

***Insight into Major League Baseball's History with Anabolic Steroids***

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Nathan Park

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On my honor as a University student, I have neither given nor received unauthorized aid on this assignment as defined by the Honor Guidelines for Thesis-Related Assignments

Signed: Nathan Park

Date: 4/13/2020

Approved:   
Kent Wayland, Lecturer, Department of Engineering & Society

Date: 5/5/2020

## Introduction

From the chlorinated pool to the rubber track, previous records are shattered every year. Athletes are getting stronger and faster, but is physical superiority the only factor in these spectacular, record-breaking performances? Eliud Kipchoge is the best marathon runner of all time and recently broke the two-hour barrier in 2019. What was once deemed a fantasy, or an unreachable record, has now become a reality. However, there are still some critics and controversy that downplay this remarkable feat. Among other issues such as low elevation, flat running course, and unlimited pacers (teammates who run the pre-determined speed of the race), the most controversial issue is the Nike Zoom Vaporfly Elite shoes worn by Kipchoge (Hobson, 2019). Some critics say that the shoes gave too much of an advantage, returning energy spent by the runner to his body. As a result, in January 2020, World Athletics developed new rules for running shoes allowed in races (Chavez, 2020). Athletes of all different sports want to achieve their goals, but they do not want an asterisk next to their statistic. They do not want critics picking apart their achievement, thus down playing it. In order for an athlete to reach their goals without any damning words from critics and observers, we must delve further into the question of what factors are considered in determining if a particular form of athletic improvement is considered fair or unfair. This paper will perform two case studies, both dealing with the MLB and anabolic steroid use, to give insight into what is considered in making new rules. They will be in chronological order: First, the competition for the single season home run record between Sammy Sosa and Mark McGwire will be analyzed. Followed by Barry Bonds' steroid ordeal. Analysis of these cases will hopefully give insight into the power and influence dynamic among sport ruling committees, the national government, and the sports fans showing how much more difficult it is when one of these forces clashes with the others.

## From the Track, to the Pool, and Rounding the Bases

Eliud Kipchoge's situation is unique in a sense that he was the first to run in the Nike Zoom Vaporfly Elites. However, taking a step back and looking at the bigger context, sheds light to how common this series of events actually is. The process of a having a record broken, critics complaining, and the overarching governing body modifying and/or adding rules is ordinary. For example, take the fully body swimsuit displayed in the 2008 Beijing Summer Olympics. In this particular Olympic games, 25 swimming world records were broken (Reid, 2008)! Even with Michael Phelps being in his prime during the Olympics, 25 new records is a large sum. Like stated before, a record broken, critics complaining, followed by a rule changed occurred. As of 2010, swimmers are barred from wearing polyurethane and neoprene suits in competition (Wong, 2009).

Unlike the marathon or the swimming cases mentioned, the MLB's history with anabolic steroids followed a different path. The path was clustered with stubbornness, resistance, and disagreement. The end result is that the MLB did in fact create rules against anabolic steroid use. However, it's the journey to this decision that really needs to be studied. It is important to note that both the briefly touched on marathon and swimming cases, dealt with how some sort of equipment worn gave too much of an advantage. On the other hand, the MLB cases are different. They involved anabolic steroids as the unfair advantage giver, not simply the equipment worn by the athletes. The physical changing of an athlete's body does make the issue more complex than an article of clothing, but the overarching study of debate and disagreement among different parties in the steroid issue can be transferred to the less complex issues. A timely rule change did not occur in the story of steroids in the MLB. The back-and-forth nature of the interactions that took place in baseball's history will give a very clear understanding of the mutual shaping that

occurs in sports and medicine. Furthermore, the analysis of the two case studies provided in this paper can be broadened to other athletic methods of improvement, spanning both biological enhancements and equipment enhancements in power dynamics among those who have a say in rule making.

In order to better understand the two case studies, it may be helpful to know the timeline of the major events of the MLB's dealing with anabolic steroids. The MLB actually banned steroid use in 1991, however there were no rules in place to test for possible infractions (The Associated Press, 2008). In other words, the ban was near useless. This lack of enforcement gave way to, what baseball fans deemed, "the steroid era" between the late 80's to the late 2000's (The Steroids Era, 2012). The two cases that will be studied both occurred in this era. The Sammy Sosa and Mark McGwire case was in the 1998 season and the Barry Bonds case was in the 2001 season. As previously noted, the MLB finally instituted PED testing in 2003, after many previous records were already broken.

### Pre-existing Literature

Baseball is called America's Pastime. It has been around since the Civil War and captured audiences worldwide. One thing that baseball has an abundance of is statistics. Baseball teams hire statisticians for the sole purpose of recording and analyzing every minute detail that happens in the game. Thankfully, this meticulous stat keeping has allowed for the common observer to relive and analyze history. For example, simply look at how many players hit over 40 home runs in a single season can outline the start and end of the steroid era. A look into the when home run records were broken can show this trend too. Of the many papers written about steroids in baseball, some go in depth to the reasons why baseball players might partake, other

than to simply become physically superior to the competition. These reasons of use are important to acknowledge since they give meaning as to why early rules banning steroids did not work, which will later be touched upon in the case studies.

One of these papers dealing with additional motives to steroid use, other than athletic superiority, analyzed the economic advantages of doping. The study used a Nash Equilibrium analysis, an economic game theory process that predicts what the athlete presented with the steroid dilemma would choose, to conclude that the players would be better off monetarily if they were to take steroids (Grossman et al, 2007). It wasn't just the players that had a financial incentive to dope, but the organization's profit would also increase during the steroid era. Thus, both the players and the organization they were part of had some financial motive to partake in steroids.

Other papers argued that peer pressure could also be a factor in causing players to dope. Studies have been conducted of how the social setting influenced whether a player partook in drugs. A study concluded that baseball players that were teammates with dopers also partook in the habit (Murray et al, 2013).

It has been well observed by the medical community that steroids can be detrimental in the long run. Although they give athletes more muscle strength and endurance, the long-term effects can be disastrous. That short-term success in breaking the single season home run record can be followed by a lifetime struggle with liver disease, heart disease, and kidney disease, just to name a few side effects from a long list (Maravelias et al, 2005). These deadly diseases are what prompted Congress to step in.

Congress held a hearing, led by the late Senator John McCain, specifically for MLB players grilling them on the use of anabolic steroids. The dangers of anabolic steroid use were

easy to see. McCain wanted to stop its use in sports and limit it to medical uses (Chass, 2005). Other than MLB having the worst case of steroid use at the time, a reason why Congress decided to target the MLB might have been due to teams sports handling steroid use differently than individual sports (Carstairs, 2003). It seemed like individual sports such as track and swimming were handling the use of steroids well, whereas baseball was not.

There is a lot of research out there on drugs in sports. What these case studies in this paper will do is bridge the gap between all these different agents and the advancement of steroids and answer how steroids were mutual shaped by society. The economics of the issue and medical side will be brushed over, and instead the paper will focus on the power of influence and pressure on describing how the MLB is today.

#### Mutual Shaping's Part in this Paper

There is no question that the advancement of technology is closely intertwined with the ins and outs of society. They both mutually shape, or influence, each other. The analysis of the two major baseball cases will be validating this mutual shaping interaction that happens in our world today. There will be slight favoritism in the analysis on what exactly society's role was in the advancement of sports technology and not vice versa, thus taking a technological constructivism approach. The reason for this is to focus more on society's agents taking part in these technological advancements, attempting to unveil the underlying power dynamics and conflict among agents. Again, this is not to say that sports improvement technology had no influence on society (the reverse), but in this specific case, analyzing the reverse would be dull in terms of highlighting power dynamics.

### An Overview of Evidence

The data collection process to learn about the two MLB case studies will be to review different forms of documentation. The first form of documentation will be past sports articles released after the ordeals by sports writers. It is important to determine what the purpose and tone of these pieces suggests, as sports writers have a large influence to the public perception of athletes and steroids. Also, it is entirely up to a conglomerate of sport writers to determine which baseball players should be honored in the Baseball Hall of Fame. Other important documents used will be public statements made by the MLB during these incidents. This will shed light into what the main rule making body was thinking on the steroid issues. The actual rule book issued by the MLB will also be reviewed to understand the severity of the rules imposed. Lastly, Congressional debates and laws will be reviewed. The United States Government and their role in the advancement of steroids is interesting and worth knowing about.

As noted in the theory section, there will be favoritism in analyzing the “society” aspect of the case studies. Therefore, the review of documentation on the actual technology will be limited. With that in mind, information on the progression of steroids will still be briefly reviewed. It is important to gather information on how scientists upgraded from a previous steroid in order to predict drug progression in years to come.

### Mark McGwire vs. Sammy Sosa

Roger Maris’s nearly 40-year-old single season home run record was broken by the ever so entertaining battle between Mark McGwire and Sammy Sosa. In the year 1998, these two sluggers both broke Maris’s single season home run total of 61 with McGwire hitting 70 home

runs and Sosa hitting 66 home runs (“Sortable Player Stats | MLB”, n.d.). It may seem that the competitive spirit in these two players may have been a factor into this incredible home run feat, but the signs all point to the use of anabolic steroids as the dominant factor.

Anabolic steroids have received an infamous reputation in the sporting world. In the United States, ever since Reagan’s political war on drugs, prominent sport law making bodies have constructed strict rules prohibiting and deterring athletes from partaking. Reagan’s Anti-Drug Abuse Act of 1986 made possession of anabolic steroids with the intent to distribute to people without medical prescriptions a criminal offense (Anti-Drug Abuse Act of 1986). As an extra precaution, or rather to emphasize the US government’s stance against steroids, Congress passed the Anabolic Steroids Control Act in 1990, which equates anabolic steroids to the same legal class as morphine. The MLB responded accordingly.

Vincent Fay, the MLB’s commissioner from 1989-1992, released a memo in 1991 banning steroids in the MLB. Following his predecessor, Bud Selig, the MLB’s commissioner from 1992-2015, released a memo in 1997 threatening that the use of anabolic steroids can lead to expulsion from the league (The Associated Press, 2007). What these memos, rather these commissioners, failed to incorporate was any sort of preventative measure to deter players from doping. It was not until 2001, three years after McGwire and Sosa broke the single season home run record, when the MLB finally implemented some sort of random drug testing policy. However, this 2001 policy was only for minor league baseball, having no rules relating to major leaguers (The Associated Press, 2007).

With what can be seen as the US Government and MLB not being on the same footing in dealing with anabolic steroids, led to conflict. Usually, when the US Government issues some decree dealing with sports, the law makers of different sports commissions do what they can to

satisfy the rule. This can be in the form of implementing random drug tests or voiding all wins, times, and records if caught doping (Pilon, 2012). However, The MLB is different from other organizations. They put on a façade of acting like they cared about anabolic steroid use in the form of public memos, but in reality, let doping slide.

In economics, one must consider both the supply and demand. The two law making bodies of the US Government and MLB are what control the supply side of overall baseball entertainment, which were discussed above. Now, the demand side must be analyzed. The public controls the demand side of overall baseball entertainment. The viewers must be entertained for the MLB to actually make a profit. This could possibly be the reason why the MLB was so lax in their doping policies during the 1990's. In 1995 season, there was a player strike which shut down the MLB for 232 days (Hauptert, 2007). A smart way to hook fans and viewers back into the sport would be to have players break record after record, by turning a blind eye to steroid use. The steroid era of baseball was able to produce this entertainment that fans wanted meaning more profit for the MLB. However, once it was confirmed that players were doping, the public seemed to hesitate. They loved the upgrade in entertainment provided by faster and stronger athletes, but were pulled in the opposite direction due to arguable immorality of steroids.

The Baseball Hall of Fame is a great honor of which only about 1% of all players get inducted into. The voters of the Hall of Fame are entirely made up of baseball writers. Analyzing what these writers had to say when casting a vote for or against McGwire and Sosa gives good insight as to what normal baseball fans think about doping. It is important to note that Mark McGwire's chance of acceptance into the Hall of Fame has passed. Sammy Sosa still has some years of eligibility of inductance, but will likely follow McGwire's path of rejection as he was not as good as McGwire. As a preview into the next case study of Barry Bonds, even though

McGwire and Sosa will not make the Hall of Fame due to their history of steroid use, the same cannot be said of future athletes caught doping. Fan opinions change over time as will be addressed further in the next case study.

Like public opinion in any other issue, there is a split on how much anabolic steroid use should affect admittance into the Hall of Fame. The majority has the same thought as Mel Antonen, one of the sports writers who has a vote in hall of fame admittance, who wrote “A vote for Bonds and Clemens is a vote for steroids usage.” (Antonen, 2019) Others, follow Antonen’s sentiment that anabolic steroids are bad. Pat Caputo, wrote “There is reason to be cautious. Once a player is in, it'd be like trying to put toothpaste back in the tube if the future reveals more conclusive evidence. It'd be next to impossible for it to be undone.” Caputo warns that voters should err on the side of caution when a player is suspect to using steroids (Caputo, 2012). Some sports writers who have the privilege to cast a vote relinquished this privilege due to this one issue. The sports writers saw this as an act of protest demonstrating how angry they are about steroids dirtying the game and hoping the anger transfers to the casual fan toward steroid users. In his farewell letter to the Hall of Fame committee, Jeff Schultz wrote “Barry Bonds, Mark McGwire and Sammy Sosa, who turned themselves into chemistry experiments, then took a sledgehammer to records.” (Schultz, 2016)

The minority of baseball writers have a more liberal view of anabolic steroid use as compared to those quoted above. One such voter, Bill Ballou, wrote “For me, there is one major unofficial guideline — the candidate must be the kind of player who could make a fan buy a ticket just to see him play” in a piece titled “Bonds, Clemens and McGwire will get my Hall of Fame vote” (Ballou, 2012). Others take a more philosophical side. One writer believes voting for a player who is not explicitly caught using anabolic steroids, is the right course of action. Peter

Abraham wrote “But not voting for somebody based only a hunch is worse. It’s baseball McCarthyism.” He details how absurd it is to not vote for someone just on a hunch (Abraham, 2011).

Although the sports writer’s opinions are split, it can be easily deduced that the majority of the public does support anabolic steroid use by baseball athletes. The pressure from the US Government did not tremendously impact MLB policy, however the MLB needed public support. If the public believed that anabolic steroid use was unethical and unmoral, then they needed to implement new policy.

### Barry Bonds

What seemed like a crazy feat of Mark McGwire hitting 70 home runs in a single season, was overshadowed 3 years later by Barry Bonds. In the 2001 season, Bonds broke the then recent record by hitting 73 home runs in a single season (“Sortable Player Stats | MLB”, n.d.). However, just like the above-mentioned case, Bonds was caught using anabolic steroids.

Barry Bonds was a great baseball player before the steroid era and before his body transformed into the muscular figure during his record-breaking home run seasons. Some analysts believed that he would have been inducted into the Baseball Hall of Fame if he continued on his early career trajectory (Schei, 2009). However, he has yet to be inducted into the Hall of Fame, largely due to the Bay Area Laboratory Co-Operative (BALCO) scandal.

Although more complex due to the extraordinary amount of press this case got, it largely resembles the Mark McGwire and Sammy Sosa case of another all-star, record breaking baseball player getting caught using steroids. In Barry Bonds case, he was caught because BALCO was illegally distributed steroids for non-medical reasons (BALCO Fast Facts—CNN, 2019). The

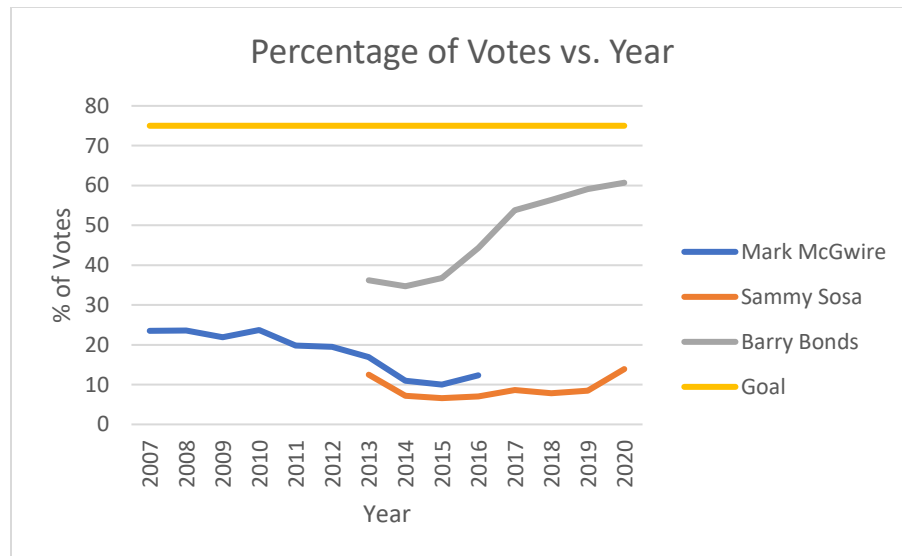
previous case laid out how steroids shaped society. What makes this case interesting is that it provides evidence of society shaping the technological progress of steroids. Thus, showing the circular mutual shaping phenomenon.

Before this Barry Bonds case, there was one method of steroid use that came to everyone's mind when questioned about steroids in athletics. That method was injection. However, this method was too easy to detect, sports organizations were on the lookout for any suspicious needles laying around. This societal pressure from the US House of Representatives and different athletic commissions caused scientists to innovate. The result was the creation of Tetrahydrogestrinone (THG), also known as the Clear. Instead of injecting steroids into an athlete's body, the Clear was to be applied like a cream on an athlete's body (Death et al., 2004). Steroids evolved in intake methods largely due to the fear of being caught.

After the BALCO scandal, MLB implemented its first random steroid testing policies (for major and minor leagues) on August 30, 2002. The consequences of testing positive were minimal, compared to other sports like track and field. The first positive urine test resulted in treatment. Only the second and third time caught would result in fines and suspensions. This was not up to the standard of Congress, and thus they piled on more pressure. Soon after, two revisions were made in 2005. The punishment for the first time being caught doping would be 50-game ban, second time would be a 100-game ban, and a third time would be a lifetime ban (AP, 2014).

Barry Bonds admitted to using anabolic steroids. The previous case study would suggest that Barry Bonds has no chance of getting inducted into the Baseball Hall of Fame. However, that would most likely have been true if his 10-year period of Hall of Fame eligibility was during the early 2000's. However, there is still hope for Barry Bonds in making it. It seems like public

perception of steroids as an automatic disqualifier has been decreasing. Below the graph shows that Barry Bonds's is getting closer to the 75% of votes needed to be inducted. The steroid era of baseball ended more than a decade ago. With time views can change and maybe the view of steroids in baseball is becoming more relaxed.



## Conclusion

It can be argued that morals are what determine if a method of athletic improvement is legal or illegal. However, this paper argues that the more important question is who determines what is moral or immoral? When looking at the Kipchoge shoe case and full-body swim suits, action from the overarching sport's lawmaking body is swift in adding them to the banned list. What makes the case of baseball's response to anabolic steroids interesting is that the MLB was in conflict with the Government as well as the public. In the other cases, all the public and the ruling sports authority were in agreement, not needing the intervention of the Government. When the decision is unanimous it's easy to know that outcome. However, when there is disagreement,

the end result is difficult to foresee and the decision will take longer to make. Especially with fluctuation in opinion of the major power groups, decisions can be weakened and even undone. If Barry Bond is accepted into the Hall of Fame, the event will mark a key shift in steroid attitude of the public. It will then put into question whether the MLB sides with the fans or with Congress. The public, ruling sport's body, and Government are what determine if something is moral and in turn if the thing should be banned. Sometimes there is agreement, and sometimes there is a game of tug-of-war that is never entirely finished to determine what is moral.

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