

Study of Skintones in Lego Figures

Women's Brick Initiative

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Introduction

Lego minifigures have historically been available in a limited range of skintones that have further marginalized POC builders. When POC builders want to build a minifigure that represents themselves, they have to deal with a limited number of lego pieces currently available along with the other issue of having a minifigure head in their shade but with a limited stock available or different facial expression. Lego has been attempting to diversify the shade range of the minifigure heads available, so we used [Bricklink's color guide](#) as a resource to track the progression of parts available per every skintone that respondents to our flesh tone survey stated represented themselves. The skintones that we are focusing on are: Dark Brown, Dark Orange, Dark Tan, Light Brown, Light Nougat, Medium Nougat, Medium Tan, Nougat, Reddish Brown, Tan, and Yellow.



Figure 1. A legend of all the skintones Lego has released minifigure head parts in.

Breakdown of Total Minifigure Skintones Released

As of July 11th, 2023, Lego has released minifigures in all the shades found in the figure above, so I scraped the counts of every head part released to compare which colors were more prominent to track any patterns or discrepancies.

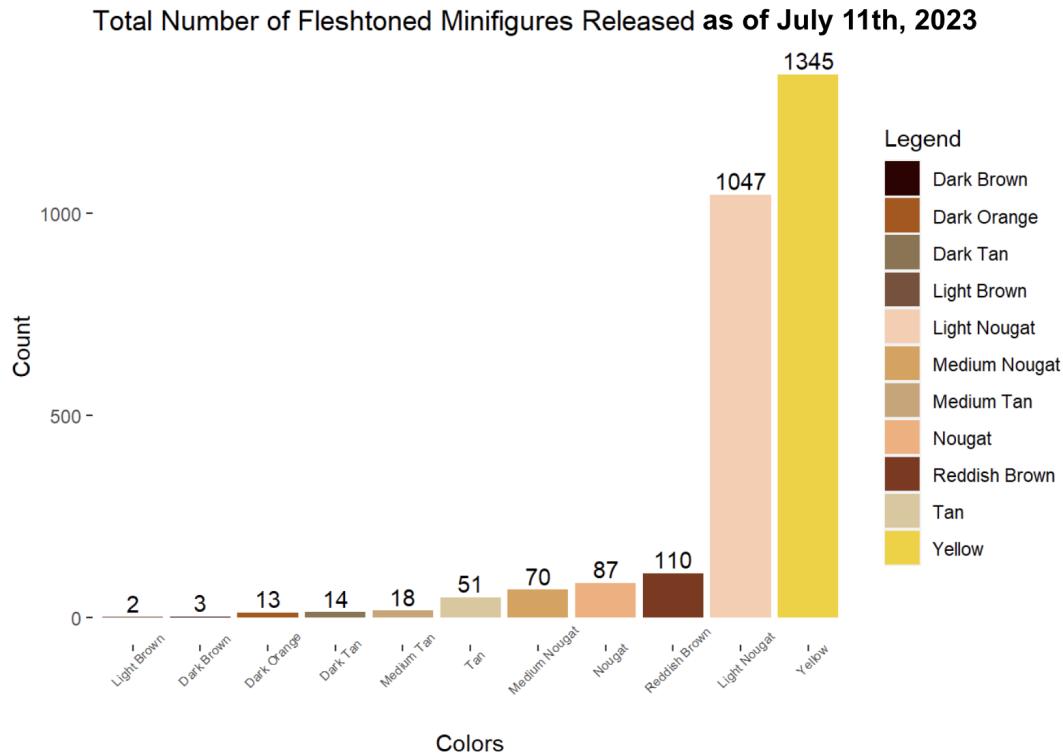


Figure 2. A bar graph showing the total number of minifigure parts per every skintone respondents wanted to see be made available

One of the most important conclusions we can draw from the bar graph above is that the overwhelming majority of minifigure parts released from all time come in the shades: Yellow and Light Nougat. Meanwhile, the next and third most frequently released shade, Reddish Brown, is close to ten percent of Light Nougat, which shows the lack of darker skintones available in minifigure parts. The majority of the darker tones come in a limited number of parts and thus expressions or designs, which speaks to the marginalization of POC Lego builders.

Last Four Years (2018-2022) of Minifigure Skintones

To take a closer look at how Lego has made changes to diversity the minifigure shade range, I decided to examine the minifigure parts released in the last four years (2018-2022) in order to determine if there have been any positive developments in the limited inventory for POC builders.

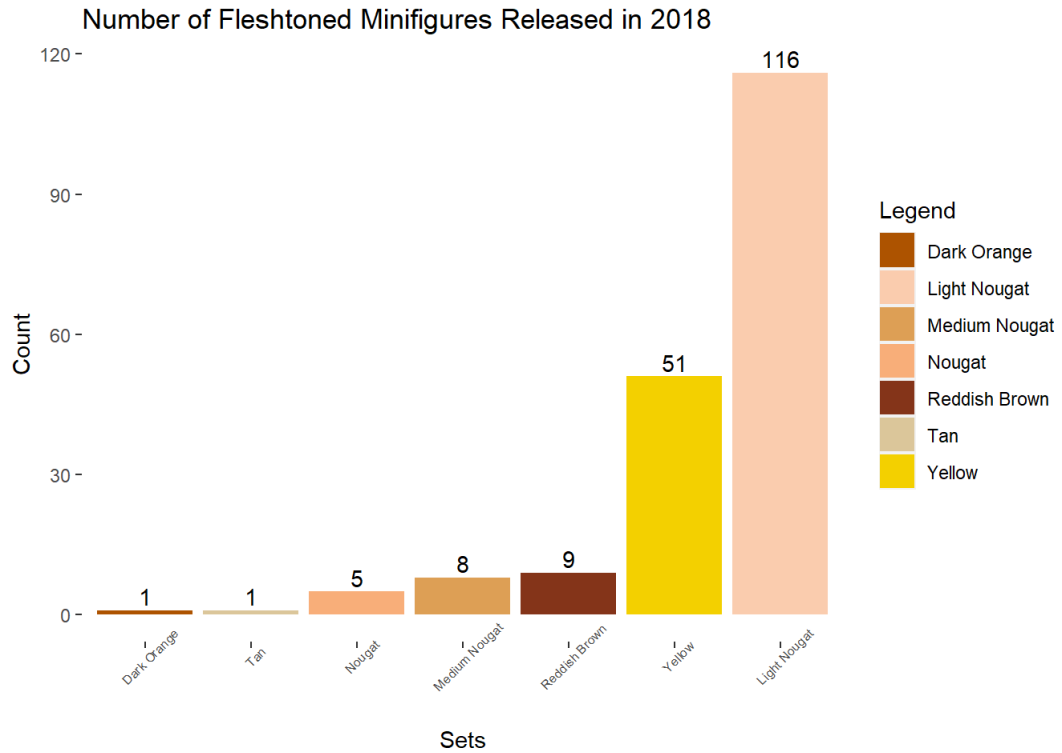


Figure 3. A bar graph showing the total number of minifigure parts per every skintone released in 2018

In 2018, Lego released mostly Light Nougat and Yellow minifigure heads, which reflects the lack of diversity in the inventory for that year. Likewise, the top three most released parts are the same in the overall trend found in Figure 2.

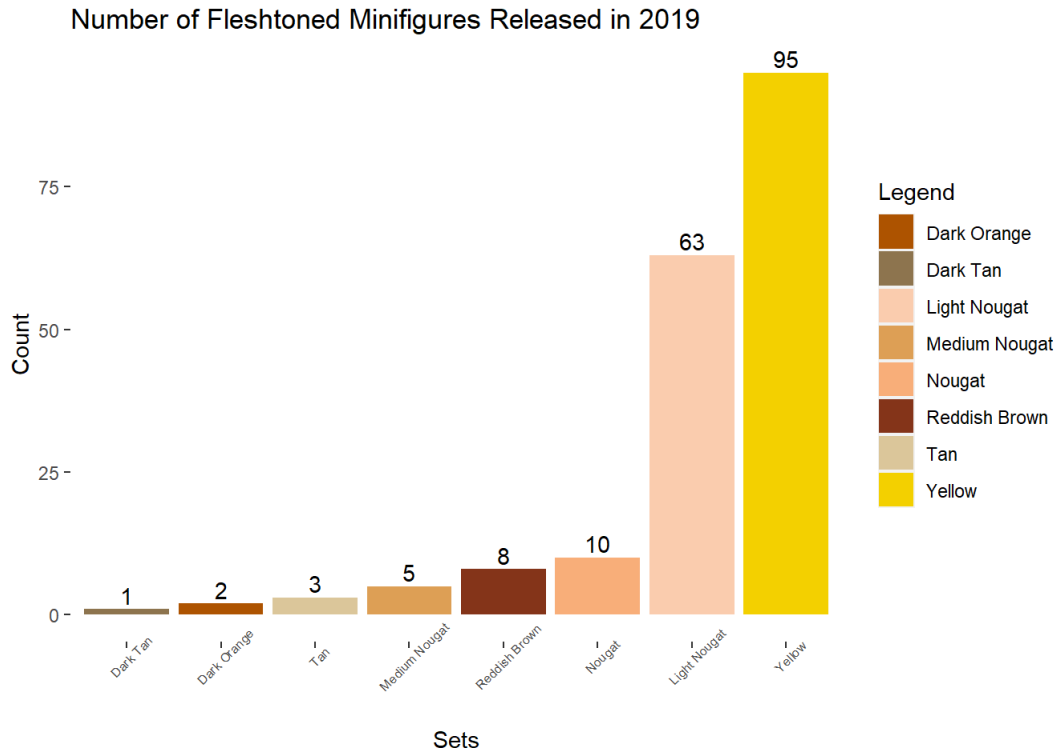


Figure 4. A bar graph showing the total number of minifigure parts per every skintone released in 2019

Similar to 2018, Yellow and Light Nougat were the most frequently released minifigure shades; however, there was a decrease in the number of Reddish Brown parts while Nougat doubled from the previous year. However, a new color Dark Tan was introduced adding another shade possible for POC builders though only one was released.

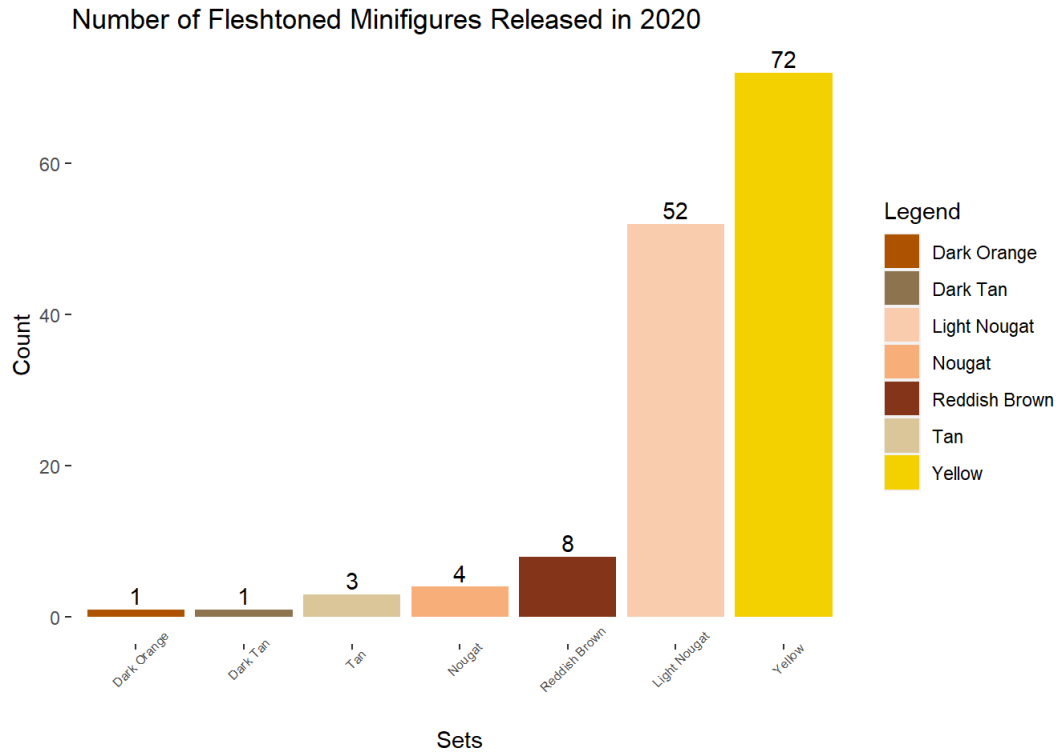


Figure 5. A bar graph showing the total number of minifigure parts per every skintone released in 2020

In 2020, Yellow and Light Nougat remained the most prominent shades while the number of Reddish Brown stayed consistent with the parts released in 2018 though Nougat decreased in count. Unlike 2018 and 2019, there were no minifigure heads released in Medium Nougat.

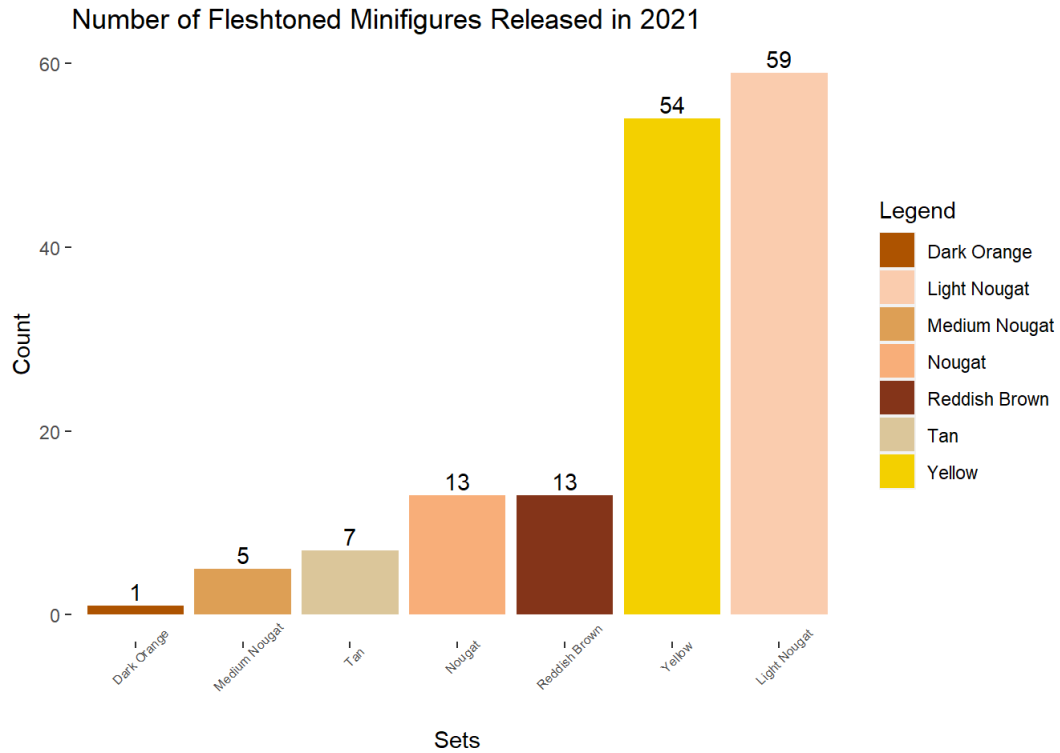


Figure 6. A bar graph showing the total number of minifigure parts per every skintone released in 2021

While Light Nougat and Yellow were the most prominent shades once again, there is a slight increase in the number of Reddish Brown, Nougat, Tan, and Medium Nougat though still noticeably much fewer compared to the remaining shades. In particular, there has only been 1 Dark Orange part released per year while there was no Dark Tan minifigure head released at all since the first time the shade was introduced by Lego.

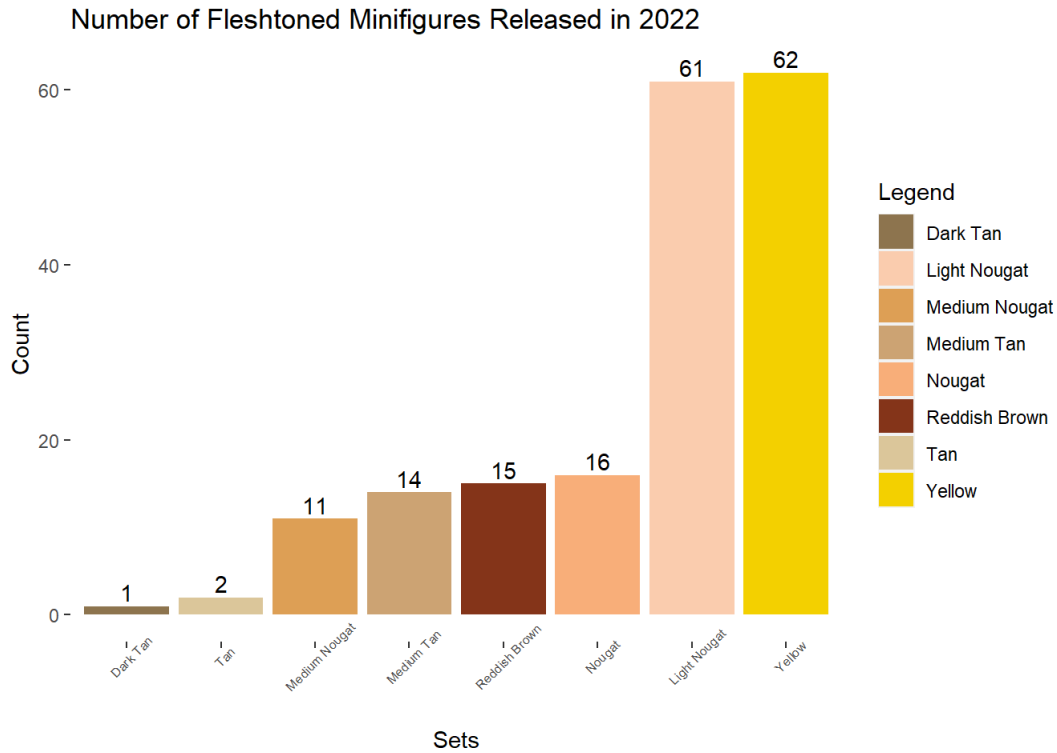


Figure 7. A bar graph showing the total number of minifigure parts per every skintone released in 2022

Similar to all the previous years, Yellow and Light Nougat remain the most frequently released shades though once again there is a slight increase in the remaining colors while a Dark Tan part was released this year unlike in 2021, the previous year.

Overall, Lego released the most number of shades, 8, in 2019 and 2022 though Yellow and Light Nougat, remaining the most frequently released shades across all four years with the darker shades in particular being released in limited quantities reflective of the lack of diversity Lego promotes through the limited shade range available for POC builders.

Individual Analysis of Minifigure Skintones Released from 2018-2022

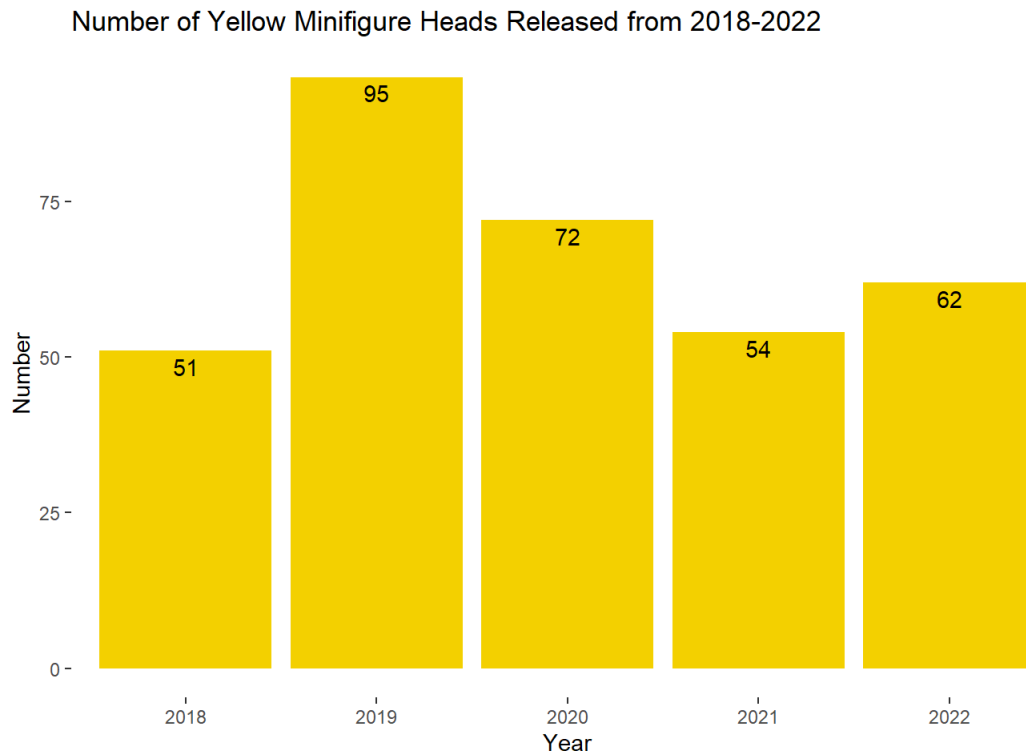


Figure 8. A bar graph showing the total number of Yellow minifigure parts from 2018-2022

The first color I chose to analyze was yellow due to how prominent the number of minifigure heads were released each year though especially in 2019 looking at the figure above. It is clear that Lego's most famous and standardized color would be among the most frequently released skintone per year; however, it is important to note that many POC builders prefer to use shades more representative of their own. Likewise, most Lego builders in general appreciate the option to personalize their minifigures to represent their likeness as best as possible so while the variety of Yellow parts are very important Lego should definitely consider diversifying their other shades to represent the builder community.

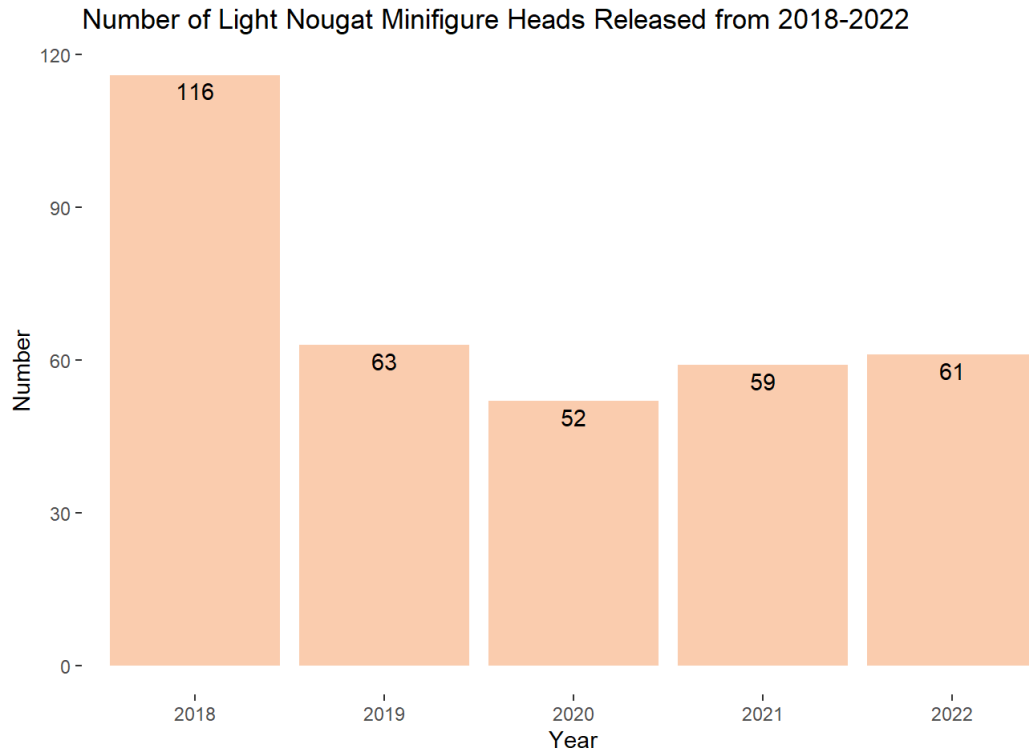


Figure 9. A bar graph showing the total number of Light Nougat minifigure parts from 2018-2022

The number of Light Nougat parts peaked in 2018, as there has been a steady decrease every year. However, it is important to note that there were more Light Nougat parts released in both 2018 and 2021 compared to Lego's most recognizable shade: Yellow. In that sense, it is clear that Lego prioritizes lighter skintones when it comes to the number of minifigure head parts available to builders, **as in no previous year has a darker skintone been more frequently released compared to either Light Nougat or Yellow.**

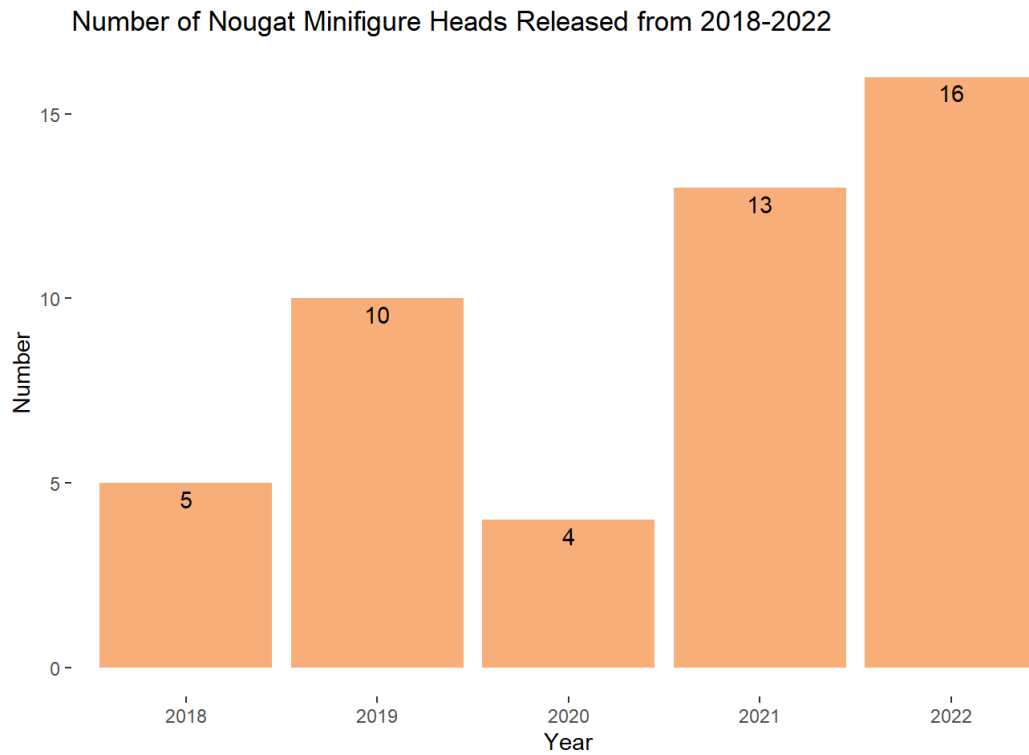


Figure 10. A bar graph showing the total number of Nougat minifigure parts from 2018-2022

In comparison to Light Nougat and Yellow, definitely there are fewer Nougat pieces released though as the years progressed outside of 2020 it is important to note that there have been more parts available for builders.

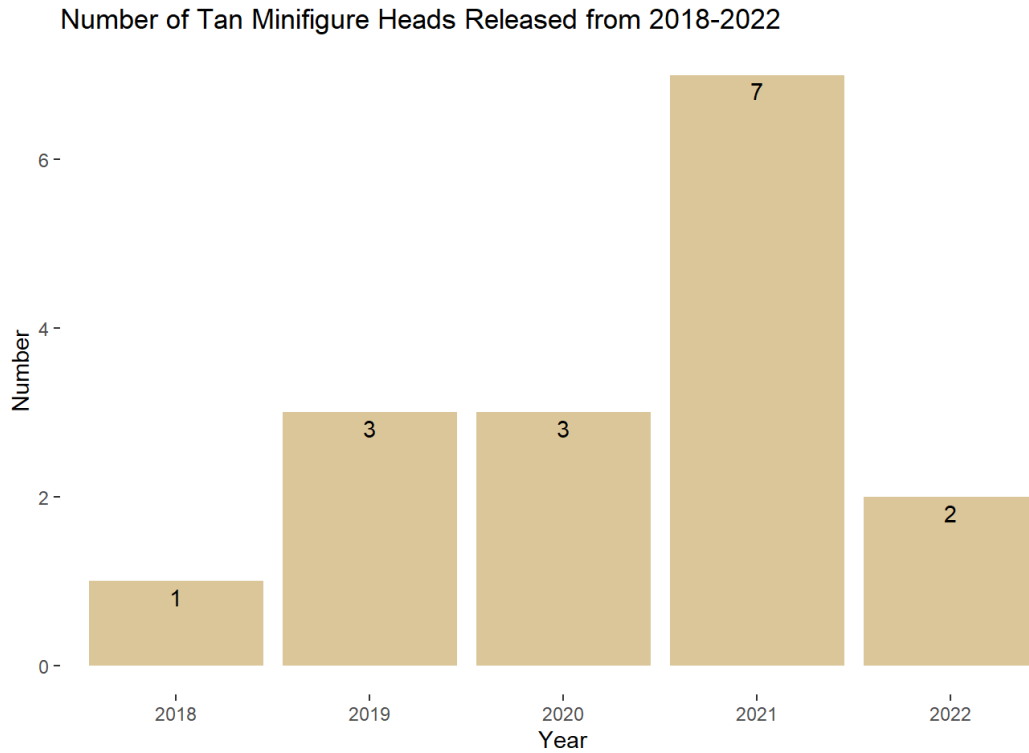


Figure 11. A bar graph showing the total number of Tan minifigure parts from 2018-2022

There have been very few Tan parts released in the past four years although there was a noticeable peak in 2021 though the number dropped once again 2022. The color Tan has often been used in character sets based off of a famous series, so that could be a reason as to why the number of Tan parts are relatively limited.

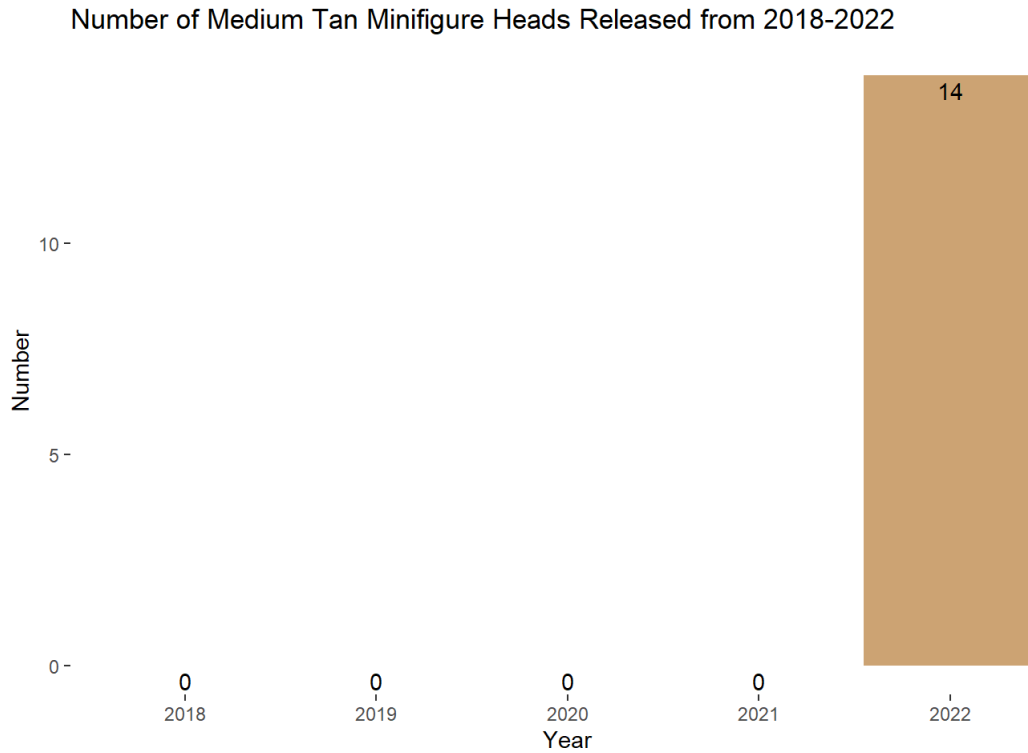


Figure 12. A bar graph showing the total number of Medium Tan minifigure parts from 2018-2022

Medium Tan is a [new addition](#) to Lego's skintones, which is why minifigure heads in the shade were released in the past year; however, it is a positive trend to Lego's initiative in creating a greater variety of fleshtones to represent more builders in the Lego community.

Number of Medium Nougat Minifigure Heads Released from 2018-2022

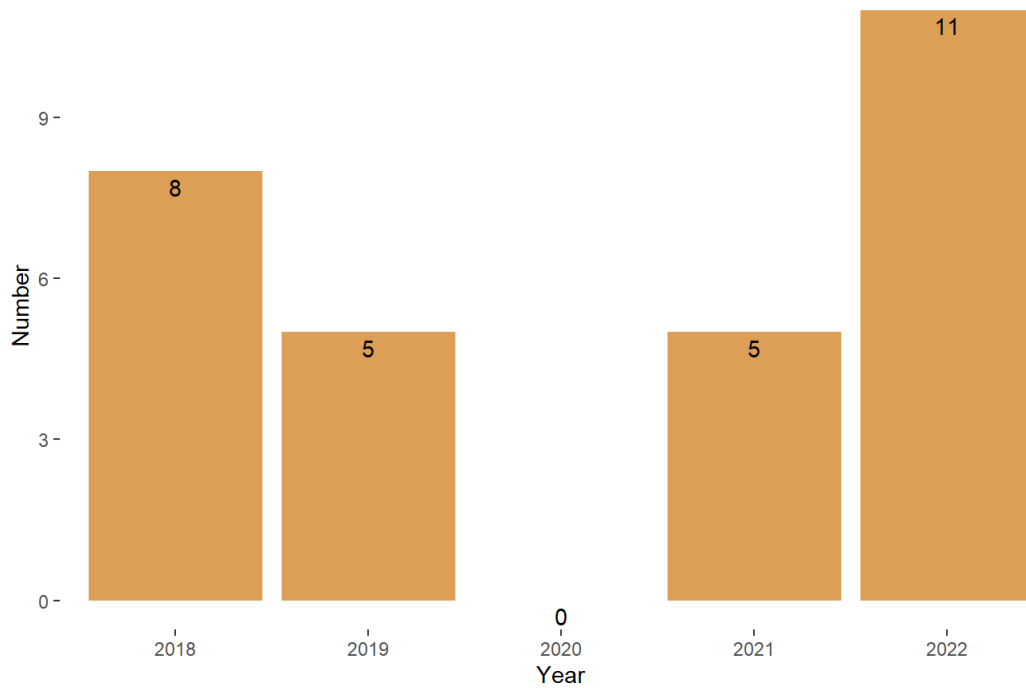


Figure 13. A bar graph showing the total number of Medium Nougat minifigure parts from 2018-2022

There has been an increase in Medium Nougat parts released in the past year; however, it is concerning to note that there were no pieces released at all in 2020. Overall, there should be more parts available for minifigures in this shade as one of the fewer darker skintones available at all for builders.

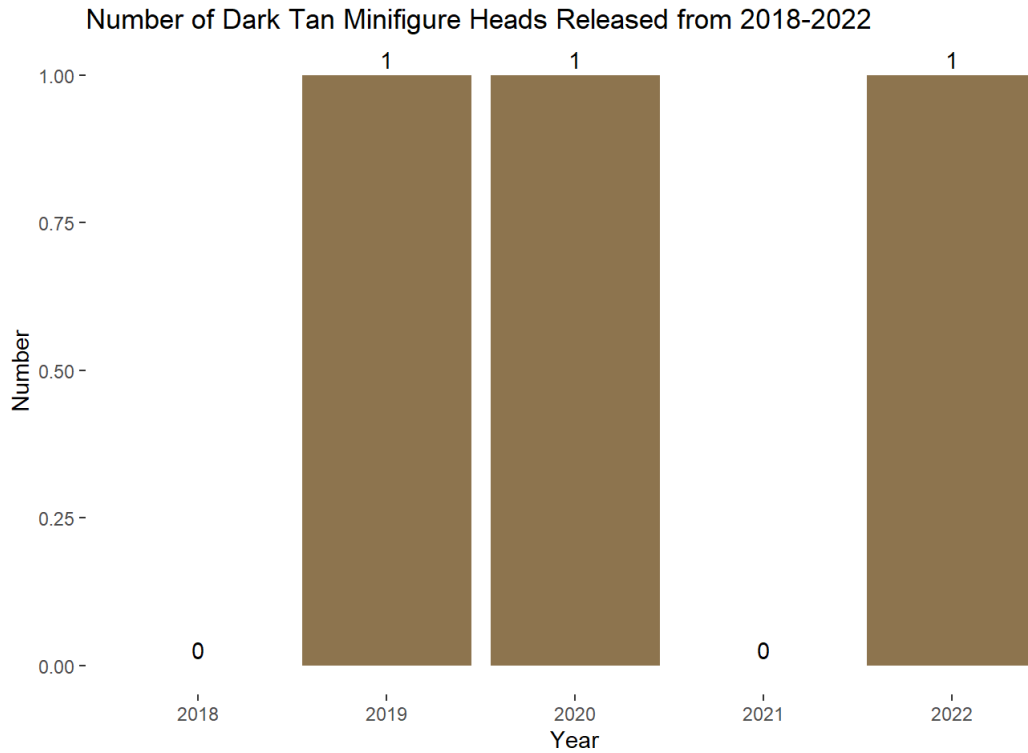


Figure 14. A bar graph showing the total number of Dark Tan minifigure parts from 2018-2022

Dark Tan is another relatively newly introduced color; however, it is concerning that only one piece was released per year other than 2021 after Lego introduced the new shade. **In general, many darker skintones were introduced later though Lego has not ensured that enough pieces are released per year for builders interested in using these fleshtones.**

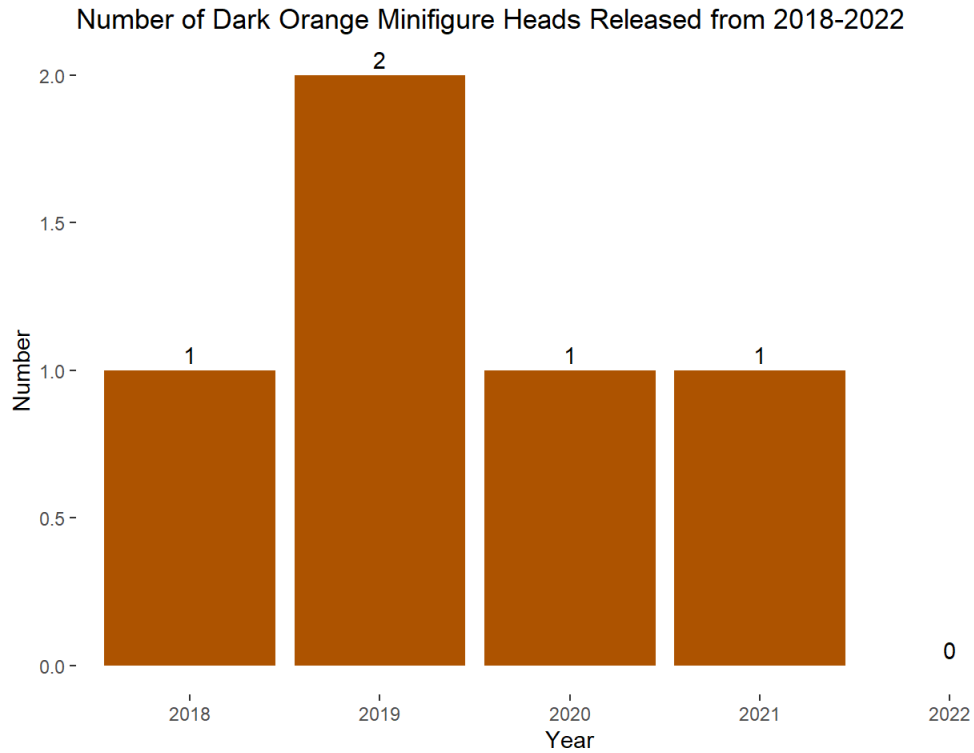


Figure 15. A bar graph showing the total number of Dark Orange minifigure parts from 2018-2022

There is a concerning negative trend in the number of Dark Orange parts released in the past four years with there being no new ones last year at all especially considering that Dark Orange is one of darkest Lego colors available. **There is definite bias against darker skintones, as Lego only releases one or two in a year if at all accentuating the lack of representation for POC builders, especially darker skinned POC.**

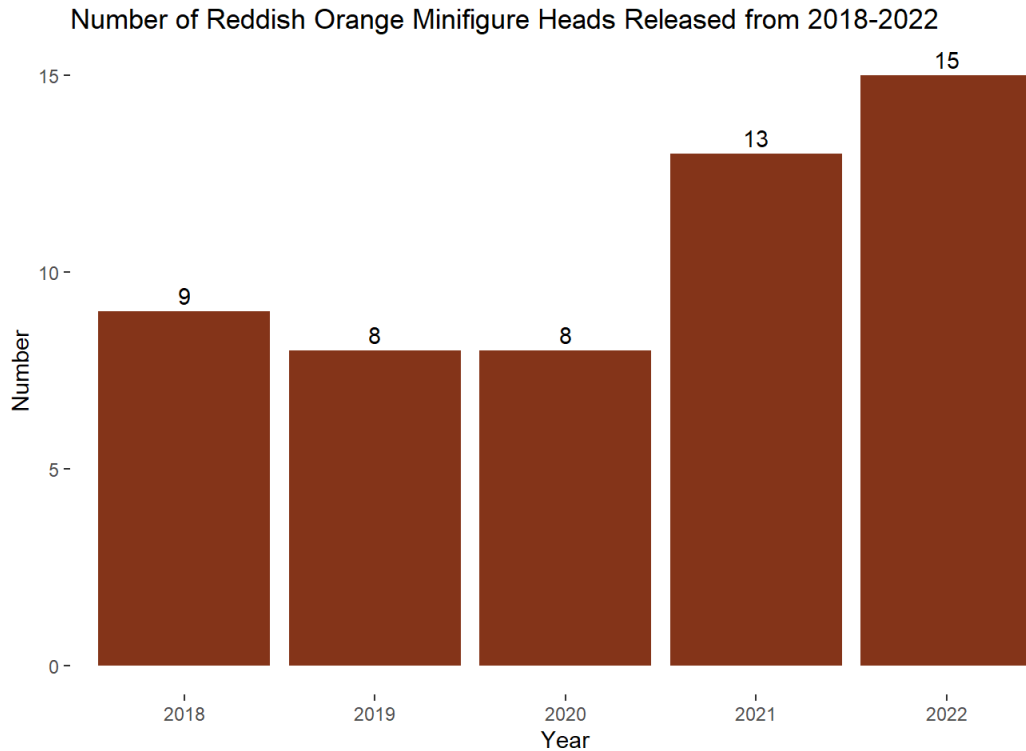


Figure 16. A bar graph showing the total number of Reddish Orange minifigure parts from 2018-2022

Out of all darker skintones, Reddish Orange is the most frequent Lego shade released with a positive trend over the past four years. **However, it is important to note that the most frequently released darker skintone is around a quarter of the number of minifigure parts released in the most available lighter skintone.** This represents the reality of Lego's lack of diversity and marginalized POC builders especially as more people look towards Lego to improve upon the biases in their products.

As stated previously, the lack of variety in darker skintones along with the few number of parts released per year are indicative of the lack of options for POC builders when creating minifigures that represent themselves. Lego should address the racist biases in the lack of darker skintone minifigure parts especially as more POC builders express their concerns with the marginalization they experience in the Lego community.

Study of Male and Female Figure Heads in Lego Figures

Women's Brick Initiative

Rithika Devarakonda, Summer Intern

Introduction

Lego minifigures are available in both traditionally masculine and feminine appearances; however, the latter were available much later according to results from [Bricklink](#). After specifying the inventory for female heads, the earliest feminine design was released in 1989 while minifigures in general were first released in 1975. To differentiate masculine and feminine minifigure designs, I found examples of both on Bricklink released this year to define what we mean more clearly in terms of presentation and appearances.



Figure 1. Image of a masculine minifigure head taken from [Bricklink](#) released in 2023

This minifigure head is an example of a masculine design, as features including facial hair are included to differentiate the male and female heads.

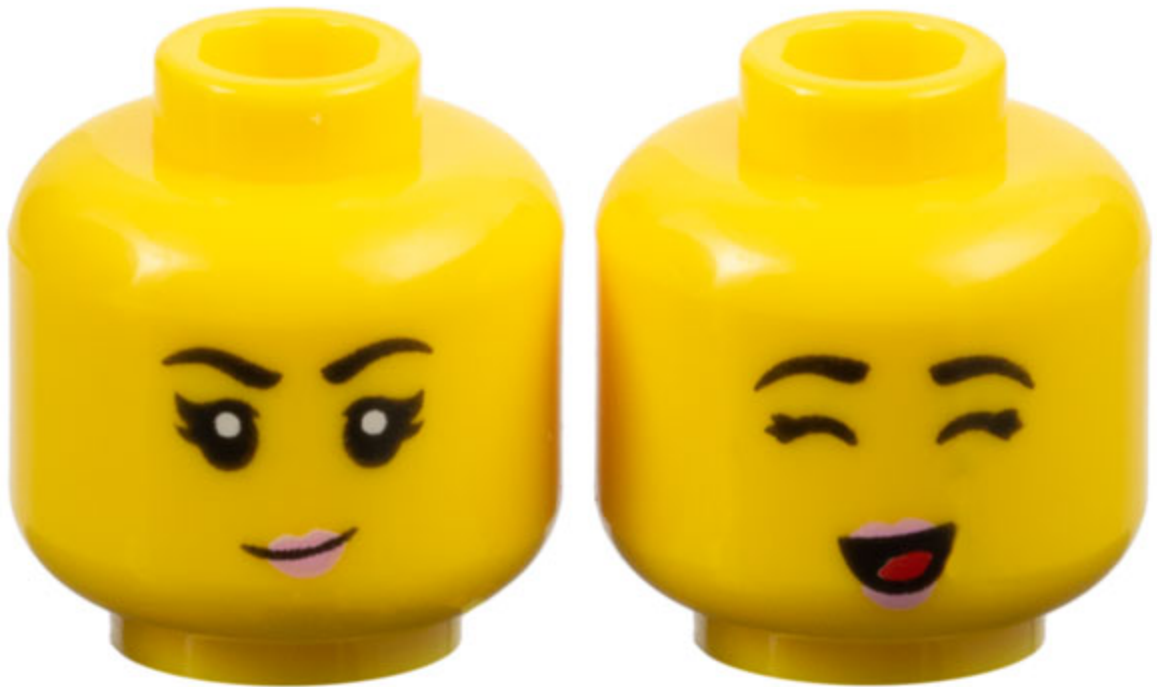


Figure 2. Image of a feminine minifigure head taken from [Bricklink](#) released in 2023

This minifigure head is an example of a feminine design, as features including longer or more defined eyelashes and lipstick are used for female heads.

Updated Figure on Total Male and Female Minifigure Heads

Now that we have examples of both masculine and feminine designs, I updated the count comparing the total number of female heads with all minifigure heads released to include Lego products released up to mid July this year. Previously, WBI interns compared the count of female heads to all minifigures up to May 2020; however, we wanted to see if Lego made progress in releasing more feminine heads over the last few years.

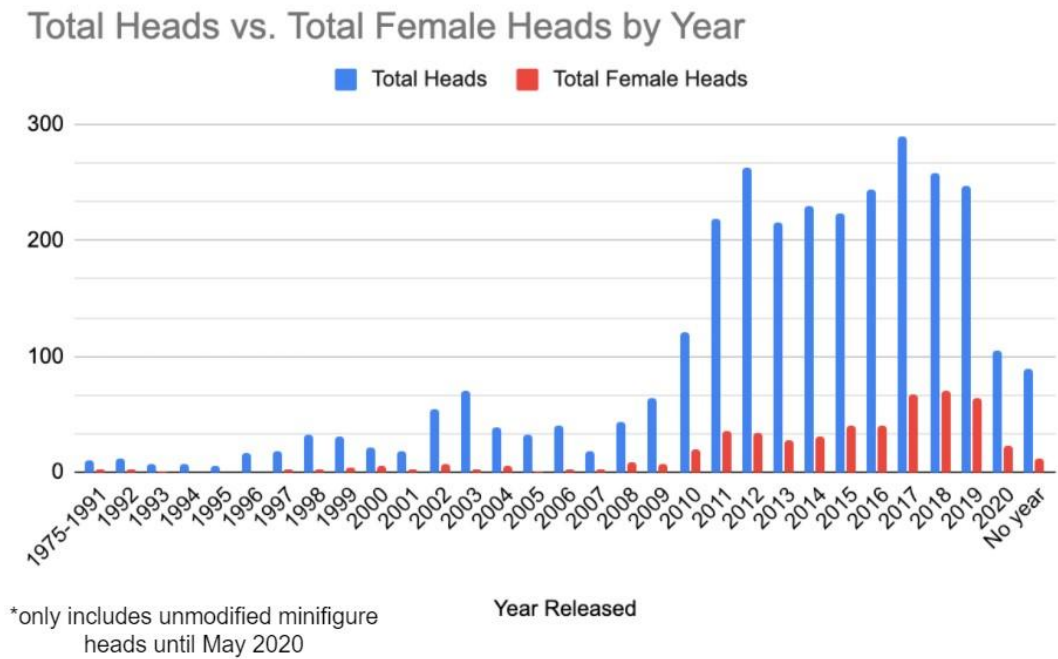


Figure 3. Barplot comparing the total number of minifigure heads versus female heads released from 1975 to May 2020

Overall, the number of feminine heads have historically always been underrepresented compared to the total number of minifigure heads across all the years. However, the number of female heads released peaked in 2018 though the count noticeably dropped after, especially in 2020.

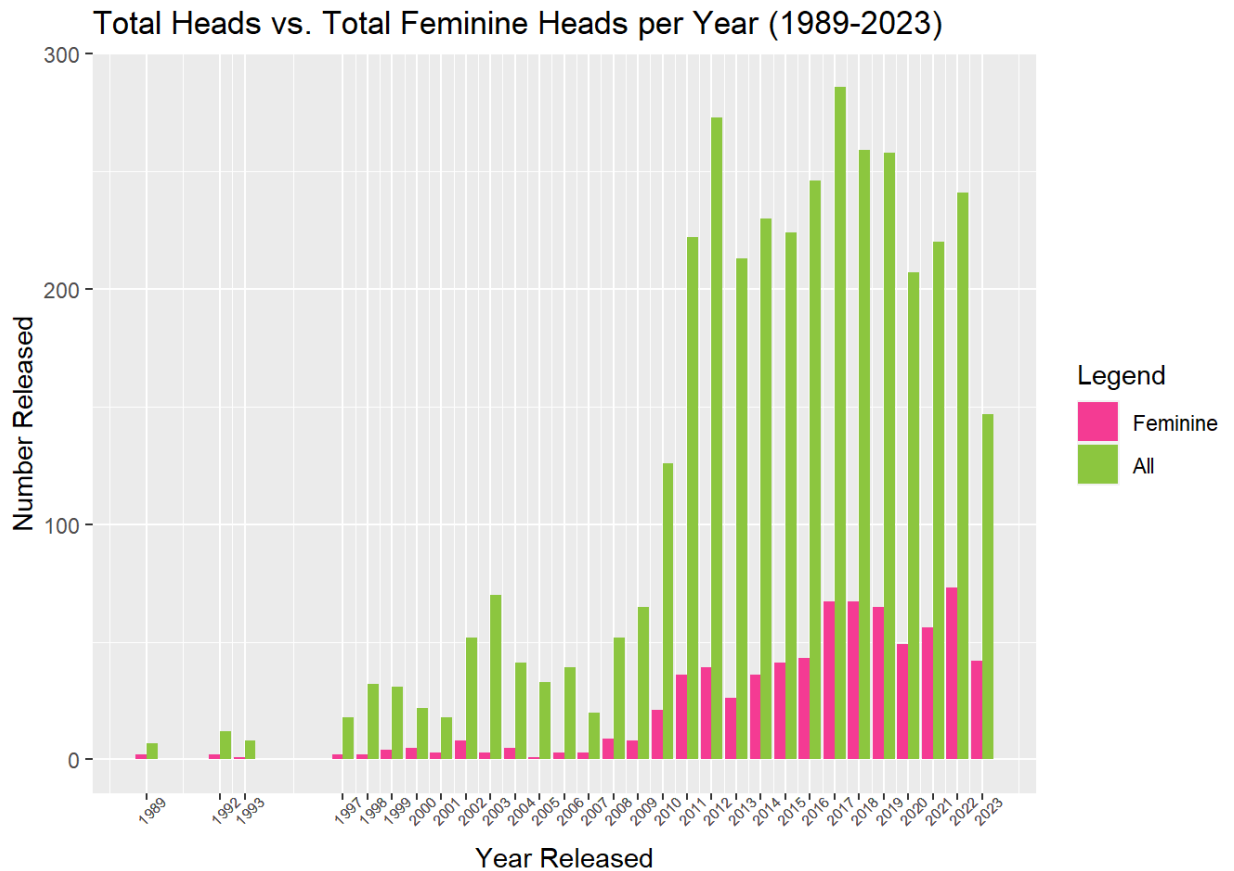


Figure 3. Barplot comparing the total number of minifigure heads versus female heads released from 1989 to July 2023

Female heads were first released in 1989, so the updated visual reflected that by emphasizing that there were long periods of time such as from 1993 to 1997 where no feminine head designs were released at all. Likewise, the count of female heads reached a new peak in 2022 in comparison to the previous case in 2018. Though the figure only measures data from halfway through 2023, it is fair to assume that there has been a positive trend in female heads released over the past few years.

There are many female builders in the Lego community, who unfortunately have fewer options in terms of finding minifigure heads that represent them with a lack of variety in feminine heads. It is also important to note that women of color builders have a fewer number of feminine heads available along with a lack of darker shades as well. Thus, Lego should recognize that the fewer number of feminine heads available makes it harder for female builders to participate in the community as seen in the disparity of minifigures released over the years.

Study of Conflict and Violence in Lego Figures

Women's Brick Initiative

Rithika Devarakonda, Summer Intern

According to a quote from a 2010 Lego report, ["the purpose is for the LEGO brand not to be associated with issues that glorify conflicts and unethical or harmful behavior."](#) There isn't much research available on the increase of conflict or violence found in Lego sets; however, a 2016 research paper called "Have LEGO Products Become More Violent?" discusses the trend of Lego products skewing towards promoting a greater level of violence and conflict. The study found that ["scenarios involving shooting and threatening behavior have increased over the years."](#) This result contrasts with Lego's ["aim to discourage pretend violence as a primary play incentive,"](#) as ["the designs are meant to enrich play with engaging conflict scenarios where aggression might be used for the purpose of overcoming imaginary evil."](#) While Lego aims to present conflict in terms of imaginary situations outside the context of reality, it is important to point out that shooting is one of the primary means of violence that has risen over the years. In particular, shooting is very much a situation that is associated with violence in real life. Also, the level of violence contributes to the exclusion of women in Lego, as the idea of conflict found in play is related to how toys are marketed towards boys. For example, [some scholars have argued that the proliferation of increasingly violent toys relates to a broader issue, a crisis of masculinity.](#) Boys are often expected to play with toys promoting some form of conflict and violence where there's a clear antagonistic force to fight against.

As part of the research on conflict and violence we decided to take a look at the Lego City sets to see if there was an increased level of conflict in a theme that is supposed to reflect real life and is marketed towards everyone. First, we looked at the total number of Lego City sets focused on automobiles because of how prominent the theme was in a city environment.

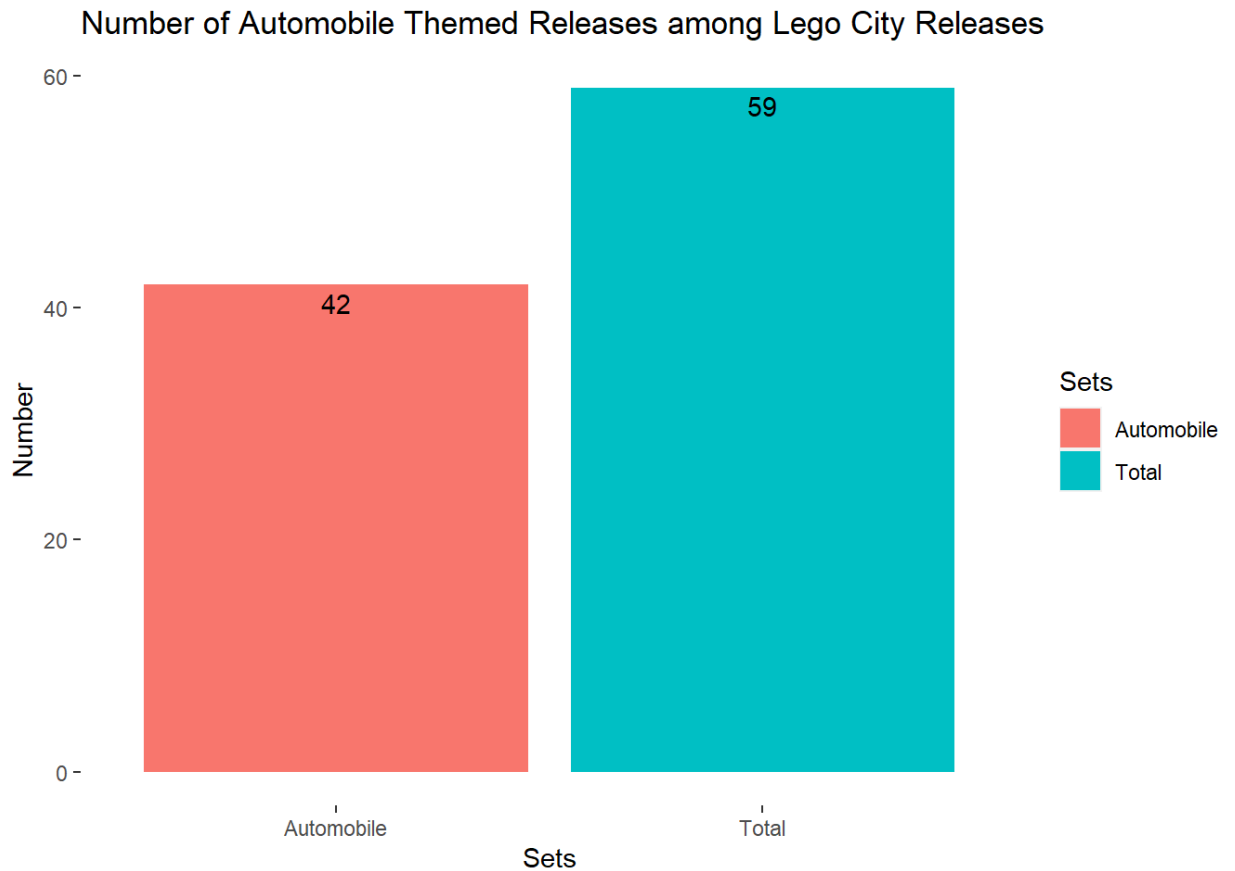


Figure 1. Barplot showing the number of Lego City sets containing an automobile

Automobiles make up the majority of Lego City sets, which is interesting because cities are typically associated with skyscrapers, shops or markets, schools, hospitals, restaurants and other important infrastructures. Instead the majority of Lego City is focused on cars, which then relates to the idea that the sets are mostly based on the idea of a chase or some form of conflict rather than actually depicting realistic cities.

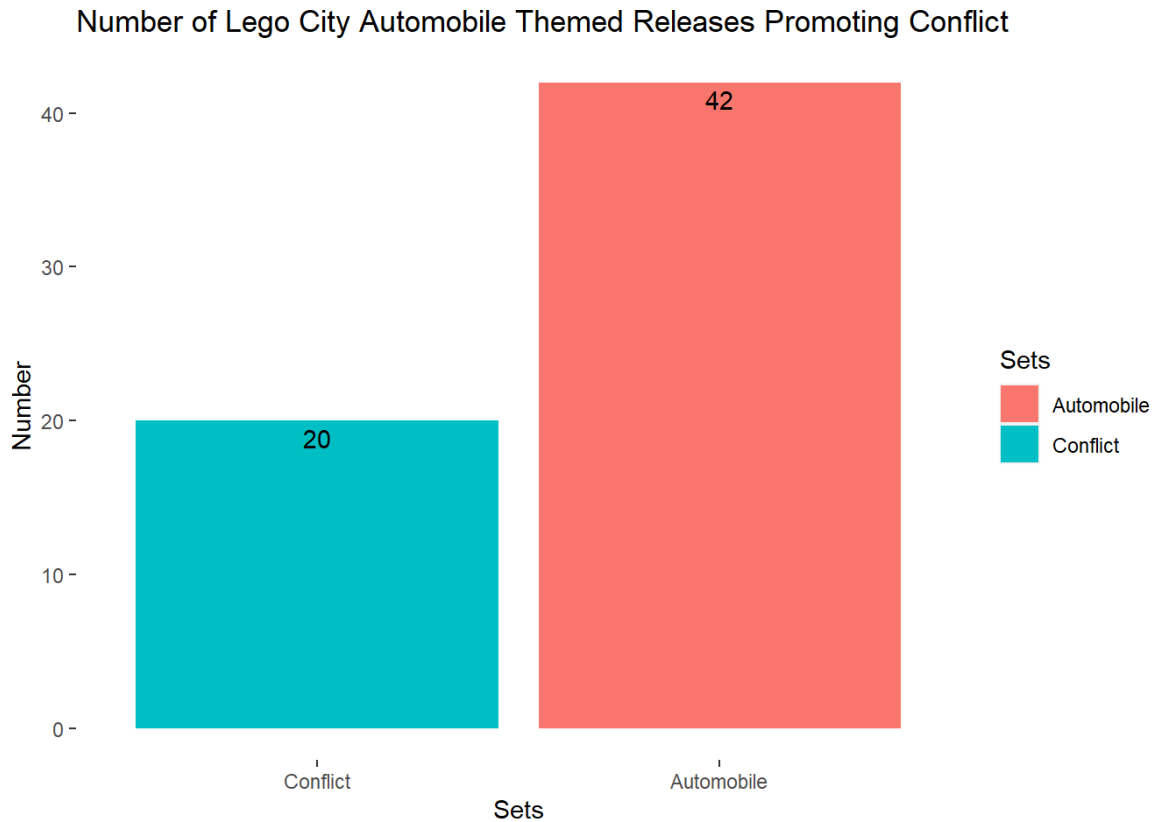


Figure 2. Barplot showing the number of Lego City sets containing an automobile that promote conflict

We defined conflict by looking for keywords such as policy, chase, patrol, challenge, crook, robber, escape, foil, stunts, reckless, attack, and challenge. As such, we narrowed down sets related to one of these words amongst the automobile Lego City sets. We found that almost half of the car themed Lego City sets promoted some form of conflict, which is important to point out as the violence is situated in the context of a real life situation rather than an imaginary, distant opposition.

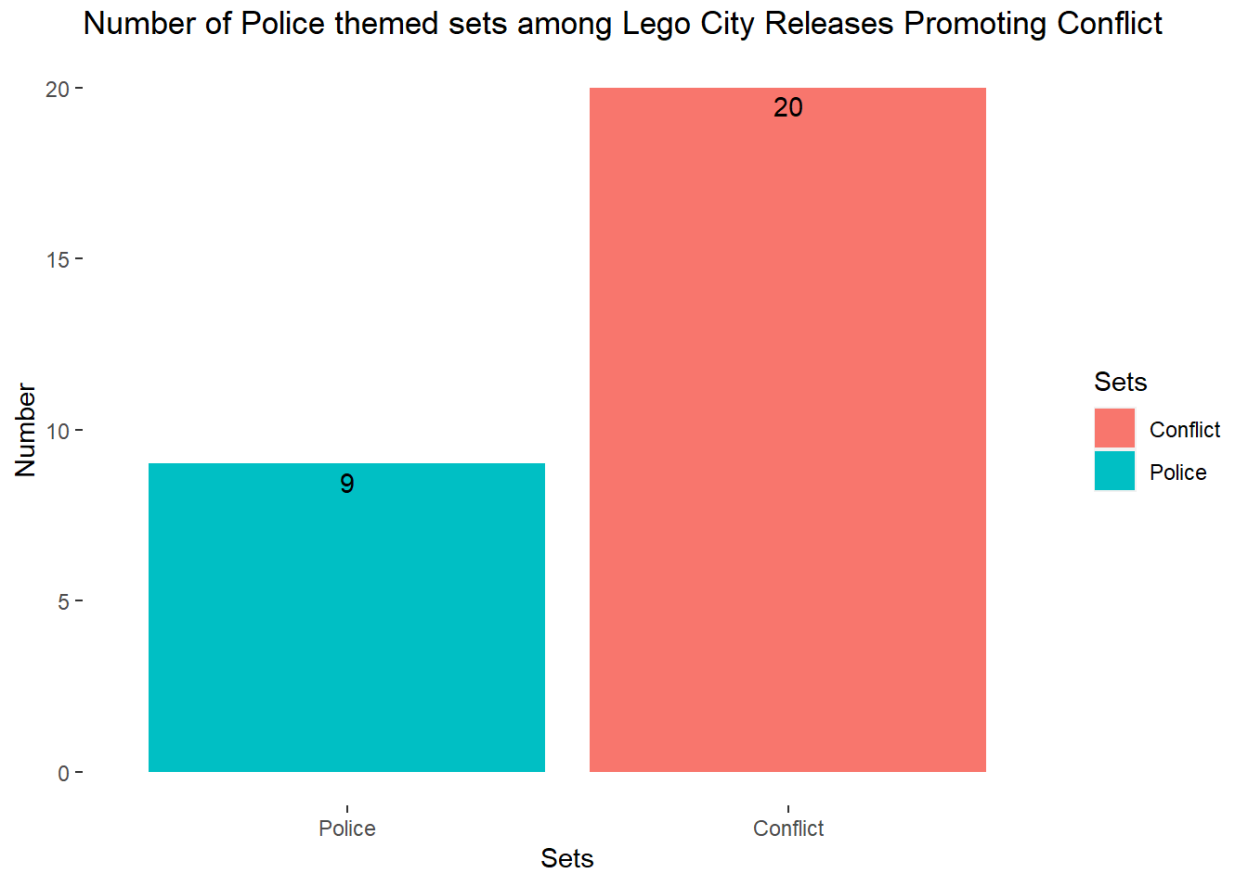


Figure 3. Barplot showing the number of Lego City automobile sets themed around the police

The overrepresentation of police and detainment in a Lego themed set marketed for everyone and meant to represent a real life city directly ties in to the increase of violence promoted in Lego products. The majority of conflict or violence in Lego sets is related to escalations between the police and a robber, which as stated above continues to emphasize that the violence promoted has implications in the real world rather than being contained in a fantasy setting. Lego's initial stance contradicts the trends found in their recent large scale releases, as the escalation of conflict themed sets has risen even in sets geared towards everyone in a more mundane, realistic setting.

Lego Friends is another city oriented set that is targeted towards girls; however, there are little to no presence of conflict oriented situations involving actions, stunts, policemen or firefighters, and robbers. The one police in Lego Friends is meant to keep peace; however, all of the police in Lego City are portrayed in violent situations as perpetrators of some form of conflict or escalated chase. Lego continues to perpetuate the idea that conflict oriented sets especially revolving around firefighters and the police

should be targeted for boys, which is rooted in sexist stereotypes as well as promoting aspects ingrained in toxic masculinity.