TRADEMARK CONFUSION SIMPLIFIED:
A NEW FRAMEWORK FOR MULTIFACTOR TESTS

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ABSTRACT

Multifactor tests are challenging for judges to apply consistently and accurately. Poorly done, they could result in law without order. How courts determine trademark infringement provides a case study for what experimental psychology and artificial intelligence can offer to reduce bias and variability in multifactor tests. In trademark law, judges must determine the likelihood of consumer confusion to decide whether a mark infringes upon a trademark holder’s rights. Plenty of commentaries have criticized the likelihood of confusion tests, but none offer a comprehensive analysis linking the impact of the legal standard’s disorder with the root causes of that dysfunction. Likewise, none demonstrate how doctrine and technology can work hand in glove to simplify this puzzling standard.

This Article draws on empirical studies, case law, and the latest experimental psychology and artificial intelligence literature to shift the debate from critiquing to simplifying the likelihood of confusion standard. It explains how three core factors, combined with two safe harbors and today’s deep learning algorithms enable courts to reach consistent and accurate results. The simplified framework will promote fair play, safeguard expressive uses, and enhance access to justice. These takeaways apply more broadly and address defects common to multifactor tests.

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I. INTRODUCTION

Deploying multifactor tests accurately and consistently is a challenging business. Courts produce judgments, not computations, and legal doctrine leaves room for varying interpretations and dissents. Even judges who agree on doctrine may differ on how they apply it. The two reasons for these

2. Id.
differences are bias, which consistently leads to the wrong outcome, and noise which leads to inconsistent outcomes.\(^3\) Both harm the legal system’s credibility.\(^4\)

Neither noise nor bias may be obvious to the casual observer. Judges are recognized experts in the law and dazzle us with their opinions.\(^5\) Moreover, much of the variability in their judgments is intentional. Judges use majorities and dissents as a means to endorse the judgments most worthy of support.\(^6\) Judgments would also be of little value if they were all identical regardless of the facts. However with variability comes the risk of noise and bias.

The literature is replete with the dangers of bias in the law.\(^7\) Even those who believe in the value of individualized judgments will agree: variability that turns judgment into a lottery becomes unjust. Something must have gone badly wrong if one defendant for the same offense gets jail time and another gets a mere warning. These errors do not cancel out, and justice has not, on average, been served. Instead, they add up.

The tensions caused by variability and bias exist whenever the law must choose between standards and rules.\(^8\) Rules provide certainty but come at the expense of rigidity and over- or underinclusiveness.\(^9\) Conversely, standards can be more flexible but are less predictable.\(^10\) Trademark infringement provides a useful case study to examine how this happens and, more importantly, how society can fix it. As the fulcrum of trademark law, the entire infringement inquiry rests on courts determining the nature and scope of likelihood of confusion (“LOC”) appropriate for each new set of facts. Conversely,

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4. See infra Part II.
5. See KAHNEMAN ET AL., supra note 3, at 228 (“The confidence heuristic points to the fact that in a group, confident people have more weight than others, even if they have no reason to be confident.”).
6. See Lim, supra note 1, at 875.
9. See infra Parts II and VI.
10. See infra Parts II and VI.
addressing the tension in trademark’s LOC standard has spillover benefits for other areas of the law as well.11

Trademarks envelop our senses both online and in the real world, blending a bouquet of information for our senses.12 Businesses imbue words, symbols, scents, and sounds with information about their goods and services.13 Consumers lean on these imbued signs, routinely making snap judgments about the price and quality of products or services without detailed inquiry.14 Coffee aficionados seek out Starbucks’ famous green mermaid, and viewers of dance, lip-sync, or comedy videos find TikTok’s stylized treble clef. Businesses who attain cult statuses like Apple or Tesla imbue even untested product lines with a halo of desirability.15 This desirably may enable them to expand rapidly into adjacent markets.

When trademark owners, seeking to protect their trademarks, enforce their rights, courts apply the LOC standard to determine whether consumers would likely be confused by the defendants’ use of their mark. The standard, which involves a multifactor test, lies at the heart of trademark law.16 Judges first identify and discuss evidence relevant to each factor before concluding if that factor weighs in favor of a likelihood of confusion between the two marks.17 They then make a holistic assessment from the perspective of the ordinary consumer in the marketplace.18 In practice this assessment manifests itself as a weighing of the factors the court earlier identified as being relevant in the LOC analysis.19

The LOC standard is a jurisprudential black hole.20 It remains poorly theorized, and opinions on the standard usually fail to explain their decisions

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11. See infra Part VI. Likelihood of confusion examines whether there is a substantial risk consumers will be confused as to the source, identity, sponsorship, or origin of the defendants’ goods.
12. 15 U.S.C. § 1127 (“The term ‘trademark’ includes any word, name, symbol, or device, or any combination thereof . . . [used] to identify and distinguish . . . goods.”).
14. Qualitex Co. v. Jacobson Prods. Co., 514 U.S. 159, 163–64 (1995) (“[T]rademark law . . . reduces the customer’s costs of shopping and making purchasing decisions, . . . for it quickly and easily assures a potential customer that this item—the item with this mark—is made by the same producer as other similarly marked items that he or she liked (or disliked) in the past.”).
16. See infra Part III.
20. See infra Part III.
in a way courts can easily apply. Moreover, each outcome is fact-specific, limiting transferrable principles from circuit to circuit and from one part of trademark law to another.

Plenty of commentaries have criticized the LOC standard. Yet none offer a comprehensive analysis connecting the impact of confusion on stakeholders, the root causes of that confusion, or solutions based on foundational trademark doctrine and forward-looking technology. This Article fills a gap in the literature as scholars fail to devise laws integrating the advantages of rules and standards while minimizing their shortcomings. Rather than displacing the LOC standard, this Article explains how a simplified, artificial intelligence (AI)-enabled standard provides a superior threshold for infringement. In doing so, this general purpose approach provides a roadmap for refining other multifactor tests, helping them produce more reliable and precise judgments.

Specifically, this Article draws on empirical studies, case law, experimental psychology, and AI literature to shift the debate from critiquing to simplifying the LOC standard. It unearths the roots of confusion and explains how (1) three overlooked factors, combined with (2) two safe harbors and (3) AI techniques available today, can work together to help courts and parties cut through bias and noise to reach consistent and accurate results. The “Troika” factors and the safe harbors create “rules of thumb,” which, when AI enables them, go far beyond trademark law to promote commercial fair play, safeguard expressive uses, and enhance access to justice in other multifactor tests, including those used in civil procedure, consumer information law, conflict of laws, copyright, criminal, and constitutional law.

Despite the urging of appeals courts, lower court judges do not approach multifactor tests robotically or discretely. Instead of using interrelated analysis, they sum up a few factors on a mental ledger as a strategy for navigating complexity. In effect, these tests become mere smokescreens for judges to create the appearance of coherence by resting on a small number of probative factors. Thus, the key to simplifying confusion in the case law, and thereby facilitating the creation of more consistent and accurate results, is to

22. See infra Section IV.B (“Trademark litigation is inherently impressionistic, particularly when actual confusion is rare.”).
23. See infra Section IV.B (in the context of the intent factor).
24. See infra Section IV.A–B.
25. See infra Section IV.C.
26. See infra Part V.
concentrate the standard on a few factors and help judges use those factors well.

II. VARIABILITY AND BIAS OFTEN UNDERLY MULTIFACTOR TESTS

The adage that “beauty is in the eye of the beholder” suggests that people will naturally differ if there is more than one perspective. A cloud of possibilities exists wherever there is judgment, even in a seemingly unique situation, driven by biases and inconsistency. As people pick different pieces of evidence to form the core of their narrative, they reach different conclusions.

Sometimes these choices lead to unfair decisions. For example, two judges who reviewed similar refugee asylum cases in the same Miami courthouse granted asylum at dramatically different rates. One judge granted refugees asylum in eighty-eight percent of cases, while the other did so only five percent of the time. And in a large-scale study, fifty judges from various districts across the country were given identical presentence reports based on hypothetical cases and were asked to set sentences for the hypothetical defendants. The study found that the “absence of consensus was the norm.”

An absence of consensus exacerbates vagueness in the law when Congress delegates wide discretionary powers to the courts. For instance, antitrust standards suffer from a similar openendedness problem as outcomes are driven less by doctrine and more by ideology. The same is true for constitutional law. The danger is that through the lens of the rule of law, indeterminable laws expand the government’s opportunities for corruption and tyranny and may over empower the government or those leveraging on

27. See Kahneman et al., supra note 3, at 39-43.
30. Id. at 9. A heroin dealer could be jailed for one to ten years. A bank robber could be jailed five to eighteen years. Id. at 6.
31. See generally, Marina Lao, Ideology Matters in the Antitrust Debate, 79 ANTITRUST L.J. 649, 651–52 (2014) (“Arguments in contemporary antitrust are not merely technical but stem from ideological differences between antitrust conservatives and antitrust liberals concerning the economy and markets and the appropriate role of government within them, the virtues of dominant firms, the value of competition, and related social and political issues.”).
32. See Kermit Roosevelt III, Constitutional Calcification: How the Law Becomes What the Court Does, 91 VA. L. REV. 1649, 1665 (2005) (“a court may substitute a decision rule that turns on objective and easily ascertainable factors.”).
vague rules to extract concessions during settlements. To prevent legislatures from outlawing behaviors in broad terms that fails to provide fair notice, constitutional law voids such laws for vagueness.

On the other hand, having too many rules interwoven into the law also create its own set of problems. Consider how courts must routinely apply numerous factors, each potentially carrying different weights for different judges. For example, damages and lost profits in patent law require judges to balance fifteen Georgia-Pacific factors and four Panduit factors, respectively.


34. John F. Decker, *Addressing Vagueness, Ambiguity, and Other Uncertainty in American Criminal Laws*, 80 DENV. U. L. REV. 241, 248 (2002) (“A statute is void for vagueness if it fails to draw reasonably clear lines between lawful and unlawful conduct such that the defendant has no way to find out whether his conduct is controlled by the statute. Vague statutes are constitutionally unacceptable because they fail to provide citizens with fair notice or warning of statutory prohibitions so that they may act in a lawful manner.”).

35. See Georgia-Pacific Corp. v. U. S. Plywood Corp., 318 F. Supp. 1116, 1120 (S.D.N.Y. 1970) (“1. The royalties received by the patentee for the licensing of the patent in suit, proving or tending to prove an established royalty.”) 2. The rates paid by the licensee for the use of other patents comparable to the patent in suit.

3. The nature and scope of the license, as exclusive or non-exclusive; or as restricted or non-restricted in terms of territory or with respect to whom the manufactured product may be sold.

4. The licensor's established policy and marketing program to maintain his patent monopoly by not licensing others to use the invention or by granting licenses under special conditions designed to preserve that monopoly.

5. The commercial relationship between the licensor and licensee, such as, whether they are competitors in the same territory in the same line of business; or whether they are inventor and promoter.

6. The effect of selling the patented specialty in promoting sales of other products of the licensee; that existing value of the invention to the licensor as a generator of sales of his non-patented items; and the extent of such derivative or convoyed sales.

7. The duration of the patent and the term of the license.

8. The established profitability of the product made under the patent; its commercial success; and its current popularity.

9. The utility and advantages of the patent property over the old modes or devices, if any, that had been used for working out similar results.

10. The nature of the patented invention; the character of the commercial embodiment of it as owned and produced by the licensor; and the benefits to those who have used the invention.
Determining copyright ownership in work-for-hire cases requires owners to canvass eleven factors. Similar issues permeate consumer information law, First Amendment law, and the proportionality of punishment under the Eighth Amendment.

11. The extent to which the infringer has made use of the invention; and any evidence probative of the value of that use.

12. The portion of the profit or of the selling price that may be customary in the particular business or in comparable businesses to allow for the use of the invention or analogous inventions.

13. The portion of the realizable profit that should be credited to the invention as distinguished from non-patented elements, the manufacturing process, business risks, or significant features or improvements added by the infringer.

14. The opinion testimony of qualified experts.

15. The amount that a licensor (such as the patentee) and a licensee (such as the infringer) would have agreed upon (at the time the infringement began) if both had been reasonably and voluntarily trying to reach an agreement; that is, the amount which a prudent licensee—who desired, as a business proposition, to obtain a license to manufacture and sell a particular article embodying the patented invention—would have been willing to pay as a royalty and yet be able to make a reasonable profit and which amount would have been acceptable by a prudent patentee who was willing to grant a license.

36. Cmty. Creative Non-Violence v. Reid, 490 U.S. 730, 751–52 (1989) (“Among the other factors relevant to this inquiry are the skill required; the source of the instrumentalities and tools; the location of the work; the duration of the relationship between the parties; whether the hiring party has the right to assign additional projects to the hired party; the extent of the hired party’s discretion over when and how long to work; the method of payment; the hired party’s role in hiring and paying assistants; whether the work is part of the regular business of the hiring party; whether the hiring party is in business; the provision of employee benefits; and the tax treatment of the hired party.”).

37. See Michael Grynberg, More Than IP: Trademark Among the Consumer Information Laws, 55 WM. & MARY L. REV. 1429, 1473 (2014) (“Key words like ‘likelihood,’ ‘confusion,’ and ‘approval’ are undefined, opening the door to judicial creativity and applications of the trademark cause of action to situations alien to its common law roots.”).


39. Dan Simon, The Limited Diagnosticity of Criminal Trials, 64 VAND. L. REV. 143, 177 (2011) (“These results are statistically better than flipping a coin, but barely so.”).
The key takeaway here is that less is more. Another psychology experiment showed that test subjects defaulted to a coin flip when they experienced factor overload.\(^\text{40}\) Subjects had to apply either a nine-factor test, a zero-factor test, or a three-factor test to a set of facts.\(^\text{41}\) The control case was based on identical facts whose outcome was widely accepted as correct, providing a yardstick to evaluate whether the subjects’ decisions were accurate.\(^\text{42}\) The study reported that the outcome under the nine-factors condition was similar to under the zero-factor condition. In contrast, subjects produced decisions closest to the widely accepted legal decision only under a three-factors condition.\(^\text{43}\)

Another problem in judicial decision-making is bias.\(^\text{44}\) Bias is a problem that goes beyond the law. In one medical study assessing angiograms, physicians disagreed with their earlier judgments more than half the time.\(^\text{45}\) Decision-makers may also substitute answering a difficult question by finding the answer to an easier one because of psychological biases.\(^\text{46}\) For instance, replacing the question “Is there climate change?” with “Do I trust the people who say it is real?” introduces variability depending on the answerer’s social circles, information sources, and political affiliation. These biases will lead to answers that fail to give the evidence their appropriate weights, resulting in judgment errors.\(^\text{47}\)

The good news is that biases and variability can be reduced by rethinking how we approach rules and standards. For instance, Congress enacted the Sentencing Reform Act of 1984 to issue mandatory guidelines and establish a restricted range for criminal sentences.\(^\text{48}\) The new law was intended to reduce variability by reducing “the unfettered discretion the law confers on those judges and parole authorities responsible for imposing and implementing the sentences.”\(^\text{49}\)

Previously, judges had to apply a standard that would otherwise differ on weights they assign to factors.\(^\text{50}\) The 1984 Guidelines required judges to

\(^{40}\) Id.
\(^{41}\) Id.
\(^{42}\) Id.
\(^{43}\) Dan Simon, A Third View of the Black Box: Cognitive Coherence in Legal Decision Making, 71 U. CHI. L. REV. 511, 511 (2004) (finding that fewer conditions made the reason for the decision clearer and therefore it was easier for the subjects to determine the result).
\(^{44}\) See Lim, supra note 7.
\(^{45}\) Katherine M. Detre, Elizabeth Wright, Marvin Murphy & Timothy Takaro, Observer Agreement in Evaluating Coronary Angiograms, 52 CIRCULATION 979 (1975).
\(^{46}\) See KAHNEMAN ET AL., supra note 3, 164-67.
\(^{47}\) See KAHNEMAN ET AL., supra note 3, 164-67.
\(^{50}\) Id.
consider two factors to establish sentences: the crime, and the number and severity of a defendant’s previous convictions. Crimes are assigned one of forty-three “offense levels,” depending on their seriousness, and judges have a narrow range of sentencing, with the top of the range authorized to exceed the bottom by the greater of six months or twenty-five percent. Judges could depart from the range by aggravating or mitigating circumstances, subject to appellate review.

When judges used the Guidelines, this made the sentence less dependent on the judge doing the sentencing. The authors attributed the reduced variation to the Guidelines because guidelines break down vague standards into a few factors that are easier to understand. They arguably nudge judges to pay attention to variables that truly matter rather than biased or irrelevant factors. Ideally, as case law develops around the guidelines, courts will create a clear method for evaluating each factor, simplifying each factor-level judgment, and reducing its variability.

Refining how courts deploy rules and standards provides them and other legal stakeholders with a powerful benefit—predictability. A study on bail decisions used two inputs known to be highly predictive of a defendant’s likelihood to jump bail: the defendant’s age, as the elderly are lower flight risks, and the number of past court dates missed, as people who are flaky in appearing tend to recidivate. The model translated these two inputs into several points, which data scientists used as a risk score. This model outperformed virtually all human bail judges in predicting flight risk. In all tasks, the model did as well as more complex regression models did but underperformed AI machine learning techniques. When AI succeeds in this way, these models not only reduce bias and variability, but also allow courts to harness much more information. AI, then, provides the final piece of the new framework for multifactor tests.

51. Id.
52. Id.
56. Id.
57. Id. When researchers applied the model to different context, they used up to five inputs (compared with the two used to predict flight risk) and weighted the different inputs by small whole numbers (between −3 and +3).
58. Id.
AI has revolutionized the legal practice in predicting doctrine, with machine learning techniques enabling AI to forecast decisions of the US Supreme Court. When there is a lot of data, machine learning algorithms may do better than humans, and better than simple rules. In this Article, I argue that AI works best in tandem with humans in deciphering trademark law's multifactor test for determining infringement, the LOC standard. AI-augmented decisionmaking can thus improve human judgment by using data science to identify how the facts map to each relevant factor, thereby reducing biases and variability in predictions and evaluations. As Daniel Kahneman, Cass Sunstein, and Olivier Sibony noted in their 2021 book *Noise*:

> [A]lthough a predictive algorithm in an uncertain world is unlikely to be perfect, it can be far less imperfect than noisy and often-biased human judgment. This superiority holds in terms of both validity (good algorithms almost always predict better) and discrimination (good algorithms can be less biased than human judges).

Collectively, the foregoing offers a roadmap of the key points this Article will cover. First, legal standards force judges to do a lot of work to specify the meaning of open-ended terms, causing them to rely on irrelevant factors or get lost in multifactor tests. In addition to finding facts, courts must give content to relatively vague phrases like what is “reasonable,” “likely,” or amounts to “confusion.” Too many rules also create confusion and unjustified variability. When judges themselves become confused, they introduce unwanted variability and bias into decisions, creating rampant injustices and high monetary costs even when the bias and variability go unnoticed.

Second, a small set of rules augmented by artificial intelligence can be more accurate than human judgment in making many decisions. As Kahneman noted, “[s]imple rules that are merely sensible typically do better than human judgment.” Rules reduce the role of judgment and limit the number of factors

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61. See infra Part V.
63. See KAHNEMAN ET AL., supra note 3, 337; see also KAHNEMAN ET AL., infra note 3, 336. (“A great deal of evidence suggests that algorithms can outperform human beings on whatever combination of criteria we select.”).
64. See infra Part V.
65. See KAHNEMAN ET AL., supra note 3, 133
to the most relevant ones—ones which AI can parse and offer more precise and readily examinable options to judges in helping them resolve disputes. This refined framework provides a transparent, easy-to-apply, and relatively cheap means of disposing cases during summary proceedings.

III. INSIDE TRADEMARK’S BLACK BOX: THE LIKELIHOOD OF CONFUSION

As trademark law’s liability lynchnpin, the LOC standard plays a critical role. Confusion likely exists between trademarks when they are so similar and the goods and/or services for which they are used are so related that consumers would mistakenly believe they come from the same source. The standard protects brand owners’ investments and provides innovative signaling devices for consumers. When consumers can rely on a dependable commercial lexicon, they reward the owners, who gain an incentive to invest in quality products and service.66

Yet, like an untended garden, the LOC standard has grown wild. Different circuit courts have spun off anywhere between six and thirteen factors to ascertain the likelihood of confusion.67 The standard needs a fresh rethinking to address the blended doctrines and new triggers for liability that have crept into it over the years.68 A crisper, simplified framework brings the benefits of clarity—cheaper, more efficient dispute resolution, laws mapped to policy goals, better-calibrated doctrines in other areas of trademark law, and sharper boundaries between trademarks and other types of intellectual property rights.69

Part A introduces the tremendous value of brand equity and the role of trademark law in safeguarding that equity. Unfortunately, it is difficult for anyone—courts, disputing parties, and the public—to determine when the law should intervene. Part B explains how the law became this way. Part C makes the case for clarity. Legal uncertainty has encouraged owners to vigorously assert trademarks, leading to an explosion of litigation. Unmeritorious claims redefine the public perception of trademark scope and ultimately shape those rights through a consumer perception feedback loop.

66. Id. at 1.
67. See infra Section III.B.
68. See infra Section III.B.
69. See infra Section III.C.
A. FROM BRAND EQUITY TO BABEL.

Brands help businesses signal to consumers how the products and services they offer differ from their rivals.70 Those brands may come to the public through words, logos, and package designs,71 infused with vivid metaphors and imagery and injected with mass media campaigns.72 Once sold as undifferentiated products, ketchup, coffee, and even water signal their desirability to consumers using brands like Heinz, Starbucks, and Smartwater.73

Consumers rely on familiar brands to quickly navigate products or services that have attributes these businesses tout without having to physically inspect, experiment with, or consume each one.74 Brands create mental anchors of goodwill and brand loyalty guides consumers toward existing or new products or services whose quality they have come to depend on.75 The difference this branding confers to a product or service is known as brand equity.76

Brand equity is worth a tremendous amount. In 2022, the overall value of the top 100 global brands reached over $3 trillion, including the ubiquitous Coca-Cola, worth more than $57 billion.77 Unsurprisingly, developing brand equity also requires a business to invest heavily, sometimes millions of dollars.78 A reliable commercial lexicon, in turn, encourages companies to invest in quality.79 This virtuous cycle produces a competitive marketplace where consumers make informed purchases and companies invest in better products to accrue goodwill.80 Unfortunately, brand equity also tempts some to free ride

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70. Ronald C. Goodstein, Gary J. Bamossy, Basil G. Englis & Howard S. Hogan, Using Trademarks as Keywords: Empirical Evidence of Confusion, 105 TRADEMARK REP. 732, 734 (2015) (calling it “one of the most important concepts developed in marketing and the law”).
73. Kevin Lane Keller, Conceptualizing, Measuring, and Managing Customer-Based Brand Equity, 57 J. MKTG. 1, 1–22 (Jan. 1993).
76. See, e.g., Adam Hayes, Brand Equity, INVESTOPEDIA, (Feb. 22, 2021) https://www.investopedia.com/terms/b/brandequity.asp (“Brand equity refers to a value premium that a company generates from a product with a recognizable name when compared to a generic equivalent.”).
77. Best Global Brands 2022, INTERBRAND, https://interbrand.com/best-brands/ (last visited Jan. 9, 2023); see also DHL Corp. v. Comm’r, 285 F.3d 1210, 1219 (9th Cir. 2002) (upholding a Tax Court valuation of DHL’s mark at $100 million).
78. Keller, supra note 73, at 1–22.
on another business’s accrued goodwill, misleading consumers into believing their inferior counterfeits embody the positive qualities of the business’s original offerings. As a result, widespread counterfeiting mars consumers’ view of the original product or service and hurts its sales. Trademark law guards against such harms.

Trademark law derives from common law antifraud doctrines. Put simply, the law helps businesses and the public ensure that if consumers want Coke, they should not be served Pepsi or, worse, counterfeit Coke. In cyberspace, freeriding can take the form of search engines selling brands as a keyword to rivals to augment their standing by association with the famous mark at the expense of brand owners’ sales and brand equity. By safeguarding authenticity, trademark law helps keep clear the signals that brands send to consumers. Unfortunately, it is difficult for anyone—courts, disputing parties, and the public—to determine when the law should intervene to protect those signals. Understanding how the law got to become this way is the first step to fixing it.


83. BEVERLY W. PATTISHALL, DAVID C. HILLIARD & JOSEPH NYE WELCH II, TRADEMARKS AND UNFAIR COMPETITION § 1.02, at 4 (4th ed. 2000) (“Unfair competition is the genus of which trademark infringement is one of the species. Under this view, all trademark cases are in fact cases of unfair competition . . . and this is merely the duty to abstain from fraud.”).

84. Goodstein et al., supra note 71, at 735.

B. THE LANHAM ACT AND THE LIKELIHOOD OF CONFUSION

Through the Commerce Clause, Congress enacted the Trademark Act, colloquially called the Lanham Act (the “Act”) in 1946. The Act codified common law doctrines but did not guide the application of the multifactor test to determine the likelihood of confusion. In his treatise on trademark law, Thomas McCarthy observed that courts quickly gave trademark law “new and potent content” as they interpreted the statute. As the fulcrum of trademark law, the entire infringement inquiry rests on courts determining the nature and scope of the LOC standard as appropriate for each new set of facts.

The Act protects registered and unregistered marks used in commerce by prohibiting free riders from using another’s word, name, symbol, or device in commerce in a way that is likely to confuse consumers. Confusion may arise in various ways, most commonly when consumers mistake defendants’ products with plaintiffs’ products (“source confusion”). Other forms of confusion include thinking plaintiffs sponsor defendants’ products (“sponsorship confusion”) or that defendants and plaintiffs are affiliated (“affiliation confusion”). Successful plaintiffs can enjoy injunctive relief, lost profits, costs of the action, and, in rare cases, attorneys’ fees. A well-functioning infringement system improves market efficiency, enables

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89. § 1114 establishes a cause of action for registered marks (and therefore as the general trademark infringement statute) and § 1125 establishes a cause of action for unregistered marks (and therefore the statute for federal unfair competition). The Senate Committee on Patents described trademark law as, on the one hand, “protect[ing] the public so that it may be confident that, in purchasing a product . . ., it will get the product which it asks for and wants to get,” and, on the other hand, protecting a trademark owner’s expenditure of “energy, time, and money in presenting to the public the product . . . from . . . misappropriation by pirates and cheats.” S. Rep. No. 79-1333, at 3 (1946).
consumer choice,93 safeguards free speech,94 and disposes of claims efficiently.95

This common law-style rulemaking has its advantages. Focusing on the parties and their peculiar issues allows judges to develop the law incrementally.96 Unfortunately, fact-specificity also makes it hard to draw useful precedents to guide business compliance decisions and later interpretations by the courts.97 Congress left operative terms like “likelihood” and “confusion” undefined.98 This vacuum invites judges to weigh in.99 Each of the thirteen circuits has its own formulation, employing between six and thirteen overlapping factors.100 Some circuits favor factors that others ignore, and in different circumstances, lower courts have identified nearly every factor or factor combination as the most important.101 The reason for this may be divergent conceptions of trademark policy, with some courts focusing on unfair competition while others concentrate on consumer confusion.102 As a

94. See, e.g., Lisa P. Ramsey, Descriptive Trademarks, and the First Amendment, 70 TENN. L. REV. 1095, 1146 (2003) (explaining that descriptive terms used as marks are commercial speech “subject to an intermediate level of constitutional scrutiny under the Central Hudson test”).
95. See, e.g., Robert G. Bone, Enforcement Costs and Trademark Puzzles, 90 VA. L. REV. 2099, 2101 (2004) (discussing “the costs of enforcing trademark law, including the administrative costs of adjudicating trademark lawsuits and the error costs of over- and under-enforcing trademark rights”).
96. See, e.g., Oliver Wendell Holmes, Codes, and the Arrangement of the Law, 5 AM. L. REV. 1, 1 (1870).
98. GoTo.com, Inc. v. Walt Disney Co., 202 F.3d 1199, 1205 (9th Cir. 2000) (“The likelihood of confusion is the central element of trademark infringement.”); RESTATEMENT (THIRD) OF UNFAIR COMPETITION Ch. 3 § 20(1) (same); MCCARTHY, supra note 13, § 23:1 (“likelihood of confusion” is a fundamental test of trademark infringement); Barton Beebe & C. Scott Hemphill, The Scope of Strong Marks: Should Trademark Law Protect the Strong More Than the Weak?, 92 N.Y.U. L. REV. 1339, 1340 (2017) (describing the likelihood of confusion determination as the “central question in most trademark litigation”).
100. MCCARTHY, supra note 13, § 24:30; see Sally Beauty Co. v. Beautyco, Inc., 304 F.3d 964, 972 (10th Cir. 2002) (six factors); In re E. I. Du Pont de Nemours & Co., 476 F.2d 1357, 1361 (C.C.P.A. 1973) (thirteen factors).
101. Beebe, supra note 21, at 1583.
102. Alejandro Mejías, The Multifactor Test for Trademark Infringement from A European Perspective: A Path to Reform, 54 IDEA 285, 314 (2014) (finding “there is also divergence on how the factors are treated and employed”); see Beebe, supra note 21, at 1591, 1596–97
result, courts in subsequent cases and businesses and their legal advisors struggle to determine the appropriate strength of each factor, either alone or relative to other factors.103

To exacerbate things, circuits apply different standards of review to lower court LOC determinations. Some appeals courts review LOC under a “clearly erroneous” standard, with that deferential standard for factual inquires making it difficult to police errancy.104 Others treat it as a question of law or a mixed question of law and fact,105 perhaps to give themselves more latitude.

A few scholars have insisted that these LOC tests are uniform where they count.106 To this view, Blake Tierney’s wry response is:

[the] likelihood of confusion factors have remained substantially unchanged for nearly a century, not because they are the best possible answer to the question of when consumers are likely to be confused, but because each court simply does what the court before it did without much consideration for why the court before it did what it did.107

(summarizing in chart form the different factors each circuit considers and reporting “substantial intercircuit variation in plaintiff multifactor test win rates”).


104. See Arrow Fastener Co., Inc. v. Stanley Works, 59 F.3d 384, 391 (2d Cir. 1995) (“We review the district court’s treatment of each Polaroid factor under a clearly erroneous standard. . . . Whether the plaintiff proved a likelihood of confusion is a legal question, and we review the court’s weighing of those factors and its ultimate conclusion under a de novo standard.”); see also Frederick Schauer, Do Cases Make Bad Law?, 73 U. CHI. L. REV. 883, 894 (2006).


106. David J. McKinley, Proving Likelihood of Confusion: Lanham Act vs. Restatement, 12 J. CONTEMP. LEGAL ISSUES 239, 243 (2001) (“After a [brief] period of disparity, the lists developed by the various federal circuits have converged; differences from one list to another have become fairly minimal.”); see also Note, Confusion in Cyberspace: Defending and Recalibrating the Initial Interest Confusion Doctrine, 117 HARV. L. REV. 2387, 2392 n.27 (2004) (“Although the factors of this test vary from circuit to circuit, there is little substantive variation among the tests.”).

Indeed, judges themselves admit the distinctions they make are often done on an “intuitive basis” rather than through “logical analysis.”

Empirical evidence backs Tierney’s view. Reporting on his dataset of cases, Beebe observed that “scattered among the circuits are factors that are clearly obsolete, redundant, or irrelevant, or, in the hands of an experienced judge or litigator, notoriously pliable.” Based on the 331 cases he reviewed, the Second Circuit’s test in *Polaroid Corp. v. Polaroid Electronics Corp* was the most frequently deployed test. In *Polaroid*, Judge Friendly articulated what became known as the eight *Polaroid* factors:

1. strength of the plaintiff’s mark;
2. similarity of plaintiff’s and defendant’s marks;
3. competitive proximity of the products;
4. likelihood that plaintiff will “bridge the gap” and offer a product like a defendant’s;
5. actual confusion between products;
6. good faith on the defendant’s part;
7. quality of defendant’s product; and
8. sophistication of the buyers.

Here, it is worth pausing to consider the fact that as an evidentiary standard, *colorable* instances of similarity that *likely* confuse may be all plaintiffs need to prove. Plaintiffs may succeed even if the marks are merely colorable and even if it is possible some consumers are not confused. When defendants counterfeit the trademark outright, liability is clear. However, like patents and copyright, trademarks protect their owners beyond literal infringement. Nonliteral infringement exposes parties to uncomfortably

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109. *Beebe, supra* note 21, at 1583–84; *see also id.* at 1643 (“The factors relating to the similarity of the parties’ advertising, marketing, and sales facilities all tended to be redundant of the proximity of the goods factor in the circuits that consider these issues separately from the proximity factor.”)
111. 287 F.2d at 495.
uncertain waters. Patent law requires claims to give notice of their metes and bounds. Neither trademark nor copyright law has such claim requirements, leaving courts without statutory or judicial guidance on operationalizing technical similarity or market substitution considerations. Aside from the simplest forms of counterfeiting, the threshold for triggering confusion, and more so likely confusion, exists only as a relative measure where reasonable minds may differ, just as they do in the asylum and criminal cases discussed in Part II. Unlike real property, there are no metes and bounds. This lack of boundaries presents interpretive challenges due to LOC’s current uncertainty.

Lack of boundaries is common to other areas of the law. In any case, though, the LOC standard’s indeterminacy muddies not just trademark law’s focal point but also trademark rights as a whole, as well as adjacent disciplines like copyright and patent law. That indeterminacy also acts as a drag on dispute resolution, compliance, and social equity. The rational response must be to clarify the law.

115. See Michael Grynberg, Thick Marks, Thin Marks, 67 CASE W. RES. L. REV. 13, 15 (2016) (“Many open questions in modern trademark law concern which parts of the range belong under the trademark holder’s control.”).

116. 35 U.S.C. § 112(b) (requiring patentees to include in their patent “one or more claims particularly pointing out and distinctly claiming the subject matter which the inventor . . . regards as the invention”).


118. Michael Grynberg, The Judicial Role in Trademark Law, 52 B.C. L. REV. 1283, 1303 (2011) (“Trademark’s fundamental inquiry, whether a likelihood of confusion exists, invites judicial lawmaking in no small part because the term ‘likelihood of confusion’ presents an interpretive problem.”); Graeme W. Austin, Tolerating Confusion About Confusion: Trademark Policies and Fair Use, 50 ARIZ. L. REV. 157, 160 (2008) (“[T]here is considerable uncertainty about some of the key questions that are germane to the factual inquiry at the heart of the likelihood of confusion analysis.”); see also generally Daryl Lim, Saving Substantial Similarity, 73 FLA. L. REV. 591, 601–02 (2021) (discussing the challenges of vagueness and uncertainty of nonliteral infringement in the copyright context); id. at 592 (“Judges and scholars have called the court-developed tests to assess substantial similarity ‘ad hoc,’ ‘bizarre,’ and ‘a virtual black hole in copyright jurisprudence.’”).

C. THE CASE FOR CLARITY

Overprotection could cause a chilling effect on marketplace competition if even compliant businesses face the specter of trademark litigation from overzealous owners. Ascertaining whether consumers might see a connection between an owner and alleged infringement is a complicated business. William McGeveran warned that ascertaining liability before the litigation is “impossible.”\textsuperscript{120} That indeterminacy may not be a bad thing. When liability is difficult to predict, risk-averse users tend to obtain a license even if not needed since there is currently no cheap and easy way to test confusion claims.\textsuperscript{121} As unsavory as it might be for licensees, trademark law does not prohibit that outcome. Trademark owners have the right to control how they and others use their marks. It is easier for them to assess whether their mark has spillovers (positive or negative) in deciding whether to license.\textsuperscript{122} Besides adapting to new situations, the uncertainty may nudge potential licensees into self-identifying, seeking licenses from owners, facilitating an efficient exchange of market value.\textsuperscript{123}

As in the real world, the danger with this tactic is the systemic risk of overfishing, or overenforcement. Brand managers and their trademark attorneys have every incentive to do so. Both base their professional success on strengthening brand equity.\textsuperscript{124} In her work on online agreements, Leah Chan-Grinvald’s research reported that “[t]rademark holders are under the misapprehension that every third-party use of a trademark must be stopped, or else their trademarks will not be considered strong.”\textsuperscript{125} Likewise, empirical work by William Gallagher suggests trademark owners routinely

\textsuperscript{120} William McGeveran, Four Free Speech Goals for Trademark Law, 18 FORDHAM INTELL. PROP. MEDIA & ENT. L.J. 1205, 1214–15 (2008) (“[I]t may be impossible to anticipate in advance how confusing a judge will find your client’s parody of, or allusion to, a trademark.”).

\textsuperscript{121} David S. Welkowitz, The Virtues and Vices of Clarity in Trademark Law, 81 TENN. L. REV. 145, 146 (2013) (“[T]rademark owner threatens litigation, an early outcome is relatively unlikely, and even cases decided before trial may prove expensive.”).

\textsuperscript{122} See Bone, supra note 95, at 2100–01 (discussing the negative costs of enforcing trademark law and trademark lawsuits); see also Kenneth L. Port, Trademark Extortion: The End of Trademark Law, 65 WASH. & LEE L. REV. 585 (2008) (discussing how trademark holders sue competitors to secure market share).

\textsuperscript{123} See, e.g., James Gibson, Risk Aversion and Rights Accretion in Intellectual Property Law, 116 YALE L.J. 882, 913 (2007) (“It should therefore come as no surprise when trademark users who could mount a decent defense against infringement claim nevertheless choose to seek a license.”).

\textsuperscript{124} See, e.g., Procter & Gamble Co. v. Johnson & Johnson Inc., 485 F. Supp. 1185, 1207 (S.D.N.Y. 1979) (“[T]rademark law not only encourages but requires one to be vigilant on pain of losing exclusive rights.”).

\textsuperscript{125} Leah Chan Grinvald, Contracting Trademark Fame?, 47 LOY. U. CHI. L.J. 1291, 1309 (2016).
“overenforce” trademark rights when they know their claims are weak—i.e., the likelihood of confusion is extremely low. Lawyers who Gallagher interviewed shared it was appropriate and even expected that they had “an asserted ethical duty to zealously advocate client interests were readily invoked to justify aggressive policing of IP rights.”

These sentiments, coupled with the enormous value of trademarks, may explain why trademark litigation has exploded over the past few decades. Owners threaten lawsuits and resist early dismissals, even when the offending use furthers First Amendment or other ostensibly laudable interests, instead cowing potential infringers into licensing agreements rather than engaging in costly litigation conflicts. Median costs of trademark suits that get through the discovery phase (and also through trial) vary between $150,000 through discovery ($300,000 through trial) on the low end, and up to $750,000 through discovery ($1.5 million through trial) on the high end. Defendants waiting until trial to weed out frivolous claims face $300,000–$1.25 million in legal fees alone. Such expensive and time-consuming disputes may involve inquiries into defendants’ intent, and requests for survey evidence underpinned by expensive dueling experts. Allowing settlements in the shadow of a vague LOC standard caters to an attitude that assumes confusion is illegal and likely protected by law. Moreover, most potential defendants simply want to avoid liability cleanly and efficiently, capitulating rather than challenging the merits of suits against them. As a result, rivals, particularly risk-averse small or medium businesses, may choose not to advertise or invest in their developing brands once subject to a trademark litigation dispute.

Unmeritorious claims redefine the public perception of trademark scope and ultimately shape those rights through a consumer perception feedback

127. See id.
132. McGeveran, supra note 121, at 1214.
Imagine a world where grocery stores must separate similar products to avoid any risk of association. In that world, companies could take licenses rather than pay to litigate. Over time, it would become rarer to see similar products grouped. Soon, even a can of generic cola beside Coke would confuse consumers. In such a world, if a grocer put a generic cola and Coke together in an aisle, the grocer would risk liability for freeriding Coke’s interest in being insulated from rivals by selling generic colas.

Chan-Grinvald’s research on online agreements indicates the problem of unmeritorious claims is also pernicious on the internet. Trademark owners assert an unprecedented number of keyword-based trademark threats against the media, book publishers, movie and television creators, search engines, comparative advertisers, critics, and parodists. For example, digital platforms help aggregate product reviews for easy price and quality comparisons. To do this, website operators need to use others’ trademarks to communicate effectively with consumers. Unfortunately, brand owners have attempted to shut down those uses based on affiliation or source confusion in court.

The Supreme Court warned in Wal-Mart Stores, Inc. v. Samara Bros. of plaintiffs using indeterminacy in trademark law to overreach and bully defendants into submission, and thus chill legitimate activities. Yet, the law’s current approach to the LOC standard breeds precisely the kind of behavior the Court warned against—allowing bullying by trademark owners and forcing defendants to litigate to clarify their rights. This is an unfair and dangerous way for the legal system to ensure compliance, and it has not gone unnoticed.

Stacey Dogan warned that “markets could not function without some means for sellers to determine whether their marketing plans might infringe someone else’s trademark. This requires the ability of individuals or companies interested in creating their own trademark to identify other protected marks

133. Mark P. McKenna, Trademark Use and the Problem of Source, 2009 U. ILL. L. REV. 773, 774 & n.4 (2009) (“Consumer expectations largely define trademark rights, yet those expectations are influenced by consumers’ understanding (or misunderstanding) of the law.”).
134. Dogan & Lemley, supra note 86, at 1694–95.
135. Dogan & Lemley, supra note 86, at 1695 (reporting thousands of keyword-based trademark threats every year).
136. See, e.g., Toyota Motor Sales, U.S.A., Inc. v. Tabari, 610 F.3d 1171 (9th Cir. 2010) (trademark defendants ran website compiling automobile dealer pricing and providing matching services).
137. See id. at 1175 (“Toyota is using this trademark lawsuit to make it more difficult for consumers to use the Tabaris to buy a Lexus.”).
139. I am grateful to Jon Lee for this insight.
and to have some confidence about the scope of existing-trademark protection.”\textsuperscript{140} In this regard, trademark law “fall[s] well short of the mark.”\textsuperscript{141} If the government expects businesses to abide by the law, then the law needs to be clear and predictable.\textsuperscript{142}

The bottom line is that the LOC standard needs to be clearer about what it expects from judges and litigants. A well-functioning standard helps set expectations for judges and litigants, creates stability and minimizes litigation costs, increases the speed of judicial decision-making, and benefits other trademark law. As the court in \textit{Samara Bros} observed, “[h]ow easy it is to mount a plausible suit depends, of course, upon the clarity of the test.”\textsuperscript{143} The status quo prejudices consumers, individuals, and fledging brands who are not repeat players. Ordinary users for purposes of art or commentary typically lack expertise about trademark law and the resources to obtain legal advice.\textsuperscript{144} Furthermore, critical to any property system, including trademark rights, is proper notice about the existence and scope of those legal rights to the public. Poor notice adds to litigation costs for potential victims of trademark bullying, increases information costs by directing users to more costly search strategies,\textsuperscript{145} impedes efficient licensing, and ultimately discourages innovation.\textsuperscript{146} A patchwork of inconsistent results destabilizes the system for everyone, even plaintiffs.\textsuperscript{147} Beyond litigation, uncertainty over the confusion standard leads parties to assign different estimates to the value of a license. It


\textsuperscript{141} Id.


\textsuperscript{143} \textit{Wal-Mart Stores, Inc.}, 529 U.S. at 213.

\textsuperscript{144} Users may be consumers or fledging brands and are “litigants” for the purposes of this argument. See Boris Shapiro, \textit{Note, Trademark Arbitration: A First Rate Change for a Second Life Future}, 8 J. Intell. Prop. 273, 287 (2009) (“While in-game users may have a legitimate belief that their business practices do not infringe real world trademarks, they must nevertheless factor the costs of litigation into the equation. Furthermore, faced with uncertainties such as the length of a trial, the amount of discovery required, the success of winning on the merits and the likelihood of appeal, the in-game business owner may feel defeated before stepping into the court-house. Notwithstanding the strength of his case, he will feel powerless in the face of an opponent with potentially unlimited time and resources”).


\textsuperscript{146} See Bone, supra note 119, at 1257.

causes negotiations to break down, harming both brand owners and potential licensees.  

Conversely, expedient determinations, which can only occur when the law is clear, serve the ends of justice for both sides. Summary judgments provide a quick and inexpensive exit ramp for parties to dispose of a case when no real issues call for a trial. The ability of courts to wield this important judicial tool protects defendants against frivolous lawsuits and plaintiffs from incurring unnecessary costs. Streamlining the test by consolidating and trimming down the factors will enable courts to get to the heart of the inquiry expeditiously. Clarifying the LOC standard lowers the temperature and makes it easier for owners to determine when to protect their interests. Part VI shows how.

Simplifying confusion will benefit other aspects of trademark law. For example, trademark law’s first sale doctrine lets others sell used or reconditioned goods with the original mark, which also incorporate confusion. Nominative fair use may likewise fold LOC into its analysis. What is “fair” implicates the confusion arising from the trademark’s use, whether the defendant only used as much as necessary of the plaintiff’s mark, which in turn infects the plaintiff’s mark with the vagueness of the LOC standard. The same issue arises with the use of expressive trademarks or the keyword advertising.

148. See Bone, supra note 119, at 1258.
150. The first sale doctrine states that a trademark owner cannot prevent someone who has lawfully purchased a trademarked good from selling that item to someone else. This allows the distribution of trademarked goods beyond the initial sale by the trademark owner. See Nitro Leisure Prods., L.L.C. v. Acushnet Co., 341 F.3d 1356, 1362–64 (Fed. Cir. 2003) (consumer confusion as benchmark for applying the first sale doctrine).
151. Toyota Motor Sales, U.S.A., Inc. v. Tabari, 610 F.3d 1175–76 (9th Cir. 2010) (determining normative fair use occurs by asking whether (1) the product was readily identifiable without use of the mark; (2) defendant used more of the mark than necessary; or (3) defendant falsely suggested he was sponsored or endorsed by the trademark holder).
153. See Rogers v. Grimaldi, 875 F.2d 994, 999 (2d Cir. 1989) (adopting balancing test that asks whether the use of a trademark as the title of an expressive work is artistically relevant to the underlying work and, if so, whether “the title explicitly misleads as to the source or the content of the work”).
154. See Network Automation, Inc. v. Advanced Sys. Concepts, Inc., 638 F.3d 1137, 1154 (9th Cir. 2011) (holding that use of mark in keyword advertising is not likely to cause confusion).
Likewise, potential infringers may be liable for dilution. Dilution occurs when defendants either tarnish the plaintiff’s mark with unsavory associations or when they blur its distinctiveness with multiple uses on different products. It does not require plaintiffs to show a likelihood of confusion. While liability for dilution is theoretically distinct from confusion, it frequently tracks similar facts when courts consider a mark’s fame and the subjective “blurring” of marks in the public mind. Defining the hard edges of the LOC standard will allow courts to develop trademark law more coherently and transparently.

Clarity also helps police the boundaries beyond trademark law on the one hand and patent law and copyright law on the other. Trademarks, unlike patents and copyright, last indefinitely and could give a trademark owner monopoly power without the threshold requirements and other limitations that patent and copyright law demand of their respective rights holders.

The risk of overextending trademark rights is particularly true in product design cases where trade dress adjoins both copyright and patent rights. For instance, clothing makers can obtain trademark protection for signature features of the clothing, while original textile designs can receive copyright protection for the pattern on clothing. Questions have also arisen over whether the design of a sign supported on the bottom by two springs constituted protectable trade dress, whether VIP’s “Bad Spaniels Silly Squeaker” dog toy, which was roughly the same shape as a bottle of Jack Daniel’s but with “dog-related twists” was “aesthetically functional,” or


158. See, e.g., Qualitex Co. v. Jacobson Prods. Co., 514 U.S. 159, 164 (“It is the province of patent law, not trademark law, to encourage invention by granting inventors a monopoly over new product designs or functions for a limited time.”).

159. See Landes & Posner, supra note 83, at 287 (“The lack of a fixed term for trademarks is one of the striking differences between trademarks, on the one hand, and copyrights and patents, on the other.”); see generally 15 U.S.C. § 1114 (remedies for trademark infringement).


164. VIP Prods. LLC v. Jack Daniel’s Props., Inc., 953 F.3d 1170, 1172 (9th Cir. 2020).
whether a thin, partially chocolate-dipped biscuit cookie was utilitarian.\textsuperscript{165} Understanding where to mark the doctrinal cloth between the disputed marks requires appreciating how the standard for confusion itself became confusing.

IV. 

ROOTS OF CONFUSION

Over the years, the jurisprudential roots of trademark law became unruly and tangled. Unfair competition intermingled with consumer protection as the Lanham Act blended trade names and technical trademarks.\textsuperscript{166} A later legislative revision untied the LOC standard from source confusion—a different part of the trademark infringement analysis. When interpreting the revision, courts then introduced idiosyncratic rules of affiliation and sponsorship as triggers for consumer confusion.\textsuperscript{167} Within the LOC tests, factors such as defendants’ intent, survey evidence, and consumer sophistication provided a convenient but misguided attempt to determine trademark infringement.\textsuperscript{168} Judges resorted to coherence-based reasoning, finding the satisfaction of other factors once they were satisfied that their favored factors were present.\textsuperscript{169} It made their work easier but muddied the waters for everyone else.

A.  

EXPANSION INTO CONFUSION

1. Blending the Law on Trade Names and Trademarks

The scope of trademark law historically protects virtually anything that functions as a source identifier—shapes, colors, smells, and sounds.\textsuperscript{170} Today, the law goes even further. As a result of the 1988 amendment to the Lanham Act, trademark law now covered new types of protectable subject matter, from technical trademarks to almost anything capable of carrying source meaning, as potential trademarks.\textsuperscript{171} As a result, the LOC standard became more complex. This Section explains the origins of these developments and their implications.

\textsuperscript{166} See infra Section IV.A.
\textsuperscript{167} See Toyota Motor Sales, U.S.A., Inc. v. Tabari, 610 F.3d at 1175 (“Toyota is using this trademark lawsuit to make it more difficult for consumers to use the Tabaris to buy a Lexus.”).
\textsuperscript{168} See infra Section IV.C.
\textsuperscript{169} See infra Section IV.D.
\textsuperscript{170} See Bone, supra note 120, at 1268.
At its origin, trademark common law in the late nineteenth century distinguished between trade names and technical trademarks.\(^{172}\) Most trade name disputes involved rivals.\(^{173}\) Unfair competition law governed these disputes and focused on directly competing uses that diverted trade,\(^ {174}\) taking the form of passing off or reverse passing off business names.\(^{175}\)

Defendants who used their first or last names as trade names reasonably expected they could do so, even if those names happened to be like the plaintiffs’ names.\(^{176}\) Instead of comparing trade names in a dispute, courts required plaintiffs to prove the defendants’ intent to confuse or mislead the public as well as proof of actual harm.\(^ {177}\) Even when plaintiffs succeeded, they only obtained narrow injunctions so defendants could continue to operate their business.\(^{178}\)

Unlike trade names that could be descriptive, technical trademarks had to be fanciful, arbitrary, or suggestive.\(^{179}\) The 1905 Trade-Mark Act mapped infringement to unauthorized use, which held “substantially the same descriptive properties as those set forth in [plaintiff’s] registration.”\(^ {180}\) The infringement threshold was lower because plaintiffs had only to prove consumers would be confused without proving intent or actual confusion.\(^ {181}\) And unlike with trade names, infringement of technical trademarks was based

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174. See Mark P. McKenna, The Normative Foundations of Trademark Law, 82 NOTRE DAME L. REV. 1839, 1904 (2007) (noting that courts only developed the likelihood of confusion factors after jettisoning the requirement of direct competition).
175. “Passing off” occurs when defendants sell their goods with the plaintiff’s mark, with “reverse passing off,” defendants sell plaintiff's goods with the defendant’s trademark, see Corporate Counsel’s Guide to Unfair Competition § 25:1 (2012).
176. MCCARTHY, supra note 13, § 4:5.
177. See SCHECHTER, supra note 172.
178. See, e.g., Kellogg Co. v. Nat’l Biscuit Co., 305 U.S. 111, 122 (1938) (“Sharing in the goodwill of an article unprotected by patent or trade-mark is the exercise of a right possessed by all—and in the free exercise of which the consuming public is deeply interested. There is no evidence of passing off or deception on the part of the Kellogg Company; and it has taken every reasonable precaution to prevent confusion or the practice of deception in the sale of its product.”).
179. See Canal Co. v. Clark, 80 U.S. 311, 323 (1871).
181. See SCHECHTER, supra note 172, at 161.
on a strict liability standard. Finally, compared with trade name cases, courts in technical trademark cases routinely granted blanket injunctions, regardless of whether doing so would put the defendant out of business.

In the twentieth century, courts blurred the distinction between the two. As sellers expanded into adjacent product markets in the post-war era, courts expanded the scope of protection to include complementary products and services. For instance, a trademark for pancake syrup infringed another for pancake batter. The Act also codified the blended standard, requiring only that the unauthorized use be connected with goods or services. Trade names enjoyed the protection offered to technical trademarks as long as owners could show "secondary meaning." Cases interpreted this as customers associating the source of the product that imbued trade names with an acquired distinctiveness. The Act subsequently welded the two concepts, allowing all kinds of signs to acquire distinctiveness through secondary meaning.

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<th>Table 1: Trade Names, Technical Trademarks and Modern Trademark</th>
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182. A trade name is generally considered the name a business uses for advertising and sales purposes, see McCarthy, supra note 13, § 30:1.
187. See, e.g., Handler & Pickett, supra note 183, at 200.
Table 1 shows how the modern trademark standard blended the most expansive aspects of the previous standards in favor of the trademark owner such as likelihood of harm rather than actual harm or broad injunction rather than a narrow one. Law and economics scholarship, driven by a belief that stronger protection maximized wealth and, in turn, promoted economic efficiency, prompted this expansion. The result infused unfair competition into trademark law and invited courts to find defendants’ marks infringing well before consumers make a purchase, based on the idea that defendants misappropriated the plaintiff’s goodwill to appeal to consumers.

In practical terms, the fused standard gave businesses using descriptive terms like “fish fry” the same broad injunctive relief previously reserved for distinctive trademarks. In policy terms, trademark law, once consumer-centered, was in effect displaced by brand equity. Scholars like Rochelle Dreyfuss, Mark Lemley, and Mark McKenna expressed alarm at this shift and its implications for trademark doctrine. Trademark law contains no rule protecting brand equity even where there is no evidence that defendants caused harm. Yet, that is precisely what aggressive owners have attempted, as they claim functional subject matter, block comparative advertising by rivals, and harass rivals. Today, the law does not require plaintiffs to define that goodwill and show misappropriation. Instead, courts use likely consumer confusion as a proxy to determine the boundaries of protectable goodwill.

190 See Landes & Posner, supra note 83, at 270–79, (advancing Chicago School economic theory within trademark law’s scope); see, e.g., W. T. Rogers Co. v. Keeene, 778 F.2d 334, 339 (7th Cir. 1985) (Posner J.) (finding that “competition is not impaired by giving each manufacturer a perpetual ‘monopoly’ of his identifying mark” if the manufacturer has chosen a “distinctive” trademark where the available names are “for all practical purposes infinite”).

191 Gibson Guitar Corp. v. Paul Reed Smith Guitars, 423 F.3d 539, 549 (6th Cir. 2005).

192 Zatarains, Inc. v. Oak Grove Smokehouse, Inc., 698 F.2d 786, 788 (5th Cir. 1983).


194 See Rochelle Cooper Dreyfuss, Expressive Genericity: Trademarks as Language in the Pepsi Generation, 65 Notre Dame L. Rev. 397, 399 (1990) (“The changing legal climate has tended to grant trademark owners greater control over their marks.”); Lemley & McKenna, supra note 86, at 414 (arguing that “trademark law needs to refocus on confusion that is actually relevant to purchasing decisions”).


197 See, e.g., Toyota Motor Sales, U.S.A., Inc. v. Tabari, 610 F.3d, at 1180.


199 See Bone, supra note 119, at 569–72 (reviewing the different attempts to define the term “goodwill” and noting that goodwill escapes precise definition).
Scholars disagree whether trademark expansionism has resulted in a net positive and whether trademark rights should be narrower or broader.200 This Article takes no stand on that normative debate but instead breaks ground on another one, arguing that the fusion is a key contributing factor to muddying the LOC standard.

2. Yet More Triggers for Confusion

When Congress amended the Act in 1962, it removed the restriction that confusion was limited to source confusion.201 Courts thereafter dutifully expanded the scope of confusion from purchasers to include non-purchasers (“post-sale confusion”) and allowed businesses to prohibit confusion over sponsorship or endorsement of goods and services.202 Whereas protection previously stopped at the shores of adjacent products, trademark law expanded to allow even a pancake chain restaurant to attempt to prohibit an evangelical organization from using a similar mark.203 This caused a jurisprudential disjuncture to occur.

Factors like consumer sophistication, the likelihood of expansion, and marketing channels have told us nothing about evaluating a brand company’s claim to be the exclusive soda associated in the minds of consumers with a sporting event.204 Worse, the multiple factors that the LOC standard now targets make applying the standard even more unwieldy and unpredictable.205

Trademark litigation is inherently impressionistic, particularly when actual confusion is rare. Courts caught up in the swirl sloppily peppered their judgments with different operative terms to describe the same thing, including

200. See Bone, supra note 119, at 1268.
202. Act of Oct. 9, 1962, Pub. L. No. 87-772 § 2, 76 Stat. 769, 769 (deleting the requirement that confusion be of “purchasers as to the source of origin of such goods or services”). See, e.g., New Kids on the Block v. News Am. Pub'l'g, Inc., 971 F.2d 302, 309 (9th Cir. 1992) (recognizing sponsorship or endorsement as relevant in determining normative fair use in trademark infringement analysis).
205. Gibson, supra note 124, at 908 (“The case law on sponsorship and approval, however, is so ambiguous as to make it almost impossible to know ex ante whether a given use will be infringing.”).
“affiliation,”206 “endorsement,”207 “connection,”208 to whether the use produced confusion “of any kind.”209 As the Fifth Circuit bluntly put it, “Congress adopted an open-ended concept of confusion. Any kind of confusion will now support an action for trademark infringement.”210

Substitution bias is particularly virulent when open-ended wording gives courts cover, as the Act did here.211 Courts took that opportunity and leaned into LOC factors like defendants’ intent, survey evidence, and trademark strength, which were malleable and easy to wield to reach their desired outcomes.212 Strikingly, Beebe’s empirical study reported that intent and surveys were so heavily weighted that courts stampeded over other factors.213 Unfortunately, if LOC outcomes turn on evidence of intent and survey evidence, then trademark infringement is fundamentally flawed. The next two Sections explain why.

B. AN INTENT TO CONFUSE

Judges may like for there to be evidence of intent because it makes their jobs easier, and the outcome feel just. All circuits but the Federal Circuit recognize this as a major factor in finding liability.214 However, eliminating intent allows a judge to focus their inquiry into the likelihood of confusing a trademark rather than the commercial immorality of defendants. Intent should be removed as a factor for determining the likelihood of confusion. This is because it is based on the defendant rather than the consumer, and with little relevance to a consumer’s perception of a mark or potential for confusion, and muddies jurisprudential waters.215

The LOC standard’s intent factor examines whether defendants sought to benefit from plaintiffs’ goodwill.216 Once plaintiffs show that defendants know

206 E.g., Pebble Beach Co. v. Tour 18 I Ltd., 155 F.3d 526, 544 (5th Cir. 1998).
207 Id.
208 SNA, Inc. v. Array, 51 F. Supp. 2d 554, 562–63 (E.D. Pa. 1999) (concluding that defendants’ attempt to use metatags to “lure internet users to their site” was in bad faith), aff’d sub nom.
209 Syntex Labs., Inc. v. Norwich Pharmacal Co., 437 F.2d 566, 568 (2d Cir. 1971).
210 Armstrong Cork Co. v. World Carpets, Inc., 597 F.2d 496, 501 n.6 (5th Cir. 1979).
211 See, e.g., SNA, Inc. v. Array, 51 F. Supp. 2d at 562–63.
212 See supra Section III.C.
213 Beebe, supra note 21, at 1607.
214 See Beebe, supra note 21, at 1589–90.
215 For an example of specific circuit language that currently use “intent” as a factor, see, e.g., Stone Creek, Inc. v. Omnia Italian Design, Inc., 875 F.3d 426, 434 (9th Cir. 2017) (“Omnia’s reason for adopting the STONE CREEK mark also plays a critical role: when the alleged infringer intended to deceive customers, we infer that its conscious attempt to confuse did in fact result in confusion.”)
about plaintiffs’ marks, courts assume intent. 217 The Restatement on Unfair Competition notes that courts may then infer confusion from wrongful intent since “it may be appropriate to assume that an actor who intends to cause confusion will be successful in doing so.” 218 To see how this causal inference works, consider the Second Circuit’s reasoning that defendants intended to capitalize on the Steinway trademark by adopting the “Steinweg” name and slogan even though consumers would not mistake a Grotrian-Steinweg piano for a Steinway piano at the time of purchase. 219 The court explained that “the harm to Steinway . . . is the likelihood that a consumer, hearing the ‘Grotrian-Steinweg’ name and thinking it has some connection with ‘Steinway,’ would consider it on that basis.” 220 Beverly Pattishall suggested that whether or not a defendant intends to confuse consumers makes outcomes more predictable. 221 It seems then that if a defendant intends to confuse consumers, a court will more likely find there to be a likelihood of confusion because it may be easier to determine the state of mind of one person, the defendant, than to forecast the perceptions of the consumer group.

Predictability is good, but the result may not be, as anyone having indulged in a night of merriment and subsequently endured a hangover will attest. Defendants’ intent plays an outsized influence because it is an easy proxy for courts to weigh the equities of the case rather than the underlying factual inquiry. 222 Courts look at defendants’ intent to copy a mark rather than confuse the public, 223 switching between “intent to confuse” and “intent to copy” interchangeably. 224 Intent inherently focuses on the wrong goalpost. Merely because the defendant’s mental state is easier to discern than the consuming public does not make that factor more relevant to the inquiry. As Kelly Collins warned,

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218. See RESTATEMENT (THIRD) OF UNFAIR COMPETITION § 22 cmt. B (1995). AMF Inc. v. Sleekcraft Boats, 599 F.2d 341, 354 (9th Cir. 1979) (“[T]he defendant can accomplish his purpose: that is, that the public will be deceived.”).
220. See id.
222. See, e.g., McCARTHY, supra note 13, § 23:110 (“[C]ourts sometimes engage in the traditional rhetoric that accompanies punishing the evildoer.”).
224. E.g., Nautilus Group, Inc. v. ICON Health & Fitness, Inc., 372 F.3d 1330, 1336–37 (Fed. Cir. 2004) (using “intent to confuse” and “intent to copy” interchangeably within the same paragraph).
“[t]his is dangerous because mere ‘copying’ is not always impermissible.”

The law encourages reusing generic or functional marks “as a part of our competitive economic system.” For this reason, she argues that the relevant intent is intent to confuse and not merely to copy.

David Tan and Benjamin Foo agree with Collins, observing that intent is “controversial as it has little or no bearing on consumers in the marketplace.” Grynberg warned that intent “lacks a necessary nexus to existence of likelihood of confusion,” making it “open to manipulation by the factfinder.”

Moreover, “[t]he elusive nature of the underlying inquiry similarly invites appellate overreaching.” Alejandro Mejías explained that intent is irrelevant because the focus “is not what the defendant intended to do, but whether his mark is likely to be confusingly similar for the relevant public.” Very few courts have acknowledged as much.

There is another reason to ditch intent—it muddies jurisprudential waters caused by the fusion of trade name and technical trademark jurisprudence further. Courts require intent when dealing with non-inherently distinctive marks. For inherently distinctive marks, courts have either presumed intent or dispensed with it. Technical trademark infringement focuses on the consequences of the defendant’s act and not on their intent. In contrast,
trade name infringement focuses on defendants’ desired outcomes, irrespective of consumer confusion. The modern standard melds both, making it an unstable and dangerous factor.

The Act does not require proof of intent. Trademark law is, after all, a strict liability offense. As the Sixth Circuit opined, the better view is to consider intent only after other LOC factors indicate liability. Intent may go to aggravated remedies but should be irrelevant to the question of guilt. As Beebe put it, “if trademark law seeks to prevent commercial immorality, then it should do so explicitly. An injunction should issue, and damages be granted on that basis alone, and not based on possibly distorted findings of fact as to the likelihood of consumer confusion.”

The final reason may be surprising given the seeming outsized role intent plays according to conventional wisdom. Beebe’s data revealed that intent was of decisive importance in the few cases where they featured. In other words, intent is doctrinally irrelevant and, when looking at case law in the aggregate, empirically irrelevant as well.

Judges may like intent because it makes their job easier, and the outcome feels just. However, intent is irrelevant to technical trademark infringement. Eliminating intent allows a more focused inquiry into LOC rather than the commercial immorality of defendants. As a practical matter, it frees parties from costly discovery and allows the court to grant summary judgment more frequently, producing the benefits discussed in Section IVC. Judges can had to demonstrate that the defendant acted with fraudulent intent, while courts would presume fraud in technical trademark infringement cases.

236. See, e.g., Shaver v. Heller & Merz Co., 108 F. 821, 827 (8th Cir. 1901) (“Everyone has the right to use and enjoy the rays of the sun, but no one may lawfully focus them to burn his neighbor’s house . . . . Everyone has the right to use pen, ink, and paper, but no one may apply them to the purpose of defrauding his neighbor of his property, or making counterfeit money, or of committing forgery.”)

237. See Taubman Co. v. Webfeats, 319 F.3d 770, 775 (6th Cir. 2003) (recognizing that the Lanham Act is a “strict liability statute”); see also Rebecca Tushnet, Running the Gamut From A to B: Federal Trademark and Federal False Advertising Law, 159 U. PA. L. REV. 1305, 1310 (2011) (noting that federal courts have interpreted trademark as a strict liability offense); Bone, supra note 95, at 2109 (referring to trademark infringement as a form of strict liability).

238. See, e.g., Taubman Co., 319 F.3d at 775 (“[T]he proper inquiry is not one of intent. In that sense, the Lanham Act is a strict liability statute. If consumers are confused by an infringing mark, the offender’s motives are largely irrelevant.”).

239. Beebe, supra note 21, at 1631.

240. Id. at 1622.

241. 10B CHARLES ALAN WRIGHT, ARTHUR R. MILLER & MARY KAY KANE, FEDERAL PRACTICE AND PROCEDURE (CIVIL) § 2730 (3d ed. 1998) (“Questions of intent, which involve intangible factors including witness credibility, are matters for the consideration of the fact finder after a full trial and are not for resolution by summary judgment.”).
dispose of cases more easily without trial and defendants will less likely be subject to vexatious suits based on the nebulous aspersions of intent. The audience of trademark law are consumers, but even there, problematic proxies have infiltrated the LOC factors to trip judges up.

C. TRADEMARK’S AUDIENCE

While the “ordinary consumer” is central to the infringement analysis, he or she remains poorly theorized. In patent cases, courts benefit from expert testimony. Trademark law makes do with survey evidence of market substitution along with an assortment of policy goals. Judges must determine confusion without evidence that any consumers were confused, imagining consumers’ likely experience as filtered through their hypothetical competing interests. This notional consumer is “neither savant nor dolt,” but rather one who “lacks special competency with reference to the matter at hand but has and exercises a normal measure of the layman’s common sense and judgment.”

The key problem here is bias—considering evidence that is irrelevant except for one’s personal biases. Like the rest of us, judges have subjective biases that consumers in the relevant marketplace may not share. This is particularly important when significant demographic differences separate the judge and average consumer. Courts are divided on the matter. In Triangle Publications v. Rohrlich, involved whether teenage girls would likely confuse SEVENTEEN in magazines for MISS SEVENTEEN used in girdles. On appeal, the dissenting judge criticized the trial judge’s “shaky kind of guess” that the ordinary female teenage consumer was likely confused by the two marks. He argued that the right approach was to survey adolescent girls, their mothers, and their sisters.

242. Casagrande, supra note 228 (proposing an elimination of intent as a factor to be considered in determining trademark infringement).
243. Yes, e.g., Lee et al., supra note 85, at 575 (“[N]either courts nor commentators have made any serious attempt to develop a framework for understanding the conditions that may affect the attention that can be expected to be given to a particular purchase.”). 
246. United States v. 88 Cases, More or Less, Containing Bireley’s Orange Beverage, 187 F.2d 967, 971 (3d Cir. 1951).
247. Kussurelis, supra note 149, at 174 (arguing that “judges place undue emphasis on facts taken out of the actual marketplace context.”).
248. DINWOODIE & JANIS, supra note 103, at 525.
249. Triangle Publications v. Rohrlich, 167 F. 2d 969, 976 (2d Cir. 1948).
250. Id. at 977.
Courts rely on surveys to determine trademark strength and consumer sophistication, and thus to answer the LOC question. Surveys are a form of evidence, while trademark strength and consumer sophistication are legal determinations. All of these inform the same inquiry—is there a likelihood of confusion? Like intent, none provide a good proxy. The Sections below explain why.

1. **Surveys are Expensive and Misleading**

In theory, parties attempt to use surveys in trademark disputes to measure whether consumers believe that the plaintiff’s mark is the source of the alleged infringer’s product or whether it sponsors or approves of the related product. In practice, courts routinely attack the representativeness of the survey from a parade of cherry-picked witnesses and extrapolate a standard of what consumers generally believe.

Surveys allow courts to determine how consumers responded to defendants’ use of their mark. Beebe touts surveys as “one of the most classic and most persuasive and most informative forms of trial evidence that trademark lawyers utilize in both prosecuting and defending against trademark claims of various sorts,” reporting that courts draw negative inferences if plaintiffs fail to conduct surveys.

Plaintiffs may provide survey evidence that an appreciable number of relevant consumers are likely to be confused. These surveys present consumers with defendants’ marks and measure their reaction in the context consumers would encounter the mark in question. They typically involve control groups to show causality between the defendants’ mark and consumer confusion. A survey needs to pass muster under the Federal Rules of Evidence, which requires considering the “validity of the techniques employed.” Courts can bar significantly flawed surveys as evidence when they are more prejudicial than probative or deemed unreliable.

251. See McCarthy, supra note 13, § 23:17 (discussing survey evidence).
252. Beebe, supra note 21, at 1641.
254. See McCarthy, supra note 13, § 32:158.
258. See McCarthy, supra note 13, § 32:158.
259. Id.
Given the perceived centrality of surveys, it is surprising that empirical studies reveal courts rely on survey evidence infrequently. Beebe’s study revealed that only twenty percent of cases discussed survey evidence, and only ten percent were credited.260 It is just as well.

One reason that cases mention survey evidence so infrequently is that surveys are costly,261 time-consuming, and even well-constructed ones are frequently challenged.262 As Robert Bone explained, “surveys are difficult to design properly and expensive to conduct . . . Judges also find it difficult to evaluate survey methodology, especially when confronted with competing expert testimony, and this increases the likelihood of error.”263 Identifying an expert to conduct surveys in the time available before a preliminary injunction hearing and the cost of doing so presents formidable challenges.264 Most parties also settle before trial.265

As a matter of justice between the parties, the staggering costs of surveys put defendants at a disadvantage. Bone explained that “[p]roving a high LOC puts a premium on surveys and expert testimony and is likely to require extensive discovery, all of which will increase direct litigation costs and strengthen a trademark owner’s ability to leverage cease-and-desist threats in frivolous and weak cases.”266

Bone is right to be concerned that surveys may be methodologically dicey. Rebecca Tushnet described the problem of verbal overshadowing in the

260. Beebe, supra note 21, at 1641 (only sixty-five (20%) of the 331 opinions discussed survey evidence and thirty-four (10%) credited the survey evidence.); Katie Brown, Natasha Brison & Paul Batista, An Empirical Examination of Consumer Survey Use in Trademark Litigation, 39 LOY. L.A. ENT. L. REV. 237, 244 (2019) (“Although survey evidence plays a critical role in trademark litigation, many disagree on the weight afforded by courts, or if it is actually a necessity.”).

261. Robert H. Thornburg, Trademark Surveys: Development of Computer-Based Survey Methods, 4 J. MARSHALL REV. INTELL. PROP. L. 91, 91 (2004) (explaining that traditional trademark surveys have “prices ranging in the hundreds of thousands of dollars” and “are all subject to being discredited and devalued” due to procedural flaws).

262. Brown, supra note 260, at 245 (“[T]here is a pressing need for continuous research on consumer survey use in trademark litigation in order to establish additional evidence and to better develop consensus among the methodologies used.”).

263. Bone, supra note 95, at 2131.

264. See MCCARTHY, supra note 13, § 32:196 (observing that “accurate and scientifically precise surveys” are not always introduced because they are costly, and litigants are better off not using a survey than using a survey “obtained on the cheap”).

265. Beebe, supra note 21, at 1642 (“It may be objected that trademark litigation is typically resolved at the preliminary injunction stage before either party has had the time or can be expected to conduct a creditable survey . . . . [I]t is still striking that survey evidence played a relatively minor role even in the bench trial context.”).

266. Bone, supra note 120, at 1269 n.110.
context of trademark surveys and noting that “questions themselves may change a respondent’s answers by changing the way she thinks. Being asked to give reasons distorts reasoning, especially when the question has little meaning for the respondent . . . . Once an idea has been brought to a respondent’s attention, he often thinks it relevant.”

Consider Anheuser-Busch, Inc. v. Balducci Publications, where the court found infringement based on evidence that over half of those surveyed thought the defendant should have permission from the plaintiff to advertise, even though only six percent of consumers were confused by the disputed trademark. To the court, the plaintiff’s survey expert tweaked the questions to elicit spurious evidence of confusion. This low bar foments the idea that most consumers are dummies unable to distinguish between goods and services.

Another problem is that surveys attempting to capture sponsorship or endorsement confusion rely on broad and indeterminate operative terms that exacerbate the indeterminacy of the LOC standard. The most egregious among these terms is “permission”—when survey respondents opine on whether they think the owners need to give “permission” for the challenged use, they problematically convert consumer impression of licensing culture into law. This word is misleading. Consumer beliefs may not map to policy imperatives and put the cart before the horse. Public perception about the legality of unlicensed trademark uses should be shaped by the law rather than defined by such uses.

In theory, surveys attempt to measure whether consumers believe that the plaintiff’s mark is the source of the alleged infringer’s product or whether it sponsors or approves of that product. In practice, courts routinely attack the

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268. 28 F.3d 769, 772–78 (8th Cir. 1994).
269. Id. at 775.
270. See, e.g., Processed Plastic Co. v. Warner Commc’ns, Inc., 675 F.2d 852, 854–55 (7th Cir. 1982) (“At the hearing, Warner Bros. introduced a survey of children between the ages of 6 to 12 in which 82% of the children identified a toy car identical to PPC’s Maverick Rebel as the “Dukes of Hazzard” car and of that number 56% of them believed it was sponsored or authorized by the “Dukes of Hazzard” television program.”).
271. Gibson, supra note 124, at 911 (“Courts’ reliance on such surveys to define the reach of the trademark entitlement thus amounts to a tautological endorsement of whatever consumers believe the law is, or should be, regardless of whether their beliefs make any sense from a policy standpoint.”).
272. Gibson, supra note 124, at 911 (“If that perception is formed at least in part by exposure to licensing practices, then the law conflates premise and conclusion and invites doctrinal feedback.”).
273. 3 ANNE GILSON LALONDE, GILSON ON TRADEMARKS § 8.03 (2021).
representativeness of the survey from a parade of cherry-picked witnesses and extrapolate a standard of what consumers generally believe.\textsuperscript{274} Judicial unease with surveys sometimes bubbles to the surface, with Judge Posner remarking once that "no doubt there are other tricks of the survey researcher's black arts that we have missed."\textsuperscript{275}

There is a certain circular irony to the whole exercise. Courts rely on surveys only to support conclusions that they reach using other factors. The analysis also works backward—faced with survey evidence showing a likelihood of confusion, judges may regard the marks as more similar than they might have appeared in the absence of the survey.\textsuperscript{276} As Peter Weiss remarked, "one might sum it all up by saying that the function of surveys in trademark litigation is to plumb the minds of the public in order to make up the minds of the judges."\textsuperscript{277} Dispensing of surveys and relying on the court's judgment would not just be cheaper and simpler, it would also be the intellectually honest thing to do.

2. Trademark Strength is Not the Answer

A related issue is trademark strength. Surveys sometimes overlap with trademark strength since parties may use the former to measure the potency of a mark's goodwill and its worthiness of protection.\textsuperscript{278} Known as the *Abercrombie* spectrum, generic and descriptive marks are not distinctive, suggestive marks are marginally distinctive, and arbitrary or fanciful are inherently distinctive.\textsuperscript{279} Trademark strength is usually the first factor courts consider.\textsuperscript{280}

\textsuperscript{274} Id.

\textsuperscript{275} Indianapolis Colts, Inc. v. Metro. Balt. Football Club Ltd. P'ship, 34 F.3d at 416.

\textsuperscript{276} Diamond & Franklyn, *supra* note 255, at 2043.

\textsuperscript{277} Peter Weiss, *The Use of Survey Evidence in Trademark Litigation: Science, Art or Confidence Game?*, 80 TRADEMARK REP. 71, 86 (1990).

\textsuperscript{278} Beebe, *supra* note 21, at 1646 ("In trademark law, the question is always of consumer perception in the marketplace rather than judicial perception in the courtroom.").

\textsuperscript{279} See *Abercrombie & Fitch Co. v. Hunting World, Inc.*, 537 F.2d 4, 9 (2d Cir. 1976) (Identifying "four different categories of terms with respect to trademark protection. Arrayed in an ascending order which roughly reflects their eligibility to trademark status and the degree of protection accorded, these classes are (1) generic, (2) descriptive, (3) suggestive, and (4) arbitrary or fanciful.").

\textsuperscript{280} See, e.g., Welding Servs., Inc. v. Forman, 509 F.3d 1351, 1361 (11th Cir. 2007) ("The stronger or more distinctive a trademark or service mark, the greater the likelihood of confusion."). Beebe & Hemphill, *supra* note 99, at 1349 ("Strength is the first factor in the Second, Fourth, Fifth, Sixth, Eighth, Ninth, and Eleventh Circuits, the second factor in the Third Circuit, and the last factor in the First and Tenth Circuits."). Courts consider design marks under the *Seabrook* factors. See *Seabrook Foods, Inc. v. Bar-Well Foods, Ltd.*, 568 F. 2d.
Strong trademarks are distinctive. Determining what the owner owns requires more than just looking at the mark; it requires assessing what protection the trademark owner should be entitled to for that mark. Distinctive marks are memorable to consumers as to source indicators and possess greater conceptual strength. Courts equate distinctiveness with a greater breadth of protection, are more willing to find confusing similarities, and that the strongest marks merit the widest range of protection.

One court acknowledged distinctiveness “is far from an exact science and that the differences between the classes, which is not always readily apparent, makes placing a mark in its proper context and attaching to it one of the labels a tricky business at best.” Empirical studies confirm courts judge mark strength intuitively and erroneously. For instance, Beebe reported how courts failed to categorize the plaintiff’s mark in a specific category of distinctiveness in half of the cases he studied. He observed that “considerations such as the comparative quality of the parties’ goods or the inherent distinctiveness of the plaintiff’s mark rarely aid in this inquiry.”

As a LOC factor, it is flawed. Scholars warn against assuming that judges can accurately gauge public perception. Lisa Ouellette observed that “[t]he

1342, 1344 (C.C.P.A. 1977) (“In determining whether a design is arbitrary or distinctive this court has looked to whether it was a ‘common’ basic shape or design, whether it was unique or unusual in a particular field, whether it was a mere refinement of a commonly-adopted and well-known form of ornamentation for a particular class of goods viewed by the public as a dress or ornamentation for the goods, or whether it was capable of creating a commercial impression distinct from the accompanying words.”).


282. See id.

283. See, e.g., First Sav. Bank, F.S.B. v. First Bank Sys., Inc., 101 F.3d 645, 655 (10th Cir. 1996) (“When the primary term is weakly protected to begin with, minor alterations may effectively negate any confusing similarity between the two marks.”).

284. See, e.g., Ford Motor Co. v. Money Makers Auto. Surplus, Inc., No. 8:03CV493, 2005 WL 2464715, at *1, *3 (D. Neb. Sept. 14, 2005) (finding that the various Ford Motor Company marks at issue “are among the most famous marks in the world” and are “therefore entitled to the widest scope of protection”).


286. See, e.g., Beebe, supra note 21, at 1633 (“The data suggest that, at least in the context of the multifactor test, the doctrine of trademark strength has broken down. Basic concepts are no longer consistently applied and mistakes of doctrine are common.”).

287. Beebe, supra note 21, at 1633–35 (stating that some use of the spectrum was made in only 193 out of 331 cases and that the mark was placed in a specific category in only 164 cases).

288. Beebe, supra note 21, at 1645.

289. Lisa Larrimote Ouellette, The Google Shortcut to Trademark Law, 102 CALIF. L. REV. 351, 362 (2014) (“there is little reason to expect that individual judges are particularly good at gauging public perception of a mark, especially given the significant demographic differences between the average judge and the relevant population of consumers in most cases.”).
complex doctrine that has evolved around trademark strength and the likelihood of confusion appears to be a (largely unsuccessful) attempt to provide some analytical rigor to the essential questions of how strongly a mark identifies goods or services and how well it distinguishes those products from others in the marketplace.”

Others have variously criticized trademark strength as “needlessly open-ended.”

Mark strength does not correlate positively with whether marks deserve stronger protection. Stronger marks suffer from more free-riding only to a certain extent, which may not affect investment. For instance, free-riders using SUPER BOWL does not dampen the NFL’s investment in promoting and producing the event. Moreover, while it is true that more free-riding lowers the threshold of confusion, that does not mean more free-riding leads to more consumer confusion. As with survey evidence, McCarthy notes, that:

[A] cynic would say that . . . when the court wants to find no infringement, it says that the average buyer is cautious and careful . . . but if the judge thinks there is infringement, the judge sets the standard lower and says the average buyer is gullible and not so discerning.

There is no requirement for LOC to consider either survey evidence or mark strength. Eliminating both would both simplify LOC and make it less prone to error.

3. Consumer Sophistication is not the Answer

Determining consumer sophistication provides the court with context of the consumer information available and the ability of consumers to discern between the marks. Vaunted as a decisive factor, the Fourth Circuit declared that it “virtually eliminating the likelihood of consumer confusion in the case of a professional or highly sophisticated buyer.” Courts consider the “consumer’s degree of care” in determining whether they would likely be confused. Sophisticated consumers resist impulse purchases but rather do

290. Id. at 360.
293. Andrew Martineau, Imagined Consumers: How Judicial Assumptions About the American Consumer Impact Trademark Rights, for Better and for Worse, 22 DEPAUL J. ART, TECH. & INTELL. PROP. L. 337, 352 (2012) (“This would seem to be a crucial part of the test, given that the standard for infringement is whether consumers are likely to be confused.”).
294. Lee et al., supra note 86, at 581.
295. E.g., Sally Beauty Co. v. Beautyco, Inc., 304 F.3d 964, 975 (10th Cir. 2002).
so after what the First Circuit called “a careful consideration of the reliability and dependability of the manufacturer and seller of the product.”296 For this reason, all LOC tests consider whether consumers within the relevant market are sophisticated and careful.297

In their search and purchase decisions, courts seek to determine consumers’ care, using a reasonably prudent purchaser as to the baseline and adjusting for situations where consumers are less likely to be confused.298 For example, factors that may affect consumer care in transactions include whether the consumers have expertise in the field, the cost and complexity of the purchase, the length of the transaction timeline, the frequency of the purchase, as well as the education, age, gender, and income of the consumer.299

Scholars criticized the artificiality of consumer sophistication, likening it to expecting judges to perform a “Vulcan mind meld” with consumers in the marketplace.300 Consumer sophistication begs the question of how a judge would distinguish between those who are sophisticated and those who are unthinking and credulous. Courts may easily project their normative view of how carefully a consumer should be or its view of a defendant’s conduct.301 Like intent, surveys, and mark strength, consumer sophistication suffers from inherent capriciousness.

Three is plenty, but there is one final culprit. The sheer multitude of factors courts must consider also makes LOC difficult to deploy, bogging down courts to apply factors selectively. To cope, they rely on coherence-based reasoning to make sense of their findings.

D. ADDRESSING COHERENCE-BASED REASONING

This Section explains how decision-makers may consider a finite amount of information to reach a good enough approximation of “correct” outcomes. Their focus gravitates toward the most familiar or concrete factors while marginalizing less-familiar factors or those more difficult to ascertain. As a result, courts may weigh LOC factors impressionistically.

299. See AMF Inc. v. Sleekcraft Boats, 599 F.2d 341, 353 (9th Cir. 1979).
301. August Storck K.G. v. Nabisco, Inc., 59 F.3d 616, 618 (7th Cir. 1995) (“Many consumers are ignorant or inattentive, so some are bound to misunderstand no matter how careful a producer is.”).
Over the past century, trademark law ossified determining the LOC standard from a pragmatic judge-made rule of thumb into a rigid and formalistic standard.\textsuperscript{302} The Restatement (First) merely mentioned “the following factors are important,”\textsuperscript{303} and the early cases applied the factors loosely.\textsuperscript{304} However, appeals courts slapped lower courts for failing to address each factor, with orders to reverse and remand.\textsuperscript{305} We can deduce that this formalism ended up burdening courts with an unwieldy craft, forcing judges to pay lip service to all the factors while systemically relying on only a few.\textsuperscript{306} At the same time, their opinions recite disclaimers that the LOC factors are only a guide and that no single factor is dispositive.\textsuperscript{307}

Given their marching orders, one might expect judges to weigh LOC factors equally.\textsuperscript{308} However, this is not what happens in practice.\textsuperscript{309} When confronting complex decision processes, judges tend to limit the factors that they consider.\textsuperscript{310} At some point, judges stop acquiring or analyzing new information. Instead, they simply commit to a decision and work backward to justify it. Some judges opt for a holistic weighing of the factors rather than attempting piecemeal arithmetic.\textsuperscript{311} Others emphasize case-by-case determination, and in so doing, underscore flexibility in applying a multitude of factors.\textsuperscript{312}

\textsuperscript{302} Beebe, \textit{supra} note 21, at 1592 (“[T]he multifactor analysis has since become an essentially compulsory and formal exercise.”).

\textsuperscript{303} Restatement (First) of Torts §§ 729, 731 (1938).

\textsuperscript{304} \textit{See}, e.g., Helene Curtis Indus., Inc. v. Church & Dwight Co., Inc., 560 F.2d 1325, 1330 (7th Cir. 1977) (“In determining ‘likelihood of confusion’ several factors are important.”).


\textsuperscript{306} Beebe, \textit{supra} note 21, at 1582 (“Judges tend to ‘stampede’ these remaining factors to conform to the test outcome.”).

\textsuperscript{307} \textit{See}, e.g., Playtex Prods., Inc. v. Georgia-Pacific Corp., 390 F.3d 158, 162 (2d Cir. 2004) (finding no “single factor as dispositive”); Eli Lilly & Co. v. Natural Answers, Inc., 233 F.3d 456, 462 (7th Cir. 2000) (stating that the “factors are not a mechanical checklist”).

\textsuperscript{308} \textit{See} Zubulake v. UBS Warburg LLC, 217 F.R.D. 309, 322 (S.D.N.Y. 2003) (noting the tendency towards this type of application).

\textsuperscript{309} Anthony E. Chavez, \textit{Using Legal Principles to Guide Geoengineering Deployment}, 24 N.Y.U. ENVTL. L.J. 59, 93 (2016) (“Decision makers, however, often do not apply multi-factor—or multi-principle—tests as they are intended.”).

\textsuperscript{310} Beebe, \textit{supra} note 21, at 1601.

\textsuperscript{311} Noble v. United States, 231 F.3d 352, 359 (7th Cir. 2000) (“[R]ather, courts must engage in a totality of circumstances approach.”).

Studies show that neither judges nor experts manage the exercise of integrating multifactor test (MFT) factors well. Coherence-based reasoning causes consistent and predictable mistakes regardless of the identity, background, or motives of the judges or other extrinsic values beyond the essential cognitive machinery that every human being brings to complex decisions.

It may occur early in the decision-making process, and a single attribute can trigger coherence-based reasoning. As a result, courts weigh those factors impressionistically. Beebe’s study confirms judges in LOC cases employ “‘fast and frugal’ heuristics to short-circuit the multifactor analysis.” According to Beebe, doing so “is evidence . . . of human ingenuity rather than human fallibility,” because “as consummate pragmatists, they ‘take the best,’ a strategy which empirical work suggests is an altogether successful—and rational—approach to decision-making.”

Coherence-based reasoning leads judges to determine outcomes based on a few factors and then read other factors into the question to support that finding of infringement. It operates bidirectionally to fit together how a judge decides the factors should go together, both preceding the decision and that which forms the basis for it. In the context of this Article, judges assessing evidence in LOC tests will look at them non-independently relative to the final decision. The resulting decision is biased, because as Dan Simon explains, “the hard case morphs into an easy one.” The takeaway is that an overload of factors demands too much from judges and forces them to stampede over

315. See Simon, Krawczyk & Holyoak, *supra* note 320, at 331 (suggesting that a single variable can initiate spreading coherence).
316. *Id.* at 1635. Tierney, *supra* note 107, at 235–36 (“[M]uch of the time spent going through the list of factors in any given case is in reality just an attempt to justify a predetermined conclusion about the likelihood of confusion.”).
320. See, e.g., Dan Simon, Chadwick J. Snow & Stephen J. Read, *The Redux of Cognitive Consistency Theories: Evidence Judgments by Constraint Satisfaction*, 86 J. PERSONALITY & SOC. PSYCHOL. 814, 830 (2004) (“Not only does the evaluation of the evidence influence the eventual verdict, but the developing verdict also seems to affect the evaluation of the evidence.”).
321. Simon, *supra* note 43, at 517 (describing studies where coherence-based reasoning caused subjects who found for the defendant and those who found for the plaintiff to be more confident the evidence supported their view after they had issued their verdict).
those they deem less significant. In the absence of direct evidence of confusion, courts must ascertain it through a host of proxy factors.322 The implications are as startling as they are important. Despite the urging by appeals courts, judges do not approach LOC robotically and discretely, summing them up on a mental ledger instead of using interrelated analyses. Instead, as a strategy for navigating complexity, LOC tests become mere smokescreens for judges to create an appearance of coherence resting on a small number of probative factors. Judges aim to employ simplified decision-making to reach satisfactory rather than optimal decisions.323 By recognizing that judges cherry-pick, we can make decisions simpler and limit factors while also driving out the error of discretion. This minimizes burdens on judges unwilling or unable to conduct deep investigations into every factor prescribed by the LOC standard in that circuit. After analyzing the applicable factors, courts could resolve cases by weighing the factors pointing in each direction.324 The key to simplifying confusion then is to concentrate on a few factors and help judges use them well.

The circuit courts currently use an average of 7.5 LOC factors, but far fewer are necessary.325 For a start, eliminate the LOC factors that cluster and overlap. The Restatement of Unfair Competition groups LOC factors into “actual confusion,” “market factors,” and “intent.”326 Beebe recommended three or four “core factors” informing “consumer perception in the marketplace rather than judicial perception in the courtroom.”327 Alejandro Mejías went further, stating that:

“[P]rincipally concentrating the analysis on the main two factors, similarity of marks and proximity of goods, adding any other relevant factors, instead of using unmanageable and misleading large lists of factors that are extremely difficult to balance, seems to be more in line with the thesis of scientific research on decision-making.”328

324. See Beebe, supra note 21, at 1601 (explaining how courts ordinarily weigh each factor in a balancing test).
325. See Beebe, supra note 21, at 1603.
326. RESTATEMENT (THIRD) OF UNFAIR COMPETITION §§ 20–23 (1995) (market factors consist of: (1) the degree of similarity between the marks, (2) the degree of similarity in the marketing methods and channels of distribution, (3) the degree of care of prospective purchasers, (4) the degree of the senior mark’s distinctiveness, (5) the likelihood of bridging the gap, and (6) the geographic differences between the marks.).
327. Beebe, supra note 21, at 1646.
328. Mejías, supra note 103, at 348 (concentrating the analysis on the main two factors).
Intent and mark strength are overly malleable and distract from the base inquiry on consumer confusion. Other factors may be redundant. For instance, the similarity of products and services are market and geographic proximity proxies\textsuperscript{329} and mark strength nests within actual confusion.\textsuperscript{330} It might be argued that since courts disregard most extraneous factors, there is little harm in retaining them. However, scholars warn that even “rarely-dispositive factors pose the risk that they may lead courts astray.”\textsuperscript{331}

Beebe also recommended assigning weights to these factors. “To emphasize that the multifactor inquiry is an empirical—rather than formal—inquiry that seeks to determine the likely perception of consumers in the marketplace.”\textsuperscript{332} By looking at only a few factors, courts can give their attention to the most pivotal considerations. Giving courts more bandwidth enables them to focus on what kinds of trademark uses they favor. They could identify positive externalities or socially valuable uses they want to reward despite potential harm to consumers or trademark owners.

Copyright law’s fair use defense uses a similar approach. The Copyright Act enumerates four factors and includes an open-ended preamble listing specific types of uses deemed fair.\textsuperscript{333} To complete the analysis, courts first determine whether the use qualifies as fair and may add to the list of presumptively fair uses as long as the new uses are referential.\textsuperscript{334} Next, courts use four questions, including how the alleged infringer used the copyrighted content, to determine if the use was fair or not.\textsuperscript{335} Again, doing so balances copyright owners’ interests against those of society in deciding how expressive works should be used within the framework.\textsuperscript{336}


\textsuperscript{330} Dayoung Chung, Law, Brands, and Innovation: How Trademark Law Helps to Create Fashion Innovation, 17 J. MARSHALL REV. INTELL. PROP. L. 492, 568 (2018) (“Naturally, if plaintiff has evidence of actual confusion, the strength of the actual confusion evidence will weigh in favor of the plaintiff to find a likelihood of confusion.”).

\textsuperscript{331} Liu, supra note 104, at 579.

\textsuperscript{332} Beebe, supra note 21, at 1647; see also id. at 1646 (“[T]he order in which the factors are listed should reflect as much as possible the weight that should be given to them.”).

\textsuperscript{333} The four factors that judges consider are: (1) the purpose and character of the use; (2) the nature of the copyrighted work; (3) the amount and substantiality of the portion taken; and (4) the effect of the use upon the potential market. 17 U.S.C. § 107.

\textsuperscript{334} See Lloyd L. Weinreb, Fair Use, 67 FORDHAM L. REV. 1291, 1298–99 (1998) (questioning whether stated uses are presumptively fair).

\textsuperscript{335} Id. (interpretation depends on reading factors as either an exclusive list or guiding tools with factor analysis).

\textsuperscript{336} See Sony Corp. of Am. v. Universal City Studios, Inc., 464 U.S. 417, 448 n.31 (1984) (“[S]ection 107 offers some guidance . . . However, the endless variety of situations . . . precludes the formulation of exact rules . . . The bill endorses the . . . general scope of . . . fair
Should we then conclude that efficiency equates to relevance? The danger here, as Beebe warned, is that decision-makers may “sacrifice,” or “consider a finite amount of information, maybe as few as two or three factors, to reach a good enough approximation of ‘correct’ outcomes.” Moreover, the factors to focus on first will depend on a judge’s view of its salience. That focus will gravitate toward the most familiar or concrete factors, which will, in turn, have an outsized influence on the outcome. Simultaneously, courts marginalize less familiar factors or those more difficult to ascertain. The next Section explains the basis for this Article’s rules of thumb to simplify the LOC tests.

V. RULES OF THUMB

Mark similarity, the similarity of goods and services, and evidence of actual confusion anchor the LOC analysis as the most relevant factors. Safe harbors protect core policies most in danger of being invaded by trademark expansionism while making it simpler and cheaper for businesses to do their due diligence and comply with the law. The Troika of LOC factors—actual confusion, similarity, and proximity of services or products—and the twin safe harbors can leverage existing AI deep learning techniques, assigning weights to each factor and considering this weighted range of possibilities. AI can also help mitigate coherence-based reasoning by getting judges to consider the weaknesses in their positions and the merits of opposing views.

A. TRADEMARK’S TROIKA

A small set of key factors helps structure the LOC inquiry and gives notice of pertinent issues and relevant evidence and a more solid basis for predicting case outcomes. Courts should adopt this new formulation of the trademark factors. As Grynberg noted, “[e]ven if judges do no more than apply heuristics of questionable quality to the disposition of trademark claims, channeling the process through a consistent framework aids litigants in identifying and

338. Adrian Vermeule, Three Strategies of Interpretation, 42 SAN DIEGO L. REV. 607, 628 (2005) (“[A] heuristic that causes decisionmakers to overweight the importance of vivid, concrete foreground information and to underweight the importance of abstract, aggregated background information.”).
339. See Schauer, supra note 105, at 894–96 (discussing the distorting effect of salience on common law rulemaking).
340. See infra Section IV.A.
341. See infra Section IV.B.
342. See infra Section IV.C.
343. See infra Section IV.C.
accommodating the factors that guide factfinding.” 344 The question then is, how many factors should we retain? Courts should retain three of the seven Polaroid factors because historically these are the ones judges find most probative. 345

The first factor is actual confusion. Actual confusion is the most direct and decisive evidence of confusion. 346 As a policy lever, it gives courts the ability to anchor their analysis in real-world characteristics. In addition, the evidence is pre-existing, does not depend on the vagrancies of survey design, and should make it easier for courts to dispose of cases pretrial. 347

The second factor is mark similarity. Beebe found it was “by far the most influential” factor. 348 Eighty-three percent of plaintiffs in injunction cases who won the similarity factor won the test, with ninety percent in plaintiff summary judgment motions. 349 In applying it, courts judge similarity between marks holistically and in isolation based on consumers encountering them in the marketplace. 350

Coherence-based reasoning is at play with the similarity factor, but with a twist, and in a good way. Courts use sights, sounds, and meaning to make snap judgments about mark similarity. 351 These heuristics allow judges to rely on “a

345. Beebe, supra note 21, at 1601 n.88 (“Like any human decision makers, district judges attempt to decide both efficiently and accurately. In pursuit of efficiency, they consider only a few factors. In pursuit of accuracy, they consider the most decisive factors.”).
347. I am grateful to Jon Lee for this insight.
348. Beebe, supra note 21, at 1600.
349. Beebe, supra note 21, at 1625.
350. The similarity between the marks makes it more likely consumers will become confused as to the source. Extremely similar marks or goods may suggest counterfeiting and free riding. Parodies, comparative advertising, and nominative use make consumers less likely to be confused, even if the third party uses the identical term. Defendants can easily compare visual or aural elements in context, making this a useful factor to encourage due diligence See McCARTHY, supra note 13, § 23:21(discussing the “sound, sight, and meaning” test for mark similarity).
small set of cheap and reliable factors that are close enough to the ideal.”  
Adam Samaha approves of this approach, since “[p]rioritizing the judge’s impressions about the similarity of marks, therefore, tends toward the high values of trademark law at bargain-basement prices.”

The third factor is the proximity of services or products. It tells courts how likely consumers are to assume an association between the marks used on related products. Confusion is more likely when an accused product contains multiple indicia of similarity. For instance, house bands typically include house marks, product-specific brands, product packaging, and color or configuration. Conversely, consumers are less likely to be confused when defendants copy only a few elements. Beebe noted that the lack of proximity of the parties’ goods was “decisive” to the outcome.

Courts look to the trademarked product, the relevant market, as well as potential consumers. Product proximity overlaps substantially with marketing and advertising channels and should be subsumed within those channels. For this reason, proximity can serve as an omnibus factor for other factors such as the relative quality of goods sold, bridging the gap between the relevant public’s perspective (rather than from the legitimate aspirations of the trademark owner), and similarity of distribution channels.

consumer confusion can require a snap judgment, which often is how consumers actually formulate impressions and make purchasing decisions.”)

352. Id. at 614.
353. Id.
355. See, Lemley & McKenna, supra note 86, at 433 (“For example, producers often distinguish their goods with a house mark, a product-specific brand, a logo, a slogan, product packaging, and perhaps product color or configuration all at once.”).
356. George Miaoulis & Nancy D’Amato, Consumer Confusion and Trademark Infringement, 42 J. MKTG. 48, 54 (1978) (finding, in the context of competing goods, that the primary cue for association between two brands was not the name but the visual appearance).
357. Beebe, supra note 21, at 1600.
Table 2: Revised LOC Factors

<table>
<thead>
<tr>
<th>Polaroid Factors</th>
<th>Troika Factors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strength of the plaintiff’s mark</td>
<td>Discard</td>
</tr>
<tr>
<td>Similarity of plaintiff’s and defendant’s marks</td>
<td>Retain</td>
</tr>
<tr>
<td>Competitive proximity of products or services</td>
<td>Retain</td>
</tr>
<tr>
<td>Likelihood plaintiffs will “bridge the gap” and offer a product like a defendants’</td>
<td>Discard</td>
</tr>
<tr>
<td>Actual confusion</td>
<td>Retain</td>
</tr>
<tr>
<td>Defendant’s good faith</td>
<td>Discard</td>
</tr>
<tr>
<td>Quality of defendant’s product</td>
<td>Discard because covered by competitive proximity of products or services.</td>
</tr>
<tr>
<td>Buyer sophistication</td>
<td>Discard because covered by actual confusion.</td>
</tr>
</tbody>
</table>

The Troika moves trademark doctrine a step in the right direction by limiting ad-hoc fact-finding. However, this is not enough. We also need to identify safe harbors. It is difficult even for savvy parties to predict the outcome in advance and resolve disputes early in any court proceeding, placing swathes of activity at significant risk.359

B. SAFE HARBORS

Safe harbors protect the uses of the marks for commentary, parody, or comparison. The First Circuit noted that trademarks “form an important part of the public dialog on economic and social issues.”360 As trademarks expand beyond source identification, they seed public discourse with their...
communicative value.\textsuperscript{361} Trademark owners obtain rights with inchoate boundaries. When the public interacts with a trademark, the mark may become imbued with collective meaning. This collective meaning has social value. If a trademark has taken on this collective meaning, then in appropriate instances, the law should offer the owner of such a trademark categorical protection from lawsuits.\textsuperscript{362}

Communication relies on a plethora of legally protected words, graphics, sounds, and smells.\textsuperscript{363} Beyond computers or smartphones, APPLE may represent a nonconformist hip lifestyle compared with users of LENOVO’s more staid business offerings. Trademarks become tools of communication and expression, and the public helps shape their boundaries as they become symbols that embody culture itself.\textsuperscript{364} When trademark law becomes entangled with free speech, what qualifies as speech and protected speech becomes folded into the LOC standard inquiry.

LOC is relevant to determining whether the use is objectively fair and whether defendants use the term “otherwise than as a mark.”\textsuperscript{365} Likewise, nominative fair use (referring to the trademark holder or its products) folds confusion into determining whether an expressive use “explicitly misleads” consumers or whether the use falsely suggests source or sponsorship.\textsuperscript{366}

The law adopts a balancing test, known as the Rogers test for expressive uses.\textsuperscript{367} The Rogers test balances “the public interest in avoiding consumer confusion” against “the public interest in free expression.”\textsuperscript{368} Cases applying

\textsuperscript{361} See Kozinski, supra note 73, at 973–74 (Noting how businesses inject the “effervescent qualities” of trademarks “into the stream of communication with the pressure of a firehose by means of mass media campaigns.”).

\textsuperscript{362} See, e.g., William McGeveran & Mark P. McKenna, Confusion Isn’t Everything, 89 NOTRE DAME L. REV. 253, 301–06 (2013) (proposing categorical exclusions for some favored uses).

\textsuperscript{363} Diamond & Franklyn, supra note 255, at 2031.

\textsuperscript{364} See Beebe, supra note 80, at 624 (arguing trademark law is both an economic doctrine and “a semiotic doctrine elaborating the principles of sign systems, of language”).


\textsuperscript{366} Rogers v. Grimaldi, 875 F.2d 994, 999 (2d Cir. 1989).

\textsuperscript{367} 15 U.S.C. § 1115(b)(4) (allowing the public “fair uses” “in good faith only to describe the goods or services.”); see William McGeveran, Rethinking Trademark Fair Use, 94 IOWA L. REV. 49, 100 (2008) (discussing Rogers test); see, e.g., Mattel, Inc. v Walking Mountain Prods., 353 F.3d 792, 816 (9th Cir. 2003) (noting that the defendant’s nominative fair use implicates “free expression”).

\textsuperscript{368} Rogers, 875 F.2d at 999.
the test credit minimal artistic relevance and focus on the defendant’s conduct to determine whether a use misleads consumers.369

McGeveran observed that expressive uses of trademarks were “a scenario that the originators of the test never contemplated.”370 The risk of chilling such socially beneficial uses has not been limited to small businesses or individuals. Movie studios use them to portray the real world realistically. Even large institutions like Hollywood studios adopt policies to manage the risk of litigation over unauthorized trademark use. Implant rights clearance and licensing adds significant costs to the production of artistic expression.371

While the costs of impinging free speech are high, the costs of being overly permissive in expressive use cases cause only minimal harm or are rare, or both.372 Research on brand extensions shows owners are rarely harmed by consumers’ mistaken association of unrelated products. Consumers rarely alter how they see the brand quality when they encounter negative information about products offered under the same mark.373 The negative impact stays with the related products but does not corrupt a positive view of the owner’s line of products.374 Safe harbors protect the uses of the marks for commentary, parody, or comparison.375

Expressive uses for commentary, parody, or education should fall within safe harbors.376 Critiquing products or corporate behavior requires us to use

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371. Id. at 2276 (“But many institutions have determined that the potential cost of defending a lawsuit is too high, even when discounted for the low likelihood of getting sued and the very low likelihood of paying damages.”).

372. Id. at 2286.

373. Id.

374. Id. at 430 (“Consumers, in other words, are smart enough to distinguish different products and hold different impressions of them.”).


This Article proposes establishing two safe harbors for potential likelihood of confusion issues. The first safe harbor should be expressive uses of protected trademarks. Expressive uses for commentary, parody, or education should fall within safe harbors. Critiquing products or corporate behavior also requires us to use trademarks. The second should be referential uses of trademarks. Nominative fair use by the trademark holder or its products should not trigger liability. Rivals and repair services need to make referential uses to compete and advertise their services to the public. The law recognizing comparative uses as a defense to referential use should still apply but it should go no further. Rivals and repair services need to make referential uses to compete and advertise their services to the public. The law currently recognizes comparative uses as a defense but should go further.

Using a single static meaning as defined by the trademark owner sacrifices the ability of consumers to evaluate rival goods and services. The risk is that plaintiffs can shut down consumer groups challenging its corporate practices and stave off rivals advertising alternative products that consumers may prefer. Even when a term has a descriptive meaning, it can be difficult to determine because meanings depend on perspective and context. Individuals may use a term that is part of a trademark to describe something completely different and separate. For rulemaking, there is no basis for a presumption of harm involving noncompeting goods even if there is confusion. Trademarks are vital for the public to share product reviews, views on a company’s labor practices, and other qualities of a business. Requiring the user to refer to the mark owner obliquely would be inefficient.

Safe harbors offer advantages over attempts to prescribe clear rules. These include improving predictability and ease of determination, allowing courts to resolve issues sooner in the litigation process. Here, Gideon Parchomovsky

377. See New Kids on the Block, 971 F.2d at 307 (“Much useful social and commercial discourse would be all but impossible if speakers were under threat of an infringement lawsuit every time they made reference to a person, company or product by using its trademark.”).
378. See, e.g., Toyota Motor Sales, U.S.A., Inc. v. Tabari, 610 F.3d 1171, 1180–82 (9th Cir. 2010) (allowing automobile broker specializing in facilitating Lexus purchases to use LEXUS mark as part of domain name).
379. See, e.g., Smith v. Chanel, Inc., 402 F.2d 562, 563 (9th Cir. 1968) (holding that truthful comparative advertising is not trademark infringement).
and Alex Stein make a more general point that “[r]eplacing these criteria with rules that will lay down irrebuttable presumptions of consumer confusion, or lack thereof, could make litigation over trademarks cheaper than it presently is.”

Safe harbors already exist within trademark law, even if not specifically within the LOC tests. For instance, the law does not protect functional product designs to avoid giving plaintiffs an advantage against rivals unrelated to the plaintiff’s reputation. Similarly, the law keeps plaintiffs on a leash so they cannot monopolize trademarks with descriptive words and receive protection for generic terms.

Safe harbors for expressive and descriptive uses allow courts to dispose of LOC cases more simply and justly. For example, uses that fit the conventional way descriptive terms are used in ordinary language would give prospective users an advantage in establishing descriptive use and exiting litigation early, thereby avoiding high litigation costs. In addition, they help carve out pockets of strong protection and guide the development of trademark rights in other areas such as merchandising rights, without giving owners the right to rely upon LOC to justify its approval. At its heart, the LOC represents a probability that a defendant’s use of its trademarks will confuse consumers. Trademark’s Troika of actual confusion, mark similarity, and similarity of goods and services paves the road for AI to fill the final piece of the equation to simplify LOC.

C. POWERED BY ARTIFICIAL INTELLIGENCE: HOW TO CATALYZE TRADEMARK REFORM PROPERLY

This Section sketches a roadmap to implementing AI to catalyze trademark reform. AI describes an algorithm capable of mimicking mental functions that we associate with the human mind, including learning and problem-solving. First, this Section discusses why and how AI is helpful to trademark disputes. Second, this Section makes three suggestions for how to use AI to ensure this Article’s proposal for trademark reform is effective: predictive analysis, robot

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384. See Welkowitz, supra note 122, at 168 (referencing Fed. R. Evid. 301).
386. See Abercrombie & Fitch Co. v. Hunting World, Inc., 537 F.2d 4, 9 (2d Cir. 1976) (“[e]ven proof of secondary meaning, by virtue of which some ‘merely descriptive’ marks may be registered, cannot transform a generic term into a subject for trademark.”).
387. Leah Chan Grinvald, *Shaming Trademark Bullies*, 2011 WIS. L. REV. 625, 636 (2011) (“This liability standard refers to the probability (not the actuality or possibility) that consumers will be confused by the same or similar trademarks.”).
judges, and a weighing of factors. Third, this Section suggests a method for weighing the LOC factors systematically.

As seen with LOC, where the criteria are vague and multiple values are at play, different judges can apply LOC differently, making it a quintessential example of a “noisy” standard. Moreover, basing outcomes on a likelihood means they may not reflect true assessments of whether consumers would indeed have been confused. To reduce bias and noise, Kahneman, Sibony, and Sunstein recommend considering using algorithms in decision-making.\footnote{See \textit{KAHNEMAN ET AL.}, \textit{supra} note 3, at 135.} They point out that algorithms are “noise-free,” explaining that they produce the same results every time if the dataset remains the same.\footnote{See \textit{KAHNEMAN ET AL.}, \textit{supra} note 3, at 135.} Furthermore, research in multiple studies, including radiology, recruitment and financial advisory work, validates that AI-assisted analyses lead to better outcomes than human judgment alone.\footnote{\textit{KAHNEMAN ET AL.}, \textit{supra} note 3, at 28-29, 132, 280.}

In 2021, Westlaw unveiled its Quick Check document analysis tool. Quick Check allows users to securely upload a brief and then analyzes the brief with its proprietary AI powered by a deep learning algorithm. The algorithm analyzes text and citations to explore all avenues of research, including relevant authority overlooked by traditional research.\footnote{WESTLAW, \textit{supra} note 388.} In addition, AI identifies patterns and connections users may not detect themselves.\footnote{WESTLAW, \textit{supra} note 388.} These include citations that would otherwise receive negative KeyCite treatment, along with relevant language from that case, so users can determine whether the treatment affected a case for a relevant reason.\footnote{WESTLAW, \textit{supra} note 388.} In short, Quick Check enables judges or attorneys to determine the merits of a case efficiently.

\footnote{389. \textit{See KAHNEMAN ET AL., supra} note 3, at 135.}
\footnote{390. \textit{See KAHNEMAN ET AL., supra} note 3, at 135.}
\footnote{391. \textit{KAHNEMAN ET AL., supra} note 3, at 28-29, 132, 280.}
\footnote{392. \textit{WESTLAW, supra} note 388.}
\footnote{393. \textit{WESTLAW, supra} note 388.}
\footnote{394. \textit{WESTLAW, supra} note 388.}
Quick Check represents stunning progress from ancient times when research meant pouring over volumes of printed case reporters in libraries. It powerfully illustrates the ability of machines to learn salience and apply it to new data. With machine learning, the algorithms improve as they are exposed to more data. Breathtakingly, Quick Check also keeps sight of underlying tradeoffs, particularly those that are only evident through a comprehensive survey of case law. These include constitutional concerns, anti-competitive concerns, and trademark law encroaching on other areas of intellectual property.

AI has also penetrated trademark practice. In 2019, Singapore launched Intellectual Property Office of Singapore IPOS Go ("IPOS Go"), the world’s first mobile app for trademark filing. IPOS Go integrates AI technology to search for similar trademarks on the trademark register, allowing applicants to preempt possible objections from similar existing trademarks. Judges or judicial law clerks feeding party briefs through a system combining features

395. WESTLAW, supra note 388.
396. See Specialized Seating, Inc. v. Greenwich Indus., L.P., 616 F.3d 722, 727 (7th Cir. 2010) (“Another goal of functionality, as TrafFix stressed, is to separate the spheres of patent and trademark law, and to ensure that the term of a patent is not extended beyond the period authorized by the legislature.”).
from Quick Check and IPOS Go can quickly identify which side the prevailing law favors and why.

Judges applying a LOC standard may define the scope of trademark rights under the guise of factfinding. For instance, intent plays an outsized role in outcomes even though it has a tangential relationship to the core question of whether consumers are likely to be confused.\textsuperscript{399} Algorithmically determining confusion allows the legal system to simplify trademark adjudication and lower the incidence of judicial errors. Making LOC more rule-like, both through the doctrinal reformation of the standard and through the application of AI, makes it easier for appeals courts to scrutinize and overturn deviant lower court decisions and allows lower courts to distinguish dubious precedent based on facts.\textsuperscript{400}

The algorithm is a tool for judges and does not replace them.\textsuperscript{401} AI systems like Quick Check and IPOS Go augment stakeholders’ decision-making and still need to pick between recommended outcomes manually. Then, the courts can examine the record below, including the AI system’s recommendations on appeal. However, the system needs three more additions to catalyze trademark reform properly: predictive analytics, the robot judge, and how to weigh the factors.

1. **Predictive Analytics**

First, if the law was merely a set of rules, processing it through algorithms makes sense, just as we would use a calculator rather than do long division by hand. However, the law regulates human behavior embedded with contested values existing in a dynamic landscape. As Oliver Wendell Holmes said, “The life of the law has not been logic: it has been experience.”\textsuperscript{402} The algorithm would need to account for case law changes over time.\textsuperscript{403}

AI systems like Quick Check process legal rules in fixed systems top-down. A more sophisticated version of the system needs to run on deep learning algorithms available today to analyze vast amounts of data from the bottom

\textsuperscript{399}. See supra Part IV.B.

\textsuperscript{400}. See Frederick Schauer, Formalism, 97 YALE L.J. 509, 541–42 (1988) (noting errors are more easily detectable under rules).

\textsuperscript{401}. Id. at 574. (The expert chooses the variables and determines what to look for. The linear model integrates the information.).


up. The goal is to offer AI predictions based on experience beyond the correct answer in an individual case.

Our ability to reason in the abstract gives us systematic superiority over AI performance thus far.\(^{404}\) Machine learning models typically cannot find commonalities between the possible options when variables are uncertain.\(^{405}\) However, things are changing. Recently, the progress in deep learning algorithms allows machines to predict human behavior and better coordinate actions with ours. In 2021, after analyzing thousands of hours of movies, sports games, and shows, Carl Vondrick revealed an astonishingly accurate algorithmic prediction method,\(^{406}\) the Vondrick algorithm, that predicts hundreds of activities, from handshaking to fist-bumping.\(^{407}\)

Vondrick’s algorithm enables machines to organize variables independently,\(^{408}\) adjusting for specificity based on the level of certainty in the variables it observes.\(^{409}\) Applied to the trademark context, this algorithm could classify marks according to their international classifications, streams of commerce, and visual, aural, or other sensory dimensions. These AI capabilities can help better mimic consumer perception and behavior, giving judges a more accurate baseline for finding or exonerating liability.

What would the technical rollout look like? Structurally, law firms could use API that interfaces with the court system, like e-filing protocols already in place today. Lexis, Westlaw, or Bloomberg could help develop that system, and integrate it into their database of cases, briefs, and articles. Individual lawyers can use other devices, such as their smartphones, computers, and cars, which function as object-detection networks.\(^ {410}\) The network takes an image as input and returns a list of values representing the image’s probability of belonging to several classes. For example, if data scientists want to train a neural network to detect all forty-five trademark classes in the USPTO’s classification system, the output layer will have forty-five numerical outputs, each containing the probability of the image belonging to one of those classes.\(^ {411}\)


\(^{405}\) *Id.*

\(^{406}\) *Id.*

\(^{407}\) *Id.*

\(^{408}\) *Id.*

\(^{409}\) *Id.*


\(^{411}\) *Id.*
Figure 2: Image Recognition
If images are at issue, for instance, the AI asks a series of questions, parties can input an image, and the AI can search against case law and tell the parties whether the image infringes.

Realistically, not all trademark disputes are amenable to AI resolution. Some cases may be more complex, making it hard to resolve claims at an early stage of litigation. For example, the facts may require the fact finder to consider if the plaintiff’s mark would fence off functional features rivals need to use. These might include color coding, industry design, and storage conventions. However, the perfect is the enemy of the good. Progress, not perfection, is what we seek.

2. The Robot Judge

Second, parties need to accept algorithmic adjudication for trademark law to reform properly. Kahneman, Sibony, and Sunstein’s research show that professionals trust their intuition and doubt machines can do better, despite evidence to the contrary. People are more willing to accept human mistakes than mistakes by algorithms, even if algorithm mistakes are fewer.

Václav Havel argued:

[W]e have to abandon the arrogant belief that the world is merely a puzzle to be solved, a machine with instructions for use waiting to be discovered, a body of information to be fed into a computer in the hope that, sooner or later, it will spit out a universal solution.

Those like Havel may reject solutions like those that AI provides, believing cases are highly varied and that good judges address those variations—which might mean tolerating bias and noise or rejecting some strategies that reduce them by taking away their discretion. They must be persuaded because they are wrong.

Using AI within the justice system raises ethical concerns, including credibility, transparency, and accountability. There are also equity considerations since deep-pocketed clients with ever-closer ties to technology companies may better leverage automation. Society needs to trust it enough to adopt its recommendation to govern the rights of the parties.

This Article’s response to the objection that AI is opaque and insufficiently accountable is to ask: “Relative to what better alternative means of adjudication?” Algorithms operate in a black box, but so do judges, and the

412. See KAHNEMAN ET AL., supra note 3, 144-46.
trend of judges engaging in post hoc reasoning is well documented and discussed in Part III. AI provides a more objective anchor to tether the LOC analysis in the face of coherence-based reasoning.

Justice Breyer surmised that judges review their decisions with confidence, forgetting doubts or the possibility they might have gone the other way.414 Dan Kahan explains that judicial opinions can be “notoriously—even comically—unequivocal” and rarely “acknowledge that an issue is difficult, much less that there are strong arguments on both sides.”415 Because confirmation bias filters out new information that contradicts existing hypotheses,416 equivocal information is likely to further drive those with divergent views apart as both sides misinterpret the evidence to confirm their opposing positions.417 It is important for the losing party to feel heard. In building on the earlier case for a robot judge, AI can provide the basis for an online dispute resolution system with the judge as a second-level reviewer.

More specifically, the current trademark regime is not the paradigm of accountability either. As Grynberg observed,

[a] framework devised to channel ad hoc factual determinations into an intelligible framework becomes instead a vehicle for ad hoc lawmaking. The outcomes may or may not be substantively palatable, but they undermine accuracy (insofar as the legal inquiry takes the guise of a factual one) and the system goals of transparency and accountability.418

Likewise, courts allow nominative fair use determinations to be derailed by consumer confusion.419 Back in the trademark context, for instance, if a defendant uses the plaintiff’s mark to refer to the plaintiff, it is meaningless to compare mark similarity. Comparing trademarks based on “similarity” lowers the bar for plaintiffs to make their infringement case without fully discharging their burden. Additionally, courts are left with no guidance on when to shift the burden to the defendant to establish a defense.

415. Dan M. Kahan, Foreword: Neutral Principles, Motivated Cognition, and Some Problems for Constitutional Law, 125 HARV. L. REV. 1, 59 (2011) (noting that this phenomenon is especially odd at the Supreme Court, where “the main criterion for granting certiorari is a division of authority among lower courts”).
418. Grynberg, supra note 419, at 1320.
419. See Cairns v. Franklin Mint Co., 292 F.3d 1139, 1150–52 (9th Cir. 2002).
Kahneman, Sibony, and Sunstein also recommend designating a “decision observer” for complex decisions.420 The observer uses a checklist to spot biases in real-time.421 As applied to LOC, the AI can function as a check on whether the judge neglected anything important, gave weight to something irrelevant, expressed bias towards a conclusion, considered alternatives, or relied upon anecdotes unsupported by the factual record. The authors also recommend that judges resist leaning on intuition before assimilating and analyzing a critical amount of information—intuition has its place, but as the authors put it, that intuition must be “informed, disciplined and delayed.”422

The literature is replete with evidence that linear modeling algorithms trump intuitive clinical judgment.423 In the same way, using the trademark Troika and safe harbors as its filters, the algorithm can recognize unenumerated instances with similar characteristics.424 Leadership should come from the bench and bar. They benefit from the aura of expertise described in the Introduction and have a responsibility to the rest of society to use the best tools available to do their jobs.

3. Weighing the Troika Factors

Third, there needs to be a method to weigh the Troika factors systematically for trademark reform to be effective, whether or not the Troika factors are adopted. The LOC factors had no weights assigned, eroding the ability to apply the tests objectively or in a manner that can be replicated.425 AI can help integrate data and provide a statistical prediction based on input variables. Humans are superior at selecting and coding information but poor at integrating it.426

When forecasting, Kahneman, Sibony, and Sunstein recommend assigning probabilities rather than absolute values or binary “yes” or “no” judgments.427 With LOC, numerical thresholds would serve this purpose and relying more

420. See KAHNEMAN ET AL., supra note 3, at 222, 240-43.
421. See KAHNEMAN ET AL., supra note 3, at 222, 240-43.
422. See KAHNEMAN ET AL., supra note 3, at 373.
423. This is seen, for example, in the case of banks predicting bankruptcies. Dawes, supra note 313, at 579.
424. See generally, Parchomovsky & Stein, supra note 383, at 182.
425. See Menard, Inc. v. Commissioner, 560 F.3d 620, 622–23 (7th Cir. 2009). (“Multifactor tests with no weight assigned to any factor are bad enough from the standpoint of providing an objective basis for a judicial decision; multifactor tests when none of the factors is concrete are worse.”).
426. Dawes, supra note 313, at 573.
427. See KAHNEMAN ET AL., supra note 3, 263 (“To many people, forecasting means the latter—taking a stand one way or the other. However, given our objective ignorance of future events, it is much better to formulate probabilistic forecasts.”).
heavily on rules, such as judicial sentencing guidelines, to reduce noise. The Troika factors, coupled with twin safe harbors, provide a similar framework for LOC analysis. On appeal, the variability of decisions reveals some idea of the extent of noise to the appellate court. A three-judge circuit appeals court or nine-Justice Supreme Court bench provides an additional check for this noise.

Computer scientists could build a model that requires judges to rate the three factors on a scale of 0-10. For instance, if the marks were completely different, the judge would rate it ‘0’ (the lowest rating possible), but if the mark were simple counterfeits, the judge would rate it ‘10’ (the highest rating). Thus, the algorithm would set a numerical threshold for finding confusion that maps to case law and the balance of probabilities. Over time, the algorithm will provide more granular information about the characteristics driving outcomes in LOC cases. In this way, the algorithm would imitate judges, granting a low score to a particular factor and consequently a lower success rate to plaintiffs.

AI can expand the scope of cases so that courts can dispense cases summarily. It can also avoid the risk of judges engaging in side-by-side mark comparison to ensure they apply the real-world purchasing context. Once these fundamentals are in place, future versions of the algorithm would perfect what surveys struggle to—capturing the collective perception of the relevant consumer group.

Importantly, the results from AI recommendations challenge judges’ prior assumptions, providing a check against coherence-based reasoning. For example, Simon’s research shows that confronting people with merits of the opposite side reduced the effect of coherence shifts by about fifty percent. In particular, his study moderated jury instruction by expressly requesting jury members to “take some time to seriously consider the possibility that the opposite side has a better case.” Legal studies similarly showed that asking lawyers to consider the weaknesses in their side or reasons that the judge might rule against them mitigated bias.

To summarize, the algorithm would need to account for case law changes over time. Parties also need to accept algorithmic adjudication for trademark law to reform properly. Finally, there needs to be a way to weigh factors...
systematically for trademark reform to be effective, whether or not the Troika factors are adopted.

D. COURTS, NOT CONGRESS

It is worth pausing to address one potential objection to the idea that courts should be the ones implementing these rules of thumb. After all, Congress has a plenary perspective. Legislators may do better than courts in considering multifaceted interests. Moreover, courts are constrained by the case record and facts before them, limiting their ability to balancing broader interests. For example, brand owners purport to show consumer confusion, but consumers’ interests may be more nuanced and may even benefit from the court allowing the defendant’s conduct. Thus, Grynberg noted:

\[\text{[t]he primacy of the particular may unduly influence judicial decisions if the urgency of the facts at hand obscures the broader consequences of a requested holding. Resolving the case before the court creates binding precedent even when it is not fairly representative of future analogous situations.}^{434}\]

The biggest problem is that Congress would need to promulgate the LOC framework ex ante and make it specific enough to help courts identify conduct justifying intervention. LOC cases are too fact-specific for legislative rules to be of much use. And then there is inevitable ambiguity stemming more from the limitations of language than the draftsman’s skill which may bring things back full circle. Even if well-drafted, the legislative process’s numerous veto points create obstacles to correct the legislative error. Finally,

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433. Grynberg, supra note 119, at 1302 (“While plaintiffs are seen as vindicating the interests of confused consumers, defendants are rarely seen as performing a similar function for the non-confused, even though these consumer often have an interest in the continuation of the defendant’s conduct.”).
434. Grynberg, supra note 119, at 1301.
435. See Schauer, supra note 105, at 892 (“When there is no actual dispute, so the argument goes, everything is speculation, and speculation that is not rooted in real world events is especially likely to be misguided.”).
436. Michael Grynberg, The Judicial Role in Trademark Law, 52 B.C. L. Rev. 1283, 1306 (2011) (“Congress is unlikely to codify a uniform approach to trademark adjudication (beyond the occasional burden allocation), and it is questionable that such an effort could plausibly provide the needed flexibility to anticipate the range of cases that drive the evolution of doctrine.”).
438. Grynberg, supra note 119, at 1300.
administrative and political costs make the likelihood of legislative action rare.439

Since its earliest days, common law crafted the boundaries of trademark rights.440 Thus, despite the LOC factors’ questionable effectiveness in implementing trademark law’s substantive goals, judicial lawmaking has advanced the trademark system’s goals. Setting standards without specifying details can lead to variability, which might be controlled through the approaches this Article discussed. The difficulty of getting diverse people to agree on variability-reducing rules is one reason why standards, and not rules, are put in place. Standards might be the best that such leaders can do. Lawmakers might reach a compromise on a standard (and tolerate the resulting noise) if that is the price of enacting law at all.

Post-enactment, the costs of decisions tend to become impossibly large. The better systemic alternative is to deploy the rules of thumb in Part IV to simplify the application of the law and make it more predictable. Common law can adapt to the nuances of the facts while precedent anchors the body of jurisprudence, giving it coherence in form, if not also in substance. Moreover, deep learning algorithms can curate the relevant datapoints to respond to changing conditions. The task of advancing the trademark system’s goals will likely fall on the district and appellate courts. The Supreme Court has never addressed or endorsed a particular test for determining the LOC standard and shows no sign that it intends to do so.441

Three key factors—actual confusion, mark similarity, and the proximity of goods and services (referred to here as the Troika factors)—help structure the LOC inquiry and gives notice of pertinent issues and relevant evidence and a more solid basis for predicting case outcomes. Similarly, safe harbors for expressive and descriptive uses allow courts to dispose of LOC cases more simply and justly. Using AI to assist judges with determining the LOC of dispute trademarks, this reduces judicial error and it will likely be up to courts, not Congress, to catalyze change.

VI. RULES, STANDARDS, AND SAFE HARBORS

This final Section distills the lessons learned so far and brings the discussion full circle to consider the implications for multifactor tests as legal

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439. See Parchomovsky & Stein, supra note 383, at 171.
440. See supra Part III.
441. The closest it has come was in 1877 where it adopted the likely confusion standard, holding that infringement occurs when “ordinary purchasers” exercising “ordinary caution” are likely to be misled. McLean v. Fleming, 96 U.S. 245, 251 (1877), However, the Court did not set forth a test.
vehicles for operationalizing rules and standards more broadly. The discussion is informed by the foregoing discussion on LOC and goes beyond it to make the point that there are transferable lessons to be learned elsewhere and vice versa. Scholars fiercely debate the distinction between rules and standards, including when they apply. The rules-versus-standards dilemma manifests in society’s unsettled tussle between accommodating individualistic and communal goals.

Rules are generally simpler than standards to understand and are easier for people to plan their conduct. The simplest rules look to a single fact, such as a speed limit, to determine a legal outcome. Clarity makes plaintiffs less likely to bring vexatious suits since parties see what constitutes a weak claim. Even if plaintiffs do send these letters, small businesses and individuals receiving cease-and-desist letters from trademark owners can point to simple and clear rules rather than hedging advice in a complex memo filled with what-ifs. For this reason, criminal laws tend to be rule-based.

To better guide the open-ended analysis, courts over the decades encrusted the LOC standard with up to thirteen factors in some circuits, to make the analysis proceed in a lockstep fashion. For this reason, Beebe observed “multifactor tests appear to be the least worst alternative, if not the only alternative, to a wide open ‘totality of the circumstances’ or ‘rule of reason’


443. See Kennedy, supra note 8, at 1766–67 (discussing individualism and altruism).


446. McGeveran, supra note 371, at 2290 (“Risk-averse intermediaries should be more willing to permit an expressive use when they can rely on an unambiguous legal argument in its favor.”).

type of analysis.” Unfortunately, the increased decision-making flexibility has led to worse results rather than better ones.

The problem, as we have seen with LOC, is that standards themselves provide little guidance. Blending the law on trademarks and trade names has also created new triggers for confusion. The Supreme Court rejected a multifactor test for diversity jurisdiction in civil procedure because courts have difficulty processing the factors. Maggie Gardner warned in the context of cross-border disputes that “tests that call for weighing ten or a dozen factors should be viewed skeptically, as judges may be unwilling or even unable to assess all of them independently.” More broadly, judges have waged an all-out war against multifactor tests characterizing them as a “confession of the inability to devise tests.”

The unfamiliarity and complexity of the law increases the risk that judges will look for rubrics in the wrong places or simplify factors while searching for a clearer framework. Consider Justice Thomas criticizing multifactor tests for taking a life of their own, or Justice Stevens criticizing them for generally producing “negative answers,” or Judge Easterbrook observing that they

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448. Beebe, supra note 21, at 1649.
449. See Ronald A. Heiner, The Origin of Predictable Behavior, 73 AM. ECON. REV. 560, 563, 565 (1983) (positing that “there is greater uncertainty as either an agent’s perceptual abilities become less reliable or the environment becomes more complex” and explaining that “when genuine uncertainty [thus defined] exists, allowing greater flexibility to react to more information or administer a more complex repertoire of actions will not necessarily enhance an agent’s performance”).
454. Doggett v. United States, 505 U.S. 647, 670 (1992) (Thomas, J., dissenting) (“But Barker’s factors now appear to have taken on a life of their own. Instead of simply guiding the inquiry whether an individual who has been deprived of a liberty protected by the Clause is entitled to relief, Barker has become a source for new liberties under the Clause.”).
invited judges to “throw a heap of factors on a table and then slice and dice to taste.”

Studies about multifactor tests with real judges in real cases show judges ignore most factors when faced with a long list. Instead, faced with complex facts and tight deadlines, judges focus on the facets of the case that are most compelling to them. Gardner points to how, in a procedural context, concrete and immediate facts “like efficiency, delay, docket congestion, gamesmanship, and the short-term interests of sympathetic parties may take precedence,” especially if judges struggle with a poorly fitting framework. In such instances, courts prioritize addressing the concrete and the familiar, while de-prioritize the unfamiliar and the difficult, leaving those factors underapplied.

The problem here is that this “choose your own adventure” approach is, as the Supreme Court pointed out in the context of determining a corporation’s principal place of business, “at war with administrative simplicity.” In doing so, that approach “has failed to achieve a nationally uniform interpretation of federal law, an unfortunate consequence in a federal legal system.” In trademark law, while courts may lean on mark strength, defendants’ intent, surveys, and consumer sophistication to shape LOC’s contours, it is impossible to know in advance whether a court will find them probative. Salience causes judges to overweigh vivid, concrete foreground information at the expense of abstract, aggregated background information. Factors become a checklist that substitutes judicial analysis and ultimately produces intuitive decisions, “hiding their lack of analytic rigor beneath a veneer of rationality.”

The risk of wrongly calibrating multifactor tests is a common one. So there is the risk of bidirectional coherence-based reasoning whenever judges

456. Reinsurance Co. of Am., Inc. v. Administratia Asigurarilor de Stat, 902 F.2d 1275, 1283 (7th Cir. 1990) (Easterbrook, J., concurring).
457. See, e.g., Beebe, supra note 21, at 1601 n. 88.
458. See Guthrie et al., supra note 314, at 787–816 (summarizing survey results that suggest judges are susceptible to common cognitive shortcuts like anchoring, framing, hindsight bias, egocentric biases, and the representativeness heuristic).
459. Gardner, supra note 337, at 964.
461. Id. at 92.
must apply more than a few factors. The problem pervades jury verdicts and social science testimony in the law on evidence. Critics contend that a multifactor test “permits courts under the guise of a well-reasoned opinion and in the name of equity to strike a ‘balance’ which justifies these courts’ view of the underlying merits of a case.” For instance, Simon found coherence-based reasoning led criminal juries to assess evidence in a way that makes them more likely to find guilt beyond a reasonable doubt. Further, he argues that “over time, unsupported variables or those suppressed by other variables degrade and even die out, while those that are mutually supported gain strength.”

There is also the risk that courts will choose which factors to apply based off of precedent, i.e., whether to apply the same factors as in similar cases, despite factual differences and explicit warnings against applying the test inflexibly. Behavioral psychology suggests that judges distill the law from prior opinions, deferring to precedent because of a professional interest in avoiding conflict with their brethren or minimizing the risk of reversal on appeal. Avoiding reinventing the wheel also conserves time and effort, particularly when inconvenient precedent is binding or must be distinguished. Thus, in a case involving forum non conveniens, even though the applicable test was not meant to be a definitive “catalog” of considerations, judges and litigants have treated those factors have been treated as such ever since.

In sum, the way courts currently apply many multifactor tests makes it difficult to account for relative factor strength, deviate from underlying policy considerations, or clarify what is at stake. Additionally, these tests allow courts to incorporate different or competing policy conceptions in a single malleable analysis. As a result, different courts reach opposite or inconsistent results using similar facts. In practice, parties can generally support opposing

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468. Hall, supra note 462, at 840.
471. Liu, supra note 104, at 579 (2008) (“Under a multi-factor balancing test, it is difficult to register the relative strength of the factors.”).
positions on each factor by citing one case or another.\textsuperscript{472} Later cases then perpetuate a chain of decisions overemphasizing these malleable factors.

Any viable solution needs to move the scholarly debate beyond the rules-standards dichotomy to consider a new framework with the certainty that rules will mark out the boundaries of reasonable claims, allowing courts to dispose of clearly unreasonable ones. At the same time, safe harbors protect the core policies most in danger of invasion by trademark expansionism while making it simpler and cheaper for businesses to perform due diligence and comply with the law.\textsuperscript{473}

This Article demonstrates how the Troika of relevant LOC factors and twin safe harbors leverages existing AI deep learning techniques. For example, AI-assisted analysis assigns weights to each factor and considers this weighted range of possibilities. AI also helps mitigate coherence-based reasoning by getting judges to consider the weaknesses in their positions and the merits of the opposition.

How successive courts interpret a “reasonable” speed eventually informs drivers that anything above eighty miles per hour is dangerous, and likewise, the work of courts over time will reveal the point where a “similar” mark becomes discernable. Courts can also identify recurring undesirable behaviors and ban them outright. Then, the algorithm can use those cases as a basis for establishing a more general prohibition on activities falling into the same family or genre. In so doing, AI would create per se rules of illegality and safe harbors that standards cannot while doing so more easily than rules.\textsuperscript{474} The result is a familiar yet concise, precise, and efficient framework for preempting, counseling and adjudicating trademark disputes. The standard thus attains the amphibious benefits of becoming more rule-like while retaining its suppleness.

\textbf{VII. CONCLUSION}

Congress built a degree of indeterminacy into the LOC standard as a feature and not a bug. Over the years, however, the jurisprudential roots of trademark law has become unruly and tangled. Unwanted variability and bias in judgments cause serious problems by including complex and irrelevant factors, including financial loss and rampant unfairness. Meanwhile, simple rules and algorithms have big advantages over human judges.

\textsuperscript{472} See Grynberg, supra note 85, at 116–17.


\textsuperscript{474} Parchomovsky & Stein, supra note 383, at 171 (“No matter how hard legislatures try, they will fail to come up with fully specified rules that accurately represent every possible contingency in all future states of the world.”).
This Article uses empirical studies, case law, and the latest experimental psychology and artificial intelligence literature to shift the debate from critiquing to simplifying the likelihood of confusion standard. It explains how three core factors, combined with two safe harbors and today’s deep learning algorithms, would enable courts to reach consistent and accurate results. A simplified framework in trademark law promotes fair play, safeguards expressive uses, and enhances access to justice. This framework, in turn, points to the importance and general applicability of a strategy to reduce bias, variability and noise in judicial decision-making using simplified rules and AI-refined guidelines.

Future work can provide a contemporary empirical analysis of the various LOC factors and how they interact, whether courts “economize” by using the Troika to provide early off-ramps to litigants or “fold” factors within each other to focus on the most relevant ones. Empirical data can also show the most dominant circuit, and whether its dominance impacts the Troika. On the AI side of things, future work can chart how AI optimizes policy performance in analyzing LOC factors without being ossified in outdated, erroneous, or biased data. Conceivably, the algorithm will need to replicate how a human perceives a mark in the marketplace. Developers will also need to deal with issues of bias, accountability, and data scarcity when deploying AI in trademark disputes.

The focus on the multifactor test for the LOC standard in trademark law also provides lessons for other types of multifactor tests. Unwanted variability matters because random errors do not cancel one another out. Likewise, consistently relying on irrelevant factors like intent results in biased decisions. A familiar yet concise, precise, and efficient framework helps preempt, counsel, and adjudicate disputes. In this way, standards can attain the amphibious benefits of becoming more rule-like while retaining their suppleness. Confusion is, in a word, simplified.