

## TRADEMARK FUNCTIONALITY REEXAMINED

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*Robert G. Bone\**

### ABSTRACT

The functionality doctrine in trademark law bars protection for some, but not all, source-identifying product features—so-called trade dress—that contribute to a product's functional performance. Despite the doctrine's lengthy history, its critical role in promoting intellectual property policies, and the considerable attention devoted to it in recent decades, courts and commentators still disagree about what functionality means, the reasons why functional marks should not be protected, and how far the functionality bar should extend. This confusion is due largely to a lack of clarity and rigor at the normative level. This article seeks to remedy the deficiency. It traces the history of the functionality doctrine, critically analyzes its policy foundations, and outlines an analytical approach for designing optimal functionality rules.

### 1. INTRODUCTION

Functionality is one of the most important but also one of the most confusing and unsettled areas of trademark law. When it applies, the functionality doctrine bars trademark protection for source-identifying product features that contribute to the functional performance of a product. For example, modern functionality law would bar protection for the distinctive shape of a wrench that substantially improves the wrench's leveraging ability, even when consumers associate the shape with plaintiff's wrenches and are likely to be confused by the defendant's use of the same shape. This simple statement of the doctrine, however, conceals a host of tricky normative and doctrinal issues. Despite its lengthy history, the critical role it plays in promoting intellectual property policies, and

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\* G. Rollie White Professor of Law, The University of Texas School of Law, 727 East Dean Keeton Street, Austin, Texas, USA, Phone: 512-232-5562. Email: [rbone@law.utexas.edu](mailto:rbone@law.utexas.edu) Many thanks to Oren Bracha, Dick Craswell, Stacey Dogan, Ward Farnsworth, Wendy Gordon, Justin Hughes, Louis Kaplow, Angela Littwin, Mark Lemley, Mark McKenna, Eric Rasmusen, Steve Shavell, and an anonymous referee for helpful comments, and thanks, too, for input received from a UT Law School Faculty Colloquium, Harvard Law School Law and Economics Seminar, Stanford Law School Law and Economics Seminar, and University of Kansas Law School Faculty Workshop. I am also grateful to Ashley Crowell and Kelsey Pflieger for their excellent research and editing assistance.

the considerable attention devoted to it in recent decades, the law of functionality today is in a state of disarray. Courts and commentators disagree about what functionality means, why functional marks should not be protected, and how far the functionality bar should extend.<sup>1</sup>

In fact, the confusion over functionality is in some ways more serious in trademark than it is in patent and copyright. In patent and copyright, the concept of functionality has relatively clear work to do in assigning intellectual property (IP) subject matter to the IP law designed to incentivize it. In patent, for example, only functionally useful inventions can obtain utility patents (35 U.S.C. § 101 (2012)) and the distinction between functional and ornamental defines the line between utility patents and design patents (1 [Chisum 2014](#), § 1.04). In copyright, the idea-expression and merger doctrines direct functionally useful subject matter to the patent system (1 [Nimmer & Nimmer 2013](#), § 2.03[D]; 4 *ibid.*, §§ 13.03[A][4], 13.03[B][3]).<sup>2</sup>

Trademark's functionality doctrine works differently. The purpose of trademark law is not to incentivize innovation, but rather to protect source-identifying symbols that consumers use to access information about product quality. As a result, there are no per se subject-matter exclusions; any kind of symbol can qualify for protection as long as it is capable of identifying source, including subject matter within the domains of patent and copyright. This means that trademark functionality is not about assigning subject matter properly. But it is unclear what it is about. Some jurists argue that the doctrine's main purpose is promoting competition in the product market. Others argue that it has an important role to play in enforcing a general right to copy, or at least a right to copy those features that were once patented. These disagreements at the policy level generate confusion at the level of doctrine.

Sorting out this confusion is important to the effective operation of trademark law. Many commentators, including myself, have complained about the ever-widening scope of trademark liability ([Bone 2006](#), pp. 548–555; [Lemley & McKenna 2010b](#), pp. 137–139) In recent decades, for example, courts

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1 Most commentators agree that functionality law is a confusing mess today. See, e.g., [Dinwoodie & Janis \(2014\)](#) at 159–160 (noting that scholars disagree about much of functionality law but they all agree that “neither courts nor jurists have successfully formulated a consistent and workable approach to functionality”); [Cohen \(2010\)](#) at 597–598 (noting that “many scholars have struggled to make sense of the *Traffix* decision and, many courts have struggled to apply it” and that over the previous five years, “the case law has continued to be confused and inconsistent”); [Thurmon \(2004\)](#) at 244 (stating that functionality law is “a mess”); [Weinberg \(2010\)](#) at 323–324 (observing that “there is broad critical consensus that *Traffix* made the functionality doctrine inconsistent, confusing, and opaque”).

2 I am not suggesting that functionality is easy to apply in patent and copyright. In fact, there are many tricky issues in both fields. My only point is that the purpose of functionality in patent and copyright is relatively clear compared to the purpose of functionality in trademark law.

have expanded the types of confusion that are actionable (Bone 2012, pp. 1337–1338).<sup>3</sup> The functionality doctrine is an important bulwark against expanding trademark law too far. It is, therefore, critical to get functionality right.

The functionality doctrine is also an important device for weeding out anticompetitive strike suits. There are many instances in which firms turn to trademark law to protect design features of their products—so-called “trade dress”—when other forms of IP protection are unavailable. Some of these suits are genuine attempts to prevent consumer confusion, but others are illegitimate efforts to restrain competition or extend the term of an expired patent. The functionality doctrine can help deter the illegitimate suits, but only if it is designed properly.

This article analyzes the source of the problems with trademark functionality and charts a path toward a more workable and sensible set of rules. The messy state of current functionality law has to do with lack of clarity and rigor at the normative level. Defenders of a broad functionality bar do a poor job of identifying its benefits, fail to take account of its costs, and largely ignore the practical obstacles to operationalizing it in administrable rules. This article aims to rebuild the doctrine on a firmer policy foundation.

Section 2 provides a brief sketch of modern trademark law. Section 3 traces the history of the functionality doctrine. It describes a major change during the 1930s in how functionality was conceived—from a conception based on a natural right to copy to a conception grounded in competition policy. This change is critical not only to the precedential relevance of the early cases, but also, and more importantly, to the continued relevance of the right to copy today.

Section 4 then turns to modern functionality law. It closely examines the Supreme Court’s holding and reasoning in *TrafFix Devices, Inc. v. Marketing Displays, Inc.* (532 U.S. 23 (2001)), the pivotal modern functionality decision. *TrafFix* left many questions unanswered and lower courts have read the opinion in inconsistent ways. The result is a muddled body of case law that can be traced to the Court’s failure to provide a clear policy rationale.

Section 5 begins the task of rebuilding the doctrine. It focuses on the right to copy product features not protected by patent or copyright, and argues that this right is in fact no right at all, but rather a policy to be balanced with others in the social welfare calculus. This policy has value because it promotes competition in the product market, facilitates downstream innovation, and channels patentable inventions to the patent system. It follows that the social benefits of allowing free copying of product features should depend on the extent to which copying promotes these three goals, and it also follows that those benefits

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3 Moreover, Congress has recognized liability in the absence of confusion when use of a mark by another dilutes its distinctiveness (15 U.S.C. § 1125(c) (2012)).

must be balanced against the costs of denying trademark protection measured in terms of consumer confusion and resulting harm.

Section 6 conducts this cost–benefit analysis. The result is a framework for crafting workable rules, as well as a set of specific reforms that significantly alter the rules the Supreme Court adopted in *TrafFix*. Indeed, the cost–benefit analysis in Section 6 has even more radical implications, for it raises serious doubts about whether trademark law should protect product features at all.

## 2. BRIEF SUMMARY OF MODERN TRADEMARK LAW

A mark is a source-identifying symbol. Consumers rely on marks to distinguish one brand of a product from another.<sup>4</sup> When a consumer sees CREST on a tube of toothpaste, for example, he can be confident that the particular toothpaste tube came from the same source as every other tube marked CREST. This works, however, only if the consumer can rely on CREST to designate a single source of toothpaste. Trademark law protects this source-identifying function by preventing others from using the same or similar symbol in a way likely to confuse consumers. This protection is justified as reducing consumer search costs, avoiding harm to consumers from purchasing the wrong product, supporting seller incentives to maintain product quality, and preventing injury to or misappropriation of a seller’s goodwill.<sup>5</sup>

The search cost rationale treats the mark as a device for efficiently communicating product information to the marketplace (1 *McCarthy* 2014, § 3:5; *Landes & Posner* 2003, pp. 166–168). When a mark reliably indicates a single source, consumers can use it to retrieve information about product quality that they learn from advertising, word of mouth, and personal experience. For example, assuming uniform quality, a consumer who sees CREST on a tube of toothpaste can be confident that the toothpaste in the tube has the qualities she expects from CREST toothpaste. Without the mark, consumers would have to search for this information in other, presumably more costly, ways. Moreover, if searching is too costly, consumers might buy another company’s inferior product bearing the same mark thinking it came from the original seller. The

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4 See *Qualitex Co. v. Jacobson Prods. Co.*, 514 U.S. 159, 163–164 (1995). I shall refer to goods and services collectively as “products” and I shall use the term “trademark” to refer to any source-identifying symbol whether it is used for goods or for services. Also, I refer to source-identifying product features as trademarks or trade dress and the legal protection accorded to them as trademark protection or trade dress protection.

5 For a comprehensive overview of trademark policies, both economic and moral, see *Bone* (2004) at 2105–2116; *Bone* (2012) at 1348–1363.

result would be allocative inefficiency, and possibly even serious personal injury to consumers.

In addition, with trademark protection, a seller can use the mark to communicate the high quality of its product to consumers, and this gives the seller an incentive to maintain and even improve that quality.<sup>6</sup> Without trademark protection, competitors could sell lower quality products (presumably manufactured at a lower cost) under the same mark for a lower price.<sup>7</sup> Consumers would buy at the lower price believing, incorrectly, that the competitor's product is the same high quality as the original seller's. The original seller then would be forced to lower the quality of its product to match the competitor's price and recapture its customers. The result would be a ratcheting down of product quality.<sup>8</sup>

Finally, courts from time to time have justified protection on the ground that free riding on a firm's goodwill or injuring that goodwill is unfair (Bone 2006). In this regard, trademark law focuses on protecting sellers as well as consumers.<sup>9</sup> However, these seller-focused justifications are highly controversial, and it is not clear how much of a role they play separate from consumer-based rationales (Bone 2012, pp. 1355–1357).

Thus, trademark law is different from copyright and patent. The latter aim to incentivize the creation of intellectual products—original works of authorship in the case of copyright and inventions in the case of patent. The primary purpose of trademark law is to prevent others from using source-identifying symbols to confuse consumers about source or sponsorship. Even the trademark policy of facilitating product quality is not necessarily about incentivizing product improvements, but rather about preventing the erosion of incentives already created by other forms of IP protection. To be sure, insofar as

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6 See *Qualitex*, 514 U.S. at 163–164.

7 Technically, this argument applies only to attributes that consumers cannot easily verify prior to purchase. Economists divide product attributes into three categories: search attributes, experience attributes, and credence attributes. A search attribute, such as color, can be verified by inspecting the product prior to purchase. A competitor has no incentive to lower the quality of a search attribute since consumers cannot be deceived. However, competitors do have incentives to lower the quality of experience and credence attributes. An experience attribute, such as taste, can be verified only by using the product, and a credence attribute, such as longevity benefits, cannot be verified by inspection or experience.

8 More precisely, the market would suffer from a lemons problem. Assuming consumers know that some products bearing the mark are high quality and some low quality without knowing which are which, they would be willing to pay a price no higher than the expected value given the two types, but that price will be lower than the price a firm must charge to produce a high quality product.

9 *Qualitex*, 514 U.S. at 163–164.

trademark protection allows a seller to reap greater profits, it can have the indirect effect of stimulating innovation, but this is not its primary purpose.

Trademark doctrine tracks this policy framework. Any type of symbol or device can serve as a trademark as long as it is capable of functioning as a source identifier. This includes words such as CREST for toothpaste, short phrases such as “YOU’RE FIRED” for entertainment services, and logos such as the Nike swoosh. It also includes visible features of a product’s configuration or packaging—so-called “trade dress.” Trade dress has been defined as “the total image of a product and may include features such as size, shape, color or color combinations, texture, graphics, or even particular sales techniques.”<sup>10</sup> Examples include the visible dual-spring design of a road sign, the interior décor of a restaurant, the contrasting red color on the outsoles of Louboutin shoes, the smell of scented sewing thread, the sound of the NBC chimes, and even Goats-on-a-Roof, live goats grazing on the sod roof of a Swedish restaurant.<sup>11</sup> Each of these features can become a source identifier if consumers associate the feature with products sold by only one firm.

To make out a *prima facie* case for trademark infringement, the plaintiff must prove that it owns rights in a protectable mark and that the defendant’s use of a similar mark infringes those rights ([American Law Institute 1995](#), § 20). For a mark to be protectable, it must be distinctive, and for a mark to be distinctive, it must be at least capable of serving as a source identifier ([2 McCarthy 2014](#), § 11:1). The rules for determining distinctiveness are somewhat complicated and there is no need to parse the details. Briefly, some marks, classified as “inherently distinctive,” are protected as soon as they are used in trade, whereas others require proof that the mark has acquired what is called “secondary meaning” ([2 \*ibid.\*](#), § 11:4).<sup>12</sup> A mark is said to have secondary meaning when a significant portion of the consuming public actually uses it to identify a unique source of the product ([2 \*ibid.\*](#), § 16:34). For example, a fabricated word such as KODAK, coined just to serve as a mark, is inherently distinctive and protected as soon as it is used in trade, whereas a descriptive term such as FISH-FRI adopted as a mark for a batter mix used to fry fish

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10 *John H. Harland Co. v. Clarke Checks, Inc.*, 711 F.2d 966, 980 (11th Cir. 1983).

11 See *Traffix Devices, Inc. v. Marketing Displays, Inc.*, 532 U.S. 23, 31–35 (2001) (dual-spring design); *Qualitex*, 514 U.S. at 162 (noting the NBC chimes); *Two Pesos, Inc. v. Taco Cabana, Inc.*, 505 U.S. 763, 768–771 (1992) (restaurant décor); *Christian Louboutin S.A. v. Yves Saint Laurent Am., Holding, Inc.*, 696 F.3d 206, 211–213 (2d Cir. 2012) (Louboutin contrasting red outsoles); *In re Clarke*, 17 U.S.P.Q.2D (BNA) 1238, 1240 (TTAB 1990) (scented sewing thread); [Scheck \(2010\)](#) (goats grazing on a roof).

12 For example, secondary meaning exists in CREST for toothpaste because consumers believe that all toothpaste tubes marked CREST come from the same source—even if they do not know that Procter & Gamble is the source.

requires proof of secondary meaning; that is, proof that consumers actually associate FISH-FRI with a batter mix sold by only one firm (the mark owner).<sup>13</sup> The rules for determining the distinctiveness of trade dress are even more complicated, and once again there is no need to delve into the details. Roughly speaking, trade dress that is part of the packaging of a product can sometimes be inherently distinctive, whereas trade dress that is a component of the product itself can never be inherently distinctive and thus always requires proof of secondary meaning.<sup>14</sup>

Once a mark owner establishes distinctiveness and satisfies all the other requirements for a valid mark, it must then prove infringement. A mark is infringed when the defendant's use of the same or similar mark is likely to confuse consumers about source or sponsorship.<sup>15</sup> This infringement rule applies in the same way to trade dress as to any other type of mark. Thus, a

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13 *Zatarains, Inc. v. Oak Grove Smokehouse, Inc.*, 698 F.2d 786, 790–793 (5th Cir. 1983). There are five types of marks for purposes of determining distinctiveness: fanciful, arbitrary, suggestive, descriptive, and generic. See *Two Pesos, Inc. v. Taco Cabana, Inc.*, 505 U.S. 763, 768 (1992) (citing *Abercrombie & Fitch Co. v. Hunting World, Inc.*, 537 F.2d 4, 9 (2d Cir. 1976)). Fanciful marks such as KODAK are fabricated just to serve as marks. Arbitrary marks are existing words that say nothing about the product, such as SUN for computers. Suggestive marks, such as COPPERTONE for suntan lotion, suggest but do not directly describe attributes of the product, whereas descriptive marks such as FISH-FRI directly describe. Generic marks such as THERMOS for a vacuum bottle denote a general type of product rather than a brand. Fanciful, arbitrary, and suggestive marks are treated as inherently distinctive and protectable without proof of secondary meaning, but descriptive marks require secondary meaning. See, e.g., *Zatarains, Inc.*, 698 F.2d 786, at 790–93. Generic marks are not protectable at all. See, e.g., *King-Seeley Thermos Co. v. Aladdin Industries, Inc.*, 321 F.2d 577, 579 (2d Cir. 1963).

14 *Wal-Mart Stores, Inc. v. Samara Brothers, Inc.*, 529 U.S. 205, 215–16 (2000). The former is called “product packaging” trade dress and the latter “product design.” Cf. *ibid.*, at 208–209, 215–216 (classifying the patterns on children’s clothing as product design) with *ibid.*, at 212 (suggesting that the design of the “squat, brightly decorated plastic bottle” containing Tide detergent is product packaging). It is not always easy to distinguish between product packaging and product design, and the *Wal-Mart* Court adopted a default rule that trade dress should be classified as product design when in doubt. *Ibid.*, at 215; see *In Re Slokevage*, 441 F.3d 957, 962 (Fed. Cir. 2006) (noting that product design renders the product itself more useful or more appealing). 1 McCarthy (2014), § 8:12.50 (noting that courts use “a common sense approach in classifying trade dress as either product or package, asking what is the primary product that the buyer is purchasing”). Moreover, classifying trade dress as product packaging does not automatically guarantee distinctiveness. Some product packaging is inherently distinctive whereas other product packaging requires proof of secondary meaning, and there are different tests for marking the distinction. See *ibid.*, § 8:13 (discussing the different tests).

15 Actual confusion is unnecessary; likelihood of confusion suffices for liability (Bone 2012, pp. 1314–1315). In some special cases involving famous marks, infringement can be found on dilution grounds in the absence of confusion when the defendant’s use is likely to impair the distinctiveness of the mark. See 15 U.S.C. § 1125(c) (2012); 4 McCarthy (2014), § 24:102. Dilution-based liability is a recent development on the federal level and very controversial. I refer to it at times but focus mainly on confusion theories.

defendant can be enjoined from selling a competing product with the same trade dress feature if its use of that feature is likely to confuse consumers.

Trade dress protection, however, gives rise to a special problem not present for other types of marks.<sup>16</sup> Preventing firms from copying a product feature gives the original seller more than the exclusive use of a source identifier. It also gives it a potential monopoly over the feature itself. This is a particular concern when the feature is connected with something that consumers want when they buy the product, such as the shape of a wrench that improves its leverage. Trademark law is not supposed to confer monopolies in products; that is the province of copyright and patent (1 *McCarthy* 2014, § 6:3). Trademark law is supposed to bolster competition by facilitating the efficient communication of product information to the market and preventing unfair methods of competition.

Functionality is the trademark doctrine designed to handle this problem. When it applies, the functionality doctrine bars protection for useful or aesthetically pleasing trade dress even when the defendant's use of the same trade dress is likely to confuse consumers. Much of the controversy over the scope of the doctrine has to do with what is required to bar protection beyond the fact that the feature serves some utilitarian or aesthetic purpose important to the product's value.<sup>17</sup> There are two different approaches historically. One approach assumes that nothing more is required, that all trade dress that contributes substantially to the performance of a product is barred. The other approach uses a more fact-sensitive competitive necessity test. This test bars protection only when copying the trade dress is a competitive necessity, in the sense that there are no, or very few, alternative forms of trade dress that are not confusingly similar and that competitors can use to compete effectively in the relevant product market. Courts disagree about the specifics of how each approach should operate and the types of trade dress to which each should apply—and why.

### 3. HISTORY OF THE FUNCTIONALITY DOCTRINE: 1870–2001

To understand why functionality law is in such a muddle today, it is useful to examine how the doctrine developed historically. Some scholars claim that

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16 See 1 *McCarthy* (2014), § 8:1 (discussing the general problem and the potential conflict with patent law).

17 Courts sometimes express this point by distinguishing between *de facto* functionality and *de jure* functionality. See, e.g., *Vornado Air Circ. Sys., Inc. v. Duracraft Corp.*, 58 F.3d 1498 (10th Cir. 1995). Trade dress is *de facto* functional when it is functional in the ordinary lay sense; that is, when it actually contributes to what the product is supposed to do. Trade dress is *de jure* functional when it is legally barred from trademark protection. Thus, *de facto* functionality is a necessary but not a sufficient condition for *de jure* functionality.



courts applied the competitive necessity in the early stages of the doctrine's development (see [Cohen 2010](#), pp. 599, 603–605; [Thurmon 2004](#), pp. 248–250, 268). Others claim that courts from the beginning vacillated between a flexible competitive necessity test and a *per se* bar ([McKenna 2011](#), pp. 836–839). Neither account is correct. There is no evidence that the competitive necessity test played a major role in functionality law until the late 1970s, and there is no indication that courts vacillated in the early cases. The following account explains how functionality developed in response to changing views about the underlying normative stakes.

### 3.1 1870–1930: The Functionality Doctrine and the Natural Right to Copy

The emergence of the functionality doctrine in the late 19th and early 20th centuries is best understood in conjunction with the background beliefs about law and property rights that prevailed during the period. These beliefs, and the arguments they support, have a formalistic quality that can seem foreign to contemporary jurists. From a modern perspective, it is tempting to discount the formalism as mere cover for concealed policy choices. But the fact that these arguments make little sense today does not mean that they made no sense in the late 19th and early 20th centuries, nor does it mean that the jurists who deployed them did so disingenuously. As we shall see, taking these arguments seriously helps to explain a number of otherwise strange aspects of early trade dress and functionality law: for example, why judges thought the functionality doctrine was justified by a common law right to copy, and why the functionality analysis focused on the intrinsic necessity of a design feature and relegated competitive necessity to a subordinate and secondary role.<sup>18</sup>

#### 3.1.1. *Trade Dress and the Right to Copy*

What we today call trademark law came into its own with the growth of national markets and the rise of competition on a national scale following the Civil War ([Bone 2006](#), pp. 576–579). Most of the cases during this early period involved ordinary word marks. By the late 19th century, however, judges were willing to extend protection beyond word marks to source-identifying

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18 It is also important to bear in mind that the history I recount in this section, like all histories, is an interpretation. It fits the historical record quite well but it does not fit perfectly. For example, late-19th-century jurists did not rely exclusively on formalistic arguments; they also considered the consequences of legal protection and even invoked utilitarian policy arguments at times. Nevertheless, judges frequently reasoned in a formalistic way by relying on a pre-political right to copy that they assumed existed independent of socially contingent policy choices.

product features on a theory of unfair competition.<sup>19</sup> Unfair competition was an open-ended tort used to grant relief for a variety of competitive practices deemed unfair (*Hopkins 1905*, § 1; *Mitchell 1896*, p. 275; *Rogers 1909*, pp. 551–552). One practice universally condemned as unfair involved passing off one’s own product as the product of another, and courts used the passing off theory to protect trade dress.<sup>20</sup>

To prove an unfair competition case based on passing off, the plaintiff had to show: (i) that the trade dress at issue had acquired secondary meaning, in other words, that consumers actually used the trade dress feature to identify source, and (ii) that the defendant used the same or similar trade dress with intent to deceive consumers.<sup>21</sup> Courts eventually relaxed the second requirement so that by the early 20th century a defendant could be held liable for unfair competition based only on consumer confusion without regard to intent.<sup>22</sup>

There was, however, a serious problem with applying unfair competition to source-identifying product features. Doing so created a potential conflict with a principle well established at the time that everyone has a right to copy publicly accessible ideas not protected by copyright or patent.<sup>23</sup> This principle applied to trade dress because copying trade dress necessarily involved copying an idea—the design idea that the feature embodied. To be sure, a product feature is a physical characteristic of the product itself, but it also exists as an idea separate from its physical embodiment and it is the idea that competitors copy. It followed that everyone, including competitors of the trade dress owner, had the right to copy product features in all their specific detail.<sup>24</sup> Hence the problem:

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19 See, e.g., *Fairbanks v. Jacobus*, 8 F. Cas. 951, 952 (C.C.S.D. N.Y. 1877) (No. 4,608). For an explanation of the late-19th-century distinction between trademark infringement (which protected so-called technical trademarks) and unfair competition (which protected other source-identifying symbols such as trade dress), see *Bone (2006)* at 562–566.

20 See *George G. Fox Co. v. Glynn*, 191 Mass. 344, 350 (1906). Passing off was considered unfair because it deceived consumers and also because it appropriated the plaintiff’s goodwill and risked tarnishing that goodwill when the defendant’s product was inferior.

21 See, e.g., *Upjohn Co. v. Wm. S. Merrell Chem. Co.*, 269 F. 209, 210–211 (6th Cir. 1920); *Crescent Tool Co. v. Kilborn & Bishop Co.*, 247 F. 299, 300 (2d Cir. 1917); *Enterprise Mfg. Co. v. Landers, Frary & Clark*, 131 F. 240, 241 (2d Cir. 1904); see generally *Hopkins (1917)*, § 19 (summarizing the elements of the unfair competition tort).

22 See, e.g., *Rogers (1909)* at 554 (noting that unfair competition should require only that the defendant’s use is likely to confuse consumers regardless of intent).

23 See, e.g., *Werckmeister v. Am. Lithographic Co.*, 134 Fed. 321, 324–327 (2d Cir. 1904).

24 See, e.g., *Upjohn Co. v. Wm. S. Merrell Chem. Co.*, 269 F. 209, 210–211 (6th Cir. 1920) (noting that “the defendant has, prima facie, a right equal to plaintiff” insofar as imitation of product features is concerned); *Daniel v. Electric Hose & Rubber Co.*, 231 F. 827, 833–834 (3rd Cir. 1916) (“useful features [not covered by a patent] are common property” and the subject of “common right” and, therefore, incapable of being the subject of an exclusive right); *Pope Automatic Merch. Co. v.*

how to justify an unfair competition injunction against copying when the defendant had a right to copy.

To appreciate the seriousness of this problem, we must examine the right to copy more closely. Although judges never clearly identified where the right came from, the best interpretation of the cases and commentary is that the right was assumed to be part of the common law, in the sense that the common law contained the general principles that gave the right its definition and its force.<sup>25</sup> In fact, the right to copy neatly fit the dominant common law property theory of the late 19th century. This theory supposed that property was a natural right based on Lockean-type principles.<sup>26</sup> To have property in a thing, one had to possess it, and to possess a thing, one had to exercise control over it to

*McCrum-Howell Co.*, 191 F. 979, 981 (7th Cir. 1911) (noting that a product feature is “public property”); *Fairbanks v. Jacobus*, 8 F. Cas. 951, 952 (C.C. S.D.N.Y. 1877) (No. 4,608) (stating that apart from patented structures and designs, “any one may make anything in any form, and may copy with exactness that which another has produced, without inflicting any legal injury, unless he attributes to that which he has made a false origin, by claiming it to be the manufacture of another person”).

- 25 There is no indication that the right was statutory, nor is there any evidence that it was constitutional. Professor Thurmon misses the fundamental importance of the right to copy when he assumes that courts tied the right to patent law along the lines of the patent bargain theory (*Thurmon 2004*, pp. 261–263). To be sure, some courts argued that granting a perpetual common law monopoly in features that were never patented or extending the patent monopoly beyond the patent term would conflict with the patent statute. See, e.g., *Daniel v. Electric Hose & Rubber Co.*, 231 F. 827, 834 (3rd Cir. 1916); *Pope Automatic Merchandising Co. v. McCrum-Howell Co.*, 191 F. 979, 982 (7th Cir. 1911). But this argument appears to have been only a *reductio ad absurdum*: if the common law did not recognize a right to copy unpatented features, it would lead to the absurd result of a perpetual common law patent. The closest a court came to suggesting that the right to copy might be statutory was in *Singer Mfg. Co. v. June Mfg. Co.*, 163 U.S. 169 (1896):

It is self evident that on the expiration of a patent the monopoly created by it ceases to exist, and the right to make the thing formerly covered by the patent becomes public property. It is upon this condition that the patent is granted.

*Ibid.*, at 185. See also *Kellogg Co. v. Nat. Biscuit Co.*, 305 U.S. 111, 118, 120 (1938). However, it is important not to read too much into this passage. There was no question that the right to copy extended beyond patented and even beyond patentable subject matter. See, e.g., *Coats v. Merrick Thread Co.*, 149 U.S. 562, 572 (1893); *Flagg Mfg. Co. v. Chester B. Holway*, 178 Mass. 83, 59 N.E. 667, 667 (1901). The Seventh Circuit later construed the language in *Singer* to express a general principle that applied in the same way to features that had never been patented. *Pope Auto. Merch. Co. v. McCrum-Howell Co.*, 191 Fed. 979, 981–982 (7th Cir. 1911). Also, the First Restatement of Torts in 1939 treated the freedom to copy product features not as a statutory grant, but rather as an entailment of the common law “privilege to compete” (*American Law Institute 1938*). See *infra* Section 3.2.1.

- 26 See, e.g., *Horwitz (1992)* at 148, 155 (noting that “the orthodox idea of property [in the late 19th century] was that it was a pre-political, Lockean natural right not created by law”). For accounts of the impact of natural law theory on 19th-century thinking about property rights, intellectual property rights, and trademark rights, see *Bone (1998)* at 256; *Bone (2006)* at 562; *Claeys (2013)* at 422; *McKenna (2007)* at 1873–1876.

the exclusion of others (Bone 1998, pp. 254–255). It followed that those things that are not capable of being controlled could not be the subject of individual property rights. On this view, for example, no one could have property in a wild animal until it was brought under control through capture, and no one could have a common law property right in ambient air and light because no one could possess ambient air and light exclusively.<sup>27</sup>

The same results held for ideas. The creator of an idea had a common law property right to his idea as long as he kept it secret and in that way excluded others from it. But he lost his property right as soon as the idea became public. Published ideas were thought to spread naturally and no one could exercise exclusive control over them since everyone had natural access to them.<sup>28</sup> It followed that as soon as a product was publicly marketed, its visible design features became publicly accessible ideas incapable of exclusive possession, and thus “public” or “common” property to which everyone had a common and equal right.<sup>29</sup> Accordingly, the general right to copy ideas implied a specific right to copy product features, which allowed firms to make and sell articles exactly identical to a competitor’s in all visible respects.

It is important to bear in mind that the common law right to copy, as the entailment of natural law principles, was considered a form of natural, not positive, right. The right was not created by courts to serve policy goals; instead, it was discovered through the application of reason to fact on a case-by-case basis through the process of common law development.<sup>30</sup> To be sure, Congress could confer exclusive rights in ideas after they were made public, as it did when

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27 See, e.g., *Avery & Sons v. Meikle & Co.*, 81 Ky. 73, 86, 90 (1883) (noting that air, light, and water are “the common property of mankind, in which all have an equal share and character of interest”).

28 See *Werckmeister v. American Lithographic Co.*, 134 F. 321, 324 (2d Cir. 1904); *Stowe v. Thomas*, 23 F.Cas. 201, 208 (C.C.E.D. Pa. 1853); *Tabor v. Hoffman*, 118 N.Y. 30, 34 (1889); Bone (1998) at 254–255; 3 *Robinson* (1890) at 26; see also *Claeys* (2013) at 422 (referring to this as the bedrock principle of IP common law in the USA and England). Today we refer to this characteristic as nonexcludability. More generally, information is what economists call a “public good,” which is a good that is both nonexcludable and nonrivalrous. Once information is made public, there is no way to exclude others from it (it is nonexcludable) and everyone can have the same information without anyone having any less of it (it is nonrivalrous). For more on the public goods nature of information, see *Landes & Posner* (2003) at 13–14.

29 See authorities cited *supra* at note 24; see also *M.J. Lewis Prods. Co. v. Lewis*, 57 F.2d 886, 887 (1931) (noting that an inventor has no right of property until he obtains a patent: “[u]ntil then there is no power over its use, which is one of the elements of a right of property in anything capable of ownership”); *Board of Trade of the City of Chicago v. Christie Grain & Stock Co.*, 198 U.S. 236, 251–52 (1905); see Bone (1998) at 255.

30 It is true that common law rights were part of a body of positive law—the common law—but the positive law did not create them; it recognized them and gave them concrete expression. See generally *Horwitz* (1992) at 158–159 (noting that late-19th-century jurists did not appeal to natural law directly but rather found natural law principles embedded in positive law).

it adopted the Patent and Copyright Acts. But those rights were positive rights, not natural rights, and thus contingent on the social policies they were designed to promote.

### 3.1.2. *Emergence of the Functionality Doctrine*

The 19th- and early-20th-century judges developed functionality rules as they struggled to reconcile the right to copy with liability for passing off. In designing these rules, they had to explain how it could be an *unfair* method of competition to do what one had a right to do—namely, copy the plaintiff’s trade dress exactly. This was particularly difficult because the right to copy was a natural right and as such could not be readily sacrificed to policy goals. This meant that courts had to find some way to limit the force of the right without relying on the sort of policy balancing that is common in the law today.<sup>31</sup>

Courts handled this challenge in two different ways. One approach relied on deceptive intent; the other focused on conflicting rights. Courts using the first approach carved out an exception to the right to copy for cases where the copying was done with the subjective purpose of deceiving consumers. As one court explained, the defendant has “neither the moral nor the legal right” to copy “for the purpose and with the result of deceiving the public.”<sup>32</sup> In *Globe-Wernicke Co. v. Brown & Besly* (121 Fed. 90 (7th Cir. 1902)) for example, the court justified an injunction against copying design features of the plaintiff’s popular box-file index folders on the ground that the defendant copied with intent to deceive purchasers (*ibid.*, at 91–92).<sup>33</sup>

As long as unfair competition required deceptive intent, this first approach perfectly harmonized the right to copy with the unfair competition tort: the intent required for liability also took the case out from under the right to copy. But this neat solution ran into trouble when courts relaxed the intent requirement and eventually eliminated it. The deceptive-intent approach still applied if the plaintiff was able to prove subjective intent, but courts had to deal with cases of innocent copying as well. Many judges responded by inferring intent from proof that the defendant copied nonessential details of the plaintiff’s design,

31 See generally *ibid.*, at 18 (describing how late-19th-century, categorical-style legal reasoning eschewed policy balancing).

32 *Buck’s Stove & Range Co. v. Kiechle*, 76 F. 758, 760 (D. Ind. 1896).

33 See also *Coats v. Merrick Thread Co.*, 149 U.S. 562, 566 (1893); *Yale & Towne Mfg. Co. v. Alder*, 154 F. 37, 37–38 (2d Cir. 1907); *Enterprise Mfg. Co. v. Landers, Frary & Clark*, 131 F. 240, 241 (2d Cir. 1904); *Candee, Swan & Co. v. Deere & Co.*, 54 Ill. 439, 461 (1870); *Fairbanks v. Jacobus*, 8 F. Cas. 951, 952 (S.D.N.Y. 1877); cf. *Marvel Co. v. Pearl*, 133 F. 160, 162 (2d Cir. 1904) (referring to an “intent to appropriate the trade of a competitor”).

such as minor and incidental aspects of ornamentation.<sup>34</sup> They reasoned that the only purpose a competitor could possibly have in copying source-identifying features with no or very little value for the product was to deceive consumers.

The second approach that courts used to reconcile unfair competition with the right to copy worked differently. It justified an injunction as a reasonable compromise between two conflicting common law rights. By the opening decades of the 20th century, it was well established that a firm's goodwill—value built up through investment in advertising and product quality—was something the common law would protect as the firm's property.<sup>35</sup> Thus, the plaintiff had a common law property right to goodwill that conflicted with the defendant's common law right to copy. The resulting conflict demanded a compromise that limited the application of each right.<sup>36</sup> This compromise, moreover, was not properly a matter of balancing policies but rather of working out an accommodation on the facts of the case that preserved the core integrity of each right.<sup>37</sup>

*George G. Fox Co. v. Glynn* (191 Mass. 344 (1906)), an important decision of the Massachusetts Supreme Judicial Court, provides a good example. Although the court's opinion mixes elements of both approaches, it relies heavily on the logic of conflicting rights. The plaintiff in the case sold a new kind of bread that combined milk and malt, which it called "Creamalt." It sold the bread in loaves with a "distinctive visual appearance," consisting of an oval shape and "distinctive features of . . . size, proportion, and condition of surface" (*ibid.*, at 346). The defendant competed by selling bread in loaves with an almost identical appearance.<sup>38</sup> The facts showed that the plaintiff's Creamalt bread was popular;

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34 See, e.g., *Enterprise Mfg. Co.*, 131 F. at 241; *Marvel Co.*, 133 F. at 161–162.

35 See, e.g., *Hanover Star Milling Co. v. Metcalf*, 240 U.S. 403, 412–413 (1916); *George G. Fox Co. v. Glynn*, 191 Mass. 344, 348–349 (1906); Nims (1917), § 15. For an account of the shift from property in the mark to property in goodwill represented by the mark, see Bone (2006) at 568–575.

36 See, e.g., *Upjohn Co. v. Wm. S. Merrell Chem. Co.*, 269 F. 209, 210–211 (6th Cir. 1920); *Keystone Type Foundry v. Portland Publ'g. Co.*, 186 F. 690, 692 (1st Cir. 1911); *George G. Fox Co. v. Glynn*, 191 Mass. 344, 350 (1906); *Flagg Mfg. Co. v. Holway*, 178 Mass. 83, 59 N.E. 667, 667 (1901); *Lektro-Shave Corp. v. Gen. Shaver Corp.*, 19 F.Supp. 843, 846 (D.Conn. 1937) (noting that the defendant has a right to copy functional features but that plaintiff has a "property right" in the nonfunctional shape of its shaver that had acquired secondary meaning). See also *Crescent Tool Co. v. Kilborn & Bishop Co.*, 247 F. 299, 301 (2d Cir. 1917) (referring to the plaintiff's "right" not to lose customers by false representation).

37 See, e.g., *Wesson v. Galef*, 266 F. 621, 623 (S.D.N.Y. 1922); *George G. Fox Co. v. Glynn*, 191 Mass. 344, 350–352 (1906).

38 The plaintiff sued the manufacturer as well as several retailers who sold the bread without its wrapper and label, causing consumers to believe that they were buying the plaintiff's bread based on the similar appearance. Today, we would treat the manufacturer's liability in this case under the contributory infringement doctrine.

that consumers used the loaf's appearance to identify it as the plaintiff's bread (i.e., the trade dress had acquired secondary meaning), and that the defendant's efforts to mimic this appearance manifested a "fraudulent intent to appropriate . . . the benefit of the public demand" for the plaintiff's bread (*ibid.*, at 347).

The court held that an injunction was proper and in so doing laid out a general framework for analyzing cases of this sort.<sup>39</sup> The court's opinion frames the problem in terms of "conflicting rights" (*ibid.*, at 349). On the one hand, the plaintiff had a "right of property" in its goodwill.<sup>40</sup> On the other hand, the defendant had a "general right . . . to use any size or shape or condition of surface that [it] choose[s]."<sup>41</sup> According to *Glynn*, when a courts is faced with conflicting rights of this sort, it must "give the case a direction" that enables each party "so to enjoy his right as not to interfere with the right of the other," and if that is not possible, then to "adjust" the two rights "on equitable principles, having proper regard for the interests of both [right holders]" (*ibid.*, at 350).<sup>42</sup>

The legal rules that the court derived from these principles distinguished between features that "no one needs to use" and features that are "necessary" to sell the same product (*ibid.*, at 351–352). The court recognized that the defendant had a general right to copy any visible feature and use it to make up the appearance of its own loaves.<sup>43</sup> However, when this general right

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39 In addition to the similar trade dress, the plaintiff in *Glynn* also complained about the defendant's use of a similar word mark. The summary I give in the text focuses on the application of the framework to trade dress.

40 *Glynn*, 191 Mass. at 348–349 (noting that the plaintiff's goodwill is its property and that the "right to have the benefit" of that goodwill is a "right of property" that courts will protect just as they do for tangible property). Moreover, the court indicated that intentional deception was not needed for liability. *Ibid.*, at 350 (noting that the defendant's fraud on consumers "need not be an active fraud in any other sense than in the willful refusal to recognize the right of the party, who has acquired a reputation for his goods, to have the benefit of the confidence which he has earned").

41 *Ibid.*, at 351. The court placed trade dress in a more general category of designations of source that "belong to the public, for any proper use," and that "the defendant has an interest to employ." *Ibid.*, at 350.

42 And, as the court also made clear, if the right of the defendant to use the designation were just as important as the right of the plaintiff to have all the benefit of its goodwill, the defendant's right would prevail, because in such a case the defendant would not be *wrongfully* appropriating the goodwill even though the defendant benefits from it. *Ibid.*, at 350–351; see *Flagg Mfg. Co. v. Holway*, 178 Mass. 83, 59 N.E. 667, 667 (1901) (noting that in cases of an "absolute conflict" between the two rights, "[p]robably . . . the defendant's [right] would prevail").

43 *George G. Fox Co.*, 191 Mass. at 351 (noting "[t]he general right of the defendants, to use any size or shape or condition of surface that they choose"); see *Flagg Mfg. Co. v. Holway*, 178 Mass. 83, 59 N.E. 667, 667 (1901) (holding that a defendant can be enjoined from copying "some subsidiary matter of ornament or label" even though its right to copy such a feature is "a right of the same nature with its freedom to determine the shape of the articles which it sells").

conflicted with the plaintiff's right to goodwill, as it did in trade dress cases, the scope of the defendant's right was more limited. The defendant had no right to copy unnecessary features if consumers would be confused (*ibid.*, at 351), but it did have a right to copy necessary features subject only to a duty to take precautions against confusion.<sup>44</sup> Since the defendant in the *Glynn* case did not need the plaintiff's distinctive trade dress combination to sell the same bread, the plaintiff's right took precedence, and an injunction was properly granted (*ibid.*, at 351).

The intentional-deception and conflicting-rights approaches gave rise to similar legal rules. As in the *Glynn* case, these rules distinguished between necessary and unnecessary product features. A defendant was free to slavishly copy any feature that was necessary to the plaintiff's article.<sup>45</sup> It still had to use precautions to mitigate confusion, but only if those precautions could be implemented without interfering with the right to copy.<sup>46</sup> On the contrary, if a feature was not necessary to the plaintiff's article—a “fanciful” feature or “some subsidiary matter of ornament or label”<sup>47</sup>—the defendant could be enjoined from copying it, provided the plaintiff proved secondary meaning and likely confusion.<sup>48</sup> Courts using the intentional-deception approach justified this rule by inferring intent to deceive from copying unnecessary features, while courts following the conflicting-rights approach justified it as a reasonable concession to the plaintiff's goodwill right.

It is important to understand that this core distinction between necessary and unnecessary features focused on what I shall call “intrinsic necessity” rather

44 *Ibid.*, at 352 (noting the defendant would be required to add “a designation or statement plainly showing that the defendant's bread was not of the plaintiff's manufacture”).

45 See, e.g., *Flagg Mfg. Co. v. Holway*, 178 Mass. 83, 59 N.E. 667, 667 (1901); *Champion Spark Plug Co. v. A.R. Mosler & Co.*, 233 F. 112, 116 (S.D.N.Y. 1916).

46 See, e.g., *Flagg Mfg. Co. v. Holway*, 178 Mass. 83, 59 N.E. 667, 667 (1901) (noting that precautions were required only “so far as are consistent with the defendant's fundamental right to make and sell what he chooses”); *Champion Spark Plug v. A.R. Mosler & Co.*, 233 F. 112, 117 (S.D.N.Y. 1916) (holding that the defendant has a right to copy the design of the plaintiff's spark plugs, but it must choose a different color as a precaution against confusion). In theory at least, if there were no reasonable precautions the defendant could take, the right to copy had priority and the defendant would be free to copy notwithstanding the confusion risk. See *Flagg Mfg.*, 59 N.E. at 667.

47 *Ibid.* (referring to “some subsidiary matter of ornament or label”); *Lektro-Shave Corp. v. Gen. Shaver Corp.*, 19 F. Supp. 843, 844 (D.Conn. 1937) (noting that a defendant “may trespass” when it “incorporates what is distinctive, ornamental, fanciful, or merely peculiar to another's product” as opposed what are “necessary functional parts”).

48 And when the feature had no secondary meaning and thus no goodwill, the defendant was free to copy it regardless of how much the plaintiff invested in creating it. See, e.g., *Cheney Bros. v. Doris Silk Corp.*, 35 F.2d 279, 280 (2d Cir. 1929) (distinguishing *International News Service v. Associated Press*, 248 U.S. 215 (1918)); *Crescent Tool Co. v. Kilborn & Bishop Co.*, 247 F. 299, 301 (2d Cir. 1917).



than competitive necessity. Intrinsic necessity has to do with the relationship between the feature at issue and the plaintiff's specific article. If the feature contributes in some significant way to what the plaintiff's article is supposed to do from the consumer's perspective—in other words, if it is a feature of the plaintiff's article that consumers want when they buy that article or that is dictated by what they want—then it is necessary to that article in the intrinsic sense. By contrast, competitive necessity has to do with the relationship between the feature at issue and the general class of product that the plaintiff sells. If the feature is one that competitors need to compete effectively in the broader product market, the feature is necessary in a competitive sense, but if competitors have access to reasonable alternatives, then it is not necessary.

In *Flagg Mfg. Co. v. Holway*, for example, the court, in effect, relied on intrinsic necessity to hold that the defendant had a right to copy and use the distinctive shape and string arrangement of the plaintiff's competing zithers (a musical instrument)—provided it clearly marked its zithers to mitigate confusion (59 N.E. 667, 667 (1901)). The court reached this result without inquiring into whether there were other equally effective zither designs available to the defendant. The plaintiff's design features were intrinsically necessary because they were significant components of what consumers wanted when they bought the plaintiff's particular zither.<sup>49</sup> Had the court focused on competitive necessity, it would have considered alternative designs that competitors could have used to market their own zithers. In effect, intrinsic necessity focused on the narrow market for plaintiff's particular zither, whereas competitive necessity would have focused on the broader market for zithers in general.<sup>50</sup>

Two main points stand out from this historical account. First, functionality rules emerged from an effort to square unfair competition with a right to copy. The resulting rules were justified, publicly at least, not as a balance of competing policies, but as a way to accommodate rights. Second, in most cases, the rules were based on a right to copy, not a right to compete. The right to copy might be given concrete expression in terms of competition, but that was only because the facts of the cases involved competing firms. In fact, as we have seen, the right to copy product features derived from a more general right to copy ideas, a right that attached to everyone not just to market actors. That right applied to every

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49 *Flagg Mfg.*, 59 N.E. 667, 667 (stating that “the instrument sold is made as it is, partly at least [*sic*], because of supposed or established desire of the public for instruments in that form” and that “[t]he defendant has the right to get the benefit of that desire even if created by the plaintiff”).

50 See also *Goodyear Tire & Rubber Co. v. Robertson*, 18 F.2d 639, 641 (D. Md. 1927) (focusing on the relationship between the plaintiff's diamond tread design and its tire to conclude that the design is a functional part of the tire and cannot be registered because it would give the plaintiff an exclusive right “to make the article itself”).

detail of an article, and absent a conflicting right, it guaranteed that a competitor could sell, not just a competitive article, but an article precisely identical to the plaintiff's.

Admittedly, those opinions that mention competition concerns do not explicitly state whether the relevant competition is in the plaintiff's particular article or in a broader product market.<sup>51</sup> However, the more sensible interpretation is the former, just as we saw for *Flagg Mfg.*<sup>52</sup> For one thing, in most of these cases, the public's right to copy and use figured most prominently, and potential anticompetitive effects were troubling simply because they resulted from limiting the defendant's ability to enjoy this right for the plaintiff's article.<sup>53</sup> Moreover, none of the opinions that I have seen clearly consider alternatives beyond those relevant to the particular article. For example, a court might focus on alternative designs for using the plaintiff's specific vacuum cleaner mechanism, but not alternative designs for marketing vacuum cleaners in general.<sup>54</sup> And as we have seen, courts equated unnecessary features with

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51 Courts would have had no reason to do so, especially if they viewed their task as protecting the defendant's right to copy the ideas embodied in the plaintiff's specific article, rather than as preserving competition.

52 At one point, Professor Thurmon notes that courts focused on competition "at the product level" rather than competition "at a market level." *Thurmon (2004)* at 271.

53 For example, while the court in *Marvel Co. v. Pearl*, 133 F. 160, 162 (2d Cir. 1904), refers to the "freedom of trade competition" and the "right of fair competition," it does so only after stating the controlling principle, that without a patent, "no person can monopolize or appropriate to the exclusion of others elements of mechanical construction which are essential to the successful practical operation of a manufacture, or which primarily serve to promote its efficiency for the purpose to which it is devoted." *Ibid.*, at 161–162. See *Diamond Match Co. v. Saginaw Match Co.*, 142 F. 727, 729–730 (6th Cir. 1906) (holding that the plaintiff could not stop the defendant from selling tipped matches with heads partly red and partly blue, because it had no patent on tipped matches and the number of color combinations was limited so the plaintiff could easily monopolize all of them and thus exclude others from using the unpatented idea).

54 See *Pope Auto. Merch. Co. v. McCrum-Howell Co.*, 191 F. 979, 981 (7th Cir. 1911) (holding that the combination of features in plaintiff's vacuum cleaner was "the most efficient and most economically manufactured form into which the [plaintiff's] mechanical combination can probably be embodied," so the defendant needed these features to manufacture and sell an unpatented "mechanism" that qualified as "public property" and thus was "equally open to both"—all without considering whether the defendant might have used a different mechanism to compete effectively in the broader vacuum cleaner market). In *Lektro-Shave Corp. v. Gen. Shaver Corp.*, 19 F. Supp. 843 (D.Conn. 1937), the court held that the cylindrical shape of plaintiff's electric razor head, while necessary to the plaintiff's oscillating razor, was not necessary to the defendant's reciprocating razor (*ibid.*, at 845). It is reasonably clear from the opinion, however, that the court would have allowed the defendant to use the cylindrical shape had it sold an oscillating razor just like the plaintiff's—even though it presumably could compete in the electric razor market by selling a reciprocating razor instead (since that's what it in fact did in the case). But see *McGill Mfg. Co. v. Leviton Mfg. Co.*, 43 F.2d 607, 608 (E.D.N.Y. 1930) (noting that the defendant could accomplish the same general functions with a different design, but also noting that the design seems "to be more ornamental than useful").

those that added nothing of significant value to the plaintiff's article rather than those with competitively effective alternatives.

This natural rights framework assumed it was possible to draw a categorical distinction between intrinsically necessary and intrinsically unnecessary product features without balancing policies.<sup>55</sup> Over time, however, it became clear that this assumption could not be sustained. Even minor ornamental features were likely to have some, if only slight, consumption value as attractive design elements, in which case the defendant actually needed them to sell an *identical* article from the consumer's point of view. Indeed, given that there was always a separate word mark to indicate source, it is hard to imagine why a seller would bother to add an ornamental detail except to make the article more appealing to consumers.<sup>56</sup> Technically, then competitors should have been free to copy such features in the same way they were free to copy any other intrinsically necessary feature. Yet, courts routinely enjoined copying minor ornamentation without mentioning consumer appeal at all.<sup>57</sup> If this makes sense, it is not because of a formal distinction between necessary and unnecessary product features. It makes sense because the burden on the defendant of omitting the plaintiff's ornamentation or using an alternative was slight and the benefit to the plaintiff

*George G. Fox Co. v. Hathaway*, 199 Mass. 99 (1908), a successor case to *George G. Fox Co. v. Glynn*, discussed above, deserves special mention. *Hathaway* involved the same plaintiff and the same malted bread as in *Glynn*. The *Hathaway* court followed *Glynn* for the general principles, indicating that the right to copy featured centrally in its analysis (*ibid.*, at 103). But the court's emphasis on the many alternative shapes, sizes, and surface appearances that the defendant could have used for its bread might suggest a concern with competitive necessity and competition in the general market for bread. However, these statements are perfectly compatible with intrinsic necessity. Consumers buying the plaintiff's malted bread did not care about the surface appearance or particular size, and the oval shape was a negative because it produced uneven slices (*ibid.*, at 102). Thus, none of these features were necessary to what consumers actually wanted from the plaintiff's specific product.

- 55 Even those courts that mentioned the burden on the defendant of using alternatives did so in easy cases that did not require a normative analysis of the acceptable magnitude of the burden.
- 56 There might have been some cases where a seller added an ornamental feature just to give consumers a way to identify source. When the plaintiff sells goods to retailers, who in turn resell those goods to consumers without any packaging, distinctive trade dress might be the only way for the plaintiff to prevent the retailer from substituting cheaper products sold by competitors.
- 57 Courts applying the functionality doctrine in the late 19th and early 20th centuries tended to downplay aesthetics and focus on utilitarian value, a practice that cannot be squared with either the deceptive intent or the conflicting rights approaches to the functionality problem. See *Champion Spark Plug Co. v. A.R. Mosler & Co.*, 233 F. 112, 116 (S.D.N.Y. 1916) (criticizing some decisions that ignore ornamental features: “[i]t is only when the mechanical operativeness of the thing is certainly all that determines the buyer's choice that such a criterion is safe”).

of avoiding confusion-related harm was much greater.<sup>58</sup> In other words, classifying features required policy judgments about how much burden the defendant *should* have to bear to mitigate confusion given the resulting benefit to the plaintiff.

In short, although there is no reason to doubt that most late-19th- and early 20th-century jurists accepted the natural rights framework that made sense of the prevailing functionality rules, problems applying those rules in practice pushed them toward a policy approach. The resulting tension came to a head with the rise of legal realism and the demise of natural rights jurisprudence in the 1930s.

### 3.2 1930–1980: Policy Balancing

#### 3.2.1. Demise of the Right to Copy as a Natural Right

Most judges in the early 20th century credited the right to copy, classified features as necessary or unnecessary, and applied the relevant rules mechanically, sometimes inferring intentional deception and sometimes mentioning the importance of protecting goodwill. A few thoughtful judges, most notably Judge Learned Hand, probed deeper.<sup>59</sup> These judges recognized that the functionality analysis depended on a balance of costs and benefits rather than on a technical application of functionality rules. In *Shredded Wheat Co. v. Humphrey Cornell Co.* (250 F. 960 (2d Cir. 1918)), for example, Judge Hand analyzed whether the form, color, and size of plaintiff's shredded wheat biscuits were necessary features by assessing the burdens and benefits in light of the defendant's right "freely to compete in the market with the first comer" and the importance of not giving the plaintiff "such advantage in the market as will substantially handicap its competitors" (*ibid.*, at 965).<sup>60</sup>

However, it was not until the First Restatement of Torts, published in 1938, that the competition policy took center stage and replaced the natural right to

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58 See *Flagg Mfg. v. Holway*, 178 Mass. 83, 59 N.E. 667, 667 (1901) (referring to nonessential features that can be enjoined as a "relatively small and incidental affair"). The need for cost–benefit balancing also blurs the distinction between intrinsic and competitive necessity.

59 Learned Hand is one of the most famous 20th-century judges and well known for his influential trademark decisions. See *Morris* (1987) at 138–139; *Bone* (2012) at 1320–1329.

60 See also *Champion Spark Plug Co. v. A.R. Mosler & Co.*, 233 F. 112, 114–15 (S.D.N.Y. 1916) (Hand, J.) (stating that "[i]n cases of this character the question is always in the nature of a compromise between the plaintiff's security in his trade and the annoyance and expense imposed upon the defendant by imposing conditions upon him").

copy as the central focus of functionality analysis.<sup>61</sup> The Restatement drafters made this clear in the Introductory Note to the functionality sections:

The privilege to engage in business and to compete with others implies a privilege to copy or imitate the physical appearance of another's goods. The public interest in competition ordinarily outweighs the interest in securing to a person the rewards of his ingenuity in making his product attractive to purchasers. . . . The privilege is . . . qualified by the law of Torts to the extent necessary in order to prevent the sale of one's goods as those of another to prevent the procurement of the means of imitation by unfair methods.<sup>62</sup>

This passage is striking in several ways. First, there is no mention of a “right” to copy. The passage gives pride of place to a “privilege to compete,” and it derives a “privilege,” not a “right,” to copy from it. The passage is also notable for framing the legal analysis as a social policy balance: the “public interest” in competition, which grounds the privilege to copy, “outweighs” the “interest” in rewarding creators.<sup>63</sup> These changes reflect the rise of a pragmatic and functionalist jurisprudence in the 1920s and 1930s. Beginning with sociological jurisprudence at the turn of the century and culminating with legal realism in the 1930s, many jurists rejected the 19th-century natural rights theory in favor of a policy-based mode of legal analysis.<sup>64</sup> And their policy-based approach assumed that property rights, like all legal rights, were constructed by the state to serve social goals (*see* [White 1972](#), p. 1007).

As I have explained elsewhere, this shift to a policy-based analysis had a significant impact on trademark and unfair competition law ([Bone 2006](#), pp. 585–589). As early as 1917, Justice Holmes made a point of emphasizing that the idea of property in trademark law should be understood functionally: “[t]he word property as applied to trade-marks is an unanalyzed expression of certain

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61 The Restatement covered trademark law and unfair competition in sections 715–756. 3 [American Law Institute \(1938\)](#) §§ 715–756.

62 *Ibid.*, Topic 3, *Introductory Note*, at 621–622.

63 The switch from the terminology of “right” to the terminology of “privilege” is likely significant as well. This linguistic shift recalls Wesley Hohfeld’s classification of jural relations that played a role in the critique of late 19th-century conceptualism. *See generally* [Hohfeld \(1917\)](#). Hohfeld argued, among other things, that a “right” was different than a “privilege.” A right always came with a correlative duty, whereas a privilege carved out a domain of action that others had no right to prevent. Thus, what the late 19th century had classified as a right to copy was actually a privilege to copy. This change in nomenclature was not just semantic; it challenged the core idea of a natural right and focused attention on underlying social policies. *See* [Horwitz \(1992\)](#) at 151–156; [Singer \(1982\)](#) at 986–995.

64 For a sampling of the vast literature on sociological jurisprudence and legal realism, *see* [Gilmore \(1977\)](#); [Kalman \(1986\)](#); [Summers \(1982\)](#); and [White \(1972\)](#).

secondary consequences of the primary fact that the law makes some rudimentary requirements of good faith.”<sup>65</sup> Moreover, in the 1930s, Professors Milton Handler and Charles Pickett of Columbia Law School wrote an influential series of articles arguing for a policy-based approach to trademark and unfair competition law (Handler & Pickett 1930a, 1930b). And in an important article on unfair competition published in 1940, Professor Zechariah Chafee argued in favor of basing rules on a policy analysis rather than on a property right in goodwill (Chafee 1940, pp. 1316–1321).

The Restatement drafters were clearly influenced by these developments when they framed the underlying rationale in terms of competition policy. However, they wrote the actual text of the rules in categorical language that closely tracked the late-19th-century and early-20th-century precedents. Section 741 of the Restatement barred the copying of “nonfunctional” features and allowed the copying of “functional” features as long as the copier took reasonable steps, such as labeling, to reduce the risk of source confusion (American Law Institute 1938, § 741). And section 742 defined a “functional” feature in terms that fit intrinsic necessity much better than competitive necessity: a functional feature is one that “affects [the] purpose, action or performance [of the goods], or the facility or economy of processing, handling or using them” (*ibid.*, § 742).

It is in the commentary to these sections that one finds signs of the shift to a competition policy. For example, the comments to section 741 state that the rule’s application should track the “needs of competition” (*ibid.*, § 741 comments a, j), and the comments to section 742 make clear that whether a feature is functional depends on “whether prohibition of imitation by others will deprive the others of something which will substantially hinder them in competition” (*ibid.*, § 741 comments a).<sup>66</sup> To be sure, these statements do not clearly choose between a narrow (product-specific) and a broad (product-market) view of the competitive domain, but the Restatement’s focus on competition policy could easily have pushed in the direction of a broad view featuring the competitive necessity test.

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65 *E.I. du Pont de Nemours Powder Co. v. Masland*, 244 U.S. 100, 102 (1917).

66 The comments also made clear that the functionality rules applied to aesthetic as well as utilitarian features. Some scholars have read the comments to suggest that the drafters must have intended competitive need to apply only to aesthetic features and not to utilitarian features (see Thurmon 2004, 272–273 & n. 110). But this is not the only way to interpret the language, and it makes little sense given that there is no reason why the drafters would have drawn a distinction between aesthetic and utilitarian for this purpose.

### 3.2.2. *Instability of Post-Restatement Doctrine*

The Restatement formulation had a major impact on functionality decisions in the decades following its publication (Thurmon 2004, p. 274; Note 1964, p. 560). Most courts followed its lead and framed the purpose of the doctrine in terms of promoting the public interest in free competition.<sup>67</sup> But they also applied the specific Restatement rules literally and ignored the commentary supporting a more flexible, competition-oriented approach.<sup>68</sup> In particular, these courts focused on what the feature contributed intrinsically to the operation or value of the product rather than what competitors needed to compete.<sup>69</sup> They disagreed a bit at the margins—about such things as how much a “functional” feature had to add to an article’s value and whether aesthetic features should be treated the same as utilitarian features<sup>70</sup>—but they found most useful product

67 See, e.g., *American Safety Table Co., Inc. v. Schreiber*, 269 F.2d 255, 271–72 (2d Cir. 1959) (noting that the “generally accepted rules of law in this complex and still developing area” are based on “the underlying principles of our competitive economy”); *Pagliari v. Wallace China Co.*, 198 F.2d 339, 343–344 (9th Cir. 1952) (emphasizing the policy of free competition); *Briddell v. Alglobe Trading Corp.*, 194 F.2d 416, 418 (2d Cir. 1952) (noting that the right to imitate product features is justified by the policy in favor of free competition); *J.C. Penney Co. v. H. D. Lee Mercantile Co.*, 120 F.2d 949, 953–54 (8th Cir. 1941) (stressing the public interest in free competition).

68 Some courts considered alternatives in close cases. See, e.g., *Haeger Potteries, Inc. v. Gilner Potteries*, 123 F. Supp. 261, 271 (S. D. Cal. 1954) (holding that the distinctive design of an ashtray was nonfunctional partly because there were lots of other ways to design an attractive ashtray). But others disagreed. See *Vaughn Novelty Mfg. Co. v. G. G. Greene Mfg. Co.*, 202 F.2d 172, 175–176, n.10 (3d Cir. 1953) (noting that the availability of alternatives does not by itself make a design nonfunctional). And some chafed at a test that forced features into just two categories. See, e.g., *Speedry Products, Inc. v. Dri Mark Products, Inc.*, 271 F.2d. 646, 648 (2d Cir. 1959) (noting that the “use of such generic terms as ‘functional’ and ‘non-functional’ is likely to lead to oversimplification and arbitrary classification”); *In Re Mogen David Wine Corp.*, 328 F.2d 925, 932, 933 (CCPA 1964) (Rich, J., concurring) (noting that Restatement’s labels are “not of much help in deciding cases”); *In Re Shakespeare Co.*, 289 F.2d 506, 508 (CCPA 1961) (rejecting the labels and relying on “deeper” principle).

69 Sometimes courts used a variation on the Restatement’s definition, but none of these variations focused directly on competitive effect. See *generally Zippo Mfg. Co. v. Rogers Imports, Inc.*, 216 F. Supp. 670, 691–693 (S.D.N.Y. 1963) (describing different approaches).

70 See, e.g., *American Marietta Co. v. Krigsman*, 275 F.2d 287, 289 (2d Cir. 1960) (noting that features that “are not in any way essential” to the use of goods are “nonfunctional”); *West Point Mfg. Co. v. Detroit Stamping Co.*, 222 F.2d 581, 589–591, 598 & n. 3 (6th Cir. 1955) (relying heavily on the Restatement and concluding that all the features of the clamps at issue are “functional to an extent”); *Pagliari v. Wallace China Co.*, 198 F.2d 339, 343–344 (9th Cir. 1952) (adopting a broad test for aesthetic functionality and denying protection to the design of a line of hotel china); *James Heddon’s Sons v. Millsite Steel & Wire Works Inc.*, 128 F.2d 6, 12–13 (6th Cir. 1942) (finding that the shape, size, and color of a fishing lure or plug “may be altogether functional”); *J.C. Penney Co. v. H.D. Lee Mercantile Co.*, 120 F.2d 949, 953–954 (8th Cir. 1941) (denying protection to a jeans pocket design relying on the Restatement); *Comment (1957)* at 217–218 (noting that the issue of how to treat aesthetic features is “a subject of conflict”).

features to be functional regardless of whether competitors had access to reasonable alternatives.<sup>71</sup> The result was a mismatch between policy and doctrine.

Sometimes courts tried to reconcile the Restatement rules with the underlying competition policy by assuming, as earlier judges following the right to copy had done, that the relevant market was narrowly defined as the article itself rather than the more general class of goods.<sup>72</sup> To illustrate, consider *Vaughn Novelty Mfg. Co. v. G. G. Greene Mfg. Co.* (202 F.2d 172 (3d Cir. 1953)), a case involving a can opener sporting a design with utilitarian advantages. From the perspective of competition policy, it would be reasonable to define the market as can openers in general and bar copying if competitors had access to reasonable substitute designs. But the court expressly rejected this approach (*ibid.*, at pp. 175–176 & n. 10). More generally, judges allowed exact copying of functional features, sometimes claiming that duplication was necessary for competition in the same article.<sup>73</sup>

71 See, e.g., *Vaughn Novelty Mfg. Co. v. G. G. Greene Mfg. Co.*, 202 F.2d 172, 175–176 & n.10 (3d Cir. 1953) (rejecting the argument that the existence of lots of shapes and designs to make a “workable product” renders a particular design nonfunctional); *Pagliari v. Wallace China Co.*, 198 F.2d 339, 343–344 (9th Cir. 1952) (noting that the right to copy does not depend on alternatives); *In Re Honeywell*, 532 F.2d 180, 182 (CCPA 1976) (noting “[t]he fact that the thermostat covers may be produced in other forms or shapes does not and cannot detract from the functional character of the configuration here involved”); *In Re Shakespeare Co.*, 289 F.2d 506, 508 (CCPA 1961) (noting that “[i]t is immaterial that other processes may be available by which glass rods without the mark can be made”); see *Thurmon* (2004) at 273–275; *Note* (1964); *Pollack* (1962) at 76 (if a feature is functional, it is “within the public domain and may generally be copied in every detail”); *Comment* (1957) at 216 (defining a new category of “engineering features” and arguing that “preservation and encouragement of freedom of competition” justifies allowing competitors to imitate these features exactly). See also *Zippo Mfg. Co. v. Rogers Imports, Inc.*, 216 F. Supp. 670, 694–695 (S.D.N.Y. 1963) (adopting the broadest definition of “functional” as the best way to strike the balance between the “policy of encouraging competition from which the public benefits” and the “interest of the public in not being deceived”). Professor Thurmon argues that before the Restatement, courts applied the “competitive need rationale,” but after the Restatement—and because of it—they applied the language of section 742 literally and strictly (*Thurmon* 2004, p. 275). I disagree. I do not read the earlier cases to apply a competitive necessity test. To the extent they referred to competitive need, they meant competition in the narrow market for the plaintiff’s particular article. In fact, I see no significant difference between the early and later cases insofar as the black-letter rules are concerned.

72 See, e.g., *American Safety Table Co., Inc. v. Schreiber*, 269 F.2d 255, 272 (2d Cir. 1959) (emphasizing that “imitation is the life blood of competition” and explaining that “[u]nless such duplication is permitted, competition may be unduly curtailed with the possible resultant development of undesirable monopolistic conditions”); *Pagliari v. Wallace China Co.*, 198 F.2d 339, 344 (9th Cir. 1952) (noting that “to imitate is to compete in this type of situation”). Some opinions relying on the Restatement harken back to the natural right to copy in their references to common property and equal rights. See, e.g., *James Heddon’s Sons v. Millsite Steel & Wire Works Inc.*, 128 F.2d 6, 15–18 (6th Cir. 1942).

73 One might justify a narrow market definition on practical grounds such as that it is too difficult or costly to define broader markets on a case-by-case basis or to determine whether the alternatives are in fact equally effective. But this justification cannot support a narrow market definition across the board. And in any case, courts never mentioned it. *But see Comment* (1957) at 216 (arguing that



This inconsistency between policy and doctrine sometimes boiled to the surface. For example, the Federal Circuit's predecessor, the Court of Customs and Patent Appeals, in a notable 1961 decision, held that some "incidental utilitarian" features (e.g., the shape of a bottle) should not be barred from trademark protection just because they affect the article's performance (e.g., the bottle's shape holds its contents).<sup>74</sup> The opinion was written by Judge Giles Rich, one of the most influential and highly respected judges on the Court of Customs and Patent Appeals and a sharp critic of mechanically applying the Restatement's rules (*Samuels & Samuels* 2007).<sup>75</sup> Rich probed beneath the rules to the underlying policies and concluded that competitive rather than an intrinsic necessity made sense for incidental utilitarian features because no public interest would be served by permitting competitors to copy a feature with little value and lots of substitutes.<sup>76</sup>

Still, Judge Rich hesitated to follow his own logic to its ultimate conclusion. He insisted on limiting the competitive necessity test to features with only incidental utilitarian value even though his reasoning had much more radical implications.<sup>77</sup> If free competition is the goal, there is no reason for competitors to use *any* features when there are reasonable substitutes available.<sup>78</sup>

"engineering" features can be imitated because "late comers" should be able "to enter the field without any greater handicap than that which faced the originator").

74 *In Re Deister Concentrator Co., Inc.*, 289 F.2d. 496, 506 (CCPA 1961). The *Deister* court distinguished a shape that is "in essence utilitarian" from a shape or feature that is "in its concept arbitrary." See also *Best Lock Corp. v. Schlage Lock Co.*, 413 F.2d.1195, 1199 (CCPA 1969) (Rich, J.) (distinguishing between a "feature dictated solely by 'functional' (utilitarian) considerations" and a feature that is arbitrary and ornamental but still serves a useful function and holding that the latter can be protected if there are enough alternatives); *In Re Mogen David Wine Corp.*, 328 F.2d 925, 932, 933 (CCPA 1964) (Rich, J., concurring) (noting that whether a feature that is mostly ornamental and only incidentally useful is legally functional should depend on "whether prohibition of imitation" will "substantially hinder" competition and this depends in turn on the available alternatives).

75 Judge Rich believed that the best way to reach sensible results in difficult cases was to probe "behind the labels to the bases for determining which to apply." *In Re Mogen David Wine Corp.*, 328 F.2d 925, 932, 933 (CCPA 1964) (Rich, J., concurring); see also *In Re Shakespeare Co.*, 289 F.2d 506, 508 (CCPA 1961) (Rich, J.).

76 *In Re Deister*, 289 F.2d. at 506 (concluding that "there is no public interest to be protected" in giving the public a right to copy).

77 *Best Lock Corp.*, 413 F.2d. at 1199.

78 Judge Rich tried to fend off this implication by insisting that the public has a right to copy strictly utilitarian features not covered by a patent and that this right allows slavish copying without regard to alternatives (see *Best Lock Corp.*, 413 F.2d. at 1199). But this argument did not work. For one thing, Rich never explained why the patent law would permit copying of strictly utilitarian features but not also features with only incidental utility, since both lie within the general subject matter of patent. More importantly, Rich's argument is inconsistent with his other beliefs. He made clear in *Deister* that the right to copy was independent of patent law (*In Re Deister*, 289 F.2d. at 501 and n. 4).

In sum, the doctrine did not keep pace with changes in the underlying rationale and the result was an unstable body of functionality rules. The resulting inconsistency created pressure to align doctrine more closely with policy.

### 3.3 1980–2001: Competitive Necessity and Alternatives Analysis

The alignment of doctrine with competition policy was finally achieved in the early 1980s, when courts extended the competitive necessity test to all forms of trade dress. A 1982 decision, *In Re Morton-Norwich Products, Inc.* (671 F.2d 1332 (CCPA 1982)), by the Court of Customs and Patent Appeals, paved the way.<sup>79</sup> *Morton-Norwich* involved the overall exterior shape of a spray container, which included the design of the bottle and its spray top. The Trademark Trial and Appeal Board refused to register the shape on the ground that it was legally functional under the Restatement rules. The *Morton-Norwich* court reversed. It found that the bottle “can have an infinite variety of forms or designs and still function to hold liquid” and that the spray top can take many different forms and still spray perfectly well. It concluded that “we do not see that allowing the applicant to exclude others (upon proof of distinctiveness) from using his trade dress will hinder competition or impinge upon the rights of others to compete effectively in the sale of the goods” (*ibid.*, at 1342).

Most important, the court took the opportunity to set out a comprehensive framework for utilitarian functionality analysis.<sup>80</sup> And this framework applied the competitive necessity test across the board (*ibid.*, at 1339):

Thus, it is clear that courts in the past have considered the public policy involved in this area of the law as, not the right to slavishly copy

He also made clear that the right was a positive, not a natural right, and that its purpose was to promote the public interest in free competition (*ibid.*, at 503 (analyzing the issues in terms of a policy balance)). These premises would seem to commit Rich to the conclusion that competitive necessity is the touchstone for all product features.

<sup>79</sup> There are a few earlier decisions that are sometimes credited with the rise of the competitive necessity test, but those decisions do not do so as decisively as *Morton-Norwich* and were not nearly as influential. See *Keene Corp. v. Paraflex Industries, Inc.* 653 F.2d 822, 827 (3d Cir. 1981) (signaling a competition focus but arguing that functionality does not depend on the number of alternatives); *Truck Equipment Service Co. v. Fruehauf Corp.*, 536 F.2d 1210, 1215, 1218, 1220 (8th Cir. 1976) (emphasizing the competition policy but in an easy case); see also *Vuitton et Fils S.A. v. J. Young Enterprises, Inc.*, 644 F.2d 769, 776–777 (9th Cir. 1981) (applying competitive necessity to aesthetic trade dress); *Dallas Cowboys Cheerleaders, Inc. v. Pussycat Cinema, Ltd.*, 604 F.2d 200, 203–204 (5th Cir. 1979) (placing the Dallas Cowboys Cheerleader uniform design in *Deister’s* ornamental-with-an-incidentally-utilitarian-function category).

<sup>80</sup> The court expressly disavowed any effort to articulate standards for aesthetic functionality (*Morton-Norwich*, 671 F.2d at 1338 & n. 1). However, its general formulation of the functionality standard could be, and later was, extended to features with aesthetic value.

articles which are not protected by patent or copyright, but the need to copy those articles, which is more properly termed the right to compete effectively.

Two points about *Morton-Norwich* bear emphasis. First, the court adopted competitive necessity not just as a way to resolve hard cases, but as the ultimate test for whether any utilitarian product feature can be protected as a trademark (*ibid.*, at 1337). Second, the court applied the test even to features that were the subject of an expired utility patent. The existence of the patent mattered to the functionality determination, but only as one of four evidentiary factors and only insofar as it “disclosed the utilitarian advantage of the design” (*ibid.*, at 1341).<sup>81</sup>

Other federal courts soon followed the lead of *Morton-Norwich*. In 1984, for example, the Fifth Circuit adopted the competitive necessity test,<sup>82</sup> and in 1985, the Seventh Circuit did the same.<sup>83</sup> By the end of the 1990s, most federal circuits to have addressed the issue had adopted the competitive necessity test for all trade dress cases, including those with an expired patent and those involving aesthetic as well as utilitarian features.<sup>84</sup>

This change in functionality law was part of a more general expansion of trade dress protection in the 1990s. In 1992, for example, the Supreme Court held that some trade dress could be protected without proof of secondary meaning, and in 1995, it endorsed the registration and protection of pure colors as well as unusual forms of trade dress such as smells and

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81 The court identified four kinds of evidence probative of competitive necessity: (i) whether the feature was covered by an expired utility patent; (ii) whether the plaintiff touted the utilitarian advantages of the design in its advertising; (iii) whether there are other alternatives available for competitors and how many; and (iv) whether the design “results from a comparatively simple or cheap method of manufacturing the article.” *Morton-Norwich*, 671 F.2d at 1340–1341. And the court made clear that the existence of an expired utility patent was not decisive against protection when there were lots of alternatives available for competitors to use.

82 *Sicilia Di R. Biebow & Co. v. Cox*, 732 F.2d 417, 429 (5th Cir. 1984) (holding that a design feature is not “legally functional—and thus unprotectable—unless the design is only one of a limited number of equally efficient options”). This case, like *Morton-Norwich*, involved the overall design and shape of a container, the lemon-shaped bottle for Sicilia lemon juice, and thus could have been decided under the *Deister* line of cases (*see ibid.*, at 427–428). However, the Fifth Circuit analyzed the functionality issues within a general framework that was suitable for all functionality cases.

83 *W.T. Rogers Co., Inc. v. Keene*, 778 F.2d 334, 339 (7th Cir. 1985) (Posner, J.) (stating that “a functional feature is one which competitors would have to spend money not to copy but to design around”). The court even applied this test to aesthetic functionality (*ibid.*, at 343).

84 *See Thurmon* (2004) at 319; *American Law Institute* (1995), § 17 cmt. c. (endorsing the competitive necessity test). Moreover, the Supreme Court itself approved the competitive necessity test, although in dictum (*Qualitex Co. v. Jacobson Prods. Co.*, 514 U.S. 159, 164–165, 169 (1995)).

sounds.<sup>85</sup> Moreover, lower courts applied expansive versions of sponsorship confusion, reinvigorated post-sale confusion, and applied the newly enacted Federal Trademark Dilution Act to trade dress as well as word marks (see Bone 2006, pp. 602–615).<sup>86</sup>

### 3.4 Summary

To recap, the functionality doctrine emerged in the 19th century to protect a natural common-law right to copy product features not protected by patent or copyright. Courts developed a body of doctrine that tried to protect against consumer confusion while still honoring the right to copy. They distinguished between features that were necessary to what the article was supposed to do and features that were only ornamental or incidental. The former could be copied slavishly as long as the copier made reasonable efforts to reduce confusion; the latter could not be copied at all if there was secondary meaning and likely confusion.

The right to copy shaped functionality law until the adoption of the First Restatement of Torts in 1938. Courts then began to view the right to copy not as a natural right, but as a privilege created by the law to preserve and promote competition. Still, these same courts continued to apply some version of the pre-Restatement functionality rules despite their poor fit with the competition policy. Eventually courts adopted the competitive necessity test and brought doctrine in line with the policy that justified it.

The question remained, however, whether a right to copy of some kind should play any independent role in functionality analysis. Cases involving expired patents put this question squarely. Some courts and commentators argued that the Patent Act, in effect, recognized a right to copy previously patented product features after the patent expired and as a result trademark protection should be barred categorically regardless of alternatives.<sup>87</sup>

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85 *Qualitex, ibid.*, at 169 (protecting pure colors); *Two Pesos, Inc. v. Taco Cabana, Inc.*, 505 U.S. 763, 763 (1992) (recognizing inherently distinctive trade dress).

86 However, Congress also made it more difficult to obtain trade dress protection by amending the Lanham Act in 1998 to place the burden to prove non-functionality on the plaintiff seeking protection of unregistered trade dress (15 U.S.C. § 1125(a)(3) (2012)).

87 For example, the Tenth Circuit dissented from the prevailing view that applied the competitive necessity test in expired patent cases and chose instead to bar trademark protection categorically (*Vornado Air Circ. Sys., Inc. v. Duracraft Corp.*, 58 F.3d 1498, 1507–1510 (10th Cir. 1995)). The court worried that preventing the copying of once-patented product features could extend the patent monopoly and conflict with the public domain policy of the Patent Act (*ibid.*, at 1510).

## 4. MODERN FUNCTIONALITY LAW AND ITS DISCONTENTS: 2001–PRESENT

The Supreme Court weighed in on functionality in 2001 with its pivotal decision in *Traffix Devices, Inc. v. Marketing Displays, Inc.* (532 U.S. 23 (2001)). The *Traffix* Court turned its back on twenty years of lower court precedent that had firmly established the competitive necessity test. It revived the old rules that barred protection for utilitarian trade dress without regard to alternatives, and it did so without explaining why. Section 4.1 summarizes the *Traffix* rules and the Court’s reasoning. Section 4.2 discusses some of the major points of confusion created by the decision.

### 4.1 The *Traffix* Opinion

The trade dress at issue in *Traffix* was a dual-spring design of a road sign that kept the sign upright in heavy wind conditions. The plaintiff, Marketing Displays, Inc. (MDI), had owned a utility patent on the dual-spring mechanism. Soon after MDI’s patent expired, a competitor, Traffix Devices, Inc. (Traffix), started selling road signs with a similar dual-spring feature. MDI sued Traffix, alleging that its dual-spring design had secondary meaning (i.e., that consumers relied on it as a source identifier for MDI’s signs) and that Traffix’s use was likely to cause consumer confusion.

The district court granted summary judgment to Traffix. Although the judge recognized that buyers of the signs tended to be professionals who were not likely to be confused, he was not willing to grant summary judgment on that ground.<sup>88</sup> However, he was willing to grant summary judgment on the ground of functionality. The Sixth Circuit reversed the functionality determination. It applied the competitive necessity test and concluded that MDI had enough evidence of alternative designs to go to the jury. The Supreme Court, in turn, reversed the Sixth Circuit and upheld the district court’s grant of summary judgment. Moreover, in doing so, it took the opportunity to map out a comprehensive set of functionality rules.

#### 4.1.1. *Traffix*’s Rules

*Traffix* sets out different rules for cases involving trade dress covered by an expired utility patent and cases involving no utility patent at all. In the latter

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<sup>88</sup> *Marketing Displays, Inc. v. Traffix Devices, Inc.*, 971 F.Supp. 262, 271–272 (E.D. Mich. 1997). See also *Marketing Displays, Inc. v. Traffix Devices, Inc.*, 200 F.3d 929, 935 (6th Cir. 1999) (concluding that “[p]urchaser care may be higher than average in this case, but some mistakes are still likely”).

category, the rules are further differentiated according to whether the trade dress is important to the article in a practical way.

**4.1.1.1. Expired utility patent.**—At the time of *TrafFix*, most federal circuits applied the competitive necessity test to cases involving an expired utility patent.<sup>89</sup> *TrafFix* rejected this approach. It held that the existence of a utility patent is “strong evidence” of functionality and places a “heavy burden” on the plaintiff to show “the feature is not functional, for instance by showing that it is merely an ornamental, incidental, or arbitrary aspect of the device” (*TrafFix*, 532 U.S. at 29–30, 34).<sup>90</sup> For example, the Court found that the dual-spring design at issue in *TrafFix* itself was functional because it was the “central advance” claimed in the expired patent regardless of whether reasonable substitutes were available (*ibid.*, at 30).<sup>91</sup>

**4.1.1.2. No utility patent.**—As mentioned above, most federal circuits at the time of *TrafFix* applied the competitive necessity test to all cases not involving a utility patent. The *TrafFix* Court rejected this approach and carved out a rather sizable exception to the competitive necessity test for trade dress that is “essential to the use or purpose of the article” or “affects the cost or quality of the article” (*ibid.*, at 32–34). The Court held that what it called the “traditional rule” applies to this type of trade dress and automatically bars trademark protection without regard to alternatives. As the Court put it, when a feature is essential to the use or purpose of the article or affects its cost or quality, “there is no need to proceed further to consider if there is a competitive necessity for the feature” (*ibid.*, at 33).<sup>92</sup>

The *TrafFix* Court made clear that the traditional rule would have barred MDI’s dual-spring design even if it had not been patented. This result followed

89 The single exception was the Tenth Circuit, which imposed a per se bar.

90 As others have noted, it is the rare case where a plaintiff can rebut the presumption, since utility patents rarely claim incidental or purely ornamental features (see *McKenna 2011*, pp. 827–831).

91 Throughout this section of its opinion, the Court uses the term “functional” without being clear about its meaning. Functional can mean de facto functional in the sense of being useful to the article, or it can mean de jure functional in the sense of barring trademark protection. It matters which definition the Court had in mind. If the Court meant de facto functional, the expired patent would simply be evidence that the feature was in fact useful, and the Court would have to explain why useful features are barred from trademark protection (in the case, this would be done by the traditional rule described below). However, if the Court meant de jure functional, the expired patent would be a reason in itself to bar trademark protection, but then the Court would have to explain why an expired patent has this legal force.

92 The Court reinforced this point when criticizing the Court of Appeals for considering alternative designs. *TrafFix*, 532 U.S. at 32–34 (observing that there was “no need . . . to engage, as did the Court of Appeals, in speculation about other design possibilities, such as using three or four springs which might serve the same purpose” and there is no need for “competitors to explore designs to hide the springs”).

for the Court from the fact that the dual-spring construction was “a unique and useful mechanism to resist the force of the wind” and “the reason the [road sign] device works” rather than just an “arbitrary, incidental, or ornamental feature” (*ibid.*, at 33). Again, it did not matter that there might be reasonable alternatives for competitors to use. The dual-spring design was the way MDI chose to keep its sign from blowing over, which was enough to make it essential and, therefore, bar trademark protection under the traditional rule.

The Court indicated that all other trade dress—in other words, trade dress that was not essential to the use or purpose of the article and did not affect its cost or quality—should be analyzed under the competitive necessity test. This includes “arbitrary, incidental, [and] ornamental” product features as well as those with aesthetic value.<sup>93</sup>

#### 4.1.2. *TrafFix's Reasoning*

One might have expected the Court to give a clear explanation for its abrupt and sharp departure from twenty years of lower court precedent. But it did no such thing. It never even explained what made its traditional rule “traditional.” To make matters worse, the Court supported its new rule by quoting language from dictum in a 1982 case,<sup>94</sup> which it had previously construed to support the competitive necessity test.<sup>95</sup>

What the *TrafFix* Court did was retrieve the functionality rule in place before the 1980s and reinstate the old intrinsic necessity approach for all features that add significant practical value to the plaintiff’s product. As we saw in Section 3, the earlier rule automatically barred protection for any trade dress that significantly contributed to the performance of the article or affected its cost of manufacture. Yet, the *TrafFix* Court did not bother to explain why the earlier rule should be revived—and revived just when the lower courts had finally worked out an approach that fit the competition policy.

In fact, there is very little policy discussion in *TrafFix*. It consists of only a few sentences in one paragraph appearing early in the opinion. The Court there notes that “[t]rade dress protection must subsist with the recognition that in many instances there is no prohibition against copying goods and products,” and that “[i]n general, unless an intellectual property right such as a patent or

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93 *Ibid.* (stating that courts should determine whether trademark protection “would put competitors at a significant non-reputation-related disadvantage”).

94 *Inwood Laboratories, Inc. v. Ives Laboratories, Inc.*, 456 U.S. 844, 850, n. 10 (1982).

95 *Qualitex Co. v. Jacobson Prods. Co.*, 514 U.S. 159, 164–165, 169 (1995). The *TrafFix* Court tries to distinguish *Qualitex* by arguing that the earlier case merely carved out an exception to the traditional rule for aesthetic trade dress. See *TrafFix*, 532 U.S. at 33. That interpretation fits the *TrafFix* Court’s purposes, but it does not fit a fair reading of *Qualitex*.

copyright protects an item, it will be subject to copying.”<sup>96</sup> However, the Court says nothing at all about where these free copying principles come from.<sup>97</sup> And it makes no effort to connect its new rules to the principles it asserts.<sup>98</sup>

One possible interpretation of *TrafFix* is that the Court applied a broad right to copy grounded in the Patent Act, a right that allows copying of anything within the subject matter of patent that is not actually protected by an existing patent.<sup>99</sup> According to this interpretation, the Patent Act places *all* useful features—unpatentable as well as unpatented—in the public domain free for copying.<sup>100</sup> Since the dual-spring design is useful and thus falls within patentable subject matter, others would have a right to copy it even if it had never been patented.<sup>101</sup> And that is exactly what the traditional rule allows them to do.

However, this interpretation fits the language of the opinion very poorly. The Court never actually refers to a right to copy and it even hedges its copying principle with qualified and somewhat tentative language.<sup>102</sup> Had the Court meant to adopt such a broad right to copy, one would expect it to have referred to the right more often and to have linked it up clearly to the traditional rule.

In addition, such an interpretation does not fit all the rules actually adopted in *TrafFix*. For example, if the Court meant to embrace this broad view, it is not clear why it limited the expired patent presumption to utility patents and exempted ornamental and aesthetic features from the traditional rule (*see generally* McKenna 2011, pp. 843–845; Strandburg 2012, p. 400). If the public has a right to copy anything within the subject matter of patent that is not actually protected by a patent, then it would seem to follow that the public has a right to copy any ornamental design within the scope of design patent that is not

96 *TrafFix*, 532 U.S. at 29.

97 Other than to decline an invitation to ground them in the Constitution. *See ibid.*, at 35 (declining to find a constitutional right to copy).

98 The Court does argue that the alternative of concealing the dual spring design, which was suggested by the Court of Appeals, would deprive consumers of visual confirmation of how the product works (*ibid.*, at 34). However, this was not offered as a justification for the traditional rule, nor does it work as such.

99 The subject matter of patent broadly encompasses anything with utilitarian value—or in the language of the statute, “any useful process, machine, manufacture, or composition of matter” (35 U.S.C. § 101 (2012)).

100 The Supreme Court went almost this far in two preemption cases decided in the 1960s, but the Court has since retreated from this extreme position and *TrafFix* is consistent with this trend. *See infra* notes 116–117 and accompanying text.

101 Professor McKenna argues for just such a broad right to copy as a normative matter, but not necessarily as an interpretation of *TrafFix* (McKenna 2011, pp. 830, 834–836).

102 The opinion states that “in many instances” and “in general” goods or products can be copied if they are not protected by a patent or copyright (*TrafFix*, 532 U.S. at 29).



actually protected by a patent (or subject to copyright). Yet lower courts have interpreted *TrafFix*'s presumption to apply only to expired utility patents and its traditional rule to apply only to practically useful features (McKenna 2011, pp. 843–848; Strandburg 2012, p. 400).

Moreover, if the *TrafFix* Court endorsed a broad statutory right to copy, one has to wonder why the Court bothered with the expired-patent presumption. After all, a traditional rule justified by a broad right to copy would do the job of barring protection perfectly well on its own. Perhaps an expired patent is supposed to be relevant as evidence that a feature is actually useful.<sup>103</sup> If so, however, it is relatively unimportant since in almost all cases utility is pretty easy to determine without help from a patent.

Finally, the case for a broad right to copy fails as a convincing interpretation of the Patent Act, or even as a desirable rule on independent normative grounds. Such a right is problematic both as a matter of precedent and as a matter of principle and policy. I discuss these points in Section 5.

#### 4.2 *TrafFix*'s Confusing Legacy

The Court's three-part functionality framework has spawned a seriously confused and muddled body of case law. Lower courts wonder how to apply the expired patent presumption, whether alternatives are relevant to the traditional rule, and what to do with the competitive necessity test.<sup>104</sup> Resolving these issues is especially difficult because *TrafFix* offers no clear policy guidance. This section briefly discusses two particularly confusing matters: the relevance of alternatives to the traditional rule and the domain of the traditional rule's application.<sup>105</sup>

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103 See *Jay Franco & Sons, Inc. v. Franek*, 615 F.3d 855, 858–59 (7th Cir. 2010) (interpreting *TrafFix* in this way).

104 See Cohen (2010) at 597–598 (noting that courts have struggled to make sense of *TrafFix* and as a result the case law has been “confused and inconsistent”); Weinberg (2010) at 323–324 (observing that there is general agreement that *TrafFix* made the functionality doctrine “inconsistent, confusing, and opaque”); Johnson (2011) at 130–139 (2011) (reviewing some of the post-*TrafFix* confusion).

105 Another area of confusion that is also linked to the Court's lack of policy guidance has to do with how strictly technical patent doctrine should be followed when applying *TrafFix*'s expired-patent presumption. See generally Cohen (2010) at 650–658 (surveying the different approaches in the case law). One might expect a judge to apply patent doctrine rather strictly if she believes that the expired-patent presumption prevents trademark law from barring use of features that patent law actually dedicates to the public domain, since those features would have to be strictly within the patent scope to warrant this treatment. See, e.g., *Keystone Mfg. Co. v. Jaccard Corp.*, 2007 U.S. Dist. LEXIS 13094 (W.D.N.Y. 2007) (engaging in a claim construction analysis to determine whether the products at issue actually practiced the patent); see also *Leviton Mfg. Co. v. Universal Security Instruments*, 304 F.Supp.2d 726, 735–736 (D. Md. 2004) (holding that the feature must be the central advance of the patent). On the contrary, one might expect a judge not to worry too much

#### 4.2.1. *The Relevance of Alternatives to the Traditional Rule*

Lower courts are split on whether the existence of alternatives is relevant to the traditional rule.<sup>106</sup> This is remarkable given how clear *TrafFix* is that the traditional rule has nothing to do with competitive necessity and alternatives. Still, the Court's assertion was never backed up with an explanation. Without an explanation, it is not surprising that lower courts would use their own understandings of functionality policy to make sense of what the Court did.

In particular, one might expect that a court strongly committed to promoting competition as the goal of functionality would be mystified by the traditional rule and inclined to read into it a concern with competitive effects. The Federal Circuit and the Ninth Circuit are good examples. Both circuits are committed to the competition policy and both have trouble accepting *TrafFix*'s traditional rule without including competitive necessity.<sup>107</sup> Moreover, in a recent decision, *McAirlaids, Inc. v. Kimberly-Clark Corp.* (756

about patent technicalities if the judge viewed an expired utility patent as simply evidence that the feature in question is in fact useful. *See, e.g., Jay Franco & Sons, Inc. v. Franek*, 615 F.3d 855, 858–859 (7th Cir. 2010) (noting that there is no need to inquire into whether the defendant's product would have infringed a claim of the expired patent because the value of the patent is only as evidence of usefulness). Finally, a judge particularly concerned about preventing consumer confusion might be inclined to limit the scope of the expired-patent presumption to make more room for the competitive necessity test. *See New Colt Holding Corp. v. RJG Holdings of Florida*, 312 F.Supp.2d 195, 212 n.10 (D. Conn. 2004) (noting that even if patent law would dedicate the feature to the public because it was disclosed but not actually claimed in the patent, this does not bar trademark protection under the expired-patent presumption).

106 *Compare Jay Franco & Sons, Inc. v. Franek*, 615 F.3d 855, 857 (7th Cir. 2010) (trade dress is functional under the traditional rule when “consumers would pay to have it rather than be indifferent toward or pay to avoid it”); *Specialized Seating, Inc. v. Greenwich Inds. L.P.*, 616 F.3d 722, 727 (7th Cir. 2010) (same); *Dippin’ Dots, Inc. v. Frosty Bites Dist., LLC*, 369 F.3d 1197, 1203–1204 (11th Cir. 2004) (same); *Eppendorf-Netheler-Hinz GmbH v. Ritter GmbH*, 289 F.3d 351, 356–358 (5th Cir. 2002) (alternatives are irrelevant); *with In Re Becton, Dickinson & Co.*, 675 F.3d 1368, 1375–1376 (Fed. Cir. 2012) (competitive necessity is relevant); *Secalt S.A. v. Wuxi Shenxi Constr. Mach. Co., Ltd.*, 668 F.3d 677, 685–687 (9th Cir. 2012) (treating the lack of equally effective alternatives as support for a functionality determination based on the traditional rule); *Valu Eng’g, Inc. v. Rexnord Corp.*, 278 F.3d 1268, 1276 (Fed. Cir. 2002) (competitive necessity is relevant).

107 *See Valu Eng’g, Inc.* at 1277 (stressing the pro-competition policy); *In Re Becton*, 675 F.3d at 1376 (noting that “the public policy underlying the rule that de jure functional designs cannot be protected as trademarks is ‘not the right to slavishly copy articles which are not protected by patent or copyright, but the need to copy those articles, which is more properly termed the right to compete effectively’”) (quoting *New England Butt Co. v. International Trade Commission*, 756 F.2d 874 (Fed. Cir. 1985)); *Secalt S.A. v. Wuxi Shenxi Construction Machinery Co., Ltd.*, 668 F.3d 677, 685–687 (9th Cir. 2012) (treating the lack of equally effective alternatives as support for a functionality determination under the traditional rule). I hasten to add that these decisions can be read to rely on evidence of alternatives only to bolster a functionality finding (because there are no alternatives) and not to support a nonfunctionality finding (because there are many). Although considering alternatives at all is inconsistent with *TrafFix*'s traditional rule, using alternatives to deny a functionality bar is a more extreme departure than using alternatives to support such a bar.

F.3d 307, 312 (4th Cir. 2014)), the Fourth Circuit joined the Federal and Ninth Circuits in holding that the availability of alternative designs is still relevant to application of the traditional rule after *TrafFix*.<sup>108</sup> And not surprisingly, the *McAirlaids* court, too, framed the underlying policy exclusively in terms of protecting competition.<sup>109</sup>

However, a court committed to broad freedom to copy should be much more willing to accept the traditional rule as *TrafFix* intended it. The Seventh Circuit is a good example. Several Seventh Circuit decisions emphasize the importance of allowing copying from the public domain, and in keeping with this position, they apply the traditional rule strictly without regard to alternatives.<sup>110</sup>

#### 4.2.2. *The Scope of the Traditional Rule's Domain*

Many lower courts read *TrafFix* to apply the traditional rule to all useful features and the competitive necessity test to all aesthetic features (McKenna 2011, pp. 551–552). But this neat division is hard to sustain. Some product features, such as the shape of a Coca-Cola bottle, contribute only incidentally and in a minor way to an article's utilitarian value. Even a court taking a broad view of the right to copy has reason to balk at applying the traditional rule to features of this kind, at least when consumer confusion is likely. Indeed, *TrafFix* itself suggests that “arbitrary” and “incidental” features are not within the traditional rule.<sup>111</sup>

Just as there are useful features that should not be subject to the traditional rule, so too there are aesthetic features that should. To illustrate, suppose that the plaintiff sells fine hotel china and customers buy the china mainly for its

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108 The *McAirlaids* court reversed the grant of summary judgment for the defendant on functionality. The court applied the four *Morton-Norwich* factors and emphasized the importance of the third factor, availability of alternative designs.

109 *Ibid.*, at 310 (stating that the “functionality doctrine prevents trademark law . . . from . . . inhibiting legitimate competition by allowing a producer to control a useful product feature”) (quoting *Qualitex Co. v. Jacobson Prods. Co.*, 514 U.S. 159, 164–165 (1995)). And while it is difficult to tell based only on a reversal of summary judgment, *McAirlaids* does seem to contemplate the possibility that trade dress could be non-functional because of alternative designs *even if* the other *Morton-Norwich* factors point in favor of functionality. *Ibid.*, at 312–314. (noting that *McAirlaids*'s patents do provide evidence of functionality although not the “strong evidence” that existed in *TrafFix* and that *McAirlaid*'s advertising arguably touted the pattern's functional attributes). If so, the Fourth Circuit might well be more extreme in its use of alternatives than the Federal Circuit.

110 See *Specialized Seating, Inc. v. Greenwich Indus., L.P.*, 616 F.3d 722,727 (7th Cir. 2010) (emphasizing that the functionality doctrine makes sure that useful designs are protected only by patent law and that firms are free to copy features that are not patented); *Jay Franco & Sons, Inc. v. Franek*, 615 F.3d 855, 857 (7th Cir. 2010) (same).

111 *TrafFix Devices, Inc. v. Marketing Displays, Inc.*, 532 U.S. 23, 30, 34 (2001) (noting that it is the “central advance” of the patent and “the reason the device works”).

attractive pattern.<sup>112</sup> The competitive necessity test would support protection for the pattern if there were enough equally pleasing alternatives. But it is hard to square this result with barring protection for the dual-spring design in *Traffix*. The same reason the Court gives—that the dual-spring design is central to the product’s value—applies to the china pattern as well.

It follows that the relationship between the traditional rule and the competitive necessity test is more complicated than the neat division between useful and aesthetic features. Most importantly for our purposes, the policies underlying the doctrine are likely to influence where a court marks the dividing line. For example, a court wedded to a broad right to copy any useful features within patent subject matter would be inclined to include more useful features under the traditional rule than a court committed to preserving competition.<sup>113</sup>

## 5. THE RIGHT TO COPY AND PUBLIC DOMAIN POLICY

The lesson is clear. To develop a sensible body of functionality law, we must carefully examine the policies underlying trademark functionality. The first step is to take a critical look at the idea that the public has a right to copy—not a natural right, but a right grounded in positive law—and that this right categorically bars trademark protection wherever it applies. This idea has the force it does because it assumes that copying is a *right*. Section 5.1 argues to the contrary that any right to copy is actually a policy and not a right at all. Section 5.2 then examines the social benefits of honoring this policy. The insights developed here have important implications for the doctrinal reconstruction undertaken in Section 6.

### 5.1 The “Right” to Copy

The right to copy is invoked by its supporters to deny protection otherwise justified on trademark policy grounds. To operate in this way, the right must exist, at least in part, outside of trademark law. If the right to copy were created

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112 See, e.g., *Pagliero v. Wallace China Co.*, 198 F.2d 339, 343–344 (9th Cir. 1952) (holding that the china pattern is legally functional because it is an important ingredient in the commercial success of the product).

113 There are other aspects of the relationship between the traditional rule and the competitive necessity test that *Traffix* leaves unresolved. For example, how are courts supposed to analyze the functionality of trade dress that combines utilitarian and aesthetic features? Can a product feature change over time from being legally functional to being legally nonfunctional when the feature’s usefulness to the product diminishes due to technological change? See *Jay Franco & Sons, Inc. v. Franek*, 615 F.3d 855, 857 (7th Cir. 2010); *Eco Mfg., LLC v. Honeywell Int’l, Inc.*, 357 F.3d 649, 653 (7th Cir. 2003).

exclusively by the rules of trademark law, it would make no sense to say that trademark law cannot protect a feature *because* there is a right to copy it.

Moreover, to justify an absolute and categorical bar such as *Traffix's* traditional rule, the right to copy must actually be a right and not just a policy.<sup>114</sup> If the “right to copy” were only a policy, it would have to be balanced against the other policies supporting trademark protection. It seems unlikely that the result would be an absolute and categorical bar applicable even in cases involving serious confusion-related harm.

The question, therefore, is whether federal law recognizes a right to copy capable of cutting off legal protection otherwise justified on trademark policy grounds. The natural right recognized in the 19th and early 20th centuries had that property, but no one to my knowledge argues today for a natural right to copy. Thus, we must look for a right created by positive law.

The common law cannot be the source of such a right. For one thing, there are limits to federal common law making power, so it might not even be possible to create a federal common law right to copy. And even if it is possible, federal common law cannot of its own force trump a federal statute such as the Lanham Act. Since there is no basis for locating the right in the Lanham Act itself, there are only two remaining possibilities: the right to copy might be created by the Constitution or it might be created by the federal patent and copyright statutes.

Neither possibility works. This is not the place to provide a detailed defense of this conclusion. Even those commentators who favor a broad right to copy concede that case law support for it is weak.<sup>115</sup> While there was a time in the 1960s when the Supreme Court endorsed a broad federal right to copy created by the Constitution and federal IP statutes and capable of preempting state unfair competition law,<sup>116</sup> the Court has since backed off this extreme position

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114 The distinction between right and policy is familiar (Dworkin 1977, pp. 90–100; Nagel (1979), pp. 112–115, 131–133). A right can be limited only for compelling reasons, such as protecting other rights of comparable moral worth or preventing particularly severe welfare losses. Ordinary policy trade-offs are not enough. Thus, if the right to copy is actually a right, firms should be free to copy product features in almost all cases, and that is exactly what the traditional rule guarantees.

115 See McKenna (2011) at 839–843 (“it is clear that even the Supreme Court has oscillated between a strong ‘right to copy’ view . . . and a weaker ‘need to copy’ view”); Barrett (2004) at 138–146 (detailing the Supreme Court’s lack of clarity on the issue).

116 See *Sears, Roebuck & Co. v. Stiffel Co.*, 376 U.S. 225, 231 (1964) (“An unpatentable article, like an article on which the patent has expired, is in the public domain and may be made and sold by whoever chooses to do so.”); *Compco Corp. v. Day-Brite Lighting, Inc.*, 376 U.S. 234, 237–238 (1964) (“To forbid copying would interfere with the federal policy, found in *Art. I, § 8, cl. 8 of the Constitution* and in the implementing federal statutes, of allowing free access to copy whatever the federal patent and copyright laws leave in the public domain.”).

and today seems content to treat freedom to copy as a policy rather than a right.<sup>117</sup>

To be sure, there are statements in some opinions to the effect that federal law recognizes a right to copy, but those statements are limited in substantial ways. In *Dastar Corp. v. Twentieth Century Fox Film Corp.* (539 U.S. 23 (2003)), for example, the Supreme Court declared broadly that the “right to copy . . . passes to the public” upon expiration of a patent or copyright, but it did so in a rather limited context and conceded the importance of coordinating the right to copy with Lanham Act policies protecting against consumer deception and confusion (*ibid.*, at 32–34).<sup>118</sup> Similarly, in *Bonito Boats, Inc. v. Thunder Craft Boats, Inc.* (489 U.S. 141 (1989)), the Court, in the course of preempting a Florida statute for interfering with “the public’s ability to exploit ideas that the patent system mandates shall be free for all to use,” (*ibid.*, at 165, 167) recognized that the Patent Act creates “a federal right to copy” upon expiration of a patent (*ibid.*, at 165). However, it also made clear that federal regulation of product features must take account of policy choices in the Lanham Act and other federal statutes.<sup>119</sup> In other words, the Lanham Act’s policy in favor of preventing consumer confusion must be coordinated with the public domain policies embodied in the Patent and Copyright Acts.<sup>120</sup>

This makes sense. The Court’s preemption decisions deal with federal–state conflicts that implicate the Supremacy Clause. Coordinating distinct federal statutes involves different considerations.<sup>121</sup> There is no reason to bar Congress from implementing policy choices in one statute just because they conflict in some way with policy choices in another statute. Instead, the two statutes should be construed as parts of a coherent whole. This means that any

117 See *Kewanee Oil Co. v. Bicron Corp.*, 416 U.S. 470 (1974); *Goldstein v. California*, 412 U.S. 546 (1973).

118 *Dastar* involved an expressive work rather than a tangible product and a reverse passing off theory that the Court feared would create a form of “mutant copyright.” Nowhere does *Dastar* suggest that the right to copy bars an ordinary passing off claim involving tangible goods.

119 See *Bonito Boats* at 166 (noting that “Congress has [in section 43(a) of the Lanham Act] thus given federal recognition to many of the concerns that underlie the state tort of unfair competition,” which is an “affirmative indication[] from Congress” that the law of unfair competition is “consistent with the balance struck by the patent laws”); *ibid.* (stating that “the application of *Sears and Compco* to nonfunctional aspects of a product which have been shown to identify source must take account of competing federal policies” in the Lanham Act).

120 See *ibid.*, at 166; *cf. ibid.*, at 158 (noting that the federal right to copy does not prevent states from authorizing injunctions against the copying of nonfunctional product features with secondary meaning).

121 See *Eldred v. Ashcroft*, 537 U.S. 186, 204 n.8 (2003) (indicating that preemption decisions “rooted in the Supremacy Clause cannot be turned around to shrink congressional choices”); *Dinwoodie* (1999) at 667–668 (arguing against inferring from the Supreme Court’s preemption decisions a right to copy as an absolute bar to federal trademark protection).

federal right to copy must take account of the policy choices Congress made in the Lanham Act. In other words, a congressionally prescribed “right to copy” must be defined by balancing the public domain policies of the Patent and Copyright Acts against the trademark policies of the Lanham Act.

The conclusion might be different if the Constitution’s Patent and Copyright Clause created a broad right to copy of its own force (*see Pollack 2000*, pp. 283–289 arguing for a constitutional right to copy). However, the Supreme Court has never been willing to construe the Clause in this way.<sup>122</sup> In *TrafFix*, the Court declined to reach this constitutional question.<sup>123</sup> Indeed, recognizing a constitutional right to copy could have serious consequences for Congress’s flexibility in the intellectual property field, a flexibility that the Court has celebrated in a number of decisions.<sup>124</sup>

In sum, the so-called right to copy should not be treated as a utility-constraining right capable of cutting off trademark protection by its own force. It makes sense only as a statement of policy, and as a policy it must be balanced against the Lanham Act’s policy of preventing consumer confusion.<sup>125</sup>

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122 I do not mean to suggest that there are no constitutional limits. For example, Congress cannot regulate facts under the Patent and Copyright Clause and perhaps not under the Commerce Clause either. *See Feist Publ’ns. v. Rural Tel. Serv.*, 499 U.S. 340 (1991). But this limitation is not relevant to trademark law. Also, there might be a First Amendment right to copy features with substantial expressive content, such as a Betty Boop character on a T-shirt, when the feature is used for expressive purposes. But even if there is, it would apply only in these special cases.

123 *TrafFix Devices, Inc. v. Marketing Displays, Inc.*, 532 U.S. 23, 35 (2001). Moreover, in *Bonito Boats*, the Court made clear that the Patent and Copyright Clause does not of its own force preempt state law (*Bonito Boats* at 165). This is significant because it implies that there is no constitutional right to copy, since if there were, preemption would seem to follow directly.

124 *See, e.g., Eldred, supra* note 121, at 222 (emphasizing the importance of giving Congress wide latitude to design optimal intellectual property protection). For example, if there were a constitutional right to copy, Congress might not be able to enact a federal trade secret statute such as the Economic Espionage Act (18 U.S.C. § 1831 (2012) *et seq.*).

125 Courts and commentators sometimes rely on a bargain theory to justify the right to copy. *See, e.g., Dastar Corp. v. Twentieth Century Fox Film Corp.*, 539 U.S. 23, 33–34 (2003); *Bonito Boats, Inc. v. Thunder Craft Boats, Inc.*, 489 U.S. 141, 150–151 (1989); *Pollack (2000)* at 291–299. The bargain theory imagines a patent as a contract between the government and the inventor, in which the government agrees to give the inventor a monopoly for a limited period of time and the inventor agrees in return to dedicate the invention to the public domain after expiration of the patent. *See Kellogg Co. v. National Biscuit Co.*, 305 U.S. 111, 121–122 (1938). The idea is that the public has a right to copy because the inventor impliedly agreed to allow copying. The first thing to note is that the argument at most confers a right to copy features that were once patented. So it only supports *TrafFix*’s expired-patent presumption and not the more expansive traditional rule. But even on its own terms the argument does not work. The notion of a bargain is pure fiction. The government sets the terms of the bargain unilaterally and the inventor has little choice but to accept. Moreover, the government must be taken to speak with a single voice when it makes the offer, and this means that the terms of the offer must include everything the government says about IP rights. Accordingly, the content and scope of any right to copy depend on a coherent account of

## 5.2 The Public Domain Policy

We have now arrived at an important insight. The functionality doctrine depends on a balance of competing policies. On one side of the balance are the trademark-related benefits of protecting source-identifying trade dress. On the other side are the costs of restricting access to and use of product features. The weight assigned to each side of the balance depends on normative judgments about the importance of the relevant policies in the specific context.

This may seem an obvious point, but it is often ignored. The tendency of courts and commentators to invoke the right to copy as a trump diverts attention from the critical question, whether the social benefits of allowing free copying are actually furthered in a trade dress case. One such benefit involves promoting product competition and reducing monopoly costs. This benefit, as we have seen, has played a major role in functionality jurisprudence ever since the 1930s. The following discussion examines two other benefits that are often associated with maintaining a robust public domain: facilitating downstream innovation based on previous creations, and channeling patentable inventions to the patent system.

### 5.2.1. *Facilitating Downstream Innovation*

Innovation is cumulative. Downstream creators build on upstream creations (Lemley 1997, pp. 997–998). This means that every innovator is an upstream creator relative to those who follow after and a downstream creator relative to those who have gone before. IP rights are important for incentivizing upstream creativity, but they can also impede downstream innovation by making it more difficult for downstream creators to access upstream creations. Licensing is one way to gain access, but transaction costs and uncertainty impede efficient licensing (*ibid.*, at 1052–1061). Thus, it is important that IP rights be limited to facilitate access and support a rich public domain from which new creators can draw freely.<sup>126</sup>

There are two ways that trademark protection for product features can impede downstream innovation. One way is by chilling creative modifications

everything Congress offers by way of IP protection, including the Lanham Act's protection against consumer confusion.

126 See *Traffix Devices, Inc. v. Marketing Displays, Inc.*, 532 U.S. 23, 29 (2001) (noting that “[a]llowing competitors to copy will have salutary effects in many instances”, including significant technological advances). This is certainly true for utilitarian theory, but even Lockean theory might support preserving a rich public domain so that everyone has an equal opportunity to create (*Merges* 2011, pp. 48–56).



of existing product designs. The other way is by restricting access to basic design elements or standard design features in an industry.

Cases involving creative modifications of existing designs should arise only rarely in practice. Competitors do not usually copy features to create something new; they copy to compete for the same consumer demand. As a result, they have strong incentives to copy almost identically.<sup>127</sup> For example, the defendant in *Traffix* did not improve the plaintiff's dual-spring design or use it to make something new. It copied the design almost identically to sell signs with the same feature in direct competition with the plaintiff.<sup>128</sup> It makes no sense to rely on the downstream innovation policy to allow free copying in cases that do not involve any significant innovation.<sup>129</sup>

The second situation, using a basic design element or industry standard, is potentially more troubling. Everyone should be free to use fundamental elements of design, such as primary colors, basic shapes, and simple patterns. For example, in *Jay Franco & Sons, Inc. v. Franek* (615 F.3d 855 (7th Cir. 2010)), the Seventh Circuit found the circular design of a round beach towel to be legally functional in part because, as “a basic element of design,” it was something everyone should be free to use (*ibid.*, at 860–861). So too, design standards in an industry should be freely available to all firms in that industry so they can innovate within established parameters. For example, someone experimenting with new décor for a pizza restaurant must be able to use design elements that are standard for pizza restaurants.<sup>130</sup>

It is not clear, however, that a public domain policy in favor of copying needs to do much work here. In most cases, ordinary trademark policies should do the

127 See *McKenna* (2011) at 854 (noting that utilitarian functionality cases usually involve direct competitors).

128 See *Traffix*, 532 U.S. at 26. The defendant did make a minor modification. It rotated the sign so that the two springs connected around a corner rather than on a side. *Ibid.*, at 30–31.

129 Moreover, innovative uses are not likely to create consumer confusion if they appear sufficiently different from the original. Nor are they likely to support a dilution claim. See 15 U.S.C. § 1125(c)(2)(B)(i) (2012) (identifying the degree of similarity as a factor for determining blurring dilution). To be sure, one cannot rule out liability altogether given the expansive application of confusion-based theories these days and the open-ended nature of the likelihood of confusion test (see *Bone* 2006, pp. 602–615; *Bone* 2012, pp. 1336–1348). But it is still very unlikely.

130 See *Happy's Pizza Franchise, LLC v. Papa's Pizza, Inc.*, No. 10-15174, 2013 U.S. Dist. LEXIS 10130 \*13–\*14 (E.D. Mich. 2013). For other cases addressing functionality for basic design elements and industry standards, see *The Antioch Co. v. Western Trimming Corp.*, 347 F.3d 150, 159 (6th Cir. 2003) (noting that “no designer should have a monopoly on designs regarded by the public as the basic form of a particular item”); *Christian Louboutin S.A. v. Yves Saint Laurent Am., Inc.*, 778 F. Supp. 2d 445, 453–454 (S.D.N.Y. 2011), *rev'd* 696 F.3d 206 (2d Cir. 2012) (district judge applying the functionality bar to the color red because primary colors are basic design elements in the fashion industry); *Rally's, Inc. v. Int'l Shortstop, Inc.*, 776 F. Supp. 451, 455 (E.D. Ark. 1990) (holding that “‘common components’” in the industry are barred from protection by the functionality doctrine).

trick. Consumers accustomed to seeing a basic element or an industry standard on many different products sold by different firms will not be inclined to adopt it as source identifier for a single firm.<sup>131</sup> Also, the likelihood of confusion might not be significant when the rest of the defendant's product design is creatively different from the plaintiff's. There might be some cases in which secondary meaning attaches and consumer confusion is likely, but they are probably not very numerous.

### 5.2.2. *Channeling Inventions to the Patent System*

Barring trademark protection for useful product features can also be important for channeling inventions to the patent system. Some commentators view channeling in terms of promoting competition (*see, e.g.*, McKenna 2011, pp. 827–830, 834; Strandburg 2012, pp. 388, 397). They assume that patent law, by allowing free copying of whatever is not patented, establishes a baseline of free competition and that channeling inventions to the patent system ensures that trademark and other forms of IP protection do not interfere with this baseline. If I understand this argument correctly, it suffers from the same problems as arguments based on a right to copy. Indeed, it might collapse into the right to copy insofar as it assumes that the supposed competitive baseline is defined by that right (*see, e.g.*, Strandburg 2012, pp. 388, 290, 396–397, linking patent's competitive baseline with a supposed patent law “right to copy”). In any case, there is no indication that patent law creates a relatively fixed competitive baseline insulated from trademark law at a “structural level” (McKenna 2011, p. 836) any more than there is evidence that it creates a right to copy capable of trumping trademark protection. Competition is important, of course, but so too is avoiding harmful consumer confusion. The objective should be to strike a sensible balance between public domain policies, including the policy of preserving competition, on the one hand, and trademark policies on the other.

There is another way in which channeling inventions to the patent system is important. Firms might not bother to seek patents on patentable features if they can use trademark law to obtain an indefinite monopoly.<sup>132</sup> By taking away the

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131 In fact, the design might properly be classified as a generic mark and not given any protection at all. However, genericity overlaps with functionality in this context: the reason for affixing the genericity label is the same as the reason for finding the design functional.

132 Patents are costly to obtain and patents on most inventions last only for twenty years from the date of filing (35 U.S.C. § 154(a)(2) (2012)). One might argue that channeling is important more generally, as a way to funnel all product features to the patent system so they can be sorted between those that deserve patents and those that do not. However, it makes little sense to channel nonpatentable features only so they can be denied a patent. *See Kewanee Oil Co. v. Bicron Corp.*, 416 U.S. 470, 480–481 (1974) (focusing on channeling benefits for patentable inventions). Even those who claim

trademark option, therefore, the functionality doctrine makes patenting more attractive. How much social value this creates depends on the benefits of directing inventions to the patent system, which in turn depend on the goals that the Patent Act promotes.

Two Patent Act goals are relevant to this analysis: incentivizing invention and encouraging early public disclosure.<sup>133</sup> Trademark law does not interfere with the first goal.<sup>134</sup> A firm with a choice between patent and trademark will choose the option that gives it a greater expected return on its research investment. If that option is trademark law, the firm does better with the trademark option and will have stronger incentives than it would if only patent were available. If the superior option is patent, the firm is no worse off for having the trademark option, too.

The impact of trademark protection on early public disclosure is more complicated. The Patent Act requires public disclosure as a condition to obtaining a patent.<sup>135</sup> Disclosure is important because it allows others to build on or invent around the invention, or copy and use it after the patent term expires (Landes & Posner 2003, pp. 294–295). Moreover, early disclosure is important to cut off the patent race and avoid wasteful duplicative research (*ibid.*, at 300–302).<sup>136</sup>

To evaluate the effect of trademark protection on public disclosure, we must distinguish between two different situations. In the first, the invention can easily

that everyone should be free to copy features denied a patent do not insist that the freedom to copy should depend on the official denial of a patent.

133 See, e.g., *Kewanee Oil Co.*, *ibid.*, at 480–481; Eisenberg (1989) at 1024–1030 (noting that the courts have relied mainly on these two goals). The *Kewanee* Court also mentions the patent policy that what is in the public domain must not be removed from the public domain (416 U.S. at 481). But this policy goal simply begs the question of whether the product feature *should* be in the public domain in the first place. Of course, preserving a public domain serves specific policy goals that patent law is concerned about. But the analysis should focus on those goals, not on some poorly defined, unitary concept of “public domain.” Section 5.2.1 addressed the goal of facilitating downstream innovation; this section addresses channeling, and Section 6.3 addresses competition.

134 Nor are the efficiency goals of prospect theory undermined by trademark protection (see Kitch (1977) presenting the prospect theory of patent law, which focuses on the benefits of giving property rights to the inventor at an early stage to facilitate efficient exploitation of the invention). Insofar as trademark protection substitutes for patent protection, trademark law achieves the same goals. The availability of trademark law for nonpatentable inventions might divert some investment at the margin away from patentable inventions, but this effect should be small given the secondary meaning, likelihood of confusion, and other limits that make trademark protection relatively weak compared to patent.

135 For example, the patent applicant must describe the invention in sufficient detail to teach it to others (35 U.S.C. § 112 (2012)), and the patent with this description is published in most cases within eighteen months of filing the application (35 U.S.C. § 122(b) (2012)).

136 The one-year statutory bar forces an inventor to file an application within one year of starting to use the invention commercially. 35 U.S.C. § 102(a), (b) (2012).

be learned by inspecting the trade dress feature. In *TrafFix*, for example, the dual-spring mechanism was fully disclosed by the plaintiff's dual-spring design.<sup>137</sup> Obviously, trademark protection in these cases cannot interfere with the public disclosure goal. Features that serve as source identifiers are visible to the public and thus already disclosed when the product is publicly marketed.

In the second type of case, the feature does not disclose the invention. For example, suppose that Firm X invents a novel process for manufacturing a fishing rod and suppose an inevitable byproduct of the process is that it leaves a spiral marking on each rod.<sup>138</sup> The spiral marking is visible to the public, but the process is not. Assume, too, that the manufacturing process would be patentable; in other words, it is novel and nonobvious and meets all the other patent requirements. And also assume that it is costly to conceal the marking, so requiring competitors to conceal it would add significantly to their manufacturing costs and put them at a competitive disadvantage.

X must decide whether to seek a patent or to keep its process secret and use the law of trade secrecy to protect it. These two options are mutually exclusive. If X obtains a patent, the invention is disclosed to the public and secrecy is destroyed (1 *Milgrim & Bensen* 2013, § 1.06[1]). If X chooses to keep the invention secret, X is barred by section 102 of the Patent Act from obtaining a patent after one year of commercial use (35 U.S.C. § 102 (2012)). There are advantages to each option. Patent law grants broad property rights that prevent others from making, using, or selling the invention even if it is independently discovered. However, patent rights last for only a limited time, usually twenty years from application (35 U.S.C. § 154(a) (2012)). Trade secret law grants more limited rights—for example, reverse engineering and independent discovery are perfectly lawful—but the rights it grants last indefinitely, for as long as the invention remains secret (2 *Milgrim & Bensen* 2013, § 7.02). In addition, keeping the invention secret makes it more difficult for competitors to invent around it.

X might well choose trade secrecy over patent given the inherent difficulties of reverse engineering a process from its product. If X would choose trade secrecy even with trademark protection for the spiral marking, the addition of trademark law makes no difference. Assume, therefore, that X would seek a patent if there were no trademark protection. In other words, adding trademark to the mix makes secrecy sufficiently more attractive to tip the balance away

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137 This first situation also encompasses cases in which the invention is not clearly disclosed but can be readily reverse engineered.

138 This example is based on *In Re Shakespeare*, 289 F.2d 506 (CCPA 1961).

from patent. This scenario is possible. With trademark protection, X can prevent competitors from selling fishing rods with the same spiral marking, which also prevents them from using the secret process even when they lawfully reverse-engineer or independently discover it.

The question, however, is how much adding trademark protection is likely to affect patent filing incentives at the margin. Because X is barred from a patent after one year of commercial use, it has only one year to evaluate the prospects of obtaining trademark protection. In that year, X must do enough by way of advertising and sales to be confident that the mark has developed, or will develop, secondary meaning.<sup>139</sup> Moreover, even if the spiral design has secondary meaning, X can only prevent uses that are likely to confuse consumers.<sup>140</sup> If competitors add enough distinguishing marks to their fishing rods, X's chance of proving likely confusion will be much reduced. Therefore, given the one year deadline, X runs a considerable risk relying on trademark protection to make the difference between choosing patent and choosing trade secrecy. This means that adding trademark protection will make a difference only for those firms very close to the margin, and it is not clear how many such firms there are.

In the end, the effect of trademark protection on the patent system is an empirical question that needs more study. There are, however, good reasons to believe that any problems are confined to a very small group of cases.

## 6. TOWARD A MORE SENSIBLE FUNCTIONALITY DOCTRINE

To recap, the right to copy is best understood not as a right, but rather as a public domain policy supporting free copying. This policy serves three main goals. The goal of promoting competition in the product market applies to all trade dress cases. The goals of facilitating downstream innovation and channeling patentable inventions to the patent system apply to only a limited set of special cases.

The following discussion reconstructs functionality doctrine to fit these policies. The primary purpose is to outline an analytical framework for designing optimal rules, not to provide a comprehensive formulation of functionality

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139 Proof of secondary meaning is required for all product design trade dress (*Wal-Mart Stores, Inc. v. Samara Bros., Inc.*, 529 U.S. 205, 211–214 (2000)). Also, courts can be quite strict about the circumstantial evidence case for secondary meaning in trade dress cases (see, e.g., *Yankee Candle Co., Inc. v. Bridgewater Candle Co., LLC*, 259 F.3d 25, 38–42 (1st Cir. 2001)). There is a remote possibility that a court would classify the spiral design as product packaging, but that is very unlikely given the tight link to the manufacturing process.

140 A blurring dilution theory is a theoretical possibility, but the spiral design would have to qualify as a “famous mark” (15 U.S.C. § 1125(c) (2012)).

doctrine. Section 6.1 maps the general approach. Section 6.2 discusses how to design functionality rules to promote downstream innovation and serve the channeling policy and Section 6.3 does the same for the competition policy. Section 6.4 discusses some special issues that arise in the context of aesthetic trade dress. Section 6.5 pulls all the various strands together. Finally, Section 6.6 discusses a more radical proposal: abolishing all trademark protection for trade dress.

### 6.1 The General Approach

Optimal functionality rules strike a balance between the benefits of free copying measured in terms of competition, innovation incentives, and channeling incentives, on the one hand, and trademark-related costs, on the other. Trademark-related costs, in turn, depend on the likelihood of consumer confusion. Absent a confusion risk, the defendant can copy freely regardless of a feature's functionality.<sup>141</sup> It follows then that every case in which the functionality doctrine is actually needed to safeguard the public domain policy must involve some significant confusion risk.<sup>142</sup>

But confusion alone is not a problem. Confusion matters only when it causes harm (Bone 2004, pp. 2147–2149; Lemley & McKenna 2010a). This means that the trademark-related costs of a functionality bar must include not only the probability of confusion, but also the social harms from confusion when it materializes. What counts, in other words, is *expected* harm: the magnitude of confusion-related harm discounted by the probability that confusion will materialize (Bone 2012, pp. 1361–1377). It is important to emphasize this point because courts often overlook it in trademark cases. They tend to focus exclusively on likelihood and ignore harm.

Therefore, any economic analysis of functionality must compare the total expected costs of different functionality rules, where the relevant costs include the costs of enjoining others from using valuable trade dress measured in terms of the effect on downstream innovation, channeling, and competition, and the costs of tolerating confusion-related harm. In general, broader functionality rules that bar trade dress protection in more cases are likely to reduce the former cost but increase the latter—and vice versa for narrower rules.

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141 I ignore dilution for the rest of the analysis. A mark must be “famous” to warrant protection on dilution grounds and trade dress seldom achieves that status. Moreover, it is not clear how to evaluate the harm from blurring dilution (Bone 2007).

142 I say “actually” because a judge need not first find likely confusion before deciding functionality. A judge instead might decide a case on functionality grounds without ever considering likelihood of confusion if functionality is easier to determine or more suitable for summary judgment.

One additional point deserves special mention. The functionality doctrine is not the only tool available to address public domain concerns. Since the 1980s, courts have expanded types of actionable confusion and imposed liability rather broadly in trade dress and other types of trademark cases (Bone 2012; Lemley & McKenna 2010a). Some of these expansions are highly problematic and should be cut back, a point that I have discussed at length elsewhere (Bone 2012, pp. 1337–1340). Any steps to cut back will reduce the risk of liability and, therefore, open up more space for copying without having to use the functionality bar.<sup>143</sup>

## 6.2 Facilitating Downstream Innovation and Channeling

We saw in Section 5 that the innovation and channeling policies are likely to be salient in only a small group of cases. In the cases where they do apply, these policies raise special concerns about the effect of functionality rules on ex ante incentives.<sup>144</sup> For example, the impact on downstream innovation must be assessed from the point of view of a potential innovator deciding whether and how much to innovate. So too, the impact on a firm's choice between patent and secrecy must be assessed from the perspective of a firm considering its options before making a choice. In both cases, ex ante predictability has special importance and there is considerable benefit in designing legal rules to convey clear signals.

Consider downstream innovation. The cases that matter are those in which the defendant's use creatively modifies the plaintiff's product design. Moreover, the modification should be substantial, since small changes add little, if any, social value in terms of innovation.<sup>145</sup> Although classification is bound to be uncertain at the margin, predicting whether a use is sufficiently creative should be relatively easy in many cases. And to some extent a defendant can manage the risks on its own by making a more substantial modification.

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143 For example, courts should insist on solid evidentiary support for each of the factors in the likelihood of confusion test. In particular, the strength of the mark factor should focus on acquired strength rather than inherent strength. Moreover, if the plaintiff relies on the intent factor, the court should insist on proof of intent to deceive consumers, not simply intent to copy the trade dress or free ride on its consumption value (Bone 2012, pp. 1337–1338).

144 Cases involving these policies often implicate the competition policy, too. For example, a competitor wishing to use a basic design element might argue that there are no equally effective alternatives to compete with a different design.

145 There is an analogy in copyright law. The fair use doctrine (17 U.S.C. §107 (2012)) permits copying of protected expression when the social benefits are substantial enough and there is good reason to allow use without a license. An important factor relevant to fair use is the degree to which the defendant's copying alters or transforms the work that it copies (*Campbell v. Acuff-Rose Music, Inc.*, 510 U.S. 569, 574–577 (1994)).

As for channeling, the relevant cases are defined as those in which the trade dress feature is causally linked in a necessary way to a hidden invention that cannot be easily discovered by inspecting the product. With this definition, it should be relatively easy to identify the relevant cases *ex post* and predict them *ex ante*. To be sure, the definition is overinclusive; it captures inventions that are unpatentable as well those that are patentable. But the cost and uncertainty of determining patentability in each case are too high to justify including that factor in the definition.

There are two possible ways to structure the applicable functionality rules for these cases. One way is to deny protection outright, perhaps with the caveat that the defendant must adopt obvious precautions against confusion, such as disclaimers and distinctive packaging. The other way is to create a very strong presumption against trademark protection, but give the plaintiff an opportunity to show that the case is one in which the expected confusion-related harm—the likelihood of confusion and the harm from confusion—is very serious.

The former approach maximizes predictability but at the cost of possibly serious confusion-related harm in some cases. The presumptive approach catches more cases where relief is justified, but it also generates more uncertainty *ex ante*. The choice between the two approaches depends on the balance of benefits and costs. For example, an absolute bar is probably superior to a presumptive rule for promoting downstream innovation. The predictability benefits are clear. Moreover, the costs are probably not very high. Secondary meaning is unlikely for basic design elements or for industry standards that are commonly used by different sellers; creative modification reduces the risk of confusion, and categorical exclusions make litigation less likely, which reduces litigation cost and uncertainty.

### 6.3 Promoting Product Market Competition

This leaves promoting competition as the only relevant policy in the vast bulk of trade dress cases, utilitarian, and aesthetic alike. It might seem as though the competition policy would support use of a competitive necessity test to identify those cases where anticompetitive effects support a functionality bar. However, this conclusion ignores the enforcement costs of applying such a test and the incentive effects of using a *per se* bar.<sup>146</sup>

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<sup>146</sup> It also ignores the risk of duplicative development costs created by relying on market entry through substitute designs. The literature on product differentiation shows that sometimes exclusivity over an information good can generate high costs even when there are plenty of substitutes (Bracha & Syed 2014). Giving one firm exclusive rights in a particular design creates opportunities for other firms to earn rents by entering that same market with a noninfringing substitute. To do so, however,



### 6.3.1. *Expected Enforcement Costs*

As I use the term here, “enforcement costs” include the administrative costs of a registration system and the process costs of litigating trademark disputes. Enforcement costs also include the expected costs of error in applying a functionality rule (Bone 2004, pp. 2123–2125). There are two types of errors: false positives and false negatives (also called Type I and Type II errors). A court commits a false-positive error when it protects trade dress that should not be protected because it is legally functional, and it commits a false-negative error when it fails to protect trade dress that should be protected because it is not legally functional. The same is true for a Patent and Trademark Office decision whether to register trade dress: a mistaken decision to register is a false-positive error and a mistaken refusal to register is a false-negative error.

The effects of a rule obviously cannot be known with certainty at the time the rule is adopted. For this reason, the rule’s costs must be measured in terms of *expected* cost. Expected cost is the cost of an outcome discounted by the probability that the outcome will occur. For example, the expected process cost of litigating functionality in a trademark suit is just the average process cost per suit discounted by the probability that a suit will be filed in which functionality is an issue.<sup>147</sup> So too, the expected cost of false-positive or false-negative error is the average cost of that type of error discounted by the probability the error will occur. Thus, expected process costs can be low even when litigation is costly if few firms file lawsuits, and expected error costs can be low even when mistakes are very costly if few mistakes are made.

### 6.3.2. *An Enforcement Cost Analysis of the Competition Policy*

The objective of an enforcement cost analysis is to identify the rule among the feasible options that minimizes total expected enforcement costs, including the expected cost of false positives, the expected cost of false negatives, and expected administrative and process costs. This section compares two possible rules: (i) a rule that applies the competitive necessity test and thus bars protection only

the entering firm must incur development costs of its own. Thus, entry reduces deadweight loss but adds duplicative development costs. If the development costs are high enough and the market demand is large enough, IP protection might be undesirable even with lots of substitutes. However, development costs are not likely to be high in those trade dress cases where protection is afforded, since if those costs were high, the substitute would not be considered equally effective from a competition point of view. I am indebted to my colleague, Oren Bracha, for alerting me to this point.

<sup>147</sup> To illustrate, if trademark owners file trademark suits in which trade dress functionality is an issue with a probability of 20 percent and the litigation and decision costs of determining the functionality issue is \$200,000 on average, then expected process costs are:  $0.2 \times 200,000 = \$40,000$ .

when there are no reasonable alternatives for competitors to use, and (ii) a per se rule, such as *TrafFix*'s traditional rule, which absolutely bars trademark protection for designated types of trade dress. It also goes beyond a strict enforcement cost analysis to consider the effect of these rules on ex ante incentives and consumer confusion from similar trade dress.<sup>148</sup>

As we shall see, one of the critical factors in choosing between these two rules on enforcement cost grounds is the cost of evaluating alternatives. The magnitude of this cost depends on how the evaluation is conducted. In theory at least, the evaluation of alternatives involves two inquiries. First, the court must define the relevant product market, and second, it must assess the adequacy of available alternatives in light of the effect on competition in that market. The first inquiry is complicated, and courts frequently sidestep it (*Lemley & McKenna 2012*).<sup>149</sup> They implicitly assume a product market rather than address the issue openly, sometimes noting that the product market should be defined broadly.<sup>150</sup> The second inquiry can be difficult as well, and courts usually treat it as a factual issue.

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148 Minimizing enforcement costs is not the ultimate objective of an economic analysis. It is an important goal because correct application of the substantive law is one of the most important ways that real world incentives are shaped. However, legal rules can affect incentives in other ways. For example, it is possible, as I shall argue in Section 6.6, that the adoption of a per se rule barring protection for product design could encourage firms to focus on word marks as source identifiers, which might then reduce the likelihood that consumers rely on trade dress to identify source. Under these circumstances, a per se rule would minimize confusion at the same time as promoting competition, and it would do so not by improving outcome accuracy, but by deterring firms from promoting trade dress as a source-identifier in the first place. My thanks to those who encouraged me to add a discussion of these incentive effects to my enforcement cost analysis.

149 In antitrust, market definition depends on cross-elasticity of demand and supply, which raises a number of complicated issues and in any event might not be the right test for trademark law (*Lemley & McKenna 2012*; *Bone 2004*, pp. 2175–2181).

150 See, e.g., *Brandir Int'l, Inc. v. Cascade Pac. Lumber Co.*, 834 F.2d 1142, 1148 (2d Cir. 1987); *Lemley & McKenna 2012*. The choice of product market is important because it affects the range of potential alternatives. To illustrate, suppose the plaintiff wishes to protect the floral pattern on its china plates as its trade dress. See *Pagliero v. Wallace China Co.*, 198 F.2d 339, 343–344 (9th Cir. 1952). If plaintiff's particular floral design is considered a separate market of its own, then there are no alternatives, for competitors must use the very same design to compete in that market. If instead the market is properly defined as china plates with any floral pattern, then alternatives exist and the court must assess their adequacy. And if the market is defined as china plates with any pattern, the range of alternatives becomes even broader. In general, the broader the market definition, the broader the range of possible alternatives. Sometimes there is an intuitively sensible definition of the product market. In *TrafFix*, for example, the most sensible definition is road signs that stand up against strong winds, rather than road signs in general or road signs with the plaintiff's particular dual-spring design. However, sometimes, such as in the china plate example, defining the product market is more difficult. See also *Dippin' Dots, Inc. v. Frosty Bites Dist., LLC*, 369 F.3d 1197, 1204, n.7 (11th Cir. 2004) (holding that the product market is flash-frozen ice cream rather than ice cream in general).

This is not the place to delve into the many complexities that these two inquiries raise. But two points deserve special mention. First, alternatives do not necessarily have to function equally well as long as they are good enough to be reasonable competitive substitutes. Of course, what is reasonable depends on a policy judgment about optimal competition, which is too complicated to explore here. Second, evaluating alternatives should include two factors: how effectively the alternative performs the function in question, and how costly it is to produce units of the product that incorporate the alternative. An alternative might be just as effective as the original but substantially increase manufacturing costs. If the cost increase is large enough, the alternative might not be a reasonable substitute because it would put a competitor at too great a market disadvantage.

The following discussion first considers the impact of the competitive necessity test and the per se rule on the administrative, process, and error costs of applying the rule. Then it considers the impact of the two rules on the costs associated with anticompetitive strike suits. Along the way, the analysis considers, among other things, the incentive effects of each rule on a firm's choice of which marks to promote.

**6.3.2.1. Costs of applying the rule.**—Expected process and administrative costs should be lower with a per se rule than with the competitive necessity test.<sup>151</sup> With a clear categorical bar, firms can predict in advance whether their trade dress will receive protection, which should reduce the number of lawsuits and registration applications. Moreover, the average cost of contesting and deciding the functionality issue should be lower with a per se rule that is easy to apply than with a competitive necessity test that requires fact-intensive inquiries.

The two rules, however, have different effects on error. Since a per se rule absolutely bars trademark protection, it avoids false-positive errors. But it generates false-negative errors in those cases where there are in fact sufficient alternatives to support vigorous competition and there is serious trademark-related harm from confusion. The competitive necessity test produces both false-positive and false-negative errors. How many of each depends on the difficulty of identifying and evaluating alternatives.

It follows from this general framework that the competitive necessity test could be superior to a per se rule for cases where it is very easy to identify

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<sup>151</sup> This depends, however, on the type of per se bar. For example, both the Federal Circuit (*see In Re Becton, Dickinson & Co.*, 675 F.3d 1368, 1375–76 (Fed. Cir. 2012)) and the Ninth Circuit (*see Secalt S.A. v. Wuxi Shenxi Constr. Mach. Co., Ltd.*, 668 F.3d 677, 685–687 (9th Cir. 2012)) interpret *Traffix's* traditional rule to incorporate the *Morton-Norwich* four-factor test, which, like any standard, tends to generate high administrative and process costs in application. Here I assume a rule that categorically and absolutely bars protection in all cases within its scope.

alternatives and evaluate their adequacy. An obvious example is the shape of a bottle that holds liquid. There are lots of shapes capable of holding liquid and the cost of manufacturing bottles in these different shapes should be easy to assess.<sup>152</sup> The road sign in *Traffix* might be another example, but it is not as clear-cut. The Court of Appeals noted that three or more springs or two springs arranged in a different way could work just as well to support a road sign in the wind.<sup>153</sup> But manufacturing costs might be more difficult to evaluate for road signs than for bottles. In any event, when alternatives are easy to evaluate, the more case-specific competitive necessity test can generate fewer errors than the per se rule without producing high process and administrative costs.

At the other extreme, a per se rule might be superior to the competitive necessity test when the evaluation process is very difficult, such as in cases involving complex scientific and engineering principles or manufacturing or production costs that are difficult to measure. A per se rule avoids complicated factual inquiries and deters filings, which reduces administrative and process costs. As for error costs, the competitive necessity test is likely to produce a lot of false-positive and false-negative errors given the assumed difficulty of evaluating alternatives. The per se rule reduces these false positives but increases the false negatives by barring protection in those cases where in fact there are plenty of alternatives and serious harm from confusion.

Thus, the choice between the two rules is sensitive to empirical factors, such as average process and administrative costs, the mix of case types in the underlying population, and the risk of error.<sup>154</sup> It would be good to have more

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152 Bottle shapes can have aesthetic value as well, and I discuss aesthetic trade dress in Section 6.4.

153 *Marketing Displays, Inc. v. Traffix Devices, Inc.*, 200 F.3d 929, 940 (6th Cir. 1999) (noting that “[i]t takes little imagination to conceive of a hidden dual-spring mechanism or a tri or quad-spring mechanism that might avoid infringing [the plaintiff’s] trade dress”).

154 To illustrate, suppose that 80 percent of a particular type of trade dress case involve a difficult alternatives analysis because of complex scientific and engineering principles and the other 20 percent involve an easy analysis. Suppose, too, that firms always file suit when their trade dress is copied and that trademark protection should be barred on functionality grounds in 70 percent of the difficult cases and 50 percent of the easy cases. Assume that trademark protection should be granted in all other cases. The per se rule bars protection in all these cases so it generates no false-positive errors. However, barring protection is a mistake when the trade dress is not functional. Thus, the per se rule generates false-negative errors with a probability of:  $0.8 \times 0.3 + 0.2 \times 0.5 = 0.34$ . Now assume that judges applying the competitive necessity test make errors in difficult cases 45 percent of the time (each way) and make errors in the easy cases only 10 percent of the time. The probability of false-negative error under the competitive necessity test is:  $0.8 \times 0.3 \times 0.45 + 0.2 \times 0.5 \times 0.1 = 0.118$ . The probability of false-positive error is:  $0.8 \times 0.7 \times 0.45 + 0.2 \times 0.5 \times 0.1 = 0.262$ . Assuming both types of error are equally costly, expected error cost is minimized when the probability of error is minimized. The probability of error is 0.34 under the per se rule and a total of 0.38 ( $0.118 + 0.262$ ) under the competitive necessity test. Thus, the per se rule is superior on error cost grounds. Note that this result depends on the assumption that the two types of error are equally costly. If the cost of a false negative is sufficiently greater than the cost of a false positive, the competitive necessity test

empirical information on each of these factors, but that might be a long time in coming. Meanwhile, the analysis supports three reasonable conclusions based on plausible empirical assumptions.

First, the competitive necessity test rather than *Traffix's* traditional rule should apply when it is obvious at an early stage that there are many equally effective alternatives, especially if it would also be obvious to a firm deciding whether to compete *ex ante*. Second, the competitive necessity test might well be superior to *Traffix's* strong presumption for cases involving expired utility patents.<sup>155</sup> This is so because the period of patent exclusivity is likely to furnish information helpful in assessing the availability of alternatives. If few competitors have succeeded in designing around a patent, it is probably safe to assume that alternatives are scarce or difficult to find, and if many competitors have managed to design around the patent in multiple ways, the opposite assumption is warranted.<sup>156</sup>

Third, a *per se* bar is probably optimal for those cases in which alternatives are difficult to evaluate. The chief obstacle to using a *per se* bar in these cases involves false-negative error costs, but there is reason to believe that false negatives might not be all that likely once the incentive effects of a *per se* rule are taken into account. A firm knowing that it cannot rely on product features to identify source should invest more in promoting and advertising nonfunctional symbols, such as catchy words or logos, and encourage consumers to rely on those rather than functional trade dress to identify source. To the extent these efforts are successful, the probability of consumer confusion should be reduced, and with it, the probability of false negatives. Thus, a strong argument can be made for a *per se* bar in cases where the adequacy of alternative designs is difficult to evaluate.<sup>157</sup>

would be superior to the categorical bar on error cost grounds. Of course, the savings in process and administrative costs with the categorical rule could easily offset the higher error costs.

155 The presumptive rule is not needed to secure channeling benefits since the plaintiff must have already obtained a patent. Nor is it justified by downstream innovation benefits if the defendant merely copies the product design without substantially modifying it.

156 Also, one might require, as a condition to trade dress protection, that a patent owner take reasonable steps during the period of patent exclusivity to counteract any consumer tendency to rely on product design for source identification. These steps might include using particularly distinctive word and logos marks and promoting those symbols aggressively.

157 It is also worth mentioning that firms do not choose product features randomly. They have strong incentives to search for trade dress that is optimally efficient. These incentives do not rule out the possibility that there are reasonable substitutes, but it might increase the difficulty of identifying them.

6.3.2.2. *Costs of anticompetitive strike suits.*—An incumbent firm seeking to monopolize a feature attractive to consumers for its utility or beauty can use trademark litigation as an anticompetitive tool. By threatening costly litigation in meritless or weak cases, the firm can force favorable settlements and discourage competitors from copying in the first place. Although I am not aware of any reliable empirical evidence bearing on the incidence of this practice, some commentators claim it is serious and the Supreme Court in *Wal-Mart Stores, Inc. v. Samara Bros., Inc.* (529 U.S. 205 (2000)) thought it was serious enough to justify placing an obstacle in the way of product-design trade dress suits (*ibid.*, at 213–214).

Assuming that there is a serious problem, a per se rule has substantial advantages over the competitive necessity test in addressing it. A per se rule can be drafted in clear terms and applied without difficult factual disputes. As a result, a defendant should find it easier to obtain summary judgment, and even to do so at an early litigation stage if the judge is willing. Moreover, a per se functionality rule should make it harder for the plaintiff to demonstrate the necessary likelihood of success on the merits to obtain a preliminary injunction. Confident of early summary judgment and free from the burden of a preliminary injunction, a defendant should be much less willing to settle a frivolous or weak suit. And with a dim prospect of obtaining a settlement, trade dress owners should be less willing to file anticompetitive suits in the first place.<sup>158</sup>

The *Traffix* case is a good example. The Court of Appeals applied the competitive necessity test and held that summary judgment was inappropriate because of factual disputes about alternatives. The Supreme Court reversed. It held that summary judgment was proper because there was no genuine dispute that the dual-spring design was the essential utilitarian component of the invention. It is not clear that *Traffix* was an anticompetitive strike suit, but if it was, the Supreme Court's per se rule did a much better job of eliminating it than the competitive necessity test could.

However, a per se rule also screens out meritorious suits, those that involve legitimate infringement claims and reasonable substitutes. The competitive necessity test screens out fewer meritorious suits because it examines more case-specific facts. But it invites more frivolous suits because it creates lots of factual disputes and makes summary judgment harder for a defendant to obtain. Thus, choosing between these two rules requires empirical evidence about the mix of

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158 This analysis assumes that the defendant also knows that the suit is frivolous or weak, which seems plausible for most trade dress cases. If instead the plaintiff had private information about the merits, such as private information about functionality, then the uninformed defendant might be willing to settle to avoid litigation costs should the suit turn out to be meritorious (*see generally* Bone 1997).

meritorious and nonmeritorious cases, the likelihood of success in obtaining an anticompetitive settlement, the adverse effect on competition that unjustified settlements produce, the deterrent effect on frivolous filings, and the expected harm from consumer confusion when trade dress suits are erroneously dismissed.

This empirical information, however, is not likely to be available anytime soon. Indeed, we do not even know the fraction of anticompetitive strike suits, which, if small enough, would support ignoring screening benefits. Even so, I am inclined to err in the direction of counting them. The prediction of frivolous filings is supported by a plausible account of litigation incentives and the confusion-related costs of screening meritorious suits might not be substantial in the long run.

To illustrate, suppose that the product feature at issue comprises a major part of the consumption value of the article and there are very few substitutes. Under these circumstances, the seller has a great deal to gain from monopolizing the feature, and without recourse to copyright or patent, the best option is trademark law. Thus, our seller has an incentive, perhaps a strong one, to file even a frivolous or weak trademark suit, especially if it can be confident of obtaining a preliminary injunction and avoiding or delaying summary judgment. A per se bar makes this strategy much less desirable.

Moreover, there is reason to believe that the adverse effect on meritorious suits might not be all that serious. If firms invest more in promoting distinctive nonfunctional symbols as source identifiers when they know that functional trade dress is barred from protection by a per se rule, and if consumers respond by focusing more on those nonfunctional symbols, then the likelihood of trade-dress-related confusion—and thus the number of meritorious cases screened out by a per se bar—should be much reduced. Also, if consumers shift to the brand name as a source identifier when lots of different products sport the same design, the expected confusion-related harm from denying protection in meritorious cases might be fairly small. Thus, a per se rule in this scenario deters frivolous suits without creating much confusion-related harm.

If I am wrong, however, it might be better to rely on methods other than a per se bar to reduce frivolous suit problems. For example, the Court in *Wal-Mart Stores, Inc. v. Samara Bros., Inc.* took a positive step when it required proof of secondary meaning for product design trade dress. Moreover, after *Bell Atl. Corp. v. Twombly* (550 U.S. 544 (2007)) and *Ashcroft v. Iqbal* (556 U.S. 662 (2009)), district judges can insist on specific factual allegations supporting secondary meaning, which should make it more difficult for frivolous plaintiffs to avoid early dismissal. And judges can and should require strong evidence that reasonable alternatives exist, and possibly also insist on evidence of actual

confusion, before granting a preliminary injunction in the face of a functionality challenge.<sup>159</sup>

#### 6.4 Aesthetic Functionality

As we saw in Section 4.2.2, courts after *Traffix* tend to apply the traditional rule to utilitarian features and the competitive necessity test to aesthetic features. Although this approach might make sense for cases implicating downstream innovation or channeling concerns, it does not make sense for cases that feature competition as the key policy.<sup>160</sup> Product market competition can be impaired by protecting aesthetic trade dress just as much as it can by protecting utilitarian trade dress. Thus, when preserving competition is the reason for a functionality bar, it might seem sensible to apply the same rule to utilitarian and aesthetic functionality.

However, aesthetic functionality has several tricky aspects that can complicate the analysis. This section discusses two of the more salient: the heterogeneity of aesthetic preference, and the close connection between aesthetic value and source identification. First consider heterogeneity. Evaluating alternatives to an aesthetically pleasing design is likely to be extremely difficult when consumer tastes vary in unpredictable ways (see *American Law Institute 1995*, § 17 cmt. c, noting the “difficulties inherent in evaluating the aesthetic superiority of a particular design”). For example, some consumers might like a red and blue color scheme for scarves whereas others might greatly prefer yellow and green. How then is a court supposed to decide whether yellow and green is a reasonable substitute for red and blue? This problem is much more serious for aesthetic features than it is for utilitarian features because the latter have instrumental value so consumer preferences are likely to be more homogenous and alternatives susceptible to a more objective evaluation.

Some courts and commentators simply assume that there are lots of different ways to create the same aesthetic impact (see *McKenna & Strandburg 2014* noting the prevailing assumption that lots of designs are equally aesthetically pleasing).

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159 Evidence of actual confusion rather than just likelihood of confusion makes it more likely that there would be trademark-related harm if protection were denied. Although evidence of actual confusion is not required for liability, a judge might justify requiring it for a preliminary injunction on the ground that it helps to assure that the risk of harm is substantial enough to tip the balance of equities in favor of the plaintiff. A judge might also insist on evidence that indicates a substantial risk of actual harm from confusion, such as that the defendant’s product is lower quality. But this could add substantial costs to the preliminary injunction proceeding (*Bone 2004*, pp. 2137–2143 (explaining why requiring proof of lower quality could substantially increase enforcement costs)).

160 For example, different treatment might make sense for channeling if one believed that channeling aesthetic features to the design patent system was less important than channeling utilitarian features to the utility patent system. And it might make sense for downstream innovation if one believed that utilitarian inventiveness was more socially valuable than aesthetic creativity. Both premises are, of course, highly controversial.



But this assumption is highly dubious. Even though aesthetic preference is subjective, there is no question that some designs are more compelling than others. The epistemic difficulty of comparing designs does not imply that all designs are equally pleasing (McKenna 2011, p. 847). If they were, it would be hard to explain why firms invest as much as they do in creative product design.

If the competitive necessity test is ruled out because of the subjectivity and heterogeneity of aesthetic preference, the choices that remain are a per se rule or no functionality bar at all. A per se rule barring protection outright, or a rule creating a very strong presumptive bar, should apply to aesthetic features that are central to the consumption value of a product, such as the pattern of china purchased for the beauty of its pattern or the shape of silverware bought for the attractiveness of its shape.<sup>161</sup> On the other side of the coin, aesthetic features that are not central in this way should not be barred at all. For example, trademark protection should be available for an attractive pattern on a snow plow that adds very little to the plow's consumption value.

The second difference between aesthetic and utilitarian features has to do with the relationship between source identification and aesthetic function. Some cases involve design features that are valuable precisely because they identify source. An example is the contrasting red outsole on Louboutin shoes.<sup>162</sup> While the color red might be especially attractive for some reason, it is also likely that consumers want shoes with this design because it signals that the consumer is wearing a Louboutin shoe and thus appreciates the Louboutin style and can afford to buy it. In other words, the contrasting red color on a Louboutin shoe is desirable not just because it has intrinsic aesthetic merit, but also because it identifies the source of the shoes as Louboutin. And source identification is precisely what trademark law is supposed to protect.

To be sure, consumers are not confused. They know exactly which shoes they are buying. The confused parties are members of the public who see the shoes with red colored outsoles and infer that they are Louboutin shoes when they are actually the shoes of a Louboutin competitor. One might object that this type of confusion is not harmful, at least when the competing products appear to be perfectly good quality, or that even if it is harmful, it is not the sort of harm that trademark law should address (Bone 2006, pp. 607–612; see Sheff 2012). But trademark law protects marks in analogous situations. For example, courts readily find trademark infringement when a firm sells watches with the

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161 See, e.g., *Wallace Int'l Silversmiths, Inc. v. Godinger Silver Art Co., Inc.*, 916 F.2d 76 (2d Cir. 1990) (silverware design held to be functional); *Pagliari v. Wallace China Co.*, 198 F.2d 339, 343–344 (9th Cir. 1952) (china patterns held to be functional).

162 *Christian Louboutin S.A. v. Yves Saint Laurent Am., Inc.*, 696 F.3d 206 (2d Cir. 2012).

ROLEX name even though buyers know full well at the time of purchase that the infringing seller has no connection to Rolex.<sup>163</sup> Courts reason that members of the general public are likely to be confused by seeing the mark on the defendant's merchandise, and that this type of confusion, known as post-sale confusion, is actionable as trademark infringement. This extension of trademark law is justified as a way to protect the prestige or status value of a good, a justification that applies with equal force to Louboutin shoes (Sheff 2012).

I do not mean to take a position on this use of trademark law. My only point is that barring trademark protection for Louboutin's color on functionality grounds is difficult to reconcile with extending trademark protection in the ROLEX example. If it is proper to use trademark law to protect the prestige value of a word mark such as ROLEX—and there is a substantial body of precedent that says it is—it should also be proper to use trademark law to protect the prestige value of a product design feature. The better approach as a policy matter might be to deny protection in both cases, but that would require overturning relatively settled precedent.

### 6.5 Pulling the Strands Together

The previous discussion outlined the analysis that should be applied to constructing a sensible set of functionality rules. The scope of the functionality bar should be defined by balancing the social benefits of barring protection against the social costs. The social benefits are those associated with maintaining a public domain, including facilitating downstream innovation, channeling inventions to the patent system, and promoting competition. In trade dress cases, innovation and channeling do some work in special cases, but promoting competition is and should be the central concern of the functionality doctrine. On the cost side of the balance, the main concern is the expected social harm associated with confusion when trademark protection is barred.

Although more empirical evidence would be desirable, it is possible to draw a few provisional conclusions, some of which deviate significantly from the current functionality law set out in *TrafFix*. First, a per se bar is desirable when the defendant makes a substantially creative use as well as when the product feature at issue is linked causally to a hidden invention that is difficult to reverse engineer—provided the defendant takes precautions and the resulting risk of confusion is not unusually high and does not produce severe harms. Second, judges should apply the competitive necessity test when it is easy to assess alternatives, including in those cases involving expired utility patents. Third, a per se rule should be applied to aesthetic trade dress that is central to the

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<sup>163</sup> *Rolux Watch USA, Inc. v. Canner*, 645 F. Supp. 484, 492, 495 (S.D. Fla. 1986).

product's consumption value except perhaps when its contribution derives mainly from its source-identifying function. In cases where the aesthetic feature is not central to the consumption value of the product, trademark protection should be allowed without regard to competitive necessity.

The analytical framework developed here also clarifies the two points of confusion left after *TrafFix* that were discussed in Section 4.2. First, alternatives should have nothing to do with a per se rule because an alternatives inquiry only undermines the predictability and enforcement-cost benefits of a per se approach. Second, as for the domain question, a per se rule imposing a categorical bar should be applied only to cases where it produces predictability or enforcement-cost benefits. All other cases should be subject to the competitive necessity test or to no functionality bar at all.

### 6.6 A More Radical Step

The foregoing discussion assumes that product design will continue to be a candidate for trademark protection and focuses on functionality as a safeguard. But the analysis also points to a more radical proposal, one that does not involve tinkering with the functionality doctrine: abolish all trademark protection for trade dress regardless of functionality, or at least for trade dress consisting of product configuration rather than packaging.<sup>164</sup> As we saw in the previous section, a per se functionality bar is already recommended for a number of trade dress cases on enforcement cost grounds. Taking a further step and abolishing all trademark protection would have the benefit of reducing the public domain costs of trade dress exclusivity, and in particular the costs to competition of protecting product features. And it would also eliminate the administrative costs of processing trade dress registrations and the costs of litigating trade dress suits.

Of course, abolishing trade dress protection risks social costs from consumer confusion. But these costs might be manageable in the long run. As discussed above, firms are likely to respond to the denial of trade dress protection by investing more in promoting and advertising word marks and catchy logos. To be sure, sellers advertise with word marks today and consumers still rely on trade dress. The plaintiff in *TrafFix*, for example, advertised and sold its road signs under the mark WINDMASTER, yet consumers still relied on the dual spring design to identify source. However, if sellers invest more in promoting

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<sup>164</sup> It is worth mentioning that an exception might be recognized for copying accompanied by subjective intent to deceive consumers. Deceptive intent can trigger moral considerations that might support trademark liability apart from economic costs and benefits (Bone 2012, pp. 1350–1353). I focus here on the economic analysis.

non-trade-dress symbols and less in promoting trade dress, one would expect more consumers to focus on those symbols rather than on trade dress features.

Moreover, consumer behavior is likely to change apart from seller incentives. As consumers confront multiple sellers competing with products incorporating the same features, they should soon learn that products with the same distinctive trade dress do not necessarily come from the same source. There might be confusion in the short run, but this confusion is likely to dissipate over time. And as more consumers shift to non-trade-dress symbols for source identifiers, firms will have stronger incentives to invest in those symbols, which in turn should cause even more consumers to make the change.

The result could well be a new equilibrium with very little confusion from trade dress. If so, abolishing trade dress protection might reap substantial social benefits without adding much in the way of social cost. To be sure, trademark law would no longer be available to encourage the creation of attractive product designs, but incentivizing creativity is not a core trademark goal. If additional protection is needed for incentives, Congress should adopt some form of special protection tailored to that purpose.<sup>165</sup>

This is not the place to explore this proposal with care.<sup>166</sup> Whatever the merits of abolishing trade dress protection on policy grounds, the fact is that trademark protection for product features is here to stay. It has been around for more than 130 years and there is no indication that Congress has any interest in eliminating it. Thus, the more practical strategy is to assume that trade dress protection will continue to exist and to modify the functionality doctrine to better serve the policies at stake.

## 7. CONCLUSION

The functionality doctrine does important work in trademark law but it is poorly understood. This article traced the source of the problems to confusion

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165 Over the past few decades, Congress has considered a number of bills that would extend limited protection to industrial design. But with the exception of statutes protecting boat hulls and semiconductor chips, none of these bills have been adopted.

166 One potential problem is worth mentioning. If firms actively promote non-trade-dress symbols, it is possible that those symbols will acquire consumption as well as source-identification value. Trademark protection for words and logos that have acquired substantial consumption value can produce anticompetitive effects, just as trademark protection for trade dress can. However, this is quite common today—for example, consumers buy athletic garb that prominently displays the NIKE swoosh, baseball caps with their favorite team names, and watches that conspicuously display the ROLEX mark—and firms promote their marks with this purpose in mind. It is not clear how much denying trade dress protection will add to the existing problems. For a useful discussion of the merchandising rights cases, see *Dogan & Lemley (2005)*.

at the level of policy. Ever since the inception of trade dress protection in the late 19th century, the idea that there is a right to copy product features not protected by patent or copyright has figured prominently in functionality jurisprudence. In the late 19th and early 20th centuries, this right was thought to derive from natural law principles embedded in the common law. This natural law foundation began to crumble with the rise of legal realism in the 1930s, and courts and commentators struggled to find a different basis for the right. Still, the right to copy continued to influence functionality law. Eventually, the right gave way completely to the competition policy and the competitive necessity test, which dominated functionality jurisprudence until the Supreme Court muddied the waters with its *Traffix* decision.

It is time to retire the right to copy. What courts and commentators call a right is actually a public domain policy. This policy serves three main purposes—promoting competition, facilitating downstream innovation, and channeling inventions to the patent system. The social benefits of recognizing a functionality bar should be cashed out in terms of these purposes. When that is done, and the resulting benefits balanced against the social costs, a rather different set of functionality rules emerges than those the *Traffix* Court adopted.

There is much at stake in setting functionality doctrine straight. Trademark protection for product features as source identifiers is firmly entrenched. It has been around for almost a century-and-a-half and some version of a functionality doctrine has been part of it for most of that time. That doctrine tolerates consumer confusion to serve the IP policy of free copying. Thus, we must be clear about the benefits of barring protection on functionality grounds to be sure that the costs are worth bearing.

There is considerable latitude for courts to refashion the functionality doctrine. It is time to do so in a coherent way that is attentive to the policies at stake. A sensible functionality doctrine is essential to a sound trademark jurisprudence.

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