The Shades of Racism in the Beauty Industry*

An exploration of inclusivity and tokenism within fashion and makeup

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This paper aims to investigate the history of racism in the beauty industry and how this impacts the inclusivity in the market. The complexions of models are assigned a lightness value and analyzed across 8 years. These results are compared to the foundation shade ranges across all major makeup brands across the U.S revealing a continuation of compounding racism within the industry as a whole.

```
fashion_tones <-
  read.csv(
    file = "https://raw.githubusercontent.com/the-pudding/data/master/vogue/faces.csv",
    skip = 0
  )

fashion_frequency <-
  read.csv(
    file = "https://raw.githubusercontent.com/the-pudding/data/master/vogue/models.csv",
    skip = 0
  )

makeup_shades <-
  read.csv(
    file = "https://raw.githubusercontent.com/the-pudding/data/master/makeup-shades/shades
    skip = 0
  )

#### Save data ####

write_csv(fashion_tones, here::here("inputs/data/fashion_tones.csv"))
```

---

*Code and data are available at: LINK.

Table 1: Models With More than 5 Appearances on Vogue

Model	Number of Covers	Lightness Value
Angelina Jolie	5	0.67
Cate Blanchett	5	0.68
Charlize Theron	6	0.68
Gisele Bundchen	9	0.67
Gwyneth Paltrow	5	0.69
Kate Hudson	5	0.67
Keira Knightley	5	0.71
Nicole Kidman	7	0.70
Penelope Cruz	5	0.62
Reese Witherspoon	5	0.63
Rihanna	5	0.62
Sarah Jessica Parker	6	0.62

```r
write_csv(fashion_frequency, here::here("inputs/data/fashion_frequency.csv"))

write_csv(makeup_shades, here::here("inputs/data/makeup_shades.csv"))


### Clean Fashion Tones Dataset:
cleaned_fashion_tones <-
  clean_names(fashion_tones)

cleaned_fashion_tones <-
  cleaned_fashion_tones |>
  rename(
    skintone = tone,
    lightness_value = l
  )
head(cleaned_fashion_tones)
```

```
      date           model skintone lightness_value
1  1/1/2018    Lupita Nyongo  #402C2C       0.2127451
2 10/1/2015    Lupita Nyongo  #58342B       0.2574230
3  3/1/2009   Michelle Obama  #844930       0.3541176
4  4/1/2015 Serena Williams  #875038       0.3750000
5  7/1/2014    Lupita Nyongo  #85524F       0.4166667
6 10/1/2016    Lupita Nyongo  #8F5347       0.4205882
```
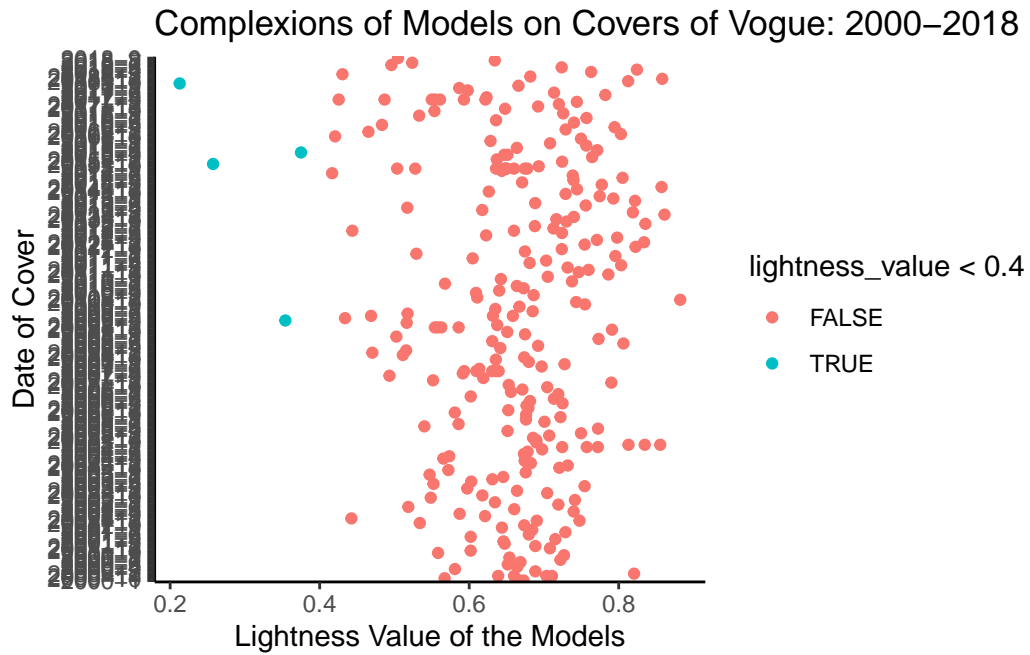
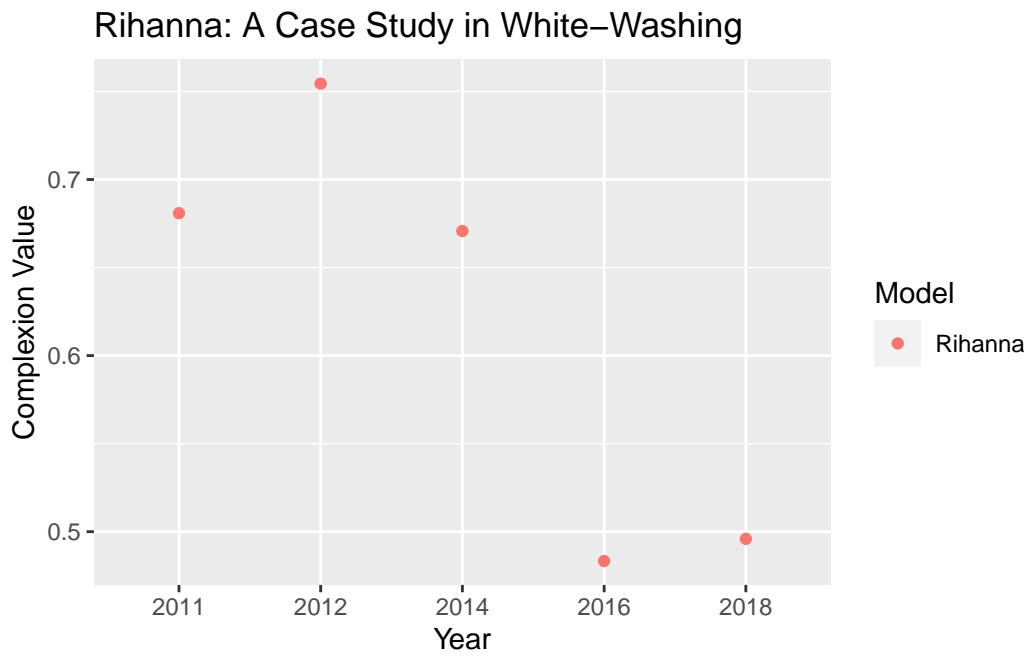Figure 1: Complexion Values of All Models on Vogue Covers from 2000-2018

Figure 2: Rihanna's Appearances on Vogue

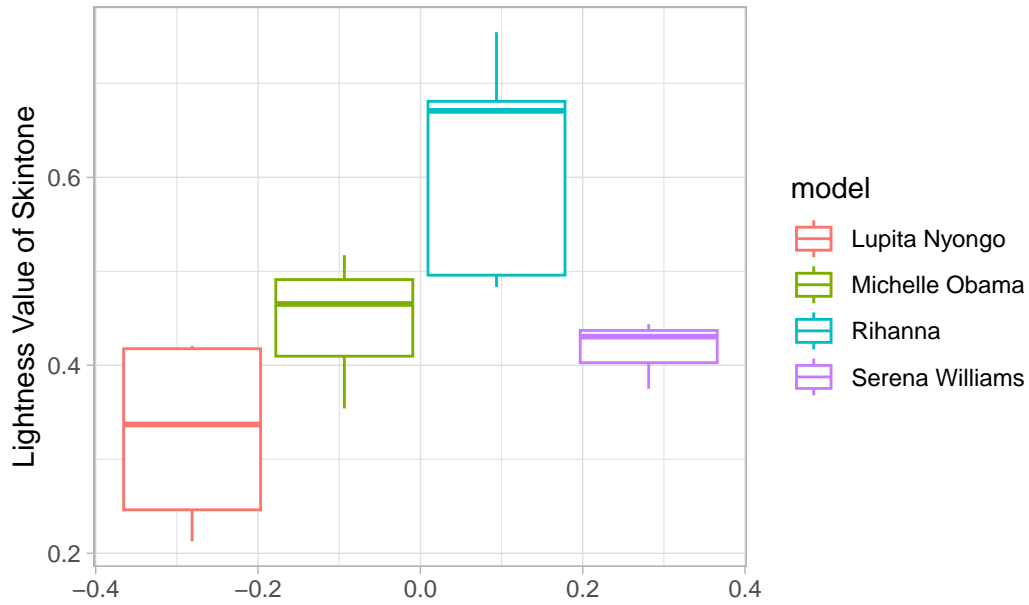## Appearances of Deepest Complexion Models on Vogue

Figure 3: Top 4 Deepest Complexion Models on Vogue

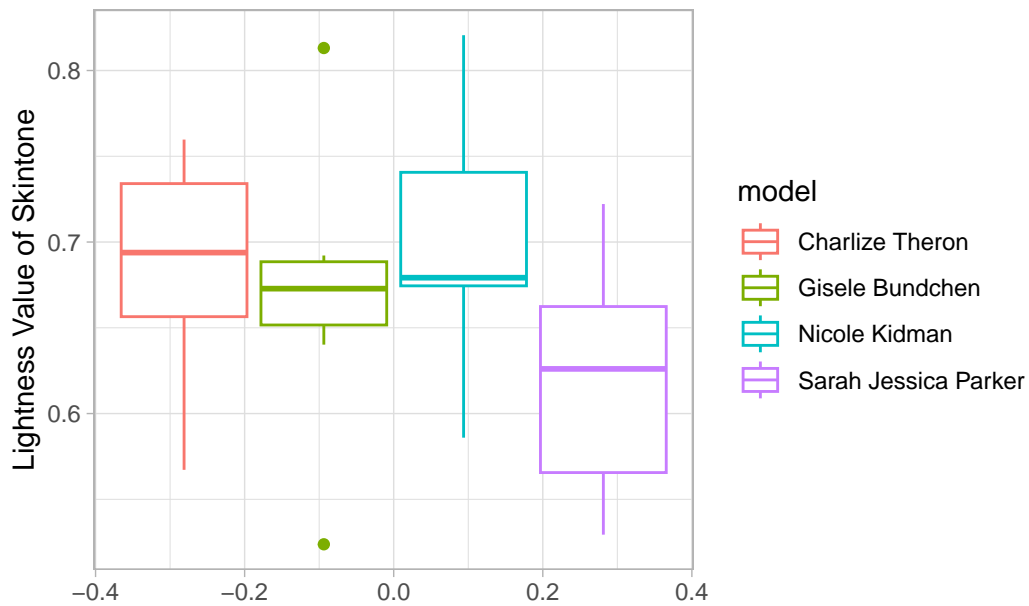## Complexions of Models with Highest Number of Vogue Covers

Figure 4: Models with Highest Number of Appearances

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Table 2: US Makeup Brands: Foundation Shade Range

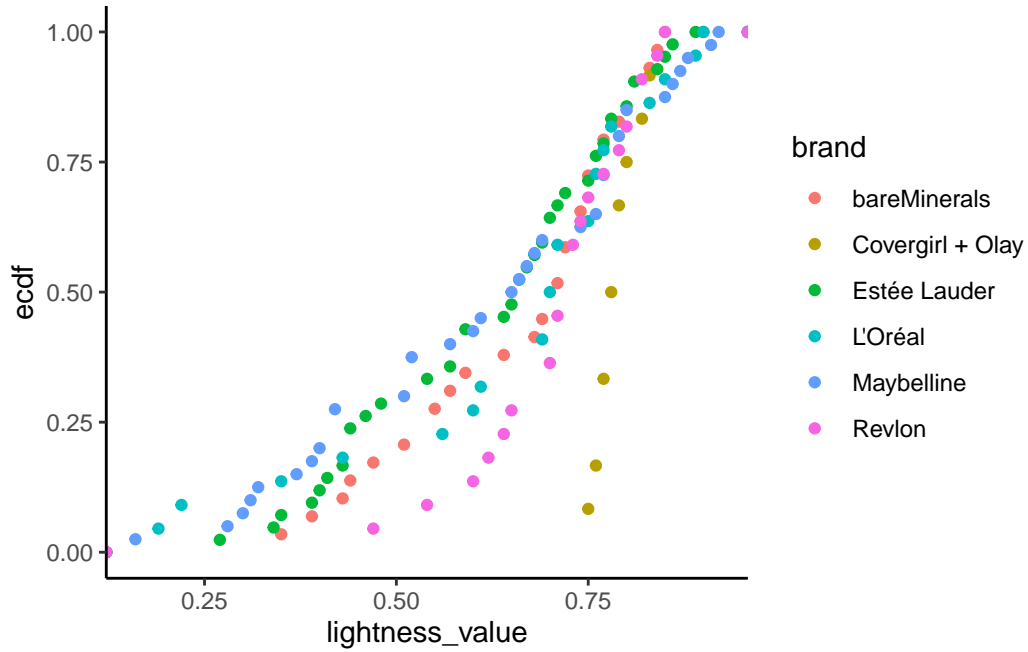| Makeup Brand	Number of Foundation Shades
Beauty Bakerie	30
Black Opal	12
Black Up	18
Bobbi Brown	30
Covergirl + Olay	12
Estée Lauder	42
Fenty	40
Iman	8
L'Oréal	22
Lancôme	40
Laws of Nature	17
MAC	42
Make Up For Ever	40
Maybelline	40
Revlon	22
bareMinerals	29

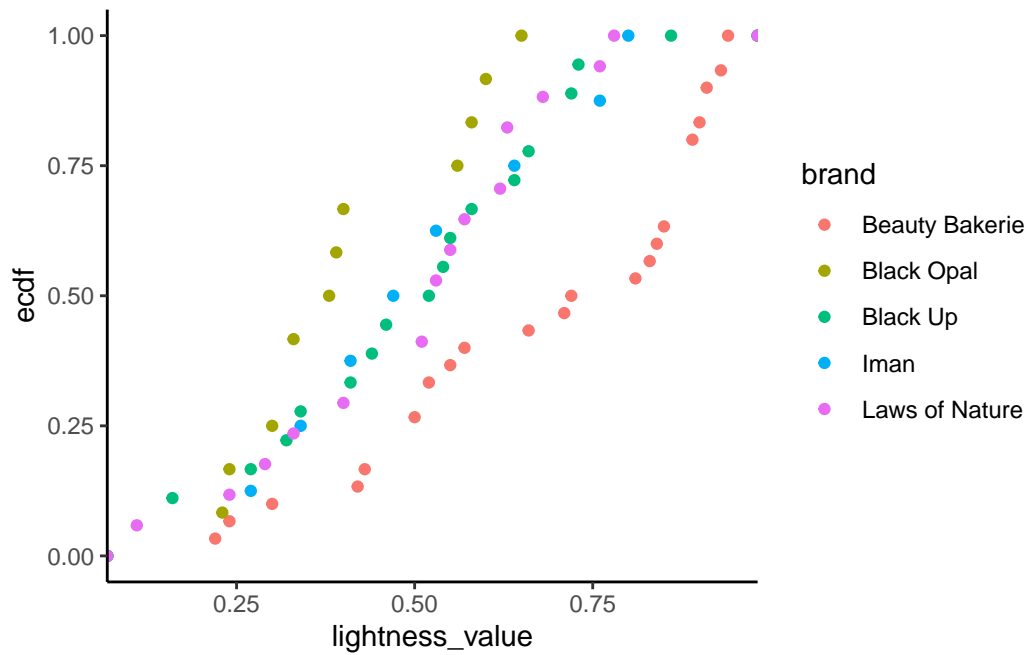Figure 5: The Shade Distribution of Best-Selling Foundations in the U.S

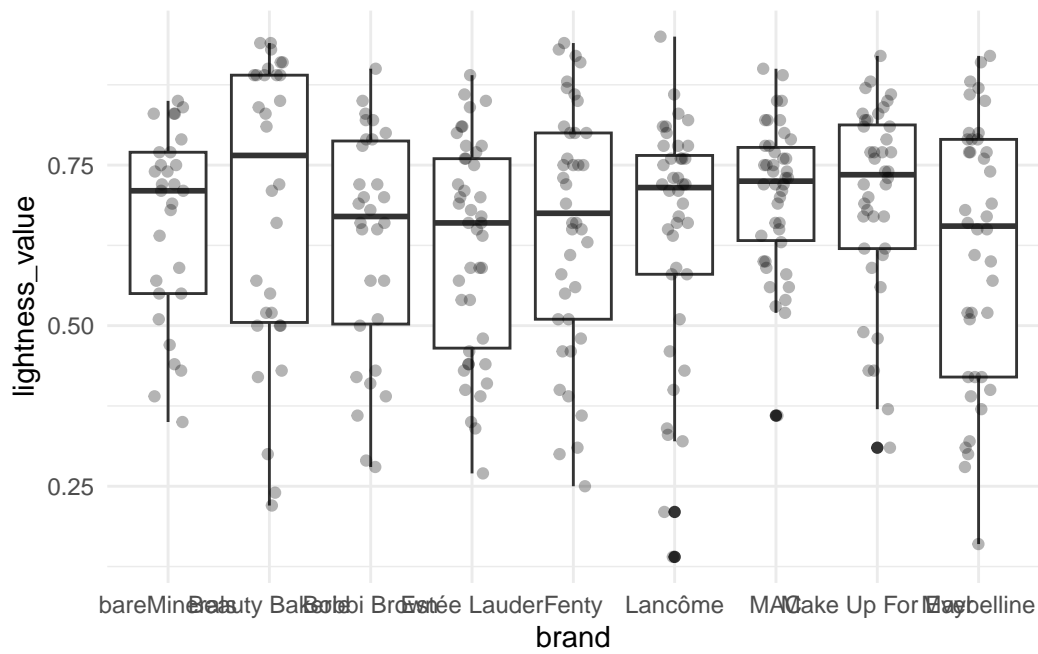Figure 6: The Shade Distribution of BiPOC-owned Makeup Brands

Figure 7: The Shade Distribution of Largest Shade Ranges Offered in the U.S

1 Introduction

You can and should cross-reference sections and sub-sections. For instance, Section 2 and Section 5.1.

2 Data

Our data is of penguins (**?@fig-bills**).

Talk more about it.

Also bills and their average (**?@fig-billssssss**). (You can change the height and width, but don't worry about doing that until you have finished every other aspect of the paper - Quarto will try to make it look nice and the defaults usually work.)

Talk way more about it.

3 Model

$$Pr(\theta|y) = \frac{Pr(y|\theta)Pr(\theta)}{Pr(y)} \tag{1}$$

Equation 1 seems useful, eh?

Here's a dumb example of how to use some references: In paper we run our analysis in R (R Core Team 2020). We also use the `tidyverse` which was written by Wickham et al. (2019) If we were interested in baseball data then Friendly et al. (2020) could be useful.

We can use maths by including latex between dollar signs, for instance θ.

4 Results

5 Discussion

5.1 First discussion point

If my paper were 10 pages, then should be be at least 2.5 pages. The discussion is a chance to show off what you know and what you learnt from all this.

5.2 Second discussion point

5.3 Third discussion point

5.4 Weaknesses and next steps

Weaknesses and next steps should also be included.

Appendix

A Additional details

References

Friendly, Michael, Chris Dalzell, Martin Monkman, and Dennis Murphy. 2020. *Lahman: Sean "Lahman" Baseball Database.* https://CRAN.R-project.org/package=Lahman.

R Core Team. 2020. *R: A Language and Environment for Statistical Computing.* Vienna, Austria: R Foundation for Statistical Computing. https://www.R-project.org/.

Wickham, Hadley, Mara Averick, Jennifer Bryan, Winston Chang, Lucy D'Agostino McGowan, Romain François, Garrett Grolemund, et al. 2019. "Welcome to the tidyverse." *Journal of Open Source Software* 4 (43): 1686. https://doi.org/10.21105/joss.01686.