Stealing Signs: Could Baseball's Common Practice Lead to Liability for Corporate Espionage?

Andrew G. Barna*

INTRODUCTION

From August 18-20, 2017, the Boston Red Sox used an Apple Watch to cheat their rival, the New York Yankees.[1] While the Yankees were visiting

DOI: https://doi.org/10.15779/Z38XW47W8P

* Andrew Barna is a corporate associate at Covington & Burling LLP in Washington, DC. The views expressed in this article are solely of the author and do not reflect the views of Covington & Burling LLP or any of its other attorneys or clients. The author would like to thank his father, late grandfather and baseball coaches for instilling within him the love of baseball, his mother for driving him to practice, and Prof. Drew Larsen for encouraging him to write this article.

1. *See* Michael S. Schmidt, *Boston Red Sox Used Apple Watches to Steal Signs Against Yankees*, N.Y. TIMES (Sept. 5, 2017), https://www.nytimes.com/2017/09/05/sports/baseball/boston-red-sox-stealing-signs-yankees.html.

Fenway Park, the Red Sox implemented the following six-step, sign-stealing scheme. First, Red Sox staff in a live video room watched the Yankees' catcher's signs and wrote down each sign and pitch thrown.[2] Second, the video room staff looked for patterns and decoded the Yankees' signs.[3] Third, the staff watched the Yankees' catcher's signs and texted the upcoming pitch to athletic trainer Jon Jochim's Apple Watch.[4] Jochim then signaled to a player on the bench, who in turn signaled to a Red Sox runner on second base.[5] Finally, the runner signaled to the hitter, who could capitalize on knowing the upcoming pitch.[6] The Red Sox won two of the three games in the series and maintained their five-game lead in the AL East.[7]

The Yankees discovered the scheme and complained to the Major League Baseball (MLB) Commissioner's Office.[8] After a full investigation, MLB Commissioner Rob Manfred concluded that the Red Sox violated an MLB "[r]egulation" against using electronic equipment to steal signs.[9] He assessed an undisclosed fine against the Red Sox[10]—the first official MLB punishment against sign stealing[11]—and threatened greater consequences in the future.[12]

Sign stealing in baseball gives a team a significant competitive advantage over its opponent.[13] By intercepting the opponent's secret communications, a team can adjust its strategy to exploit that information.[14] Sign stealing can help teams win games,[15] and one statistician estimates that the "marginal economic value" of each MLB win is at least $1.2 million.[16] As a result, teams take precautions to protect their signs.[17] While sign stealing in baseball is generally

---

2. Joe Ward et al., *How Red Sox Used Tech, Step by Step, to Steal Signs from Yankee*, N.Y. TIMES (Sept. 6, 2017), https://www.nytimes.com/interactive/2017/09/06/sports/baseball/red-sox-steal-signs-yankees.html.

3. *Id.*

4. *Id.*

5. *Id.*

6. *Id.*; *see also infra* Part I.A.

7. *2017 Boston Red Sox Schedule*, BASEBALL REFERENCE, https://www.baseball-reference.com/teams/BOS/2017-schedule-scores.shtml (last visited Apr. 27, 2019).

8. *See Commissioner's Statement Regarding Red Sox-Yankees Violations*, MLB.COM (Sept. 15, 2017), https://www.mlb.com/news/commissioners-statement-regarding-red-sox-yankees-violations/c-254435818 [hereinafter *Commissioner's Statement*]. The Red Sox filed a countercomplaint, alleging the Yankees used YES Network cameras to steal the Red Sox's signs. *Id.*

9. *See id. But see infra* Part I.D. Manfred concluded that there was "insufficient evidence to support the allegation that the Yankees [] made inappropriate use of the YES Network to gain a competitive advantage" but found the Yankees violated a separate rule against in-game communication using bullpen phones in a prior season. *Commissioner's Statement*, *supra* note 8.

10. *See Commissioner's Statement*, *supra* note 8.

11. *See infra* Part I.D.

12. *See Commissioner's Statement*, *supra* note 8.

13. *See infra* Part I.A.

14. *See id.*

15. *See id.*

16. *See* Nate Silver, *Is Alex Rodriguez Overpaid?*, *in* BASEBALL BETWEEN THE NUMBERS: WHY EVERYTHING YOU KNOW ABOUT THE GAME IS WRONG 187-88, 193 (Jonah Keri ed. 2006).

17. *See infra* Part I.C.

permissible,[18] MLB custom and new rules prior to the 2019 MLB season delineate between acceptable and unacceptable sign stealing.[19]

Many companies around the world rely on proprietary secrets to gain a competitive advantage over their rivals. These intangible assets are called "trade secrets." In the United States, there are two primary regimes that protect trade secrets: (i) the Uniform Trade Secrets Act (UTSA) (state) and (ii) the Economic Espionage Act of 1996 (EEA) (federal). Those frameworks prohibit trade-secret "misappropriation" and "theft of trade secrets," with available remedies being damages, injunctions, and criminal penalties depending on the circumstances.[20]

Recently, MLB experienced its first theft-of-trade-secrets case, after St. Louis Cardinals scouting director, Christopher Correa, hacked into the Houston Astros' strategy database 48 times between January 2012 and June 2014.[21] Correa obtained Astros trade notes and draft plans and was indicted by the Department of Justice (DOJ) on twelve counts of trade-secret theft and hacking.[22] Correa plead guilty to five counts of hacking and received 46 months in prison.[23] However, the plea agreement dropped the trade-secret charges, so there is no legal precedent on trade-secret theft in the baseball context.

This paper applies the U.S. trade-secret frameworks to sign stealing in baseball. In particular, it explores whether an MLB team or the DOJ could succeed in a hypothetical "theft of trade secrets" case against a sign-stealing defendant. Ultimately, it argues that the DOJ—but not a team—could plausibly win such a case because (i) a court could classify baseball signs as "trade secrets" and (ii) sign stealing would fall within the EEA's broad ban on "theft of trade secrets."

This paper proceeds in four parts. Part I provides background on sign stealing in baseball, MLB custom surrounding the practice, how MLB teams protect their signs, and the rules against sign stealing. Part II outlines the basic requirements for a plaintiff to succeed in a trade-secrets case under the UTSA and the EEA. Part III analyzes MLB's mandatory arbitration agreement and concludes that the only possible plaintiff-defendant variations for an MLB trade-secrets case are: *United States vs. Team* or *United States vs. Player*, both under the EEA. Finally, Part IV applies the EEA to the hypothetical sign-stealing case. A brief conclusion follows.

---

18. *See infra* Part I.D.

19. *See infra* Part I.B, D; *Commissioner's Statement*; Jacob Bogage, *MLB Aims to Crack Down on the Game's Tradition of Sign Stealing*, WASH. POST. (Feb. 20, 2019), https://www.washingtonpost.com/sports/2019/02/20/mlb-aims-crack-down-games-tradition-sign-stealing/?utm_term=.ffd66274be10.

20. *See infra* Part II.A.

21. Mike Axisa, *We Now Know Extent of Cardinals Hack and the Unprecedented Penalties from MLB*, CBS SPORTS (Jan. 30, 2017, 7:29 PM), https://www.cbssports.com/mlb/news/we-now-know-extent-of-cardinals-hack-and-the-unprecedented-penalties-from-mlb/.

22. *Id.*

23. Press Release, Former Cardinals Official Sentenced to Prison for Astros Computer Intrusions, DEP'T OF JUSTICE (July 18, 2016), https://www.justice.gov/usao-sdtx/pr/former-cardinals-official-sentenced-prison-astros-computer-intrusions.

I. SIGN STEALING IN BASEBALL

Signs are everywhere in baseball.[24] Signs are nonverbal signals that baseball players and coaches use to communicate strategy during the game.[25] Before each pitch, the catcher signals to the pitcher, using finger signs between his legs, what pitch to throw and where to throw it. Coaches in the dugout signal to the third-base coach what hitting or baserunning strategy to employ. The third-base coach, in turn, relays that signal to the hitter or baserunner. In the absence of signs, coaches and players would communicate strategy verbally. Verbal communication, however, increases the chance that the opponent hears the strategy and reacts accordingly. Thus, since the 1860s, coaches and players have turned to signs to keep their strategy a secret.[26]

"Sign stealing" can be traced back to 1876 and has existed in every era of professional baseball since.[27] Many baseball greats, such as Ted Williams, Paul Molitor, Bob Feller, Willie Mays, Joe DiMaggio, Roger Maris, and Cal Ripken, Jr., engaged in sign stealing during their professional careers.[28] Current Miami Marlins manager Don Mattingly and former Washington Nationals manager Dusty Baker acknowledge that sign stealing is still "part of the game."[29]

Over the years, professional baseball has developed various customs in response to sign stealing. For instance, there are right and wrong ways to steal signs.[30] Teams have also developed mechanisms to protect their signs.[31] Until Commissioner Manfred's actions against the Red Sox in 2017 and announcement of new rules in 2019, as discussed in Part I.D., baseball relied solely on these customs to govern sign stealing.[32]

A. How to Steal Signs in Baseball & Why Sign Stealing Matters

Effective sign stealing has two components: stealing the opponent's signs and relaying them to the player who can benefit from the information. First, a sign stealer watches for patterns in the opponent's signs and conduct.[33] For example, the opponent notes that each time the catcher holds down the finger

---

24. *See* Peter Gammons, *Sign Language*, SPORTS ILLUSTRATED (Apr. 15, 1991), https://www.si.com/vault/1991/04/15/123997/sign-language-is-giving-signs-a-higher-art-form-than-stealing-them-one-finger-says-yes-two-say-no-three-say-pitchout ("At any moment in a major league game a mass of information is being passed back and forth across the diamond.").

25. *See* PAUL DICKSON, THE HIDDEN LANGUAGE OF BASEBALL: HOW SIGNS AND SIGN-STEALING HAVE INFLUENCED THE COURSE OF OUR NATIONAL PASTIME 168-69 (2003).

26. *Id.* at 26, 30-31.

27. *Id.* at 33 (describing the sign-stealing scheme of the 1876 Hartford Dark Blues); *see generally id.* at 33-159.

28. *Id.* at 21-22, 91; JASON TURBOW & MICHAEL DUCA, THE BASEBALL CODES: BEANBALLS, SIGN STEALING, & BENCH-CLEARING BRAWLS: THE UNWRITTEN RULES OF AMERICA'S PASTIME 159-60, 163 (2010).

29. DICKSON, *supra* note 25, at 135; TURBOW & DUCA, *supra* note 28, at 159.

30. *See infra* Part I.B.

31. *See infra* Part I.C.

32. *See infra* Part I.D.

33. *See* DICKSON, *supra* note 25, at 19-20, 89, 125-26.

sign "2" for the pitcher, the pitcher throws a curveball. He notes that each time the third-base coach touches his hat and then wrist, the baserunner attempts to steal a base. If someone sees a pattern develop, they have stolen the opponent's signs. Additionally, players often steal signs indirectly through reading "tipped" pitches, or the pitcher's unconscious habits. For example, Babe Ruth famously stuck out his tongue when he threw curveballs, accidentally signaling his next pitch to hitters.[34] By reading habits, players can in effect steal signs given earlier by the catcher (i.e. "throw a curveball").

Then, signs must be relayed to the player who can take advantage of them. Over the years, players have developed many methods for relaying stolen signs, including: code words, hand signs, whistles, and standing and sitting in the dugout, to name a few.[35] A commonly used strategy is to have the runner on second base steal the catcher's signs and relay them to the hitter. Typically, players agree upon relay codes before the game or once the signs have been stolen (i.e. a whistle means a curveball is coming). Then, after hearing or seeing the relay code, the hitter who received the stolen signs can take advantage of that information in real-time.

Today's MLB hitters are tasked with hitting fastballs ranging from 90-105 mph.[36] On a 95-mph fastball, a hitter has 150 milliseconds to decide whether to swing.[37] Knowing that the pitcher plans to throw a fastball inside, before it happens, gives the hitter a huge advantage. He may anticipate it, start his swing earlier, and time the pitch correctly. As former MLB pitcher Mike McCormick explained, "You let a major-league hitter know what's coming, and he might not hit it all the time, but it certainly makes him a better hitter."[38] On the flip side, if the defense steals the offense's baserunning signs and knows the runner on first plans to steal, the pitcher can throw a pitchout (an unhittable high and outside pitch), making it easier for the catcher to throw out the runner.[39]

The evidence shows that stealing signs gives teams a significant advantage. For example, the 1948 Cleveland Indians deployed a military-grade gun sight to steal signs from their scoreboard, and, as a result, went 19-5 in their last 24 games

34. *See id.* at 19-20.

35. TURBOW & DUCA, *supra* note 28, at 160-64; *see also infra* Part I.B.

36. Justin Arndt, *How Aroldis Chapman Threw the Fastest Pitch Ever*, HUFFINGTON POST (Aug. 28, 2016, 9:04 PM), https://www.huffingtonpost.com/entry/how-aroldis-chapman-threw-the-fastest-pitch-ever_us_57c38390e4b06384eb4066ef.

37. *See* David Kohn, *Scientists Examine What Happens in the Brain When a Bat Tries to Meet a Ball*, WASH. POST (Aug. 29, 2016), https://www.washingtonpost.com/national/health-science/scientists-examine-what-happens-in-the-brain-when-bat-tries-to-meet-ball/2016/08/29/d32e9d4e-4d14-11e6-a7d8-13d06b37f256_story.html.

38. TURBOW & DUCA, *supra* note 28, at 180; *see also* DICKSON, *supra* note 25, at 54 (quoting Ty Cobb, stating the Tigers' 1905 scheme "was a great thing for the Detroit batting averages"); Amy K. Nelson & Peter Keating, *Signs of Trouble in Toronto*, ESPN (Aug. 10, 2011), http://www.espn.com/espn/otl/story/_/id/6837424/baseball-toronto-blue-jays-suspicion-again-stealing-signs-rogers-centre (detailing home vs. away splits for the 2010 Blue Jays hitter).

39. *See* DEREK ZUMSTEG, THE CHEATER'S GUIDE TO BASEBALL 41 (2007).

to make the playoffs.[40] The 1951 New York Giants trailed their division leader by 13 ½ games in mid-August when they installed a telescope in their centerfield clubhouse; they then won 16 games straight and went 20-5 in September to win the pennant.[41] In 1952, Brooklyn Dodgers manager Charlie Dressen estimated that sign stealing helped the Dodgers win nine additional games, and thus the pennant.[42] Finally, due to a Red Sox player's lackadaisical signs and the unique features of Fenway Park, the Blue Jays knew every pitch the Red Sox threw at Fenway Park from 1987-88, which helped them go 13-0 at Fenway during that span, compared to 6-7 versus the Red Sox in Toronto.[43]

Finally, sign stealing has an economic impact. Each MLB team is an independently owned business,[44] and teams compete against each other for wins, fans, and revenue. A win for one team is necessarily a loss for another. Each win brings a team closer to making the MLB postseason, a prerequisite for winning the ultimate competition, the World Series. Due to the short- and long-term increases in ticket, television, and merchandise revenues that flow from making the postseason,[45] each marginal win that gets a team closer to the postseason has a significant financial value. In 2006, statistician Nate Silver estimated that the "marginal economic value" of an MLB win was $1.2 million, with the 90th win having a marginal economic value of $4.4 million.[46] As the total gross revenue for MLB's 30 teams has more than doubled since 2006,[47] one would expect these values to be higher today. Therefore, sign stealing that leads to wins may provide a team millions in additional revenue.[48] Alternatively, the team victim to that sign stealing will lose the marginal economic value of the extra win.

---

40. DICKSON, *supra* note 25, at 91-93; TURBOW & DUCA, *supra* note 28, at 177-78.

41. DICKSON, *supra* note 25, at 143-44; TURBOW & DUCA, *supra* note 28, at 179. *But see* DICKSON, *supra*, at 146 (evidence refuting the benefit of the stolen signs).

42. Harold Friend, *Brooklyn Dodgers' 1952 Pennant was "Tainted" as the New York Giants' 1951 Flag*, BLEACHER REPORT (Sept. 28, 2011), http://bleacherreport.com/articles/869508-the-dodgers-1952-pennant-was-as-tainted-as-the-new-york-giants-1951-flag; *see also* Gammons, *supra* note 24 (quoting former White Sox coach Joe Nossek, "Stealing signs can be worth 15 or 18 key outs in a season. How many wins does that add up to? Four, five, maybe a few more?").

43. TURBOW & DUCA, *supra* note 28, at 163-64; *see also* TURBOW & DUCA, *supra*, at 173 (explaining how the 1960 White Sox's home-field operation helped them go 51-26 (.662) at home and 36-41 (.468) on the road); DICKSON, *supra* note 25, at 44 (explaining how the 1900 Phillies' home-field operation helped them go 36-20 (.643) at home while only 24-35 (.407) on the road).

44. MICHAEL J. COZZILLIO ET AL., SPORTS LAW: CASES AND MATERIALS 19 (2d ed. 2007).

45. *See generally* Silver, *supra* note 16, at 175-76, 183-87.

46. *Id.* at 187-88, 193.

47. In 2005, the total gross revenue of MLB's 30 teams was $4.73 billion. *See Baseball Team Valuations*, FORBES, https://www.forbes.com/lists/2006/33/Revenues_1.html (summing the revenue figures) (last visited Apr. 27, 2019). In 2018, total gross revenues for the teams was $9.63 billion. *See The Business of Baseball: The List*, FORBES, https://www.forbes.com/mlb-valuations/list/#tab:overall (summing the revenue figures) (last visited Apr. 27, 2019).

48. *See supra* notes 45-47 and accompanying text.

B. Baseball Ethics: The Right and Wrong Way to Steal Signs

In baseball, there are right and wrong ways to steal signs. Ethical norms, developed over the years, define acceptable practices.[49] These norms distinguish between two different dichotomies: (i) naked eye vs. mechanical (or aided) sign stealing and (ii) sign stealing inside vs. outside the field of play.[50]

Sign stealing by a player or coach inside the field of play and using the naked eye is considered acceptable.[51] In fact, some pundits view naked-eye sign stealing as meritorious.[52] For example, former MLB pitcher Orel Hershiser stated, "Winning and losing is a cutthroat business, and stealing signs is a fair part of [] gamesmanship False It's not cheating."[53]

However, sign stealing is considered cheating if the stealer uses a mechanical device (e.g., a telescope or live broadcast) and/or resides outside the field of play.[54] These norms began to develop in the early 1900s, during what some commentators call the "spyglass" or "binocular era" of baseball.[55] One commentator explained:

> At the turn of the twentieth century, spyglass espionage was all the rage in baseball. Teams would regularly place operatives [equipped with binoculars] not just inside the scoreboards of stadiums, but in apartments across the street. Signals would be relayed by waving towels, opening and closing windows and curtains . . . hanging feet or arms out of scoreboard openings, and even using mirrors to reflect signals to the batter.[56]

In one famous example, the 1900 Philadelphia Phillies hid their third-string catcher in the centerfield clubhouse, equipped with binoculars and a Morse-code key.[57] The Phillies wired the key underneath the field to a receiver in the Phillies' third-base coaching box, which the third-base coach stood on.[58] Before each pitch, the catcher sent a Morse-code message to the coach, which vibrated underneath his foot, and the coach relayed the sign to the hitter.[59] When the scheme was discovered that season,[60] teams were outraged and called for punishment.[61]

---

49. *See infra* Part I.D.
50. *See* DICKSON, *supra* note 25, at 57; TURBOW & DUCA, *supra* note 28, at 175.
51. *See id.* There is one minor exception: when a batter peeks down before the pitch to see the catcher's signal or position. TURBOW & DUCA, *supra* note 28, at 169. Baseball custom condemns this kind of sign stealing. *See* DICKSON, *supra* note 25, at 135.
52. *See, e.g.*, TURBOW & DUCA, *supra* note 28, at 175 (quoting late sportswriter Red Smith).
53. DICKSON, *supra* note 25, at 22.
54. *See id.* at 57; TURBOW & DUCA, *supra* note 28, at 175.
55. *See, e.g.*, DICKSON, *supra* note 25, at 57.
56. TURBOW & DUCA, *supra* note 28, at 175-76.
57. *See* TURBOW & DUCA, *supra* note 28, at 176.
58. *See id.*
59. *See id.*
60. The scheme was discovered when the visiting shortstop, Tommy Corcoran, tripped on the wire. *See id.*
61. *See* DICKSON, *supra* note 25, at 45-46.

Aided and outside-the-park sign stealing has resurfaced frequently in MLB history. As mentioned, the 1948 Indians and 1951 Giants benefited from the practice.[62] In the 1950s and early 1960s, evidence shows that the White Sox, Braves, Athletics, and Cubs placed staff in their scoreboards, stole signs using binoculars, and relayed them using scoreboard lights.[63] From the 1960s to the 1980s, several teams used closed-circuit televisions in their clubhouses to steal signs.[64] In 1997, the Mets faced allegations of using cameras to steal signs,[65] and the Phillies faced similar accusations in 2007 and 2008.[66] In 2010, the Rockies caught a Phillies coach using binoculars from the bullpen.[67] That same year, someone was caught in the Blue Jays' bleachers raising his hands before every off-speed pitch.[68] In 2017, the Red Sox and Yankees accused each other of mechanical sign stealing.[69] Finally, during the 2018 American League Championship Series, the Red Sox accused a Houston Astros employee in the camera well next to the Red Sox dugout of recording the Red Sox's signs.[70]

Aided sign stealing is frowned upon for notions of fundamental fairness and for undermining the integrity of the game.[71] As Part I.C discusses, teams take extensive measures to protect their signs. However, a team likely cannot protect against sign stealing by mechanical means and/or outside the stadium. Aided sign stealing also gives the home-field team an unfair advantage, as they can use their stadium and technology to steal signs while the away team cannot.[72] In contrast, both the home and away teams can equally participate in naked-eye sign stealing. Finally, aided sign stealing undermines the integrity of the game by unbalancing the intended competition between the pitcher and hitter.

As Part I.D will discuss, MLB Commissioners have responded differently to accusations of mechanical sign stealing over time.[73] Baseball custom still rules the day: there remains a right and wrong way to steal signs. However, Commissioner Manfred has in effect codified this baseball custom with his actions against the Red Sox in 2017 and new rules in 2019.[74]

---

62. *See supra* notes 40-41 and accompanying text.

63. DICKSON, *supra* note 25, at 104-06; TURBOW & DUCA, *supra* note 28, at 172-75, 180.

64. *See* DICKSON, *supra* note 25, at 129-30.

65. Murray Chass, *Opponents Claim the Mets are Stealing Signs Via Video*, N.Y. TIMES (Aug. 19, 1997), https://www.nytimes.com/1997/08/19/sports/opponents-claim-the-mets-are-stealing-signs-via-video.html.

66. Michael S. Schmidt, *Phillies Are Accused of Stealing Signs Illegally*, N.Y. TIMES (May 12, 2010), https://www.nytimes.com/2010/05/13/sports/baseball/13phillies.html.

67. *Id.*

68. *See* Nelson & Keating, *supra* note 38.

69. *See supra* notes 1-9.

70. *See* Dave Sheinin, *Astros Under Scrutiny Under Sign-Stealing Controversy During ALCS*, WASH. POST (Oct. 17, 2018), https://www.washingtonpost.com/sports/2018/10/17/mlb-investigation-clears-astros-alleged-sign-stealing-during-alcs/?noredirect=on&utm_term=.34beea6fbf00.

71. *See generally* TURBOW & DUCA, *supra* note 28, at 175.

72. *See supra* notes 40-41, 56-59, 63-64.

73. *See infra* Part I.D.

74. *See infra* Part I.D.

C. How MLB Teams Protect Their Signs

Given the historical persistence of sign stealing, teams employ strategies to protect their signs. In fact, baseball historians attribute the catcher's squat to an early effort to protect against sign stealing.[75] As many signs, such as the third-base coach's signs to the hitter, remain in the public eye, teams have developed systems of creative deception to keep their signs secret.

A team's first line of defense is using false signs. For example, third-base coaches typically give a series of signs and mix in false signs to confuse the opposition. In a series of eight to ten signs, the coach may provide no real signs, one real sign, or one real sign and then a "wipe off" sign that overturns the outstanding real sign.[76] Even trickier, teams sometimes designate other individuals (e.g., a bench player, first-base coach, etc.) to deliver offensive signs, meaning that every sign from the third-base coach is a decoy.[77] With these defensive systems in place, opponents face a greater challenge in stealing the real signs.

In addition to using false signs, many teams change signs throughout the game or season.[78] For example, pitchers and catchers often change their signs with a runner on second base, because the runner has a clear view of the catcher's signs. Pitchers and catchers may also change their signs every three innings.[79] To further confuse the opposition, several teams in the past have instituted different batting signs for each player.[80] Finally, when a player gets traded to another team, teams often change their signs.[81]

Specific to pitcher-catcher signs, teams employ several additional strategies. First, as discussed previously, coaches and teammates try to ensure that the pitcher does not "tip" his pitches.[82] Second, coaches instruct pitchers to work faster, which shortens the time in between the catcher's sign and the pitch.[83] Working faster decreases the amount of time the opponent has to relay the sign to the hitter, thereby decreasing the likelihood of sign stealing.[84] Third, pitchers sometimes give signs to catchers.[85] This practice operates the same way as designating an unsuspecting individual to deliver offensive signs, as each of the catcher's signs will be a decoy. Fourth, during the 2018 MLB season, at least two teams frequently positioned their shortstop in front of the second-base

75. *See* DICKSON, *supra* note 25, at 15.
76. *Id.* at 11.
77. *Id.* at 10, 15, 84.
78. *See id.* at 13, 137.
79. *Id.* at 13; *see also* Sheinin, *supra* note 70 (quoting 2018 Red Sox manager, Alex Cora, "If we feel there's something going on, we change the signs.").
80. DICKSON, *supra* note 25, at 13.
81. Tim Kurkjian, *Can You Read the Signs?*, ESPN (Aug. 12, 2004), http://www.espn.com/mlb/columns/story?columnist=kurkjian_tim&id=1857661.
82. *See* DICKSON, *supra* note 25, at 101-02.
83. ZUMSTEG, *supra* note 39, at 40.
84. *Id.*
85. *See* DICKSON, *supra* note 25, at 33 (detailing Larry Corcoran of the 1880 Chicago White Stockings moving a wad of tobacco back and forth in his mouth).

runner, to block the runner from reading the catcher's signs.[86] Finally, in 2019, the Yankees began using a laminated card placed under the pitcher's cap and on the catcher's wristband, whereby the pitcher or catcher flash numbers to each other that correspond with a pitch call, and the large number of codes on the card makes it more difficult to steal the Yankees' signs.[87]

Baseball custom has placed the onus on the team giving signs to combat sign stealing. Legendary Hall of Fame coach Connie Mack once wrote, "The object is to keep your signals secret so that your opponents won't get wise to them."[88] Another Hall of Fame coach, Sparky Anderson, once quipped, "If you can't hide your signs, you've got problems."[89] Finally, Orel Hershiser assigned the blame more bluntly, "The fault is not with the people stealing the signs, but with the people giving them False It is a pitcher's own fault if his signs are picked up."[90]

Baseball teams have many low-cost and effective defenses at their disposal to protect their signs. Hence, the prevailing attitude is that teams must use these defensive measures to safeguard their valuable communications.

D. Baseball's Rules Against Sign Stealing

There are no official rules against sign stealing in baseball.[91] In other words, sign stealing is generally permissible. Until the 2017 MLB season, custom delineated between permissible naked-eye sign stealing and impermissible mechanical sign stealing.[92] However, between Commissioner Manfred's response to the 2017 Red Sox Apple Watch scandal and new rules prior to the 2019 MLB season, Commissioner Manfred has formalized MLB custom into an official rule.

MLB's unwritten rule against mechanical sign stealing began in the early 1960s. Mechanical sign stealing was so rampant in the late 1950s and early 1960s that MLB considered banning it after the 1961 season.[93] That offseason,

---

86. *See, e.g.*, Tom Ley, *Javier Báez Came up with a Novel Way to Prevent Sign-Stealing*, DEADSPIN (Apr. 23, 2018), https://deadspin.com/javier-baez-came-up-with-a-novel-way-to-prevent-sign-st-1825465919; Billy McInerney, *New York Mets: Jason Heyward Angry at Amed Rosario for Blocking Signs (Video)*, ELITE SPORTS NY (June 1, 2018), https://elitesportsny.com/2018/06/01/new-york-mets-news-jason-heyward-yells-at-amed-rosario-for-sign-block/.

87. Andy Martino, *Yankees Find New Solution to Age-Old Sign-Stealing Problem*, SNY.TV (June 5, 2019), https://www.sny.tv/yankees/news/yankees-find-new-solution-to-age-old-sign-stealing-problem/307772514.

88. DICKSON, *supra* note 25, at 69.

89. TURBOW & DUCA, *supra* note 28, at 159.

90. DICKSON, *supra* note 25, at 22.

91. *See Rob Manfred on Red Sox Investigation: There's No Rule Against Sign-Stealing*, ESPN (Sept. 5, 2017), http://www.espn.com/blog/sweetspot/post/_/id/82486/rob-manfred-on-red-sox-investigation-theres-no-rule-against-sign-stealing; *see also generally* THE OFFICIAL PROFESSIONAL BASEBALL RULES BOOK R. 21 (2019 ed.), https://registration.mlbpa.org/pdf/MajorLeagueRules.pdf.

92. *See supra* Part I.B.

93. DICKSON, *supra* note 25, at 108.

the National League owners granted their president, Warren Giles, the power to vacate wins from teams that had been proven to have used mechanical means to sign steal.[94] While not outright banning the practice, then-MLB Commissioner Ford Frick stated when discussing mechanical sign-stealing, "I am definitely opposed to such practices. If such a charge were substantiated, I would forfeit the game."[95] Since that time, there has been an unwritten MLB rule against mechanical sign stealing.[96]

Until recently, however, the MLB Commissioner's Office has appeared unwilling to pursue mechanical sign-stealing claims. For example, in 2010, after the Phillies were accused of having a coach use binoculars in the bullpen, MLB issued a warning to the coach but did not make an official sign-stealing finding.[97] In fact, then-MLB Commissioner Bud Selig made light of the allegations, citing baseball's rich history of sign stealing.[98] No team prior to 2017 had been punished. As a result, enforcement of this rule had been left to players and coaches. Often, if a team breaks one of baseball's unwritten rules, the slighted team will intentionally hit a player on the infracting team and both teams deem the equitable balance restored.[99]

Commissioner Manfred took a different approach in 2017, fining the Red Sox after the Apple Watch scheme, marking the first official punishment for sign stealing in baseball.[100] In particular, Commissioner Manfred drew on a 2001 guidance memo by the Commissioner's Office to teams stating that sign stealing using electronic devices was not permitted.[101] The memo explained, "[Electronic] equipment may not be used for the purpose of stealing signs or conveying information designed to give a club an advantage."[102] MLB had re-circulated the 2001 memo to teams prior to the 2017 MLB season.[103] Commissioner Manfred believed the guidance was sufficient to conclude that the 2017 Red Sox's Apple Watch scheme violated a "clear [MLB] Regulation" and stated that "future violations . . . will be subject to more serious sanctions,

94. *Id.*

95. *Id.* at 121.

96. *Id.* at 122-23.

97. Troy E. Renck, *Phillies Warned About Binoculars*, DENVER POST (May 12, 2010), https://www.denverpost.com/2010/05/12/phillies-warned-about-binoculars/.

98. *See* Roger I. Abrams, *Phillies Stealing Signs: Say It Ain't So*, HUFFINGTON POST (May 14, 2010), https://www.huffingtonpost.com/roger-i-abrams/phillies-stealing-signs-s_b_576589.html ("I have to tell you now, you could get me started on history—stealing signs has been around for 100 years.").

99. *See* Bogage, *supra* note 19.

100. *See Commissioner's Statement*, *supra* note 8.

101. Ken Rosenthal, *Red Sox Crossed a Line, and Baseball's Response Must Be Firm*, THE ATHLETIC (Sept. 5, 2017), https://theathletic.com/94995/2017/09/05/red-sox-crossed-a-line-and-baseballs-response-must-be-firm/ (describing the 2001 Sandy Alderson memo).

102. *Id.*

103. Alex Speier, *Everything You Need to Know About Sign-Stealing*, BOSTON GLOBE (Sept. 5, 2017), https://www.bostonglobe.com/sports/redsox/2017/09/05/everything-you-need-know-about-sign-stealing/gvXZ0hPKVzZtKzt2AQb25H/story.html.

including the possible loss of draft picks."[104] Prior to the 2018 MLB postseason, the Commissioner's Office "reinforced its existing rules" with teams and "institut[ed] a new prohibition on the use of certain in-stadium cameras."[105] To be sure, even if these prohibitions existed in guidance memos, the MLB Commissioner has the broad power—under Rule 21(f) of the Major League Rules—to punish any "conduct not to be in the best interests of Baseball."[106]

Finally, prior to the 2019 MLB season, Commissioner Manfred circulated a memo to teams outlining new rules against of electronic sign stealing.[107] Those rules provided that:

1. Non-broadcast outfield cameras are prohibited;
2. Only a team's designated replay official may watch a live broadcast of the game;
3. Each team's replay official will be monitored by a security expert to ensure the official does not communicate signs with team personnel in person, by phone or by any other device;
4. All other bullpen and clubhouse television monitors will broadcast on an eight-second delay;
5. Television monitors in the tunnels or auxiliary rooms between the dugout and the clubhouse are prohibited; and
6. Each team must disclose to MLB the location of every in-house camera within the team's stadium, detailing its purpose, wiring and where the signal can be viewed.[108]

The rules also contained an enforcement mechanism, whereby before and after every season, each General Manager (or president of baseball operations) and club manager must sign a certificate stating that their team is in compliance with MLB's sign-stealing rules and they do not know of any "pre-mediated plan to steal signs."[109] Finally, teams that violate these rules may lose draft picks and/or international spending money.[110]

Commissioner Manfred appears to be taking mechanical sign stealing more seriously than his predecessors.[111] MLB teams are now on notice that mechanical sign stealing will be met with harsh consequences from the MLB Commissioner's Office.

---

104. *Id.*

105. Rachel Bowers, *MLB Concludes Astros Did Not Violate Any Rules in ALCS Game 1 Against Red Sox*, BOSTON GLOBE (Oct. 17, 2018), https://www.boston.com/sports/boston-red-sox/2018/10/17/mlb-astros-sign-stealing-rules.

106. THE OFFICIAL PROFESSIONAL BASEBALL RULES BOOK, *supra* note 91, R. 21(f).

107. Bogage, *supra* note 19.

108. Tom Verducci, *Exclusive: MLB to Pass New Rules Designed to Crack Down on Sign Stealing*, SI.COM (Feb. 19, 2019), https://www.si.com/mlb/2019/02/19/major-league-baseball-sign-stealing-rule-change.

109. *Id.*

110. *Id.*

111. *See generally Commissioner's Statement*, *supra* note 8.

II. THEFT OF TRADE SECRETS IN THE UNITED STATES

A trade secret is a piece of information that a company keeps secret because it has commercial and competitive value to that company.[112] The quintessential example is Coca-Cola's secret formula,[113] but many companies use proprietary secrets (e.g., formulas, designs, techniques, processes, or codes) to gain an advantage against their competitors. One survey estimated that trade secrets constitute an average of 62 percent of value of a firm's information assets.[114] In the aggregate, U.S. public companies are estimated to own $5 trillion worth of trade secrets.[115] Because of their commercial value, trade secrets are also primary targets of theft. This phenomenon has many names, including theft of trade secrets, trade-secret misappropriation, corporate espionage, economic espionage, and industrial espionage.

The annual loss in value to U.S. companies from trade-secret theft is staggering. In 2014, PricewaterhouseCoopers and the Center for Responsible Enterprise and Trade estimated that the U.S. economy loses one to three percent of GDP, or $200 to $550 billion, to trade-secret theft annually.[116] Specifically, U.S. companies lose value by losing the competitive advantage they had in their trade secrets when someone misappropriates them to another corporation.[117] Take, for example, the theft of DuPont's compound for titanium dioxide (TiO_2), a white pigment, from 1997 to 2011. Before the theft, DuPont's "proprietary refining process was more efficient than any of its competitors," and DuPont controlled 20 percent of the $12 billion TiO_2 market.[118] From 1997 to 2011, DuPont scientist Walter Liew stole DuPont's titanium dioxide secrets and sold them to the Pangang Group, a collection of PRC-controlled companies.[119] In 2013, "[t]hanks to a sluggish economy *and cheap Chinese competition*, the price

---

112. *See* James W. Hill, *Trade Secrets, Unjust Enrichment, and the Classification of Obligations*, 4 VA. J.L. & TECH. 2, 1 (1999).

113. *See* Rice Ferrelle, *Combating the Lure of Impropriety in Professional Sports Industries: The Desirability of Treating a Playbook as Legally Enforceable Trade Secret*, 11 J. INTELL. PROP. L. 149, 167-68 (2003).

114. FORRESTER CONSULTING, THE VALUE OF CORPORATE SECRETS: HOW COMPLIANCE AND COLLABORATION AFFECT ENTERPRISE PERCEPTIONS OF RISK 2 (2010).

115. *See* U.S. CHAMBER OF COMMERCE, THE CASE FOR ENHANCED PROTECTION OF TRADE SECRETS IN THE TRANS-PACIFIC PARTNERSHIP AGREEMENT 10 (2014).

116. *See* CTR. FOR RESP. ENTER. AND TRADE & PRICEWATERHOUSECOOPERS, ECONOMIC IMPACT OF TRADE SECRET THEFT 3 (2014).

117. *See id.* at 23-31 (summary of DOJ trade-secret theft cases).

118. Cyrus Sanati, *How DuPont Spinoff Chemours Came Back from the Brink*, FORTUNE (May 18, 2016), http://fortune.com/2016/05/18/how-dupont-spinoff-chemours-came-back-from-the-brink/; Del Quentin Wilber, *Stealing White: How a Corporate Spy Swiped Plans for DuPont's Billion Dollar Color Formula*, BLOOMBERG (Feb. 4, 2016), https://www.bloomberg.com/features/2016-stealing-dupont-white/ (referencing DuPont's $2.6 billion business).

119. Wilber, *supra* note 118; Press Release, U.S. and Chinese Defendants Charged with Economic Espionage and Theft of Trade Secrets in Connection with Conspiracy to Sell Trade Secrets to Chinese Companies, DEP'T OF JUSTICE (Feb. 8, 2012), https://www.justice.gov/opa/pr/us-and-chinese-defendants-charged-economic-espionage-and-theft-trade-secrets-connection.

of TiO_2 had spiraled down to earth."[120] In other recent cases, the DOJ estimated $400 million to $8.75 billion of lost value in the theft of Micron Technology's semiconductor technology,[121] American Superconductor estimated lost value of $800 million from the theft of wind turbine technology,[122] and General Motors estimated lost value of $40 million from the theft of hybrid vehicle technology secrets.[123]

There are parallel state and federal legislative frameworks for protecting trade secrets in the United States. The subparts below provide an overview of those regimes and outline the two key elements of any trade-secret case: (i) the existence of a "trade secret" and (ii) proof that the defendant engaged in "misappropriation" or "theft of trade secrets."

A. The State and Federal Regimes that Protect Trade Secrets

The Uniform Trade Secrets Act and the Economic Espionage Act of 1996 provide overlapping state and federal protections, respectively, against trade-secret theft in America.

States have recognized trade-secret protections since 1837, and, until 1979, each state developed its own trade-secret common law.[124] In 1979, in an attempt to unify the state common law approaches, the Uniform Law Commission published the Uniform Trade Secrets Act (UTSA).[125] Since then, forty-nine states have adopted some version of the UTSA.[126] Despite remaining state variations in trade-secret doctrine,[127] for simplicities' sake, this paper uses the UTSA as the focal point for state trade-secret protection.

In 1996, Congress passed the Economic Espionage Act of 1996 (EEA), 18 U.S.C. §§ 1831-39, creating a federal trade-secret protection regime.[128] The

120. Sanati, *supra* note 118 (emphasis added).

121. Aruna Viswanatha et al., *U.S. Accuses Chinese Firm, Partner of Stealing Trade Secrets from Micron*, WALL ST. J. (Nov. 1, 2018), https://www.wsj.com/articles/u-s-accuses-two-firms-of-stealing-trade-secrets-from-micron-technology-1541093537.

122. Press Release, DEP'T OF JUSTICE, Sinovel Corporation and Three Individuals Charged in Wisconsin with Theft of Amsc Trade Secrets (June 27, 2013), https://www.justice.gov/opa/pr/sinovel-corporation-and-three-individuals-charged-wisconsin-theft-amsc-trade-secrets.

123. EXEC. OFF. OF THE PRESIDENT, ADMINISTRATION STRATEGY ON MITIGATING THE THEFT OF U.S. TRADE SECRETS 7 (2013).

124. *See* Mark A. Lemley, *The Surprising Virtues of Treating Trade Secrets as IP Rights*, 61 STAN. L. REV. 311, 315-16 (2008) (These common law principles can be found in the RESTATEMENT (FIRST) OF TORTS § 757 (1939) and the RESTATEMENT (THIRD) OF UNFAIR COMPETITION § 39 (1995)). *See also* Ferrelle, *supra* note 113, at 151-55.

125. UNIF. TRADE SECRETS ACT editors' notes (UNIF. LAW COMM'N 1985) ("The Uniform Act codifies the basic principles of common law trade secret protection.").

126. *See* James McQuade et al., *Massachusetts Enacts New Reforms on Noncompetes, Becomes 49th State to Enact UTSA*, ORRICK BLOGS (Aug. 28, 2018), https://blogs.orrick.com/trade-secrets-watch/2018/08/28/massachusetts-enacts-new-reforms-on-noncompetes-becomes-49th-state-to-enact-utsa/ (last visited Apr. 27, 2019).

127. *See* Richard F. Dole, Jr., *Statutory Royalty Damages Under the Uniform Trade Secrets Act and the Federal Patent Code*, 16 VAND. J. ENT. & TECH. L. 223, 228-29 (2014).

128. *See* 18 U.S.C. §§ 1831-39 (2018).

EEA has two main parts: (a) section 1831 "economic espionage" (trade-secret theft to benefit a foreign government) and (b) section 1832 "theft of trade secrets" (no intent to benefit a foreign government).[129] For this paper, because no foreign governments are involved in MLB sign stealing, only section 1832 is relevant.

There are three main differences between the EEA and the UTSA. First, the EEA is a criminal and civil statute, whereas the UTSA only provides civil remedies.[130] Under the EEA, the U.S. Attorney General may seek criminal penalties.[131] Second, the EEA governs a broader set of conduct than the UTSA. The EEA prohibits trade-secret "misappropriation" *and* "theft of trade secrets," whereas the UTSA only prohibits trade-secret "misappropriation."[132] Finally, as a procedural matter, the EEA requires the trade secret to be "related to a product or service used in or intended for use in *interstate or foreign commerce*."[133] Without this jurisdictional hook, a plaintiff must sue in state court under the UTSA.

Both the UTSA and the EEA provide a private cause of action for an owner of a trade secret to sue someone that "misappropriat[es]" or attempts to misappropriate that trade secret.[134] Both regimes also allow private plaintiffs to obtain injunctive relief and/or damages.[135]

The penalties for trade-secret theft under the UTSA and the EEA are nearly identical. For a civil private suit under either regime, a plaintiff may recover a variety of damages. First, a plaintiff may recover damages from "actual loss caused by the misappropriation" plus "damages from unjust enrichment . . . not addressed in computing damages for actual loss."[136] Additionally, a court may award "exemplary damages" of up to two times the above damages, plus attorney's fees, if the misappropriation was "willful and malicious."[137] Finally, as an alternative measure of damages, a plaintiff may seek damages in the amount of a hypothetical "reasonable royalty" for the stolen trade secret.[138] In this situation, a court assumes a hypothetical ex-ante negotiation between the parties and estimates what a "reasonable royalty" would be for the trade secret.[139] Where the EEA extends beyond the UTSA, though, are the penalties available to

---

129. *See generally id.* §§ 1831-32.

130. *Compare id.* §§ 1832, 1836, *with* UNIF. TRADE SECRETS ACT §§ 2-3.

131. *See* 18 U.S.C. § 1832.

132. *Compare id.* §§ 1832, 1836, *with* UNIF. TRADE SECRETS ACT §§ 2-3; *see also infra* Part II.C.

133. 18 U.S.C. § 1832(a) (emphasis added), § 1836(b).

134. *Id.* § 1836(b); UNIF. TRADE SECRETS ACT §§ 2-3. The EEA's private cause of action was instituted recently under the Defend Trade Secrets Act of 2016 (DTSA). *See* Defend Trade Secrets Act of 2016, Pub. L. No. 114-153, 130 Stat. 376 (codified as 18 U.S.C. § 1836).

135. UNIF. TRADE SECRETS ACT §§ 2-3; 18 U.S.C. § 1836(b)(3).

136. 18 U.S.C. § 1836(b)(3)(B); UNIF. TRADE SECRETS ACT § 3(a).

137. 18 U.S.C. § 1836(b)(3)(C)-(D); UNIF. TRADE SECRETS ACT §§ 3(b), 4.

138. 18 U.S.C. § 1836(b)(3)(B)(ii); § 3(a).

139. Chip Booker, *Proving a Reasonable Royalty for Trade-Secret Misappropriation*, ABA SEC. LITIG. (Oct. 22, 2012), http://apps.americanbar.org/litigation/committees/businesstorts/articles/fall2012-1012-proving-reasonable-royalty-trade-secret-misappropriation.html.

the Attorney General. For example, the Attorney General may seek imprisonment of up to ten years.[140] Additionally, the Attorney General may obtain injunctive relief and/or a "fine[] [of] not more than the greater of $5,000,000 or 3 times the value of the stolen trade secret to the organization."[141]

There are two prongs to a trade-secret-theft case under the EEA and the UTSA. First, the plaintiff must establish that the plaintiff's property stolen was a "trade secret" as defined by the EEA or the UTSA.[142] Second, the plaintiff must prove that the defendant engaged in "misappropriation" or "theft of trade secrets."[143]

B. What is a "Trade Secret"?

Under both the EEA and the UTSA, a plaintiff must establish the following three elements to qualify information as a "trade secret": (i) the right type of information (ii) that its owner has "taken reasonable measures to keep secret" and (iii) that "derives independent economic value" from being secret.[144] Only "trade secrets" receive protection.[145]

First, the stolen information must be a certain type of information. In reality, this is a historical element, as the RESTATEMENT (FIRST) OF TORTS required "continuous use" and a prior version of the EEA appeared to require the information to be related to "products" and not services.[146] Today, the EEA and the UTSA define the scope of protectable information broadly.[147] The EEA defines "trade secret" as "all forms and types of financial, business, scientific, technical, economic, or engineering information."[148] Likewise, the UTSA defines trade secret as "information, including a formula, pattern, compilation, program, device, method, technique, or process."[149] Use of the trade secret is not required, and trade secrets may relate to services.[150] Also, there is no minimum value required for a "trade secret" finding.[151] Courts deny "trade secret" status with some frequency, but it is usually because the information fails one of the other two elements.[152] Given these definitions, one commentator

140. 18 U.S.C. § 1832(a) (Supp. V 2017).
141. *Id.* §§ 1832(b), 1836(a).
142. *See generally id.* §§ 1832; UNIF. TRADE SECRETS ACT §§ 2-3.
143. *See generally* 18 U.S.C. §§ 1832; UNIF. TRADE SECRETS ACT §§ 2-3.
144. 18 U.S.C. § 1839(3); *see also* UNIF. TRADE SECRETS ACT § 1(4).
145. *See generally* 18 U.S.C. §§ 1832; UNIF. TRADE SECRETS ACT §§ 2-3.
146. RESTATEMENT (FIRST) OF TORTS § 757, cmt. b (1939); Daren Orzechowski, *Amendments to the Economic Espionage Act Broaden Trade Secret Protection*, WHITE & CASE (Jan. 15, 2013), https://www.whitecase.com/publications/article/amendments-economic-espionage-act-broaden-trade-secret-protection (detailing the Theft of Trade Secrets Clarification Act of 2012).
147. *See* 18 U.S.C. § 1839(3); UNIF. TRADE SECRETS ACT § 1(4); *see also* 1 ROGER M. MILGRIM, MILGRIM ON TRADE SECRETS § 1.01(2)(b)(iii)(A) (2017).
148. 18 U.S.C. § 1839(3).
149. UNIF. TRADE SECRETS ACT § 1(4).
150. *See* 18 U.S.C. § 1839(3); UNIF. TRADE SECRETS ACT § 1(4).
151. *See* 18 U.S.C. § 1839(3); UNIF. TRADE SECRETS ACT § 1(4).
152. *See* MILGRIM, *supra* note 147, §§ 1.01(2)(b)(iii)(A), 1.09.

concludes, "[T]he type of information that can qualify for trade secret protection . . . is virtually unlimited."[153]

Second, the owner of the information must have taken "reasonable efforts to keep such information secret."[154] Trade-secret owners need not take every possible precaution to protect their trade secret; only reasonable efforts are required.[155] Reasonableness requires an assessment of the circumstances, the precautions taken, and the cost of precautions not taken.[156] Reasonableness will vary depending on the type of information, the type of employer, the industry, and industry practice.[157] Generally, however, courts focus on limitations on access to the information, confidentiality agreements, and notice to employees of the trade-secret status.[158]

Finally, the information must "derive[] independent economic value, actual or potential, from not being generally known to, and not being readily ascertainable through proper means by, another person who can obtain economic value from the disclosure or use of the information."[159] This final element is complex. First, this element requires a high degree of secrecy. Specifically, there will be no trade secret if "the principal persons who can obtain economic benefit from [the] information are aware of it."[160] Second, a court will deny "trade secret" status if the information is "readily ascertainable through proper means."[161] According to the UTSA editors, "proper means" include independent invention, reverse engineering, licensing, or observation in public use or publications.[162] Third, there must be "independent economic value" from the information's secrecy.[163] Take DuPont's TiO_2 compound, discussed *supra*, for example. DuPont's TiO_2 compound allowed it to produce TiO_2 more efficiently than its competitors, allowing DuPont to sell at lower prices and obtain a twenty-percent market share. After the theft, however, a competitor began to produce DuPont's TiO_2 compound, charged a lower price, and drove market share away from DuPont.[164] Ex post, it is clear that the secrecy of DuPont's TiO_2 compound provided "independent economic value" to DuPont prior to the theft.

If a plaintiff can show all three elements, then a court will find the information is a "trade secret." Only after a court finds a "trade secret" will the court assess whether the defendant engaged in "misappropriation" or "theft of trade secrets."

---

153. *See id.* § 1.01(2)(c)(iii)(A).
154. 18 U.S.C. § 1839(3)(A); *see also* UNIF. TRADE SECRETS ACT § 1(4)(ii).
155. *See* 18 U.S.C. § 1839(3)(A); *see also* UNIF. TRADE SECRETS ACT § 1(4)(ii).
156. MILGRIM, *supra* note 147, § 1.04.
157. *See* UNIF. TRADE SECRETS ACT § 1(4)(ii); MILGRIM, *supra* note 147, § 1.04.
158. *See* UNIF. TRADE SECRETS ACT § 1, cmt.; MILGRIM, *supra* note 147, § 1.04.
159. 18 U.S.C. § 1839(3)(B); *see also* UNIF. TRADE SECRETS ACT § 1(4)(ii) (nearly identical).
160. UNIF. TRADE SECRETS ACT § 1, cmt.
161. 18 U.S.C. § 1839(3)(B); *see also* UNIF. TRADE SECRETS ACT § 1(4)(ii) & cmt.
162. UNIF. TRADE SECRETS ACT § 1 cmt.
163. 18 U.S.C. § 1839(3)(B); *see also* UNIF. TRADE SECRETS ACT § 1(4)(ii).
164. *See supra* notes 118-20 and accompanying text.

C. What Constitutes "Misappropriation" or "Theft of Trade Secrets"?

To win a trade-secrets case, the plaintiff must show that the defendant engaged in "misappropriation" or "theft of trade secrets."[165] The specific cause of action available depends on the identity of the plaintiff. Under the EEA and the UTSA, private plaintiffs may only bring a suit for trade secret "misappropriation."[166] However, under the EEA, the Attorney General may sue for the broader category of "theft of trade secrets."[167]

The EEA and the UTSA define "misappropriation" identically, as the:

> (i) acquisition of a trade secret of another by a person who knows or has reason to know that the trade secret was acquired by *improper means*; or (ii) disclosure or use of a trade secret of another without express or implied consent by a person who (A) used *improper means* to acquire knowledge of the trade secret. . .[168]

As the definition makes clear, the misappropriation analysis turns on whether the defendant obtained the trade secret through "improper means."[169] If the defendant used "improper means," they engaged in misappropriation.[170] In contrast, if they used "proper means," they did not engage in misappropriation and the court will deny the plaintiff relief.[171]

The EEA and the UTSA both define "improper means" as "includ[ing] theft, bribery, misrepresentation, breach or inducement of a breach of a duty to maintain secrecy, or espionage through electronic or other means."[172] Both frameworks also go on to specify a few examples of what is not "improper," such as reverse engineering and independent derivation.[173] Reverse engineering occurs when a company begins with a competitor's final product and engages in trial and error to re-create that product.[174] It is also clear that discovery under a license or public observation would be proper means.[175] However, where the frameworks differ is whether "other lawful means of acquisition" may be improper. The EEA deems "other lawful means of acquisition" as *not* improper,[176] whereas the UTSA's editors' notes state that "[i]mproper means *could* include *otherwise lawful conduct which is improper under the*

---

165. *See* UNIF. TRADE SECRETS ACT § 2 (providing a cause of action for "misappropriation"); 18 U.S.C. §§ 1832, 1836 (providing causes of action for "theft of trade secrets" and "misappropriation").

166. UNIF. TRADE SECRETS ACT §§ 2(a), 3(a); 18 U.S.C. § 1836(b)(1).

167. 18 U.S.C. §§ 1832; *see infra* notes 178-81 and accompanying text.

168. 18 U.S.C. § 1839(5); UNIF. TRADE SECRETS ACT § 1(2)(i) (emphasis added).

169. *See* 18 U.S.C. § 1839(5); UNIF. TRADE SECRETS ACT § 1(2)(i).

170. *See* 18 U.S.C. § 1839(5); UNIF. TRADE SECRETS ACT § 1(2).

171. *See* 18 U.S.C. § 1839(5); UNIF. TRADE SECRETS ACT § 1(2)

172. 18 U.S.C. § 1839(6)(A); UNIF. TRADE SECRETS ACT § 1(1).

173. 18 U.S.C. § 1839(6)(B); UNIF. TRADE SECRETS ACT § 1 cmt.

174. *See* UNIF. TRADE SECRETS ACT § 1 cmt.

175. *Id.*; *see also* 18 U.S.C. § 1839(6)(B) (deeming not improper "any other lawful means of acquisition").

176. 18 U.S.C. § 1839(6)(B) (Supp. V 2017).

circumstances."[177]

Putting the "misappropriation" analysis aside, the Attorney General may sue for the broader category of "theft of trade secrets" under EEA § 1832. A "theft of trade secrets" claim requires showings of "intent to convert a trade secret . . . to the economic benefit of anyone other than the owner" and "inten[t] or know[ledge] that the offense will [] injure [the] owner."[178] Assuming these *mens rea* showings, there is a "theft of trade secrets" violation if the defendant:

> knowingly—(1) *steals*, or without authorization appropriates, takes, carries away, or conceals, or by fraud, artifice, or deception obtains such information . . . (2) . . . *communicates* or *conveys* such information; (3) *receives*, buys, or *possesses* such information, knowing the same to have been stolen or appropriated, obtained, or converted without authorization; (4) attempts to commit any offense described in paragraphs (1) through (3); or conspires . . . to commit any offense described in paragraphs (1) through (3). . .[179]

Under these provisions, a defendant can be found liable for stealing a trade secret, communicating, receiving, or possessing a stolen trade secret, or attempting or conspiring to do any of those actions.[180] The conduct banned also includes "misappropriation."[181] As a result, section 1832 grants the Attorney General broad power—much broader than private plaintiffs—to penalize conduct related to trade-secret theft.

Once a plaintiff convinces a court that the defendant engaged in "misappropriation" or "theft of trade secrets," the plaintiff may, as applicable, obtain injunctive relief, damages, and/or criminal penalties.[182]

III. HOW A SIGN-STEALING TRADE-SECRETS CASE COULD ARISE

In baseball, there are four variations of the parties in a potential sign-stealing trade-secrets dispute. In theory, either an MLB team or the U.S. Attorney General could be a plaintiff in a sign-stealing dispute, and either an MLB team or a player could be a defendant in such a dispute. Therefore, the four potential variations for a sign-stealing dispute are: (i) *Team vs. Team*, (ii) *Team vs. Player*, (iii) *United States vs. Team*, and (iv) *United States vs. Player*.

In the first two variations, a harmed team-plaintiff might want to allege theft of trade secrets in state court under the UTSA or in federal court under the EEA § 1832. However, MLB's Constitution—particularly its mandatory arbitration provision—precludes such a case.[183] The Major League Constitution (MLC) is signed by every team and is MLB's governing document.[184] Article VI of the

177. UNIF. TRADE SECRETS ACT § 1 cmt. (emphasis added).
178. 18 U.S.C. § 1832(a) (Supp. V 2017).
179. *Id.* (emphasis added).
180. *See id.*
181. *See id.* § 1832(a)(1) (banning appropriation "without authorization").
182. *See supra* notes 134-41 and accompanying text.
183. *See* MAJOR LEAGUE CONST. Art. VI, § 1 (2008).
184. *See id.* Arts. I, VII. The author was only able to obtain a 2008 version of the MLC,

MLC provides:

> *All disputes and controversies related in any way* to professional baseball between [Teams] . . . and any Major League Baseball entity(ies) (including . . . their owners, officers, directors, employees *and players*) . . . *shall* be submitted to the Commissioner, as arbitrator, who, after hearing, shall have the sole and exclusive right to decide such disputes and controversies, and whose decision shall be final and unappealable.[185]

Therefore, any *Team vs. Team* or *Team vs. Player* dispute must be submitted by the team to the Commissioner, for final and unappealable arbitration.[186] This is how the Yankees' claim against the Red Sox was "litigated" in 2017. Because the MLC forecloses actual litigation between teams and between teams and players, teams may not sue their opponents for theft of trade secrets under the UTSA or the EEA.

Although a team is foreclosed from suing in court, the U.S. Attorney General may still sue in federal court for "theft of trade secrets" under EEA § 1832.[187] The MLC rules out the UTSA as a potential source of relief, because only private plaintiffs may sue under the UTSA.[188] However, the Attorney General could sue a team or player engaged in sign stealing, alleging a violation of EEA § 1832.

Therefore, of the four possible variations, only two—(iii) *United States vs. Team* and (iv) *United States vs. Player*—could ever find their way into a courtroom. In order to succeed, the Attorney General would need to convince a court that baseball signs are "trade secrets" and that the defendant team or player engaged in "theft of trade secrets" under the EEA.[189]

IV. WOULD SIGN STEALING IN BASEBALL CONSTITUTE THEFT OF TRADE SECRETS?

As discussed in Part III, the only MLB trade-secrets disputes that could find their way into a courtroom are *United States vs. Team* and *United States vs. Player*, both under the EEA. Therefore, this Part focuses on the EEA and leaves an analysis of the UTSA behind.

As a preliminary matter, there is a minor jurisdictional hurdle to any sign-stealing case under the EEA. Section 1832 of the EEA only provides a cause of action if the trade secret is "related to a product or service used in or intended for use *in interstate* or foreign *commerce*."[190] Therefore, the Attorney General must

---

which expired in 2012. *See id.* Art. I. Therefore, for this paper, the author assumes that the cited terms from the 2008 MLC are still in effect for the current MLC.

185. *Id.* Art. VI, § 1 (emphasis added).

186. It is beyond the scope of this paper to determine whether the MLB Commissioner should entertain theft-of-trade-secrets arguments in a mandatory arbitration.

187. 18 U.S.C. § 1832 (Supp. V 2017).

188. *See* UNIF. TRADE SECRETS ACT §§ 2-3 (UNIF. LAW COMM'N 1985).

189. *See supra* notes 142-43, 178-82 and accompanying text.

190. 18 U.S.C. § 1832(a) (Supp. V 2017) (emphasis added).

convince a court that MLB is engaged in "interstate commerce." For much of baseball's history, the Supreme Court rejected this notion.[191] However, in 1972, the Supreme Court recognized that its precedent no longer comported with the contemporary understanding of "interstate commerce" in the Constitution or the Sherman Act.[192] There, in *Flood v. Kuhn*, the Supreme Court settled the matter emphatically: "Professional Baseball is a business and it is engaged in interstate commerce."[193] Thus, while a sign-stealing defendant could argue that baseball is not engaged in interstate commerce and thus the EEA should not apply, that argument is untenable with *Flood v. Kuhn*, the modern conceptions of "interstate commerce," and the modern game of baseball.

After satisfying this jurisdictional hurdle, a court would move on to analyze whether (i) baseball signs are "trade secrets" and (ii) stealing signs constitutes "misappropriation" or "theft of trade secrets."

A. Are Baseball Signs "Trade Secrets"?

To get protection under the EEA, baseball signs must be "trade secrets." Accordingly, baseball signs must meet each of the three elements of a "trade secret" under the EEA.

First, baseball signs must be the right type of information. The EEA states that "all forms and types of financial, business, scientific, technical, economic, or engineering information" may be eligible for trade-secret designation.[194] Using this language, the sign-stealing defendant could argue that baseball signs do not fall within one of the enumerated categories, as signs convey sports strategy information. The defendant could also argue that Congress intended to limit the scope of information by enumerating categories. However, the Attorney General could argue that the language "all forms and types" suggests that the categories should be construed broadly, and that baseball signs are "business" information. MLB teams grossed $9.63 billion in revenue in 2018,[195] so baseball is big business. Furthermore, signs are how teams communicate strategy in-game, and a team's in-game performance affects the team's bottom line.[196] Finally, the Attorney General could analogize baseball signs to some of the EEA's enumerated information types, such as "plans," "designs," or "codes."[197] Given the broad scope of eligible information, a court could find that baseball signs are "business" information eligible for trade-secret protection.

---

191. *See Fed. Baseball Club of Baltimore, Inc. v. Nat'l League of Prof. Baseball Clubs*, 259 U.S. 200, 208-09 (1922) ("[P]ersonal effort, not related to production, is not a subject of commerce."); *Toolson v. New York Yankees, Inc.*, 346 U.S. 356, 357 (1953). *But see Toolson*, at 357-58 (Burton, J., dissenting) (outlining the many "interstate" and "commerce" aspects of baseball).

192. *See Flood v. Kuhn*, 407 U.S. 258, 282 (1972).

193. *Id.*

194. 18 U.S.C. § 1839(3) (2016).

195. *See supra* note 47.

196. *See supra* notes 45-48 and accompanying text.

197. *See* 18 U.S.C. § 1839(3) (2016).

Second, the team must have taken "reasonable measures to keep [its signs] secret."[198] The sign-stealing defendant could argue that teams display their signs publicly, which is not a reasonable precaution.[199] In most, if not all, trade-secrets cases, the company victim to the theft does not publicly display its trade secrets. In addition, the author has not heard of a team that makes its players sign nondisclosure agreements to protect its signs.

Despite this objection, reasonableness depends on the industry, the precautions taken, and the precautions not taken. This would be a fact-intensive, case-by-case inquiry.[200] Per industry practice, MLB teams take many measures to protect their signs. They use false signs, change signs throughout the game, change signs after players get traded, ensure the pitcher is not "tipping" pitches, and speed up the pitcher's delivery.[201] Trade-secret owners need not take all precautions.[202] For example, it would be unreasonable to require players and coaches to whisper strategy in the pitcher's or hitter's ear before every pitch, as this would materially slow down an MLB game. Assuming that the team took the precautions detailed in Part I.C., the team may be deemed as taking "reasonable" precautions to keep their signs secret.

Finally, baseball signs must "derive[] independent economic value" from being secret and not be "readily ascertainable by proper means."[203] The Attorney General may be able to convince a court that baseball signs have "independent economic value" from being secret. There is strategic and financial value to a team for executing its strategy in secret, because successful execution may help the team win more games. Furthermore, there is a significant loss to the team if its strategy is stolen by its opponent. The opponent can react defensively to the team's strategy for a competitive and, ultimately, economic benefit.[204] However, it is arguable that baseball signs are "readily ascertainable by proper means." This term of art is undefined in the EEA but is borrowed from the UTSA, which provides comments to clarify. The comments state that "proper means" include "reverse engineering," [205] and baseball signs are subject to discovery by reverse engineering. The question would then turn to a court's construction of "readily ascertainable."[206] A court would assess how easily one can reverse engineer a team's signs.[207] Despite the many historical examples, sign stealing is difficult.[208] While this might be a close call, the Attorney General could plausibly succeed on showing this final element.

---

198. *See id.* § 1839(3)(A) (2016).
199. *See* Servo Corp. of Am. v. General Elec. Co., 393 F.2d 551, 555–56 (4th Cir. 1968) ("[P]ublic disclosure [of the trade secret] dispels the secret.").
200. MILGRIM, *supra* note 147, § 1.04.
201. *See supra* notes 75-84 and accompanying text.
202. *See* MILGRIM, *supra* note 147, § 1.04.
203. *See* 18 U.S.C § 1836(3)(B) (2016).
204. *See supra* Part I.A.
205. UNIF. TRADE SECRETS ACT § 1 cmt. (UNIF. LAW COMM'N 1985).
206. MELVIN F. JAGER, TRADE SECRETS LAW § 5:11 (2018).
207. *Id.*
208. *See generally* DICKSON, *supra* note 25, at 131.

In summary, if ever litigated in court, a court could plausibly find that baseball signs meet all three "trade secret" elements, making them eligible for protection under the EEA.

B. Do Sign Stealers Engage in "Misappropriation" or "Theft of Trade Secrets" under the EEA?

Assuming a court would deem baseball signs "trade secrets," a court would then analyze whether the sign-stealing team or player engaged in "misappropriation" or "theft of trade secrets" under the EEA.[209]

For a "misappropriation" claim, the Attorney General has two strong arguments. The first is that sign stealing is "theft," which is a form of "improper means," required for "misappropriation."[210] Additionally, if a team used electronic means, the Attorney General could classify that conduct as "espionage through electronic [] means," also "improper."[211]

In response, the Attorney General could face two strong counterarguments. First, the defendant could argue that their successful scheme was "reverse engineering," which is carved-out from the EEA's definition of "improper means."[212] The EEA does not provide guidance on what constitutes reverse engineering, but perhaps a court would find the UTSA comments persuasive. For reverse engineering, the UTSA comments clarify that the "acquisition of the known product must . . . be by [] fair and honest means."[213] This broad language, as applied to baseball, might require an inquiry into what is "fair and honest" in baseball. Due to baseball's historical custom against mechanical sign stealing and new rules in 2019,[214] a court might find that mechanical sign stealing is not "fair and honest" and thus not "reverse engineering." Alternatively, naked-eye sign stealing might be deemed "fair and honest" and thus acceptable "reverse engineering."[215] It is plausible that a court would find the UTSA comments persuasive because Congress drafted the EEA—and used the term "reverse engineering"—after the term was described in the UTSA.

The second counterargument a defendant could make is that the EEA carves out "other lawful means of acquisition" from the definition of "improper."[216] As there are no statutory laws against sign stealing, the defendant team or player could succeed in arguing that its conduct was "lawful" and thus not "improper." Because "improper means" are required for a "misappropriation" claim, a court could find that the defendant team or player likely did not engage in "misappropriation" as defined by the EEA.

---

209. 18 U.S.C. § 1832 (2016); *see supra* note 143 and accompanying text.
210. 18 U.S.C. § 1839(6)(a) (2016); *see also id.* § 1839(5).
211. *Id.* § 1839(6)(a).
212. *Id.* § 1839(6)(b).
213. UNIF. TRADE SECRETS ACT §§ 2-3 (UNIF. LAW COMM'N 1985).
214. *See supra* Part I.B.
215. *See supra* Part I.B.
216. *See supra* note 176 and accompanying text.

The defendant, however, would struggle with the EEA's broad ban on "theft of trade secrets." In particular, the Attorney General can sue anyone who knowingly *stole* a trade secret, *communicated* a stolen trade secret, *received* or *possessed* a stolen trade secret, or *attempted* or *conspired* to do any of the foregoing.[217] As applied to baseball, if signs are "trade secrets," the Attorney General has broad power to prosecute all sign-stealing conduct. For example, the Attorney General could indict a coach or player for stealing signs, a player for communicating those signs from second base or the dugout, a team or player for possessing stolen signs, or a hitter for receiving those signs at the plate.[218]

Section 1832's *mens rea* requirements could also be met. Based on the empirical evidence of sign stealing's benefits,[219] the Attorney General could show that a sign-stealing team or player knew the sign stealing would harm the opposing team.[220] However, a defendant could object that they intended only to benefit in-game—not economically—from sign stealing.[221] This would be a close call. A court, however, could plausibly infer an intent of economic-benefit from the "marginal economic value" estimations of each MLB win.[222]

As a final argument, the defense could double-down on its "reverse engineering" argument, contending that a reverse-engineered trade secret is not a "stolen" trade secret. Accordingly, the prohibitions above (e.g., communicating, receiving, possessing, etc.) would be inapplicable because they require the trade secret to be "stolen."[223] The Seventh Circuit has held that "it is perfectly lawful to 'steal' a firm's trade secret by reverse engineering."[224] However, the Attorney General could cite the EEA's bans on knowingly "taking" a trade secret and "receiving" or "possessing" a trade secret obtained "without authorization."[225] It is unclear how a court would square these arguments if it found sign stealing to be "reverse engineering." As mentioned, it is possible that the "reverse engineering" analysis could track baseball custom and MLB's new rules.[226]

As a normative matter, there are several policy arguments against imposing legal liability for sign stealing. The first stems from the policy justification for trade-secret protection. In most cases, when a company's trade secret is stolen, most of the value proposition of the item vanishes, and it can never be recovered.[227] As a result, trade-secret laws aim to help companies protect their

---

217. 18 U.S.C. § 1832(a) (Supp. V 2017).
218. *See supra* note 217 and accompanying text.
219. *See supra* Part I.A.
220. *See* 18 U.S.C. § 1832(a) (Supp. V 2017).
221. *See id.* § 1832(a) (requiring "intent to convert . . . to the economic benefit of anyone other than the owner").
222. *See supra* Part I.A.
223. *See supra* note 179 and accompanying text.
224. *See ConFold Pacific, Inc. v. Polaris Industries, Inc.*, 433 F.3d 952, 959 (7th Cir. 2006).
225. *See* 18 U.S.C. § 1832(a)(1), (3) (2016).
226. *See supra* notes 213-15 and accompanying text.
227. *See generally supra* notes 117-23 and accompanying text.

investment in intangible assets. In the sign-stealing context, however, a team can regain the value of its proprietary information easily, by changing its signs. Second, sign stealing is an accepted "part of the game," and baseball has developed its own custom around the practice. Subjecting all sign stealers to criminal exposure would undermine this custom, as well as the gamesmanship around naked-eye sign stealing.[228] Relatedly, baseball norms place the burden on the team giving their signs to protect them, because so many low-cost precautions are available.[229] Third, the MLB Commissioner, due to his expertise on baseball matters, is best suited to handle controversies involving baseball custom.[230] Finally, the MLB Commissioner may impose baseball-specific remedies—e.g., loss of draft picks—that the courts cannot.[231]

Policy arguments aside, because of the EEA's broad prohibition on "theft of trade secrets"—if baseball signs are "trade secrets"—the Attorney General could, in theory, plausibly bring and win a case against a team or player for sign stealing.

CONCLUSION

Given its competitive and economic benefits, sign stealing in baseball will live on. As shown by Commissioner Manfred's action against the Red Sox and new rules prior to the 2019 MLB season, breaking baseball's custom will now be met with harsh consequences from the MLB Commissioner's Office. However, in theory, the next time a team or player engages in sign stealing, the U.S. Attorney General could sue under EEA § 1832, alleging "theft of trade secrets."

In this hypothetical case, a court could plausibly find baseball signs to be "trade secrets" because they are (i) business information, broadly construed, (ii) that teams take reasonable measures to protect, and (iii) that have "independent economic value" from being secret and not being "readily ascertainable by proper means."[232]

If a court deems baseball signs "trade secrets," the Attorney General has broad power to prosecute sign-stealing cases under section 1832's "theft of trade secrets" provisions.[233] For example, the Attorney General could prosecute a team for stealing signs or possessing stolen signs, or a player for relaying or receiving stolen signs. The Attorney General's largest hurdles would be section 1832's *mens rea* requirement and whether a court would find stolen signs to be "reverse engineered."[234] Nonetheless, based on the analysis above, baseball's

228. *See supra* Part I.B.
229. *See supra* notes 88-90 and accompanying text.
230. *See* Samuel J. Horovitz, *If You Ain't Cheating You Ain't Trying: "Spygate" and the Legal Implications of Trying Too Hard*, 17 TEX. INTELL. PROP. L.J. 305, 328-29 (2009).
231. *See id.* at 329.
232. *See supra* Part IV.A.
233. *See supra* Part IV.B.
234. *Id*.

common practice of stealing signs could, in theory, lead to liability for theft of trade secrets.