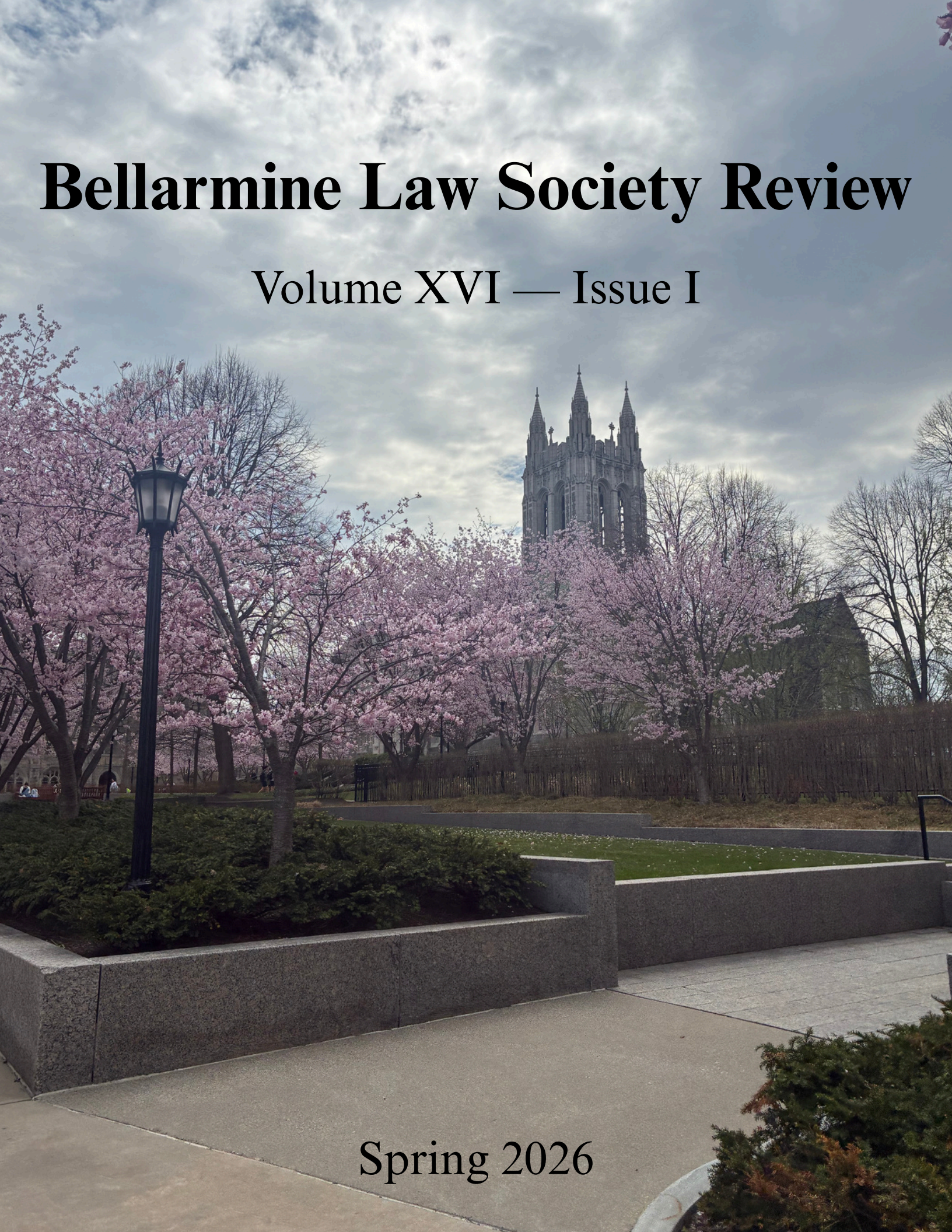
Bellarmine Law Society Review

Volume XVI — Issue I



Spring 2026

BELLARMINE LAW SOCIETY REVIEW
VOLUME XVI, ISSUE NO. I

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Cover art courtesy of Simon Hoefling

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Simon K. Hoefling
Boston College, hoeflisi@bc.edu

EDITOR'S NOTE: VOLUME XVI NO. I OF THE *BELLARMINE LAW SOCIETY REVIEW*

SIMON K. HOEFLING

I am proud to present the first issue of Volume XVI of Boston College's *Bellarmine Law Society Review*. This edition marks my final issue as Editor-in-Chief, as well as Jessica Orrell's final issue as Managing Editor, as we graduate from Boston College this May. We are both deeply grateful for our time at Boston College and for the opportunity to contribute to the *Review*— it has been a truly rewarding experience that has taught us so much about the law, legal scholarship, and the process of academic publishing. We would also like to thank our graduating Associate Editors—Sarah Patel, Lily Hillis, and Lola Milazzo—whose dedication and hard work over the years have been instrumental in shaping the publication into what it is today.

For this spring edition, we feature four papers from outstanding authors at Boston College and beyond, each engaging with pressing legal questions. First, Zade Hirsch of Boston College examines the legal and economic performance of medical malpractice damages caps, arguing that while such caps modestly reduce certain payouts, they function primarily as a redistributive mechanism and fail to address broader drivers of healthcare costs. Next, Audrey Brower of the University of Michigan offers a joint economic and legal analysis of *Cavalleri v. Hermès International* (2025), contending that the alleged tying practices reflect consumer preferences for exclusivity rather than unlawful anticompetitive conduct. Third, Zoe Wen of Georgetown University explores the fallibility of eyewitness memory, integrating psychological and neuroscientific research to demonstrate how memory can be distorted and proposing evidence-based reforms to improve the reliability of testimony. Finally, Kate Kissel of Boston College reevaluates the fair use doctrine in the context of LLMs, arguing for a more balanced application of the four factors under Section 107 to better protect authors' rights in an evolving technological landscape.

Taken together, these contributions reflect the *Review*'s commitment to interdisciplinary legal scholarship, drawing on insights from economics, neuroscience, and beyond. This issue also highlights our continued effort to broaden the *Review*'s reach, featuring work from authors outside the Boston College community while maintaining a strong foundation within it. The volume of high-quality submissions this cycle was remarkable, and the pieces selected here exemplify the rigor, thoughtfulness, and contemporary relevance we strive to uphold.

Finally, we are pleased to announce that Syesha Swani will serve as the next Editor-in-Chief, with Genevieve Morrison as Managing Editor. We are confident that under their leadership, the *Review* will continue to grow in both scope and impact. To our readers, whether new or longstanding, thank you for your continued support. We hope you enjoy this edition of the *Bellarmine Law Society Review*.

Bellarmine Law Society Review

Volume XVI | Issue I Article I

Beyond Damages Caps: Behavioral, Economic, and Legal Pathways to Reforming Medical Malpractice Liability

Zade Hirsch
Boston College, hirschz@bc.edu

BEYOND DAMAGES CAPS: BEHAVIORAL, ECONOMIC, AND LEGAL PATHWAYS TO REFORMING MEDICAL MALPRACTICE LIABILITY

ZADE HIRSCH[1]

Abstract: Medical malpractice reform in the United States has long centered on statutory damages caps intended to control liability costs, stabilize insurance markets, and preserve access to healthcare. This paper evaluates the legal and economic performance of damages caps and argues that their effects are more limited than often assumed. Using case law, national malpractice data, and economic scholarship, the analysis shows that malpractice claim frequency has declined substantially since the 1990s, while system costs are increasingly driven by a small number of high-severity cases. In this context, damages caps modestly reduce certain payouts but do not consistently lower insurance premiums, significantly reduce defensive medicine, or address broader drivers of healthcare spending. Their legal durability also varies widely across states due to differing constitutional frameworks. The paper concludes that these caps function primarily as a redistributive mechanism rather than a comprehensive reform, ultimately proposing alternative strategies—including behavioral interventions, structured disclosure programs, and tiered damages frameworks—to improve safety, compensation, and system efficiency.

I. Problem

Medical malpractice lies at the intersection of law, economics, and public policy. State and federal statutes shape how society values human life, compensates injured patients, deters professional negligence, and allocates the financial burdens of modern healthcare. Each year, preventable medical errors lead to serious injuries and deaths, while physicians and hospitals operate in an environment of rising costs, increasingly complex care, insurance reimbursement pressures, and concerns about litigation. America's civil justice system is intended to balance

[1] Zade Hirsch is a rising senior in the Morrissey College of Arts and Sciences at Boston College studying Greek and Roman history and philosophy. He is likely to attend law school after graduation and is interested in politics and public policy. When in his hometown of Los Angeles, he often plays tennis and surfs. He has a 14-year old Labradoodle named Paco.

accountability with fairness, yet stakeholders increasingly question whether traditional tort principles can effectively achieve these goals in a complex and rapidly evolving healthcare economy.

The ultimate goal of medical malpractice law has always been to ensure that injured patients receive just compensation. Yet as total settlement payouts climb dramatically—from $3.6 billion in 2010 to $5.1 billion in 2024—the system faces a more complex question: how can it preserve fair compensation and meaningful deterrence without bankrupting physicians and hospitals, driving up malpractice premiums, discouraging risky but necessary care, expanding administrative burdens meant solely to avoid liability, and inviting greater legal exposure as opportunistic attorneys pursue ever-larger awards?[2] This tension has led many states to enact tort reform measures—generally caps on non-economic or total damages—designed to stabilize liability risk, control premiums, and reduce overall costs. Supporters argue that caps reduce unpredictable—and potentially irrational—jury awards, lower premiums, and help retain physicians in high-risk specialties. Critics counter that caps arbitrarily limit recovery for the most severely injured patients and undermine tort law's core compensatory and corrective-justice functions.

From an economic perspective, malpractice liability influences physician behavior, insurance markets, and healthcare spending. Broad estimates place the systemwide cost of malpractice, including defensive medicine, administrative expenses, and indemnity payments, at approximately $56 billion annually, representing 2.4% of national healthcare expenditures.[3] Some studies suggest that caps modestly reduce premiums and certain forms of defensive

[2] Division of Practitioner Data Bank, Bureau of Health Workforce, Health Resources and Services Administration, *Data Analysis Tool*, https://www.npdb.hrsa.gov/analysistool.
[3] Michelle M. Mello, Amitabh Chandra, Atul A. Gawande, and David M. Studdert, "National Costs of the Medical Liability System," *Health Affairs* 29, no. 9 (2010): 1569–77, https://doi.org/10.1377/hlthaff.2009.0807.

medicine; others find minimal long-term effects or emphasize that most malpractice-related costs arise from structural features of healthcare rather than litigation frequency. The mixed nature of the data illustrates a key difficulty: evaluating the actual impact of tort reform requires reconciling conflicting evidence and recognizing the limitations of economic measurement in a system as fragmented as American healthcare.

The legal landscape is equally unsettled. Damages caps have faced persistent constitutional challenges, with courts in different states reaching sharply divergent conclusions about the limits of legislative authority. Some courts uphold caps as permissible economic regulation, while others strike them down as violations of equal protection, the right to a jury trial, or separation-of-powers principles. These disputes highlight larger institutional questions about which branch of government is best positioned to regulate civil liability, and whether tort reform encroaches on the traditional role of juries in determining damages.

Public policy considerations further complicate the debate. Tort reform affects patient safety incentives, the distribution of healthcare resources, and access to justice. Critics argue that caps disproportionately burden children, the elderly, and individuals with limited earning potential, whose harms are often primarily non-economic. Proponents respond that without caps, liability pressures may worsen physician shortages or discourage providers from practicing in underserved communities. These competing concerns demonstrate why malpractice reform has remained politically salient across decades and why no consensus solution has emerged.

Given these overlapping legal, economic, and policy dynamics, the core problem is not merely whether damages caps succeed or fail in isolation, but whether the broader malpractice system effectively balances compensation, deterrence, and healthcare affordability. Tort reform has sought to address genuine challenges, yet its outcomes remain contested, and its trade-offs

are unevenly distributed among patients, physicians, and insurers. Understanding these tensions is essential to evaluating whether existing reforms are justified and to identifying alternative approaches that better align with the goals of fairness, efficiency, and institutional legitimacy in medical liability.

II. History

IIa. Origins of Malpractice

Writings on medical responsibility can be traced back to Ancient Egypt, where Hammurabi's Code ordered that "if the doctor has treated a gentleman…and has caused [him] to die, or has opened an abscess of the eye for a gentleman…and has caused the loss of [his] eye, one shall cut off his hands."[4] This law was adopted in Rome, and by 1200 CE, Roman law had become the law of Europe. In 1066, English common law was established, and court records show a direct line of malpractice decisions extending to the present.[5] Due to British influence, medical malpractice suits first appeared in the US with regularity beginning in the 1800s.[6] Before the 1960s, however, legal claims for medical malpractice were rare and had little impact on the practice of medicine.[7]

IIb. 1970s

The origins of contemporary malpractice reform trace back to the early 1970s, when the United States experienced what became known as the first medical malpractice insurance crisis.[8]

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[4] B. S. Bal, "An Introduction to Medical Malpractice in the United States," *Clinical Orthopaedics and Related Research* 467, no. 2 (2008): 339, https://doi.org/10.1007/s11999-008-0636-2.
[5] Ibid.
[6] Ibid.
[7] Ibid.
[8] Glen O. Robinson, "The Medical Malpractice Crisis of the 1970's: A Retrospective," *Law and Contemporary Problems* 49, no. 2 (1986): 5–35, https://doi.org/10.2307/1191413.

Several insurers withdrew from the market or drastically raised premiums, citing unexpectedly high claims costs and volatility in jury verdicts.[9] Physicians in high-risk specialties, particularly obstetrics and emergency medicine, reported dramatic premium spikes and, in some cases, threatened to stop delivering babies or leave certain states altogether.[10] Policymakers feared that escalating liability pressures would reduce access to essential medical services.

In response, numerous states enacted the first generation of tort reforms. California's Medical Injury Compensation Reform Act of 1975 (MICRA) became the most influential model.[11] MICRA imposed a $250,000 cap on non-economic damages, limited attorney contingency fees, allowed periodic payments of future damages, and introduced other modifications intended to stabilize insurance markets.[12] At the time, legislators explicitly framed these reforms as emergency measures designed to contain spiraling costs and preserve the availability of care.[13] MICRA quickly became the template for national reform efforts, and California's experience would shape debates for decades as malpractice attorneys attempted to work around the law.[14]

IIc. 2003

During the early 2000s, individual cases began to illustrate the stakes of tort reform more vividly than abstract policy debates. One of the most notable was *Gourley v. Methodist Health*

[9] Ibid.
[10] Ibid.
[11] R. Marcelis, "Medical Injury Compensation Reform Act of 1975: Looking Back, Looking Forward, an Interview with Tort Reform Attorney, Fred Hiestand, General Counsel of Civil Justice Association of California," *UC Davis Business Law Journal* 11 (2012).
[12] Ibid.
[13] Ibid.
[14] A second wave of reforms emerged in the 1980s and 1990s, as states sought to replicate MICRA's approach in response to renewed premium increases and concerns about defensive medicine. Many states enacted caps—primarily on non-economic damages—and early constitutional challenges began to surface. Although this era expanded the geographic reach of tort reform, it did not fundamentally alter the structure of malpractice liability. Instead, it laid the groundwork for the more consequential debates and judicial conflicts that would emerge in the early 2000s.

System (2003), a Nebraska Supreme Court decision involving a child who suffered severe brain injuries at birth due to medical negligence.[15] A jury awarded $5.6 million in damages to cover lifelong care and suffering,[16] but Nebraska's statutory cap on total damages required the court to reduce the award to $1.25 million.[17]

The *Gourley* decision crystallized the tensions at the heart of malpractice reform. To supporters of caps, the case demonstrated the necessity of predictable liability limits to preserve stable insurance markets and protect healthcare providers from financial ruin. To critics, *Gourley* represented the injustice inherent in blanket statutory caps, as the award was insufficient to cover the lifelong care the child would require. The Nebraska Supreme Court ultimately upheld the statutory cap, emphasizing the legislature's prerogative to address perceived crises in healthcare access and insurance costs.[18] Yet the case also highlighted a deeper normative question: whether legislatures should override jury determinations to achieve economic stability, and whether such limits erode the compensatory function at the core of tort law.

While *Gourley* worked its way through the courts, a third wave of tort reform emerged, again driven by rising malpractice premiums and concerns from medical associations that high-risk specialties were becoming unsustainable. Texas's 2003 reforms, which included a $250,000 cap on non-economic damages for physicians, hospitals, and nursing homes, were widely promoted by tort reform advocates as a success story.[19] Texas reported improved insurer participation, greater perceived stability in the liability market, and renewed physician interest in

[15] *Gourley v. Methodist Health System*, 265 Neb. 918 (Neb. 2003).
[16] Ibid.
[17] Ibid.
[18] Ibid.
[19] Jamee Cotton, "How Much Are You Worth?: Why the Texas Supreme Court Took Tort Reform Too Far in Limiting the Admissibility of Certain Medical Expenses During Trial," *Texas Tech Law Review* 45 (2013): 565.

practicing in the state, though academic analyses reached more mixed conclusions regarding long-term effects.[20]

IId. 2010-2025

The period from 2010 to the present has been marked by constitutional fragmentation, legislative recalibration, and growing experimentation with alternatives to traditional caps. During this time, the legal landscape surrounding malpractice reform became increasingly uneven as state supreme courts reached sharply divergent conclusions about the validity of damages caps. In 2010, the Illinois Supreme Court struck down its non-economic damages cap in *Lebron v. Gottlieb Memorial Hospital*, holding that the statute violated the state constitution's separation-of-powers doctrine.[21] Florida followed suit several years later: in 2014, its Supreme Court invalidated caps in wrongful-death malpractice cases in *Estate of McCall v. United States*, and in 2017, extended that reasoning to personal-injury malpractice actions in *North Broward Hospital District v. Kalitan*.[22] By contrast, many other states continued to uphold their cap regimes, often applying lenient rational-basis review rather than strict scrutiny. This emerging patchwork underscored that malpractice reform is deeply intertwined with each state's constitutional structure and institutional philosophy. Where courts regarded the jury's fact-finding role as indispensable, caps proved vulnerable; where legislatures enjoyed broad authority over economic regulation, caps were more readily sustained. Today, thirty states use some form of cap.[23]

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[20] Ibid.; Beyond 2003, the 2000-2010 era also witnessed growing scrutiny of the empirical claims underlying tort reform. Economic studies reached divergent conclusions about whether caps reduced premiums, defensive medicine, or healthcare spending. The academic debate became increasingly nuanced, laying the groundwork for the more sophisticated analyses seen today.

[21] *Lebron v. Gottlieb Memorial Hospital*, 930 N.E.2d 895 (Ill. 2010).

[22] *Estate of McCall v. United States*, 134 So. 3d 894 (Fla. 2014); *North Broward Hospital District v. Kalitan*, 219 So. 3d 49 (Fla. 2017).

[23] Center for Justice & Democracy, "Fact Sheet: Caps on Compensatory Damages: A State Law Summary," September 29, 2025, https://centerjd.org/content/fact-sheet-caps-compensatory-damages-state-law-summary.

Over the past few years, states have revisited the substance of their malpractice frameworks in response to new empirical evidence, evolving political dynamics, and shifts in public attitudes toward compensation. The most consequential example is California's 2022 enactment of AB 35, the first major revision to MICRA since 1975. AB 35 increased the non-economic damages cap for both personal-injury and wrongful-death malpractice claims and provided for gradual future increases, reflecting the recognition that MICRA's fixed nominal cap had become outdated and insufficient for catastrophic injury cases.[24] Yet the reform preserved MICRA's broader architecture, signaling that legislators remained committed to balancing compensation concerns with the stability valued by insurers and providers.

At the national level, policymakers and scholars have increasingly explored alternatives to traditional caps, including "safe harbor" rules tied to evidence-based clinical guidelines, specialized health courts, early-offer mechanisms, and enhanced patient-safety initiatives. These approaches reflect a growing understanding that the malpractice system must balance multiple objectives, and that no single reform can address all the system's deficiencies.

The history of medical malpractice reform thus reveals a recurring pattern: periods of perceived crisis prompt legislative intervention; courts either validate or constrain those efforts; and stakeholders debate the empirical outcomes with varying conclusions. Throughout this evolution, the core tensions remain unresolved: how to adequately compensate injured patients, deter negligence effectively, and maintain a healthcare system that is both affordable and accessible.

III. Analysis

IIIa. Legal Performance of Damages Caps

[24] *California Assembly Bill No. 35*, ch. 17 (2022).

Damages caps operate at the intersection of legislative authority and traditional judicial functions. Their performance depends not only on statutory design but also on constitutional durability, institutional fit, and the extent to which they preserve or constrain the jury's fact-finding role. Law reviews across the country have observed that state courts diverge sharply on these questions, reflecting constitutional traditions that differ more fundamentally than the statutes they review.[25]

Courts that uphold damages caps tend to emphasize the legislature's authority to regulate civil remedies in response to perceived systemic concerns. *Arbino v. Johnson & Johnson* (2007) illustrates this approach. Here, the Ohio Supreme Court reasoned that modifying non-economic damages to stabilize the liability insurance market was a legitimate exercise of policymaking power and reviewed the statute under a deferential, rational-basis standard.[26] This form of deference reflects an institutional judgment that legislatures, rather than courts, are better positioned to weigh complex economic tradeoffs. This reasoning, however, presumes a relatively direct connection between damages caps and improved insurance stability—a premise that empirical studies evaluate with mixed results. NYU law professor Catherine Sharkey's analysis suggests that focusing solely on payout suppression understates the broader systemic effects of caps, including changes in insurer behavior, plaintiff selection, and the overall litigation environment.[27] A significant part of her analysis is the finding of a crossover effect where caps on noneconomic damages (like pain and suffering) lead plaintiffs' attorneys to more vigorously pursue, and juries to award, larger economic damages (like lost wages and medical expenses), which are often uncapped.[28] From this perspective, the argument that caps inherently promote

[25] Catherine M. Sharkey, "Unintended Consequences of Medical Malpractice Damages Caps," *New York University Law Review* 80 (2005): 391.
[26] *Arbino v. Johnson & Johnson*, 116 Ohio St. 3d 468 (Ohio 2007).
[27] Sharkey, "Unintended Consequences of Medical Malpractice Damages Caps," 403.
[28] Sharkey, "Unintended Consequences of Medical Malpractice Damages Caps," 405.

predictability may rely on a partial account of how malpractice systems operate. This highlights a central tension: although standardization may further legislative policy goals, it can also constrain the individualized assessment of harm traditionally entrusted to juries.

Courts that strike down damages caps adopt the opposite institutional perspective, viewing tort remedies as part of the judiciary's core constitutional function. The Illinois Supreme Court's decision in *Best v. Taylor Machine Works* (1997) demonstrates this ideology. The court invalidated a $500,000 non-economic damages cap on separation-of-powers grounds, reasoning that a uniform statutory limit prevents juries from performing their role of assessing individualized harm.[29] Rather than deferring to legislative policymaking, the court emphasized the judiciary's obligation to preserve the integrity of the adjudicative process.[30] Jeffrey Parness' commentary on *Best* in the *Penn State Law Review* notes that this approach reflects a deeper constitutional commitment: the jury's fact-finding authority is a structural guarantee resistant to across-the-board legislative modification.[31] The Florida Supreme Court adopted a related logic in *McCall,* striking down malpractice caps on equal protection grounds. In the court's view, caps impose disproportionate burdens on the most severely injured plaintiffs, flattening distinctions among cases that tort law is designed to evaluate individually.[32] These decisions reveal skepticism toward the standardization project inherent in damages caps and reflect a constitutional philosophy that prioritizes individualized adjudication over systemic uniformity.

Cases applying total-damages caps reveal additional institutional tensions. As previously mentioned, in *Gourley*, the Nebraska Supreme Court upheld a statutory ceiling on all damages, reducing a jury's multimillion-dollar verdict to the legislative maximum. While the court found

[29] *Best v. Taylor Machine Works*, 179 Ill. 2d 367 (Ill. 1997).
[30] Ibid.
[31] Jeffrey A. Parness, "State Damage Caps and Separation of Powers," *Penn State Law Review* 116 (2011–2012): 145.
[32] *McCall v. US*, 9.

that the legislature acted reasonably to address insurance concerns, some Stanford scholars have observed that total caps intensify the tradeoff between predictability and individualized compensation, particularly in catastrophic injury cases.[33] Such caps shift significant discretion from juries to legislatures and courts, prompting questions about which institution is best situated to evaluate the magnitude of non-economic harm.

The recent case law and scholarly analysis indicate that a stable national legal consensus on damages caps is unlikely to emerge. States that conceptualize tort law as a domain for legislative experimentation, such as Ohio, tend to uphold caps; states that embed individualized adjudication and jury authority within structural constitutional protections, such as Illinois and Florida, tend to invalidate them. As Studdert and Mello note in the *New England Journal of Medicine*, this divergence is rooted in constitutional design rather than empirical disagreement.[34]

Accordingly, the legal performance of damages caps cannot be assessed in the abstract: their stability, function, and doctrinal coherence depend on institutional environments that are neither uniform nor converging. This structural fragmentation ensures that caps will remain legally contested and jurisdiction-specific for the foreseeable future.

IIIb. Economic Performance

Economic assessments of medical malpractice reforms must begin with the fundamental question of whether the system faces a volume-driven crisis. National data suggest it does not. As shown below, malpractice payment reports submitted to the National Practitioner Data Bank

[33] Christopher N. Kelly and Michelle M. Mello, "Are Medical Malpractice Damages Caps Constitutional? An Overview of State Litigation," *Stanford Journal of Law, Medicine & Ethics* 33, no. 3 (2005): 515–534.
[34] David M. Studdert, Michelle M. Mello, and Troyen A. Brennan, "Medical Malpractice," *New England Journal of Medicine* 350, no. 3 (2004): 283–292.

peaked in the early 1990s at nearly 20,000 annually and have since entered a decades-long decline.[35] By the early 2020s, annual payment reports had fallen to roughly half their 1990s levels.

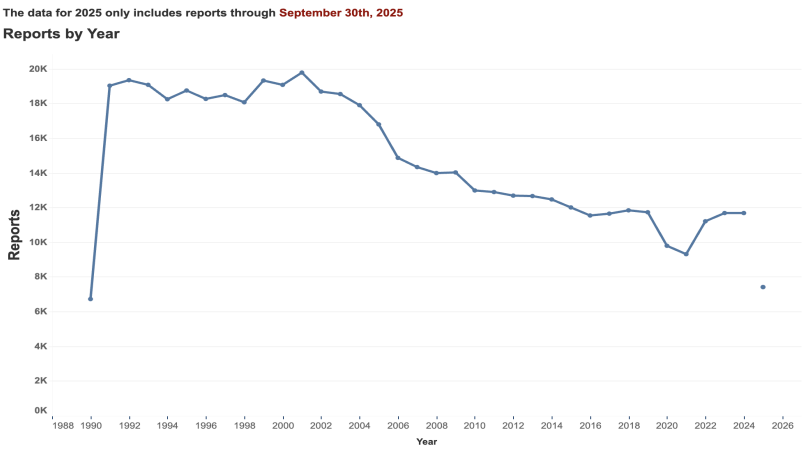

Figure 1:
NPDB Medical Malpractice Payment Reports over Time

This sustained contraction complicates arguments that malpractice litigation remains excessively frequent or that high filing rates drive contemporary instability in insurance markets. A shrinking pool of paid claims indicates that reforms designed to reduce claim volume—such as procedural hurdles or screening panels—address a problem that has been diminishing for more than twenty years. The economic pressures of the current malpractice environment arise from different sources, prompting a reevaluation of what damages caps meaningfully achieve.

National trends can mask specialty-level variation, but the long-run decline is consistent across medical fields. Table 1 (adapted from a 2017 *JAMA* study) shows that paid-claim rates per 1000-physician-years fell sharply between 1992 and 2014 in virtually every specialty, including those historically considered high-risk.[36] Neurosurgery, obstetrics and gynecology, general surgery, orthopedics, and emergency medicine all experienced declines of 40-60%. Even low-risk specialties, including pediatrics and dermatology, saw steep reductions.

[35] Division of Practitioner Data Bank, Bureau of Health Workforce, Health Resources and Services Administration, *Data Analysis Tool*, https://www.npdb.hrsa.gov/analysistool.
[36]Adam C. Schaffer et al., "Rates and Characteristics of Paid Malpractice Claims Among U.S. Physicians by Specialty, 1992–2014," *JAMA Internal Medicine* 177, no. 5 (2017): 710–718, https://doi.org/10.1001/jamainternmed.2017.0155.

Table 1: Rates of Paid Medical Malpractice Claims per 1,000 Physician-Years by Specialty, 1992–2014.

Specialty	Rate of Paid Medical Malpractice Claims					Difference in Mean Rate From Period 1 to Period 4	Percentage Change[a]
	1992-2014 (All Periods)	1992-1996 (Period 1)	1997-2002 (Period 2)	2003-2008 (Period 3)	2009-2014 (Period 4)		
All specialties	14.1	20.1	17.5	13.2	8.9	−11.2	−55.7
Anesthesiology	11.7	15.4	13.7	10.8	8.6	−6.8	−44.2
Cardiology	15.9	15.6	18.0	16.6	13.5	−2.1	−13.5
Colon and rectal surgery	34.1	38.3	39.3	35.1	27.6	−10.7	−27.9
Dermatology	11.6	17.3	15.2	10.6	6.2	−11.1	−64.2
Emergency medicine	18.8	24.3	24.4	18.6	13.0	−11.3	−46.5
Family medicine	14.3	22.3	18.4	13.0	8.2	−14.1	−63.2
Gastroenterology	15.8	18.5	18.0	16.5	12.1	−6.4	−34.6
General practice	21.9	29.0	23.2	16.7	12.6	−16.4	−56.6
General surgery	30.0	34.4	34.3	29.9	22.2	−12.2	−35.5
Internal medicine	7.1	8.9	8.5	7.1	4.8	−4.1	−46.1
Neurology	9.5	13.1	12.0	9.4	5.8	−7.3	−55.7

These parallel declines reinforce a central economic insight: contemporary malpractice risk is not driven by the sheer number of claims, but by the financial impact of a relatively small subset of high-severity cases. This shift places increased importance on payout magnitude and variance. Insurers can no longer rely on frequency smoothing—spreading risk over many moderate claims—and instead must absorb the financial shock of rare but extremely costly catastrophic injuries. This is the environment in which damages caps are intended to function economically.

The question, however, is how well caps actually perform this stabilizing function. The empirical literature indicates that many of the claimed economic benefits of caps are overstated or contingent on assumptions that do not hold consistently. For example, caps are frequently justified on the grounds that they reduce malpractice insurance premiums. Yet GAO analyses show that premium spikes correspond more closely to cyclical patterns in the insurance industry—investment downturns, reduced reinsurance availability, and shifting underwriting

standards—than to changes in malpractice claim frequency or severity.[37] This evidence does not merely weaken the premium-reduction claim but raises a deeper point: to the extent premiums move independently of tort reforms, caps may be addressing the wrong variable altogether. If the primary drivers of premium instability lie outside the liability system, lawmakers may be using a legal instrument to treat what is essentially a financial market phenomenon.

Even when studies detect premium reductions in cap states, the effect is often small relative to overall market variation. This raises a second question: is the observed premium stability attributable to the cap itself, or to selection effects, insurer market structure, or broader economic conditions? Because many states adopt caps during politically salient "crisis periods," it is difficult to disentangle the effect of the reform from that of the cycle that triggered it. The empirical record, therefore, supports a narrower and more cautious claim: caps may contribute to premium stabilization under certain conditions, but they are neither a necessary nor sufficient cause of sustained premium moderation.

Defensive medicine also illustrates how the economic rationale for caps can be overstated. Early studies—most notably by Kessler and McClellan—found that liability reforms were associated with reductions in spending for certain Medicare patient groups.[38] Yet subsequent research has struggled to replicate these results across specialties, time periods, or broader patient populations. Continued studies consistently find minor or statistically insignificant effects, and surveys indicate that physicians report practicing defensively even in states with strict caps on damages.[39] This suggests that liability pressure is only one factor

[37] U.S. Government Accountability Office, *Medical Malpractice Insurance: Multiple Factors Have Contributed to Increased Premium Rates*, GAO-03-702 (Washington, DC: U.S. Government Printing Office, 2003), https://www.govinfo.gov/app/details/GAOREPORTS-GAO-03-702.
[38] Daniel Kessler and Mark McClellan, "Do Doctors Practice Defensive Medicine?" *Quarterly Journal of Economics* 111, no. 2 (1996): 353–390, https://doi.org/10.2307/2946682.
[39] Michelle M. Mello and Troyen A. Brennan, "Deterrence of Medical Errors: Theory and Evidence for Malpractice Reform," *Texas Law Review* 80 (2002): 1595–1637.

shaping clinical behavior, interacting with institutional practice norms, reimbursement incentives, and patient expectations. The Congressional Budget Office estimated that even a comprehensive package of tort reforms would reduce national health spending by approximately 0.5 percent, a figure that substantially narrows the economic significance of defensive medicine as a justification for caps.[40] The weight of the evidence thus indicates that while caps may marginally reduce some defensive practices, they do not meaningfully alter overall healthcare spending patterns.

The rise in claim severity, however, offers a more targeted, though still limited, economic justification for caps. Data from the National Association of Insurance Commissioners show that while the number of paid claims has declined, average indemnity payments have steadily increased, driven by the growing cost of medical care and the disproportionate economic weight of catastrophic injuries.[41] This concentration of financial exposure in a small set of high-severity cases introduces volatility that insurers struggle to price effectively. Damages caps theoretically mitigate this risk by constraining the upper tail of non-economic damages, thereby reducing volatility in total payouts. But this mechanism has structural limits: caps restrict only non-economic damages, while economic damages, especially lifetime medical costs, continue to rise sharply.[42] In states with long-static caps that fail to adjust for inflation, such as California under the pre-2022 MICRA regime, this mismatch becomes especially pronounced. Caps substantially reduce compensation for non-economic loss without materially addressing the escalating economic damages component that drives overall severity. Economically, this

[40] Congressional Budget Office, "Limiting Tort Liability for Medical Malpractice," January 8, 2004, https://www.cbo.gov/sites/default/files/cbofiles/ftpdocs/49xx/doc4968/01-08-medicalmalpractice.pdf.
[41] National Association of Insurance Commissioners, *U.S. Health Insurance Industry Analysis Report* (2024).
[42] Rishi Khera et al., "Lifetime Healthcare Expenses across Demographic and Cardiovascular Risk Groups," *American Journal of Preventive Cardiology* 14 (2023): 100493.

produces an uneven tradeoff: predictability may improve for insurers, but not necessarily in the areas most responsible for rising costs.

Cross-state analyses also reveal the constraints of caps as a systemic reform. Using Avraham's Database of State Tort Law Reforms, multiple studies find that non-economic caps reliably reduce mean payouts.[43] Yet these reductions have not translated into consistent improvements in physician supply, particularly in high-risk specialties such as obstetrics or neurosurgery. Workforce data from the Association of American Medical Colleges show no stable correlation between the presence of caps and specialist distribution once population, market demand, and regional healthcare infrastructure are accounted for.[44] This disconnect suggests that the economic effects of caps may be primarily redistributive—shifting financial risk away from insurers and providers and onto severely injured plaintiffs—rather than transformative at the system level. They reduce the size of payouts but do not address broader structural issues, such as escalating healthcare costs, regional provider shortages, or insurance-cycle volatility.

Therefore, the economic evidence supports a restrained conclusion: damages caps function effectively in narrow, context-dependent ways, principally by reducing certain categories of payouts and, in some cases, moderating short-term volatility in insurer losses. But beyond this limited domain, they do not reliably reduce premiums, meaningfully curtail defensive medicine, or address the primary drivers of healthcare spending. Their economic performance is therefore real but partial. Caps mitigate a shrinking subset of malpractice-system

[43] Ronen Avraham, "Database of State Tort Law Reforms (7.1)," University of Texas School of Law, Law and Economics Research Paper No. e555 (October 26, 2021), https://doi.org/10.2139/ssrn.90271.
[44] GlobalData Plc, *The Complexities of Physician Supply and Demand: Projections From 2021 to 2036* (Washington, DC: Association of American Medical Colleges, 2024).

pressures, namely severity-driven tail risk, while leaving other inefficiencies of the healthcare and insurance markets largely intact.

IIIc. Distributional and Ethical Tensions

Even if damages caps achieve some degree of economic predictability, they introduce substantial distributional consequences that shape who bears the costs of malpractice injuries. Caps function as a mechanism for allocating losses across plaintiffs, providers, insurers, and society at large. Because caps apply only to non-economic damages, their impact falls most heavily on plaintiffs whose harms are not readily quantified in lost wages or future medical expenses. This includes children, elderly individuals, stay-at-home caregivers, and low-income workers—groups whose economic losses tend to be modest relative to the severity of their injuries. Scholars of medical malpractice reform have emphasized that caps tend to compress recoveries most sharply for claimants whose compensable losses are dominated by pain, suffering, and loss of function rather than foregone earnings.[45] Caps thus redistribute risk downward, away from institutional actors such as insurers and hospital systems and toward those who experience catastrophic injuries.

These distributional dynamics generate further concerns regarding deterrence. Tort law traditionally assumes that providers internalize the expected costs of negligent behavior; liability encourages investment in safety. Yet when caps reduce exposure in the most severe cases, the expected cost of malpractice becomes less sensitive to catastrophic harm. Hyman argues that this can blunt marginal deterrence by flattening the liability function: the difference in legal consequences between moderate and severe negligence narrows.[46] Although empirical studies do

[45] Randall R. Bovbjerg, "Commentary: Malpractice Reform in Policy Perspective," *The Milbank Quarterly* 85, no. 2 (2007): 297–305, https://doi.org/10.1111/j.1468-0009.2007.00488.x.
[46] David A. Hyman, "Commentary: Medical Malpractice and the Tort System: What Do We Know and What (If Anything) Should We Do About It?" *Texas Law Review* 80 (2002): 1639–1655.

not definitively establish that caps weaken safety incentives, the theoretical concern is structurally significant. A liability system that undervalues the largest harms may distort provider incentives even if average payouts decline. This tension between predictability for insurers and deterrence for patients is central to understanding why courts in states such as Florida and Illinois ground their constitutional decisions partly in concerns about individualized adjudication and protection for the most seriously injured.

Ethical tensions arise from these distributional patterns, although they can be articulated without appealing to normative preferences. Tort law historically embodies an individualized conception of justice: each plaintiff's harm is assessed on its own terms, and compensation reflects the magnitude of that harm. Caps, by design, replace individualized assessment with a uniform ceiling. This shift raises the ethical question of whether the state may prioritize systemwide cost control over case-specific compensation. Sharkey describes this as the conflict between aggregate welfare optimization and particularized justice, a conflict embedded in the very structure of caps rather than in political preferences.[47] Courts that strike down caps frequently rely on this reasoning, emphasizing that uniform statutory limits obscure relevant distinctions among injuries and plaintiffs. In this sense, the ethical tension is not whether caps are "fair," but rather what theory of fairness the malpractice system should operationalize: one centered on predictability and systemwide affordability, or one centered on individualized redress.

The distributional consequences also extend beyond plaintiffs. Caps can shift costs to public programs such as Medicaid or Medicare when injured patients receive inadequate tort recoveries to fund long-term care.[48] This creates a secondary redistribution: taxpayers absorb

[47] Sharkey, "Unintended Consequences of Medical Malpractice Damages Caps," 421.
[48] Jennifer Arlen, "Contracting over Liability: Medical Malpractice and the Cost of Choice," *University of Pennsylvania Law Review* 158, no. 4 (2010): 957–1023, http://www.jstor.org/stable/20698352.

costs that would otherwise be borne by negligent providers or their insurers. These spillovers introduce another institutional tension. Legislatures often justify caps as a means of preserving healthcare access by stabilizing provider premiums, yet the downstream transfer of long-term care costs to public systems complicates that calculus. The economic efficiency of caps, then, depends not only on reduced payouts but also on the externalities arising from shifting injury costs to the social insurance system.

Finally, distributional and ethical tensions converge in states that impose caps even in cases of egregious malpractice or catastrophic lifelong injury. In such circumstances, the statutory ceiling may bear little relationship to the harm suffered, creating a divergence between legal compensation and social expectations of accountability. While this paper takes no position on which model is morally preferable, these tensions highlight that caps are not merely technical adjustments to the tort system. They represent institutional choices about how the burdens of medical injury should be allocated, and what values the malpractice system is designed to prioritize.

IV. Conclusion and Implications

IVa. Reform Recommendations

The preceding analysis suggests that damages caps, though politically durable in many jurisdictions, address only a narrow portion of the malpractice system's challenges. A more constructive approach is to view malpractice reform as a problem of institutional design rather than merely a matter of legal doctrine. Behavioral economics provides a helpful framework for this shift. As Thaler and Sunstein's book *Nudge: Improving Decisions About Health, Wealth, and Happiness* emphasizes, outcomes can be transformed by reorganizing environments so that better

choices become more accessible, more salient, and more natural.[49] These principles of liberal paternalism, applied successfully in settings as varied as lunch lines and airport restrooms, can be repurposed for medical liability policy, where complexity, time pressure, and asymmetric information routinely distort decision-making.

One promising area for reform lies in the structure of clinical decision-making itself. Errors often arise not from a lack of knowledge but from predictable cognitive overload. Hospitals could redesign clinical environments to steer physicians toward safer practices: reorganizing electronic records so that crucial information is more prominent, embedding evidence-based guidelines as the natural default pathway, and reducing the number of steps required to follow best practices. These interventions mirror the Schiphol airport strategy of placing the fly in urinals to improve accuracy: a minor change in presentation produces a disproportionately large effect on behavior.[50] Implementing these reforms would require collaboration among hospital leadership, specialty organizations, and technology vendors, as well as state support for institutions that lack the resources to reconfigure their systems. The strength of this approach is its ability to reduce malpractice risk by lowering error rates themselves, thereby targeting the upstream origins of claims. Its weakness is the uneven capacity of hospitals to adopt these changes and the risk that poorly designed defaults could unintentionally narrow clinical discretion.

A second reform focuses on how adverse events are handled once they occur. Traditional disclosure and early-resolution programs often falter because they require physicians to initiate emotionally fraught conversations and require patients to navigate unfamiliar processes. Behavioral insights suggest that participation increases when the pathway is clear and structured,

[49] Richard H. Thaler and Cass R. Sunstein, *Nudge: Improving Decisions About Health, Wealth, and Happiness* (New Haven: Yale University Press, 2008), 3.
[50] Ibid., 4.

like eating healthy in a lunch line that pushes salad rather than junk food.[51] Making disclosure the presumptive first step could normalize early communication. Providing patients with automatically generated, visually straightforward explanations of their options would reduce uncertainty at a time when many feel overwhelmed and are then persuaded to sue by litigious attorneys. The strength of such a model lies in its capacity to resolve disputes before they escalate, thereby improving patient trust and reducing litigation risk. Its weakness is largely cultural: institutions may resist adopting a process that appears to be an implicit admission of fault, and without broad uptake, the effects may remain limited.

A third set of reforms concerns the structure of damages limits themselves. If political or constitutional realities make the elimination of caps unlikely in some states, the design of caps can still be improved.[52] A uniform ceiling treats vastly different injuries in the same way, producing the distributional distortions identified earlier. A tiered cap, i.e., one higher for catastrophic injuries, could preserve some predictability while reducing the most regressive effects. Such a model would resemble the cafeteria strategy of placing healthier items at the front of the line: the overall menu remains unchanged, but the arrangement encourages more balanced outcomes.[53] Implementing a tiered system would require legislative action, actuarial modeling, and clear statutory definitions of injury categories. The strength of this approach is that it addresses both fairness and stability; its weakness lies in the administrative complexity of defining severity levels and drawing a line for what injuries qualify as "catastrophic."

Reforms could also target the informational asymmetries that shape who brings malpractice claims. Research consistently shows that many severely injured patients—especially

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[51] Ibid.
[52] Of course, these design improvements matter only in states where caps remain constitutionally permissible; jurisdictions like Illinois or Florida would require constitutional amendments before adopting any version of a tiered system.
[53] Thaler and Sunstein, *Nudge: Improving Decisions About Health, Wealth, and Happiness*, 5.

those with limited resources or low health literacy—never file claims at all.[54] This creates a mismatch between actual harm and the system's liability outputs. States or large health systems could implement patient-navigator programs that are automatically triggered after serious adverse events. These navigators would not act as advocates for litigation but would provide neutral explanations of rights and options. The advantage of this intervention is its potential to reduce inequities in access. The difficulty lies in ensuring neutrality and avoiding perceptions that hospitals are attempting to steer patients away from exercising their rights.

Finally, policymakers should adopt a sequencing strategy for reform. A phased approach, starting with decision-support redesign, followed by structured disclosure systems, and then by more complex reforms to damages and patient navigation, would allow stakeholders to adapt gradually and generate data to inform subsequent steps. Such sequencing mirrors the behavioral principle that people respond better when choices are introduced in manageable increments rather than sweeping overhauls.[55]

IVb. Prediction

Large-scale legislative reform is unlikely in the near future. Malpractice policy has low political salience, generates limited electoral payoff, and would require courts or legislatures to revisit entrenched constitutional doctrines. States that currently have caps will mostly retain them, while states without caps will not adopt them unless there is a dramatic constitutional change. Instead, the most plausible evolution will occur within hospitals, insurers, and risk-management systems. Incremental, behaviorally informed redesign—quietly adopted because it improves operations and reduces internal costs—will shape the future far more than

[54] Melinda R. Pappadis et al., "The Relationship of Health Literacy to Health Outcomes Among Individuals With Traumatic Brain Injury: A Traumatic Brain Injury Model Systems Study," *Journal of Head Trauma Rehabilitation* (2024).
[55] Thaler and Sunstein, *Nudge: Improving Decisions About Health, Wealth, and Happiness*, 4.

statutory change. The result will be a system that evolves gradually at the institutional level while formal tort rules remain broadly stable and deeply fragmented across states.

Bellarmine Law Society Review

Volume XVI | Issue I Article II

Cavalleri v. Hermés and Illegal Tying

Audrey Brower
University of Michigan, browera@umich.edu

CAVALLERI V. HERMÉS AND ILLEGAL TYING

AUDREY BROWER[1]

Abstract: This paper offers a joint economic and legal analysis of the California class action lawsuit, *Cavalleri v. Hermès International* (2025). In this case, plaintiff Tina Cavalleri alleges that luxury retailer Hermès International uses tying practices, illegal under US law, to coerce consumers to purchase unwanted accessory products (tied product), to access its iconic Birkin handbag (tying product). This paper utilizes a mixed-methods analysis to prove that Hermès' tying practices are legal and reflective of consumers' exclusivity preferences. Qualitatively, this paper considers the allegations within the context of economist Thorstein Veblen's Theory of Conspicuous Consumption, which suggests that consumers purchase luxury goods both as costly signals of wealth or social status and as a means of emulating the consumption patterns of "social elites." Quantitatively, this paper uses a cost-based modeling of bundling and tying, based on a model developed by economists David Evans and Michael Salinger, the support the notion that Hermès's tying practices are both profit-maximizing and driven by transactional efficiencies, rather than anticompetitive foreclosure. Finally, the paper applies both Veblen's theory and the cost-based findings to prior legal precedent for assessing tying practices *per se*. It finds that *Cavalleri v. Hermès International* (2025) fails the three-part test for *per se* tying. Recent legal precedent, such as *Broad. Music v. Columbia Broad* (1979), *Ohio v. American Express* (2018), and *Brantley v. NBC Universal* (2012) also suggests that legal tying practices can promote competition, a small group of ties are illegal *per se*, and judicial disapproval of tying arrangements has diminished over time. Therefore, under theoretical, economic, and legal analyses, the paper concludes that Hermès' tying practices are not illegal *per se*, but rather reflect consumers' preferences for exclusivity.

[1] Audrey Brower is a senior economics and history student at the University of Michigan. She is focused on researching the history of statistical, legal, and criminal justice systems, both within the US and internationally. She is the author of "Counting A Country: The History of Canada's National Statistics Office," for the *Columbia Journal of History*, and is currently working with the Carceral State Project at the University of Michigan to research the criminal-legal system in Michigan. Audrey is passionate about global and domestic human rights causes and plans to attend law school one day.

I. Introduction

Hermés is a global luxury fashion house, widely known for its famous Birkin and Kelly bags. These handbags are uniquely characterized by their consistently high demand, low supply, price, and exclusivity. In fact, a standard leather or exotic Birkin takes hours to craft and may sell anywhere between $10,000 to over $100,000.[2] Naturally, as an esteemed and highly sought-after brand, Hermés reserves the Birkin and Kelly bags for its highest-value and most loyal consumers. It does so by tying the purchase of the Birkin to other leather goods and accessories. On March 19, 2024, Tina Cavalleri and Mark Glinoga filed a potential class action suit in the Northern District of California against Hermés, alleging that its tying practices violate the Sherman Antitrust Act and California Cartwright Act.[3] The plaintiffs claim that tying allows Hermés to exploit its market power to coerce consumers into purchasing ancillary products, artificially inflate Birkin prices, and unfairly select consumers "deemed worthy" based on a sufficient "purchase profile."[4]

On September 17, 2025, a judge dismissed the lawsuit, finding that Hermés's practices are not anticompetitive and that plaintiffs failed to prove the presence of "a relevant tying market, market power in the relevant market [to coerce consumers into purchasing the tied products], and injury to competition in a tied product market."[5] Although the case was dismissed, the opinion leaned largely on a legal analysis. Given the economic nature of tying, it is beneficial to examine the costs of tying to answer the question: does Hermés violate antitrust laws when it requires consumers to purchase a certain amount of ancillary goods before buying a Birkin?

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[2] *Cavalleri et al. v. Hermès International*, Case No. 3:24-cv-01707-JD, U.S. District Court for the Northern District of California (September 17, 2025).; Vanessa Wat, "What Influences an Hermés Birkin Bag Price," *Sotheby's*, December 11, 2025, https://www.sothebys.com/en/articles/what-influences-an-Hermés-birkin-bag-price.
[3] Anna P. Hayes and Jennifer Lada, "It's Not a Bag, It's a Birkin: Class Action Targets Hermés with Antitrust, Unfair Trade Claims," *Holland & Knight*, March 25, 2024, hklaw.com/en/insights/publications/2024/03/its-not-a-bag-its-a-birkin-class-action-targets-Hermés-with-antitrust.
[4] *Cavalleri et al. v. Hermès Int'l*, No. 3:24-cv-01707-JD (N.D. Cal. 2025).
[5] Ibid.

When analyzed through the lens of the luxury goods market, the tied-product market, and a cost-based model of competitive tying, Hermés's practices do not violate antitrust laws, but reflect consumer preferences for exclusivity in the luxury goods market.

II. Legal Background

Hermés is a luxury fashion designer, known for its famous, trademarked Birkin and Kelly bags.[6] In particular, the Birkin is difficult and expensive to produce because it is handcrafted and uses the finest materials. These factors, combined with the bag's growing popularity, make the sought-after good "a symbol of rarefied wealth" according to the complaint.[7] Due to its esteemed nature, Hermés's business model functions to select the most dedicated clientele with a significant purchase history to buy its Birkin. To ensure that this remains the case, Hermés developed its Sales Associate Incentive Program, which prohibits sales associates from earning commission on Birkin sales and asks employees to use the bag "to [allegedly] coerce consumers to purchase ancillary products," for which they earn 3% commission.[8] In other words, the program prevents sales associates from overselling the Birkin in a way that diminishes the bag's value while boosting the associate's commission pay. Thus, the tying product—the Birkin—serves as leverage that associates can use to encourage consumers to spend more at Hermés.

In a 2025 class action lawsuit, *Cavalleri v. Hermés*, Plaintiff Tina Cavalleri spent thousands of dollars and claimed to have been "coerced" into purchasing ancillary products to gain access to the Birkin.[9] After buying one Birkin, Hermés associates denied her the sale of a

[6] Ibid.
[7] Ibid.
[8] Ibid.
[9] Ibid.

second until she bought more products, prompting her to sue. Cavalleri represents a class of U.S residents and a subclass of California residents who were "coerced" into buying ancillary products tied to the Birkin.[10] She alleges that this coercion enabled Hermés to exercise substantial market power, which thus compelled it to increase prices and profits related to Birkin sales in a manner that violated antitrust legislation.

Cavalleri alleges that Hermés engaged in unlawful tying practices under the Sherman Antitrust Law and California Cartwright Act, as well as injury to competition in violation of California's Unfair Competition Law.[11] Under this allegation, the tying product is the Birkin, while tied products are ancillary Hermés products, including leather goods, accessories, and jewelry.[12] Cavalleri's stance implies that nearly all consumers want specifically the Birkin as an esteemed status symbol and thus are coerced into buying unwanted accessories in order to obtain it. Although any consumer can purchase it, Hermés forces purchasers to buy its other products first. This is a way for Hermés to sell the Birkin to consumers who value it the most, retaining the Birkin's exclusivity.

Briefly, the Sherman Antitrust Law prohibits businesses from forming or conspiring to form a monopoly.[13] The California Cartwright Act prohibits illegal tying arrangements where the consumer is coerced into purchasing a separate tied product.[14] In practice, these regulations require plaintiffs to prove that the company exercises "sufficient economic power in the tying market" to harm competition in the tied market.[15] Moreover, the Unfair Competition Law prohibits any unlawful or unfair business act as well as misleading or deceptive advertising that

[10] Ibid.
[11] Hayes and Lada, "It's Not a Bag, It's a Birkin."
[12] Ibid.
[13] Sherman Act, 15 U.S.C. §§ 1–2 (1890).
[14] California Cartwright Act § 16720 and 16727.
[15] Hayes and Lada, "It's Not a Bag, It's a Birkin."

injures competition.[16] Altogether, this case may represent growing antitrust scrutiny among middle-class consumers and impending changes to luxury sales strategies.

The court evaluates anticompetitive practices *per se*, meaning that they are so inherently damaging to the market that no further justification is needed.[17] In other words, *per se* legality is a matter of black and white; plaintiffs must prove pure injury to competition, not the further negative effects associated with the injury, and defendants are not entitled to justification.[18]

On September 17, 2025, California District Judge James Donato ruled that Hermés did not engage in illegal tying *per se* and that Cavalleri "bank[ed] on the theory that all tying claims are a *per se* violation. . . so they need not allege much in the way of facts."[19] Plaintiffs did not supply enough evidence to prove (1) a tying market (Birkins); (2) significant economic power within that tying market; and (3) competitive harm in the tied product market (accessories). Given this standard, it is easier to prove competitive harms in the tying market because the associated tied products include a wide array of luxury goods: "scarves and shawls, ready to wear clothing, footwear, watches, jewelry, fragrances, accessories, [home goods]."[20] In this sense, it would be easier to prove sufficient market power and harm in one market of elite luxury handbags rather than several accessory markets.

III. The Luxury Goods Market

[16] Cal. Bus. & Prof. Code § 17200; CACI No. 3421.
[17] Bona Law, "Antitrust Standards of Review: The Per Se, Rule of Reason, and Quick Look Tests," *Bona Law*, August 10, 2018, https://www.bonalaw.com/insights/legal-resources/antitrust-standards-of-review-the-per-se-rule-of-reason-and-quick-look-tests.
[18] *Per se* standard is the typical standard for analyzing antitrust violations in the United States. Practices that meet the standard have no legitimate justification and a significant anticompetitive effect; therefore, *per se* antitrust violations can be considered unlawful without further analyzing reasonableness, economic impact, or other factors, See U.S. Department of Justice, "Antitrust Resource Manual: Attorney General's Policy Statement," *Antitrust Division*, https://www.justice.gov/archives/jm/antitrust-resource-manual-1-attorney-generals-policy-statement.
[19] *Cavalleri et al. v. Hermès Int'l*, No. 3:24-cv-01707-JD (N.D. Cal. 2025).
[20] Ibid.

In economics, a luxury good is one where demand increases more than proportionally as income rises. As consumers become wealthier, they tend to spend more on luxury. Economists characterize the luxury goods market as high in income elasticity of demand, sensitive to business cycle patterns, and responsive to consumer spending trends.[21] Additionally, consumers often exhibit high intertemporal elasticity of substitution and patience when purchasing luxury goods.[22] That is, they are willing to postpone luxury consumption for necessity consumption in the short-run.

Since the 19th century, luxury consumption has increasingly grown outside of affluent spheres due to a post-industrial rise of the middle class, globalization shaping trend cycles, and real household income rising in the US.[23] Moreover, in the past decade, growth in the luxury goods market has accelerated faster than aggregate consumption, as industry profits tripled since 2019 (see Figure 1).[24] This growth represents a changing consumer class, where luxury is no longer seen as limited to affluent households.[25] Instead, Zimmer suggests luxury today takes on a "competitive quality" where "people see others' conspicuous consumption and then try to 'keep up with the Joneses' by engaging in conspicuous consumption of their own."[26] Notable economist Thorstein Veblen describes this push to mimic wealthy consumption choices as "pecuniary emulation."[27]

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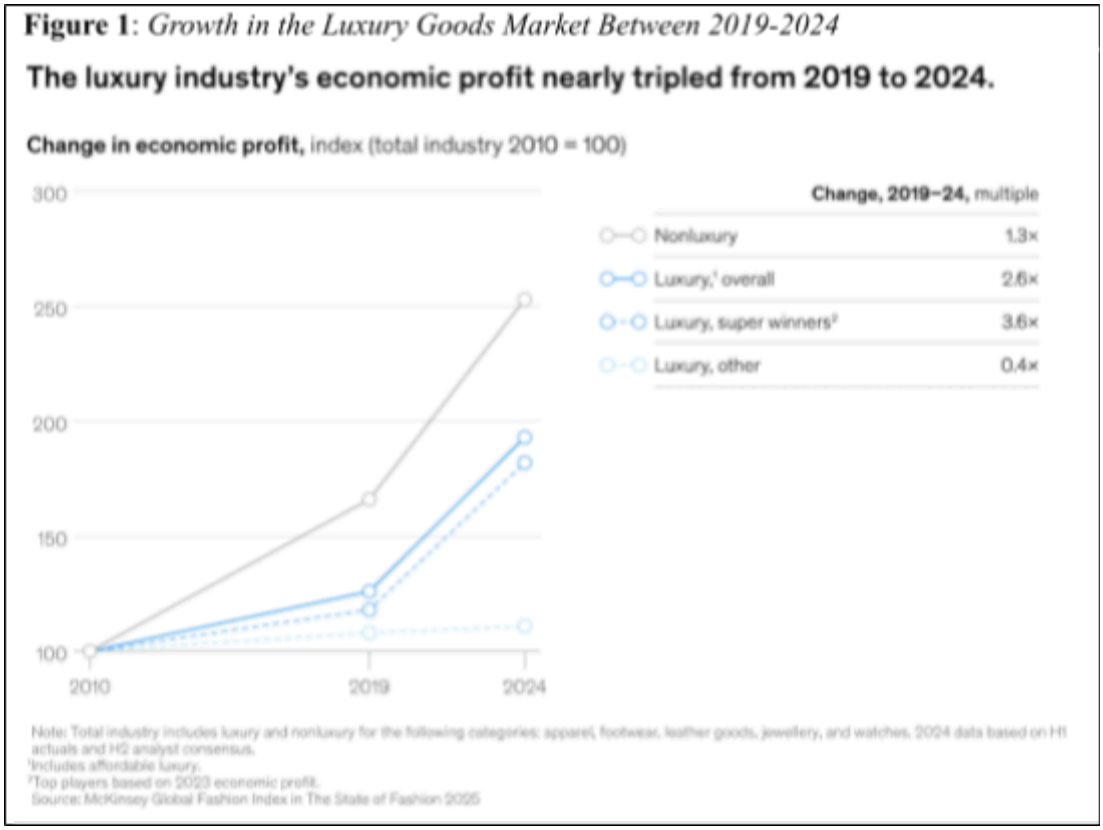
[21] Kimberly Caserta, *Luxury Good Demand* (BA thesis, Morrissey College of Arts and Sciences, Boston College, 2008).
[22] Shinsuke Ikeda, "Luxury and Wealth Accumulation," ISER Discussion Paper no. 0528, (Institute of Social and Economic Research, Osaka University, 2001).
[23] Scott Zimmer, "Veblen's Theory of Conspicuous Consumption," *EBSCO Research Starters*, last modified February 2017, https://www.ebsco.com/research-starters/political-science/veblens-theory-conspicuous-consumption
[24] Anita Balchandani et al., "The State of Luxury: How to Navigate a Slowdown," *McKinsey & Company*, January 13, 2025, https://www.mckinsey.com/industries/retail/our-insights/the-state-of-luxury-how-to-navigate-a-slowdown.
[25] Amrita Dhaliwal, Devinder Pal Singh, and Justin Paul, "The Consumer Behavior of Luxury Goods: A Review and Research Agenda," *Journal of Strategic Marketing* 33, no. 1 (2020): 1–27, https://doi.org/10.1080/0965254X.2020.1758198.
[26] Zimmer, "Veblen's Theory of Conspicuous Consumption."
[27] Thorstein Veblen, *The Theory of the Leisure Class* (New York: Macmillan, 1899).

Figure 1: *Growth in the Luxury Goods Market Between 2019-2024*



In *Theory of the Leisure Class*, Veblen develops his Theory of Conspicuous Consumption, which suggests that outward-facing desires, such as reputation, differentiation, and social validation, drive luxury consumption to convey conformity to social status, norms, or values.[28] Moreover, society is willing to accept this behavior as long as conspicuous consumers are socially conforming, but not boastful about this level of materialism themselves.[29] This shows how social norms drive consumer behavior, and consumers derive confidence and identity from consumption choices.[30] When a consumer buys a Birkin, they self-differentiate from other luxury and non-luxury shoppers by using the highest outward sign of wealth and status. This status differentiation stems from a "Veblen effect" or snob effect, where higher prices create

[28] Dhaliwal et al., "The Consumer Behavior of Luxury Goods," 1-27; Veblen, *The Theory of the Leisure Class*.
[29] Veblen, *The Theory of the Leisure Class*, 120.
[30] Ibid.

higher demand.[31] That is, consumers who heavily value exclusivity, materialism, or status get larger "Veblen effects" and greater increases in utility for consuming luxury goods.[32]

For the individual consumer, conspicuous consumption can be a costly signal of wealth or status.[33] Under costly signaling, expensive luxury goods make a credible signal because poorer consumers cannot afford to send the signal.[34] In line with costly signaling, Nelissen and Meijers find a "brand premium" where people tend to treat a person wearing luxury brands more favorably. This suggests luxury consumption is socially profitable because "displays of luxury qualify as a costly signaling trait."[35] Both costly signaling and pecuniary emulation mean that other consumers will copy luxury consumption patterns to keep up with the trends associated with wealth and status. In *Cavalleri*, ancillary purchases act as a credible and recognizable signal that distinguishes luxury ("socially elite") from non-luxury consumers.

For luxury retailers, scarcity and exclusivity drive the value of luxury goods.[36] Nueno and Quelch outline luxury goods as characteristically possessing a premium handcrafted quality, bearing a recognizable design associated with the owners' vision or country of origin, and having a global reputation, limited distribution, and premium pricing.[37] More specifically, the

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[31] Ibid.; Scott Zimmer, "Veblen's Theory of Conspicuous Consumption."; Appendix A, See Andrew Loo, "Veblen Goods," *Corporate Finance Institute*, accessed December 2025, https://corporatefinanceinstitute.com/resources/economics/veblen-goods/.

[32] Caserta, *Luxury Good Demand*.

[33] R. M. A. Nelissen and P. S. Meijers, "Social Benefits of Luxury Brands as Costly Signals of Wealth and Status," *Evolution and Human Behavior* 32, no. 5 (2011): 343–55, https://doi.org/10.1016/j.evolhumbehav.2010.12.002.

[34] Jose Luis Nueno and John A. Quelch, "The Mass Marketing of Luxury," *Business Horizons* 41, no. 6 (December 1998): 61–68, https://doi.org/10.1016/S0007-6813(98)90023-4.

[35] Nelissen and Meijers, "Social Benefits of Luxury Brands as Costly Signals of Wealth and Status."; Veblen, *The Theory of the Leisure Class*; Zimmer, "Veblen's Theory of Conspicuous Consumption."

[36] Nueno and Quelch, "The Mass Marketing of Luxury."

[37] Ibid.; Several characteristics commonly associated with luxury brands, such as Hermés, include: "Consistent delivery of premium quality across all products in the line, from the most to the least expensive; a heritage of craftsmanship, often stemming from the original designer (Tiffany's, for example, is 160 years old); a recognizable style or design (the savvy consumer does not need to look at the label to know the brand); a limited production run of any item to ensure exclusivity and possibly to generate a customer waiting list; a marketing program that supports, through limited distribution and premium pricing, a market position that combines emotional appeal with product excellence; a global reputation (the brand's world-class excellence is universally recognized); association with a country of origin that has an especially strong reputation as a source of excellence in the relevant product category; an element of uniqueness to each product (the imperfections in each hand-blown Waterford crystal vase

researchers found that luxury brand price markups range from 160% to 320% across 10 to 35 product models.[38]

In the context of "Veblen effects," retailers can damage a product's exclusive image by setting the price too low.[39] This suggests that tying can be an efficient way to maintain exclusivity and consumer loyalty. For Hermés, the high quality, distinctive silhouette, limited quantity, branding premium, and cost savings associated with the Birkin justify its high prices and tying practices as a luxury retailer.[40] Nonetheless, reserving the Birkin for the "most worthy" consumers could be problematic because it strictly benefits the wealthiest consumers.

IV. The Tying-Tied Product Market

Tying occurs when a firm sells one good (the tying product) only when a consumer purchases its other products (the tied, ancillary, or accessory product).[41] Typically, products are complementary, and arrangements can be either contractual, legally bound by contracts, or technological, connected by virtue of the product.[42] In the Hermés case, ties to the Birkin are complementary and technological because there is no option to purchase the bag alone.

The Sherman Antitrust Act and Clayton Act prohibit forming or conspiring to form a monopoly and anticompetitive tying practices in markets.[43] Additionally, the California Cartwright Act forbids coercing consumers into buying another unwanted product.[44] These laws

provide, ironically the assurance of exclusivity); an ability to time design shifts when the category is fashion-intensive; and the personality and values of its creator."
[38] Ibid.
[39] Laurie Simon Bagwell and B. Douglas Bernheim, "Veblen Effects in a Theory of Conspicuous Consumption," *The American Economic Review* 86, no. 3 (1996): 349, http://www.jstor.org/stable/2118201.
[40] Nueno and Quelch, "The Mass Marketing of Luxury."
[41] David S. Evans and Michael Salinger, "Why Do Firms Bundle and Tie? Evidence from Competitive Markets and Implications for Tying Law," *Yale Journal on Regulation* 22, no. 1 (2005).
[42] Erik Hovenkamp and Herbert Hovenkamp, "Tying Arrangements and Antitrust Harm," *Arizona Law Review* 52 (2010): 925, https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1443284.
[43] U.S. Department of Justice, Antitrust Division, "The Antitrust Laws (Antitrust Laws and You)," accessed December 2025, https://www.justice.gov/atr/antitrust-laws-and-you.
[44] Cal. Bus. & Prof. Code § 17200; CACI No. 3421.

suggest that tying can be coercive, restrict consumer choice, and limit competition. As the Department of Justice puts it, "if an illegal tying arrangement is in place, a seller can use its strong market power on a popular product to force customers to buy a second, lesser product."[45]

Under fair, legal, and competitive practices, tying can be an efficient and competitive allocation method that drives goods to consumers with the highest willingness to pay. Tying in competitive markets can be efficient because it reduces costs or improves the quality of goods.[46] Moreover, "The great majority of ties are beneficial or at least benign, measured by welfare standard[s]."[47] Current antitrust laws are limited in the fact that they too broadly define anticompetitive harm and do not consider potential welfare gains. These broad definitions have yielded several judicial challenges in which the courts have narrowed and refined the definition of illegal antitrust and tying practices *per se*.

Since 1914, several court cases have refined and redefined antitrust laws. In 1917, *Motion Picture Patents v. Universal Film* made all anticompetitive tying illegal under patent law standards.[48] In 1947, *International Salt Co. v. U.S.* established the *per se* standard for evaluating practices, which the courts use in most tying cases today.[49] In 1984, *Jefferson Parish v. Hyde* found that a hospital's exclusive contract with one anesthesia group constituted legal tying because the anesthesia company did not have significant market power in the operating room to force consumers to buy unwanted amounts of anesthesia.[50]

IVa. Estimated Production Costs and Consumer Expenditures for a Birkin

Hermés's public financial records were analyzed to estimate the production costs,

[45] U.S. Department of Justice, "The Antitrust Laws."
[46] Evans and Salinger, "Why Do Firms Bundle and Tie?"
[47] Hovenkamp and Hovenkamp, "Tying Arrangements and Antitrust Harm."
[48] *Motion Picture Patents Co. v. Universal Film Mfg. Co.*, 243 U.S. 502, 516 (1917).
[49] *International Salt Co. v. United States,* 332 U.S. 392 (1947).
[50] *Jefferson Parish Hospital District No. 2 v. Hyde*, 466 U.S. 2 (1984).

consumption expenditures, and impact of tying associated with the Birkin bag (see Appendix D).[51] Tables 2 and 3 employed secondary financial analyses to estimate the "minimum plausible threshold" for a standard, leather, 25-inch Birkin to be produced and sold to an ordinary upper middle-class consumer (such as Cavalleri). This standard maintains simplicity and reflects the consumers represented in *Cavalleri*, who demand the Birkin for its status but have little preference for the rarity of leather texture, color, or skew.[52]

Table 2 shows the estimated total consumer expenditures associated with buying a Birkin. Sotheby's, a second-hand luxury retailer, suggests the minimum retail price for a standard Birkin 25 varies by exclusivity level, and the minimum plausible spending on ancillary products is 1:1.[53] Under this assumption, expenditures for the Birkin and total required ancillary products are equal. Additionally, the expected resale price is estimated to be 2.4 times the original sale price, suggesting that a Birkin is a profitable investment for prospective resellers, collectors, or second-hand retailers (see Appendix E).

Table 2: *Expected Consumer Expenditures for a Birkin 25*

Scenario	Birkin 25 Expenditure	Ancillary Expenditures	Total Spending (Birkin + Ancillary)	Expected Resale Price (2.4x)
A: Leather	$12,300	$12,300	$24,600	$29,520
B: Exotic	$50,000	$50,000	$100,000	$120,000
C: Collector	$100,000	$100,000	$200,000	$240,000

Table 3 shows the estimated costs associated with producing a Birkin. When it comes to production costs, financial analyses indicate that, under Hermés's current tying conditions, fixed

[51] Hermés International, "Outstanding Sales and Results in 2023," press release, February 9, 2024.
[52] Vanessa Wat, "Hermés Raises the Birkin Bag Price: What You Need to Know," *Sotheby's*, September 23, 2025, https://www.sothebys.com/en/articles/Hermés-raises-the-birkin-bag-price-what-you-need-to-know
[53] Jasmine Li, "How to Get a Birkin Bag, According to an Hermés Insider," *Fortune*, April 2, 2024, https://fortune.com/2024/04/02/birkin-insider-tips-buying-disciple-brand/.

costs are $800 and the marginal-cost-to-price ratio is approximately 0.15.[54] This is consistent with economists' findings that ratios below 0.25 indicate strong tying potential.[55] These estimated costs are also consistent with the typical characteristics of luxury goods that Nueno and Quelch outlined. In short, Birkin production costs are a fraction of the estimated retail price, reflecting the high quality, brand premium, or limited distribution of luxury goods; these characteristics alone do not prove anticompetitive foreclosure.[56] Furthermore, small fixed costs and a marginal-cost-to-price ratio below 0.25 suggest that tying may be driven by transactional efficiencies, rather than anticompetitive foreclosure.

Table 3: *Expected Production Costs for a Birkin 25*

Scenario	Marginal Costs (15% retail price)	Fixed Cost	Total Costs
A: Leather	$1,845	$800	$2,645
B: Exotic	$7,500	$800	$8,300
C: Collector	$15,000	$800	$15,800

[54] Jacqui Palumbo, "The Hermés Birkin Bag: Everything You Need to Know about the World's Most Coveted Tote," *CNN*, July 18, 2023, https://www.cnn.com/style/Hermés-birkin-bag-origins-cost; Brooke Unger, "The Secret Economics of the Birkin Bag," *1843 (The Economist)*, July 28, 2016, https://www.economist.com/1843/2016/07/28/the-secret-economics-of-the-birkin-bag; Hermés International, "Outstanding Sales and Results in 2023."; Wat, "Hermés Raises the Birkin Bag Price."; Wat, "What Influences an Hermés Birkin Bag Price."; Vanessa Wat, "Complete Guide to Buying a Birkin Bag," *Sotheby's*, October 21, 2025, https://www.sothebys.com/en/articles/complete-guide-to-buying-a-birkin-bag; Under the "minimum plausible threshold" standard, the table reflects a 1:1 spending ratio to "qualify" to purchase a Birkin, See Li, "How to Get a Birkin Bag, According to an Hermés Insider."

[55] Adrien Auclert et al., "New Pricing Models, Same Old Phillips Curves?" *The Quarterly Journal of Economics* 139, no. 1 (2024): 121–86, https://doi.org/10.1093/qje/qjad041.

[56] Unger, "The Secret Economics of the Birkin Bag."; Daysia Tolentino, "Can You Really Buy a Birkin Direct From a Chinese Factory?" *GQ*, April 22, 2025, https://www.gq.com/story/chinese-tiktok-manufacturers-luxury-goods-explainer; Palumbo, "The Hermés Birkin Bag: Everything You Need to Know about the World's Most Coveted Tote."; Hermés International, "Outstanding Sales and Results in 2023."; Because Hermés does not publish the exact costs of producing its Birkin bags, secondary source analysis was used to estimate the production costs. In one report, CNN looked at Hermés's public financial records to estimate marginal production costs at approximately 15% to 20% of retail prices. In another case, Chinese manufacturers claim a $38,000 Birkin bag costs $1,400 each to produce. In another instance, The Economist finds that a basic, standard leather Birkin costs $800 to produce. This model uses the 15% marker under the "minimum plausible threshold" standard. See Unger, "The Secret Economics of the Birkin Bag."; Tolentino, "Can You Really Buy a Birkin Direct From a Chinese Factory?"; Palumbo, "The Hermés Birkin Bag: Everything You Need to Know about the World's Most Coveted Tote."

IVb. A Cost-Based Model of Competitive Bundling and Tying

Two common economic explanations for tying—price discrimination and foreclosure of competition—are limited to firms with market power using ties to reduce competition.[57] Empirical studies and legal cases conclude that tying practices can also be competitive and socially efficient.[58] To understand competitive tying, economists Evans and Salinger analyzed heterogeneous consumer preferences and marginal cost-savings in a cost-based model of tying, which can be used to evaluate Hermés's practices in light of exclusivity preferences and the growing luxury market (see Appendix A).[59]

Evans and Salinger define tying as a special case of bundling in which consumers cannot get the tying product without first buying tied products.[60] Although this reduces consumer choice, competitive tying leads to efficiencies such as cost savings, quality improvements, or supplementing demand in the tied-product market.[61] Thus, Hermés would reduce costs and consumers would get higher-quality products. Table 4 illustrates Hermés's product offerings under "No Tying" and "Bundle + 2 Tying," which is a bundle with ancillary products available separately (see Appendix B). Table 5 combines cost savings and expenditure figures to estimate that the profit for a standard leather Birkin 25 is higher under tying than no tying conditions.

[57] Evans and Salinger, "Why Do Firms Bundle and Tie?"
[58] Hovenkamp and Hovenkamp, "Tying Arrangements and Antitrust Harm."
[59] Evans and Salinger, "Why Do Firms Bundle and Tie?"
[60] Evans and Salinger, "Why Do Firms Bundle and Tie?"
[61] Nueno and Quelch, "The Mass Marketing of Luxury."

Table 5: *Hermes Estimated Profit Under Tying*

	Revenue	**Cost**	**Profit**
No Tying	$24,600	$4,490	$20,110
Bundle + 2 Tying	$24,600	$3,000	$21,600

Combining estimations of expenditures, costs, and demand with the cost-based models findings about marginal cost-savings reveals that Hermés's tying practices are competitive, arising from luxury goods demand and consumer exclusivity preferences, rather than foreclosure of competition. Given high demand for the Birkin, the "Bundle + 2" tying strategy allows Hermés to maximize profit, preserve exclusivity, increase demand for accessories (rather than using coercion), and reduce marginal costs from otherwise marketing the Birkin separately.[62] Thus, Hermés operates in a differentiated, competitive market for elite luxury products.

V. Applying Findings to a Legal Framework

A cost-based model suggests that Hermés's tying practices are exclusivity-driven, competitive, and legal *per se,* establishing: (1) a relevant tying market, (2) insufficient market power, and (3) no competitive harm.[63]

Under the first requirement, *Cavalleri* did not recognize a relevant tying market because the allegations were merely conclusionary.[64] Moreover, the two reports plaintiffs cited simply outlined the standard market for luxury goods and consumer preferences for exclusivity. The cost-based analysis shows, however, that the purchase of a Birkin, conditioned on the purchase of ancillary products, confirms a relevant tying market.

[62] Evans and Salinger, "Why Do Firms Bundle and Tie?"
[63] *Cavalleri et al.*, Case No. 3:24-cv-01707-JD.
[64] Ibid.

Under the second requirement, Hermés has a significant share in the market for elite luxury handbags, but not sufficient power or control over the tying market to coerce consumers into buying accessories. Although the company's handbags constitute a 60% to 75% market share, market dominance does not equate to anticompetitive or coercive conduct, as "mere showing of substantial or even dominant market share alone cannot establish market power sufficient to carry out a predatory scheme."[65]

Cavalleri suggested the Sales Associate Incentive Program made associates leverage the Birkin to coerce consumers into buying unwanted ancillary products. Under a broad legal precedent, *Epic Games v. Apple* (2023) suggests that an "[illegal] tying arrangement affects a not insubstantial volume of commerce in the tied product market."[66] Thus, if leverage qualifies as market power, then the over $12,300 spent on ancillary products counts as a significant volume of commerce tied to the Birkin bag. Despite this, leverage arguments are quite ambiguous given that "a tie cannot create a second 'monopoly' in the tied product unless the latter has no untied uses."[67] In other words, the Birkin must be rendered useless when untied to yield competitive harm in the accessory market. This is untrue in the Hermés case, as consumers primarily desire the Birkin. Instead, ancillary products may act as a mechanism to determine the "most worthy" consumers based on a high willingness to pay and a large "purchase profile."[68]

Under the third requirement, Hermés's lack of power in the tying market is enough to conclude competitive tying practices. As Judge Donato writes, "Hermés [may] reserve the Birkin bag for its highest-paying customers, but that in itself is not an antitrust violation."[69] Nueno and

[65] *Rebel Oil Co., Inc. v. Atlantic Richfield Co.*, 51 F.3d 1421, 1439 (9th Cir. 1995); *Cavalleri et al.*, Case No. 3 3:24-cv-01707-JD.
[66] *Epic Games, Inc. v. Apple, Inc.*, 67 F.4th 946, 996–97 (9th Cir. 2023).
[67] Hovenkamp and Hovenkamp, "Tying Arrangements and Antitrust Harm."
[68] *Cavalleri et al.*, Case No. 3:24-cv-01707-JD.
[69] Ibid.

Quelch similarly claim that luxury goods are intentionally "designed for an exclusive market."[70]

Hermes's market dominance reflects its ability to appeal to consumer preferences for exclusivity and status and the nature of this exclusive market.[71] Under "pecuniary emulation," the Birkin buyers act out of social interest, rather than being coerced, to signal their wealth. Furthermore, exclusivity allows Hermés to profitably distinguish itself from competitors whose business models reflect similar exclusivity-driven practices: Chanel's Classic Flap Bag, Dior's Saddle Bag, or Fendi's Baguette bag.[72]

Along with the three-part *per se* analysis, recent legal and economic analyses have substantially shifted and softened their view of tying practices. In fact, "[courts'] strong disapproval of tying arrangements has substantially diminished."[73] For instance, *Broad. Music v. Columbia Broad* (1979) found that "consequences of labeling market conduct as illegal *per se* may be substantial…only after considerable experience with certain business relationships [should] courts classify them as *per se* violations."[74] In other words, courts must establish consistent, harmful consequences of illegal tying practices. Nevertheless, this level of harm is rare. *Ohio v. American Express* (2018) concluded that "[a] small group of restraints are unreasonable per se because they always or almost always tend to restrict competition."[75] Further, *Brantley v. NBC Universal* (2012) adds that "tying arrangements may promote rather than injure competition."[76]

From an economic view, increased tying occurs in some competition markets.[77] In fact,

[70] Nueno and Quelch, "The Mass Marketing of Luxury."
[71] Thorstein Veblen, *The Theory of the Leisure Class;* R. M. A. Nelissen and P. S. Meijers, "Social Benefits of Luxury Brands as Costly Signals of Wealth and Status," *Evolution and Human Behavior* 32, no. 5 (2011): 343–55, https://doi.org/10.1016/j.evolhumbehav.2010.12.002.
[72] Nueno and Quelch, "The Mass Marketing of Luxury."
[73] *Illinois Tool Works, Inc. v. Independent Ink, Inc.*, 547 U.S. 28, 35 (2006).
[74] *Broad. Music, Inc. v. Columbia Broad. Sys. Inc*., 441 U.S. 1, 9 (1979).
[75] *Ohio v. Am. Express Co.*, 585 U.S. 529, 540 (2018).
[76] *Brantley v. NBC Universal Inc.*, 675 F.3d 1192, 1200 (9th Cir. 2012).
[77] Evans and Salinger, "Why Do Firms Bundle and Tie?"

tying can competitively leverage otherwise unrealized consumer surplus to expand demand for the tying product, thus increasing output and strengthening welfare and competition.[78] Hovenkamp and Hovenkamp find examples where non-foreclosing and non-coercive ties may increase social welfare and surplus relative to the outcome under separate product pricing (see Appendix E).[79]

VI. Preferences for Exclusivity & Wasteful Spending

While Hermes's tying practices are legal and accurately reflect consumers' preferences for exclusivity, several ethical concerns arise from conspicuous consumption. First, selecting the "most worthy" consumers widens the gap between willingness and ability to pay. Second, as Veblen argues, conspicuous consumption is entirely wasteful, socially driven spending. These concerns are best assessed under utilitarian ethics—a form of consequentialism used to assess an action's morality. In short, the most ethical choice is that one that produces the greatest social benefit for the greatest number of people. Utilitarianism is a sound ethical framework because (1) it is most commonly employed in business and economic settings; and (2) it accounts for costs and benefits to all members of society, including corporate interests.[80] Utilitarian ethics can be modeled as the aggregate of utilities across various actors to give the net effect on society.

$$\textit{Net Social Welfare} = U1 + U2 + U3 + U4 \ldots + Un$$

The first ethical concern is that Hermés uses ancillary products to unfairly select the "most worthy" consumers. For Hermes, the Birkin's high quality, limited quantity, and exclusive image justify high prices and ties to ancillary products. Additionally, under utilitarianism, the

[78] Jay Pil Choi, Doh-Shin Jeon, and Michael D. Whinston, "Tying with Network Effects," *MIT Economics Working Paper*, (April 3, 2024).
[79] Hovenkamp and Hovenkamp, "Tying Arrangements and Antitrust Harm."
[80] Ethics Unwrapped, "Utilitarianism," McCombs School of Business, The University of Texas at Austin, accessed December 2025, https://ethicsunwrapped.utexas.edu/glossary/utilitarianism.

Birkin's premier "artisan quality" means that luxury consumers benefit from higher quality products ($U1 > 0$), artisans benefit from higher wages for more intensive labor ($U2 > 0$), and Hermés benefits by charging higher prices and tying products to remain profitable ($U3 > 0$).

Nueno and Quelch indicate that luxury goods by nature are "designed for an exclusive market," which benefits those who can afford luxury goods while neither harming nor benefiting those who cannot.[81] For Hermes, tying is a way to retain this exclusive market. Although individuals may want to buy a Birkin, they are not excluded from the market, harmed by others' luxury consumption, or unable to survive without a Birkin ($U4 = 0$). In this sense, the market for luxury goods is just like any efficient allocation mechanism operating under scarcity, but with added exclusivity preferences. Thus, utilitarianism concludes that Hermés's selection of consumers is a morally optional act because Net Social Welfare is at least zero, depending on how each utility is weighted.

The second ethical concern is that luxury consumption, despite being a preference, is wasteful, unnecessary, and harms one's quality of life. As mentioned, a motive behind luxury consumption is what Veblen calls "pecuniary emulation," where consumers use luxury to exude adherence to a status or social norms.[82] In this way, luxury goods act as a costly signal to one's social status, where affluent consumers gain access to high society ($U1 > 0$) while lower-class consumers do not gain or lose anything ($U2 = 0$).[83]

Although the Net Social Welfare is positive, Veblen suggests that conspicuous consumption is an inherently wasteful and socially constructed phenomenon. In *The Theory of the Leisure Class*, Veblen writes:

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[81] Nueno and Quelch, "The Mass Marketing of Luxury."
[82] Veblen, *The Theory of the Leisure Class*.
[83] The utilitarian analysis is only looking at the direct effects of luxury consumption on upper-class and lower-class consumers. It does not account for the potential indirect or secondary effects of luxury consumption, such as changes in social behavior, political values, or living situation.

> "Many items of customary expenditure prove on analysis to be almost purely wasteful, and they are therefore honorific only, but after they have once been incorporated into the scale of decent consumption, and so have become an integral part of one's scheme of life, it is quite as hard to give up these as it is to give up many items that conduce directly to one's physical comfort, or even that may be necessary to life and health."[84]

That is, Veblen believes that conspicuous consumption is wasteful because it involves using time, money, labor, and resources on goods that no one has a need for. Rather, its entire value is contingent upon social beliefs about luxury and the status associated with it. Soon, these products may even become customary for living as though it were a necessity. Socially, the "competitive quality"—which can manifest as "pecuniary emulation"—can create significant rifts and hostility in relationships. Psychologically, luxury can force consumers into a so-called "rat race" of working harder, longer hours to sustain this unnecessary luxury consumption. Humans can become indebted to status, sacrificing well-being in pursuit of social status.

Under utilitarianism, luxury consumption is morally optional because it increases utility for buyers at no direct cost to others, and relatively small indirect social and psychological costs. Opting not to consume may be "kinder" to society's psychological well-being, but not obligatory. Although conspicuous consumption is ethical, what Veblen is trying to point out is whether or not this is fulfilling and meaningful to life, or merely an artificial, trivial social hierarchy.

VII. Conclusion

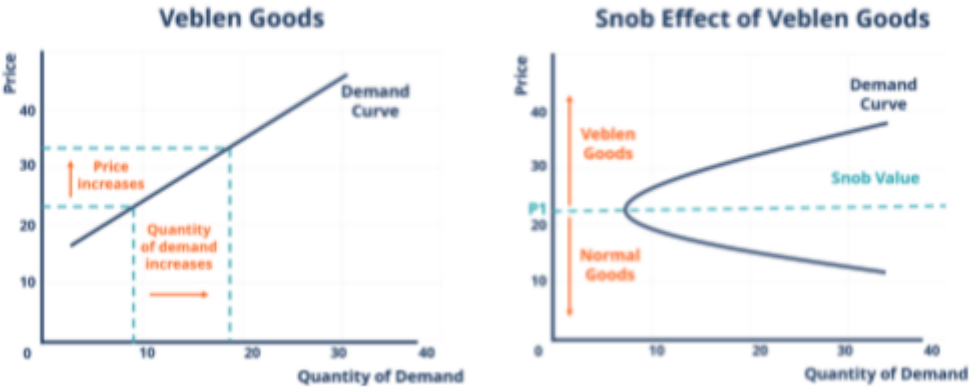
[84] Veblen, *The Theory of the Leisure Class*, 86.

When analyzed through the lens of the luxury goods market, the tied product market, and a cost-based analysis of tying, Hermés's practices do not violate antitrust laws; instead, they reflect consumer preferences for exclusivity and the nature of luxury demand. Judge Donato's legal rationale in the *Cavalleri v. Hermés* supports this conclusion. An economic cost-based analysis shows that competitive tying allows Hermés to remain exclusive, in-demand, and profitable. A legal analysis concludes that Hermés intentionally reserves the Birkin for consumers who value it the most, reflecting a naturally exclusive luxury goods market rather than coercion. A utilitarian ethical analysis suggests that luxury consumption is morally optional because it benefits consumers, with minimal, indirect, and hard-to-measure psychological impacts on society. Overall, the three analyses indicate that Hermés's lack of market power and anticompetitive harm make its tying practices legal and (optionally) moral.

Appendix A

Veblen Goods and Effects[85]

Figure 2: *Graph of Veblen Good Demand and "Veblen Effects"*



While the law of demand is a *ceteris paribus* statement, holding everything constant except price and quantity, luxury goods are unique in that they have a positive relationship between price and quantity, along with a highly negative network externality. The positive relation between price and quantity suggests that Veblen goods are inconsistent with the expected circumstances under the law of demand.

Appendix B

[85] Andrew Loo, "Veblen Goods," *Corporate Finance Institute*, accessed December 2025, https://corporatefinanceinstitute.com/resources/economics/veblen-goods/; Velblen, *The Theory of the Leisure Class*.

Cost-Based Model of Bundling and Tying[86]

Appendix B applies the cost-based model of bundling and tying developed by economists David Evans and Michael Salinger to assess Hermés's tying practices in the luxury goods market.[87] The paper looks at the marginal cost savings associated with tying to determine whether Hermés's conduct reflects anticompetitive, illegal tying or competitive, legal tying based on consumer preferences, cost savings, and luxury demand. As seen in Table 4, this paper focuses on "No Tying," which is what *would occur* without tying, and "Bundle + 2," a mixed strategy, that best reflects *what does occur* under tying, in which the bundle is offered along with the tied product sold separately. "Bundle + 2 Tying" mechanism was taken from Evan and Salinger's cost-based model because it most accurately represents Hermés's situation in which consumers can purchase either ancillary products alone or the bundle with ancillary products and the Birkin, but never the Birkin alone.

Table 4: *Hermes Product Availability Under Difference Bundling Scenarios*

	Good 1 Only	**Good 2 Only**	**Goods 1 & 2**
No Tying	Yes	Yes	No
Bundle + 2 Tying	No	Yes	Yes

Good 1 is the tying product, focusing on a standard leather Birkin 25. Good 2 is the tied product, or Hermés accessories. Goods 1 & 2 are the tied bundle. The model sets the marginal cost of producing the Birkin, ancillary products, and the tied bundle as *ch*, *ca*, *cb* and fixed costs as *F*. Based on findings in Table 1, $F = 800$ and $ch = ca = 1{,}845$ which reflects the estimated 15% marginal-cost-to-price ratio and 1:1 ancillary spending ratio, for the "minimum plausible

[86] Evans and Salinger, "Why Do Firms Bundle and Tie?"
[87] Ibid.

threshold" consumer.

Evans and Salinger note that under competitive tying, firms benefit from marginal cost savings (*cb*), which is estimated as *cb* = 3,000 in the Hermés case for simplicity and alignment with the "minimum plausible threshold."[88]

$$cb = c1 + c2 - cost\ saving$$

$$cb = 1{,}845 + 1{,}845 + 800 - 1{,}490$$

$$cb = 3{,}000$$

Finally, the estimates from the cost-based model combined with secondary analyses about production costs and consumption expenditures can be used to estimate Hermés's profitability for a standard, leather Birkin 25 under no tying and tying conditions (see Table 5). Revenue inputs come from expenditure estimates, while cost inputs come from estimated total costs and cost savings in the cost-based model.[89] The findings in the model suggest that profit under no tying is approximately $20,110 while profits under tying are approximately $22,645. These findings indicate that the marginal cost savings associated with tying are significant as they can make production more efficient and Hermes more profitable in the elite luxury goods market.[90]

No Tying for Scenario A:

$$\pi = [(CEh + CEa) - (ch + ca + F)$$

$$\pi = [(12{,}300) + (12{,}300) - (1{,}845 + 1{,}845 + 800)]$$

$$\pi = [24{,}600 - 4{,}490]$$

$$\pi = \$20{,}110$$

[88] Ibid.
[89] Ibid.
[90] Ibid.

Bundle + 2 Tying for Scenario A:

$$\pi = [(CEh + CEa) - cb]$$

$$\pi = [(12{,}300) + (12{,}300) - (3{,}000)]$$

$$\pi = [24{,}600 - 3{,}000]$$

$$\pi = \$21{,}600$$

Table 5: *Hermes Estimated Profit Under Tying*

	Revenue	**Cost**	**Profit**
No Tying	$24,600	$4,490	$20,110
Bundle + 2 Tying	$24,600	$3,000	$21,600

Appendix C

Birkin Pricing Characteristics and History[91]

Birkin Bag Pricing Key Takeaways

Sales Highlight	**Sotheby's has sold nearly $100 million** in Birkin bags since **2021**, underscoring their global demand and status as the ultimate symbol of collectible luxury.
Condition	Store fresh or pristine Birkins command the highest prices; **visible wear can reduce value by 30%+**.
Size	Smaller sizes like **Birkin 25 are most in-demand** and often pricier than larger sizes like 35 or 40.
Material	Leather Birkins are most common; **exotic skins (like crocodile) fetch much higher prices**.
Color	**Neutrals** and **pastels** drive the **highest demand**; bright colors typically sell for less.
Age	Newer bags with **recent date stamps are more valuable**; older bags often sell at lower prices.
Style	**Limited editions** like the Faubourg or Picnic often **peak early** stabilize after 12 months.
Price Range	Leather Birkins range from **$10,000 to $35,000+**; exotic Birkins can reach **$250,000+**.
Collector Appeal	**Scarcity**, **craftsmanship**, and **exclusivity** drive demand.
Provenance	Bags linked to notable owners—such as Jane Birkin's original prototype, which sold for **$10.1M in July 2025**—can achieve record-breaking premiums at auction.

Birkin 25 Price History

Year	USD	Change	Euro	Change
2016	$8,400	0.0%	€5,900	0.0%
2019	$8,850	+4.8%	€6,600	+11.9%
2020	$8,850	0.0%	€6,800	+3.0%
2021	$8,850	0.0%	€6,800	0.0%
2022	$10,100	+2.5%	€7,400	+8.8%
2023	$10,400	+3.0%	€8,050	+8.8%
2024	$11,400	+9.6%	€8,600	+6.8%
2025	$12,100	+6.1%	€8,950	+4.1%
May 2025 (U.S. Only)	$12,700	+5.0%	—	—

BIRKIN 25 PRICE TABLE

The smallest Birkin bag, the Birkin 25 has increased to $12,700 for a Togo leather bag at Hermès boutiques in the United States, following a second U.S-only price increase in May 2025 due to newly imposed tariffs . While the price of the Birkin 25 remained flat from 2019 to 2021, it increased in 2019 from $9,400 in 2016. The price for Birkin 25 in Togo leather in Europe is now €8,950 , up from €5,900 in 2016. While the price increase in Euro was less than the increase in the U.S., it is still cheaper to buy a Birkin 25 in Europe versus the United States. While some brands try to normalize prices globally Hermès does not follow this practice.

Hermès Birkin Bag Price Increase 2025 Key Takeaways

Birkin Bag Price Increase in 2025	U.S. prices rose **4.4% to 6.4%** in May 2025 due to new tariffs; Europe saw smaller 4.3% hikes.
Factors Driving Price Increases	**Tariffs, limited production, brand prestige, currency fluctuations.**
Birkin 25 Price 2025	**$12,700 (U.S.)** vs. €8,950 (Europe)
Birkin 30 Price 2025	**$13,900 (U.S.)** vs. €9,800 (Europe)
Secondary Market Impact	**Secondary prices average ~2.4x retail**; may rise gradually following tarrif-driven retail increases.
Collector Appeal	High demand persists due to **exclusivity, craftsmanship,** and **rarity.**

Sotheby's, an international luxury retailer, offers a comprehensive analysis of the factors that influence the price of a Birkin bag. Vanessa Wat, Deputy Director and Head of Sales at Sotheby's, explains how condition, size, material, color, age, style, and collector's appeal all impact the pricing of Birkin bags.

[91] Wat, "What Influences an Hermés Birkin Bag Price."; Wat, "Complete Guide to Buying a Birkin Bag."

Appendix D

Hermés Consolidated Financial Statements[92]

CONSOLIDATED BALANCE SHEET

ASSETS

In millions of euros	31/12/2023	31/12/2022
Goodwill	72	-
Intangible assets	225	213
Right-of-use assets	1,716	1,582
Property, plant and equipment	2,340	2,007
Investment property	7	8
Financial assets	1,141	1,109
Investments in associates	200	54
Loans and deposits	70	65
Deferred tax assets	631	555
Other non-current assets	37	39
Non-current assets	**6,438**	**5,630**
Inventories and work-in-progress	2,414	1,779
Trade and other receivables	431	383
Current tax receivables	51	19
Other current assets	300	263
Financial derivatives	188	160
Cash and cash equivalents	10,625	9,225
Current assets	**14,008**	**11,828**
TOTAL ASSETS	**20,447**	**17,459**

LIABILITIES

In millions of euros	31/12/2023	31/12/2022
Share capital	54	54
Share premium	50	50
Treasury shares	(698)	(674)
Reserves	10,744	8,795
Foreign currency adjustments	189	303
Revaluation adjustments	553	546
Net income attributable to owners of the parent	4,311	3,367
Equity attributable to owners of the parent	**15,201**	**12,440**
Non-controlling interests	2	16
Equity	**15,203**	**12,457**
Borrowings and financial liabilities due in more than one year	50	35
Lease liabilities due in more than one year	1,720	1,629
Non-current provisions	31	30
Post-employment and other employee benefit obligations due in more than one year	151	181
Deferred tax liabilities	2	20
Other non-current liabilities	106	103
Non-current liabilities	**2,060**	**1,998**
Borrowings and financial liabilities due in less than one year	1	2
Lease liabilities due in less than one year	289	268
Current provisions	134	133
Post-employment and other employee benefit obligations due in less than one year	16	15
Trade and other payables	880	777
Financial derivatives	45	74
Current tax liabilities	586	496
Other current liabilities	1,233	1,239
Current liabilities	**3,183**	**3,004**
TOTAL EQUITY AND LIABILITIES	**20,447**	**17,459**

[92] Hermés International, "Outstanding Sales and Results in 2023."

CONSOLIDATED INCOME STATEMENT

In millions of euros	2023	2022
Revenue	**13,427**	**11,602**
Cost of sales	(3,720)	(3,389)
Gross margin	**9,708**	**8,213**
Sales and administrative expenses	(3,169)	(2,680)
Other income and expenses	(889)	(836)
Recurring operating income	**5,650**	**4,697**
Other non-recurring income and expenses	-	-
Operating income	**5,650**	**4,697**
Net financial income	190	(62)
Net income before tax	**5,840**	**4,635**
Income tax	(1,623)	(1,305)
Net income from associates	105	50
CONSOLIDATED NET INCOME	4,322	3,380
Non-controlling interests	(12)	(13)
NET INCOME ATTRIBUTABLE TO OWNERS OF THE PARENT	4,311	3,367
Basic earnings per share *(in euros)*	41.19	32.20
Diluted earnings per share *(in euros)*	41.12	32.09

While Hermés does not publicly disclose the exact cost or price data for the Birkin, these broader public financial statements were useful to understand the firm's general sources of revenue and costs.

Appendix E

Non-coercive and Non-foreclosing Ties Improving Social Welfare[93]

Table 2
Willingness to Pay

	Alpha	Beta
Customer 1	10	5
Customer 2	3	11

In this case, the optimal strategy for the dominant firm is to package the two products together at a price of 14 and sell both products to both customers. The seller's surplus is 28. Customer 1's surplus is 1; Customer 2's surplus is 0.

Now suppose that tying and bundled discounting are forbidden, which means that the seller must set a price for Alpha and Beta individually. One choice would be for the seller to set a price of 10 for Alpha and 11 for Beta. In that case only Customer 1 would purchase Alpha and only Customer 2 would purchase Beta. So the seller's surplus would be 21; and the customers' surplus would be 0.

Alternatively, the seller could charge a price of 3 for Alpha and 5 for Beta. In this case, both customers would purchase both products. The seller's surplus would be 16. Customer 1 would have a consumer surplus of 7 and Customer 2 would have a consumer surplus of 6. Total consumer surplus would be 13.

[93] Hovenkamp and Hovenkamp, "Tying Arrangements and Antitrust Harm."

Bellarmine Law Society Review

Volume XVI | Issue I Article III

Reconstructive Memory and Eyewitness Error: Cognitive Neuroscience Insights for Police Investigative Practice

Zoe Wen
Georgetown University, kw863@georgetown.edu

RECONSTRUCTIVE MEMORY AND EYEWITNESS ERROR: COGNITIVE NEUROSCIENCE INSIGHTS FOR POLICE INVESTIGATIVE PRACTICE

ZOE WEN[1]

Abstract: The general public and the legal system often assume that human memory is mostly accurate. However, decades of psychology research reveal that eyewitness memory, which is often critical during criminal investigations, can be easily contaminated after the event occurs and is far from infallible. Instead, memory retrieval is a reconstructive process influenced by neural activity in the hippocampus, amygdala, and the prefrontal cortex, rendering it vulnerable to suggestion, stress, and other sources of bias during police interviews. Incorporating scientific insights into the vulnerabilities of eyewitness testimony can help minimize the harmful and often fatal consequences of mistaken eyewitness identification in wrongful convictions and meaningfully advance both procedural and substantive due process. This article explores (1) the neural mechanisms of memory, including an overview of memory encoding, storage, and retrieval, as well as the roles the hippocampus, prefrontal cortex, and amygdala play; and (2) how and when false memories tend to form, focusing on the misinformation effect, stereotypic memory errors, the weapon focus effect, and stress. The article concludes by providing evidence-based recommendations, such as the cognitive interview, that reduce memory distortion and improve the reliability of eyewitness testimony.

Despite advancements in forensic techniques, eyewitnesses remain central to criminal investigations and prosecutions. They provide vital information that guides police inquiries and influences judgments about the defendant's guilt.[2] The general public and the legal system often

[1] Zoe Wen graduated from Georgetown University in 2026 with a Bachelor of Arts in Government, a Bachelor of Arts in Psychology, and a minor in Statistics. Throughout undergrad, Zoe explored the intersection of policy, advocacy, and empirical research through academic coursework, extracurricular commitments, and internships at nonprofits. For instance, her honors thesis compared the narrative content and structure of civil protection order petitions written with and without legal counsel to better understand the justice gap and the barriers pro se parties face when navigating the legal system. She will attend Harvard Law School in the upcoming fall, where she hopes to continue this multidisciplinary engagement with justice and equity, immerse herself in public interest law, and use holistic and client-centered representation to help make the legal system more accessible and equitable for all.

[2] Michel Ginet and Jean Py, "A Technique for Enhancing Memory in Eyewitness Testimonies for Use by Police Officers and Judicial Officials: The Cognitive Interview," *Le Travail Humain* 64, no. 2 (2001): 173–91.

assume that human memory is mostly accurate, particularly when the witness appears confident in their recollections.[3] However, memory research has consistently shown that memory is far from immune to mistakes and biases. Instead, eyewitness memory can be contaminated, as with all other forms of forensic evidence.[4] Notably, the U.S. Supreme Court's standard for determining whether a suggestive eyewitness identification poses a "substantial likelihood of irreparable misidentification" dates back to 1977.[5] This judicial failure to incorporate up-to-date scientific understandings of the fallibility of memory has significant and often deadly consequences. As of January 2020, there have been 375 documented DNA exonerations in the U.S.,[6] and mistaken eyewitness identification played a role in 75% of those cases.[7] These errors are not simply procedural failures. They reflect the fundamental nature of human memory, which is a reconstructive process shaped by hippocampal-prefrontal interactions and contextual influences, making it vulnerable to distortion from stress, attentional narrowing, and post-event suggestion during both encoding and retrieval. Because high-arousal memories of crime are especially susceptible to these biases, the criminal justice system must ground investigative practices in cognitive neuroscience and adopt techniques such as the cognitive interview to improve the reliability of eyewitness identifications and reduce wrongful convictions.

Far from being a passive recorder of past events, human memory is a flexible process that integrates new memories into existing networks of knowledge. Beyond attentional biases and situational factors that influence how information is initially encoded, the process of

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[3] Jessica W. Lacy and Craig E. L. Stark, "The Neuroscience of Memory: Implications for the Courtroom," *Nature Reviews Neuroscience* 14, no. 9 (2013): 649–58.
[4] Laura Mickes, Benjamin M. Wilson, and John T. Wixted, "The Cognitive Science of Eyewitness Memory," *Trends in Cognitive Sciences* (2025).
[5] Gary L. Wells and Deah S. Quinlivan, "Suggestive Eyewitness Identification Procedures and the Supreme Court's Reliability Test in Light of Eyewitness Science: 30 Years Later," *Law and Human Behavior* 33, no. 1 (2009): 1–24.
[6] Innocence Project, "Research Resources," accessed November 23, 2025, https://innocenceproject.org/research-resources/.
[7] Lacy and Stark, "Neuroscience of Memory."

reconsolidation during retrieval can modify earlier neural representations, producing false or incomplete recollections.[8] Central to this reconstructive process is the dynamic interaction between the hippocampus and prefrontal cortex. During retrieval, the prefrontal cortex guides the selection of memories most relevant to the current context, while the hippocampus retrieves associated details and activates the most fitting schema.[9] Thus, when an eyewitness recalls the experience of a crime, the present context and the retrieval cues supplied by law enforcement can become integrated with the original memory. Because the retrieval process automatically activates relevant schemas, eyewitnesses may unknowingly blend past perceptions with current expectations, reflecting a core function of human memory: using prior information to guide present behavior.[10] This automatic retrieval of related memories yields significant evolutionary benefits in everyday life, as knowledge about how events usually unfold can fill in missing details regarding what is most likely to happen.[11] However, in the context of eyewitness testimony, this susceptibility to false memory formation is problematic, particularly when the legal system presumes that confident, detailed recollections of the past are always reliable.[12]

Building on this understanding, decades of neuroscience and psychological research have demonstrated through controlled laboratory experiments that individuals often recall events they never actually experienced. The classic Deese-Roediger-McDermott paradigm tasks participants with remembering a list of semantically related words and tests their memory with either a recall or recognition test. The list centers on a missing word. For example, a list consisting of bed,

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[8] Andre G. Lentoor, "Cognitive and Neural Mechanisms Underlying False Memories: Misinformation, Distortion, or Erroneous Configuration?" *AIMS Neuroscience* 10, no. 3 (2023): 255–72.
[9] Alison R. Preston and Howard Eichenbaum, "Interplay of Hippocampus and Prefrontal Cortex in Memory," *Current Biology* 23, no. 17 (2013): R764–R73.
[10] Lacy and Stark, "Neuroscience of Memory."
[11] Selin Ikier, Can Dönerkayalı, Özlem S. Halıcı, Zeynep A. Kaymak Gülseren, Hande Göksal, and Burak Akbaş, "When Is Memory More Reliable? Scientific Findings, Theories, and Myths," *Applied Neuropsychology: Adult* 31, no. 1 (2024): 77–94.
[12] Lacy and Stark, "Neuroscience of Memory."

dream, nightmare, and night revolves around the related but excluded word "sleep." Across laboratory experiments, participants frequently report remembering related but missing critical words, thus retrieving a false memory.[13]

Elizabeth Loftus's pioneering work on eyewitness suggestibility in the 1970s extended these laboratory findings to real-world contexts, providing ecologically valid evidence that subtle post-event misinformation can induce false memories. In this research paradigm, after participants watch a visual sequence depicting a forensically relevant event, such as a traffic accident or theft incident, the researchers ask them about the event they just witnessed. The key manipulation here is the wording of the questions themselves. Comparisons of participants' subsequent eyewitness reports reveal that suggestive interview questions can generate significant errors in memory accuracy. One of Loftus's original studies concluded that subtle differences in word choice, such as using "smashed" instead of "hit" when asking participants how fast two vehicles were going during a video of a car accident, influenced participants' estimates of the cars' speeds and whether they had seen broken glass.[14] Taken together, these experiments show that contextual circumstances during encoding and retrieval powerfully reshape memory, systematically skewing people's reports of past events. The implications for eyewitness testimony are even more profound, as witnessing a crime typically involves intense emotional arousal and divided attention. In the aftermath of such a traumatic event, witnesses must recall both central and peripheral details that they may never have fully encoded, making their recollections especially susceptible to distortion.

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[13] Stephan Kuehnel, Matthias Mertens, Felix G. Woermann, and Hans J. Markowitsch, "Brain Activations during Correct and False Recognitions of Visual Stimuli: Implications for Eyewitness Decisions—An fMRI Study Using a Film Paradigm," *Brain Imaging and Behavior* 2, no. 3 (2008): 163–76; Andre G. Lentoor, "Cognitive and Neural Mechanisms Underlying False Memories: Misinformation, Distortion, or Erroneous Configuration?" *AIMS Neuroscience* 10, no. 3 (2023): 255–72.

[14] Maria S. Zaragoza, Robert F. Belli, and Kimberly E. Payment, "Misinformation Effects and the Suggestibility of Eyewitness Memory," in *Do Justice and Let the Sky Fall* (London: Psychology Press, 2013), 35–63.

To explain why such memory errors consistently occur, researchers have converged on two dominant frameworks: the Fuzzy-Trace Theory and the Source Monitoring Framework. The Fuzzy-Trace theory distinguishes between two types of memory traces that are often retrieved simultaneously but differ in the amount of detail contained. Verbatim traces include concrete details of the experience, and people forget them more quickly. Gist traces, on the other hand, consist of the individual's interpretation and summary of the event.[15] The recall of verbatim details usually suppresses inaccurate recollections. However, when detailed information is missing or when gist traces are especially salient due to other contextual factors, people may misinterpret a vivid but fake memory as if it had been experienced.[16] This explanation aligns with the brain's reliance on schemas to organize knowledge, as people are more prone to false memory formation when presented with information consistent with preexisting schemas.[17] Moreover, because recollection is a reconstructive process, memories become less episodic and more semantic over time. As the information is repeatedly retrieved and re-encoded under various conditions, the memories become broader and more generalized.[18] Thus, over time, fuzzy traces of past events can misdirect memory, and the neural resources required to distinguish between genuinely experienced and merely familiar information may not always be available, especially under conditions of high cognitive load or stress.[19]

Building on the insights of the Fuzzy-Trace Theory, the Source Monitoring Framework offers a complementary explanation of false memories, focusing on failures to identify the origins of remembered details. Although memories from different sources typically differ in perceptual, semantic, and affective content, these cues can become blurred during retrieval.

[15] Ikier et al., "When Is Memory More Reliable?"
[16] Lentoor, "Cognitive and Neural Mechanisms Underlying False Memories."
[17] Ikier et al., "When Is Memory More Reliable?"
[18] Lacy and Stark, "Neuroscience of Memory."
[19] Ikier et al., "When Is Memory More Reliable?"; Kuehnel et al., "Brain Activations during Correct and False Recognitions."

When individuals misattribute internally generated information or details encountered after the event to the original experience, false memories emerge.[20] This misattribution is especially likely in eyewitness testimony, as there is substantial overlap between the witnessed event and recollection during the police interview. When answering questions about what they saw, witnesses actively retrieve and reconstruct the original event in their mind.[21] If suggestive questions unintentionally introduce misinformation during the interview, the witness may misattribute that post-event misinformation to their original memory. Once reconsolidated into the neural representation of the witnessed event through long-term potentiation, this may lead to misrepresentations of the past, particularly for peripheral details that the witness was only exogenously attending to. Moreover, schema-driven source misattribution errors compound this effect, where people increasingly rely on group stereotypes as their memories fade.[22] Ultimately, both the Fuzzy-Trace Theory and the Source Monitoring Framework highlight why leaning on preexisting expectations about how the world tends to operate can contribute to false memory formation in the context of eyewitness testimony.

Beyond documenting the prevalence of false memories, researchers have increasingly focused on specific contextual and cognitive conditions that render eyewitness memories vulnerable to distortion. Pioneered by Loftus, one of the most well-documented sources of memory bias is the misinformation effect, where exposure to misleading post-event information leads eyewitnesses to report details they never encountered.[23] Although disagreements remain about whether this effect is due to destructive updating of the underlying memory or retrieval

[20] D. Stephen Lindsay, "Autobiographical Memory, Eyewitness Reports, and Public Policy," *Canadian Psychology / Psychologie Canadienne* 48, no. 2 (2007): 57–66; Zaragoza, Belli, and Payment, "Misinformation Effects."
[21] Zaragoza, Belli, and Payment, "Misinformation Effects."
[22] Heather M. Kleider, Kathy Pezdek, Stephen D. Goldinger, and Aaron Kirk, "Schema-Driven Source Misattribution Errors: Remembering the Expected from a Witnessed Event," *Applied Cognitive Psychology* 22, no. 1 (2008): 1–20.
[23] Zaragoza, Belli, and Payment, "Misinformation Effects."

failure,[24] the subtle nature of misinformation is alarming when applied to real-life witness testimony, as slight variations in the wording of a question can significantly affect recall accuracy.[25]

To investigate the neural mechanisms underlying the misinformation effect, neuroimaging studies have examined how patterns of brain activity differ during the retrieval of true and false memories. For example, a 2010 functional magnetic resonance imaging (fMRI) study presented participants with photographs of actors performing routine everyday activities. During a subsequent misinformation phase, participants viewed either critical items containing subtle alterations to the original scenes or control items that matched the initial photographs. A day later, participants completed an item memory recognition test and a conflict test, where they indicated whether they noticed any discrepancy between the initial photo and the written description. The behavioral results align with the misinformation effect. When the written descriptions conflicted with the photograph, participants chose the misinformation version on 33% of the trials. fMRI data indicate that ventral visual areas are more active during the retrieval of subsequent true memories than false memories, suggesting that accurate recall is associated with greater reactivation of the sensory cortex. Thus, strong encoding of specific details of an event may minimize the formation of false memories.[26] Two limitations of this experiment are its small sample size of eighteen participants and the use of non-forensic stimuli. However, these neuroimaging results provide valuable insights into how distinguishing between conflicting information about past events requires additional neural resources and how weak encoding of

[24] Ibid.
[25] Lacy and Stark, "Neuroscience of Memory."
[26] Crystal L. Baym and Benjamin D. Gonsalves, "Comparison of Neural Activity That Leads to True Memories, False Memories, and Forgetting: An fMRI Study of the Misinformation Effect," *Cognitive, Affective, & Behavioral Neuroscience* 10, no. 3 (2010): 339–48.

specific object features during an event renders that representation vulnerable to false memories.[27]

Importantly, eyewitness memory can be systematically biased even in the absence of explicit post-event misinformation. The contextual model of eyewitness identification explains how the type of crime committed may also influence memory accuracy. The perpetrator's social identities, including race and gender, may activate specific stereotypes that push eyewitnesses to encode prototypical facial features preferentially. This enhanced encoding will then make those prototypical features more accessible during retrieval.[28] Kleider et al.'s 2012 experiment powerfully illustrates this preference for stereotype-consistent information. Participants viewed a series of images of Black male faces, then they rated how believable each would be as an actor auditioning for the role of artist, teacher, or drug dealer. After a twenty-minute distraction task, participants identified each actor's role from the beginning. Notably, faces that were scored higher on perceived Black stereotypicality were more likely to be correctly recategorized as a drug dealer compared to the artist or teacher labels. Yet, there was no significant difference in the recategorization accuracy of stereotypical faces for any other categories. These findings demonstrate how the stereotypical association of African American males with criminality serves as a memory cue that people default to when their memory of an individual falls short.[29] Although not situated in a forensic context, this experiment illustrates that memory encoding and retrieval do not happen in a vacuum. Instead, schemas provide a backdrop of related knowledge, and new encounters become integrated with previously acquired information.[30] As memories of

[27] Ibid.; Kuehnel et al., "Brain Activations during Correct and False Recognitions."
[28] Danny Osborne and Paul G. Davies, "Crime Type, Perceived Stereotypicality, and Memory Biases: A Contextual Model of Eyewitness Identification," *Applied Cognitive Psychology* 28, no. 3 (2014): 392–402.
[29] Heather M. Kleider, Sarah E. Cavrak, and Lauren R. Knuycky, "Looking Like a Criminal: Stereotypical Black Facial Features Promote Face Source Memory Error," *Memory & Cognition* 40, no. 8 (2012): 1200–13.
[30] Alison R. Preston and Howard Eichenbaum, "Interplay of Hippocampus and Prefrontal Cortex in Memory," *Current Biology* 23, no. 17 (2013): R764–R73.

details of a witnessed crime fade, people become increasingly reliant on schematic processing, rendering them particularly susceptible to stereotypic memory biases.[31]

In addition to retrieval failures, eyewitness errors often originate during the initial experience of an event, as attention and emotional arousal powerfully shape what information is encoded.[32] One example of conflicting attentional priorities is the weapon focus effect, which refers to the correlation between the presence of a weapon and reduced memory accuracy. A meta-analysis of 28 studies concludes that the presence of weapons negatively affects feature and identification accuracy under experimentally controlled conditions.[33] The most likely explanation for this reduced memory performance is the unusual item hypothesis, which suggests that because weapons are unexpected in most contexts, additional attentional resources are required for resolving the apparent conflict between the weapon and one's schema for that environment.[34] The heightened attention to the unexpected stimulus weakens the witness's processing of peripheral details, such as the perpetrator's clothing, impairing their ability to identify the culprit.

Carlson et al. (2017) affirm this attentional narrowing effect. Using a mock robbery video, researchers compared lineup identification accuracy across three conditions: visible weapon, concealed weapon, and no weapon. Demonstratively, those in the visible weapon condition produced significantly fewer correct identifications than both the concealed weapon and no weapon conditions. Further analysis revealed that participants' ability to differentiate between the perpetrator and lookalike suspects was significantly lower when a gun was present.[35]

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[31] Heather M. Kleider, Kathy Pezdek, Stephen D. Goldinger, and Aaron Kirk, "Schema-Driven Source Misattribution Errors: Remembering the Expected from a Witnessed Event," *Applied Cognitive Psychology* 22, no. 1 (2008): 1–20.
[32] Ikier et al., "When Is Memory More Reliable?"
[33] Jonathan M. Fawcett, Emma J. Russell, Kristen A. Peace, and James Christie, "Of Guns and Geese: A Meta-Analytic Review of the 'Weapon Focus' Literature," *Psychology, Crime & Law* 19, no. 1 (2013): 35–66.
[34] Curt A. Carlson, Jessica L. Dias, Daniel R. Weatherford, and Melissa A. Carlson, "An Investigation of the Weapon Focus Effect and the Confidence–Accuracy Relationship for Eyewitness Identification," *Journal of Applied Research in Memory and Cognition* 6, no. 1 (2017): 82–92.
[35] Carlson et al., "Weapon Focus Effect and the Confidence–Accuracy Relationship."

The attentional principles guiding how the human brain boosts certain representations account for the enhanced resources dedicated to salient and unusual stimuli, such as a weapon. Thus, memory biases can take root during the original encoding of the witnessed event, which may later become amplified by post-event misinformation and stereotypical memory errors.

Another major factor that undermines eyewitness reliability is stress, which disrupts hippocampal-prefrontal functioning and impairs both the encoding and retrieval of episodic memories. The body releases adrenaline and cortisol during high arousal, modulating memory consolidation and strengthening the encoding of some memories. However, the relationship between stress hormones and memory performance follows an inverted U-shaped pattern. While moderate arousal can enhance encoding, extremely high levels of stress, such as those elicited during a crime, tend to impair it.[36] In the context of eyewitness testimony, the catastrophe model holds: high levels of psychological arousal and cognitive anxiety during encoding generally weaken memory.

Valentine and Mesout's 2009 study provides an ecologically valid demonstration of the influence of anxiety on eyewitness accuracy. To examine how real-world threats affect facial recognition under stress, researchers recruited volunteer visitors to the London Dungeon, an immersive haunted attraction. After walking through a high-arousal maze, during which they encountered a planted actor who startled them as part of the experience, participants completed a state-anxiety questionnaire. Without being instructed to attend to the actor's facial features, they subsequently provided a written description, completed a cued-recall task, and attempted to identify the actor from a nine-person lineup. Strikingly, 75% of participants who scored below the median on the state anxiety scale correctly identified the actor. Only 17% of eyewitnesses who scored below the median made a correct identification. Performance on the recall tasks

[36] Lacy and Stark, "Neuroscience of Memory."

revealed a similar negative correlation, where participants who experienced higher anxiety levels reported fewer correct descriptions than their less anxious counterparts.[37] The methodology here, namely not providing participants prior warnings that they would need to identify one of the actors in the labyrinth and situating them within a high-arousal environment, renders these observable differences in memory accuracy particularly insightful.[38]

Taken together, misinformation effects, stereotype-consistent distortions, weapon focus, and stress illustrate how both internal states and external conditions systematically skew memory across encoding, consolidation, and retrieval. Fortunately, some conditions enhance the reliability of eyewitness recall, particularly when the initial test assesses uncontaminated memory.[39] Researchers emphasized that, like other types of forensic evidence, the methods of evidence collection have significant consequences for the accuracy of eyewitness testimony.[40]

One of the most well-studied, evidence-based solutions to these vulnerabilities is the cognitive interview, a structured technique designed to enhance accurate recall while minimizing suggestibility. Developed by psychologists in 1984, the cognitive interview technique has been studied in over 50 experiments and found to be more effective than standard police practices.[41] The cognitive interview consists of four components: context reinstatement, hypermnesia, change in narrative order, and use of different perspectives. The police ask the witness to (1) return to the environmental and emotional context of the crime scene; (2) recall the maximum amount of information they can remember; (3) retell the scene in a different chronological order;

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[37] Tim Valentine and Julie Mesout, "Eyewitness Identification under Stress in the London Dungeon," *Applied Cognitive Psychology* 23, no. 2 (2009): 151–61.
[38] Ibid.
[39] John T. Wixted, Laura Mickes, John C. Dunn, Steven E. Clark, and Gary L. Wells, "Estimating the Reliability of Eyewitness Identifications from Police Lineups," *Proceedings of the National Academy of Sciences* 113, no. 2 (2016): 304–9.
[40] Gary L. Wells and Elizabeth F. Loftus, "Eyewitness Memory for People and Events," in *Handbook of Psychology: Forensic Psychology*, vol. 11, ed. Irving B. Weiner (Hoboken, NJ: Wiley, 2003), 149–60.
[41] Michel Ginet and Jean Py, "A Technique for Enhancing Memory in Eyewitness Testimonies for Use by Police Officers and Judicial Officials: The Cognitive Interview," *Le Travail Humain* 64, no. 2 (2001): 173–91.

and (4) recount the scene from a different perspective.[42] These instructions should help mitigate the misinformation effect, as the free recall method minimizes the use of suggestive questions and prevents witnesses from failing to report details that they may mistakenly deem irrelevant to the criminal investigation. Retelling the event in different orders and from another perspective should reduce eyewitnesses' reliance on schemas and stereotypes, as they cannot depend on retrieval cues such as sequentiality and may need to activate additional scripts to reconstruct the scene.[43]

This method is grounded in the principle of encoding specificity, which holds that memory retrieval is most effective when the retrieval context closely resembles the original encoding environment.[44] A recent electroencephalogram (EEG) study by Bramao et al. provides a clear demonstration of this phenomenon. The researchers found that increasing overlap between encoding and retrieval conditions, through either physical or mental reinstatement, significantly improved recall accuracy. In the experiment, participants learned word pairs presented alongside background context, such as the library or train station. Participants then engaged in context reinstatement, either by mentally reconstructing the original scene or by viewing an image of it. Afterward, they attempted to recall the second word of each pair when cued with the first. EEG analyses revealed that both mental and physical reinstatement elicited similar neural patterns, suggesting they rely on overlapping memory mechanisms. Moreover, participants were more accurate on the recall task when the encoding-retrieval context overlapped than when it did not. The comparable benefits yielded by mental and physical reinstatement demonstrate that both bottom-up processing (by physically seeing or being in the

[42] Ibid.
[43] Ibid.
[44] Ibid.

context of encoding) and top-down strategy (by imagining the contextual details of the original episode) meaningfully improve memory accuracy.[45]

This memory advantage of context reinstatement applies outside the laboratory setting. In 2001, psychologists Ginet and Py compared outcomes from three interview techniques used with students who viewed a mock crime: a standard police interview, a structured interview (where researchers reminded the investigators of the common pitfalls of traditional strategies), and the cognitive interview. Notably, students in the cognitive interview condition provided 27% and 36% more accurate information during the interview than the standard and structured approach, respectively.[46] This significant increase in the number of correct details retrieved illustrates the effectiveness of the cognitive interview. Asking the witness to reimagine the event's original context and provide all the details they can remember, regardless of how irrelevant they may seem, seems to maximize the likelihood of accurate retrieval by reactivating the neural representation of the witnessed event and other related schemas.

Beyond police interview techniques, psychologists have also developed lineup procedures that reduce false identification rates. Specifically, each lineup should contain only one suspect who should not stand out from the fillers, non-suspects selected based on the eyewitness's description of the alleged perpetrator. Moreover, police investigators should always remind the witness that the real perpetrator may not be in the lineup. Lastly, a sequential lineup, where suspects are shown one at a time, produces fewer false identifications than a simultaneous lineup that presents all potential suspects together.[47] Sequential lineups require eyewitnesses to compare each suspect with their memory of the perpetrator. On the contrary, simultaneous

[45] Inês Bramao, Anders Karlsson, and Mikael Johansson, "Mental Reinstatement of Encoding Context Improves Episodic Remembering," *Cortex* 94 (2017): 15–26.
[46] Ginet and Py, "Enhancing Memory in Eyewitness Testimonies."
[47] Lacy and Stark, "Neuroscience of Memory."

presentations encourage relative comparisons, which are more prone to stereotypic memory errors based on prototypicality.[48] Another recommendation from the memory literature is to assess the witness's confidence in their identification, as it is typically a reliable indicator of accuracy.[49] However, the confidence-accuracy relationship is strongest when confidence is assessed immediately after the identification decision and collected under optimal conditions, where participants are attentive and tested after a short retention interval.[50] Using an uncontaminated measure of confidence is key, as continuous reconstruction of memory after lineup identification may alter that perception of confidence.

This body of evidence demonstrates that traditional legal assumptions about memory reliability are inconsistent with scientific findings, underscoring the need for revised standards governing suggestive testimony. Although many laboratory experiments are limited in ecological validity, they collectively suggest that human memory is far from infallible and that having a confident memory does not necessitate a truly accurate recollection of the past.[51] Eyewitnesses' memories of real-life crimes are undeniably more complex than those based on mock videos or images in laboratory experiments. However, these studies intentionally use forensically relevant stimuli and place participants in naturalistic contexts to evoke anxiety, partially imitating the actual experiences of witnessing a crime.[52] Thus, legal actors, including judges, juries, and police investigators, must reexamine their assumptions about the reliability of eyewitness memory and ground their practices in empirical research.

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[48] Osborne and Davies, "Crime Type and Memory Biases."
[49] John T. Wixted, Laura Mickes, John C. Dunn, Steven E. Clark, and Gary L. Wells, "Estimating the Reliability of Eyewitness Identifications from Police Lineups," *Proceedings of the National Academy of Sciences* 113, no. 2 (2016): 304–9.
[50] Carlson et al., "Weapon Focus Effect and the Confidence–Accuracy Relationship."
[51] Lacy and Stark, "Neuroscience of Memory."
[52] Zaragoza, Belli, and Payment, "Misinformation Effects."

Although practical challenges remain, the benefits of implementing neuroscience-informed procedures outweigh the logistical costs. Ginet and Py's 2001 study shows that law enforcement officers can adopt cognitive interview techniques with minimal disruption. The training period was short, the investigators properly followed the instructions, and there was no significant increase in interview length. However, one consequential decision the criminal justice system must make is where to strike the balance between false positives and false negatives, particularly regarding police lineups. Although sequential lineups reduce the number of wrongful identifications of innocent suspects, they may increase the likelihood of failing to identify the real culprit.[53] However, under the American commitment to innocent until proven guilty, police investigative procedures should err on the side of caution and prioritize reducing the probability of wrongful convictions. Incorporating current memory research into forensic practice helps ensure that eyewitness evidence is collected accurately, reduces the risk of wrongful convictions, and aligns legal standards with the realities of how memory functions.

[53] Lacy and Stark, "Neuroscience of Memory."

Bellarmine Law Society Review

Volume XVI | Issue I Article IV

Large Language Models, Fair Use, and Protecting Author's Rights: Re-Weighing the Four Factors of Section 107 of the Copyright Law

Kate Kissel
Boston College, kisselk@bc.edu

LARGE LANGUAGE MODELS, FAIR USE, AND PROTECTING AUTHOR'S RIGHTS: RE-WEIGHING THE FOUR FACTORS OF SECTION 107 OF THE COPYRIGHT LAW

KATE KISSEL[1]

Abstract: This paper will argue that the four factors of Section 107 of the Copyright Act must be evaluated with more equal or comparable weights when discussing the usage of copyrighted materials to train Large Language models (LLMs). The question of fair use in the context of generative AI has repeatedly arisen in recent court cases, as authors bring class action suits against tech companies like Meta and Apple for using their works without permission to power human-like LLMs. Authors claim deprived revenue and market dilution, as they argue that AI models are creating artificial competition in three ways: first, in deprived licensing potential; second, in the form of replicated versions of their work both in regurgitated outputs and expressively similar summaries; and third, within competitive "original" content. This paper will first describe LLMs and the current concerns surrounding their training on copyrighted material. It will then define copyright law, set out the history and current cases facing courts, and conduct a fair use assessment on both the training of LLMs on copyrighted works and their outputs. The paper will propose a solution to the problem of courts accepting the training of LLMs as fair use without considering their outputs. Such a solution will center upon a de-emphasis of the historically salient transformative factor and instead propose a more balanced assessment of the four factors of Section 107. The analysis will use a qualitative approach founded upon copyright law and the fair use doctrine, precedent from court decisions, and ongoing cases to arrive at such a conclusion. The goal of this paper is to enhance the working understanding of LLMs relation to copyright law and support the rights of authors to protect their work in a rapidly evolving judicial landscape.

[1] Kate Kissel is a junior at Boston College studying English and business on the pre-law track. Throughout her undergraduate career she has pursued legal experiences including an internship with her local District Attorney's office, a teaching assistantship for a business law class, and an internship this summer at a non-profit legal aid organization, the Volunteer Lawyers Project of CNY. Outside of her interest in law, Kate has also pursued student journalism as a member of the editorial board of *The Heights*, Boston College's independent student newspaper, and has worked as a writing tutor at the Boston College Writing Center. She would like to thank Professor Scheufele for her support in the publication of this paper, as well as her loving friends and family.

I. Introduction

Ia. What are LLMs?

Large language models (LLM) are a type of generative AI technology that generates text, image, video, and sound in response to user prompting.[2] Such outputs are created through the materials the LLM is trained upon, units of texts referred to as "tokens."[3] The more data the LLM consumes, the more knowledgeable it becomes about the statistical relationships between words.[4] Earlier renditions of the models could only predict the probability of a single word, but today, as they get "larger" and more advanced, they are able to predict the probability of sentences, paragraphs, and entire documents.[5] This means that, upon user-prompting, LLMs are able to generate entirely new texts by predicting the words to come in a sequence.[6] Training is at the core of LLM capabilities, and without extensive training on texts of all different languages, styles, and subject matters, LLMs are not able to produce diverse or advanced responses to user inputs.[7] This training period can last many months and require heavy resource investment from the developer.[8]

Although such data can be gathered off the Internet, books are particularly helpful in training LLMs.[9] Books are useful as they provide an immense amount of text in a unified style and organization.[10] Further, books are typically well-written and use proper grammar, providing a more valuable source than many texts on the Internet.[11] This high-quality data expands the

[2] *Kadrey v. Meta Platforms, Inc.*, 788 F. Supp. 3d (N.D. Cal. 2025), 1026.
[3] Ibid., 1034.
[4] Ibid., 1039.
[5] Ibid., 1039.
[6] Ibid.
[7] Ibid.
[8] Google, "Introduction to Large Language Models," Google for Developers, https://developers.google.com/machine-learning/resources/intro-llms#what_is_a_language_model
[9] *Kadrey,* 788 U.S., 1039.
[10] Ibid.
[11] Ibid.

LLM's "content window," or tokens it holds in its memory at a given time.[12] For this reason, LLM programmers often select an initial data set that involves long and consistent books with a particular style and coherent structure.[13] The better the LLMs memory, the "smoother" its mimicking of human conversation, as it becomes capable of responding to longer prompts, incorporating more information into its responses, and remembering previous conversations.[14] These conversations are constantly improving, as LLMs are beginning to be able to effectively imitate human speech patterns and combine information with different styles and tones.[15]

Some well-known LLMs include ChatGPT, owned by OpenAI; Bard, owned by Google; Llama, owned by Meta; and Bing Chat, owned by Microsoft.[16] These models are growing at unprecedented rates and attracting substantial investment; for example, ChatGPT attracted over 200 million monthly visitors in 2024.[17] In the coming years, technology companies are looking for new ways to push these models to be smarter and more independent, including developing the capacity for self-training in Google's case or creating reasoning models with deep cognitive function such as Anthropic's Claude 3.7 Sonnet model.[18]

Ib. The Problem in Relation to Copyright Law

For now, however, LLMs are only as good as the data they are trained on. Because books provide such a valuable resource for LLMs to learn from quickly and effectively, technology companies seek them out for their datasets. As a result, a plethora of lawsuits have struck courts

[12] Ibid.
[13] Ibid.
[14] Ibid.
[15] Google, "Introduction to Large Language Models."
[16] Cloudflare, Inc., "What Is an LLM (Large Language Model)?," https://www.cloudflare.com/learning/ai/what-is-large-language-model/.
[17] Cem Dilmegani, "The Future of Large Language Models in 2026," *AIMultiple*, https://research.aimultiple.com/future-of-large-language-models/.
[18] Ibid.

across the country as authors and publishers question the legality of AI companies utilizing their copyrighted works without permission for such training. Authors claim that such usage strips them of their rightful compensation in the form of licensure and threatens the market for their work by either polluting it with free-renditions of their work in the form of summations and verbatim copies or artificially saturating it with AI-authored competition. In response, technology companies invoke the fair use doctrine, claiming that their usage of copyrighted works qualifies based on its transformative nature. Courts have not yet reached a universal conclusion on this issue in recent decisions.

Some publishers have taken matters into their own hands by striking content licensing deals with AI companies. The benefits of such deals are found on both sides, with the authors maintaining ownership over their work and profiting off it and AI companies being shielded from potential lawsuits while utilizing high-quality training materials. One such deal came in December 2023, when Axel Springer agreed to allow OpenAI to utilize their content, including paywalled content, in exchange for attribution and link to full articles.[19] Similar agreements have followed. In April 2024, *The Financial Times* signed with OpenAI. Their CEO stated that AI products should "contain reliable sources," in reference to the deal.[20] As AI is unlikely to disappear in the future, a model that works well and uses high-quality sources is beneficial not just to technology CEOs but also to the public. Further, deals such as these are illustrative of the potential for this problem to be solved outside of the court and for authors to maintain control over how their work is used and the outputs that will result from it. For now, though, this is not an all-encompassing solution. In Meta's case, for example, the company attempted to strike

[19] Sara Guaglione, "2024 in Review: A Timeline of the Major Deals between Publishers and AI Companies," *Digiday*, April 17, 2025, https://digiday.com/media/2024-in-review-a-timeline-of-the-major-deals-between-publishers-and-ai-companies/.
[20] Ibid.

licensing deals for the books they utilized for training but found such a process to be too difficult, as publishers often do not hold the subsidiary rights to license books for AI training, and even when they do, they are often regional instead of global.[21] In terms of reaching out to individual authors, such a process is too cumbersome, as there is currently no organization for collective licensing.[22] Further, Meta states that many publishers just ignored their outreach.[23] Thus, licensing presents a variety of difficulties that have led AI companies to simply take it upon themselves to utilize copyrightable materials without permission. To redress such an inequity requires analysis of copyright law and the fair use doctrine.

Ic. Copyright Law

The Copyright Act of 1972 grants the author of an original work the right to "reproduce the copyrighted work, to prepare derivative works, to distribute copies of the work via sale, rental, lease, or lending, and in the case of literary works, to display the copyrighted work publicly."[24] Derivative works are defined largely by example, including "translation, musical arrangement, dramatization, fictionalization, motion picture version, sound recording, art reproduction, abridgment, condensation, or any other form in which a work may be recast, transformed, or adapted."[25] Infringement occurs when a person or entity "violates any of the exclusive rights of the copyright owner."[26] The act intends to strike a balance between providing authors with enough reward so as to stimulate further creative work and promoting broad availability of art to the general public.[27]

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[21] *Kadrey,* 788 U.S., 1040.
[22] Ibid.
[23] Ibid.
[24] 17 U.S.C. § 106.
[25] 17 U.S.C. § 101.
[26] Guaglione, "2024 in Review."
[27] *Hachette Book Group, Inc. v. Internet Archive*, 115 F.4th 163 (2d Cir. 2024).

To that end, Section 107 of the Act allows for certain "fair" uses of copyrighted works and sets out four non-exclusive factors for courts to consider.[28] The four factors are as follows:

1. the purpose and character of the use, including whether such use is of a commercial nature or is for nonprofit educational purposes;
2. the nature of the copyrighted work;
3. the amount and substantiality of the portion used in relation to the copyrighted work as a whole;
4. the effect of the use upon the potential market for or value of the copyrighted work.[29]

In a fair use analysis, all four factors are weighed, and no single factor leads to a conclusive determination. Historically, the first and fourth factors have emerged as the most salient, with the first factor often finding particular relevance to cases involving new technologies, as courts are cautious not to stifle the advancement of science and technology.[30] Further, fair use is interpreted on a "case-by-case" basis, and, as such, each ruling may reflect a slightly varied interpretation of the doctrine.[31]

II. Recent Interpretations

Within the last few years, as LLM technology continues to expand, a swath of cases has raised questions of fair use in relation to generative-AI technology in courts across the country.

One of the largest and most influential class actions came in August 2024, with *Bartz v Anthropic PBC* (2025).[32] In this case, three authors filed a copyright infringement claim against Anthropic, an AI startup, for copying their copyright-protected content from online libraries of

[28] 17 U.S.C. § 107.
[29] Ibid.
[30] Guaglione. "2024 in Review."
[31] *Kadrey,* 788 U.S., 1059
[32] *Bartz v. Anthropic PBC*, 791 F. Supp. 3d 1038 (N.D. Cal. 2025).

pirated books to train their LLM "Claude."[33] The court conducted analyses of four different uses: the copies used to train specific LLMs, the copies used to convert purchased print library copies into digital library copies, the downloaded pirated copies used to build a central library, and any copies made from central library copies but not used for training.[34] For the purposes of this paper only the copies used to train specific LLMs will be considered. Such copies in their use for training Claude were found to be transformative, the amount and substantiality of the portion used reasonable, and the copies not replacing demand for the author's original work.[35] The only factor landing against fair use was the second, as the nature of the copied works was found to contain expressive elements and to be explicitly chosen for those qualities.[36] As of September 2025, a historic $1.5 billion settlement was preliminarily approved under which Anthropic is to pay publishers and authors not for the use of their works itself, which was considered fair use, but for the pirated materials used to build a central training library.[37]

Two days after the *Bartz* decision came *Kadrey v. Meta Platforms Inc.* (2025).[38] This case dealt with 13 authors' claims that Meta used their copyrighted books to train their LLM "Llama."[39] Just like in *Bartz*, the court found that the training of Llama to generate new text was highly transformative, a reasonable amount of the work was used, and there was not enough evidence brought to ascertain market harm.[40] Similar to *Bartz*, the second factor of fair use pertaining to the nature of the copyrighted work fell in favor of the authors as their works were found to be highly expressive.[41] Notably, a factor of such ruling was that these specific authors

[33] Ibid., 1046-1050.
[34] *Bartz v. PBC*, 787 F. Supp. 3d 1007 (N.D. Cal. 2025).
[35] Ibid., 1021, 1029-1032.
[36] Ibid., 1029.
[37] Brett Carmody, "Training AI on Books: A Tale of 2 Fair Use Rulings," *Law360*, https://www.law360.com/ip/articles/2395078.
[38] *Kadrey,* 788 U.S.
[39] Ibid., 1042.
[40] Ibid., 1044-1059.
[41] Ibid., 1049.

failed to provide proper evidence of market dilution that led to the fair use outcome, stating that plaintiffs of a similar case with proper evidence of the market effects would likely find success.[42] Two weeks following this fair use ruling, plaintiffs brought piracy claims against Meta, claiming that they infringed their copyrights by downloading and allegedly distributing their works using peer-to-peer file sharing.[43] The plaintiffs are not asking to revisit the fair use finding regarding the copyrighted works utilized in the training process, but instead furthering the piracy claims pertaining to the file sharing still undecided after the court's judgment.[44] As of December 12, 2025, class discovery has not yet begun and the authors are still narrowing their class definition.[45]

The differences between these two cases and the way the court analyzed them speaks to the case-by-case nature of the fair use doctrine. *Kadrey*, in conversation with *Bartz*, seems to suggest a court preference to regard LLM training as a transformative endeavor, but whether such use is fair regarding copyright law seems to depend heavily upon the evidence of market harm. However, both cases were tried in the United States District Court for the Northern District of California, which presides over the Silicon Valley region.[46] Such a court may thus be more inclined to favor technology as it is presiding over a region where many technology and start-up companies are located. Notably, in both cases, the court analyzed solely the training of LLMs, not any output data.

III. An Analysis of LLM Training as Fair Use in the Court

[42] Ibid., 1059.
[43] Ivan Moreno, "Meta's Alleged Book Piracy Is Next Phase of Authors' IP Suit," *Law360*, July 11, 2025, https://www.law360.com/articles/2362498.
[44] Ibid.
[45] Ibid.
[46] *Kadrey,* 788 U.S.*; Bartz,* 787 U.S.

This section will discuss LLM training through the four factors as laid out above.

The first factor deals with the purpose and character of the work and has historically contained two subfactors: the extent to which the use is transformative, and whether the use is commercial in nature.[47] Further, *Andy Warhol Found. for the Visual Arts, Inc. v. Goldsmith* (2023) asks courts to consider "whether the new work merely 'supersede[s] the objects of the original creation … ('supplanting' the original), or instead adds something new, with a further purpose or different character."[48] LLM training has found success under this first factor, garnering transformative designations from the courts. In *Authors Guild, Inc. v. Hathitrust* (2014) a "full-text searchable database is a quintessentially transformative use," and similarly in *Bartz* the training of an LLM on copyrighted materials was described as "quintessentially transformative."[49] The crux of such a transformative designation is the idea that the training of LLMs possesses a distinct purpose from the original work, as the purpose of such training is to "turn a hard corner and create something different" out of the author's works.[50] In addition, because LLMs are trained in "tokens" to enhance the "content windows," their use of the copyrighted material has been found to possess a much different character than the original source material.[51]

Warhol also placed a newfound focus on the commercial nature of the work, thereby linking the commercial use subfactor with the fourth factor of market effect.[52] What this means for AI companies who develop their LLMs "to monetize consumers and not to educate users," is

[47] *In re OpenAI, Inc*., 2025 U.S. Dist. LEXIS 185088 (S.D.N.Y. 2025).
[48] *Andy Warhol Foundation for the Visual Arts, Inc. v. Goldsmith,* 598 U.S. 508 (2023).
[49] *Bartz*, 787 U.S., 1022.; Authors Guild, Inc. v. HathiTrust, 755 F.3d 87 (2d Cir. 2014).
[50] Lauren Berg, "OpenAI Can't Strike Authors' Pirated Book Download Claims," *Law360 Legal News*, October 28, 2025, https://advance.lexis.com/api/document?collection=news&id=urn%3acontentItem%3a6H3P-58N3-RV32-K0F0-00000-00.
[51] Google, "Introduction to Large Language Models."
[52] *Andy Warhol Found. for the Visual Arts, Inc.*, 598 U.S., 510.; Shen. "Fair use, Licensing, and Authors' Rights in the age of Generative AI."

that their commercial use is now of greater significance in the fair use analysis.[53] In essence, *Warhol* established a higher bar for fair use, making it more difficult to succeed on a fair use claim just because of an alteration to the original work without a distinct further purpose, particularly when such use is for a commercial purpose.[54] Here, the usage is evidently commercial, but, as *Kadrey* states, "commercialism isn't dispositive of the first factor and tends to be less important when the secondary use is highly transformative."[55] Thus, factor one favors fair use despite the commercial nature of LLM training.

The second factor, which has historically held little weight in fair use analyses, does often fall against fair use, as the works used for training contain expressive elements and were chosen for these qualities.[56] The third factor deals with the "amount and substantiality of the portion" of the copyrighted work, and whether the amount was "reasonable in relation to the purpose of the copying."[57] LLM models specifically are dependent upon both the quality and quantity of the works they are trained on. As a result, copyrighted works are often inputted in their entirety. The court, however, draws a distinction between "reasonably necessary" and "strictly necessary," and states that because LLMs do need an expansive amount of data for training, using any one work is about as reasonably necessary as the next.[58] Further, the quantity of work inputted does in fact make a difference to the LLM, as the more "tokens" the LLM consumes, the more knowledgeable, and thus profitable, it becomes—so, it is reasonable to input the entire work.[59] However, utilizing a copyrighted work in its entirety, no matter the transformative purpose, cannot rule in favor of fair use. As the court states in *Bill Graham Archives v. Dorling Kindersley*

[53] Shen. "Fair use, Licensing, and Authors' Rights in the age of Generative AI."
[54] *Andy Warhol Found. for the Visual Arts, Inc.*, 598 U.S., 510.
[55] *Kadrey,* 788 U.S., 1046
[56] Carmody, "Training AI on books: A tale of 2 fair use rulings."; *Bartz,* 787 U.S., 1029
[57] *Bartz,* 787 U.S., 1029 .
[58] Ibid.
[59] *Kadrey,* 788 U.S., 1050

Ltd (2006), "neither our court nor any of our sister circuits has ever ruled that the copying of an entire work *favors* fair use."[60] But, it doesn't necessarily weigh against it either. Rather, when works are utilized in their entirety for a transformative training purpose this factor will often weigh neither for nor against fair use.[61]

The last factor of fair use assesses "whether the copy brings to the marketplace a competing substitute for the original, or its derivative, to deprive the rights holder of significant revenues because of the likelihood that potential purchasers may opt to acquire the copy in preference to the original."[62] But it is not just whether the copy would hurt competition, but rather if it would usurp the market by offering a competing substitute.[63] As laid out in *Campbell* and cited in *Hachette,* this factor considers not only the specific market harm found in the actions of the infringer but also what would follow if such conduct was widespread and unrestricted.[64] The end goal of LLM copying is indeed to bring to the marketplace a competing substitute. However, in cases that lack clear output data, the court has found a recognition of such reality to require too many inferences for admissibility in court. Specifically, the Supreme Court has stated, no "inference of market harm… is applicable to a case involving something beyond mere duplication for commercial purposes."[65]

This came to light in *Kadrey*, where a series of inferences were cited by the court as necessary to prove market harm: first, that the specific LLM at hand can create competitive works; second, that it will be used to do so; third, that consumers will purchase those materials over ones written by a human author; fourth, that consumers will buy those books instead of the

[60] *Bill Graham Archives v. Dorling Kindersley Ltd*., 448 F.3d 605 (2d Cir. 2006).
[61] Jeffrey Greenbaum, "When Should Training an AI Model Prevail Against Copyright Infringement?" *Oklahoma Law Review* 77 (Summer 2025): 823.
[62] *In re OpenAI, Inc*., 2025 U.S. Dist. LEXIS 103349 (S.D.N.Y. 2025).
[63] *Bartz,* 787 U.S., 1030.
[64] *Hachette Book Group, Inc. v. Internet Archive*, 115 F.4th 163 (2d Cir. 2024).
[65] *Kadrey,* 788 U.S., 1057.

plaintiff's books in particular; and fifth, that the specific LLM at hand is meaningfully better at creating such materials because of its training on copyrighted material.[66] Therefore, although it is evident that the end goal of LLM training is to produce materials that exist in the marketplace as a competing substitute, to find the training process indicative of such market harm would require a series of inferences not applicable to just training without any output evidence.[67] As such, where market harm cannot be inferred, it follows that a usurpation of the market cannot either. Therefore, this fourth factor can, and has been, found to favor fair use when courts solely analyze the training of LLMs in isolation from their outputs.

IV. LLM Training as Synonymous with LLM Outputs

Fair use designation appears, from the analysis above, to rely heavily on the availability of output data that clearly evidences direct regurgitation of authors copyrighted works, as without it, the usage presents as transformative and void of market harm. AI companies are thus positioned to continue to utilize copyrighted materials in the training of LLMs because they can establish a fair use defense against authors' infringement claims when the time comes. Under such a system, court cases will only proliferate, as both sides are unclear on the exact boundaries of fair use. The problem, however, in the court universally ruling against fair use, is the analogy posed in *Bartz*: an LLM learning from works is akin to a schoolchild learning from books. The analogy deals specifically with the fact of the LLM utilizing the authors' works and a contested "explosion of works" in the market that would occur as a result, not the issue of such works existing under unrecognized copyright. The court here argued that the training of LLMs is no different from a schoolchild learning to read and write from authors' work.[68] They argue, then,

[66] Ibid.
[67] Ibid.
[68] *Bartz,* 787 U.S., 1032.

that the idea that LLMs will produce competitive works is no different from the notion that a child could produce them as a result of their learning.[69] This type of protection is, as the court states, "not the kind of competitive or creative displacement that concerns the Copyright Act."[70] To the court, an LLM learning and producing competitive outputs is comparable to someone reading modern-day classics because of their expressionism, memorizing them, and then emulating their best writing.[71] This analogy points towards a tension at the heart of recent findings of fair usage for LLM training—a comparison between a human and an LLM is impossible.

A human can read a finite amount of material and can only hold so much of it in their brain at once. An LLM, on the other hand, is a machine capable of taking in mass amounts of data at a speed and efficiency unimaginable to any human mind. Additionally, an LLM is entirely made up of its inputs. Thus, unlike a human who can make a distinction between their own thoughts and those they have heard elsewhere, everything the LLM knows is an outside source. The LLM does not simply learn the materials it consumes—it becomes them—and this creates an irrevocable threat to authors in terms of what it may be capable of producing. As Judge Vince Chhabria argues in his dissenting opinion in *Kadrey*, the analogy of *Bartz* is entirely "inapt," and not a basis for ignoring the first, and most important, factor of fair use analyses.[72] He writes that "using books to teach children to write is not remotely like using books to create a product that a single individual could employ to generate countless competing works with a miniscule fraction of the time and creativity it would otherwise take."[73] It is thus impossible to compare, or reason with, such a machine as a trained LLM. Although such a training process is evidently

[69] Ibid.
[70] Ibid.
[71] Ibid., 1021
[72] Kadrey, 788 U.S., 1036
[73] Ibid., 1036.

transformative and of the nature of progress the fair use doctrine is meant to protect, this tool is not simply a knowledgeable model. Rather, it is a user-operable communicator generating outputs in the marketplace for everyday consumers at a speed and growth that seem fundamentally incompatible with the intentions of the fair use doctrine. Outputs are, for technology companies, the entire point, as they are what generate profits. Thus, outputs must be considered in any assessment of fair usage when discussing LLM training on copyrighted works.

V. Case Studies with Output Data

Two ongoing cases illustrate the copyright infringing nature of LLM outputs that result from training: *In re Open AI Copyright Infringement Litig.,* (2025) and *Advance Loc. Media LLC v. Cohere Inc* (2025).[74] Besides the obvious presence of outputs, these cases also differ from *Kadrey* and *Bartz* in that they were tried in the United States District Court for the Southern District of New York, meaning they likely are not positioned to favor technology in the same way a Silicon Valley court may.[75]

Va. In re OpenAI Copyright Infringement Litig. and Advance Loc. Media LLC

In re OpenAI Inc. Copyright Infringement Litigation is a putative class action suit brought together by authors against OpenAI in April, 2025.[76] The case consolidates 10 suits from the largest names in literature and journalism to allege that OpenAI and its investor Microsoft illegally utilized their copyrighted works to train the models behind ChatGPT and subsequently create infringing works.[77] As of October 27, 2025, the court has denied OpenAI's bid to dismiss claims of direct copyright infringement, stating that a reasonable jury would find allegedly

[74] *In re OpenAI, Inc.,* 2025 U.S. Dist. LEXIS 103349 (S.D.N.Y. 2025).; *Advance Loc. Media LLC.*, U.S.
[75] *In re OpenAI, Inc.,* 2025 U.S. Dist. LEXIS 103349 (S.D.N.Y. 2025).; *Advance Loc. Media LLC.*, U.S.
[76] *In re OpenAI, Inc.,* 2025 U.S. Dist. LEXIS 103349 (S.D.N.Y. 2025).
[77] Berg, "OpenAI Can't Strike Authors' Pirated Book Download Claims."

infringing outputs to be substantially similar to the plaintiff's works.[78] It did note that an "ordinary observer" test would apply as well, as they found that even this observer could reasonably conclude that the allegedly infringing outputs are substantially similar to the copyrighted works.[79] On November 7, 2025, OpenAI was ordered by the Court to produce 20 million de-identified ChatGPT logs.[80] On November 24, they were directed to produce materials regarding their deletion of datasets of pirated books, and plaintiffs gained entitlement to depose OpenAI attorneys regarding such datasets.[81] On January 5, 2026, the motion for OpenAI to produce the 20 million logs was affirmed, after OpenAI's attempted objections to the ruling.[82] Proceedings are currently ongoing for this case, but the release of the 20 million logs will be illuminative in the coming fair use ruling.

The second case is *Advance Loc. Media LLC v. Cohere Inc* (2025).[83] The plaintiffs include Forbes Media, Guardian News, Los Angeles Times, Vox Media, and more news publishing companies.[84] In their complaint, the plaintiffs allege that Cohere, an AI company, is using their work to train their LLM models known as the Command Family of models.[85] They allege that Cohere trained their models off crawled data from the internet, and that their Retrieval Augmented Generation feature reproduced their work in "verbatim copies, substantial excerpts, or substitutive summaries of publishers' works" that include heavy paraphrased and exactly replicated phrases.[86] They state that the summaries "go beyond a limited recitation of facts" by "lifting expression directly or parroting the piece's organization, writing style, and

[78] *In re OpenAI, Inc.,* 2025 U.S. Dist. LEXIS 103349 (S.D.N.Y. 2025).
[79] Ibid., 95.
[80] Ibid.
[81] Ibid.
[82] Berg. "OpenAI Told to Produce 20M ChatGPT Logs in Copyright Case."
[83] *Advance Loc Media.,* U.S.
[84] Ibid.
[85] Ibid., 4.
[86] Ibid., 5.

punctuation."[87] Cohere's efforts to dismiss the publishers' direct copyright claim, the secondary copyright claim, and a Lanham Act claim have all been denied as of November 13, 2025.[88] As of now, there has been no judgment on whether Cohere's fair use claim will succeed, but the rejected motion to dismiss does make it clear that the complaint adequately alleges facts that could, if proven, lead to a denial of fair use.[89]

VI. A Fair Use Analysis of *In Re. OpenAI* and *Advance's* Output Data

This section will conduct a fair use analysis regarding the cases *In Re. OpenAI* and *Advance*. As both cases contain output data, examples of such data presented to the court by authors is offered below to inform the analysis.

VIa. Output Data

In the case *In Re. OpenAI*, output data presented included summaries of the author's works.[90] In demonstrating this, the court cited an output authors brought of a summary from George R.R. Martin's *A Game of Thrones* series from his *A Song of Ice and Fire* book series.[91] Here is a clipping of such output:

"**Main Plot Points:**

1. **Stark Family in Winterfell:**
    - Eddard (Ned) Stark is the Warden of the North, ruling from Winterfell.

[87] Ibid., 10.
[88] Ibid., 2.
[89] Ibid.
[90] *In re OpenAI, Inc. Copyright Infringement Litig.*, U.S., October 27
[91] Ibid., 92

- King Robert Baratheon, Ned's old friend, visits Winterfell to ask Ned to become his Hand of the King after the previous hand, Jon Arryn, died under suspicious circumstances.
- Ned reluctantly accepts to investigate Jon Arryn's death.
- Ned's wife, Catelyn, receives a letter from her sister Lysa (Jon Arryn's widow) suggesting the Lannisters might be behind Arryn's death.
- Bran, Ned's young son, accidentally witnesses Queen Cersei Lannister and her brother Jamie Lannister in an intimate relationship. Jaime pushes Bran off a tower to keep the secret, but Bran survives, albeit in a coma."[92]

This is only one of five main plot points the output contained, as well as a brief on setting, the prologue, and the ending of the novel.[93] The court concluded that such a detailed summary did indeed convey the "overall tone and feel of the original work by parroting the plot, characters, and themes of the original."[94] Outlines for potential sequels of plaintiffs' works were also found to be substantially similar to plaintiffs' original works when undergoing a more discerning observer test.[95] As mentioned before, the motion did not address whether these allegedly infringing outputs are protected as fair uses.[96]

In *Advance,* plaintiffs brought 50 examples of verbatim copying and 25 examples of a mix between verbatim copying and close paraphrasing.[97] The complaint utilizes a feature called "Under the Hood" analysis, which allows them to see the specific underlying documents that Cohere utilized to generate the response.[98] In the following examples, such analysis reveals that

[92] Ibid., 109.
[93] Ibid., 109, 110.
[94] Ibid., 111.
[95] Ibid.
[96] Ibid., 115.
[97] *Advance Loc Media.*, U.S., 10.
[98] Ibid., 4.

Cohere is utilizing full-text copied versions, whether of the original source or of a copy of it, to generate outputs.[99]

One such example is illustrative, in response to the prompt: "tell me about the unknowability of the undecided voter," Command delivered an output directly copying eight to ten paragraphs from a *New Yorker* article with few alterations.[100] In another, clipped below, an article was copied verbatim from a January 2019 *Newsday* article.[101] This work is a result of another iteration of unauthorized copying—as Cohere made yet another copy apart from that used in training when it delivered this output to a user.[102] An "Under the Hood" analysis proved that the output came from a December 2021 copy of the original article which is no longer active:

Prompt: "Give me the article PSEG LI: We don't have to pass along federal tax savings published by *Newsday*."[103]

Cohere's Chat Output:

> "PSEG Long Island's unique contract with the Long Island Power Authority exempts the company from a state order to share its windfall from federal tax reductions PSEG and state officials said. LIPA in its annual budget reported it received a total of $6 million in savings from contractors who saw significant reductions from President Donald Trump's tax reform bill which lowered the corporate tax rate to 21 percent from 35 percent."[104]

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[99] Ibid., 3.
[100] *Insider, Inc. et al. v. Cohere Inc.*, Complaint filed in the U.S. District Court for the Southern District of New York, February 13, 2025. https://advance.lexis.com/api/document?collection=briefs-pleadings-motions&id=urn%acontentItem%3a6F43-43W3S1KC-H08T-00000-00&context=1519360&identityproflleid=5MWD8751942\
[101] Ibid., 36, 37.
[102] Ibid., 36.
[103] Ibid.
[104] Ibid., 37.

This copy is a verbatim iteration; however, Cohere also delivers somewhat verbatim copying with slight word and punctuation alterations when prompted about a specific article.[105] But, Cohere also is not merely at the mercy of user prompting.[106] Instead, it outputs materials of its own discretion, offering up directly infringing outputs not even elicited by users.[107] In one such example, Command was asked about budget strains on future transit funding in Miami-Dade County and subsequently produced a practically verbatim output of a *Miami Herald* article on the subject with only a slight rewording of the opening sentence.[108] This case demonstrates the competitive degree to which LLM models have risen. But, more than that, it highlights the impossibility of controlling a highly-trained LLM, as it will produce the output resulting from its training even when such a response is not elicited by the user.

The extensive capabilities of Cohere's LLMs continue to be expressed in subsequent examples of infringement. In one, Cohere not only produced an article behind a *Business Insider* paywall but did so in just a few hours after its original publication. The article was first published at 11:08 a.m. By 12:55 p.m., the LLM had made a copy of it from the publisher's website, and by 1:14 p.m., it was able to output the entire article with only slight alterations.[109] LLMs thus possess an incredible speed of processing—a speed entirely unimaginable to human memorization ability—further depicting the vast insufficiency of comparing human and LLM capabilities. Cohere also delivers substitutive summaries of requested work, both when asked to summarize a topic as it is depicted by a specific publisher and when asked about a topic in general.[110] In this case, the prompt stated, "tell me about Portland public schools not allowing

[105] Ibid., 36.
[106] Ibid., 39.
[107] Ibid.
[108] Ibid.; Douglas Hanks, "As Budget Strains Grow, Miami-Dade Mayor Pulls Back on Future Transit Funding," *Miami Herald*, September 5, 2024, https://www.miamiherald.com/news/local/community/miami-dade/article291916500.html
[109] *Insider, Inc. et al. v. Cohere Inc.*, Complaint filed in the U.S. District Court for the Southern District of New York.
[110] Ibid., 41, 42.

teachers to talk about political matters."[111] Command answered with a copied summary of a *The Oregonian* article, with one sentence of the summation reproduced below.[112]

Coheres Chat Output: "The policy states that displays must be tied to approved curriculum or district-approved events."

Original Article from *The Oregonian*: "Under the rule, items on display in classroom walls and bulletin boards must be related to approved curriculum or district approved events."[113]

VIb. Factor One: The Purpose and Character of the Work

To reiterate, this first factor contains two subfactors: "transformativeness" and commerciality.[114] Specifically, the *Warhol* test demands a further purpose or character, particularly when the use is of a commercial nature.[115]

As indicated by the outputs above, what LLMs produce is far from transformative. The summation in *In re. OpenAI* does not intend to add something new, but instead to get as close as possible to what has already been, conveying the same tone and feel of the original work.[116] The court cited *Walker v Time Life Films Inc.* (1985), which laid out what was protectible (setting, plot, and characters) versus what was not (stock themes, stock characters, scenes resulting from the choice of setting or situation, and abstract ideas).[117] The summaries cited did not recount all of the intricate plot twists and elements of character development from the original works, and yet they did attempt to abridge or condense the central copyrightable elements of setting, plot, and characters.[118] In so doing, they present the same purpose and character as the original works,

[111] Ibid., 42.
[112] Ibid., 43.
[113] Ibid., 43, 44.
[114] 17 USCS § 107.
[115] *Andy Warhol Found. for the Visual Arts, Inc.*, 598 U.S. 510.
[116] *In re OpenAI, Inc. Copyright Infringement Litig.*, U.S., October 27, 110.
[117] Ibid., 96.
[118] Ibid.

speaking to their inherent non-transformative character. In *Advance*, the lack of transformative quality is even more apparent, as the outputs do not try to get as close as they can to the original because they are often the original themselves.[119] As seen above, their directly verbatim and slightly altered but substantively verbatim outputs intentionally mimic, if not fully copy and paste, the author's original work such that there is not even a change of tone or form.[120] Thus, they evidently fail to advance any sort of further purpose of their own. In both cases, there is nothing new within these summations and copies that has not previously existed, demonstrating their inherent non-transformative nature and obvious commercial threat. Outputs that offer merely a repackaged, regurgitated, reiterated version of what has already been produced cannot be seen as transformative, regardless of their technological character.

As mentioned before, *Warhol* brought the purpose of the use, specifically whether it is for a commercial purpose, to the forefront.[121] For LLM training, the intention is to create a profit—with OpenAI raking in 13 billion dollars in annual revenue, over 70% of which coming from users paying 20 dollars a day to chat with an AI.[122] The commercial purpose of OpenAI, and thus LLM companies in general—to profit off their outputs—cannot exist simultaneously with the author's goal of profiting off of their original work. OpenAI is not seeking to innovate to a new level of human advancement in technology through their clipped summaries that infringe on an author's style; they are merely attempting to profit off of an original artistic creation. The commercial threat in *Advance* is even more obvious, with the outputs directly undercutting the author's original works by outputting works behind a paywall. Even for

[119] *Advance Loc. Media LLC*, 10.
[120] Ibid., 11.
[121] *Andy Warhol Found. for the Visual Arts, Inc.*, 510.
[122] Connie Loizos, "OpenAI Has Five Years to Turn $13 Billion into $1 Trillion," *Yahoo Finance*, October 1, 2025, https://finance.yahoo.com/news/openai-five-years-turn-13-053936019.html.

materials not behind a paywall, it is evident that users would have no cause to look for original works of authorship when they can find a direct, or practically identical, copy of such work easily through a quick LLM output. Further, although "transformativeness" is only one factor of the analysis, as put forth in *Hachette*, "a use of copyrighted material that merely repackages or republishes the original is unlikely to be deemed a fair use."[123] Thus, factor one must weigh against fair use when taking infringing outputs into account.

VIc. Factor Two: Nature of the Copyrighted Work

Regarding training and outputs, the materials LLMs are utilizing infringe the second factor in both of its elements. As set out in *Blanch v Koons* (2006), this factor considers whether the materials used are "expressive or creative" and whether or not they are published, with works that are both expressive or creative and published falling against a fair use designation[124] Further, a court is more likely to find this factor weighing toward a fair use assessment when the work is factual or informational.[125] LLMs utilize works published on the internet for their expressive and creative quality. They are also using, as evidenced by the outputs above, particularly the *Game of Thrones* output in *In re OpenAI.,* materials that possess a unique character far different from a factual or informational work.[126] This factor favors authors and publishers, as it protects original, published, creative expression from unauthorized use and reproduction of the kind performed by LLMs and reflected in their outputs.

VId. Factor Three: Amount and Substantiality of the Portion Used in Relation to the Copyrighted Work as a Whole

[123] *Hachette Book Grp.,* Inc.163, U.S., 181
[124] *Blanch v. Koons*, 467 F.3d 244 (2d Cir. 2006).
[125] Ibid., 256
[126] *In re OpenAI, Inc. Copyright Infringement Litig.*, U.S., October 27

As stated above, the usage of entire copyrighted works to train an LLM can be viewed as reasonable and necessary because of the direct correlation between the amount of works an LLM inputs and their capabilities (as whether the amount was reasonable is considered in direct relation to the proposed transformative purpose).[127] However, *Authors Guild v Google Inc.* (2015) reminds that, "what matters is not so much 'the amount and substantiality of the portion used' in making a copy, but rather the amount and substantiality of what is thereby made accessible to a public [in the purported secondary use] for which it may serve as a competing substitute [for the primary use]."[128] Considering LLM outputs, which are indeed the secondary use of LLM training, such extensive copying is entirely unreasonable, as it applies to a non-transformative purpose of regurgitating works verbatim or through paralleled summation. LLM outputs are made accessible to the public in a way that an authored work could never be. Available at the click of a button for instantaneous generation by anybody with access to the internet, outputs are of the utmost accessibility, particularly in a way that has the potential for market harm. As shown above, when such outputs are practically identical to the original work, the amount made available to the public is basically the original work in its entirety. Thus, this factor too lands against fair use when accessing LLM outputs.

VIe. Factor Four: The Effect of the Use Upon the Potential Market for or Value of the Copyrighted Work

LLM outputs diverge from their training when assessing the fourth factor of fair use. The analogy of an LLM's learning and output to a child learning to read and producing competitive works because of such education falls apart when the actual LLM product is considered. An LLM can create what a child cannot and enter it into the competitive marketplace with a fraction

[127] Berg, "OpenAI Can't Strike Authors' Pirated Book Download Claims."
[128] *Authors Guild v. Google, Inc.*, 804 F.3d 202 (2d Cir. 2015).

of the effort it would require a human to do so. Simply, a human cannot produce competitive outputs that can in any way measure up to those of an LLM. Judge Vince Chhaabria says it best in his response to the *Bartz* analogy: "when it comes to market effects, using books to teach children to write is not remotely like using books to create a product that a single individual could employ to generate countless competing works with a minuscule fraction of the time and creativity it would otherwise take."[129] It is not necessarily the fact of the training, but the intent to which it is put that is misaligned with the intentions of the Copyright Act and fair use.

The first form of market harm comes in the form of regurgitated outputs. It is clear that regurgitated outputs, such as those in the aforementioned cases, bring to the marketplace a "competing substitute for the original, or its derivative."[130] Evidently, what incentive would a consumer have to seek out and pay for an entire work if they could instead access a free, expressively similar summary in a fraction of a second, or obtain subscription-based news content through LLM outputs that replicate it? Allowing such behavior to exist in the marketplace may benefit the public in terms of information availability, but it ignores the protections that the Copyright Act is intended to provide for creators. A consumer may gain greater access to knowledge and quick summations, but an author's original creative expression is now hijacked for purposes they did not authorize. This factor is also meant to consider the market harm if such conduct was widespread and unrestricted.[131] If all LLMs were to advance to this degree and continue to populate the internet with stolen works and expressively similar summaries, there would be no reason for authors to create at all, as it can be inferred that consumers would turn to these free outlets over paying for original source material.

[129] *Kadrey,* 788 U.S., 1036.
[130] *In re OpenAI, Inc.*, 800 U.S., September 19, 2025, 75.
[131] *Hachette Book Grp., Inc. v. Internet Archive*, 115 U.S., 389.

The second form of market harm comes in the form of entirely "original" LLM works. This issue is discussed in *Kadrey* as it pertains to the training of LLMs, but here it will be understood regarding outputs.[132] In this case, the court assumed that people would be able to use LLMs to create books and then sell them in the marketplace.[133] This was found indicative of "indirect" substitution. Such substitution is not often of great relevance to copyright cases, as it typically deals with one original work being compared to a single secondary work, which is unlikely to pose great potential for harm. This case, however, pertains to technology powerful enough to instantaneously generate countless competitive, indirectly substantive, works.[134] Thus, indirect substitution does in fact have a real threat of diluting the market within the quantity, and similar quality, of works it can generate.[135] *Kadrey* cites a specific example: "if someone bought a romance novel written by an LLM instead of a romance novel written by a human author, the LLM-generated novel is substituting for the human-written one."[136] It is clear, then, that the substitutability of LLM outputs for original works may vary depending on the type of work, with nonfiction works perhaps being easier to displace than fiction ones.[137] In any case, books produced by an LLM have the potential to compete for sales both simply as alternative products and by flooding markets with artificial works such that original works are more likely to go unnoticed.[138] As aforementioned, in the *Kadrey* case this factor favored fair use, but as the court acknowledged, it was a conclusion "in significant tension with reality" that was only found because the plaintiffs failed to provide adequate evidence of market harm.[139] Though such technology is just beginning to take hold, there has still been a plethora of AI-generated books

[132] *Kadrey,* 788 U.S., 1055.
[133] Ibid., 1052.
[134] Ibid., 1054.
[135] Ibid.
[136] Ibid.
[137] Ibid., 1035.
[138] Ibid., 1052.
[139] Ibid., 1057.

entering the marketplace on Amazon and diluting the market.[140] These books take the form of summaries, AI-generated biographies, and copycat books. Not only do they deprive authors of their rightful profits, but they also harm their reputation by producing low-quality work under author aliases.[141] Here, consumers are very likely to opt to acquire the copy as they are not even aware of any distinction between it and the original. Where AI books are allowed to enter the marketplace, either in the form of entirely original works or those purporting to be written by a human author, a human author can no longer compete.

Thus, there is evidently market harm found in any outputs produced by LLMs—both in the form of copied iterations, summations, and "original" outputs, weighing this factor against fair use.

VII. Re-Weighing the Four Factors of Section 107

Fair use was intended to be a flexible and open-ended doctrine to accommodate and encourage technological innovation.[142] In opposition to fair dealing, which only permitted copying for certain stringent purposes, fair use was intended, as Awad writes, to function as a "legal doctrine that allows others to use a copyrighted work of authorship for purposes other than that intended by the author."[143] Its flexibility has allowed technology to prosper—permitting thumbnails and search engines in *Field v. Google Inc* (2006) and *Perfect 10, Inc. v. Amazon.com, Inc.* (2007).[144] However, the doctrine was created in 1976 and was thus established at a time when the idea of artificial intelligence competing in a marketplace with human work was entirely

[140] Ibid., 1052.
[141] Andrew Limbong, "Authors Push Back on the Growing Number of AI 'Scam' Books on Amazon," *NPR*, March 13, 2024, https://www.npr.org/2024/03/13/1237888126/growing-number-ai-scam-books-amazon.
[142] *Hachette Book Grp., Inc.* 115 U.S., 179
[143] Awad, "Generative AI's Copyright Enigma: A Comparative Study of Fair Use and Fair Dealing."
[144] Ibid., 48.

inconceivable.[145] Where search engines and thumbnails simply organize information, making the original source available to the public in an accessible manner, generative AI models become the copyrighted material themselves. By doing so, LLMs effectively function as a stand-in for original, human creation, and as such cannot continue to find protection under the fair use flexibility regarding technology. Protecting innovation is one thing, but continuing to support a machine and industry founded entirely upon copyright infringement is another.

The problem, however, as seen above, is that it is difficult for courts to overlook the evident transformative quality of an LLM. In cases without clear output data, such as *Kadrey* and *Bartz,* it appears nearly impossible for the court to dispute the AI companies' argument that their usage transforms authors' works into a mechanized form incomparable with the original work. For cases with output data, such as *In re OpenAI* and *Advance,* it remains to be seen whether courts will determine such a use as fair or not. However, the problem originates from the *Kadrey* and *Bartz* findings, that is, in the finding of the LLM training as fair. It is at this stage of training that LLMs become knowledge machines capable of infringement, and it is also at this stage that they should not be granted free access to copyrighted materials. Policing LLM outputs is simply inconceivable, and thus the only way to regulate them is to halt the learning that makes their communications possible. To do so, however, requires rethinking the recent trajectory of the fair use doctrine, particularly the overemphasis on transformative quality.

Section 107 of the Copyright Act contains four factors. And yet, undue emphasis has been placed on the first factor, specifically the "transformative" subclause. In *Campbell v Acuff-Rose Music* (1994), the court laid out that, "the more transformative the new work, the less will be the significance of other factors, like commercialism, that may weigh against a finding of

[145] 17 USCS § 107.

fair use."[146] Following *Campbell* came *Cariou v Prince* (2013), which determined the transformative issue to be the "heart of the fair use inquiry."[147] This decree has led the transformative factor, as aforementioned, to become determinative of a fair use verdict over 91 percent of the time.[148]

Such a singular focus on the transformative component, an idea not even present within the language of the first factor of Section 107 which asks the court only to consider the purpose and character of the use, poses a unique threat to authors' ownership over their works. This approach has been called into question by numerous courts, and Awad cites a few of these with words of skepticism: the Seventh Circuit in *Kienitz v. Sconnie Nation LLC* (2014) stated that "asking exclusively whether something is 'transformative' not only replaces the list in §107 but also could override 17 U.S.C. §106 (2) which protects derivative works," and Justice Clarence Thomas of the U.S. Supreme Court stated in *Google LLC v. Oracle Am.* (2021) that "courts have wrongly conflate[d] transformative use with derivative use."[149] A derivative work is, as paraphrased from Section 101 of the Copyright Act, a work based upon a preexisting work that, as a whole, represents an original work of authorship.[150] The outputs of LLMs found in *In re OpenAI* and *Advance* seem to be exactly of this derivative character, sometimes being the original work themselves or attempting to fill in for it with summation and paraphrasing. And yet, they may find protection under the token of "transformativeness." Thus, bolstering the transformative factor taints not only the protections granted to authors in the other factors of Section 107, but also those they possessed pertaining derivative works in Section 106. Evidently,

[146] *Campbell v. Acuff-Rose Music, Inc.*, 510 U.S. 569 (1994).
[147] Rollin Ransom, "The 'Transformation' of the Copyright Fair Use Test," *Law360*, December 19, 2014, https://www-law360-com.eu1.proxy.openathens.net/articles/603602/the-transformation-of-the-copyright-fair-use-test.
[148] Ibid.
[149] Ibid.
[150] Ibid.

this emphasis poses a clear threat to the long-standing protections authors maintain over their authorship.

The overemphasis on the transformative subclause has created the scenario in which LLM training can be permissible under fair use as LLMs will always possess a robotic, technological expression that is in some way inventive from an original work's form. But a new fair use doctrine is not needed to inhibit LLM training on copyrighted materials. The four factors of Section 107 are in fact equipped to effectively grapple with the technology LLMs present if they are, as *Campbell* states, "weighed together."[151] As previously argued, LLM training cannot be separated from outputs. And yet, considering "transformativeness" does exactly that, effectively allowing LLM training to claim fair use purely based on innovative mechanics while ignoring the ways in which their usage violates the other factors. Although fair use intends to promote new technology, it does not universally grant it a free pass. Instead, factors two, three, and four all provide counterweights to a doctrine that, left up to purpose and character, allows for large-scale commercially competitive usage of similar expression. Simply, the bar of fair use is too low when centralized in just one of its factors; there is more to the fair use doctrine than simple invention.

Although the other factors are meant to be taken together with the first, they have more recently become unduly influenced by it. The second and third factors, as expressed above, hardly favor fair use, as LLMs are using works for their expressive quality and in their entirety. And yet, the transformative factor has impacted how they are weighed. In *Kadrey,* for example, the court laid out that with the amount that is reasonable to use being considered in direct relation to the proposed transformative purpose.[152] The same process has occurred regarding

[151] *Campbell v. Acuff-Rose Music, Inc.,* 510. U.S., 574-578.
[152] *Kadrey,* 788 U.S., 1050.

commercialism, with *Kadrey* stating, "commercialism isn't dispositive of the first factor and tends to be less important when the secondary use is highly transformative."[153] *Warhol* linked the first and fourth factors, tying purpose to commercialism, and thus even this point is impacted by the emphasis on transformation.[154] The transformative element then takes on other factors, leading to a fair use argument for copying a work in full and utilizing it for a commercial purpose. If AI companies did not choose works for their expressive quality and only used parts of them for a non-commercial intention, then it seems unlikely that outputs would contain such blatant regurgitation and pose such a real threat to authors' works. But this is not how LLMs are currently trained: they use authors' works for a purpose and that purpose is expressed in competitive, infringing, outputs. Continuing to look past these characteristics of LLM training and instead focus on the transformative nature of the "tokens" LLMs consume allows for the type of outputs that create market harm for authors, as they possess the same expression and quantity as their original work.

Thus, looking forward, in cases both with and without output evidence, courts must consider the factors of Section 107 as they are intended. By doing so, a more nuanced understanding of the boundaries new technologies must adhere to in their usage of copyrighted materials can develop. Although it may be difficult to ascertain commercial threats without output data, the other factors, regarding expression and quantity of the use, easily fall against fair use even for the training period. When these factors are weighed alongside, instead of in deference to, the transformative factor, fair use becomes a much stronger, impenetrable doctrine that provides greater protection to human works. Although the extent of transformative quality is salient to a fair use decree, so too are the other factors Congress laid out. While LLM training

[153] Ibid., 1046.
[154] *Andy Warhol Found for the Visual Arts, Inc.*, 598 U.S., 510.

may be inherently transformative, this character cannot be considered above all else, lest AI come to run rampant over human creation. Whether in training or output, there is something amiss about the way LLMs have come to take on human character and expression as their own. Thus, it is up to the four factors of fair use to, together, halt such artificial, competitive creation.