NOTES

CONCEPTUAL SEPARABILITY AS CONCEIVABILITY: A PHILOSOPHICAL ANALYSIS OF THE USEFUL ARTICLES DOCTRINE

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In copyright law, the useful articles doctrine plays a significant role in defining the limits of copyright's domain and the boundary between copyright and patent. But the implicated notion of "conceptual separability" has proved to be difficult to define, and the Supreme Court's effort to define it in the recent case Star Athletica, L.L.C. v. Varsity Brands, Inc. is unsatisfying. In an effort to resolve this challenge, the present paper puts forth a novel test for conceptual separability, one that draws inspiration from the philosopher's idea of conceivability. The test is the following question: "When you conceive of the relevant useful article as lacking the design element in question, is the article you imagine functionally identical to the actual article?" If the answer to this question is yes, then the design element is conceptually separable from the article's utilitarian aspects; if not, then the element has failed the test, and it is not entitled to copyright protection. The present paper explores why this novel proposal avoids many of the pitfalls of existing tests (including the Court's own in Star Athletica), why it best achieves the aims of the useful articles doctrine, and what questions remain once the challenge of conceptual separability has been resolved.

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^{*} Copyright © 2018 by Mala Chatterjee. Joint-JD/PhD in Philosophy Candidate, 2018, New York University School of Law. B.A. in Philosophy from Stanford University, 2014. I warmly thank Barton Beebe, David Chamers, Scott Hemphill, Barry Friedman, Jeanne Fromer, Erick Sam, Chris Sprigman, my fellow members of the Furman Academic Scholars Program in the 2016–2017 year, and those in attendance at the Engelberg Center for Innovation Law and Policy's 2018 Tri-State Region IP Workshop, for their extremely helpful questions and comments.

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INTRODUCTION

Philosophers differentiate concepts and objects—and delineate what is *necessary* to a particular concept or object's identity—on the basis of conceivability.¹ They ask questions of the form: Can you conceive of X as lacking property Y? If the answer is no, then property Y is necessary to the identity of X. By way of example, a philosopher would say that because we can look at a red, two-by-two square and conceive of it as instead being blue or four-by-four, we can conclude that the color and size of the square are not necessary aspects of the square's identity. On the other hand, because we *cannot* conceive of a square that is also round, we can see that being non-round is a necessary aspect of what it is to be a square. This idea is both simple and intuitive, but the lens of conceivability can nonetheless bring something novel and helpful to a problem in copyright law, one that has yet to find a satisfying solution. This is the problem of conceptual separability.

First, some background: In copyright law, the protection granted to certain pictorial, graphic, and sculptural works is limited by the useful articles doctrine.² "Useful articles" are defined as objects having an intrinsic utilitarian function that is not merely to portray the appearance of the article or convey information; for example, dresses, belt buckles, containers, and industrial designs broadly.³ The design of a useful article is considered a pictorial, graphic, or sculptural work protectable under copyright law—"only if, and only to the extent that, such design incorporates pictorial, graphic, or sculptural features that can be *identified separately from*, and are capable of existing indepen-

¹ See generally David J. Chalmers, *Does Conceivability Entail Possibility?*, *in* CONCEIVABILITY AND POSSIBILITY 145, 145–200 (Tamar Szabó Gendler & John Hawthorne eds., 2002) (describing this analytical framework).

² See 17 U.S.C. § 101 (2012).

dently of, the utilitarian aspects of the article."⁴ This is to say that, if a useful article's expressive features are inseparable from its utilitarian aspects, those features are not entitled to copyright protection. This "separability" requirement includes both *physical* and *conceptual* separability.⁵ But although physical separability is relatively straightforward, conceptual separability has proven much more difficult to pin down.

The issue of conceptual separability emerged into focus in the Supreme Court's recent case Star Athletica, L.L.C. v. Varsity Brands. In this case, the Court addressed the question of whether copyright protection extends to the design elements on cheerleading uniforms: namely, the arrangement of colors, stripes, and chevrons on the fabric.⁶ Uniforms—and articles of clothing more generally—fall squarely within the purview of the useful articles doctrine, as they possess the intrinsic utilitarian function of covering their wearers' bodies.⁷ Because the design elements in question in *Star Athletica* were printed directly onto the fabric of said uniforms, they were certainly not physically separable. The Supreme Court thus articulated its own test for conceptual separability, and, in applying it, concluded that these design elements were entitled to copyright protection.⁸ However, as I will argue below, the Court's holding in this case did not successfully resolve the issue of conceptual separability. We therefore still need a satisfying test, so that we might delineate the limits of copyright's reach.

In the present paper, I propose a novel test for conceptual separability that draws inspiration from the way philosophers think about necessity and conceivability. In particular, I argue that the correct test is the following question: "When you conceive of the article as lacking the design element in question, is the article you imagine *functionally identical* to the actual article?" If the answer to this question is yes, then we can conclude that the design element is conceptually separable from the article's utilitarian aspects; if not, then the element has failed the test, and it is not entitled to copyright protection. I will

⁴ Id. (emphasis added).

⁵ See H.R. REP. No. 94-1476, at 55 (1976), as reprinted in 1976 U.S.C.C.A.N. 5659, 5668 ("Unless the shape of an automobile, airplane, ladies' dress, food processor, television set, or any other industrial product contains some element that, physically or conceptually, can be identified as separable from the utilitarian aspects of that article, the design would not be copyrighted").

⁶ Star Athletica, L.L.C. v. Varsity Brands, Inc., 137 S. Ct. 1002, 1007-08 (2017).

⁷ See 17 U.S.C. § 101 (defining "useful articles" as ones with intrinsic utilitarian functions that are not merely to portray the appearance of the article or to convey information).

⁸ Star Athletica, 137 S. Ct. at 1012.

argue that this test follows from the correct way to interpret the text of the useful articles doctrine, that it promotes the purpose of the doctrine, and that it possesses several important virtues that many of the prior separability tests have lacked.

In Part I, I give an account of the division of labor between patent and copyright law, and the role that the useful articles doctrine plays in maintaining this division. I then proceed to canvass the history of conceptual separability9-starting with the pre-Star Athletica tests, then turning to the Supreme Court's Star Athletica proposaland I highlight the problems faced by each account. In Part II, I propose the conceivability test and illustrate how it works when applied to example articles, and also explain why I take it to be the correct way of thinking about conceptual separability. Part III addresses philosophical issues regarding what precisely is meant by conceivability in this context—such as the kind of conceivability I have in mind, and the ways in which our conceptions must be constrained. Part IV responds to challenges faced by the test, such as whether it employs an impermissibly essentialist understanding of articles, and what "functionally identical" really means. Finally, in Part V, I apply the conceivability test to the articles of Star Athletica to show how the Court should have ruled in this case, and conclude by noting what further questions remain.

Ι

The Patent/Copyright Division of Labor, the Useful Articles Doctrine, and the Existing Separability Tests

Before turning our attention to conceivability, we must understand the purpose, history, and current status of the useful articles doctrine. Section I.A thus provides an overview of copyright and patent law, as well as the role of the useful articles doctrine in preserving their division of labor. Section I.B then summarizes the major, pre-*Star Athletica* tests for conceptual separability, a number of their many problems, and the Supreme Court's own attempt to resolve the matter in *Star Athletica*.

A. Copyright, Patent, and the Useful Articles in Between

In the United States, patent and copyright law are both grounded by the Constitution's Progress clause, which gives Congress the power to "promote the Progress of Science and useful Arts, by securing for

⁹ For the pre-Star Athletica tests of conceptual separability, see infra notes 24–29.

limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries."¹⁰ But the domains of copyright and patent are nonetheless distinct: Patent is the province of useful inventions, whereas copyright is home to expressive creations.¹¹ This division of labor is important to maintain, as patent and copyright are quite different with respect to their standards for granting protection, as well as the scope of protection that they grant. Inventions seeking patent protection are required to be useful, novel, and non-obvious.¹² In exchange for meeting these requirements, the patent regime grants inventors a total monopoly on the technology, such that even independent inventors to charge monopoly-high prices and maximize returns for the twenty-year patent term.¹⁴

Copyright protection, on the other hand, is granted automatically upon the creative work being "fixed in any tangible medium of expression."¹⁵ Copyright law does not require that creative works be novel or non-obvious; they need only be original, where "originality" is interpreted as requiring "independent creation plus a modicum of creativity."¹⁶ Copyright *does* recognize an independent creation defense, which means that exclusive rights over works of authorship are only enforceable against those who have "actually copied" the work in question.¹⁷ But copyright protection also lasts significantly longer than a patent, as the term is typically the whole lifetime of the

¹⁵ 17 U.S.C. § 102(a) (2012).

¹⁶ Feist Publ'ns, Inc. v. Rural Tel. Serv. Co., 499 U.S. 340, 346 (1991) (holding that information alone without a modicum of original creativity cannot be protected by copyright, and therefore that Rural's telephone directory was not copyrightable).

¹⁷ Castle Rock Entm't, Inc. v. Carol Publ'g Grp., Inc., 150 F.3d 132, 137 (2d Cir. 1998) (noting that establishing copyright infringement requires demonstrating actual copying and that the copying amounts to an improper appropriation).

¹⁰ U.S. CONST. art. I, § 8, cl. 8.

¹¹ E.g., Christopher Buccafusco, A Theory of Copyright Authorship, 102 VA. L. REV. 1229, 1239–40 (2016) (describing this distinction); Jeanne C. Fromer, A Psychology of Intellectual Property, 104 Nw. U. L. REV. 1441, 1446, 1449–50 (2010) (same).

¹² 35 U.S.C. §§ 101–103 (2012) (requiring that patent-eligible inventions be a "new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof," that is also not "obvious . . . to a person having ordinary skill in the art").

¹³ See 35 U.S.C. § 271 (2012) (identifying actions that constitute an infringement of patent); Kewanee Oil Co. v. Bicron Corp., 416 U.S. 470, 490 (1974) ("While trade secret law does not forbid the discovery of the trade secret by fair and honest means, *e.g.*, independent creation or reverse engineering, patent law operates 'against the world,' forbidding any use of the invention for whatever purpose for a significant length of time.").

¹⁴ See, e.g., Mark A. Lemley, *The Economics of Improvement in Intellectual Property Law*, 75 TEX. L. REV. 989, 996 (1997) (describing the anticompetitive effects of intellectual property rights).

author plus an additional seventy years.¹⁸ Given the varying standards and scopes of protection—carefully crafted by Congress to optimize incentives for production—it is important that the line between patent and copyright does not get blurred. In particular, scholars emphasize that copyright must not be abused by inventors hoping for a "backdoor patent" on their useful invention, as such abuse would result in a significantly longer exclusive right with a much lower standard for receiving protection.¹⁹

The useful articles doctrine is one mechanism whereby copyright law screens out functional elements of an object so that functionality remains the domain of patent alone.²⁰ The doctrine states that copyright law only protects the pictorial, graphic, or sculptural features of a useful article to the extent that these features "can be identified separately from, and are capable of existing independently of, the utilitarian aspects of the article."²¹ If a design element is not physically or conceptually separable from the article's utility, then it will fall outside of the purview of copyright protection. The element is then channeled to the utility patent domain, where-if it meets the higher bars of utility, novelty, and non-obviousness-it will be eligible for patent protection.²² The useful articles doctrine is thus an important safeguard in copyright, blockading against utilitarian elements and quelling attempts at backdoor patents.²³ But in order to correctly apply the doctrine, we must determine the correct test for conceptual separability.

²⁰ H.R. REP. No. 94–1476, at 54, *as reprinted in* 1976 U.S.C.C.A.N. at 5662–63, 5667 (noting that the useful articles doctrine was intended to exclude from copyright law works of industrial design, including the creativity associated with successfully marrying form and function).

²¹ 17 U.S.C. § 101 (2012).

²² See 35 U.S.C. §§ 101–103 (2012) (identifying the conditions for patentability).

²³ See, e.g., Moffat, *supra* note 19, at 1500 (noting that the useful articles doctrine is a "channeling doctrine[]" that directs functional works to the patent realm in order to "maintain the distinction between the two regimes").

¹⁸ 17 U.S.C. § 302(a) (2012).

¹⁹ E.g., Viva R. Moffat, *Mutant Copyrights and Backdoor Patents: The Problem of Overlapping Intellectual Property Protection*, 19 BERKELEY TECH. L.J. 1473, 1513–14 (2004) (arguing that the availability of overlapping protection threatens the intellectual property system by undermining the goals of intellectual property law and disrupting the balance struck by Congress in fashioning the copyright and patent systems); Mathias Strasser, *The Rational Basis of Trademark Protection Revisited: Putting the Dilution Doctrine into Context*, FORDHAM INTELL. PROP. MEDIA & ENT. L.J. 375, 427–28 (2000) (defining an attempt to gain additional protections for an item that falls within the subject matter of patent law a "back-door patent"). Another phrase for this is "patent smuggling." *See* Gerard Magliocca, *Ornamental Design and Incremental Innovation*, 86 MARQ. L. REV. 845, 855 (2003) (describing patent smuggling as an effort to "dodge the patent process" by receiving a different form of protection).

B. Conceptual Separability: The Old Tests

The Supreme Court's holding in Star Athletica is where the law of separability presently stands. But we cannot appreciate the challenges raised by this doctrine without first examining its history. Prior to Star Athletica, a number of mysterious, problematic tests for separability were proposed and utilized. To name only the most well-known of these: Professor Paul Goldstein has argued that a design is conceptually separable "if it can stand on its own as a work of art traditionally conceived, and if the useful article in which it is embodied would be equally useful without it";24 Nimmer on Copyright claimed that conceptual separability exists when there is "substantial likelihood that, even if the article had no utilitarian use, it would still be marketable . . . simply because of its aesthetic qualities";²⁵ Keiselstein-Cord v. Accessories by Pearl, Inc. held that the expressive aspect of the article is conceptually separable whenever it can be said to be "primary," and the utilitarian function can be said to be "subsidiary";²⁶ Brandir International, Inc. v. Cascade Pacific Lumber Co. applied the test articulated by Robert Denicola in his paper Applied Art and Industrial Design: A Suggested Approach to Copyright in Useful Articles,²⁷ holding that copyrightability is dependent on "the extent to which the work reflects artistic expression uninhibited by functional considerations";²⁸ and Judge Newman's dissent in Carol Barnhart v. Economy *Cover Corp.* proposed a finding of copyrightability where a work "stimulate[s] in the mind of the beholder a concept that is separate from the concept evoked by its utilitarian function."29

However, each of these tests faces problems. For instance, the Goldstein and Nimmer tests required that judges evaluate the artistic merit and marketability of the expressive elements, which they are arguably ill-equipped to do, and which might also introduce unneces-

²⁴ 1 Paul Goldstein, Copyright: Principles, Law & Practice § 2.5.3 (1989).

 $^{^{25}}$ 1 Melville B. Nimmer & David Nimmer, Nimmer on Copyright § 2A.08[B][4] (Matthew Bender, rev. ed. 2017).

²⁶ See Kieselstein-Cord v. Accessories by Pearl, Inc., 632 F.2d 989, 993 (2d Cir. 1980) (holding that belt buckles had conceptually separable sculptural elements and were therefore entitled to copyright protection).

²⁷ See Brandir Int'l, Inc. v. Cascade Pac. Lumber Co., 834 F.2d 1142, 1146–47 (2d Cir. 1987) (holding that functional considerations of the RIBBON bike rack overtook the aesthetic considerations, such that the form and function of the rack became "inextricably intertwined," and therefore precluding copyright protection).

²⁸ Robert C. Denicola, Applied Art and Industrial Design: A Suggested Approach to Copyright in Useful Articles, 67 MINN. L. REV. 707, 741 (1983).

²⁹ Carol Barnhart Inc. v. Econ. Cover Corp., 773 F.2d 411, 422 (2d Cir. 1985) (Newman, J., dissenting).

sary subjectivity into the analysis.³⁰ The *Kieselstein-Cord* test presupposed an untenable "primary" versus "subsidiary" distinction between the aesthetic versus the utilitarian aspects of the useful article, and *without* providing criteria for pinning down which is which, thereby lacking the predictability and stability needed from a legal rule.³¹ The *Brandir* "process" test rested on an unrealistic picture of how useful articles are made—namely, that their design process is wholly determined *either* on the basis of aesthetic considerations *or* on the basis of functional ones—when, in reality, the process probably involves both.³² And Judge Newman's test faced both an audience and a vagueness problem: Who exactly is the relevant beholder, and what does it really mean to "stimulate" two *separate* concepts in his mind, rather than, say, one united concept?³³ In sum, given all of these (as well as other) concerns, it is unsurprising that courts have been unable to uniformly embrace one proposal.

Thus, the state of the useful articles doctrine has historically been problematic.³⁴ Some circuits have shared the same test for conceptual separability, but others, like the Second Circuit, have had so many different and potentially incompatible tests that it is not even clear

³¹ See, e.g., Barnhart, 773 F.2d at 421 (Newman, J., dissenting) (arguing that *Kieselstein-Cord* "offers little guidance to the trier of fact, or the judge endeavoring to determine whether a triable issue of fact exists, as to what is being measured by the classifications 'primary' and 'subsidiary'").

³² Judge Winter's dissent argued against the *Brandir* test on the grounds that it makes protection depend on "largely fortuitous circumstances concerning the creation of the design in issue." *Brandir Int'l*, 834 F.2d at 1151 (Winter, J., dissenting). Others have argued that the approach has no basis in statute or legislative history, and is "out of step" with the rest of copyright law by requiring an investigation into the intent of the artist. *E.g.*, Shira Perlmutter, *Conceptual Separability and Copyright in the Designs of Useful Articles*, 37 J. COPYRIGHT SOC'Y U.S.A. 339, 372 (1990).

³³ The majority in *Barnhart* argued against Judge Newman's test on the grounds that it is "so ethereal as to amount to a 'non-test' that would be extremely difficult, if not impossible, to administer," and that almost any utilitarian article may be viewed by some as art depending on how it is displayed, citing examples of a Campbell's Soup can or a pair of scissors. *Barnhart*, 773 F.2d at 419 n.5.

³⁴ See Varsity Brands, Inc. v. Star Athletica, L.L.C., 799 F.3d 468, 484–85 (6th Cir. 2015) (summarizing nine existing tests for conceptual separability and describing the resultant circuit split).

³⁰ See John B. Fowles, The Utility of a Bright-Line Rule in Copyright Law: Freeing Judges from Aesthetic Controversy and Conceptual Separability in Leicester v. Warner Bros., 12 UCLA ENT. L. REV. 301, 302 (2005) (arguing that relying on judges' aesthetic understanding—or lack thereof—in deciding copyright cases could lead judges to sink deep into a "quagmire of conceptual separability" (quoting Leicester v. Warner Bros., 232 F.3d 1212, 1223 (9th Cir. 2000) (Tashima, J., concurring))). Nimmer's test has also been criticized by Nimmer himself on the grounds that a "likelihood of marketability" standard is foreign to copyright, could disproportionately favor more conventional or popular forms of art, and is very difficult to prove. NIMMER & NIMMER, supra note 25.

which has predominated within that circuit.³⁵ This has led to inconsistency and unpredictability, as well as a litigation-generating effect with more extreme sorts of cases.³⁶ Moreover, the lack of clarity with respect to where the law stands has distorted its ability to produce the incentives it aims to produce. Copyright law has thus long needed a test that can be universally embraced by courts, as well as depended on by plaintiffs and defendants alike.

The Supreme Court set out to resolve these challenges in *Star Athletica, L.L.C. v. Varsity Brands.*³⁷ Rather than choosing to apply any one of the aforementioned tests, the Court opted for a much more minimal analysis. In particular, it held the following:

[A] feature incorporated into the design of a useful article is eligible for copyright protection only if the feature (1) can be perceived as a two- or three-dimensional work of art separate from the useful article and (2) would qualify as a protectable pictorial, graphic, or sculptural work—either on its own or fixed in some other tangible medium of expression—if it were imagined separately from the useful article into which it is incorporated.³⁸

This account of conceptual separability has become the law of the land, thereby purporting to dissolve the aforementioned inconsistency and unpredictability. But this test is *also* crucially mistaken. I will elaborate on the *Star Athletica* test and its problems—ones which the conceivability test itself successfully avoids—in the section below.

Π

THE CONCEIVABILITY TEST

A. The Proposal

Conceivability—broadly understood as the imaginative ability to represent a scenario involving actual or non-actual things in actual or non-actual configurations³⁹—is a philosophically significant notion, traditionally taken to be a guide to possibility and necessity.⁴⁰ The thought is that, if a certain configuration of an object is conceivable,

³⁵ Id.

³⁶ See Brief Amicus Curiae on Behalf of Intellectual Property Professors in Support of Petitioner at 11, Star Athletica, L.L.C. v. Varsity Brands, Inc., 137 S. Ct. 1002 (2017) (No. 15-866) (arguing that increased contestability of separability has encouraged plaintiffs to bring more extreme cases).

 $^{^{37}}$ Star Athletica, 137 S. Ct. at 1007 (noting the Court's intent to resolve disagreements in this realm).

³⁸ Id.

³⁹ Tamar Szabó Gendler & John Hawthorne, *Introduction: Conceivability and Possibility, in* CONCEIVABILITY AND POSSIBILITY 1, 1 (Tamar Szabó Gendler & John Hawthorne eds., 2002).

⁴⁰ Id.

then this is a *possible* configuration; conversely, if an object cannot be conceived of as lacking a certain property, then this property is *necessary* to the object in question.⁴¹ We understand conceivability in action when we look at examples. So, for instance, we can conceive a certain blond-haired human as having red hair. We can imagine humans with any number of different hair colors, in fact, because hair color is a *contingent* property. On the other hand, we cannot conceive of a human that is not an organism. We might conceive of things that *look and act* like humans—perhaps that are even qualitative duplicates of humans—which we might call robots, or something similar. But these nonetheless cannot be actually human, because being human necessarily involves being an organism.⁴²

The conceivability framework is well-suited for conceptual separability because it can tease apart what design elements are necessary to the *functionality* of the article. In other words, once we have determined the function of the article, we can utilize the lens of conceivability to determine if a certain expressive element is necessary to the article's performance of that function. The conceivability test is thus as follows: When you conceive of the article as lacking the design element in question, is the article you imagine functionally identical to the actual article? If the answer is yes, then the design element is not necessary to the article's function. It is conceptually separable from the article's utilitarian aspects, and it is entitled to copyright protection. On the other hand, if the answer is no, then the design element has failed the test and falls out of the purview of copyright law.

B. Applying the Test

Before canvassing the virtues of this proposal, and to help us get a better sense of how the proposal works, let us apply it to particular examples of useful articles from actual separability cases to see what outcomes it generates. First, pulling from *Kieselstein-Cord*, imagine a belt buckle, a utilitarian object, that is *also* a sculptured design "cast in

⁴¹ See *id.* There is a philosophical issue here regarding what *kind* of necessity I have in mind for the purposes of the conceivability test. This issue is addressed in Section IV.

 $^{^{42}}$ To further elucidate the distinction between contingent and necessary properties as illustrated by conceivability, consider the following examples: 1) I can conceive of the pain I am experiencing in my left arm being instead located in my right arm, but I cannot conceive of the pain I am experiencing being such that I have it without feeling it, because feeling a pain is necessary to having a pain. 2) I can conceive of my pet black poodle Bertrand being a white poodle, but I cannot conceive of Bertrand being a plush toy poodle while still being himself, because being an actual dog is necessary to being Bertrand. 3) I can conceive of the number 2 being denoted by the symbol "&" instead of the symbol "2," but I cannot conceive of the number 2 *not* being a prime number, because being a prime number is necessary to being the number 2.

precious metals—decorative in nature and used as jewelry."⁴³ The question presented is whether this sculptural design is entitled to copyright protection. Applying the conceivability test, the right question to ask is the following: In conceiving of the same belt buckle without the decorative, sculptural design, do we conceive of something that has the same functionality as the existing belt buckle? The answer in this case is yes. The conceived-of buckle is, though less beautiful, still able to be worn, to be fastened, to perform all of the actual buckle's functions. The design thus passes the conceivability test and is entitled to protection, which is what the *Kieselstein-Cord* court held (but, unfortunately, using the mysterious primary/subsidiary test).⁴⁴

On the other hand, consider the articles of Barnhart. This case regarded the design of human torso mannequins, used for the purpose of displaying clothes as they would look when worn.45 The mannequins were designed to imitate the muscular chest of a man, and the breasts and waist of a woman; the question at hand was whether these elements were conceptually separable from the mannequin's functionality. Applying the conceivability test, we start by conceiving of the mannequins without the design elements, and we then ask whether the articles we conceive of are functionally identical to the actual articles. In this case, the answer is no. Given that the mannequin's function is to show how clothing will look when worn by actual human beings, the body-like design elements are necessary for performing this function. If the mannequin did not have this design, it would instead be shaped as a flat rectangle, incapable of emulating the look of the clothing on an actual person's figure. Therefore, these design elements of the mannequins are not entitled to copyright protection.

C. The Camouflage Example

It is worth noting that an implication of the conceivability test is that the *same* design element might be conceptually separable on one object but not on another. For instance, consider the example of a camouflage design, which was discussed in the oral arguments heard by the Supreme Court for *Star Athletica*.⁴⁶ This camouflage design might be printed on a military uniform, or it might instead appear on a fashion accessory such as a purse. In the context of the military uni-

⁴³ Kieselstein-Cord v. Accessories by Pearl, Inc., 632 F.2d 989, 990 (2d Cir. 1980).

⁴⁴ See id. at 994 (finding that the buckle designs at issue constituted copyrightable creative art).

⁴⁵ Carol Barnhart Inc. v. Economy Cover Corp., 773 F.2d 411, 412 (2d Cir. 1985).

⁴⁶ Transcript of Oral Argument at 4, Star Athletica, L.L.C. v. Varsity Brands, Inc., 137 S. Ct. 1002 (2017) (No. 15-866).

form, the design would not pass the conceivability test. If we conceive of the uniform without the camouflage print, then what we imagine is not functionally identical to the actual uniform because it is not able to successfully hide the soldier in the woods.⁴⁷ Given that concealing the soldier is one of the primary functions of the uniform (along with protecting the soldier's body from the elements), the camouflage print is clearly not conceptually separable in this context.⁴⁸

On the other hand, a fashion purse with a camouflage print does not do anything to conceal the wearer of the purse, nor does it aim to itself be concealed. Such a print is placed on a purse precisely *to* be seen, to "portray the appearance" of the print itself, for purely aesthetic and expressive purposes.⁴⁹ In this context, the print is analogous to a polka dot or a paisley, or any other stylish pattern printed on a fabric. And if we imagine the purse in question without the print, then what we imagine is functionally identical to the original purse: It still holds the wearer's belongings and can be worn by the wearer over her arm. The camouflage in this context is thus a purely expressive design choice, conceptually separable from the functionality of the purse.

D. The Virtues of Conceivability

As simple and minimal as the conceivability test might seem, it has several important virtues lacked by many of the previous tests. First, the conceivability test is in accordance with the statutory text. Recall that the design of a useful article is protectable "only if and only to the extent that such design incorporates pictorial, graphic, or sculptural features that can be identified separately from, and are capable of existing independently of, the utilitarian aspects of the article."50 Under the conceivability test, if the "utilitarian aspects of the article" are so intertwined with the design element that they are modified when we conceive of the two pulled apart, then it follows that those design elements cannot be identified separately from the article's useful aspects. To put it another way, conceivability allows us to distinguish which elements of the article are actually part of the article's functionality. By focusing on the persistence of the article's utility when stripped of design elements, rather than on the persistence of the design element's aesthetic value when stripped of utility,

⁴⁷ Id. at 23.

⁴⁸ See, e.g., Fulmer v. United States, 103 F. Supp. 1021 (Cl. Ct. 1952) (finding no copyright infringement when the government produced parachutes printed with the plaintiff's camouflage design because of the useful articles doctrine).

⁴⁹ 17 U.S.C. § 101 (2012) ("A 'useful article' . . . [has] an intrinsic utilitarian function that is not merely to portray the appearance of the article or to convey information.").

⁵⁰ Id. (emphasis added).

the test draws our attention to what the statute is trying to safeguard against.⁵¹ The statute does not ask us whether the pictorial, graphic, or sculptural (PGS) features have artistic worth once separated, or whether they could stand on their own as a copyrightable work. It instead specifically asks whether the PGS features can exist independently from the utilitarian aspects.⁵² Therefore, the correct test for conceptual separability must inquire about the PGS features' relationship to these utilitarian aspects.

This reading of the statute is undoubtedly aligned with the purpose of the useful articles doctrine; namely, assuring that no functional elements-including elements that are both expressive and functional-receive backdoor patent protection through copyright law.⁵³ If we read the statute such that it only asks whether the PGS features can stand as works of art on their own, then PGS features which do count as works of art, but which are also necessary for the functionality of the article (such that their removal diminishes functionality), will receive copyright protection. But this amounts to granting monopolies on functional elements, despite copyright not being in the business of functionality. On the other hand, the interpretation of the statute presupposed by the conceivability test successfully maintains the division of labor between copyright and patent. If a design element has some functional content and therefore fails the conceivability test, then it will not be granted protection, regardless of whether it could be a work of art on its own. This forecloses copyrights in elements wielding utilitarian power, leaving the business of utility monopolies squarely in the province of patent law.

In fact, failure to accord with this purpose of the useful articles doctrine is precisely what's wrong with the Supreme Court's own pro-

- ⁵² See supra note 49 and accompanying text.
- ⁵³ Moffat, *supra* note 19, at 1500.

⁵¹ This approach has been adopted by a number of courts. See, e.g., Whimsicality, Inc. v. Rubie's Costume Co., 891 F.2d 452, 455 (2d Cir. 1989) (holding that the decorative elements of clothing are particularly unlikely to meet the test of conceptual separability because they are intrinsic to the decorative function of the clothing, rather than asking the question of whether the elements could stand on their own as a work of art); Eliya, Inc. v. Kohl's Dept. Stores, No. 06 Civ. 195 (GEL), slip op. at 22 (S.D.N.Y. Sept. 13, 2006) (holding that the design elements of the shoe at issue are unprotected because they all serve a functional purpose on the shoe). Other courts have taken the opposite approach, however. See, e.g., Universal Furniture Int'l, Inc. v. Collezione Europa USA, Inc., 618 F.3d 417, 434–35 (4th Cir. 2010) (holding that the design elements of the furniture pieces are aesthetic objects in their own right and therefore protected, without discussing whether the furniture itself would be functionally different when stripped of the ornamentation); Galiano v. Harrah's Operating Co., 416 F.3d 411, 420-21 (5th Cir. 2005) (holding that the uniform designs are unprotected because they are unable to "moonlight as a piece of marketable artwork," without considering whether they are necessary to the functionality of the uniforms).

posal, as put forth in *Star Athletica*. Recall that the Court articulated the following test for separability:

[A] feature incorporated into the design of a useful article is eligible for copyright protection only if the feature (1) can be perceived as a two- or three-dimensional work of art separate from the useful article and (2) would qualify as a protectable pictorial, graphic, or sculptural work—either on its own or fixed in some other tangible medium of expression—if it were imagined separately from the useful article into which it is incorporated.⁵⁴

In a sense, this test makes use of an insight underlying the conceivability test; that, in simply imagining the feature in question separately from the useful article, we can arrive at genuine insight into its copyrightability or lack thereof. However, what the Supreme Court's test gets wrong is what it asks us about what we imagine. By focusing on whether the feature would count a PGS work when separated from the article, the Court's test pays no attention to whether the feature is useful at all, or whether the functionality of the article would be the same without it. Again, this is problematic because a feature could both qualify as a PGS work as well as have functionality. Thus, under the Court's test, it is entirely possible for creators to receive backdoor patents in functional features, as long as they can also meet the notoriously thin requirements of originality and a modicum of creativity.55 Star Athletica's test thus does not achieve the useful articles doctrine's aim of keeping the domains of copyright and patent separated, instead opening the floodgates for backdoor patents in those hybrid functional/PGS elements. The conceivability test, on the other hand, successfully preserves this desired division of labor.

Next, the conceivability test minimizes many of the challenges faced by the pre-*Star Athletica* test proposals. For instance, this test does not require that aesthetic judgments about the artistic merit of the design elements as works of art, nor does it require them to make complex empirical judgments about their marketability without utility, the process that was behind their creation, or whether the aesthetic elements are perceived by viewers as primary or secondary to the utilitarian ones. To the contrary, the conceivability test *only* asks for a metaphysical judgment about whether the design element is necessary to the utility. Luckily, judges and juries make such metaphysical judgments all the time: To name only a few, they are tasked with deter-

⁵⁴ Star Athletica, L.L.C. v. Varsity Brands, Inc., 137 S. Ct. 1002, 1007 (2017).

⁵⁵ See, e.g., Bleistein v. Donaldson Lithographing Co., 188 U.S. 239, 251 (1903) (noting that originality and creativity in copyright law need only pass "the narrowest and most obvious limits," as persons trained only in the law are not equipped to evaluate creative works beyond this low bar).

mining whether a certain action caused a certain effect, whether something was actually copied from another work, and whether one expressive feature of a work is identical to a feature of another.⁵⁶ Tasking courts with the conceivability test is thus asking judges and juries to make a kind of judgment they are already equipped and responsible for making.

Further, compared to the tests of Nimmer, Goldstein, Kieselstein-Cord, and Judge Newman, the conceivability test does not raise as challenging of an audience problem. If we ask the questions of whether some expressive element is a work of art, is marketable, is a primary rather than subsidiary feature, or triggers two separate concepts rather than one, then we will likely get different answers depending on who we ask. An artist or designer will have different judgments than a mere appreciator of art or design, who will see things differently still from someone uninitiated or uninterested in aesthetic works. Of course, one might argue that *all* separability tests will necessarily raise an audience problem: After all, who gets to decide whether the element is conceptually separable, and why is their point of view the favored one? But the audience problem faced by the conceivability test seems to be comparatively less severe. When asked the question of whether something is conceivable, people are much less likely to disagree. Conceivability is a property so closely tied to logic, to the imaginative limitations shared by us all, that only in controversial cases will opinions seriously diverge.⁵⁷ Sidestepping the more daunting challenge of designating some particular point of view thus minimizes a problem—both theoretical and practical in nature that many other tests cannot avoid.58

Another virtue of the conceivability test is that it treats conceptual separability as analogous to *physical* separability. This virtue is

⁵⁶ See, e.g., In re Polemis & Furness, Withy & Co., 3 K.B. 560 (1921) (holding that a negligent actor had caused damages and was therefore liable); Three Boys Music Corp. v. Bolton, 212 F.3d 477 (9th Cir. 2000) (explaining that actual copying can be established on the basis of circumstantial evidence of access, and that the allegedly infringing work was substantially similar to the work which it had allegedly infringed).

⁵⁷ One might worry that this argument overlooks the fact that there are many different *kinds* of conceivability. In order for there to really be uniformity in different applications of the conceivability test, it is important that all those applying the test have precisely the same kind of conceivability in mind. This issue is addressed in Section IV.

⁵⁸ This is not to say that there isn't still *some* audience problem in the conceivability test: It is true that we must still always ask whose point of view is the one from which we should ask the separability question. It also might turn out that *all* of the difficult separability cases are controversial enough for opinions to diverge. Nonetheless, it is reasonable to posit that the range of disagreement produced by the conceivability question will be comparatively more constrained than it is in the question of aesthetic value or marketability.

contrasted against the many existing, cumbersome tests asking us something that looks and operates totally differently from the physical separability inquiry.⁵⁹ In the case of physical separability, the question to ask is whether we can actually take away the design element from the article without affecting the article's utility.⁶⁰ Following in line, the conceivability test asks if we can *imagine* the article's utility unaffected with the design element taken away. The similarity between these two tests is both conceptually satisfying and practically convenient; and, by linking the conceptual separability reasoning processes to the processes of the straightforward physical case, the conceivability test promotes uniformity and predictability.

The preceding discussion helps clarify the way the conceivability test works and why it is desirable as an alternative. But it does not clarify everything. There are important remaining questions requiring what precisely is *meant* by conceivability, and what sorts of conceptions I have in mind. I answer these questions in the following section.

III

PHILOSOPHICAL ISSUES IN CONCEIVING

Conceivability is a complex and philosophically loaded property, and we must therefore pin down how exactly it is to be understood for the purposes of this test. I have argued that conceivability is an appropriate lens for separability because it is a guide to *necessity*, and can thus illuminate whether an element is necessary for an article's functionality. But philosophers have recognized that there are multiple types of necessity—for instance, "logical," "metaphysical," or "nomological" necessity—and so we must clarify which type we are interested in illuminating.⁶¹ Section III.A briefly addresses this issue. Next, a more pressing issue is that there are a *number* of ways in which one can conceive of some article without some design element. For instance, one might imagine the article with the element ripped away, or with a replacement element, or instead with an additional, unrelated modification. The problem with this range of possibilities is that different conceptions might yield different answers to the test. Thus,

⁵⁹ See Brief Amicus Curiae on Behalf of Intellectual Property Professors in Support of Petitioner, *supra* note 36, at 9 (arguing that the correct test for conceptual separability considers it to be "a kind of coda to physical separability").

⁶⁰ U.S. COPYRIGHT OFFICE, COMPENDIUM OF U.S. COPYRIGHT OFFICE PRACTICES § 924.2(A) (3d ed. 2014) ("Physical separability means that the useful article contains pictorial, graphic, or sculptural features that can be physically separated from the article by ordinary means while leaving the utilitarian aspects of the article completely intact.").

⁶¹ See, e.g., Kit Fine, *The Varieties of Necessity, in* CONCEIVABILITY AND POSSIBILITY 253, 254 (Tamar Szabó Gendler & John Hawthorne eds., 2002) (discussing different types of necessity).

we must specify which is the correct way of conceiving. This question is answered in III.B.

A. Conceivability & Necessity

The philosopher's first concern is one that might not plague lawyers and judges, but we will nonetheless briefly address it here. Recall the idea that, if a certain configuration of an object is conceivable, then this is taken to be a "possible" configuration.⁶² There are a number of ways in which we can understand possibility. For instance, *metaphysical* possibility is a particularly broad notion: It is arguably broader than *nomological* or *natural* possibility, which refers only to what is possible in worlds in which the laws of nature are the same as those in the actual world.⁶³ The idea here is that certain things are both conceivable and metaphysically possible which nonetheless violate the laws of nature. For instance, it is conceivable and metaphysically possible for a ball dropped from a rooftop in some other possible world to not fall at all, even though the laws of nature of the actual world are such that the ball would fall (and accelerate at a rate of 9.8 meters per second squared).

This technical distinction pushes us to clarify the correct understanding of the conceivability test, because it shows that a certain notion of conceivability would be too broad for our purposes. To see this, consider a useful article that has some functional element X which is necessary given the laws of nature, but which would *not* be necessary in certain worlds with different laws. Suppose that element X enables the article to function whilst handling gravitational effects, and it therefore would not be necessary if there were no gravity. In this case, one might worry that, if we allow ourselves to conceive of the article without element X in worlds with no gravity, then element X would pass the conceivability test. However, intuitively, this element is still functional, as it *does* serve an important functional role in the actual object (namely, that of handling gravitational effects).

The preceding consideration highlights that what we are concerned with in the useful articles doctrine is not whether the elements are necessary to the articles' functionality in just any possible world,

⁶² *E.g.*, Gendler & Hawthorne, *supra* note 39, at 1–2 (noting this premise). Many philosophers argue that conceivability is not a perfect guide to metaphysical possibility, as there are some propositions that are conceivable *in some sense* but are not metaphysically possible. For example, it is *prima facie* conceivable that both Goldbach's conjecture, as well as its negation, are true, even though one of these is metaphysically impossible. Nonetheless, philosophers still tend to think that *for the most part* conceivability is a reliable guide to possibility. *E.g.*, Chalmers, *supra* note 1, at 146.

⁶³ Fine, *supra* note 61, at 254, 262.

but crucially, only in worlds where the laws of nature are the *same* as the actual world. Thus, the relevant sense of conceivability is comparatively narrow; it should serve as a guide to *nomological* necessity specifically, and not the broader notion of metaphysical necessity.⁶⁴ This is to say that the conceivability test should be understood as employing a *conditional* conceivability, whereby we restrict ourselves to imagining only worlds close enough to ours such that they have the same laws of nature as the actual world. The more precise formulation of the test is thus as follows: "*Holding the laws of nature fixed*, when you conceive of the article as lacking the design element in question, is the article you imagine functionally identical to the actual article?"

B. Conceiving How: The Closest, Uncreative, Alternative Design

The second philosophical question is much more practically pertinent, demanding that we specify the *manner* of conceiving. The worry is that, given the variety of possible conceptions we could have about the article in question, it might be that certain conceptions will indicate that the relevant element is functionally neutral, whereas other conceptions will indicate that it is not. To see this, consider the example of a creatively shaped pocket on a shirt. We could conceive of this shirt as though we have simply ripped the pocket from it (in which case what we imagine would not be functionally identical to the actual shirt, as it would lack the "carrying around small objects" func-

⁶⁴ It is worth pointing out that some philosophers do hold that the laws of nature are metaphysically necessary. Weaker versions of this view hold that the necessity arises for Kripkean reasons. The thought here is that the reference of terms such as "mass" are fixed a posteriori to a certain specific property in our world, such that worlds with different laws do not contain mass, and therefore, that the laws actually governing mass are metaphysically necessary. See, e.g., Fine, supra note 61, at 258 (arguing that we should "exercise caution in judging a natural necessity to be metaphysically contingent"). See generally SAUL A. KRIPKE, NAMING AND NECESSITY (1980). Stronger versions of this view argue that the laws of nature must be metaphysically necessary in order for there to be a robust difference between the laws of nature and merely true accidental generalizations. Sydney Shoemaker, Causality and Properties, in TIME AND CAUSE 109, 124 (Peter Van Inwagen ed., 1980) (arguing that "[C]ausal necessity is just a species of logical necessity"); Chris Swoyer, The Nature of Natural Laws, 60 AUSTRALASIAN J. PHIL. 203, 203 (1982) (arguing that natural laws involve "genuine" and "metaphysically necessary" relations between properties). For these philosophers, metaphysical and nomological necessity are, in some sense, one and the same, which might initially seem to entail that these philosophers do not have the aforementioned need for a narrower conception of conceivability. However, this only follows if these philosophers also accept that conceivability is a reliable guide to possibility. Of course, it would be implausible to think the laws of nature are necessary as well as that conceivability is a reliable guide to possibility, because we can easily conceive of possible worlds in which the laws of nature are different from our own (such as the gravity-free world imagined above). Thus, for the purposes of our test, regardless of which conception of the laws of nature we ultimately embrace, we still need a narrower conception of conceivability.

tionality); or, we could conceive of the shirt with a pocket of the same size and location, but with a wholly uncreative square shape (in which case what we imagine *would* be functionally identical, as it would still be able to carry around small objects). Instead, we could imagine a very different pocket replacing the original one (which may or may not pass the conceivability test, depending on the size or usefulness of this new pocket); or, finally, we could imagine the pocket to be designed in a very different way, in a different size and with a different, unique shape (which also may or may not pass the conceivability test depending on the nature of the new design). In light of these various outcomes, it is clear that we need a constraint on what *sort* of conception is called for by this test, so that it yields consistent applications and results.

At this point, it is important to remember that the conceivability test only asks us to imagine away the design element itself. It does not ask us to imagine away the part of the article that the design element is on, nor does it ask us to imagine the article with some additional component or design. With this in mind, we can see that the first conception noted above—namely, ripping the whole pocket from the shirt—gets things wrong because it removes more than just the *design* of the pocket. The third conception—which adds a new, different pocket to the article—also goes beyond the test by doing more than merely removing the design. Similarly, the fourth conception replaces the relevant design with a different creative design, and it thus also adds something that the conceivability test does not call for. The second approach, however, simply strips the pocket of its unique design. The pocket we are imagining is the same pocket, only without the relevant design, and also without the addition of anything further. This is therefore the approach that accords with the demands of the conceivability test.

At this point, one might wonder if we will always be able to cleanly imagine away *only and all of* the design element in question. For one thing, doing so requires a precise account of what exactly constitutes the design element. This alone should not be problematic, because we already need such an account in order to understand the copyright claim itself. But there is a more challenging worry here: namely, that once we've stripped the article of the creative design, we might then need to *replace* it with some alternative design, in order for the article to continue to exist at all.

The issue of alternative designs arose in the preceding pocket example, in which I deployed the notion of an uncreative squareshaped pocket. As noted above, we must keep in mind that the conceivability test does not ask us to replace the design under consideration with an alternative *creative* design. This is an important limitation on our conceptions; otherwise, there might be cases where the design element in question—call it element A—really is functional and should not pass the test, and yet it does pass, because we are improperly conceiving of the article with some alternative, creative element B that is itself functional (in fact, functionally equivalent to element A) and that therefore *substitutes* the functionality of element A. Thus, to avoid such cases, our conceptions must be limited so that we may only replace the creative design element with an *uncreative* one, such as the basic square shape of the pocket described above.

In addition to uncreativeness, we need one more constraint on our conceptions in order to avoid the "functional supplement" worry above; namely, the constraint of *closeness*.⁶⁵ To see why, consider the pocket example once again. In conceiving of the pocket with only an uncreative square shape, we might imagine it as twice the size of the original pocket (A), half the size of the original pocket (B), or the exact same size as the original pocket (C). All three of these conceptions involve uncreative alternative designs, but only C is functionally identical to the original pocket; A has more functionality, whereas B has less. Under conceptions A or B, the design element would fail the test. But this is problematic, because the change in functionality is clearly not attributable to the loss of the design element itself. Conceptions A and B both deviate from the original pocket on an unnecessary dimension, thereby modifying the article in an unnecessary and functional way. This deviance eliminates the control in our conception experiment and thereby sabotages our efforts to test the specific element at hand. Luckily, such sabotage can be easily avoided. If we restrict our conception to the alternative design *closest* to the actual one-which, in this case, would be C-then we prevent unnecessary deviance from interfering with our inquiry.

The complete constraint on our conceptions is thus as follows: In conceiving of the article without the relevant design element, we must replace the creative design element with only the *closest uncreative alternative design*. This constraint is both effective and intuitive. If we modify the article in our conception in unnecessary ways, then this creates the possibility that we have added or changed something that *compensates* for the function of the element lost; but if we have compensated for lost functionality, then the element lost must itself be functional. On the other hand, straying too far from the original article could result in functional modifications for which the element

⁶⁵ For a discussion elaborating the idea of "closeness" of possible worlds, see DAVID K. LEWIS, COUNTERFACTUALS 91–95 (Blackwell Publishers 2001) (1973).

itself is not to blame, such that we might mistakenly fail elements which should actually pass the conceivability test. The range of permissible conceptions can leave no room for such functional sleight of hand, and the constraints of uncreativeness and closeness achieve this goal.

One might wonder if the notion of "uncreative designs" needs further explication. But creativity already plays a central role in copyright law, and it is therefore not something requiring elaboration uniquely for this test. As explained in Section I, in order for an expression to be a candidate for copyright protection to begin with (whether or not it is a part of a useful article), it must *first* fulfill the requirement of possessing a modicum of creativity. In *Feist*, for example, the Court held that a phonebook, organized by alphabetization, was not sufficiently creative to meet the modicum of creativity requirement.⁶⁶ The question of whether a certain design element will qualify as creative will depend on the context and article in question, and so we will not say more about it here. For our purposes, it is enough to note that I use the notion of "uncreative designs" to refer specifically to ones *not* entitled to copyright protection, because they fall short of a modicum of creativity.

I have argued that restricting ourselves to the *closest uncreative alternative design* will prevent us from imagining articles with functional alterations, so that we can clearly identify the functionality (or lack thereof) of the design element at hand. But we are still left with a substantial challenge: functionality itself.

IV

Essentiality & Functionality

The preceding section has clarified how to understand conceivability. But in order to *apply* the conceivability test, we must understand what it means for articles to be functionally identical. This challenge is taken up in the present section. First, Section IV.A responds to the objection that the conceivability test understands functions in an impermissibly essentialist or idealistic way. Section IV.B then turns to the challenge of defining articles' functions, ultimately concluding that *all* tests for separability—and not just the conceivability test—are faced with this challenge. It is therefore the challenge we should turn our attention to next.

⁶⁶ Feist Publ'ns, Inc. v. Rural Tel. Serv. Co., 499 U.S. 340, 361-62 (1991).

A. Essentiality

One might object that the conceivability test is problematically essentialist. Is it really the case that design elements either *will* or *will not* be essential to the functionality of a certain type of article? To illustrate this worry, consider one commonly encountered example: a table. Initially, we might think that a four-legged design is essential to the functionality of a table, as a table would not be able to perform its function of supporting objects without such legs. But this thought is quickly undermined when we conceive of a triangle-shaped, threelegged table, serving the function of supporting objects just as well as its four-legged counterparts. We can also conceive of a long, thin, twolegged table, or even a square-shaped table supported by one large leg at its very center. Given this variety in possible, functional table forms, does it make sense to think of *any* of the particular legs of a table as essential to its functionality? If we did think in this way, then which leg(s) would be the essential ones?

The problem with this worry is that it hinges on a misreading of what the test really demands, and the level of generality at which it operates. The conceivability test is to be applied at the level of *partic*ular useful articles: It does not ask us to consider the kind of article at the platonic level, or to determine what properties are essential to the functionality of "tables" abstractly construed. Instead, the test asks us what is necessary to the functionality of the particular article in question. When examining particulars, the task of determining what is necessary to their function is much easier than in the context of abstract object types. We do not need some background conception of what is essential to tables or backpacks or watches generally; we must only reflect on the table or backpack or watch at hand. This entails that, although a certain design element might not be necessary for the functionality of all backpacks, it could still be necessary for the function of the particular backpack in question. This particular backpack is the true object of our inquiry. Thus, we can and should apply the test on the design elements of said backpack, without any commitments about what all backpacks essentially require.

B. Functionality

Nonetheless, even at the level of particulars, we are still faced with the challenge of defining an article's function. How fine-grained should our notion of functionality really be?⁶⁷ Consider the example

⁶⁷ See, e.g., Margot E. Kaminski & Guy A. Rub, *Copyright's Framing Problem*, 64 UCLA L. REV. 1102, 1129 (2017) (discussing the widespread "framing" problems in copyright law and noting that, in useful articles doctrine cases, the court is faced with a

of one hookah water container, a useful article shaped in a particularly distinctive and creative way, as discussed in Inhale, Inc. v. Starbuzz Tobacco, Inc.⁶⁸ In applying the conceivability test, we ask: When we conceive of this hookah water container without this distinctive and creative shape—and instead with the uncreative shape of a straightforward tube-do we imagine something functionally identical to the actual hookah water container? Clearly, the answer here depends on the fineness of grain of our specification of the function. If the function of the container is merely "containing water," then the imagined container-stripped of the distinctive and creative designis functionally identical to the actual container. But if the function is defined more specifically, say, as "containing a certain amount of water in a certain shape," then the imagined container has different functional properties than the actual one. Given this difference in outcome of the two inquiries, it is clear how much hinges on how we specify the function. So, how do we determine the right specification?

A different strand of the worry with pinning down an article's function is that we limit ourselves to *legitimate* functions, such that not every possible use of the article is deemed a part of its functionality. After all, useful articles likely *could* be used in a variety of ways, including ways in which they are not designed or intended to be used. A pair of sneakers could be used as a doorstopper, or as a paperweight, or as a hammer to pound in a nail. A pair of socks could be used as a handkerchief. Should these possible but peripheral functions factor into our separability analysis? Certainly not. After all, such an overly permissive definition of "utilitarian aspects" would take us through a downward spiral, seemingly implying that basically every article-useful or not-has countless utilitarian aspects, and that basically every property of said article is relevant to one of these aspects or another. But the mere existence of a distinction between utilitarian and non-utilitarian aspects suggests that this overly permissive definition of "utilitarian aspects" is not the correct way to interpret the statutory text. Thus, in our application of the conceivability test and our determination of the article's functional identity, our inquiry should be limited to its central, legitimate utilitarian aspects, and not all of the many possible functions that the article could be used to perform.

framing problem in deciding whether to zoom in by considering each possible utilitarian function of parts of the work, or zoom out by focusing on the main functionality of the work as a whole).

 $^{^{68}}$ 755 F.3d 1038, 1040–42 (9th Cir. 2014) (holding that the shape of a hookah water container is not entitled to copyright protection "insofar as the shape accomplishes the function" of holding the water).

This is not to say that determining an article's central, legitimate functions will always be straightforward. The question of what counts as a function poses great challenges in copyright as well as design patent and trademark law, all of which channel functional elements (albeit, each with slightly different understandings of "functionality") away from their spheres of protection and towards the utility patent regime.⁶⁹ The challenge was notably discussed in the oral arguments heard by the Supreme Court in Star Athletica.⁷⁰ Exploring the ideas of Chris Buccafusco and Jeanne Fromer, the Court inquired about whether the function of a uniform is not merely to clothe the cheerleaders and convey the fact that they are cheerleaders, but also, to make the cheerleaders look good by altering the perception of their bodies in a flattering way.⁷¹ If "looking good on" counts as one of these article's central and legitimate utilitarian aspects,72 then the design elements of the uniforms that make the article look good onnamely, the stripes and chevrons positioned in a flattering and slimming way—would not pass the conceivability test. The outcome thus turns on our understanding of the article's legitimate function. But is it implausible to think that legitimate functions can be so defined?

In one effort to dissolve this concern, we might argue that legitimate functions should be delineated on the basis of the purpose of the article. For example, the purpose of a shoe is not to hold doors open, but rather, to enclose, protect, and support the wearer's foot; therefore, being a doorstop is not a part of the shoe's legitimate function. This purposive understanding has intuitive appeal, but it faces its own challenges. For instance, whose understanding of the purpose is relevant for our analysis? If the relevant perspective is the article's designer, then "purpose" might turn out to be under-inclusive of functional aspects. To see this, imagine that an artist creates a certain sculpture. It later turns out that the shape of the sculpture is particularly well-suited for some legitimate utilitarian purpose, but it is one that the artist had not herself contemplated. In this case, even though the artist did not create the design with this useful purpose in mind, we would still not want to grant her a copyright in said utility. Such a grant would undermine the statutory language of the useful articles

⁶⁹ See supra Part I.

⁷⁰ See Transcript of Oral Argument at 4–7, Star Athletica, L.L.C. v. Varsity Brands, Inc., 137 S. Ct. 1002 (2017) (No. 15-866) (discussing the function of cheerleading uniform designs).

⁷¹ *Id.*; *see also* Christopher Buccafusco & Jeanne C. Fromer, *Fashion's Function in Intellectual Property Law*, 93 NOTRE DAME L. REV. 51, 53 (2017) (arguing that clothing design elements which perform the function of making the wearer look good should not be entitled to copyright protection).

⁷² Buccafusco & Fromer, *supra* note 71, at 103.

doctrine,⁷³ because the sculpture's shape *really is* utilitarian, even if the artist herself did not know this whilst designing it. It would also undercut the policy behind the useful articles doctrine, as this copyright would prevent the rest of society from benefiting from a genuinely useful design.

On the other hand, if the relevant point of view for determining the purpose is that of the article's consumer, then "purpose" might become unreasonably expansive. Imagine that an artist creates a particular abstract design for t-shirts, and it turns out that this design is extraordinarily good at scaring away kittens. Although kitten-scaring is a function that, we can imagine, very few people would see as legitimate, we can also imagine that some customers with particularly strong aversions to kittens would find this to be extremely useful. These individuals might therefore insist that the design should not be entitled to copyright protection, even though the vast majority of us would not deem this a legitimate function of the design, instead seeing it as purely aesthetic. If we do not want such an idiosyncratic function to count as legitimate, then we cannot delineate legitimate functions on the basis of just any customer's purpose.

So, we are clearly faced with a challenge in delineating legitimate functions. But this challenge is not uniquely ours. The conceivability test is an account of separability, and any such account will also demand a conception of functionality. This becomes especially obvious once we recall that, in order to determine if the article is a useful article at all, we must determine if it has an intrinsic utilitarian function. In other words, the question of the article's intrinsic functionality must be answered before even asking the question of separability. To see this, recall that the Copyright Act defines useful articles as ones with an "intrinsic utilitarian function" that is not merely to "portray the appearance of the article or . . . convey information."⁷⁴ Thus, an article does not count as a useful article if it merely has some utilitarian function, or a *possible* utilitarian function; it must have an intrinsic one in particular. The following passage from Christopher Buccafusco and Jeanne Fromer's paper Fashion's Function in Intellectual Property Law further illustrates this point:

Most paintings do not have an intrinsic utilitarian function. Instead, they exist to portray their own appearance. When we think about why most paintings are painted and why they are valued by consumers, we focus on their representational characteristics. Indeed, virtually all of the decisions that an artist makes about the content

⁷³ See 17 U.S.C. § 101 (2012) (excluding the "utilitarian aspects" of "pictorial, graphic, and sculptural" works from copyright protection).

of a painting are concerned with representational or depictive ends. This is not to say that a painting can have no function. It may successfully cover a hole in the wall Yet this sort of utilitarian function is one that is shared by all physical objects and is thus not intrinsic, or essential, to a painting . . . in any meaningful way. This sort of non-intrinsic functionality does not magically make paintings . . . intrinsically utilitarian. Most paintings, then, are by application of the copyright statute, not useful articles.⁷⁵

Given that we must already engage in the aforementioned sort of analysis in order to determine if the object qualifies as a useful article, there is no reason to think we cannot engage in a similar analysis in order to determine what the legitimate functions are. To be sure, it might still require a further step to define the function, one beyond merely confirming that it has some such function; but again, every test of separability will require this further step.

To see an example of how such functionality-defining analysis should go, consider again the *Inhale, Inc.* hookah water container.⁷⁶ One might argue that the actual container is not functionally identical to the one we conceive of without the distinctive shape, as it does not contain the same amount of water in the same way. But this argument is unconvincing, since it is unlikely that the amount and manner of containing water is part of the hookah water container's *legitimate* function, which is simply to contain water. The amount and manner of containing serve no further functional ends, nor are they relevant to the utility of the hookah or its ability to operate properly. We simply don't care how much water the container holds, or what particular shape it holds it in. We can thus conclude that the conceived-of container stripped of its design elements is functionally identical to the actual one, and therefore—contrary to what the *Inhale, Inc.* court held⁷⁷—the shape is conceptually separable from its functionality.

To summarize the dialectic of the preceding paragraphs, I began in Section IV.A by considering the worry that it is unrealistic to think that certain design elements are essential to certain types of useful articles, and I dissolved this worry by re-emphasizing that the conceivability test is to be applied at the level of particular useful articles, rather than such articles abstractly construed. I then turned in Section IV.B to the challenges in defining a particular article's function, such as the fact that a function can be defined with more or less fineness of grain, or can include all of the possible functions of the article (even

⁷⁵ Buccafusco & Fromer, *supra* note 71, at 66–67.

⁷⁶ Inhale, Inc. v. Starbuzz Tobacco, Inc., 755 F.3d 1038 (9th Cir. 2014).

⁷⁷ See id. at 1042 ("The shape of a container is not independent of the container's utilitarian function \ldots .").

incidental ones). I argued that we can and should restrict ourselves to considering the object's *legitimate* functions, and that this is a feasible restriction, because we must already consider whether the object has legitimate functions in our "intrinsic utilitarian function" analysis. Finally, I gave an example of how this "legitimate function" analysis should go.

As I noted above, while it is true that the conceivability test must be paired with an understanding of functionality in order for it to actually be applied, this requirement is by no means uniquely faced by the conceivability test alone. *All* tests for separability require an account of functionality, and it is therefore not a weakness of the present proposal. In fact, we might even think it a virtue of the conceivability test that it allows us to cleanly separate functionality and separability analysis. We may now tease apart the questions of *what* the legitimate function of the article is and *whether* the design element is conceptually separable from that function, and such a systematic approach to the messy and tricky useful articles doctrine will no doubt better ensure that courts get things right with their analysis.

V

STAR ATHLETICA & OTHER CONCLUDING REMARKS

A. Conceivability & Cheerleading Uniforms

What does the conceivability test tell us about the facts of *Star Athletica*? For one thing, in applying the test, we can see even more clearly that the difficult remaining question is that of functionality (and it is the question we should turn our attention to next, now that separability has been resolved). Recall again that the dispute in *Star Athletica* regarded the design elements of cheerleader uniforms: stripes and chevrons, placed in particular colors and locations on otherwise white clothing articles.⁷⁸ Applying the conceivability test, we pose the following question: When we conceive of the uniform as lacking these design elements, is the uniform we conceive of functionally identical to the actual uniform?

I argue that the right answer to this question is no, assuming a very plausible account of the functions of cheerleading uniforms. In particular, these functions—beyond those of any other, ordinary article of clothing—are to create the impression that the wearer is a cheerleader, that *all* the wearers are members of the same cheerleading squad, and that the whole cheerleading squad is uniquely attached to the team for which it cheers. Now applying the conceiva-

⁷⁸ Star Athletica, L.L.C. v. Varsity Brands, Inc., 137 S. Ct. 1002, 1007 (2017).

bility test, since the uniform we conceive of must employ the *closest uncreative alternative design*, we cannot replace the stripes and chevrons we've stripped away with some newly imagined design elements. But such blank uniforms are not identical to the existing ones with respect to the aforementioned three functions. A cheerleading uniform without stripes, chevrons, or any other such embellishment does not look like a cheerleading uniform at all, instead looking only like a white skirt and blouse. This is unhelpful in identifying a squad or delineating it from another squad (for instance, in the context of a game or large-scale cheerleading competition), nor does it do anything to suggest which team the cheerleading squad is attached to. Therefore, the design elements in this case do not pass the conceivability test, and thus the Supreme Court erred in extending them copyright protection.

Of course, my analysis might be contested on the basis of how I characterize the functions of these uniforms. For instance, it might be objected that the three functions listed constitute "convey[ing] information," and that they are therefore irrelevant under the useful articles doctrine.⁷⁹ I have two responses to this objection. First, under the statute, even if the article must have an intrinsic utilitarian function beyond conveying information in order to count as a *useful article*, this alone does not entail that, once the article does count (by virtue of having some other function), the conveyance of information cannot be regarded as one of its legitimate functions. In the present case, this is to say that although the cheerleading uniforms would not have qualified as a "useful article" if they had no function beyond conveying information, this is irrelevant because (a) they do have some other intrinsic utilitarian function (namely, covering the wearer's body) and (b) conveying information can still count among their legitimate functions in our separability analysis.

My other response to this objection is that it might be a mistake to characterize the aforementioned functions of cheerleading uniforms as merely conveying information. To the contrary, creating an impression involves causing a certain kind of *phenomenology*, or creating an *experience* in the viewers. All uniforms, by nature, convey some information about their wearers, but cheerleaders are also performers of a certain kind. The impression that these uniforms create of the wearers—their relationships with each other as fellow squad members, as well as their relationship to the team for which they

⁷⁹ See 17 U.S.C. § 101 ("A 'useful article' is an article having an intrinsic utilitarian function that is not merely to portray the appearance of the article *or to convey information*." (emphasis added)).

cheer—are functionally important to that performance. After all, it would not be the same if the cheerleaders wore different, generic outfits, but with large nametags identifying themselves as cheerleaders of squad X cheering for team Y.⁸⁰ The relevant impression created by these uniforms might therefore be more than mere information conveyance.⁸¹

It could also be argued that cheerleading uniforms have other important functions beyond the three I have listed. For example, they might perform the function of flattering the wearer by causing her figure to be perceived as an hourglass shape.⁸² However, this point is orthogonal to our present purposes. For even if the legitimate functions of these uniforms are not limited to the three which I have listed, these three functions are nonetheless legitimate. It is sufficient for our purposes that I have identified only these three, as I have argued that the design elements already fail the conceivability test with respect to these functions alone. Adding more to our list of functions will not change our answer to the conceivability question, and therefore does not bear on what our test tells us about the right holding for this case.

We have considered and addressed some concerns with my analysis of *Star Athletica*, but I must emphasize again that these concerns were with the *functionality* analysis, and *not* with the conceivability test itself. Applying the conceivability test to *Star Athletica* illustrates how this test differs from the Court's own, and it further shows us that now, armed with our newly minted test for conceptual separability, we must turn our attention to the challenges of functionality.

B. Conclusion

I criticized the Court's holding in *Star Athletica* on the grounds that it undermines the very purpose of the useful articles doctrine. Far from maintaining the division of labor between copyright and patent law, the test permits creators to utilize the thin requirements of copy-

⁸⁰ By "not the same," I do not mean merely for aesthetic reasons, but for functional ones. For instance, rather than immediately getting the impression that cheerleader A is on squad X and cheering for team Y, I would have to *read* her nametag. This is a functional difference!

⁸¹ Is "creating an impression" too broad to count as a legitimate function? Would it entail, for instance, that *paintings* are functional, or is there room for a distinct impression-creating function that is important to the cheerleaders' performance? This is another compelling line of criticism, and I'm not sure that it would be wrong; but given that it takes us too far down the rabbit hole, I will cut off my exploration of functionality at this juncture, leaving it aside for further, important work.

⁸² See Buccafusco & Fromer, *supra* note 71, at 53 ("[F]eatures of these uniform designs—stripes, chevrons, zigzags, and color-blocking . . . affect the perception of the wearer by drawing attention to certain aspects of the wearer's body over others and by making the wearer seem to be curvier and have a longer torso.").

right to obtain backdoor patents on functional features of articles. This is to say that, as a general matter, Star Athletica creates a wider domain of copyright, one which includes elements that are both expressive and functional. In comparison, the conceivability test yields a more restricted domain, according to which only those features which are purely expressive-but not functional-fall within copyright's scope. At this point, we might wonder whether the conceivability test expands or contracts the domain of copyright in other ways, or whether it has implications for policy debates regarding the domain of copyright. For example, scholars have advanced policy arguments emphasizing the importance that the useful articles doctrine either prevent or permit copyright protection for certain kinds of articles. In one such a debate, Kal Raustiala and Christopher Sprigman have argued that the lack of copyright protection in the fashion industry is actually an important force in propelling the cyclical industry forward.⁸³ On the other hand, Christopher S. Hemphill and Jeannie Suk have argued that the limitations on copyright protection offered to fashion design results in under-protecting designers from "close copying," thereby undermining innovation and incentives to create, as well as distorting the direction of innovation.84

If the conceivability proposal had either a broadening or narrowing effect on the scope of protection afforded to fashion designs, then it would also have implications for the policy concerns raised by the aforementioned discussions. However, the test is rather neutral. This is precisely because the conceivability test, unlike many proposals of the past,⁸⁵ allows for separability and functionality analyses to be independent of one another.⁸⁶ Many of the policy concerns regarding the domain of copyright will ultimately rise or fall depending on our account of functionality, and the conceivability test does not presuppose any commitments with respect to that question. Accepting the conceivability test is compatible with both accepting or denying Buccafusco and Fromer's earlier-mentioned account of fashion and

⁸⁶ See supra Section IV.

⁸³ Kal Raustiala & Christopher Sprigman, *The Piracy Paradox: Innovation and Intellectual Property in Fashion Design*, 92 VA. L. REV. 1687, 1691 (2006).

⁸⁴ C. Scott Hemphill & Jeannie Suk, *The Law, Culture, and Economics of Fashion*, 61 STAN. L. REV. 1147, 1153 (2009).

⁸⁵ See, e.g., Brandir Int'l, Inc. v. Cascade Pac. Lumber Co., 834 F.2d 1142, 1145 (2d Cir. 1987) (holding that copyrightability is dependent on "the extent to which the work reflects artistic expression uninhibited by functional considerations" (quoting Robert C. Denicola, *Applied Art and Industrial Design: A Suggested Approach to Copyright in Useful Articles*, 67 MINN. L. REV. 707, 741 (1983))); Kieselstein-Cord v. Accessories by Pearl, Inc., 632 F.2d 989, 993 (2d Cir. 1980) (holding that the expressive aspect is conceptually separable whenever it can be said to be "primary," and the function can be said to be "subsidiary").

"looking good on" functionality, for example, according to which design elements that positively affect the way the garment's wearer is perceived qualify as functional.⁸⁷ Undoubtedly, whether or not one accepts the Buccafusco and Fromer view on the function of fashion or any other proposed account of functionality for that matter—will have broadening or narrowing effects on the domain of copyright; but this can all be freely debated and determined in its own right, independent from the question of conceptual separability.

independent from the question of conceptual separability. We have seen that the philosophers' tool for delineating necessities is well-suited to the task of delineating whether or not an expressive element is independent from its article's utility. I have argued that this test follows from the appropriate reading of the statutory text of the useful articles doctrine, and that it also promotes the purpose of the doctrine by maintaining the division of labor between copyright and patent law. I have outlined a number of virtues that this test possesses which many others lack, including that it treats conceptual separability as analogous to physical separability, and that it does not require judges to make aesthetic judgments about the value of expressive elements. I have responded to philosophical challenges raised by the notion of conceiving, and have further remarked on how the notion of functionality fits with this test. And although it is true that the conceivability test must be paired with the right account of functionality in order for it to be successfully applied, the need for such an account is equally shared by all other candidate tests. Fittingly, questions of functionality should remain conceptually separate.

⁸⁷ See Buccafusco & Fromer, supra note 71, at 53, 103.