aesthetic biases or consumer preferences, they subvert them, self-consciously challenge them, and, ultimately, pervert them. The astonishing fact is that, in doing so, consumers have found themselves in the rather odd position of all of a sudden desiring designs that are self-consciously hideous. Why should women willingly put themselves in this bizarre position of suddenly wearing, and coveting, “birth control goggles” and FUPAs⁶⁷? Why, because a designer came along and suddenly imbued the design with cache.

Consider a simple example in the fashion context: the comically-oversized, padded-shoulder silhouette (what some have called “Frankenstein shoulders”⁶⁸) that a rogue street fashion turned high fashion designer named Demna Gvasalia created to usher in a new era for the Paris fashion house Balenciaga.⁶⁹ It would likely be unprotectable under Fromer and Buccafusco’s framework because it “influences how the wearer is perceived,” turning their wearers into clownish boxes that perhaps is best exemplified by a music video featuring Kanye West struggling to walk through a narrow hallway wearing a cartoonishly oversized version of one, released at the height of the dominance of the Shoulder (Figure 1, below).⁷⁰



Figure 1 (video still from Kanye West & Lil Pump, “I Love It”)

Yet the “Frankenstein’s shoulders” example lays bare an implicit assumption in Fromer and Buccafusco’s proposed framework: that designs that influence how the wearer is perceived should be labeled functional precisely because they are *flattering* to the wearer for reasons that have nothing to do with the particular designer’s own innovations, and thus to allow a monopoly on

⁶⁵ See *Zalewski v. Cicero Builder Dev., Inc.*, 754 F.3d 95, 106-07 (2d Cir. 2014) (noting that plaintiff must distinguish between “those aspects of his designs that were original to him from those dictated by the form in which he worked”).

⁶⁶ The sine qua non of trademark, one might well say, is source-identification. See Graeme B. Dinwoodie, “The Death of Ontology: A Teleological Approach to Trademark Law,” *Iowa Law Review* 84 (1999): 616 (“[P]rotecting source-identifying symbols in the marketplace is the very *raison d’être* of trademark law....”).

⁶⁷ See *infra* note 72 and accompanying text.

⁶⁸ WWD Staff, “Demna Gvasalia on Appropriation, ‘Ugly’ Sneakers and the Curse of Pre-collections,” *WWD*, February 2019.

⁶⁹ Nathan Heller, “Demna Gvasalia on Balenciaga, Haute Couture, and Why He’s Staying Put in Zurich,” *Vogue*, February 2020.

⁷⁰ Buccafusco and Fromer, “Fashion’s Function in Intellectual Property Law,” 53.

such a feature would put competitors at a significant disadvantage.⁷¹ As Fromer and Buccafusco write, certain design features that “make [the wearer] look thinner, bigger, taller, or curvier” should be disallowed protection—as examples, they point to color-blocking (which make the body curvier and slimmer”) and the Muller-Lyer illusion, which could lengthen the body.⁷² These age-old and well-known design techniques, they conclude, are functional because “[t]hey are used to make the wearer look more attractive.”⁷³

So how, then, to account for the fact that some of the most popular clothing of the past decade have focused on making the wearer *unattractive* (potentially giving new meaning to the term “fashion victim”), so much so that it spawned a women’s fashion blog with a cult following titled, appropriately, *Man Repeller*?⁷⁴ As one article put it: “It isn’t an overstatement to say that *Man Repeller* changed the way that millennial women dress. The site launched in 2010, after a decade of celebrities in bandage dresses, stiletto heels, and sexy-sloppy velour tracksuits, with a mission to champion the quirky and even ugly. Crazy blouses, wild print mixing, oversized silhouettes, faux pas like ‘FUPAs’ and ‘birth control goggles.’”⁷⁵

If the way we think about the function of clothing today can largely be attributed to a bygone *Sex and the City* era of bandage dresses and stiletto heels—catnip for their male audience, then the *Man Repeller* aesthetic reflected the way women in their 20s and 30s *actually* wanted to dress—a *Girls* update for the 21st century. This ugly-repulsive-grotesque aesthetic has become, in fact, *so* dominant amongst the mainstream fashion cognoscenti today that one millennial fashion blog proclaimed the *Man Repeller* aesthetic to be, in 2020, simply “run-of-the-mill”—flooding every influencer Instagram feed and championed by celebrities like Rihanna.⁷⁶ The revered status of such retailers like Opening Ceremony, which opened in 2002, introduced to the world clothing items that are perhaps best labelled as “memorably insane,” such as “absurd puffer coats...patterned with what could be meat, marble, or vomit, with sleeves sculpted into little T-Rex arms.”⁷⁷ Meanwhile, other “ugly fashions” like clogs with socks, nerdy dad shoes, and Martin Margiela’s famous “camel-toe” shoes⁷⁸ have become so ingrained into the everyday lingua franca of fashion that it feels almost basic. And yet, despite their almost single-handed dominance of the fashion world today, such styles have been barely remarked upon in the broader design law conversations surrounding the protection of fashion design.

⁷¹ For example, Fromer and Buccafusco analogize copyright’s prohibition on the protection of functional features to similar doctrines in trademark law, noting that trademark’s functionality doctrine “seeks to prevent [mark owners] from using trademarks to gain advantages unrelated to their reputation. This unfair advantage could result if the mark extended to cover useful product features that competitors were then prevented from producing. It could also occur if the mark extended to product features the consumers desired to purchase irrespective of their source-signifying characteristics.” *Ibid*, 94.

⁷² *Ibid*, 59.

⁷³ *Ibid*, 60.

⁷⁴ Irina Grechko, “When the Arm Party is Over: Inside the Rise and Fall of the *ManRepeller* Fashion Aesthetic,” *Refinery29*, October 28, 2020, <https://www.refinery29.com/en-us/2020/10/10130804/why-man-repeller-shut-down-leandra-medine-fashion-aesthetic>.

⁷⁵ Rachel Tashjian, “What Happened to *ManRepeller*?,” *GQ*, December 4, 2020, <https://www.gq.com/story/what-happened-to-man-repeller>.

⁷⁶ Irina Grechko, “The Rise and Fall of the *Man Repeller* Fashion Aesthetic,” *Refinery29*, October 22, 2020.

⁷⁷ Jocelyn Silver, “Where Will We Go To Feel Cool Now?,” *Paper*, January 23, 2020, <https://www.papermag.com/opening-ceremony-stores-closing-rip-2644889104.html?rebelltitem=12#rebelltitem12>.

⁷⁸ Bianca Husodo, “History Behind the Hype: The Tabi, Margiela’s Split-Toe Shoes,” *Lifestyle Asia*, Dec. 21, 2017, <https://www.lifestyleasia.com/sg/style/fashion/history-behind-hype-tabi-margielas-split-toe-shoes/>.

So, too, in architecture. No style is more synonymous with our built environment than high modernism, and, with it, the godfather of modernism, Le Corbusier's, dictate that homes should be machines for living in—efficient, simple, well-engineered.⁷⁹ Following this logic, it seems doubtful that any component of the home should be copyrightable, as the overall flow, configuration, and placement of every design element are, if not simply *scenes a faire* for the streamlined vocabulary of modernism, at the very least responsive to the needs of the client.

Yet dysfunctional design begins with externally-dictated elements and turns them on their head. If nothing can seem as banal and unoriginal as adhering to local zoning ordinances, architects like Rem Koolhaas and the Dutch firm MVRDV challenge this notion by creating rare, astonishingly original forms from such externally-determined elements: a building shaped like a cat's paw; a large, hollow space composed of a series of perforated interior voids resembling a beehive.

If the many limiting doctrines developed by courts that severely curtail the copyright protection available to architectural works were done out of the belief that buildings, like computer software, seem fundamentally responsive to external demands and efficiency, and thus incompatible with copyright's protection of the aesthetic, they evidence a cramped, narrow view of what architecture is, and what it can be. So, too, is the belief, widely held and commonly aired, that architects simply create designs in response to client bids, for which they are paid in return—a neat and tidy quid-pro-quo that makes architecture ill-suited to copyright's incentives structure.⁸⁰ Yet these narratives leave out the most visionary architects, who create enduring images for the architectural canon, and who develop unique, innovative visual vocabulary through the long, unpaid, and almost always unrewarded process of architectural competitions—a process far removed from the typical custom builds for clients. As the architect Charles Holland notes, “[c]ompetitions exist within a separate economy from that of commercial development. Most architects lose money entering them and stand little chance of winning.”⁸¹ Holland writes:

[A]rchitectural competitions are not only about winning work. They are also about developing an idea or an approach and getting the chance to speculate on larger and more complex projects than firms might normally be able to. Many architects use them to develop a body of work that, even though partly unbuilt, establishes their voice within architectural culture. Recent architectural history seems to legitimize this view. Competition schemes— even, and perhaps especially, when unbuilt— play a large role in establishing the architectural canon. Both Adolf Loos's entry for the Chicago Tribune Tower, in 1922, and Alison and Peter Smithson's designs for the Golden Lane housing competition, in 1951, loom large in the history of modern architecture, despite the fact that the former was disqualified in the competition and the latter unplaced. Architectural competitions aren't always about winning the job, and to discuss them solely on that basis is to misunderstand their point.⁸²

⁷⁹ Le Corbusier, *Towards a New Architecture* (New York: Dover Publication, 1986), 107.

⁸⁰ See Kevin Emerson Collins, “The Hidden Transactional Wisdom of Media Discrimination in Pre-AWCPA Copyright,” *Washington University Law Review* 97 (2020): 693.

⁸¹ Charles Holland, “‘Architect: Will Crit for Coffee,’ The Economies of Architecture,” *Perspecta* 47 (2014): 156.

⁸² *Ibid.*

Others are far less charitable, or perhaps just more blunt, about the relationship between architectural competitions and monetary rewards (or, more appropriately, the lack thereof). Writing about the thousands of bids received for New York's World Trade Center, architect Mark Foster Gage does "the math on the calculator of architectural desperation" to estimate that "[i]f those hours were billed at a very, very low rate of \$75 per hour, it would be equal to \$72 million worth of unpaid work." Gage concludes that "architecture as a discipline made a \$72 million dollar donation to [the World Trade Center developer] Larry Silverstein, whose net worth is currently estimated at \$3.5 billion."⁸³

Defaulting to the comforting notion that much of architecture, as a practice, is not reliant upon copyright's incentives structure, and so is in many ways a subject matter copyright need not concern itself, with obscures the fact that copyright rules always hide normative value judgments about worth, about who (or what) is deserving, and who's not. It may very well be that architects rarely think about copyright and, indeed, that as a legal tool, it is seldom invoked, or invoked most often by designers of mass-scale tract homes.⁸⁴ After all, buildings are expensive and time-consuming things to copy. And while architecture seems like a fine field to include in the abundant, fruitful scholarship on intellectual property law's "negative space"⁸⁵—a discipline that flourished for decades with limited copyright protection and thus proves that copyright protection is simply not necessary—the same exact thing can be said for a field that is unequivocally, safely copyrightable: fine art. After all, in fine art, only the original matters.⁸⁶ It is telling, then, that pleas for protection—both by architects testifying before Congress and by scholars writing before the enactment of the AWCPA—mostly center around normative, not utilitarian, justifications. If architecture is poetry, if architecture, too, manifests the architect's personality, if he is no "less than" a "sculptor or a dramatist," then why does he not, too, deserve the same protection as a sculptor or a dramatist?⁸⁷ Is not the highest of high architecture as creative as *The Great Gatsby*, and the lowest of tract homes as banal as the copyrighted postcard ridiculed by Jeff Koons yet ultimately prevailing in *Rogers v. Koons*?⁸⁸

If part of the concern with putting buildings on equal footing with other copyrighted works is the problem of adjudication, the difficulty of separating form from function in cases involving modernist works,⁸⁹ this Chapter has tried to think beyond that old form follows function chestnut and to illuminate the wide heterogeneity of architectural styles, debunking the idea that design today is mostly indebted to the modernist tradition. Given this wide range of styles, there is no reason why each architectural work should not be evaluated on a case-by-case basis, just like in cases involving other copyrighted works. Most copyrightable subject matter are not subject to de-facto filtration tests, or to an automatic, blanket pronouncement that the protection accorded to the subject matter is de facto "thin." For example, the Ninth Circuit went so far as to automatically

⁸³ Mark Foster Gage, "Rot Munching Architects," *Perspecta* 47 (2014): 22.

⁸⁴ See David E. Shipley, "The Architectural Works Copyright Protection Act at Twenty: Has Full Protection Made a Difference?"

⁸⁵ See Christopher Sprigman and Kal Raustiala, *The Knockoff Economy: How Imitation Sparks Innovation* (Oxford: Oxford University Press, 2012)

⁸⁶ See Xiyin Tang, "The Artist as Brand: Toward a Trademark Conception of Moral Rights," *Yale Law Journal* 122 (2012): 251 ("Almost all the market value for [a work of visual art] resides within the original copy."); Amy Adler, "Why Art Does Not Need Copyright," *George Washington Law Review* 86 (2018).

⁸⁷ David E. Shipley, "Copyright Protection for Architectural Works," *South Carolina Law Review* 37, no. 3 (1986): 393; see also U.S. Congress, House, Committee on the Judiciary, *Copyright Amendments Act of 1990*, 101st Cong., 2d sess., 1990, H.R. Rep. 101-735.

⁸⁸ *Rogers v. Koons*, 960 F.2d 301 (2d Cir. 1992).

⁸⁹ See Rebecca Tushnet, "Shoveling a Path After *Star Athletica*," *UCLA Law Review* 66 (2019): at 1228-29.

rebuke the notion that a *particular* musical composition enjoyed only thin protection, by stating categorically that “[m]usical compositions are not confined to a narrow range of expression.”⁹⁰ Why, then, deem the entire subject matter of architecture, as a categorical matter, protected only by a “thin” copyright?⁹¹

Second, this Chapter has tried to illuminate ways in which design can be both dictated or influenced by external factors while simultaneously subverting, perverting, and ultimately, refuting them. Thus, current doctrine whittling away the already thin scope of protection granted to architecture by categorically filtering out every design choice responding to some external element—zoning laws, cost, client expectations—misunderstands the point. Under the theory that these externally-influenced design choices are not original to the architect because it originated from outside of him, there is no reason why the same could not be said for a songwriter working within a particular known style (Pop, Country, Electronica), or constrained by the Top 40s formula, or consumer expectations for what a dance number or a summer smash should sound like.⁹² There is, nonetheless, much creative freedom, and choice, that happens within these constraints. All copyrightable works that are indebted to the market in some way—a popular paperback, a Hollywood action film—are dictated by a number of external factors. Read in this way, architecture is no more indebted to external influence than any other category of copyrighted work.

CONCLUSION

The design practice I describe in this Chapter—of taking external constraints, of subverting them, perverting them, addressing them tongue-in-cheek and with a nod and wink—is not limited to contemporary architecture. This Chapter has used fashion as another example of how dysfunctional designs that cater not to consumer demands but rather *created* consumer demand rose to dominate trend cycles today. The implications of dysfunctional design for the broader field of design law is more complex, complicated by the Supreme Court’s recent decision in *Star Athletica* and the headache-inducing separability test.⁹³ But dysfunctional designs deserve to be talked about, not just because it challenges the notion that designers are harnessing pre-existing consumer biases towards beauty, but also because it refutes the notion that architecture or industrial design is fundamentally dual-nature, both functional and nonfunctional. The “micro purse” that is too small to hold even a cell phone or a wallet but that quickly dominated the fashion cycle has no

⁹⁰ *Williams v. Gaye*, 895 F.3d 1106, 1120 (2018); *but see Skidmore v. Led Zeppelin*, 952 F.3d 1051, 1080 (9th Cir. 2020) (Watford, J., concurring) (noting that the Ninth Circuit has never gone so far as to affirmatively hold that musical works are necessarily entitled to broad protection).

⁹¹ *See, e.g., Charles W. Ross Builder, Inc. v. Olsen Fine Home Bldg., LLC*, 827 F.Supp.2d 607, 620 (E.D. Va. Sept. 29, 2011) (noting that “many courts have likened architectural works to compilations, which receive only ‘thin’ copyright protection” and collecting case law); *Harvester, Inc. v. Rule Joy Trammell + Rubio, LLC*, 716 F.Supp.2d 428, 438 (E.D. Va. June 3 2010) (“[T]he copyright protection in architectural works, as with traditional compilations, is necessarily thin.”).

⁹² *See Harvester, Inc. v. Rule Joy Trammell + Rubio, LLC*, 716 F.Supp.2d 428, 438 (E.D. Va. June 3 2010) (after concluding that the scope of protection granted to architectural works is thin, further narrowing the scope by holding that design elements dictated by “(1) market demands, (2) building codes and manufacturers’ clearance directives, (3) functional demands, (4) the existing building’s physical characteristics, and (5) the goal of ‘restoring’” the building are unprotectable).

⁹³ For example, Mark McKenna has argued that industrial design should be channeled into design patents, a point revealed in the legislative history of the 1976 Copyright Act that the Supreme Court misunderstood. *See* Mark P. McKenna, “Knowing Separability When We See It,” *University of Pennsylvania Law Review Online* 166: 128 (2017).

function other than to be ornamental.⁹⁴ While ostensibly an object of industrial design, in having no function other than to adorn the arm of its wearer, it is no different from the painting that enlivens a room.

By challenging long-held, facile assumptions about the rightful place of architecture and fashion, by challenging the notion that they only exist to serve the demands of clients by subverting those demands, frustrating those demands, and, in turn, creating *new* demands, dysfunctional designs, like the best of art, force us to look longer, to look differently. It's in the dissonance between form and function where the magic, the beauty, happens.

⁹⁴ See Andrea Cheng, "Why Are All of our Bags Shrinking?" *CR Fashion Book*, Nov. 26, 2019, <https://www.crfashionbook.com/fashion/a26832352/micro-bags-trend/> (noting that the smaller the bag is, "the more it functions only as a form of ornamentation, implying that you have hired help to lug your belongings").