Richmond Journal of Law & Technology

Volume 29 | Issue 1 Article 4

11-30-2022

Trial by Centipawns: A Comprehensive Analysis of Defamation Actions in Online Chess & The Probative Value of Statistical Evidence in Civil Trials

Ryan Thomas Garippo Miller, Canfield, Paddock and Stone P.L.C.

Follow this and additional works at: https://scholarship.richmond.edu/jolt

Recommended Citation

Ryan T. Garippo, *Trial by Centipawns: A Comprehensive Analysis of Defamation Actions in Online Chess & The Probative Value of Statistical Evidence in Civil Trials*, 29 Rich. J.L. & Tech 165 (). Available at: https://scholarship.richmond.edu/jolt/vol29/iss1/4

This Article is brought to you for free and open access by the Law School Journals at UR Scholarship Repository. It has been accepted for inclusion in Richmond Journal of Law & Technology by an authorized editor of UR Scholarship Repository. For more information, please contact scholarshiprepository@richmond.edu.

TRIAL BY CENTIPAWNS: A COMPREHENSIVE ANALYSIS OF DEFAMATION ACTIONS IN ONLINE CHESS & THE PROBATIVE VALUE OF STATISTICAL EVIDENCE IN CIVIL TRIALS

Ryan Thomas Garippo*

Cite as: Ryan Thomas Garippo, *Trial by Centipawns: A Comprehensive Analysis of Defamation Actions in Online Chess & The Probative Value of Statistical Evidence in Civil Trials*, 29 RICH. J.L. & TECH 1 (2022).

Look, I would say, you have a unique chance of learning more about the game of chess with your computer than Bobby Fisher, or even myself, could manage throughout our entire lives. What is very important is that you will use this power productively and you will not be hijacked by the computer screen. Always keep your personality intact. Remember that the machine is there to help you, because at the end of the day, you're not playing freestyle chess, advanced chess, human-plus-machine. If you are playing against other humans, it's about winning the game. The machine will not be assisting you, unless you are cheating of course.

- Grandmaster Garry Kasparov¹

^{*}Associate Attorney, practicing in Litigation and Dispute Resolution, at Miller, Canfield, Paddock and Stone P.L.C. Juris Doctor, Notre Dame Law School (2022); Bachelor of Arts in Liberal Arts and Sciences, University of Illinois at Urbana-Champaign (2019); Peak Chess.com Rapid Rating (1712). I want to thank everyone who made this article possible. First, I would like to thank the Honorable Mark Telloyan for his experience regarding all things law and chess. Second, I would like to thank Professor Randy Kozel for his excellent feedback throughout the writing process. Third, I would like to thank Annalisa Gobin and all the fantastic editors at the Richmond Journal of Law and Techonology. Last and certainly not least, I am especially grateful for the never-ending support from my wife, Elizabeth Garippo, and the rest of my family.

¹ Elena Holodny, One of the greatest chess players of all time, Garry Kasparov, talks about artificial intelligence and the interplay between machine learning and humans,

I. Introduction

- [1] Truthfully, I did not intend to publish this article at such an opportune time. I have been concerned about defamation in online chess for several years. However, I suspected that it was a dormant problem that would need to be addressed sometime in the undetermined future. I did not suspect that the day would come so soon.
- [2] Shortly after this article was accepted for publication, ² chess' cheating problem made headlines in The Wall Street Journal, ³ The Guardian, ⁴ and The New York Times. ⁵ These publications were covering the actions of Magnus Carlsen, the current World Chess Champion, who recently accused one of his opponents, Hans Moke Niemann, of cheating. In the aftermath of Carlsen's allegations, Chess.com, one of the largest online chess platforms, made the decision to remove Niemann from one of its upcoming online tournaments. ⁶ Additionally, Chess.com subsequently

BUSINESS INSIDER (May 24, 2017, 6:11 AM), https://www.businessinsider.com/garry-kasparov-interview-2017-5 [https://perma.cc/ZG7P-KLYJ].

² Letter from Annalisa Gobin, Editor-in-Chief, Rich. J.L & Tech., to author (Aug. 22, 2022) (on file with author).

³ Andrew Beaton & Joshua Robinson, *Chess Is in Chaos Over Suspicion That a Player Cheated Against Magnus Carlsen*, WALL ST. J. (Sept. 8, 2022, 12:37 PM)., https://www.wsj.com/articles/magnus-carlsen-hans-niemann-chess-cheating-scandal-11662644458 [https://perma.cc/2NB6-5TMY].

⁴Sean Ingle, *Magnus Carlsen publicly accuses Hans Niemann of more cheating*, GUARDIAN (Sept. 27, 2022, 5:20 PM), https://www.theguardian.com/sport/2022/sep/27/magnus-carlsen-hans-niemann-chess-cheating [https://perma.cc/4UZQ-KMDV].

⁵ Greg Keener, *Cheating Allegation Looms Over Elite Chess*, N. Y. TIMES (Sept. 28, 2022), https://www.nytimes.com/2022/09/28/crosswords/hans-niemann-magnus-carlsen-cheating-update.html [https://perma.cc/N4S8-QR3K].

⁶ Chess.com, *The Hans Niemann Report*, CHESS.COM (Oct. 4, 2022, 4:00 PM), https://www.chess.com/blog/CHESScom/hans-niemann-report [https://perma.cc/Y8T3-59V3].

published a report accusing Niemann of cheating over one hundred times on its platform.⁷ These actions were unprecedented and left many in the chess world wondering whether the situation was handled correctly.

- [3] Initially, several people questioned whether Niemann has a viable claim for defamation against either Carlsen or Chess.com.⁸ Fortunately, the chess world may get an answer to this question sooner than we thought.⁹ Niemann recently filed a lawsuit, alleging defamation, against Carlsen, Chess.com, and others. This article takes no position on the lawsuit. The situation is fluid, and the facts are complicated. However, this article does aim to fill the gap in legal discourse regarding the proper conduct of online chess websites in an increasingly digital world.
- [4] Despite its recent newsworthiness, cheating in chess is hardly a novel issue. However, the issue assumed greater relevance when chess saw an unexpected increase in popularity.¹⁰ In 2020, an unprecedented number of new users created accounts on online chess databases.¹¹ Additionally,

⁷ *Id*.

⁸ See Kenneth Rogoff, *The scandal rocking the chess world*, BOSTON GLOBE (Oct. 6, 2022, 2:56 PM)., https://www.bostonglobe.com/2022/10/06/opinion/scandal-rocking-chess-world/ [https://perma.cc/7UCD-FJFV] (noting that Niemann may have interest in a defamation suit); *see also Unpersuasive Scholar Trolling*, DIVIDED ARGUMENT, at 9:49 (Nov. 24, 2022), https://www.dividedargument.com/episodes/unpersuasive-scholar-trolling [https://perma.cc/EMQ5-LBQZ] (noting Professor Dan Epps' interest in Niemann's lawsuit).

⁹ See Niemann v. Carlsen, Play Magnus, Chess.com, LLC, Daniel Rensch, & Hikaru Nakamura, No. 4:22-cv-01110-SRW (E. D. Mo. filed on Oct. 02, 2022).

¹⁰ See Roy Lahood, *The Queen's Gambit, the Chess Boom, and the Future of Chess*, MICH. J. ECON. (Apr. 5, 2021), https://sites.lsa.umich.edu/mje/2021/04/05/the-queensgambit-the-chess-boom-and-the-future-of-chess/ [https://perma.cc/9ZAW-S7DG] (explaining that Chess' newfound popularity may be partially attributable to both *The Queen's Gambit* and the COVID-19 pandemic).

¹¹ See id.

these chess websites began to host several new online tournaments.¹² The rise in new users and tournaments has brought a novel dilemma to the chess community:¹³ how to best stop cheating in online chess.

[5] The problem of cheating has proven vexing for online chess platforms to solve. All of the major online chess databases currently have robust anti-cheating policies. ¹⁴ Yet, these databases still have a consistent stream of active cheaters on their platforms. ¹⁵ According to International Master Danny Rensch, the Chief Chess Officer for Chess.com, the website recently received a letter signed by several of the game's best players, imploring the website to bolster its anti-cheating policies. ¹⁶ In response, Chess.com and many other online chess platforms enhanced their already comprehensive anti-cheating policies. ¹⁷ However, these updates to online anti-cheating policies have likely come with a price.

¹² *Id*.

¹³ See About Online Chess Cheating, CHESS.COM (Aug. 19, 2020, 6:49 PM), https://www.chess.com/article/view/online-chess-cheating [https://perma.cc/QEA2-CS35] (asserting that Chess.com's surge in users and cheating creates a growing problem in the chess community).

¹⁴ See id. (showing Chess.com's anti-cheating policy as an example of a strong response by the chess community).

¹⁵ See id.

¹⁶ Chess.com, *Don't Cheat At Chess: What Chess.com Is Doing to Catch Cheaters!*, YOUTUBE (Apr. 30, 2020), https://www.youtube.com/watch?v=knvySXCNfd8 [https://perma.cc/6K4W-TNNM].

¹⁷ See About Online Chess Cheating, supra note 13; see also Terms of Service, LICHESS.ORG (Aug. 5, 2022), https://lichess.org/terms-of-service [https://perma.cc/Y9KQ-HMRX].

- [6] In recent years, the potential for top chess players to make a high-income salary from the game, has greatly increased. If these players are labeled as "cheaters," then it could substantially affect their ability to earn a living. Furthermore, these situations are particularly problematic if it turns out that an accusation of cheating was a "false positive" and the player did not actually cheat.
- [7] Take for example the case of Henry Despres, a chess coach located in New York.²⁰ In 2013, Despres filed a complaint in the United States District Court for the Eastern District of New York.²¹ In this complaint, Despres alleged that Chess.com closed his account for online cheating and caused him reputational harm.²² Despres also claimed that the damage to his reputation would prevent him from obtaining new students.²³ Consequently, Despres filed a defamation action seeking \$200,000 in damages.²⁴
- [8] Despres' case presents an illustrative example of the potential harm that could be caused by a false accusation. According to Despres, at the time of his filing, he only had a fifteen-year life expectancy.²⁵ Despres was

¹⁸ See Andrew Hercules, Are Chess Players Rich? The Truth About Making Money In Chess, HERCULES CHESS, https://herculeschess.com/are-chess-players-rich/[https://perma.cc/G69R-KYVV].

¹⁹ About Online Chess Cheating, supra note 13.

²⁰ Complaint at 4, Despres v. Chess.com LLC, No. 2:13-cv-06212 (E.D.N.Y. Nov. 12, 2013).

²¹ *Id*. at 1.

²² *Id.* at 4.

²³ *Id*.

²⁴ *Id*.

²⁵ Complaint, *supra* note 20, at 4.

reliant on chess to support himself for the remainder of his life. ²⁶ Accordingly, a cheating accusation would have deprived Despres from his primary form of financial security. However, Despres' case was never heard on the merits. ²⁷ According to subsequent court documents, Despres allegedly settled his dispute with Chess.com. ²⁸ Despres' Chess.com account is still active to this day. ²⁹

[9] Since Chess.com has never litigated this matter in court, the issue has not been resolved for subsequent cases. However, it is likely that online chess platforms expose themselves to liability when they publicly accuse players of cheating. Future players could allege defamation and claim that their ability to make money from chess has been diminished. If an online chess website was able to prove that a player cheated, then the platform would avoid liability. This well-established doctrine in defamation law is known as "truth" as "an absolute defense." Thus, online chess platforms should be one hundred percent certain of their cheating accusations lest they expose themselves to liability.

[10] The tension between defamation law and an increased desire for advanced cheating detection software gives rise to the subject of this article. If online chess websites are willing to defend their cheating accusations on the basis that "truth" is "an absolute defense,"³¹ then their methodology for catching cheaters will be material in every lawsuit. To support this thesis, the remaining portions of this article will be split into three parts. In Part II,

²⁶ See id.

 $^{^{27}}$ See Order Dismissing Case at 1, Despres v. Chess.com LLC, No. 2:13-cv-06212 (E.D. N.Y. Nov. 12, 2013).

²⁸ Id.

²⁹ chess2Knights, CHESS.COM, https://www.chess.com/member/chess2knights [https://perma.cc/Y863-B22K].

³⁰ See Curtis Pub. Co. v. Butts, 388 U.S. 130, 151 (1967).

³¹ See id.

the basic format of competitive chess play and the current policies regarding cheating will be outlined. In Part III, the prima facie case for chess-based defamation will be illustrated to demonstrate that liability is possible. In Part IV, the current anti-cheating policies set forth by major online chess platforms will be analyzed. The goal of this presentation is to determine whether these policies can definitively establish that a player truly cheated. Consequently, this article will conclude with a discussion of possible reforms to the current cheating detection policies in competitive online chess.

II. A BACKGROUND IN CHESS

[11] Before beginning a defamation analysis, it is worthwhile to understand the basic layout of competitive chess. Historically, chess has been played through two primary mediums: over-the-board and online chess.³² There are several key distinctions between these mediums.

[12] Over-the-board chess is the most traditional form of gameplay. Two players meet in-person, conventionally through an organized chess tournament, and play until the game is finished.³³ These tournaments are supervised by arbiters who manage the event and ensure that all players follow tournament rules.³⁴ Players compete for Elo rating³⁵ along with any prize money that may come from a top-placed finish.³⁶ Elo rating is chess'

³² See Michael Stephen Vargas, *Is over-the-board chess better than online chess?*, WE Go CHESS, https://wegochess.com/is-over-the-board-chess-better-than-online-chess/[https://perma.cc/P6SB-BX64] (distinguishing between the two mediums of chess).

³³ See generally INT'L CHESS FED'N, FIDE LAWS OF CHESS 2–8 (2018), https://www.fide.com/FIDE/handbook/LawsOfChess.pdf [https://perma.cc/CRV7-ESBR] (explaining the basic rules of chess).

³⁴ *Id.* at 15–16.

³⁵ See generally Elo Rating System, CHESS.COM, https://www.chess.com/terms/elo-rating-chess [https://perma.cc/Y3FK-GNVU] (explaining the Elo rating system).

³⁶ See Hercules, supra note 18.

measurement for the overall strength of a player.³⁷ If a player wins his game, his Elo rating increases.³⁸ Thus, if a player loses his game, his Elo rating decreases.³⁹ If the players draw, their Elo ratings will remain relatively intact.⁴⁰ Consequently, players take great pride in their Elo rating. The amount of Elo rating that a player gains or loses is directly contingent on his opponent's skill level.⁴¹ For example, a player gains more Elo rating by beating an opponent rated significantly higher than him.⁴² If the same player beat an opponent closer to his own skill level, then he would gain less Elo rating.⁴³ For this reason, players are typically matched with opponents that have a similar rating to themselves.⁴⁴ This form of matchmaking is done to avoid dramatic swings in Elo rating.⁴⁵ According to the United States Chess Federation ("USCF"), the 50th percentile player typically has an Elo rating

³⁷ See Elo Rating System, supra note 35.

³⁸ *Id*.

³⁹ *Id*.

 $^{^{40}}$ Id. (inferring that draws result in less of an Elo rating change compared to a win or a loss).

⁴¹ See id.

⁴² Elo Rating System, supra note 35.

⁴³ See id.

⁴⁴ *See, e.g.*, Thore Graepel & Ralf Herbrich, *Ranking and Matchmaking*, GAME DEV. MAG. (Oct. 2006), https://www.microsoft.com/en-us/research/publication/ranking-and-matchmaking/ [https://perma.cc/CPC8-7LAA].

⁴⁵ See id.

of somewhere between 900-1100.⁴⁶ The 25th percentile is closer to 500.⁴⁷ Alternatively, the 75th percentile is approximately 1500.⁴⁸

[13] As a player approaches the top tiers of over-the-board chess, he can compete for titles. ⁴⁹ Titles are honorary designations awarded for excellence in the game of chess. Titles are either awarded by the International Chess Federation ("FIDE")⁵⁰ or the player's national chess federation. ⁵¹ The highest rated title in chess is the designation of Grandmaster. ⁵² This title is highly coveted and only awarded to the world's best players. However, there are also International Masters ⁵³, FIDE Masters ⁵⁴, Candidate Masters ⁵⁵, and National Masters. ⁵⁶ These players far exceed average skill level and they are capable of winning most tournaments provided there are no other highly rated opponents. Therefore,

⁴⁶ USCF Ratings Distribution Charts, U.S. CHESS ONLINE (Nov. 1, 2004), http://www.uschess.org/archive/ratings/ratedist.php [https://perma.cc/CCL4-EEAY].

⁴⁷ *Id*.

⁴⁸ *Id*.

⁴⁹ See FIDE Title Regulations effective from 1 July 2017 till 31 December 2021, INT'L CHESS FED'N (July 1, 2017), https://handbook.fide.com/chapter/B01Regulations2017 [https://perma.cc/2HMT-CSPX] [hereinafter FIDE Title Regulations].

⁵⁰ See INT'L CHESS FED'N, FIDE CHARTER 8 (2020) (explaining the French origin of FIDE's name).

⁵¹ See FAQ (Starting Out), U.S. CHESS FED'N, http://www.uschess.org/index.php/Learn-About-Chess/FAQ-Starting-Out.html [https://perma.cc/JTS5-ZVXZ].

⁵² *Id*.

⁵³ FIDE Title Regulations, supra note 49.

⁵⁴ *Id*.

⁵⁵ *Id*.

⁵⁶ FAQ (Starting Out), supra note 51.

titled players are consistently invited to tournaments with the largest cash prizes, as their likelihood of winning is quite high.

[14] Online chess is significantly different than its over-the-board counterpart. As opposed to playing games in-person, online chess is played via internet platforms like Chess.com or Lichess.org. These platforms typically require new players to make an account and agree to the terms of service before playing.⁵⁷ New players must play several games to establish a rating. Importantly, the rating system used on online chess databases is not the same as the over-the-board style Elo rating.⁵⁸ Instead, most major online chess platforms use either the Glicko 1 or Glicko 2 rating system.⁵⁹ The Glicko systems are regarded as being more accurate and mathematically complex than the Elo rating methodology.⁶⁰ Yet, at a fundamental level, Glicko rating systems operate quite similarly to Elo ratings. For purposes of this article, the only major difference between these systems is that there are often discrepancies between players' Elo ratings and their Glicko ratings.⁶¹

[15] Online chess also has tournaments that resemble over-the-board style tournaments. In online tournaments, players can sign onto an internet chess platform and compete for prizes.⁶² Notably, online chess does not issue titles to its players. Rather, players who are already titled due to their

⁵⁷ Terms of Service, supra note 17; see also User Agreement, CHESS.COM (Apr. 21, 2022), https://www.chess.com/legal/user-agreement [https://perma.cc/8PSH-WXSX].

⁵⁸ *Chess rating systems*, LICHESS.ORG, https://lichess.org/page/rating-systems [https://perma.cc/2KS7-CK9M].

⁵⁹ See id.

 $^{^{60}}$ Id

⁶¹ See id.

⁶² See Titled Tuesday: All The Information, CHESS.COM, https://www.chess.com/article/view/titled-tuesday [https://perma.cc/3HB4-GH4E] (Sept. 14, 2022, 9:42 AM).

over-the-board tournaments can apply for a special titled account.⁶³ These accounts give titled players special benefits including the opportunity to compete for higher value prize funds in events such as "Titled Tuesday."⁶⁴ Therefore, by obtaining a title in over-the-board games, players gain access to more financial opportunities online.

[16] Additionally, there are numerous other opportunities for titled players to play chess online for financial gain, including brand deals through online video platforms. A notable example is Grandmaster Hikaru Nakamura, formerly the world's third highest rated over-the-board player, 65 whose notoriety led him to sign a streaming agreement with an e-sports team in 2020. 66 Under that agreement, Nakamura was required to broadcast his online chess games on Twitch.com. 67 This opportunity allowed Nakamura to play online chess on a full-time basis and earn guaranteed income outside of tournament play. 68 Another example is International Master Levy Rozman who has become the largest chess content producer on YouTube, 69 with 1.64 million subscribers and multiple paid contracts

⁶³ See Daniel Rensch, Why Chess.com For Titled Players and Coaches?, CHESS.COM (May 17, 2022, 10:03 AM), https://www.chess.com/article/view/why-chesscom-fortitled-players-and-coaches [https://perma.cc/GR5P-BLE9].

⁶⁴ See id.; see also Titled Tuesday, supra note 62.

⁶⁵ See Top 100 Players March 2015 - Archive, INT'L CHESS FED'N, https://ratings.fide.com/toparc.phtml?cod=345 [https://perma.cc/CG5C-6Q6A].

⁶⁶ Nick Statt, *Esports giant TSM signs Hikaru Nakamura, its first pro chess player*, THE VERGE (Aug. 27, 2020, 1:47 PM), https://www.theverge.com/2020/8/27/21404322/hikaru-nakamura-chess-tsm-esports-sign-contract-player-twitch [https://perma.cc/KW2Z-GJFK].

⁶⁷ See id.

⁶⁸ See id.

 $^{^{69}}$ Laura Nystrom, Streamer Sensation Levy Rozman Announces Winners of \$100,000 Chess Grant Program, Business Wire (Nov. 10, 2021, 8:00 AM),

with advertisers. 70 Therefore, it is not surprising that more titled chess players than ever before are taking advantage of the opportunities on online video platforms.

[17] This evidence supports the conclusion that a player's reputation is incredibly important to his financial success in chess. A player's rating and title are proxies for his skill at the game. These proxies signal to the broader chess community that this player is highly skilled and should be considered an authoritative source of knowledge. Accordingly, highly rated players are frequently invited to chess tournaments, given special online account privileges, and can generate massive audiences on internet video services. All of these opportunities are predicated on a player's reputation. If a player's reputation were significantly tarnished, he would stand to lose potentially millions of dollars' worth of opportunities.

[18] It may be self-evident, but traditionally both over-the-board and online chess have been considered individual endeavors.⁷² As such, the game has historically been played without outside assistance.⁷³ A player is

https://www.businesswire.com/news/home/20211110005433/en/Streamer Sensation-Levy-Rozman-Announces-Winners-of-100000-Chess-Grant-Program [https://perma.cc/S95P-2236].

⁷⁰ *GothamChess*, YouTuBE, https://www.youtube.com/channel/UCQHX6ViZmPsWiYSFAyS0a3Q [https://perma.cc/H5K3-AFEE].

⁷¹ See Episode 261- "Master to IM" Adult Improver Special with FM Doug Eckert, NM Evan Rosenberg and FM Dalton Perrine, THE PERPETUAL CHESS PODCAST (Jan. 11, 2022), https://www.perpetualchesspod.com/new-blog/2022/1/11/ep-261-master-to-im-adult-improver-special-with-fm-doug-eckert-nm-evan-rosenberg-and-fm-dalton-perrine [https://perma.cc/F3AB-SJUU] (explaining National Master Evan Rosenberg's desire to become an International Master).

⁷² See Fair Play Policy, CHESS.COM (Apr. 21, 2022), https://www.chess.com/legal/fair-play [https://perma.cc/3FD2-RMH4].

⁷³ See id.

only permitted to use his current knowledge of the game.⁷⁴ He cannot consult other people, books, notes, online chess engines, or other resources while the game is ongoing.⁷⁵ However, these rules do not prohibit a player from consulting outside materials at other times.⁷⁶ Rather, a player is simply restricted from accessing these resources *during* his game.⁷⁷ Players remain free to consult any of these resources in preparation for their games, provided that they do not access these materials once the match starts.⁷⁸

[19] Accordingly, many major online chess platforms have implemented robust rules to prevent cheating. These rules are reinforced by advanced software and are intended to preserve the game's integrity. For example, Chess.com has a Fair Play Policy that prohibits cheating and is backed by the latest anti-cheat technology. Similarly, Lichess.org prohibits cheating in its "Terms of Service," and also has a highly advanced system for detecting cheaters. If a player is caught cheating on either of these websites, his account will be permanently closed. Once a player's account is closed, there will typically be a notice posted on his profile notifying other

⁷⁴ See id.

⁷⁵ *Id*.

⁷⁶ See id.

⁷⁷ See Fair Play Policy, supra note 72.

⁷⁸ See id.

⁷⁹ *Id.*; see Don't Cheat At Chess, supra note 16.

⁸⁰ Terms of Service, supra note 17.

⁸¹ *Id.*; *Fair Play Policy*, *supra* note 72.

users why the account was closed. ⁸² Chess.com's notice states "[t]his account has been closed for violating our Fair Play Policy. These rules help keep chess fair for everyone." As will be discussed later in this article, modern cheating detection software has become highly advanced and allegedly almost never produces "false positives." ⁸⁴ Consequently, online chess platforms, such as Chess.com, have been confident enough to assert that they would defend any account closure in court. ⁸⁵

[20] Despite the platforms' assertions of accuracy in identifying cheating, players accused of cheating have still brought actions in response to such accusations. As previously discussed, Henry Despres⁸⁶ is one of several plaintiffs who have filed a defamation lawsuit based on cheating allegations.⁸⁷ Although Despres' defamation suit was never heard on the merits, his lawsuit did raise two novel issues. The first is whether a plaintiff can prove that current anti-cheating policies of online chess platforms meet the prima facie case for defamation. Assuming *arguendo* that the prima facie case has been met, one must then ask whether modern cheat detection software is sufficiently advanced at catching cheaters. If such software is sufficiently advanced, an online chess platform may be able to avoid

⁸² See Zerodha's Nikhil Kamath banned from chess.com for violating fair-play policy in game against Viswanathan Anand, THE WEEK (June 14, 2021, 3:33 PM), https://www.theweek.in/news/sports/2021/06/14/zerodhas-nikhil-kamath-banned-from-chesscom-for-violating-fair-play-policy-in-game-against-viswanathan-anand.html [https://perma.cc/4JHZ-M4LT] [hereinafter Nikhil Kamath Article].

⁸³ *Id*.

⁸⁴ See About Online Chess Cheating, supra note 13.

⁸⁵ *Id*

⁸⁶ Complaint, supra note 20, at 4.

⁸⁷ See, e.g., Lehmann v. U.S. Chess Fed'n, No. 05-95-00304-CV, 1996 Tex. App. LEXIS 283, at *2–4 (Tex. Ct. App. 1996); *Niemann*, 4:22-cv-01110-SRW at 1-44.

liability under the doctrine of "truth" as "an absolute defense." While defamation claims due to false allegations of cheating may be somewhat novel to chess, they are not completely unprecedented in the broader legal community. In fact, a California appellate court recently held that false allegations of cheating are sufficient to support a prima facie case for defamation. The following section of this article will provide a legal analysis for an illustration of a defamation action premised on an allegation of online chess cheating.

III. THE PRIMA FACIA CASE FOR CHESS-BASED DEFAMATION

- [21] Based on current tort law, it is highly likely that an online chess platform's accusation of cheating would be sufficient to support a defamation claim. In this section, each element of a defamation claim will be analyzed individually to show that these suits may have merit.
- [22] Defamation is a well-known exception to the First Amendment of the United States' Constitution. The First Amendment states that "Congress shall make no law ... abridging the freedom of speech." However, this protection does not apply to defamatory speech. In fact, states are even allowed to criminalize defamatory speech. Furthermore, all fifty states

⁸⁸ Curtis Publ'g. Co., 388 U.S. at 151.

⁸⁹ See Mitchell v. Twin Galaxies, LLC, 285 Cal. Rptr. 3d 211, 224–25 (Cal. Ct. App. 2021) (illustrating a similar situation to Despres' case except in the realm of arcade video games).

⁹⁰ *Id*.

⁹¹ U.S. CONST. amend. I; *see* Gitlow v. New York, 268 U.S. 652, 666 (1925) (holding that states cannot abridge freedom of speech either under the Fourteenth Amendment).

⁹² Walter V. Schaefer, *Defamation and the First Amendment*, 52 U. Colo. L. Rev. 1, 1–3 (1980).

⁹³ Beauharnais v. Illinois, 343 U.S. 250, 255 (1952).

have civil laws prohibiting defamation.⁹⁴ The rest of this article refers to the civil action available for a claim of defamation.

[23] At common law, there are typically four elements to a defamation claim. According to the Second Restatement of Torts, these elements are as follows: (1) "a false and defamatory statement concerning another"; (2) "an unprivileged publication to a third party"; (3) "fault amounting at least to negligence on the part of the publisher"; and (4) "either actionability of the statement irrespective of special harm or the existence of a special harm caused by a publication." If the plaintiff is a public figure, there is an additional requirement that the defendant's statement be made with "actual malice." Since defamation suits are civil cases, each element must be proven by a preponderance of the evidence.

[24] Additionally, there are multiple defenses to a defamation claim. If any of these defenses are proven, including the doctrine of "truth" as "an absolute defense," a plaintiff's action will not be successful.⁹⁷ The "truth" as "an absolute defense" doctrine is derived from the first element of a defamation claim,⁹⁸ which requires that a defendant's statement be false.⁹⁹ A statement is false when it "is not substantially correct."¹⁰⁰ Since a true

⁹⁴ See generally PRAC. L. LAB. & EMP., DEFAMATION IN EMPLOYMENT REFERENCES STATE LAW CHART: OVERVIEW (2022), Westlaw 3-619-6023 (providing a chart demonstrating that every state has a civil law action for defamation and listing the elements).

⁹⁵ RESTATEMENT (SECOND) OF TORTS § 558 (AM. L. INST. 1977).

⁹⁶ N.Y. Times Co. v. Sullivan, 376 U.S. 254, 279–80 (1964).

⁹⁷ See Curtis Publ'g Co., 388 U.S. at 151.

⁹⁸ See id. at 151–52.

⁹⁹ RESTATEMENT (SECOND) OF TORTS § 558 (AM. L. INST. 1977).

¹⁰⁰ Spengler v. Sears, 878 A.2d 628, 640 (Md. Ct. Spec. App. 2005) (quoting Batson v. Shiflett, 602 A.2d 1191, 1213 (1992)).

statement is by definition "correct," it cannot qualify as false. Therefore, the "[t]ruth of a defamatory statement of fact is a complete bar to recovery." Even if a plaintiff can prove the other elements of defamation, he is precluded from recovery when this doctrine applies.

A. The Statement

[25] If an online chess platform falsely accuses a player of cheating, then the first element of defamation has likely been satisfied. Under the first element, an online chess platform needs to make "a false and defamatory statement concerning another." This element can be split into three parts. First, an online chess platform must make a statement. Second, this statement must concern another. Last, this statement must be "false and defamatory." If each of these three parts apply, then the first element has been satisfied.

[26] First, this article must analyze whether online chess platforms typically make statements sufficient to trigger defamation law. ¹⁰⁶ As a preliminary matter, online chess platforms are unlikely to issue press statements that explicitly accuse someone of cheating. ¹⁰⁷ Most major online

¹⁰¹ RESTATEMENT (SECOND) OF TORTS § 581A cmt. d (Am. L. INST. 1977).

¹⁰² Id. § 558(a).

¹⁰³ *Id*.

¹⁰⁴ *Id*.

¹⁰⁵ *Id*

¹⁰⁶ See Restatement (Second) of Torts § 558(a).

¹⁰⁷ See About Online Chess Cheating, supra note 13; but see The Hans Niemann Report, supra note 6.

chess platforms prohibit such statements as a matter of policy. However, even in the absence of explicit press releases, it is still possible for online chess platforms to issue statements. For example, under Chess.com's current policies, when it "determines" that someone has cheated, the website inserts text on the player's profile and closes his account. This article will refer to this text as the Fair Play Notice. The Fair Play Notice reads "[t]his account has been closed for violating our Fair Play Policy. These rules help keep chess fair for everyone." The Fair Play Policy exclusively addresses Chess.com's rules against cheating. The Fair Play Policy of this article, the Fair Play Notice and other notices like it are the relevant statements for defamation law.

[27] Next, there is a requirement that the statement must concern another person. This part of the element is easily satisfied. Chess.com's Fair Play Notice is placed directly on the user's profile. In the Notice, Chess.com explicitly states that it is referring to "[t]his account," which specifically implicates the user. Therefore, it is highly likely that these notices "concern another" for purposes of defamation law.

[28] Lastly, there is also a requirement that the statement be "false and defamatory." This requirement will be the center of debate in most chess-based defamation suits. This debate stems from the fact that a player will almost always claim they were falsely accused of cheating. Conversely, the online chess platform will defend its statement, claiming it is true and non-

¹⁰⁸ See, e.g., About Online Chess Cheating, supra note 13.; Terms of Service, supra note 17.

¹⁰⁹ See Nikhil Kamath Article, supra note 82.

¹¹⁰ See Fair Play Policy, supra note 72.

¹¹¹ See RESTATEMENT (SECOND) OF TORTS § 558(a) (Am. L. INST. 1977).

¹¹² See Nikhil Kamath Article, supra note 82.

¹¹³ RESTATEMENT (SECOND) OF TORTS § 558(a) (Am. L. INST. 1977).

actionable. Therefore, a player's lawsuit will often hinge on whether he is able to prove that the cheating allegations were false. In Part IV of this article, the precise methodology for proving whether a player cheated will be analyzed. However, in the interim, it is sufficient to note that if a player can prove he was falsely accused of cheating, then the first element of defamation has likely been met.

B. The Publication

[29] The second element for a defamation claim is an "unprivileged publication to a third party." This element can also be split into three parts. First, the defendant must make a publication. 115 Second, that publication must be unprivileged. 116 Third, the publication must be made to a third-party. 117 If each of these parts are satisfied, then the second element has been met.

[30] Chess.com's Fair Play Notice, and other notices like it, are publications under defamation law. According to the Second Restatement of Torts, "printed words" can constitute a publication provided that they are "brought to the attention of a third-person." Chess.com puts its Fair Play Notice in text and places it on the public facing portion of a player's profile. This text would certainly qualify under any meaning of the term "printed words." By publishing this Notice on the public portion of a

```
<sup>114</sup> Id. § 558(b).
```

¹¹⁵ See id.

¹¹⁶ *Id*.

¹¹⁷ Id.

¹¹⁸ See RESTATEMENT (SECOND) OF TORTS § 577 cmt. a (Am. L. INST. 1977).

¹¹⁹ See Fair Play Policy, supra note 72; Nikhil Kamath Article, supra note 82.

¹²⁰ RESTATEMENT (SECOND) OF TORTS § 577 cmt. a (Am. L. INST. 1977).

player's profile, the website is hoping to communicate a message to thirdparty users and anyone else who visits the website. Accordingly, these notices are publications for purposes of defamation law.

[31] The next part of the second element is that the publication needs to be unprivileged. ¹²¹ Under defamation law, there are several ways for a publication to be privileged. Most of instances of privilege rest on "the consent of the other affected by the actor's conduct." ¹²² Therefore, if a plaintiff consents to publication, then he cannot subsequently sue for defamation. No online chess player has ever consented to being falsely labeled a cheater. Additionally, using Chess.com has an example, there is no such consent waiver that appears anywhere in its Fair Play Policy or User Agreement. ¹²³ Furthermore, it would be unreasonable for online chess platforms to assume that users implicitly consent to false allegations being published. Consequently, this component will almost always be satisfied.

[32] The final requirement is that the publication be made to a third-party. 124 As was outlined under the first requirement, this component has likely been satisfied. Anyone, with or without an account on Chess.com, can view its Fair Play Notices. Anyone can click on an accused cheater's profile, read the notice, and infer that he cheated. Accordingly, there are millions of third parties who have access to these publications. Therefore, it is highly likely that all the requirements of a publication have been met.

¹²¹ RESTATEMENT (SECOND) OF TORTS § 558(b) (Am. L. INST. 1977).

¹²² *Id.* § 10 (Am. L. INST. 1965).

¹²³ See also See Fair Play Policy, supra note 72; User Agreement, supra note 57.

¹²⁴ See Restatement (Second) of Torts § 558(b) (Am. L. Inst. 1977).

C. Negligence

[33] The third element in every successful defamation suit is "fault amounting at least to negligence on the part of the publisher." Publishers are negligent when they do not act as a "reasonably prudent person" would have under the circumstances. 126 In the context of online chess, this element may be extremely difficult to prove.

[34] As will be demonstrated in Part IV of this article, online chess platforms have highly advanced statistical detection methods to determine whether a player is cheating. 127 These statistical models do not deal in certainties. 128 Rather, these statistical models will provide an online chess platform with the probability that a player cheated. 129 Consequently, a platform can decide that it is only willing to accuse players of cheating above a certain probability threshold. 130

[35] Currently, none of the major online chess platforms publish their probability thresholds. Regardless, many platforms, including Chess.com, have committed to acting conservatively when accusing a player of cheating. 131 Although, given the standard of proof in defamation suits, this

¹²⁵ See id. § 558(c).

¹²⁶ E.g., Chicago Great W. Ry. Co. v. McDonough, 161 F. 657, 665 (8th Cir. 1908).

¹²⁷ See Episode 136- IM Kenneth Regan, The Perpetual Chess Podcast (July 23, 2019), https://www.perpetualchesspod.com/new-blog/2019/7/23/episode-136-im-kenneth-regan [https://perma.cc/85V3-EEYX].

¹²⁸ *Id*.

¹²⁹ Id

¹³⁰ See About Online Chess Cheating, supra note 13 (noting that Chess.com will only accuse players of cheating in certain circumstances).

¹³¹ See id. (explaining that Chess.com balances the risk of banning an innocent player against the goal of closing as many cheating accounts as possible).

promise should not be particularly comforting to plaintiffs. Defamation claims, like most other civil suits, must be proven by a preponderance of the evidence. Under the preponderance standard, a plaintiff needs to prove "that there is a greater than 50% chance that the claim is true." Using this standard, it is possible for an online chess platform to implement a strong legal strategy against liability. The platform could simply commit to setting its probability threshold at greater than 50%.

[36] Consider the following basic example of how a legal strategy based on probability thresholds could work. An online chess platform decides to enact a probability threshold for catching cheaters. At the same time, the platform also wants to act conservatively. Therefore, the platform decides to only act on cases where there is a 75% probability of cheating. Under this statistical model, a suspected cheater's game is compared against the platform's artificial intelligence database. ¹³⁴ These artificial intelligence databases are part of a broader category known as chess engines. ¹³⁵ If the player's game shares too many similarities with the optimal strategy suggested by an engine, then a simulation will be conducted. ¹³⁶ This simulation will reenact a player's game multiple times to determine the likelihood that his moves were played without outside assistance. ¹³⁷

¹³² See preponderance of the evidence, LEGAL INFO. INST. (March 2022), https://www.law.cornell.edu/wex/preponderance_of_the_evidence [https://perma.cc/3B53-N5GJ].

¹³³ *Id*.

¹³⁴ See Episode 136- IM Kenneth Regan, supra note 127.

¹³⁵ See id.

¹³⁶ *Id*.

¹³⁷ *Id*.

Additionally, this simulation will take into account whether it was reasonable for a player of that rating to make these moves. 138

[37] This practice, which is known as predictive analytics, is prevalent throughout online chess platforms. Under a predictive analytics analysis, one could imagine a hypothetical result, where the database concludes that the player cheated in 76/100 simulations (i.e., 76%). This result would meet the online chess platform's threshold. Consequently, the online chess platform would "conclude" that the player cheated and ban his account.

[38] Under such circumstances, it could prove quite difficult for a player to succeed on his defamation claim even if he did not cheat. The online chess platform will claim that a reasonable person would have relied on these statistical models when making cheating accusations. After all, a plaintiff may find it difficult to claim that a platform acted unreasonably when the court's own standard of proof is statistically satisfied. However, as will be examined in Part IV of this article, these statistical models are not as solid as they facially seem. Still, a plaintiff must find some way to prove that an online chess platform's statistical model is deficient in order to prevail.

[39] The best way to attack these statistical models is to question any underlying assumptions that they are built upon. When many of these models were developed, chess players did not study with engines. 142

¹³⁸ See About Online Chess Cheating, supra note 13 ("[I]f a beginner has a 99% accuracy against a grandmaster, [Chess.com] will be very suspicious. However, in general, accuracy is NOT evidence.").

¹³⁹ See Episode 136- IM Kenneth Regan, supra note 127.

¹⁴⁰ See McDonough, 161 F. at 658.

¹⁴¹ See preponderance of the evidence, supra note 132.

¹⁴² See Episode 136- IM Kenneth Regan, supra note 127.

Instead, these players relied on famous games, chess books, and coaches to improve. However, in the modern era, most chess players study almost exclusively with engines. Has fact begins to undercut the validity of most preexisting statistical models.

[40] If a player studies by learning the best moves suggested by a chess engine, then there is diminished value in comparing his game against an engine. The moves will obviously be quite similar as they were originally suggested by an engine. However, this fact does not necessarily mean that the player cheated. Players are allowed to consult engines *before* their games and the online chess platforms provide these databases. ¹⁴⁵ Accordingly, it is not uncommon for there to be minimal statistical inaccuracies at a top-level chess match. Therefore, there may be some flaws built into the reliability of many current statistical models.

[41] Furthermore, over-the-board chess uses a significantly different model than its online counterpart. FIDE uses a system based on "independent evidence" of cheating. ¹⁴⁶ Under this system, if statistical models indicate that a player is cheating, the tournament's arbiter will be informed. ¹⁴⁷ The arbiter would observe that player more carefully and look

¹⁴³ See Episode 204- FM Nathan Resika (Adult Improver Series), THE PERPETUAL CHESS PODCAST (Dec. 1, 2020), https://www.perpetualchesspod.com/new-blog/2020/12/1/episode-204-fm-nathan-resika [https://perma.cc/9C4T-HTNT].

¹⁴⁴ *Id*.

¹⁴⁵ See Fair Play Policy, supra note 72.

¹⁴⁶ See id.; see also Francois P. Strydom, FIDE Ethics Commission, World Chess Federation, Motivation *In Re* Case No. 8/2015 & Case No. 2/2016, (2018), https://ethics.fide.com/images/stories/FIDE_ETHICS_COMMISSION_-_MOTIVATION_-_TETIMOV__RICCIARDI_FINAL.pdf [https://perma.cc/4Q7J-5368] (detailing two landmark cheating cases investigated by FIDE that took into account statistical evidence of the probability of cheating).

¹⁴⁷ See Episode 136- IM Kenneth Regan, supra note 127.

for independent evidence of cheating.¹⁴⁸ This evidence could take a variety of forms. In one notable example, Grandmaster Igors Rausis was caught checking a chess engine on his phone while using the bathroom.¹⁴⁹ Once the arbiter has obtained independent evidence, then he is permitted to accuse a player of cheating.¹⁵⁰

[42] Currently, online chess does not have a comparable system. It is difficult to observe independent evidence of cheating when players compete remotely. Furthermore, online chess platforms do not have arbiters which makes the task significantly harder. The conclusion of this article will contain an analysis of the potential reforms to online chess cheating detection. However, in the interim, it is sufficient to note that there are some reliability issues regarding online chess platforms' current practices. Given these known reliability issues, courts could certainly find that a platform acted unreasonably by accusing a player of cheating. This finding would be sufficient to prove negligence and thus, satisfy the third element of a defamation claim.

[43] Additionally, it is worth noting that there is a category of chess players who may be considered limited public figures for purposes of defamation law.¹⁵¹ If a person is a limited public figure, then they must prove "actual malice" instead of negligence to prevail on their case.¹⁵² An

¹⁴⁸ *Id*.

¹⁴⁹ See Allyson Chiu, A chess grandmaster's success was 'unreal.' Until he was caught in the bathroom with a phone., WASH. POST (July 15, 2019, 6:39 AM), https://www.washingtonpost.com/nation/2019/07/15/chess-grandmasters-success-was-unreal-then-he-was-caught-bathroom-with-phone [https://perma.cc/EUF5-C82H]; see also STRYDOM, supra note 146, at 13, 14 (explaining a situation where an over-the-board player was suspected of keeping an earpiece in during a tournament).

¹⁵⁰ See Episode 136- IM Kenneth Regan, supra note 127.

¹⁵¹ See Gertz v. Robert Welch, Inc., 418 U.S. 323, 351–52 (1974); see also 3 Rodney A. Smolla, Smolla and Nimmer on Freedom of Speech § 23:4 (3d ed. 1996).

¹⁵² See Gertz, 418 U.S. at 327–28.

individual is a limited public figure when he "voluntarily injects himself or is drawn into a particular public controversy and thereby becomes a public figure for a limited range of issues." ¹⁵³

[44] In the context of this article, figures like International Master Levy Rozman or Grandmaster Hikaru Nakamura would be chess celebrities or limited public figures. These players are prominent chess personalities who have inserted themselves into the game's discourse via their online presence. If these players were ever sue to for defamation, they may need to prove that the statement was made with "knowledge that it was false or with reckless disregard of whether it was false or not." However, since this rule applies to such a limited class of players, it will not be analyzed further. It is sufficient to mention that certain players will have a much more difficult time satisfying their burden of proof.

D. Harm

[45] The fourth and final element of a defamation claim is "either actionability of the statement irrespective of special harm or the existence of a special harm caused by a publication." Special harm is harm that is unique to the individual making the claim. Chess players accused of cheating have two ways that they could go about proving this element.

[46] First, the players could argue that these statements made by online chess platforms are actionable regardless of a special harm. According to the Second Restatement of Torts, defamatory statements which constitute libel are *per se* actionable. A claim for libel is a type of defamation in

¹⁵³ *Id.* at 351.

¹⁵⁴ Sullivan, 376 U.S. at 280 (citing Coleman v. MacLennan, 98 P. 281, 281–282 (Kan. 1908)).

¹⁵⁵ RESTATEMENT (SECOND) OF TORTS § 558 (AM. L. INST. 1977).

¹⁵⁶ RESTATEMENT (SECOND) OF TORTS § 569 cmt. b (Am. L. INST. 1977).

which the allegedly defamatory statement is written."¹⁵⁷ As was established above, most online chess platforms issue their cheating accusation statements in the form of "printed words."¹⁵⁸ Consequently, even without a special harm, any player accused of cheating can file an action for defamation.

[47] However, even if these claims were not *per se* actionable as libel, many players would still be able to bring defamation suits provided there is a special harm.¹⁵⁹ A special harm "is the loss of something having economic or pecuniary value."¹⁶⁰ Consequently, if the plaintiff can prove that he "has been deprived of [a] benefit which has a more or less indirect financial value to him,"¹⁶¹ then this element has been satisfied. Only players who are making money from chess will meet the special harm standard. For example, players who are coaches, authors, online video content creators, and tournament competitors may qualify. These players must prove that but-for the platform's defamatory statement, they would have continued to make money from chess. Therefore, if either of these two rules apply, then the last element has been satisfied.

E. Application in Modern Case Law

[48] It is quite possible for an online chess platform to defame a player. However, it may be quite difficult for a player to prove negligence or falsity. Nonetheless, proving this element is not impossible. Courts have begun

¹⁵⁷ Murphy v. LivingSocial, Inc., 931 F. Supp. 2d 21, 26 (D.D.C. 2013) (citing Ning Ye v. Holder, 644 F. Supp. 2d 112, 117 (D.D.C. 2009)).

¹⁵⁸ RESTATEMENT (SECOND) OF TORTS § 577 (AM. L. INST. 1977).

¹⁵⁹ RESTATEMENT (SECOND) OF TORTS § 575 cmt. a (Am. L. INST. 1977).

¹⁶⁰ *Id.* § 575 cmt. b.

¹⁶¹ *Id*.

to rule for plaintiffs in the context of defamation claims based on online gaming cheating allegations. 162

[49] In *Mitchell v. Twin Galaxies, LLC*, a California appellate court first considered these claims. ¹⁶³ Billy Mitchell, the plaintiff, was a world record holder in Donkey Kong and Pac-Man. ¹⁶⁴ These records were featured on the defendant's website which "publishes leaderboards on its website for thousands of video game titles across dozens of video game platforms." ¹⁶⁵ The records appeared on the defendant's website for nearly twenty years ¹⁶⁶ but they were ultimately disputed by another user of the website. ¹⁶⁷ This user claimed and provided evidence that Mitchell's records "were not achieved on original Donkey Kong arcade hardware as required under the rules." ¹⁶⁸ The user based these claims on certain anomalies in Mitchell's gameplay that allegedly only occur on modified devices. ¹⁶⁹ After reviewing these claims, the defendant issued a cheating accusation statement. ¹⁷⁰ The defendant also revoked all Mitchell's records and banned "him from

¹⁶² See Mitchell, 285 Cal. Rptr. 3d at 222–23.

¹⁶³ *Id.* at 219.

¹⁶⁴ *Id.* at 214.

¹⁶⁵ *Id.* at 215.

¹⁶⁶ See id. at 214–16.

¹⁶⁷ Mitchell, 285 Cal. Rptr. 3d at 215.

¹⁶⁸ *Id*

¹⁶⁹ *Id.* at 215.

¹⁷⁰ See id. at 216.

participating in [their] competitive leaderboards." ¹⁷¹ Consequently, Mitchell filed a defamation action against the website. ¹⁷²

[50] Before trial, the defendant filed an Anti-Strategic Lawsuit Against Public Participation ("SLAPP") motion.¹⁷³ According to the court, "anti-SLAPP motions were developed to address the societal ills caused by meritless lawsuits filed to chill the exercise of First Amendment rights."¹⁷⁴ In this anti-SLAPP motion, the defendant alleged that "its statement arose from a protected activity and Mitchell could not establish a probability of success on each of his causes of action."¹⁷⁵ Mitchell disagreed and opposed the motion. ¹⁷⁶ In turn, the trial court needed to determine Mitchell's "probability of success" on his defamation claim.¹⁷⁷ The trial court found that "Mitchell ha[d] shown a probability of prevailing on his claims."¹⁷⁸ Thus, the defendant's anti-SLAPP motion was denied.¹⁷⁹ The defendant then appealed its motion to the California Court of Appeal.¹⁸⁰

```
<sup>171</sup> Id.
```

¹⁷² *Mitchell*, 285 Cal. Rptr. 3d at 217.

¹⁷³ *Id*.

¹⁷⁴ *Id.* at 219 (citing CAL. CIV. PROC. CODE § 425.16(a)).

¹⁷⁵ *Id.* at 217.

¹⁷⁶ *Id*.

¹⁷⁷ Mitchell, 285 Cal. Rptr. 3d at 217, 219.

¹⁷⁸ *Id.* at 219.

¹⁷⁹ *Id*.

¹⁸⁰ *Id*.

[51] In an opinion written by Judge Sam Ohta, the California Court of Appeal affirmed the trial court's denial. The California Court of Appeal explained that these cases often hinge on the falsity requirement. Here, Mitchell had submitted evidence that supported the veracity of his records. This evidence included a sworn affidavit from a witness claiming that Mitchell did not cheat. However, the defendant also submitted contradicting evidence. Ultimately, the Court of Appeal declined to "weigh the credibility or comparative probative strength of competing evidence at this stage of the proceedings." It was sufficient to note that Mitchell had met his falsity burden for defamation.

[52] Mitchell v. Twin Galaxies, LLC provides a clear warning to online chess platforms: false allegations of cheating in competitive gaming can be the basis for a defamation suit. In fact, Mitchell's holding goes further than simply proving that these types of claims are possible. Mitchell also stands for the proposition that an entity's cheating detection methods are material to the success of a defamation claim. In this case, the user who accused Mitchell of cheating submitted evidence based on anomalies in gameplay. The user had observed these anomalies and reported them to the record-keeping website. The website reviewed the anomalies and

¹⁸¹ *Id.* at 214.

¹⁸² Mitchell, 285 Cal. Rptr. 3d 224.

¹⁸³ *Id.* at 220.

¹⁸⁴ *Id.* at 221.

¹⁸⁵ *Id.* at 218.

¹⁸⁶ *Id.* at 221.

¹⁸⁷ *Mitchell*, 285 Cal. Rptr. 3d at 224.

¹⁸⁸ See id. at 215.

¹⁸⁹ *Id*.

banned Mitchell.¹⁹⁰ However, Mitchell was able to submit sworn affidavits to contradict the veracity of these claims.¹⁹¹ This evidence was sufficient to defeat the defendant's anti-SLAPP motion.¹⁹²

[53] There are many similarities to the facts of *Mitchell* in the context of online chess. For example, chess websites rely on users to report suspicious players to the platform for investigation. ¹⁹³ Users are told to look for anomalies in gameplay to identify potential cheaters. ¹⁹⁴ Once a player is reported, the online chess platform determines whether the reported player has cheated, and if the platform believes he has, then his account will be closed. ¹⁹⁵ Therefore, it is clear that both the defendant in *Mitchell* and online chess platforms rely on user submitted reports to investigate cheaters. ¹⁹⁶ Furthermore, both websites identify suspicious players based on gameplay anomalies and make final cheating determinations using their own expertise. ¹⁹⁷ Mitchell was able to make a showing of falsity by submitting affidavits from witnesses who said that he did not cheat. ¹⁹⁸ Consequently, it stands to reason that a person accused of cheating in chess could adopt a similar strategy in litigating his case.

¹⁹⁰ *Id.* at 215–16.

¹⁹¹ *Id.* at 218.

¹⁹² Mitchell, 285 Cal. Rptr. 3d at 224.

¹⁹³ See About Online Chess Cheating, supra note 13.

¹⁹⁴ See id.

¹⁹⁵ Id.

¹⁹⁶ See id; Mitchell, 285 Cal. Rptr. 3d at 216.

¹⁹⁷ See About Online Chess Cheating, supra note 13; Mitchell, 285 Cal. Rptr. 3d at 216.

¹⁹⁸ *Mitchell*, 285 Cal. Rptr. 3d at 221.

[54] Defamation claims have also been successful in the context of cheating accusations in professional sports. ¹⁹⁹ For example, in *Zimmerman v. Al Jazeera America, LLC*, two professional baseball players prevailed on a motion to dismiss regarding allegations of steroid use. ²⁰⁰ These two players were Ryan Zimmerman and Ryan Howard. ²⁰¹ Both men are elite players even by professional baseball's standards. Zimmerman played for the Washington Nationals and has scored the most runs in the franchise's history. ²⁰² Howard played for the Philadelphia Phillies, where he won the league-wide award for Most Valuable Player. ²⁰³ Despite, or perhaps because of, Zimmerman and Howard's achievements, both players were ultimately accused of cheating in order to obtain their success. ²⁰⁴

[55] In 2015, Al Jazeera America, LLC ("Al Jazeera"), released a documentary titled "The Dark Side: Secrets of the Sports Dopers." In that documentary, Deborah Davis, an investigative reporter employed by Al Jazeera interviewed a supplier of performance enhancing drugs ("PEDs"). Prior to the interview, Davis introduces the supplier "as a 'chemical mastermind" and "a genius at outwitting' the World Anti-

¹⁹⁹ See Zimmerman v. Al Jazeera Am., LLC, 246 F. Supp. 3d 257, 263–64, (D.D.C. 2017).

²⁰⁰ Id. at 263.

²⁰¹ Id.

²⁰² Jessica Camerato, *3 keys to win over O's: Zim, Harrison, Soto*, MAJOR LEAGUE BASEBALL (May 23, 2021), https://www.mlb.com/news/ryan-zimmerman-becomesfranchise-runs-leader-in-win [https://perma.cc/8XJ4-J239].

²⁰³ *Ryan Howard wins MVP in his 2nd season*, BASEBALL WRITERS' ASS'N AM. (Nov. 21, 2006), https://bbwaa.com/06-nl-mvp [https://perma.cc/2ZTN-ARBD].

²⁰⁴ Zimmerman, 246 F. Supp. 3d at 263.

²⁰⁵ Id. at 265.

²⁰⁶ *Id.* at 265–66.

Doping Agency."²⁰⁷ The supplier ultimately claimed to have given steroids to Zimmerman and Howard throughout the course of their careers. ²⁰⁸ Steroids are prohibited in Major League Baseball and to use them would be a form of cheating. ²⁰⁹ However, both players denied these allegations. ²¹⁰

[56] Upon release of the documentary, Zimmerman and Howard filed suit alleging defamation against Al Jazeera.²¹¹ In response, Al Jazeera filed a motion to dismiss the case.²¹² In its motion, Al Jazeera argued that it never accused the players of cheating; rather, Al Jazeera only reported on the claims made by the supplier.²¹³ Al Jazeera argued further that the players had not pled sufficient facts to meet the actual malice standard for public figures.²¹⁴ Both players opposed this motion.²¹⁵

[57] In 2017, the District Court for the District of Columbia ruled in favor of the players.²¹⁶ Prior to her tenure as a Supreme Court Justice, then-Judge

```
<sup>207</sup> Id. at 266.
```

²⁰⁸ *Id.* at 267–68.

²⁰⁹ See Major League Baseball, Major League Baseball's Joint Drug Prevention and Treatment Program 7–12 (2022), https://www.mlbplayers.com/_files/ugd/4d23dc_5ac1b51876554fc283b5e74e7e25be68.pdf [https://perma.cc/6HFK-REE7].

²¹⁰Zimmerman, 246 F. Supp. 3d at 270–71.

²¹¹ *Id*.

²¹² *Id.* at 271.

²¹³ *Id.* at 271, 276.

²¹⁴ *Id.* at 271.

²¹⁵ Zimmerman, 246 F. Supp. 3d at 271.

²¹⁶ *Id.* at 263.

Ketanji Brown Jackson rejected the argument that Al Jazeera was merely reporting the supplier's allegations.²¹⁷ The opinion stated that "a reasonable viewer could certainly have understood the documentary as a whole to be an endorsement of [the supplier's] claims." ²¹⁸ In particular, the documentary boosted the supplier's credibility by using terms such as "mastermind" to identify him.²¹⁹ Judge Jackson stated further that it was possible for the actual malice standard to be met because Al Jazeera was allegedly aware of a prepublication statement made by the supplier which recanted his defamatory claims.²²⁰ Accordingly, Judge Jackson ruled in favor of the plaintiffs.²²¹

[58] Although it was not specifically an issue in the *Zimmerman* case, one could see the use of statistical evidence being relevant in the context of steroid allegations. After all, steroid use is detected based on the presence of statistically significant levels of testosterone or PEDs in a player's blood.²²² One could imagine a scenario where a player is born with naturally high levels of testosterone, but subsequently fails a random PED screening due to his natural baseline. This example highlights the importance of a nuanced approach to a statistical cheating detection methodology.

[59] In the context of online chess, the nuance created by using statistical evidence is quite important. Based on statistics alone, an online chess website can never say with certainty that a player cheated. Yet, as of right

```
<sup>217</sup> Id. at 277.
```

²¹⁸ *Id*.

²¹⁹ *Id*.

²²⁰ Zimmerman, 246 F. Supp. 3d at 283.

²²¹ *Id.* at 288.

²²² See generally Steroid Drug Test, U.S. DRUG TEST CTRS., https://www.usdrugtestcenters.com/steroid-drug-testing.html [https://perma.cc/E3B4-94CW] (describing the effect of steroids on the human body).

now, it appears that online chess platforms are willing to ban players based on statistics alone and are not required to consider other factors. Therefore, much like the steroid example, it is at least possible that some confounding variables are at play.

[60] An entity's cheating detection methodology is of the utmost importance in these suits due to the falsity element of a defamation suit. Therefore, it is worth analyzing whether the highly advanced software deployed by chess websites is sufficiently capable of accurately identifying cheaters. Additionally, given the holdings in *Mitchell* and *Zimmerman*, one must inquire as to whether chess cheating detection software is vulnerable to legal challenges. These issues will be examined in further detail in Part IV of this article. Online chess cheating accusations can form the basis for a defamation suit. As was demonstrated in this Part of the article, online chess websites often negligently publish statements accusing players of cheating, and thus cause monetary harm.²²³ It is in these ways that the prima facie case for chess-based defamation could potentially be met.

IV. THE ONLINE CHEATING DETECTION METHODOLOGY

- [61] In this Part of the article, the anti-cheating methodology used by online chess platforms will be explained. Unfortunately, these "highly advanced" systems are still deeply flawed and so this Part will set the stage for the vital reforms that should be made to cheating detection methods.
- [62] Before beginning this analysis, it is important to first note that this article is not criticizing any platform in particular. Online chess platforms are usually extremely secretive about their cheating detection policies. Ostensibly, these platforms do not want to disclose too much about their methodology lest they embolden cheaters. Accordingly, this article will discuss the methodologies used at a general level. This article will rely on the opinions from the world's foremost experts on chess cheating detection to make informed conclusions about current industry best practices. This

 $^{^{223}}$ See Restatement (Second) of Torts \S 558 (Am. L. Inst. 1977).

section is not meant to be comprehensive, but rather provide some prominent examples of the methodologies used to catch cheaters. Therefore, this Part of the article will outline some of the known methods currently being used by online chess platforms for cheating detection.

A. Predictive Analytics

[63] In general, chess cheating detection relies on the predictive statistical analytical methods discussed above. The actual process, however, is much more complex than simply comparing a human's moves against the computer's suggestions. Much of this research has been done by Dr. Kenneth Regan at the University of Buffalo. ²²⁴ Dr. Regan obtained a bachelor's degree in Mathematics from Princeton University, a Doctor of Philosophy ("PhD") in Mathematics from Oxford University, and is also an International Master in chess. ²²⁵ Due to his educational and personal background, Dr. Regan is especially well-suited to understand the algorithms used to detect cheating in chess.

[64] According to Dr. Regan, before websites can conduct predictive analyses (in which a player's moves are compared against a chess engines suggestions to determine the probability that that player cheated), the websites must have access to a chess engine.²²⁶ Engines assign a numerical

²²⁴ See Episode 136- IM Kenneth Regan, supra note 127, at 00:44; Detecting Cheating in Chess, DATA SKEPTIC (2015), https://dataskeptic.com/blog/transcripts/2015/detecting-cheating-in-chess [https://perma.cc/BZ2P-3AAH].

²²⁵ Ken Regan, UNIV. AT BUFFALO: DEPT'T OF COMPUT. SCI. & ENG'G, https://engineering.buffalo.edu/computer-science-engineering/people/faculty-directory/full-time.host.html/content/shared/engineering/computer-science-engineering/profiles/faculty/ladder/regan-ken.detail.html [https://perma.cc/2JUN-2SQA]; Regan, Kenneth, INT'L CHESS FED'N, https://ratings.fide.com/profile/2000725 [https://perma.cc/AN7A-AHGN].

²²⁶ See Episode 136- IM Kenneth Regan, supra note 127, at 08:15 (creating algorithms for predicting chess games requires data from hundreds of thousands of previously played chess games).

evaluation to every chess position.²²⁷ In this system, each piece is assigned a specific value.²²⁸ To evaluate a chess position, chess engines assesses all the pieces on the board and their relevant placement.²²⁹ If a player has more pieces that are also placed better, then chess engines will consider him to have a mathematical advantage.²³⁰ These advantages are measured in a unit called centipawns (i.e., 1/100 of a pawn's value).²³¹ A difference of a few centipawns will likely have no perceivable effect on the average player's position.²³² In fact, only the world's best engines would be able to notice this difference.²³³ Therefore, it would be quite surprising for unassisted players to consistently recognize moves that differ by only a few centipawns.

[65] Understanding this background information helps in illustrating the two-step process for determining whether a player cheated.²³⁴ The first step of this process is the screening phase.²³⁵ According to Dr. Regan, the

²²⁷ See id. at 15:38 (arguing that chess engines choose moves by looking at their value).

Pawns are worth one point of material. Knights and bishops are worth three. Rooks are worth five. Lastly, the queen is worth nine. The king is not assigned a numerical value, because it cannot be captured. *Chess Piece Value*, CHESS.COM, https://www.chess.com/terms/chess-piece-value [https://perma.cc/U3UL-FWJC].

²²⁹ See Jeremy Silman, *How to Evaluate Chess Positions (Example)*, CHESS.COM (Feb. 28, 2018, 3:10 AM), https://www.chess.com/article/view/how-to-evaluate-a-position [https://perma.cc/9ESD-G6Z5].

²³⁰ See id.

²³¹ See Episode 136- IM Kenneth Regan, supra note 127.

²³² See id.

²³³ See id.

²³⁴ See id. (comparing statistical evidence from screening reports with observed conduct of players).

²³⁵ See id. at 29:54.

screening phase is intended to catch all players who may be cheating. ²³⁶ The screening phase is built to avoid false negatives. ²³⁷ All players are put through the screening process so that cheaters cannot avoid detection. ²³⁸ Dr. Regan analogizes the screening phase to the Transportation Security Administration ("TSA") checkpoints at airports: ²³⁹ regardless of guilt, all flyers must go through TSA checkpoints at airports. All flyers receive more scrutiny so that no nefarious actors can board planes. A similar process applies to chess cheating detection. ²⁴⁰ All players are scrutinized so that no cheaters go undetected. ²⁴¹

[66] In the screening phase, chess cheating detection systems are looking for small anomalies within a player's gameplay.²⁴² Consequently, cheating detection systems have set an acceptable standard deviation of accuracy based on a player's rating.²⁴³ If a user is playing outside of that standard deviation, he might be identified during the screening phase.²⁴⁴ For a player to be identified during the screening phase, he needs to play roughly 2.5-3 standard deviations away from the norm.²⁴⁵ Under this standard, the

²³⁶ See Episode 136- IM Kenneth Regan, supra note 127, at 29:54.

²³⁷ See id. at 29:54–33:24.

²³⁸ See id. at 33:24.

²³⁹ See id. at 28:54.

²⁴⁰ See id.

²⁴¹ See Episode 136- IM Kenneth Regan, supra note 127, at 33:24.

²⁴² See id. at 30:21–31:33.

²⁴³ See id. at 07:40.

²⁴⁴ See id. at 29:54–34:30.

²⁴⁵ See id. at 31:33–34:30; see also Detecting Cheating in Chess, supra note 224 (explaining the relevance of various z-scores).

algorithm would be expected to produce one false positive for every 750 instances of cheating identification.²⁴⁶ However, the process does not stop here.²⁴⁷ If a player is identified during the screening phase, he is then subjected to another level of scrutiny.²⁴⁸

[67] The second step of the process, known as the full testing phase, is used when online platforms are looking to build concrete cases against cheaters.²⁴⁹ This phase is used to avoid false positives.²⁵⁰ Chess platforms want to be extremely certain that a player has cheated before pursuing disciplinary action. Keeping with the TSA analogy, this stage is analogous to being called in for questioning after a baggage search at the airport.²⁵¹ TSA is looking to obtain concrete evidence against nefarious actors, while avoiding sending innocent people to prison. In the full testing phase, all a player's moves across multiple games are meticulously analyzed against a chess engine.²⁵² The goal is to find certain move patterns that are highly indicative of cheating.²⁵³

[68] For example, consider a chess position with four highly reasonable moves that are each within a few centipawns of difference.²⁵⁴ To the non-

²⁴⁶ See Episode 136- IM Kenneth Regan, supra note 127, at 30:04–34:30.

²⁴⁷ See id. at 30:04–33:26.

²⁴⁸ See id.

²⁴⁹ See id. at 30:04–33:26.

²⁵⁰ Id. at 34:04.

²⁵¹ See Episode 136- IM Kenneth Regan, supra note 127, at 28:56–29:27.

²⁵² See Detecting Cheating in Chess, supra note 224.

²⁵³ Id.

²⁵⁴ See id.

assisted player, these moves all may look nearly identical. In such a position, it would be reasonable for a player to pick a mathematically inferior move and not suffer any consequences.²⁵⁵ Therefore, it is highly unlikely that a player would pick the chess engine suggested move multiple times in a row.²⁵⁶ In fact, according to Dr. Regan, the odds of a player picking correctly in ten consecutive positions of this nature are over 1,000,000:1.²⁵⁷ It is due to this statistical improbability that the data produced by a full search can provide much more definitive evidence regarding whether a player cheated.

B. Independent Evidence of Cheating

[69] Apart from statistical evidence, there are several other methods that can be used to detect cheaters. One common method for determining whether a player is cheating is looking at his profile on the online chess platform. There are several characteristics that are common to many cheaters' profiles. While none of these characteristics are dispositive by themselves, they may give reason for suspicion, especially when the player is positively identified by predictive analytics. 259

[70] The first suspicious characteristic of a cheater's profile is that it is a brand-new account. ²⁶⁰ Chess is an extremely difficult game and takes time

²⁵⁵ See id.

²⁵⁶ See id.

²⁵⁷ See Detecting Cheating in Chess, supra note 224.

²⁵⁸ GothamChess, *Chess Cheaters Get EXPOSED*, YouTube (Jan. 16, 2021), https://www.youtube.com/watch?v=l5MD6hn5PgI [https://perma.cc/7K3A-FJ8B] (learning how to identify a cheater in online chess from International Master Levi Rozman).

²⁵⁹ See id.

²⁶⁰ *Id.* at 00:20–1:05.

to master. Therefore, it may be concerning if a new user makes an account on an online chess platform and experiences immediate success.²⁶¹ While it is true that there may be innocuous explanations for this quick success, such as learning the game over-the-board, this factor is at least somewhat worrying.

Secondly, it may be viewed as suspicious if the player is extremely highly rated but does not have a titled account.²⁶² This view is based on the fact that it is extremely difficult to learn the game of chess exclusively online. Although many players prefer the online medium, they still play over-the-board chess because it is conventionally viewed as better for improvement. Over-the-board games are longer and thus give the players more time to think. While players are still improving, this extra time can be critical to allow them to make more accurate moves under time and pressure constraints. It would be nearly impossible to reach Grandmaster strength playing exclusively faster online games. Yet, if a player reached Grandmaster strength over-the-board, then he would also likely have the corresponding title and a titled account. It is important to note that Grandmasters have been known to use anonymous online accounts to practice: a fact that could explain some of these suspicious profiles. ²⁶³ Despite this consideration, it is unlikely that all of these profiles are anonymous Grandmasters. Therefore, the absence of this credential paired with a high rating can also be concerning.²⁶⁴

²⁶¹ *Id*.

²⁶² *Id*.

²⁶³ See bjohn1234, The Anonymous GM Phoenix, CHESS.COM (Jan. 24, 2014), https://www.chess.com/forum/view/livechess/the-anonymous-gm-phoenix [https://perma.cc/3XXJ-2A4D] (discussing the true identity of an anonymous GM account).

²⁶⁴ GothamChess, *supra* note 258, at 00:20–1:05.

[72] Thirdly, if the player is highly rated and his name appears on his profile, it is suspicious if there is no record of him in any chess database. ²⁶⁵ Over-the-board chess tournament games are all recorded and stored in databases. ²⁶⁶ For the same reasons previously mentioned, it would be incredibly unlikely for a player to master the game without participating in over-the-board tournaments. Therefore, if there are no recorded over-the-board games for this player's listed name, then that is also cause for alarm. ²⁶⁷

[73] Finally, rapid growth and success are also troubling.²⁶⁸ As discussed above, chess takes time to master. Yet, often times, cheaters will gain hundreds or thousands of rating points in a matter of weeks.²⁶⁹ Additionally, cheaters will hardly ever lose their games because they have the assistance of a chess engine.²⁷⁰ These wins will often be against players that are ranked significantly higher than them at the time of the match.²⁷¹ It is important to note that a player's rate of increase and previous games are publicly displayed on most online chess websites. If these characteristics are present on a public profile, it may be a good reason to report this player for investigation.²⁷²

²⁶⁵ *Id.* at 9:00–10:45.

²⁶⁶ See Explorer, CHESS.COM, https://www.chess.com/explorer [https://perma.cc/DK74-ZRC3] (demonstrating an example of an over-the-board database for master level games).

²⁶⁷ GothamChess, *supra* note 258, at 9:00–10:45.

²⁶⁸ *Id*.

²⁶⁹ Id.

²⁷⁰ See id. at 10:46–12:10.

²⁷¹ *Id*.

²⁷² GothamChess, *supra* note 258, at 10:46–12:10.

[74] These four characteristics are shared by many cheaters on online chess platforms. However, it is also worth noting that there are some profile characteristics which have no bearing on a player's likelihood to cheat. The first is a player's country of origin.²⁷³ Currently, there is no data to support the conclusion that any particular country cheats at higher rates than others. To make these claims without other evidence is to venture into blind nationalism and collective condemnation. Therefore, chess platforms do not seem to consider this information.

[75] Additionally, the public photograph for the account is not usually probative in a cheating investigation.²⁷⁴ There is no value in looking at a person's picture to determine whether he is cheating and there is no way to verify that a person even used a real photograph of himself when making his profile.²⁷⁵ Unless the profile photograph bears some facial admission of cheating,²⁷⁶ then it is likely that the picture will not be of value.

[76] While a player's country of origin and profile picture should not be considered, the first four factors should be.²⁷⁷ In short, the four factors in assessing if the profile may belong to a cheater are: age of the account, titled status, public record of over-the-board games, and rapid success.²⁷⁸ If these factors are present, when coupled with a positive identification under a predictive statistical analysis, then an online chess platform is much more likely to be suspicious of a user.

²⁷³ *Id.* at 6:38–6:50.

²⁷⁴ *Id.* at 6:26–6:35.

²⁷⁵ *Id*.

²⁷⁶ The example that was given by International Master Levy Rozman was a picture of a robot. *Id*.

²⁷⁷ See GothamChess, supra note 258.

²⁷⁸ *Id*.

[77] Another method for determining whether an online player is cheating is the common stylistic tendencies of cheating in gameplay. In a similar manner to the common characteristics of cheaters' profile pages, there are also certain moves and strategies that are indicative of a player using an engine.

[78] The first stylistic gameplay tendency of cheaters is slow consistent timing in between moves.²⁷⁹ Cheaters often do not make moves quickly because they need time to check a chess engine to determine the best move.²⁸⁰ Therefore, even if the best move is obvious,²⁸¹ it still may take a cheater several seconds to determine that is the best course of action.²⁸² This tendency amounts to cheaters spending approximately 3–7 seconds on every move of a game.²⁸³ Whereas, the amount of time that a non-cheater spends will vary move to move. Sometimes the non-cheater will spend a few seconds, and other times, he will spend a few minutes. Conversely, regardless of how complicated a chess position is, a cheater will often make the best move in a matter of seconds without expending extra time.²⁸⁴

[79] The next stylistic tendency is that, for similar reasons as above, cheaters will often temporarily disconnect from the online session while a game is ongoing.²⁸⁵ Cheaters need to reference a chess engine during the game to ensure that they are making the right moves. Often, the chess engine will be open on another window on the player's device. If a player is

²⁷⁹ *Id.* at 9:13–9:33.

²⁸⁰ *Id*.

²⁸¹ For example, a blundered gueen by the opponent.

²⁸² See GothamChess, supra note 258, at 9:13–9:33.

²⁸³ *Id.* at 9:13–9:33.

²⁸⁴ See id. at 3:03–3:18.

²⁸⁵ See id. at 3:39–3:56.

referencing an engine, then he may need to temporarily exit the game to check the other window. This practice will cause the online chess session to temporarily disconnect. This tendency is known as toggling. While this phenomenon may also simply be indicative of poor internet connection, toggling is at least worth monitoring when paired with other suspicious behavior.

[80] The third tendency is one in which cheaters are often non-confrontational and prefer to keep all their options open.²⁸⁶ Chess engines do not like to capitalize on slight inaccuracies by their opponents.²⁸⁷ Rather, chess engines prefer to build a slow calculated attack and then strike at an opportune moment.²⁸⁸ Therefore, it is somewhat unlikely that the chess engine will attempt to remove pieces from the board that are of equal value.²⁸⁹ The engine will generally prefer to keep all of its pieces on the board and build for a decisive attack.²⁹⁰ While strong titled players may also sometimes adopt this style of gameplay, it is unlikely that they will play such a style in every game. Thus, if a player is using a chess engine to cheat, it is likely that these tendencies will be reflected in a higher percentage of his games.²⁹¹

[81] It is also quite common for online cheaters to make many inaccuracies as they run low on time.²⁹² As was explained above, cheaters

²⁸⁶ See id. at 0:26–6:00.

²⁸⁷ See GothamChess, supra note 258, at 0:26–6:00.

²⁸⁸ See id.

²⁸⁹ See id.

²⁹⁰ See id.

²⁹¹ See id.

²⁹² See GothamChess, supra note 258, at 4:30–5:10.

typically need 3-7 seconds per move in order to cheat.²⁹³ However, if the game is concluding due to time constraints and the cheater has not won, he will sometimes try to rely on his own skill to finish the game.²⁹⁴ Often, the player's actual skill will be much lower than the rest of his gameplay, and the quality of his moves will suffer significantly.²⁹⁵ As a result, it is not uncommon for a cheater to blunder several times under pressure.²⁹⁶

[82] The last form of independent evidence is the eye tracking software that some online chess platforms have begun to experiment with for their highest-level tournaments. ²⁹⁷ This software records a player's eye movements and can determine whether he is routinely looking at information not contained on his screen. ²⁹⁸ However, this methodology has not been used for cheating detection amongst the general public and is certainly not the basis of the vast majority of accusations. ²⁹⁹ For now, it is sufficient to note that this technology is on the horizon for the landscape of chess cheating detection and could play a larger role in the future.

[83] In conclusion, there are several different types of independent evidence of cheating. These types of evidence include: the characteristics of a cheater's profile; the stylistic preferences of cheaters; and the use of eye tracking software. Each of these types of evidence, when partnered with

²⁹³ See id. at 9:13–9:33.

²⁹⁴ *Id.* at 4:30–5:10.

²⁹⁵ See id.

²⁹⁶ *Id*.

²⁹⁷ Cornelia Askvall, *Eye Tracking as a Potential Game-Changer for PRO Chess*, MEDIUM (May 16, 2019), https://medium.com/@cornelia.askvall/pro-chess-league-uses-eye-tracking-insights-fb49ce823c50 [https://perma.cc/R7FX-T8J3].

²⁹⁸ See id.

²⁹⁹ See id. (limiting the application of this technology to the PRO Chess League).

a positive result on a predictive analytics analysis, are strong evidence that a player has cheated.

C. Cumulative Effects of Current Cheating Detection Methods

[84] In the world of online chess, all of these cheating detection methods are used in practice. Yet, none of the major online chess platforms have published a comprehensive policy detailing how these factors will be applied in a given case. This lack of transparency has resulted in a system of business practices which are ripe for defamation actions, particularly regarding the use of predictive statistical analytics in deciding whether to accuse a player of cheating.

[85] Despite the potentially low probative value of the previously discussed factors when used alone, no major online chess platform has publicly committed to following the independent evidence requirement from over-the-board gameplay. Therefore, online chess platforms are not required to consider a potential cheater's profile characteristics or stylistic gameplay preferences. Thus, it is possible for an online chess platform to ban a player on predictive statistical analytics alone. However, online chess platforms do more than just ban users. These platforms claim to be able to establish "truth" regarding whether a player cheated. In fact, Chess.com even claims to be able to prove "beyond all reasonable doubt, that [the banned player has] broken [the] rules." Yet, it is highly unlikely that statistical evidence alone would satisfy a preponderance of the evidence standard let alone reasonable doubt, depending on how the platform is using the evidence.

[86] The issue of how to use statistical data as evidence has been wrestled with in the American legal system for several decades. In 1971, Professor Laurence Tribe predicted the occurrence of this exact issue in his famous

³⁰⁰ What do I need to know about Fair Play on Chess.com?, CHESS.COM (Aug. 3, 2022), https://support.chess.com/article/648-what-do-i-need-to-know-about-fair-play-on-chess-com [https://perma.cc/XA6D-94J2].

article *Trial by Mathematics: Precision and Ritual in Legal Process*. ³⁰¹ Tribe theorized that perhaps someday a legal system would attempt to rely on strictly statistical evidence as proof of "the *occurrence* or nonoccurrence of the event, act, or type of conduct on which the litigation is premised." ³⁰² Tribe claimed that in such situations a legal system would transform "evidence about the *generality* of cases to evidence about the *particular* case before us." ³⁰³ According to Tribe, the use of statistics in this way would be particularly problematic. ³⁰⁴

[87] Professor Tribe poses the hypothetical of a plaintiff who was hit by a bus.³⁰⁵ However, the plaintiff does not know which bus hit him.³⁰⁶ In this hypothetical, one bus company owns eighty percent of all buses in the neighborhood.³⁰⁷ If the plaintiff sues this company, he will always be able to prove that it was more than fifty percent likely that the bus that hit him was owned by the defendant.³⁰⁸ Consequently, the company will be forced to pay for one hundred percent of bus injuries, despite only owning eighty percent of the market's vehicles.³⁰⁹ Such an approach would thereby punish

³⁰¹ See generally Laurence H. Tribe, *Trial by Mathematics: Precision and Ritual in the Legal Process*, 84 HARV. L. REV. 1329 (1971) (considering the advantages and disadvantages of using mathematical methods in the legal process).

³⁰² *Id.* at 1339.

³⁰³ Id. at 1346.

³⁰⁴ *Id*.

³⁰⁵ *Id.* at 1340–41.

³⁰⁶ Tribe, *supra* note 301, at 1340.

³⁰⁷ *Id.* at 1340–41.

³⁰⁸ See id. at 1349.

³⁰⁹ *Id.* at 1349–50.

the bus company simply for being the most successful enterprise in the neighborhood.³¹⁰

[88] The parallels between this example and online chess are staggering. Consider a different hypothetical regarding a new chess player. The player is a prodigy and working hard on his craft. This player is new to online chess, and he is improving rapidly. However, the player is also studying the game vigorously and thus, playing with extremely high accuracy. These factors cause an online chess platform to brand him as a cheater and close his account, although the player has never cheated a day in his life. This player would be required to carry the burden of the online chess platform's mistake, because he worked harder and was better at the game than everyone else. To decide cases like this one, based on only statistical evidence, would weaken "the confidence of the parties and their willingness to abide by the result[.]" Thus, on grounds of public policy, Tribe argues that statistics alone cannot meet a preponderance of the evidence standard, lest all civil cases be reduced to a matter of probabilities. 312

[89] Furthermore, it is simply false that statistical evidence alone can satisfy the standard of "beyond a reasonable doubt." In fact, the Supreme Court of California has plainly stated that "no mathematical equation can prove beyond a reasonable doubt." To reduce the reasonable doubt standard to statistical evidence would be to eviscerate all protections surrounding individualized suspicion that are entrenched in our legal system. Thus, an online chess platform cannot meet the reasonable doubt standard based on predictive statistical analytics alone.

³¹⁰ See id.

³¹¹ Tribe, *supra* note 301, at 1376.

³¹² Id. at 1349.

³¹³ *Id.* at 1350 (citing People v. Collins, 438 P. 2d 33, 40 (Cal. 1968)).

[90] By either a preponderance of the evidence or reasonable doubt standard, statistical evidence alone will be insufficient proof that a player has cheated. Thus, unless online chess platforms are willing to submit other independent evidence in every defamation case, they have likely established a system which will frequently fail muster in court. Accordingly, these cheating detection systems alone will not sufficiently protect online chess platforms in subsequent litigation.

V. CONCLUSION

[91] It is important to reiterate that this article does not intend to disparage any of the major online chess platforms. These platforms are overburdened by an influx of new cheaters, and the task of limiting the harm is immense. Cheaters ruin the game of chess and should be punished severely for their actions. However, it is equally important to note that the hardest working chess players should not be forced to bear the burden for those who violate the rules.

[92] As was demonstrated above, it is quite possible that online chess players could routinely succeed on defamation actions if platforms cannot establish "truth" as "an absolute defense."³¹⁴ However, there are several issues regarding the processes for determining whether a player cheated. Particularly, there are valid concerns regarding the potential use of strictly statistical evidence to determine the "guilt" of a cheater.

[93] While it is true that an online chess platform could avoid liability by simply removing any potentially defamatory publication from its website, to do so without making other reforms would be to miss the mark regarding the real issue in these cases. The real issue is that there are potentially innocent players who are being deprived of the game they love and rely on for income. Online chess platforms should be looking to protect these players and not punish them for their success at the game.

³¹⁴ See Curtis Publ'g Co., 388 U.S. at 151.

[94] One potential solution would be for online chess to adopt an independent evidence requirement as is used in over-the-board chess.³¹⁵ This solution would allow online chess platforms to consider the relevant statistics, but also build a comprehensive case which includes other evidence against a player. Professor Tribe also discussed the potential for solutions like this one. Tribe suggested that it would be possible for a factfinder to begin with an "a priori estimate of the likelihood of the proposition's truth, then update[] his prior estimate in light of discoverable evidence bearing on that proposition[.]"³¹⁶ Furthermore, if an online chess platform intends to adopt this strategy, it should publish a statement announcing that it follows an independent evidence standard. Thus, eliminating any public concerns that a player was banned for strictly statistical reasons.

[95] Lastly, it is also important to note that while this essay has focused on chess, there is no logical reason to limit its implications to the sixty-four squares of the game. Whether it is alleged cheating in chess, baseball, or Donkey Kong, we as a society, we must not lose sight of our desire for individualized suspicion in legal proceedings, lest we run the risk of digressing into a world where judges are supplanted by data, and the rights of the individual are forgotten in service of a fictious statistical utopia.

³¹⁵ See Episode 136- IM Kenneth Regan, supra note 127, at 60:05.

³¹⁶ Tribe, *supra* note 301, at 1350.