

# 03 — Ways of Seeing (1)

Kieran Healy

January 24, 2024

# Ways of Seeing (1)

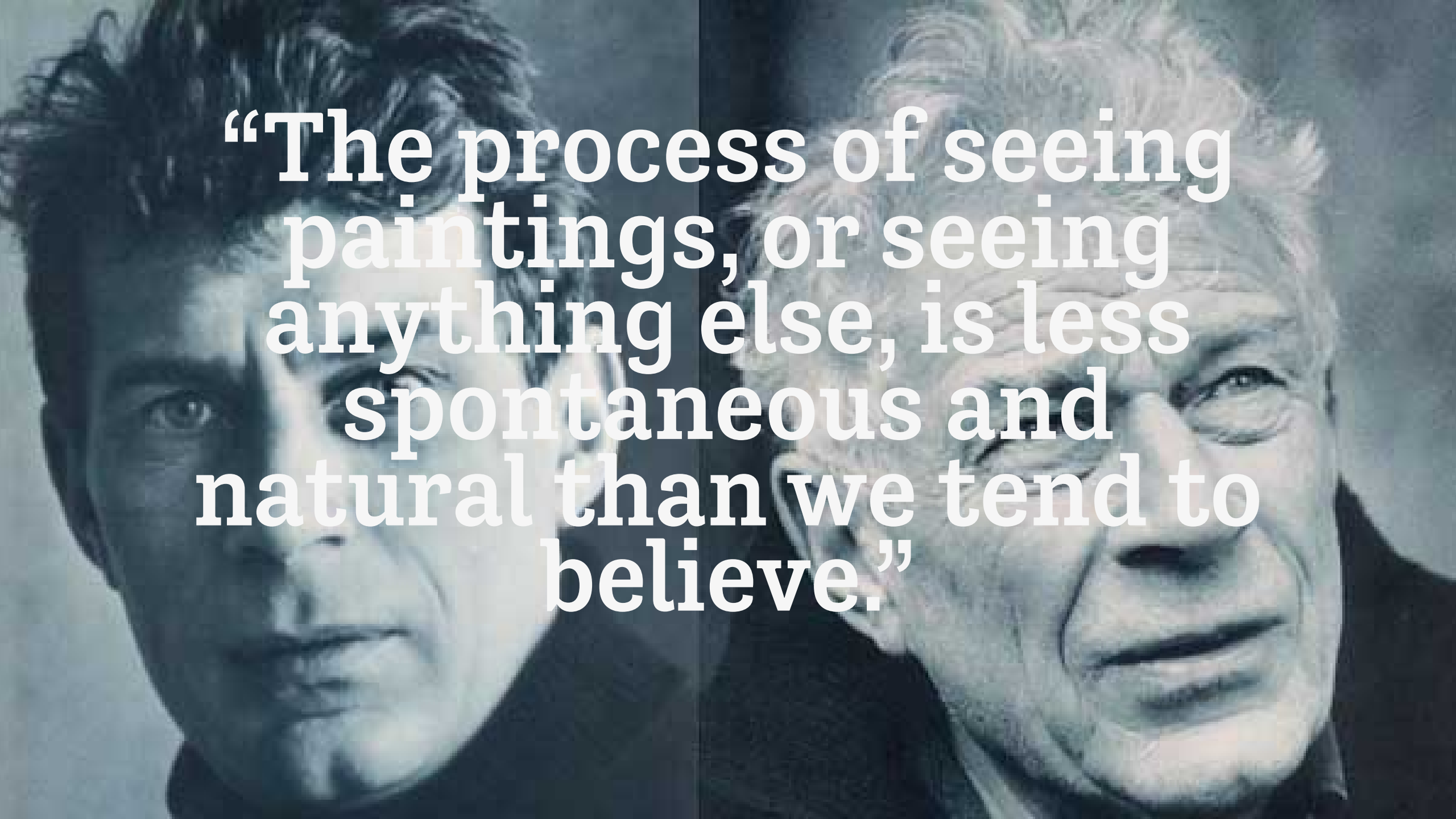










The background of the image is a composite of two faces. On the left is a younger man with dark, curly hair, looking directly at the camera with a neutral expression. On the right is an older man with white hair, looking slightly to the side with a gentle smile. The two faces are separated by a vertical line down the center. Overlaid on this background is a quote in white, bold, sans-serif font.

**“The process of seeing  
paintings, or seeing  
anything else, is less  
spontaneous and  
natural than we tend to  
believe.”**





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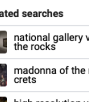
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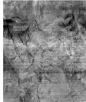
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leonardo da vinci paintings



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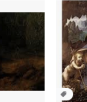
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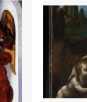
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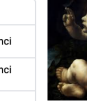
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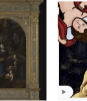
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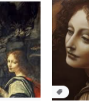
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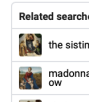
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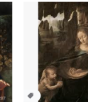
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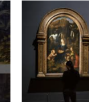
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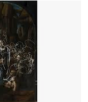
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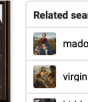
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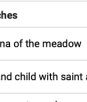
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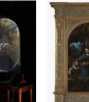
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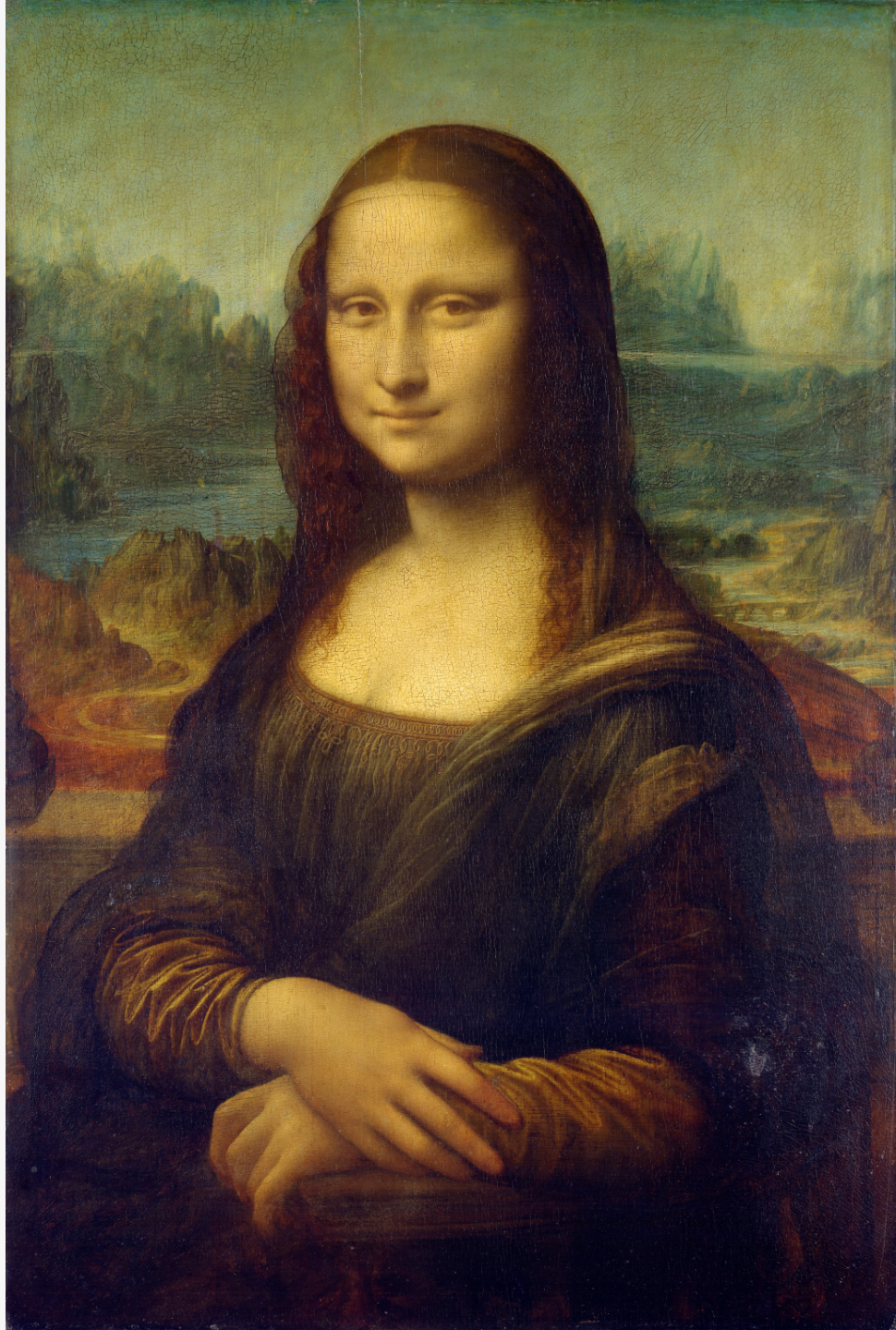
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Make your *wildest* dreams come alive.  
Surrender to the *sensual* and release  
your most *passionate* self.  
Live by *impulse* with a scent that will  
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LET YOUR INSTINCT TAKE OVER

## Megan Fox

is well known for her starring  
and supporting roles in  
blockbuster action, thriller  
and comedy studio  
and independent films. Fox is  
currently in production on another  
major blockbuster film  
due to be released  
in June 2014.

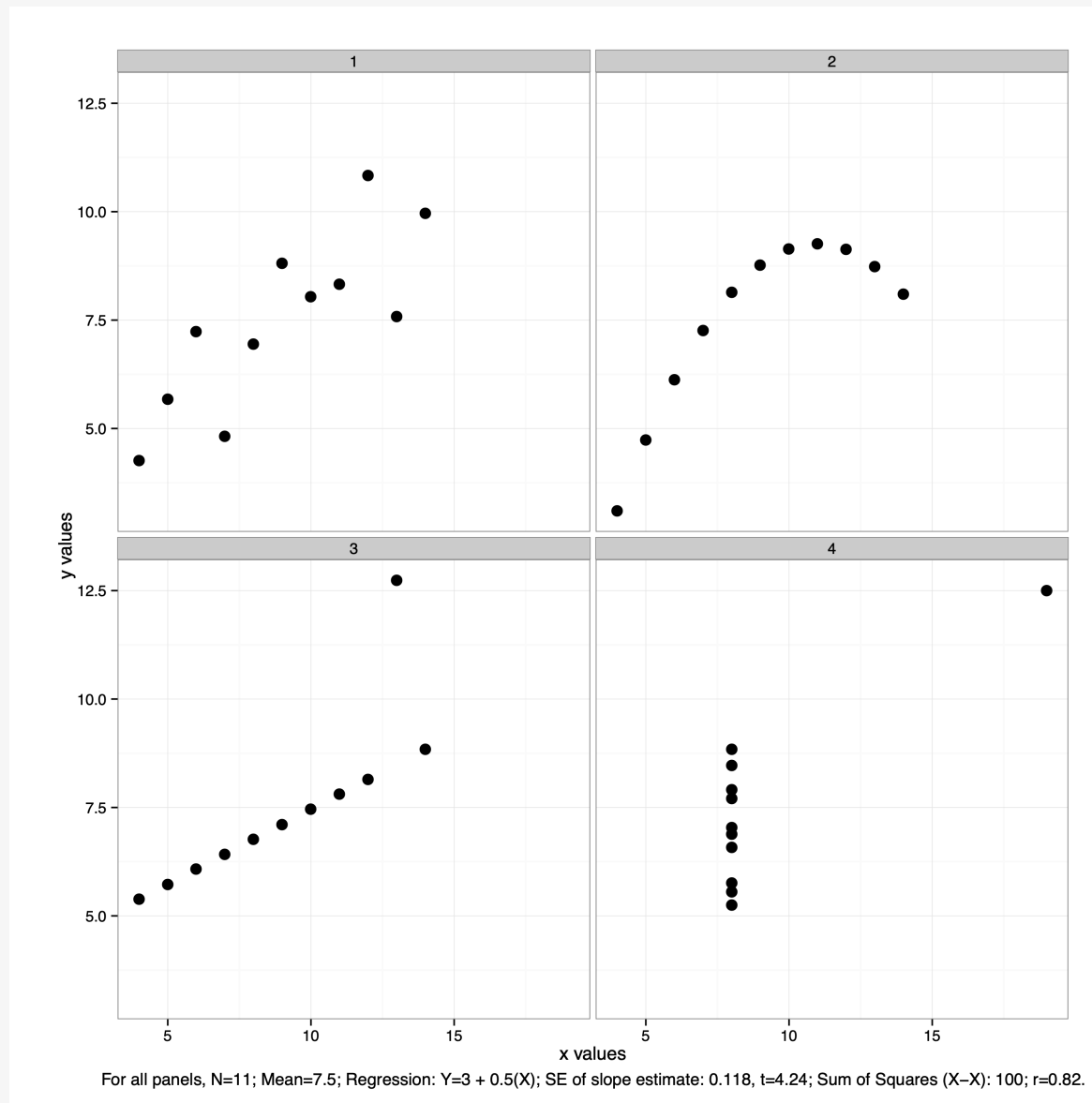


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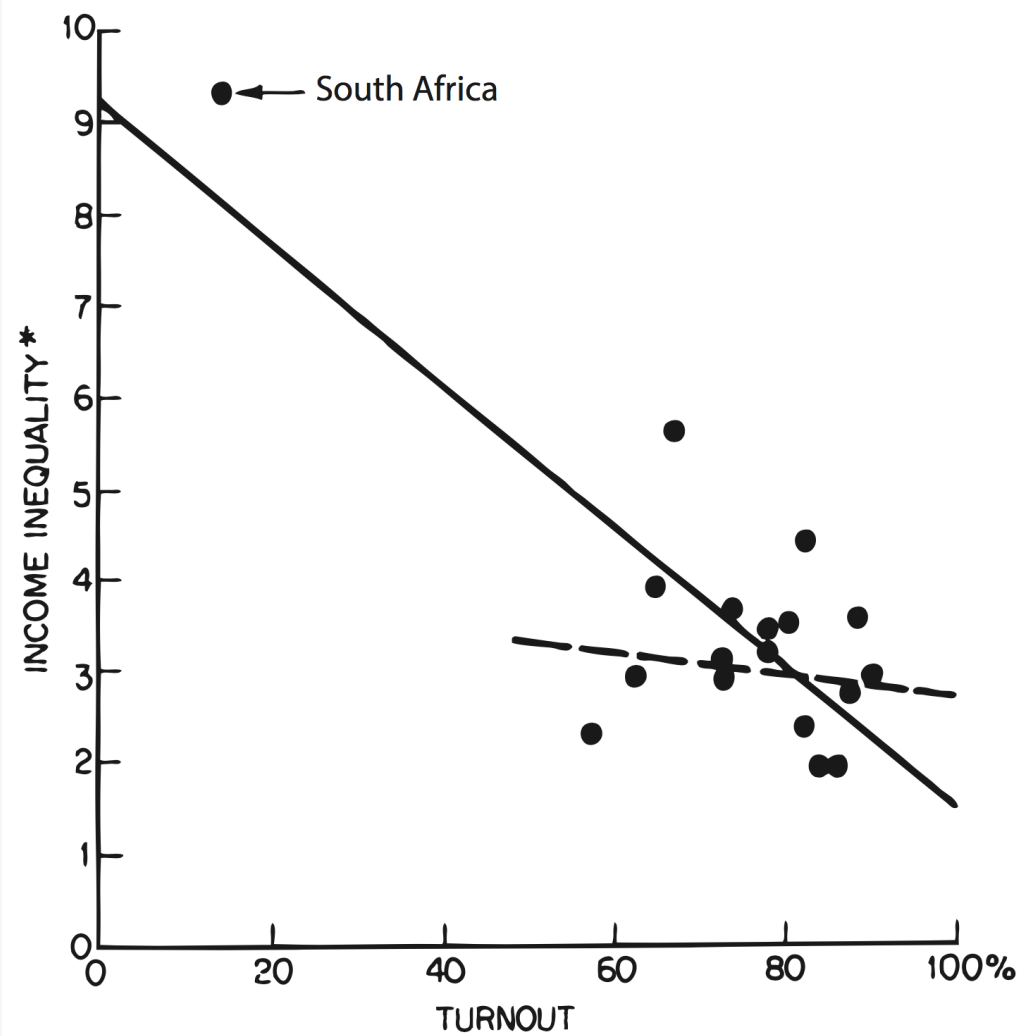
**You should look at your data**



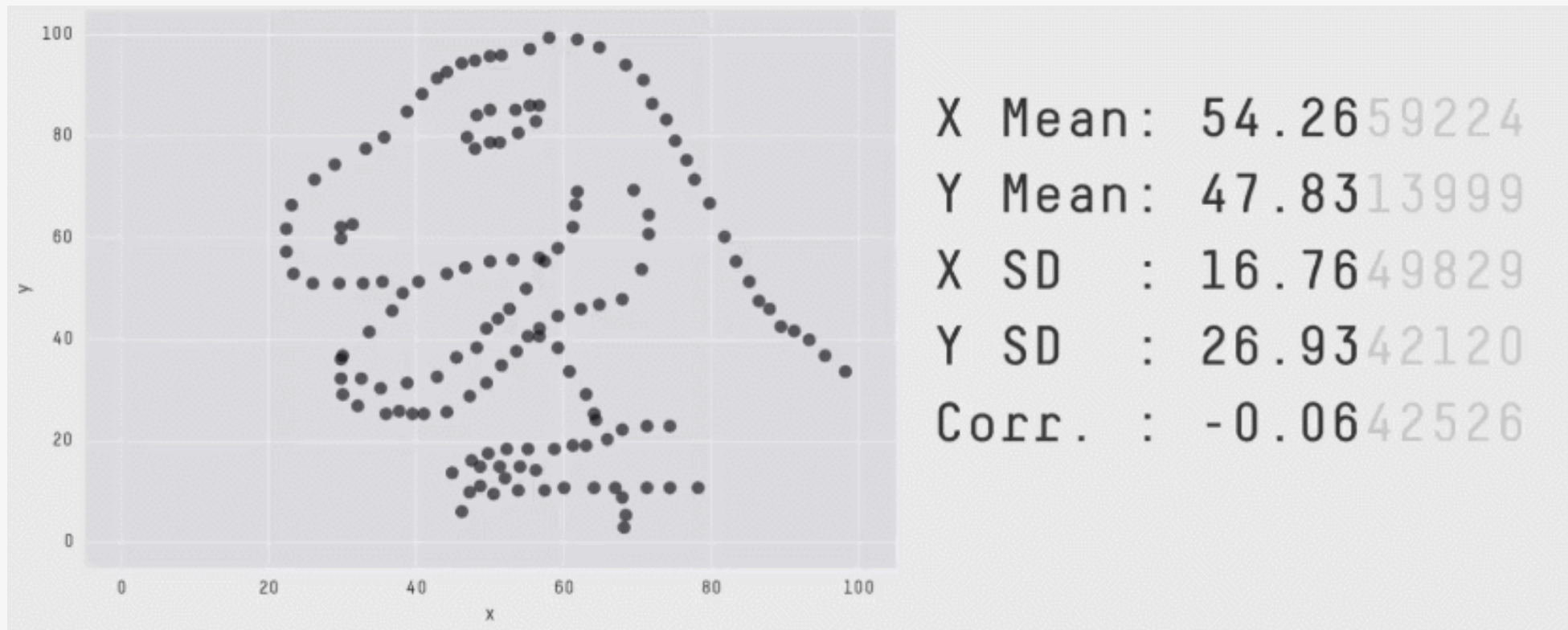
**Seeing things**



Anscombe's Quartet

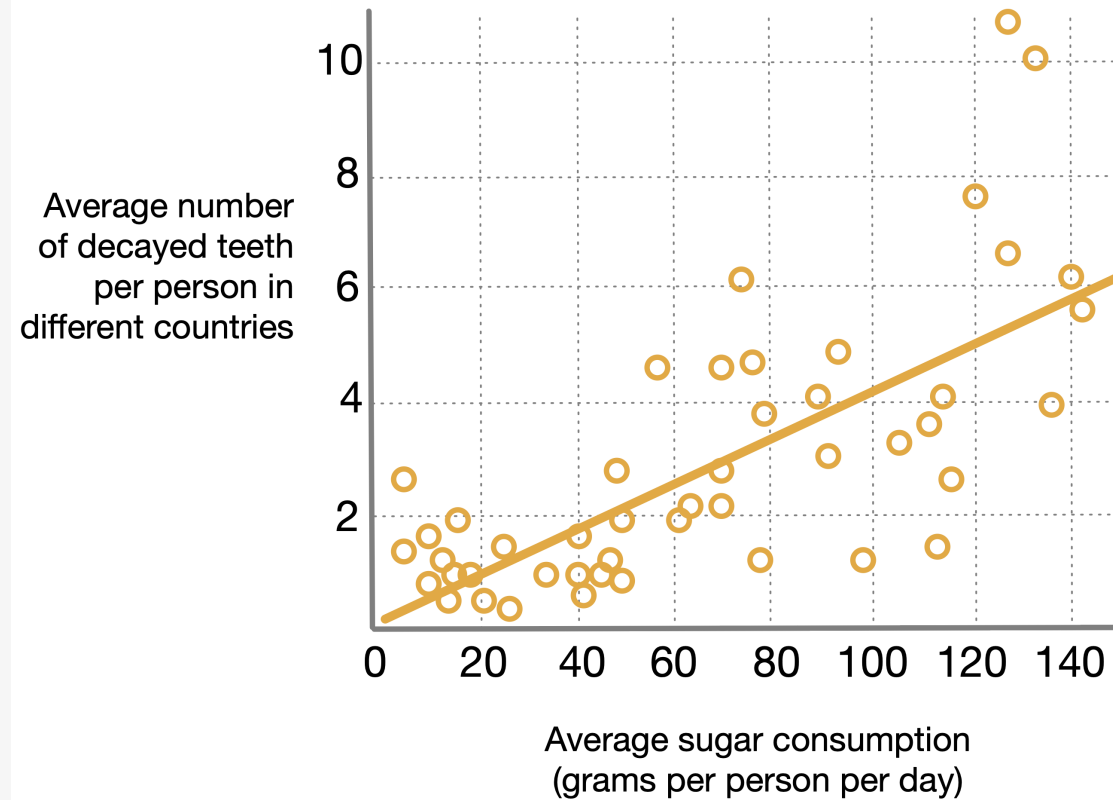


Key. — Bivariate slope including South Africa (N = 18)  
- - - Bivariate slope excluding South Africa (N = 17)



Cairo; Matejka & Fitzmaurice

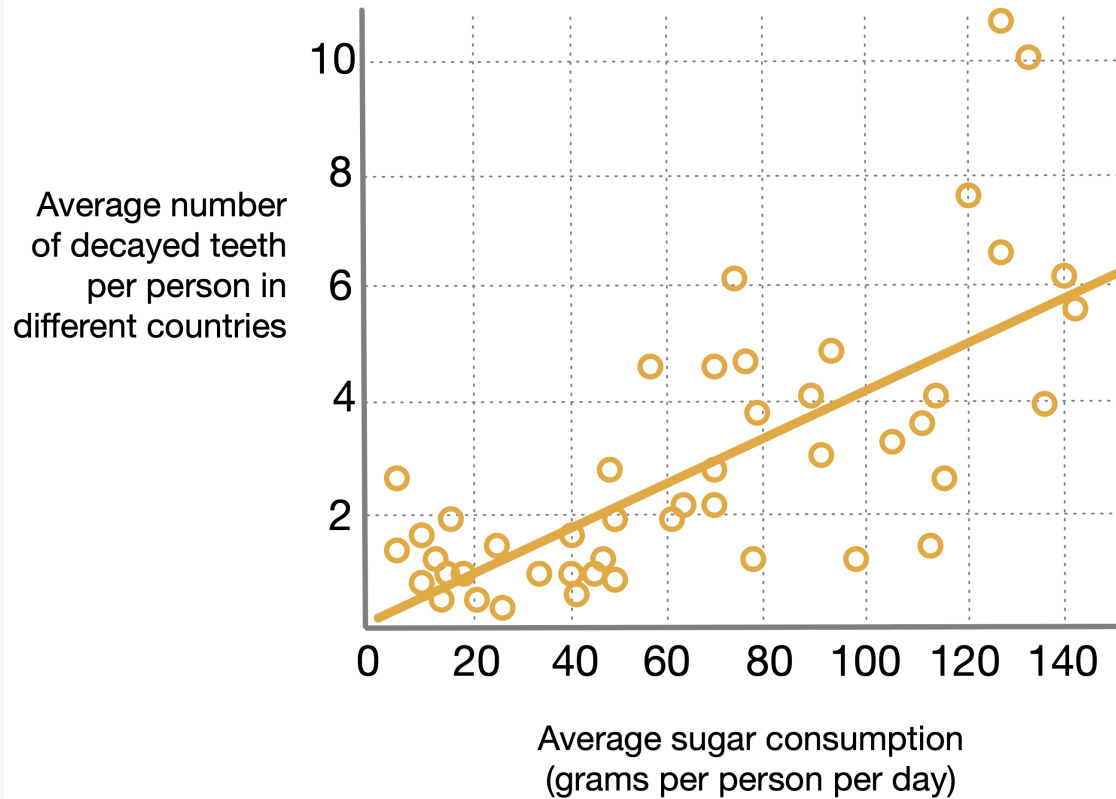
Which of the following statements best describes the data in the graph below?



Pew Research

- A. In recent years, the rate of cavities has increased in many countries
- B. In some countries, people brush their teeth more frequently than in other countries
- C. The more sugar people eat, the more likely they are to get cavities
- D. In recent years, the consumption of sugar has increased in many countries

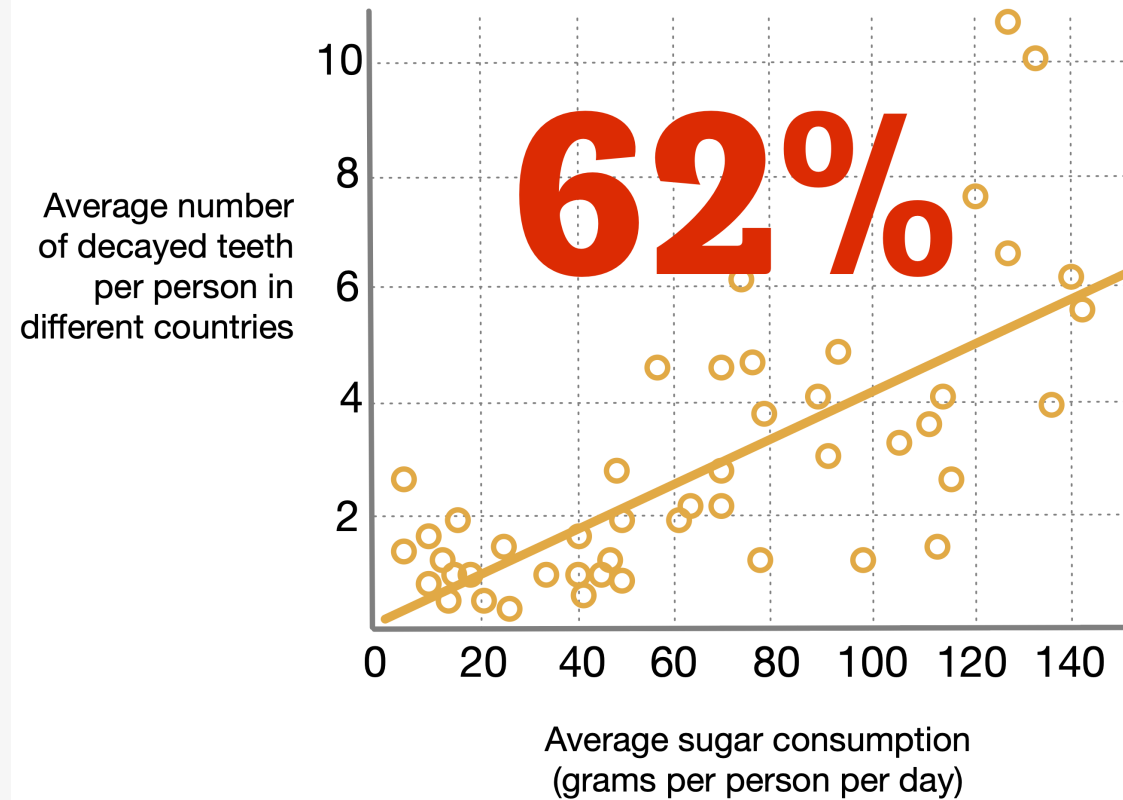
Which of the following statements best describes the data in the graph below?



Pew Research

- A. In recent years, the rate of cavities has increased in many countries
- B. In some countries, people brush their teeth more frequently than in other countries
- C. The more sugar people eat, the more likely they are to get cavities
- D. In recent years, the consumption of sugar has increased in many countries

Which of the following statements best describes the data in the graph below?



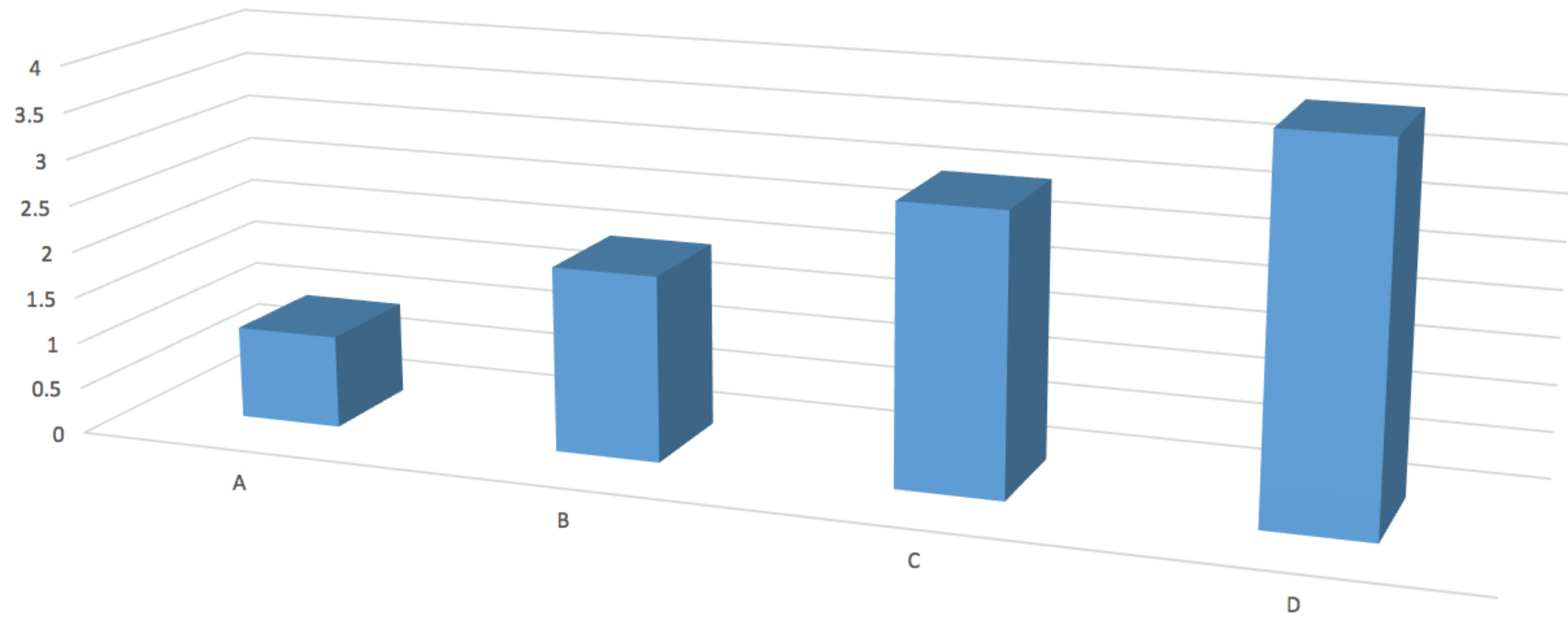
Pew Research

- A. In recent years, the rate of cavities has increased in many countries
- B. In some countries, people brush their teeth more frequently than in other countries
- C. The more sugar people eat, the more likely they are to get cavities
- D. In recent years, the consumption of sugar has increased in many countries

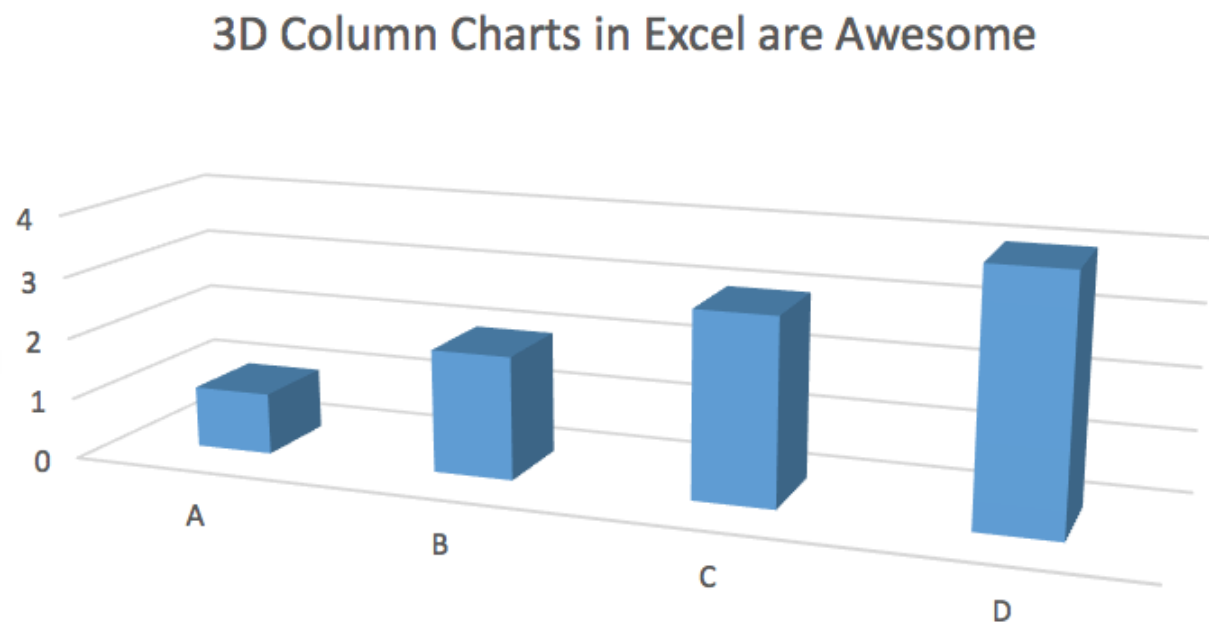
**Not Seeing Things**



### 3D Column Charts in Excel are Awesome



A	1
B	2
C	3
D	4



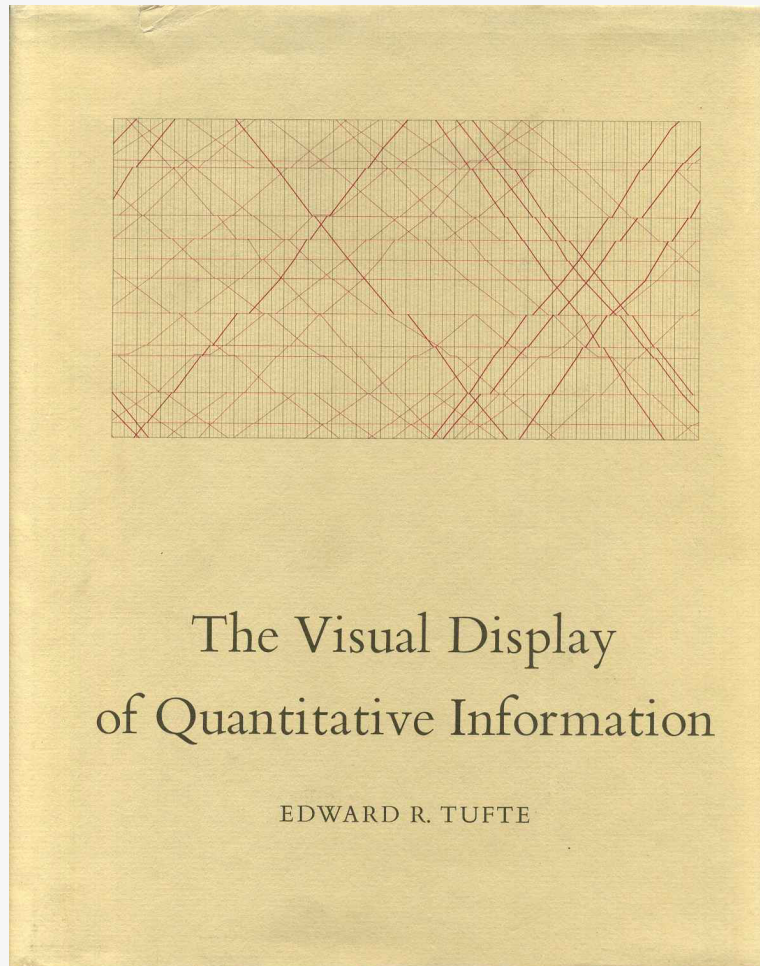
**Bad Taste**

**Bad Data**

**Bad Perception**

**Bad Taste: Simplify, Simplify?**

# Tufte's “Data to Ink Ratio”







## MONSTROUS COSTS

Total House and Senate  
campaign expenditures,  
in millions

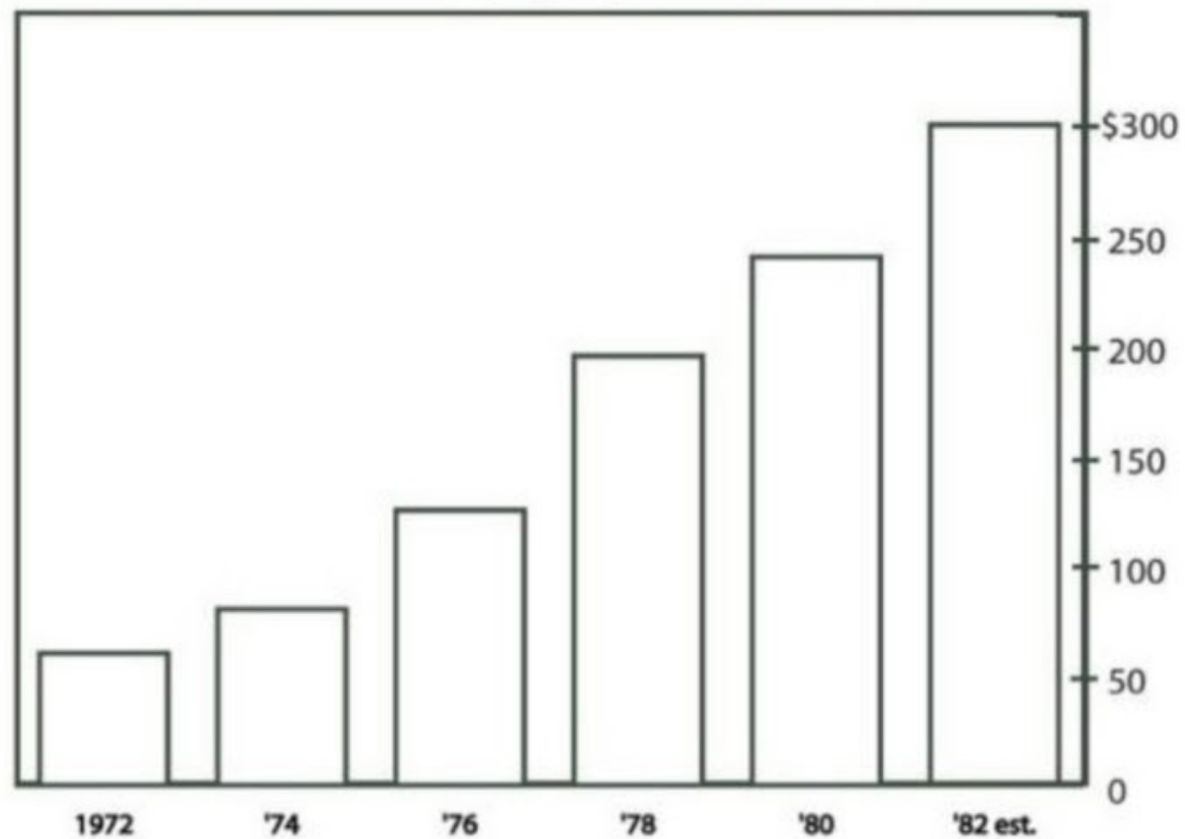


Nigel Holmes

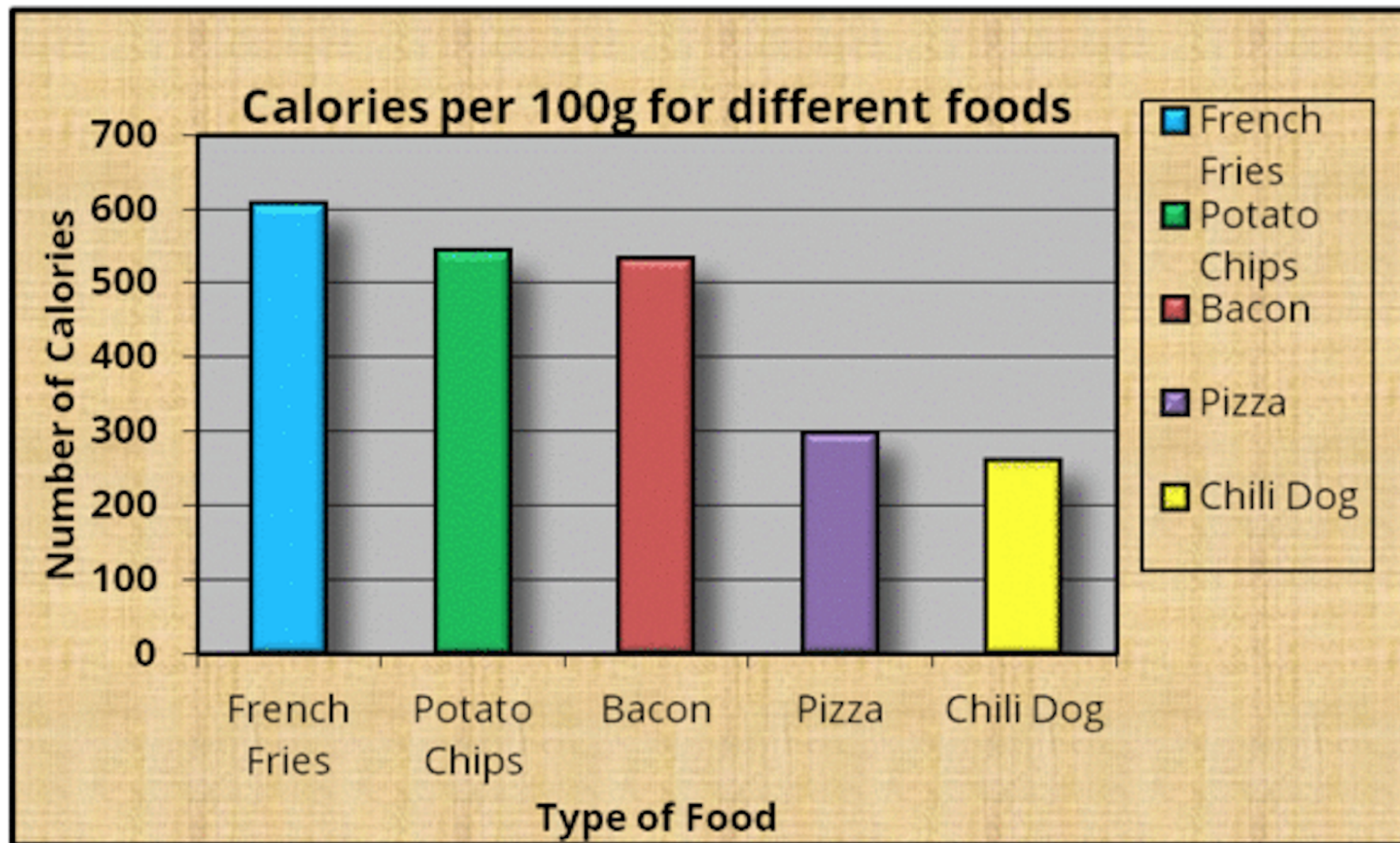


### MONSTROUS COSTS

Total House and Senate campaign expenditures, in millions



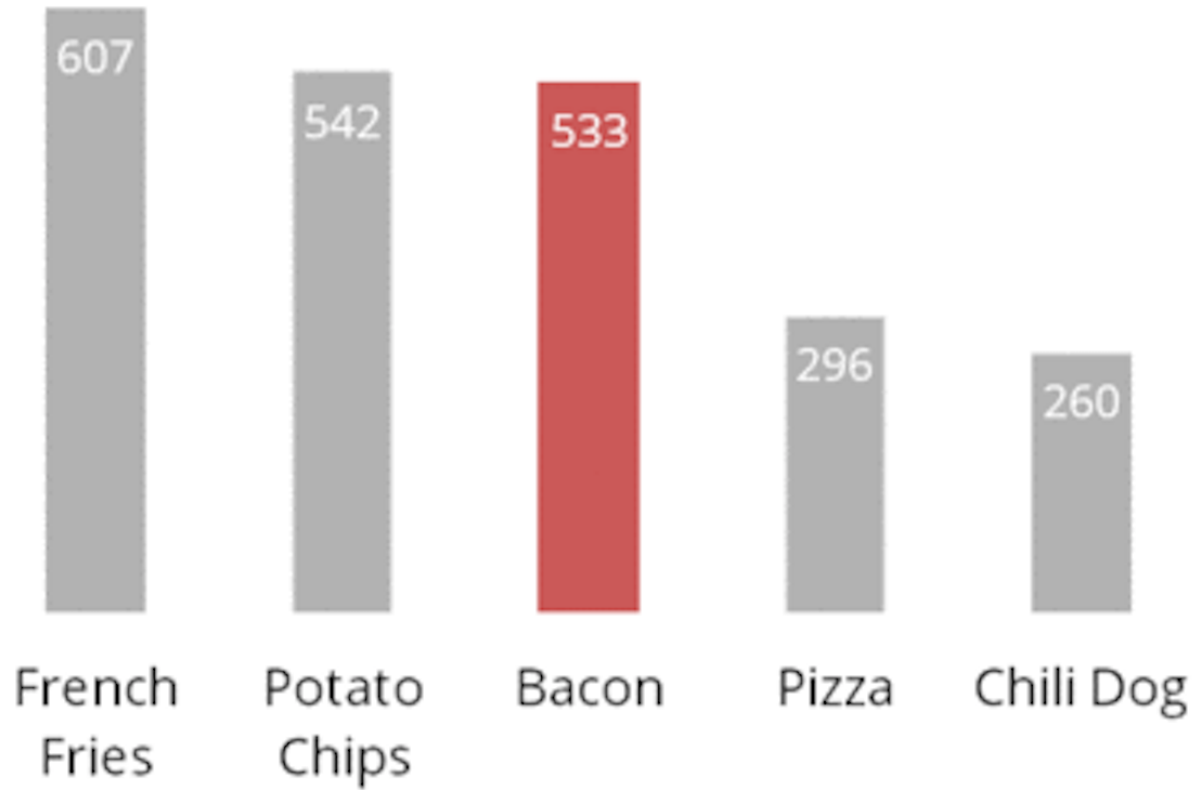




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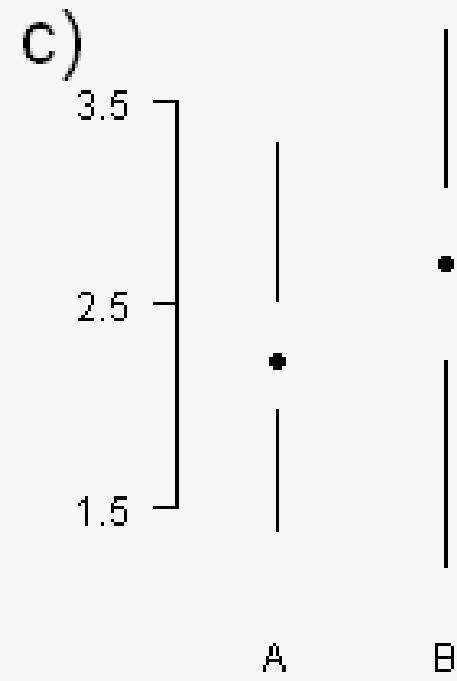
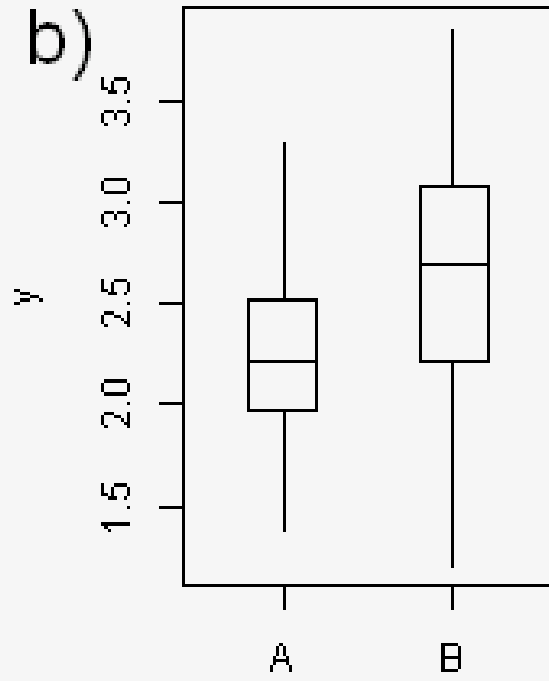
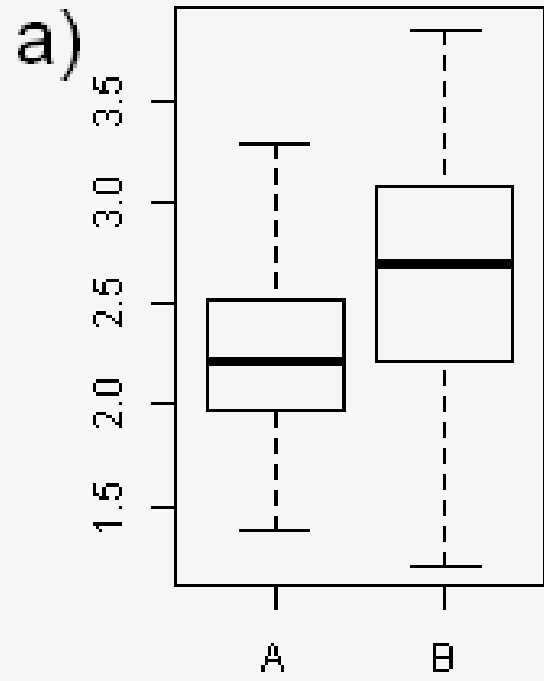
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## Calories per 100g



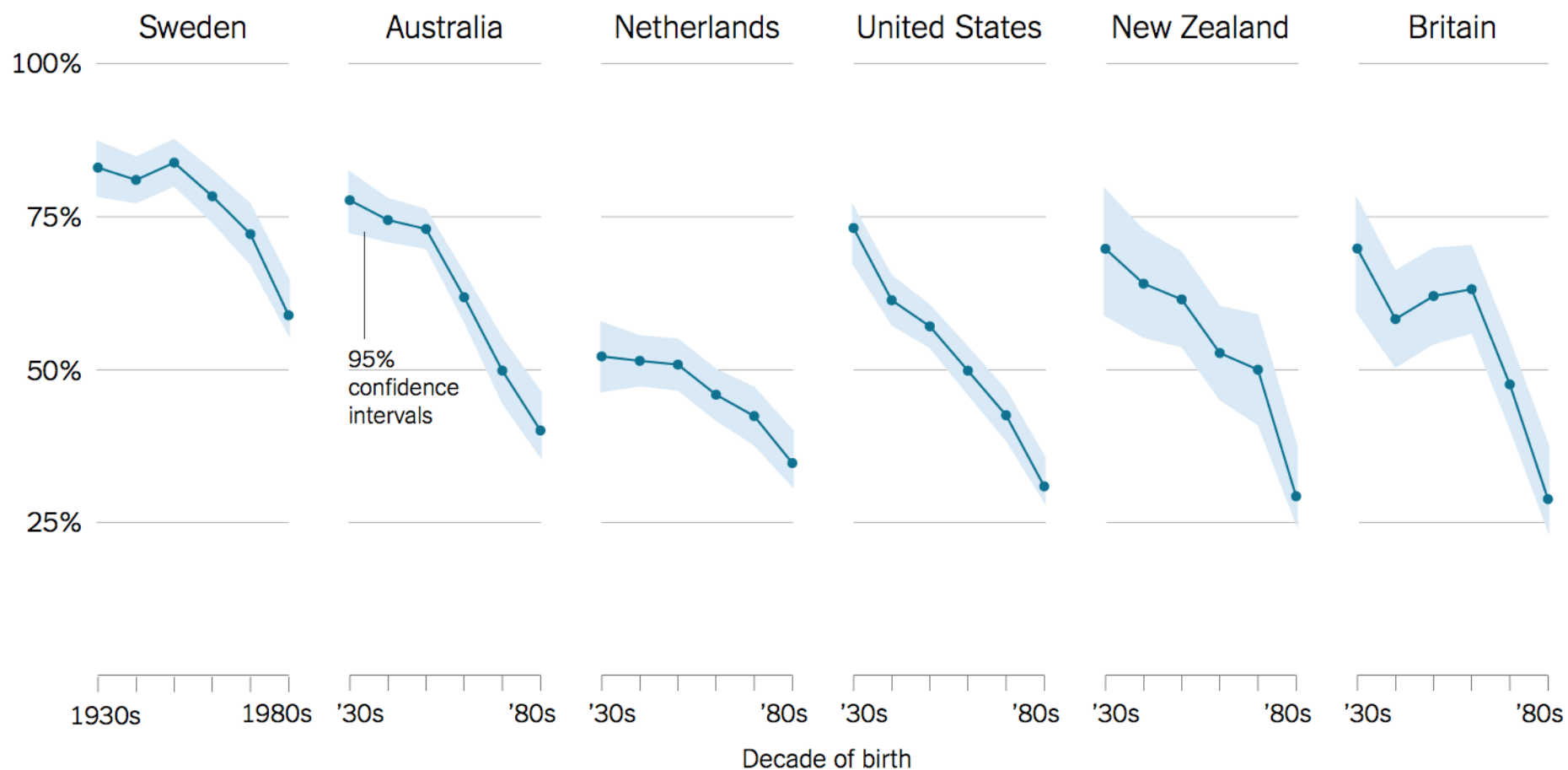
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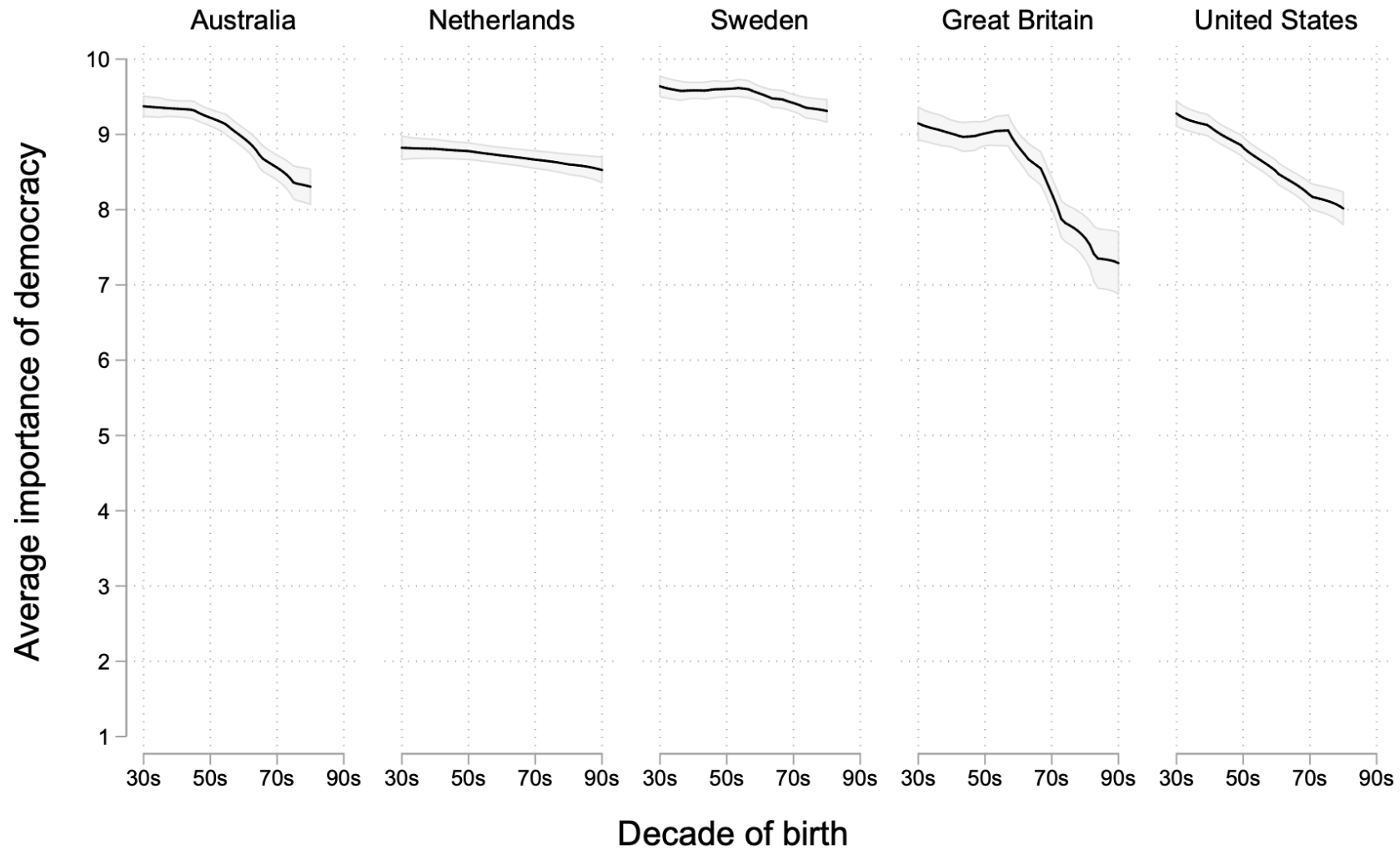


# **Bad Data: Junk-Free Junk Charts**

## Percentage of people who say it is “essential” to live in a democracy



Source: Yascha Mounk and Roberto Stefan Foa, “The Signs of Democratic Deconsolidation,” *Journal of Democracy* | By The New York Times



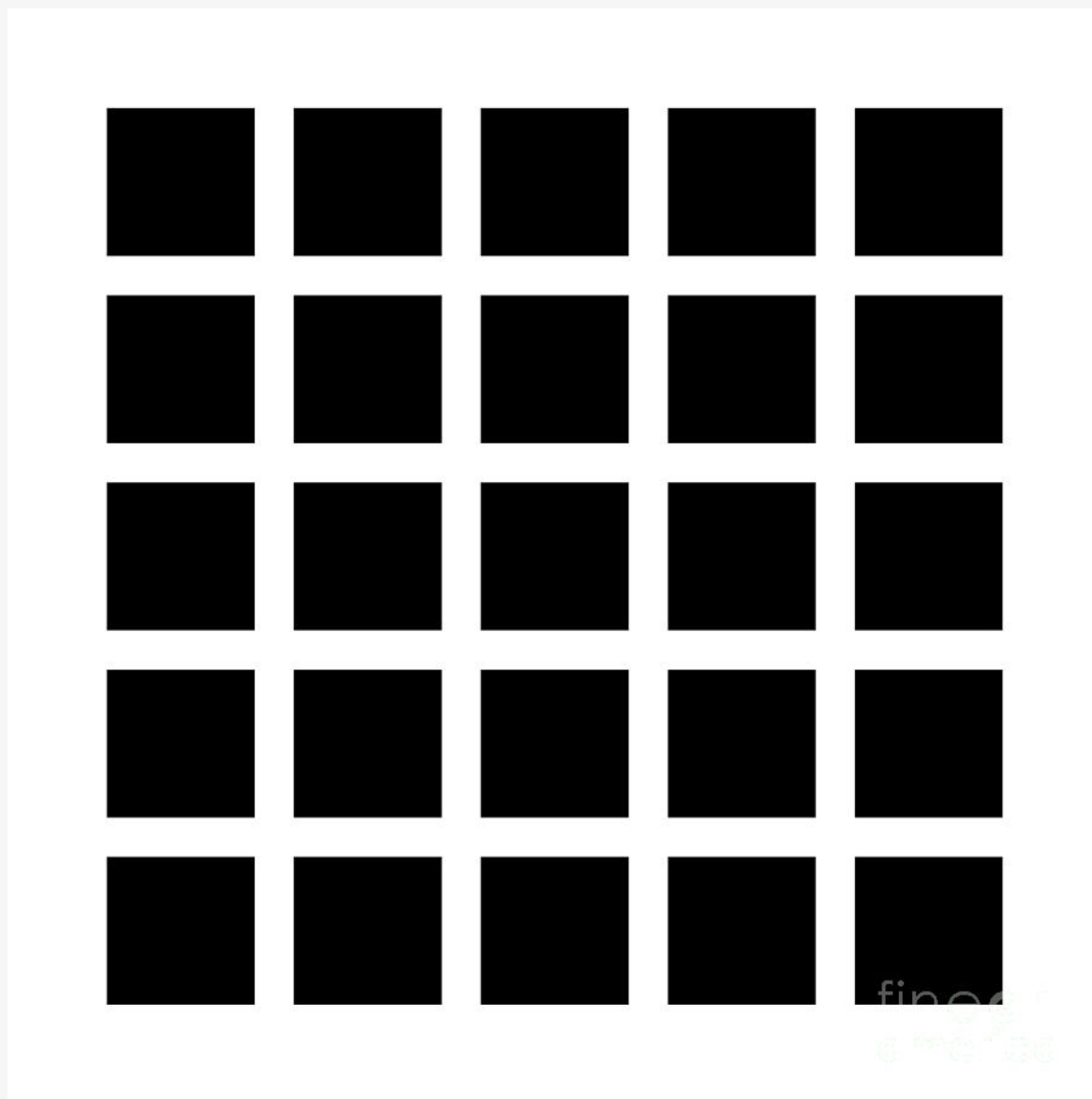
Graph by Erik Voeten, based on WVS 5

Erik Voeten

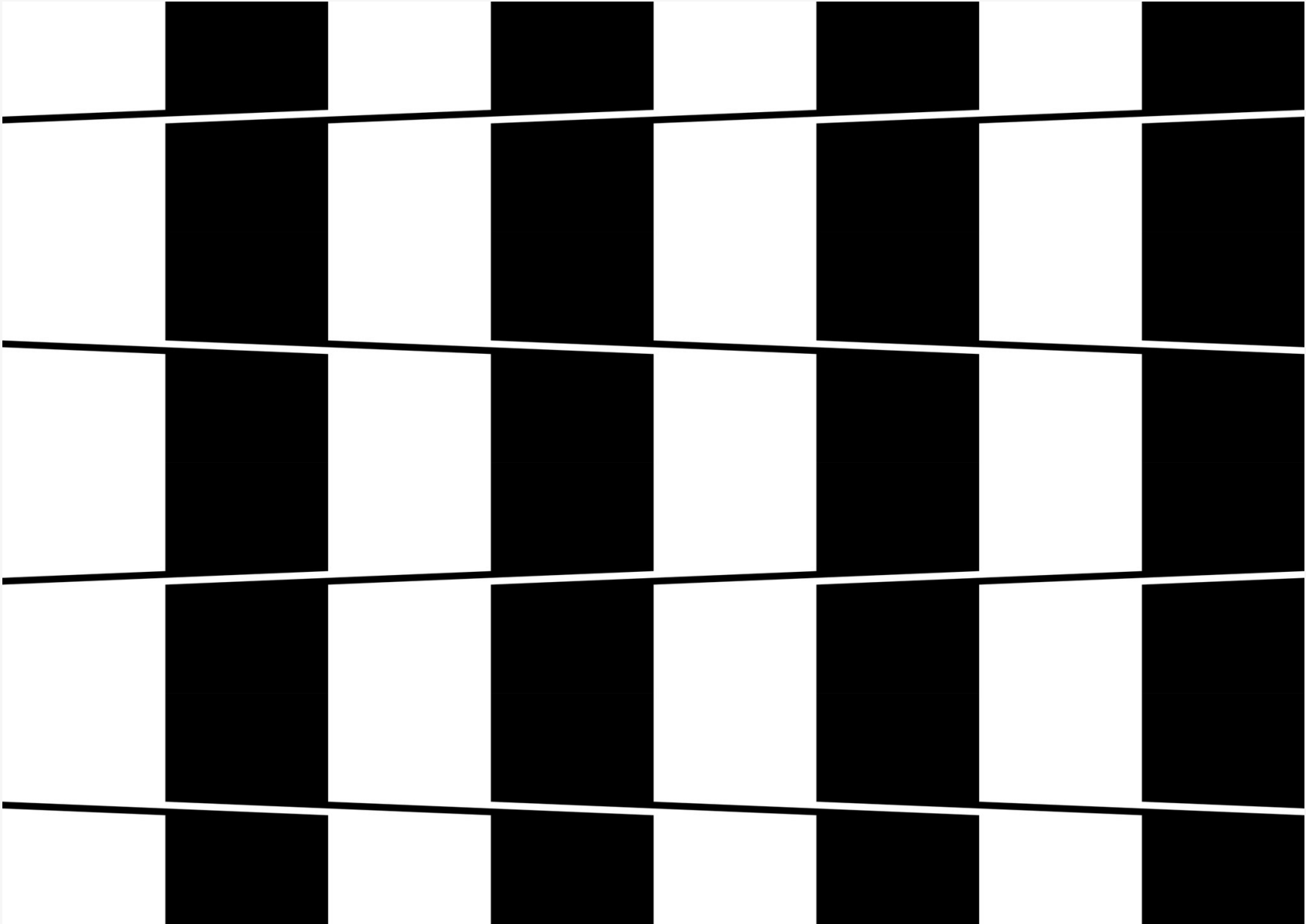
# Bad Perception: Seeing and Not Seeing

# Edges & Contrasts

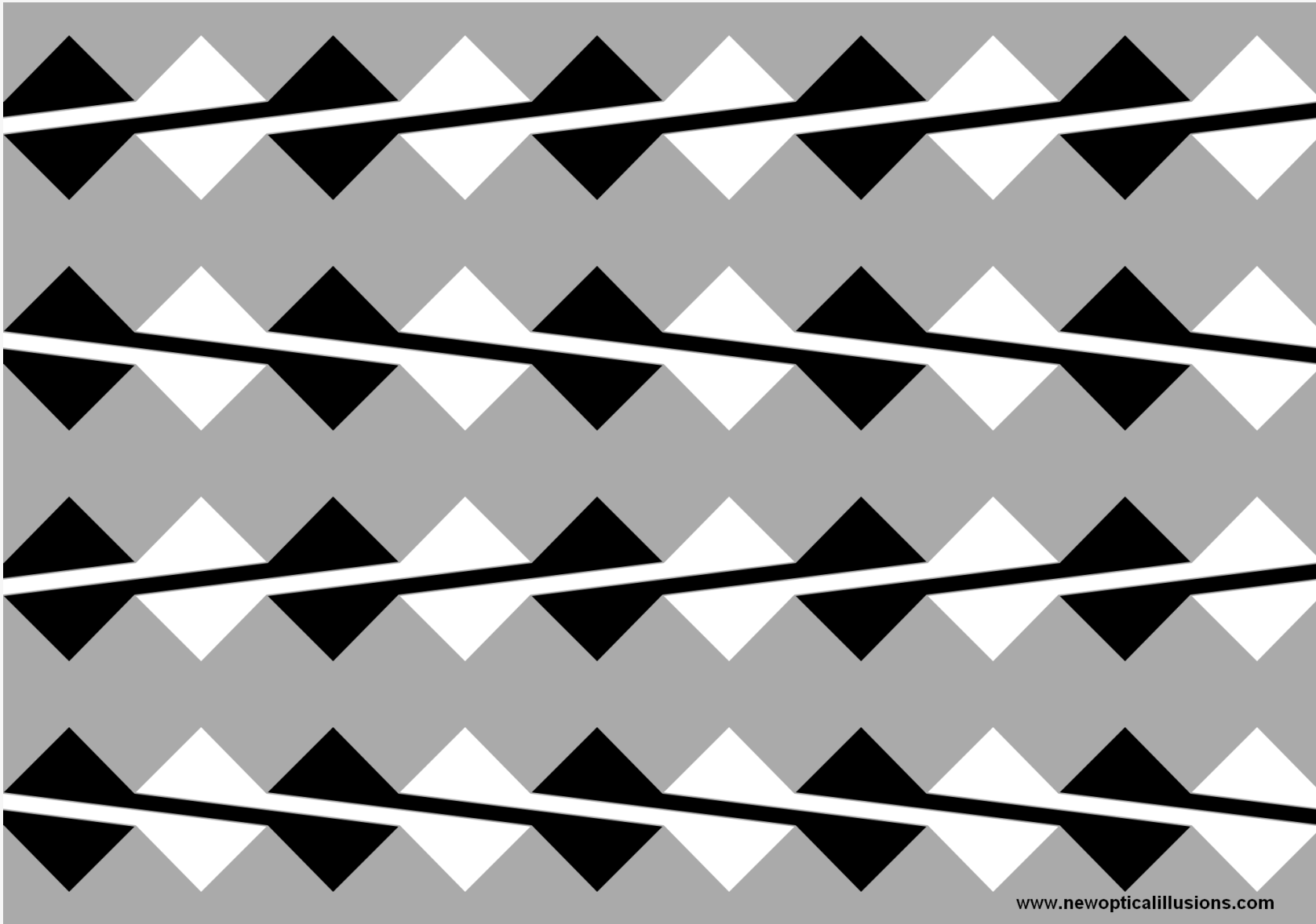




Hermann Grid Effect




Fraser Columns



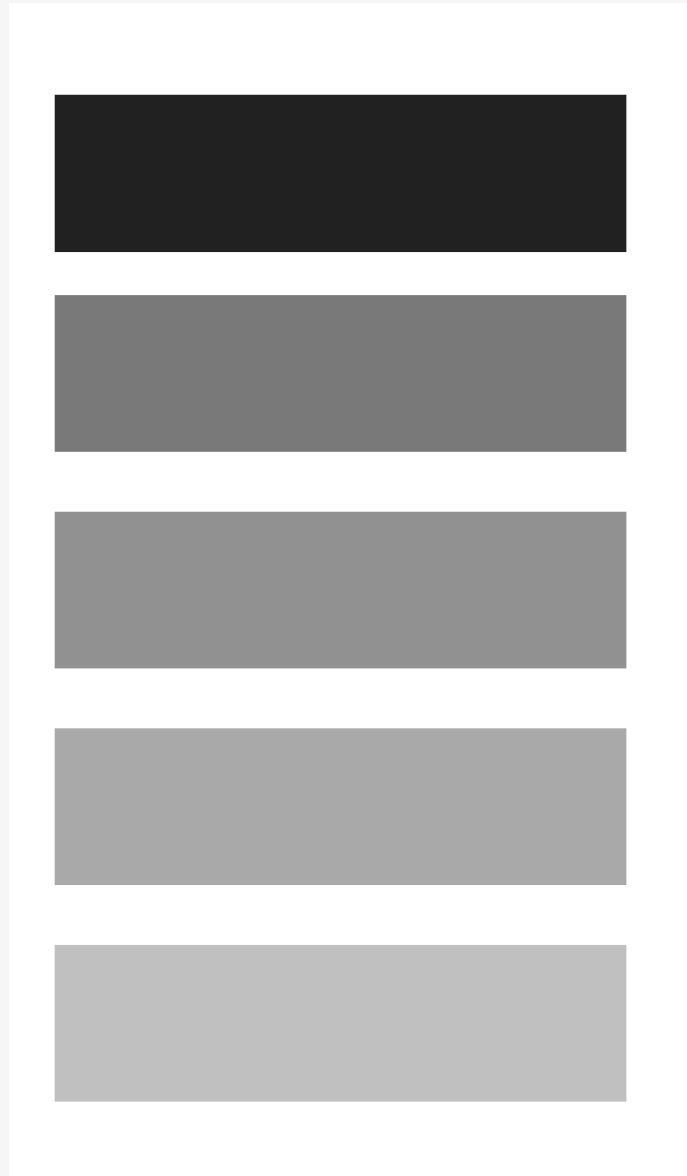
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Fraser Diamonds

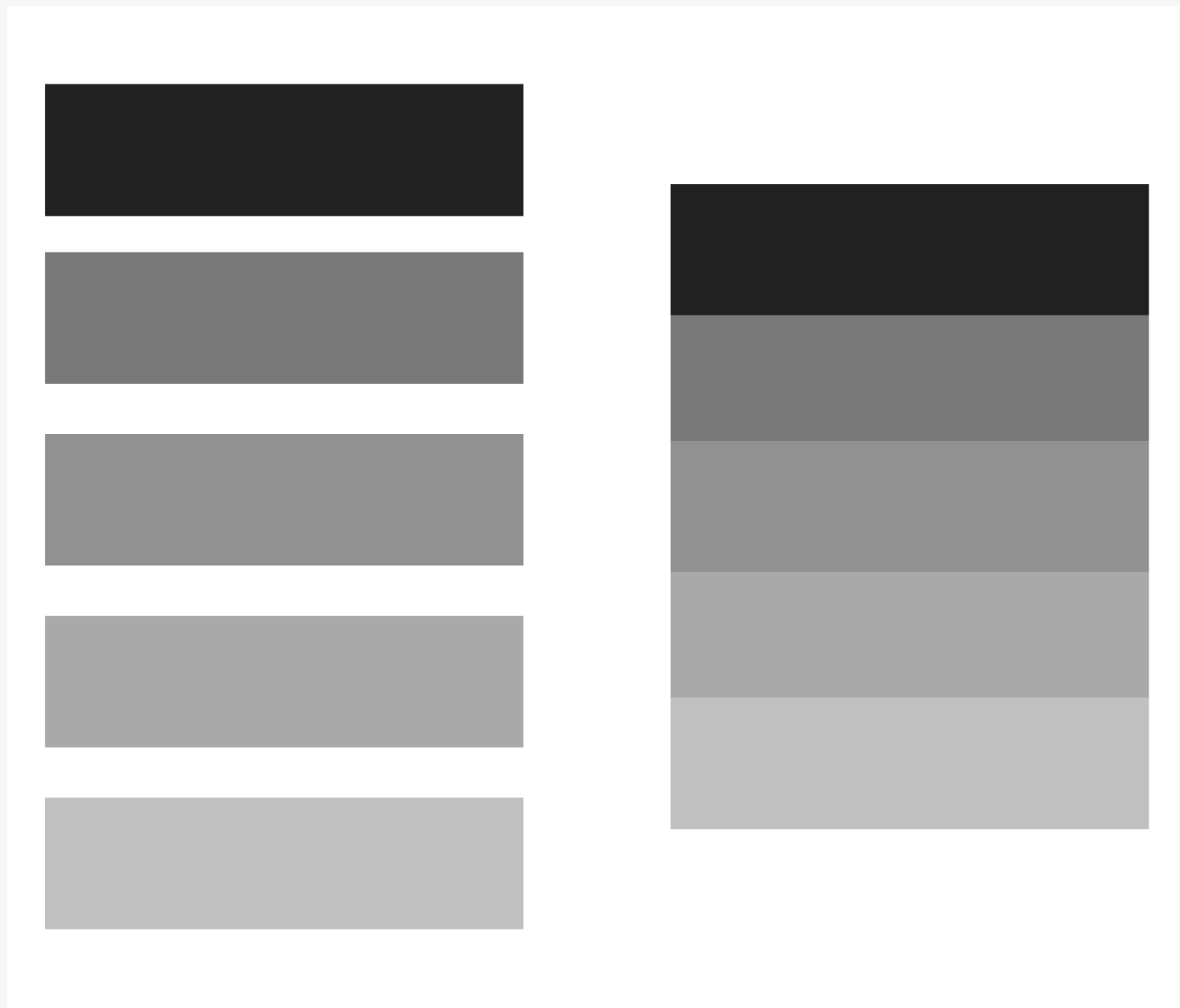
The image features two concentric circles centered on a light gray square background. The inner circle is a vibrant red, and the outer circle is a solid black. Both circles are perfectly circular and have a consistent thickness. The text is positioned in the center of the red circle.

These are two perfectly  
geometrical circles



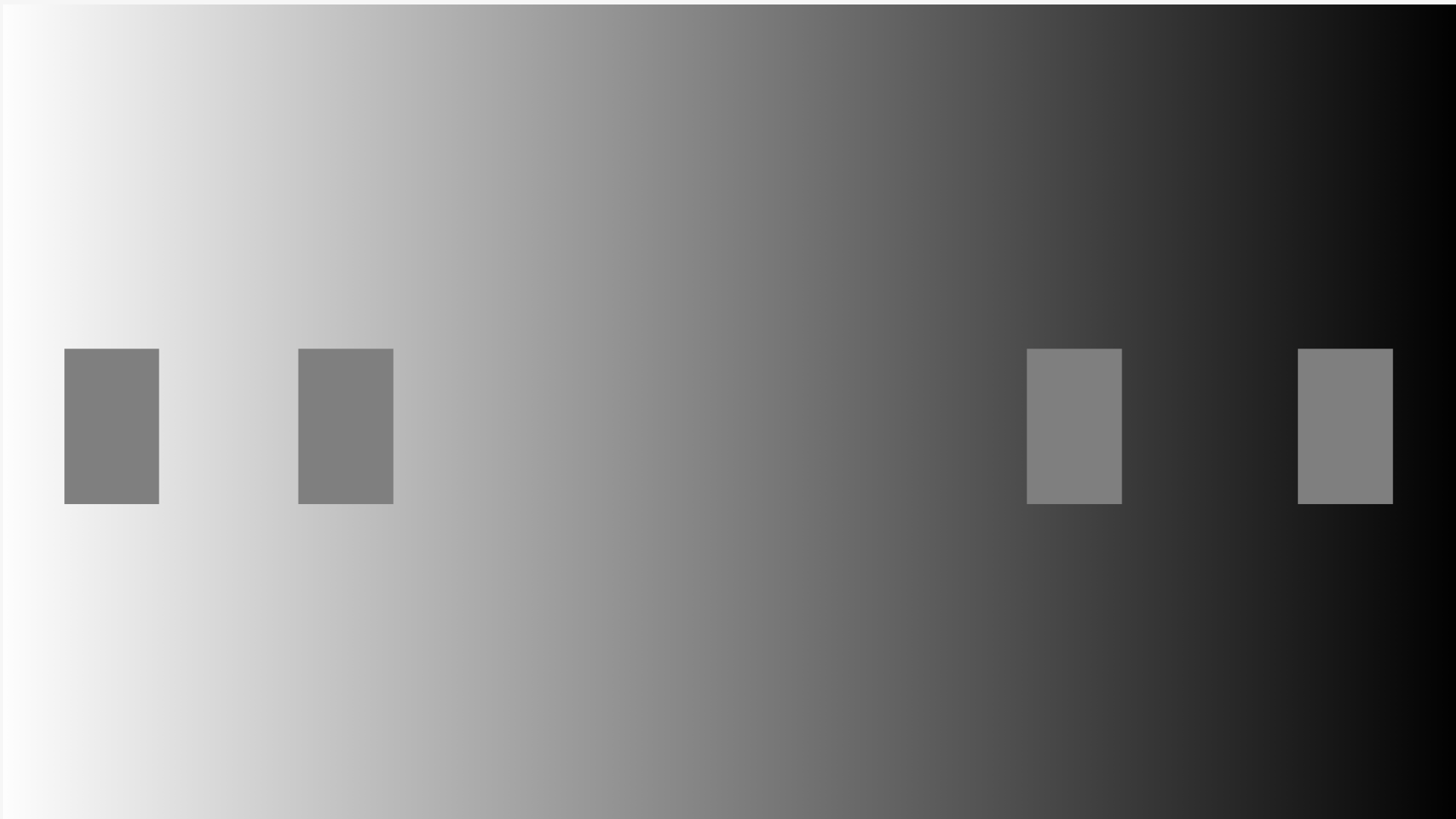


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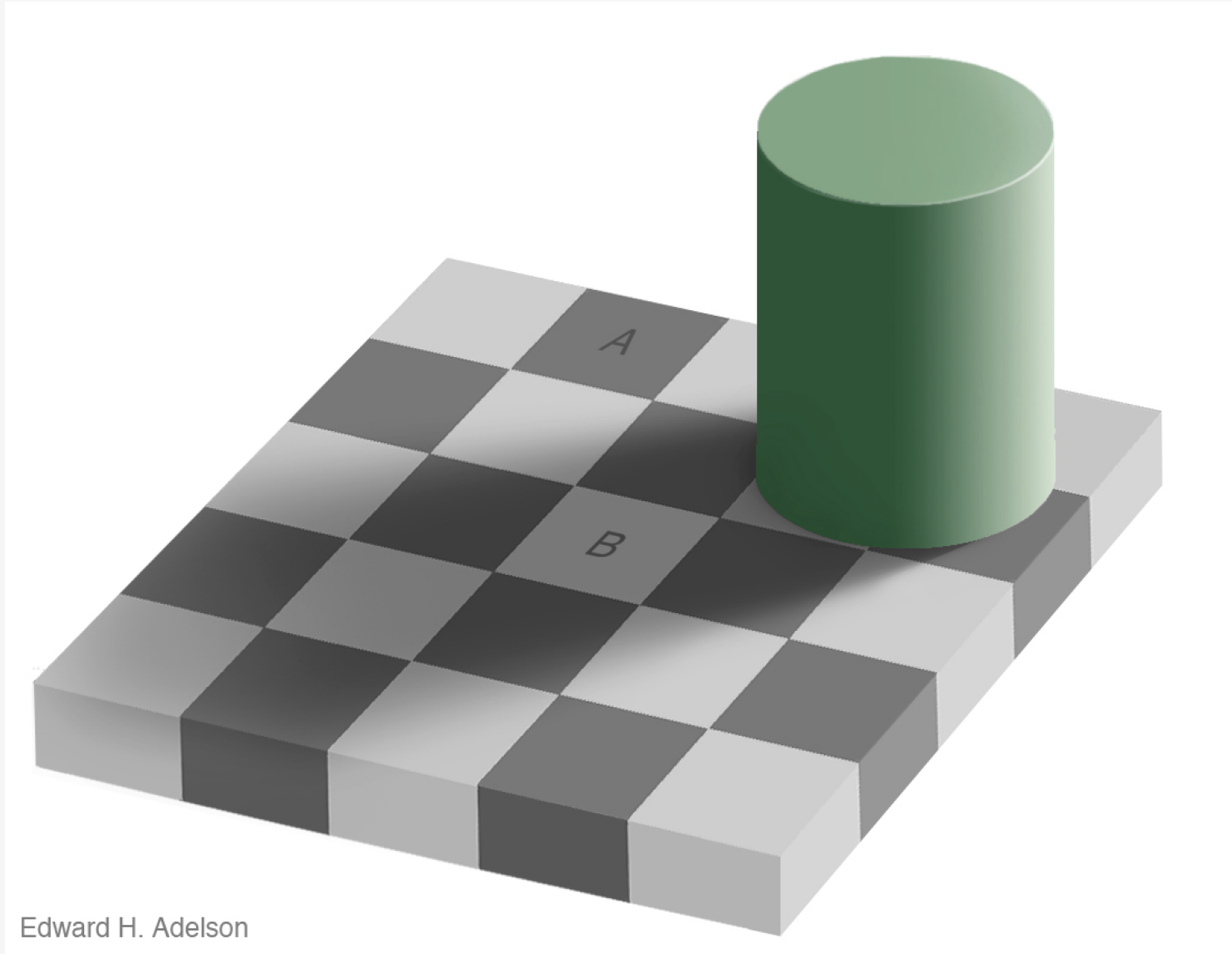


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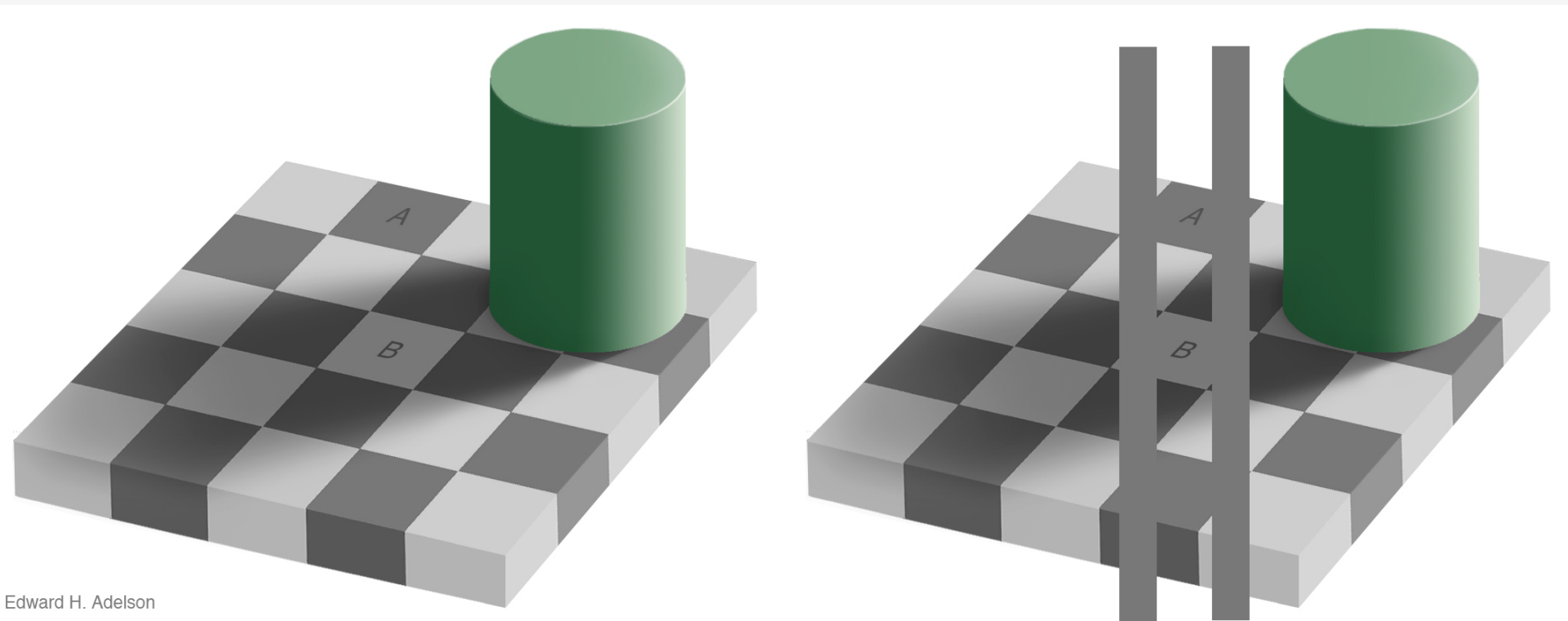






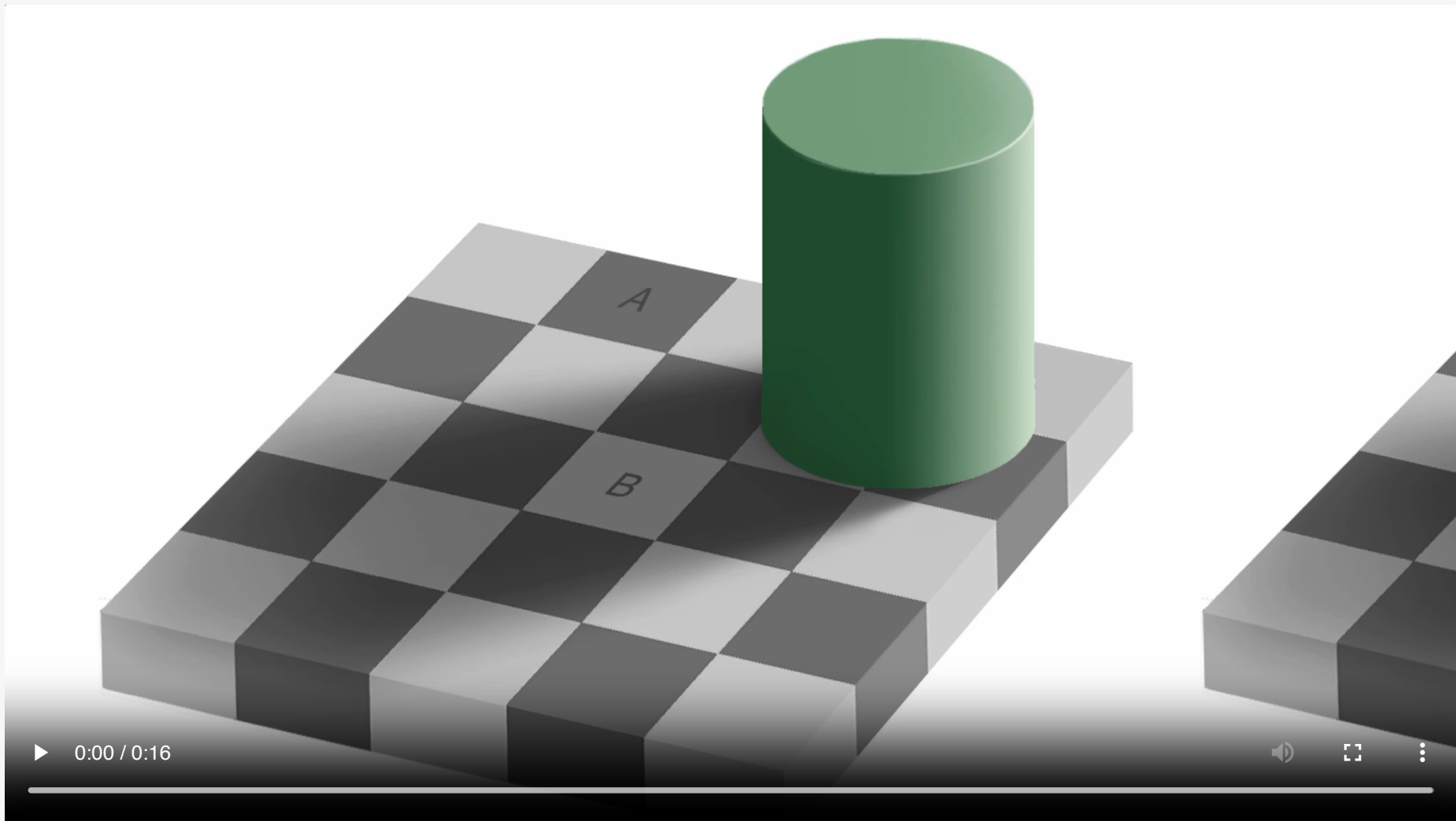
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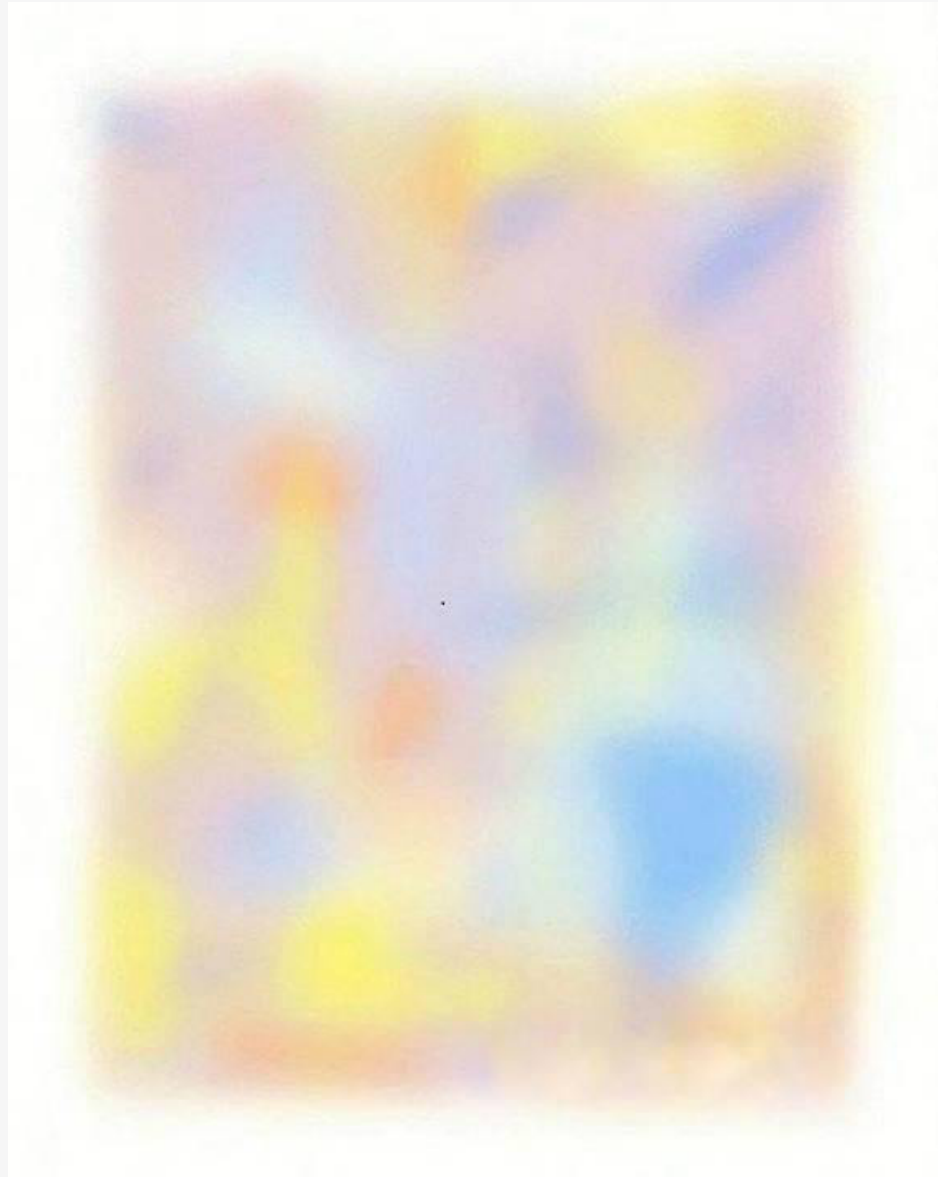
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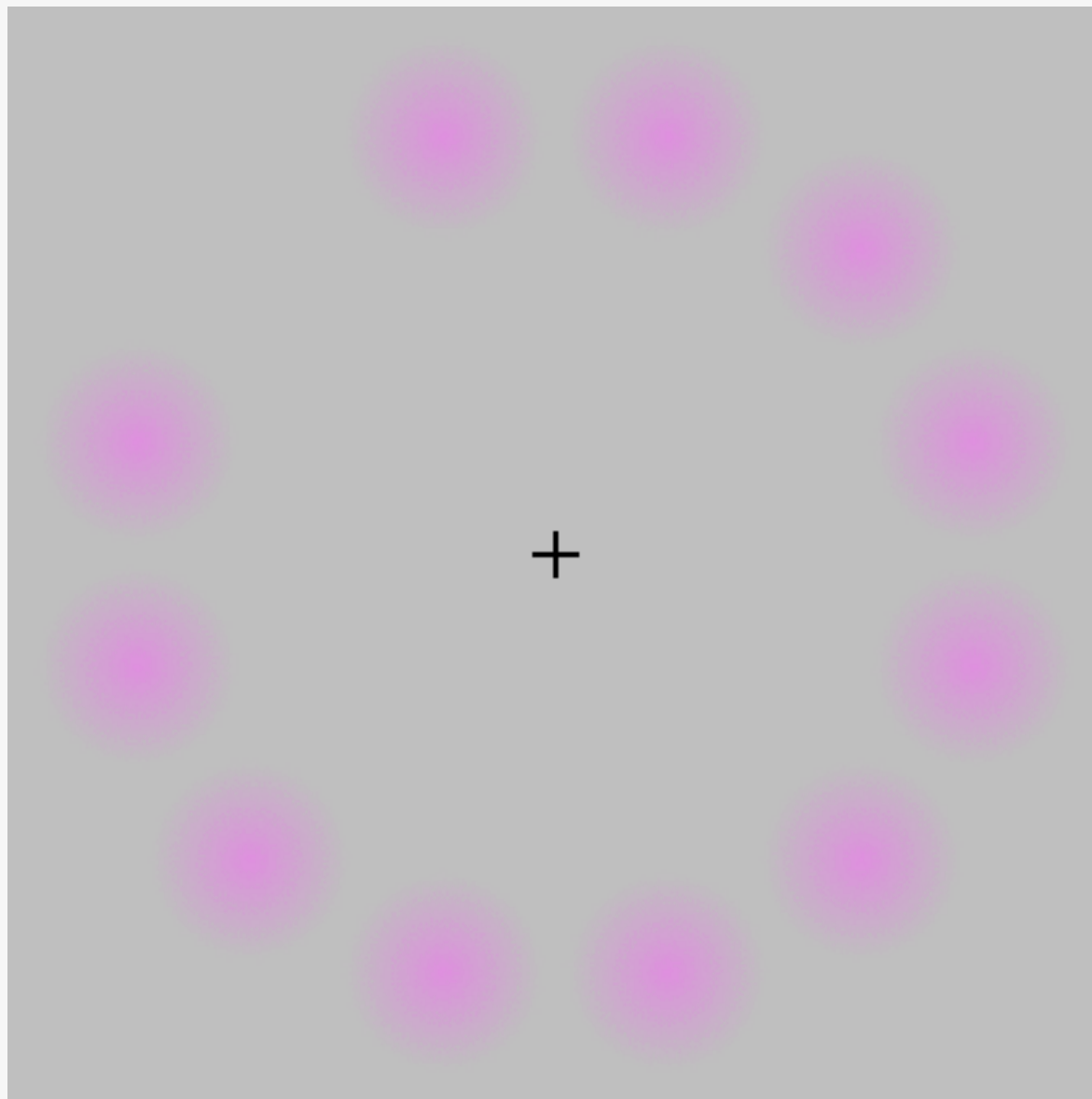
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# Luminance and Color

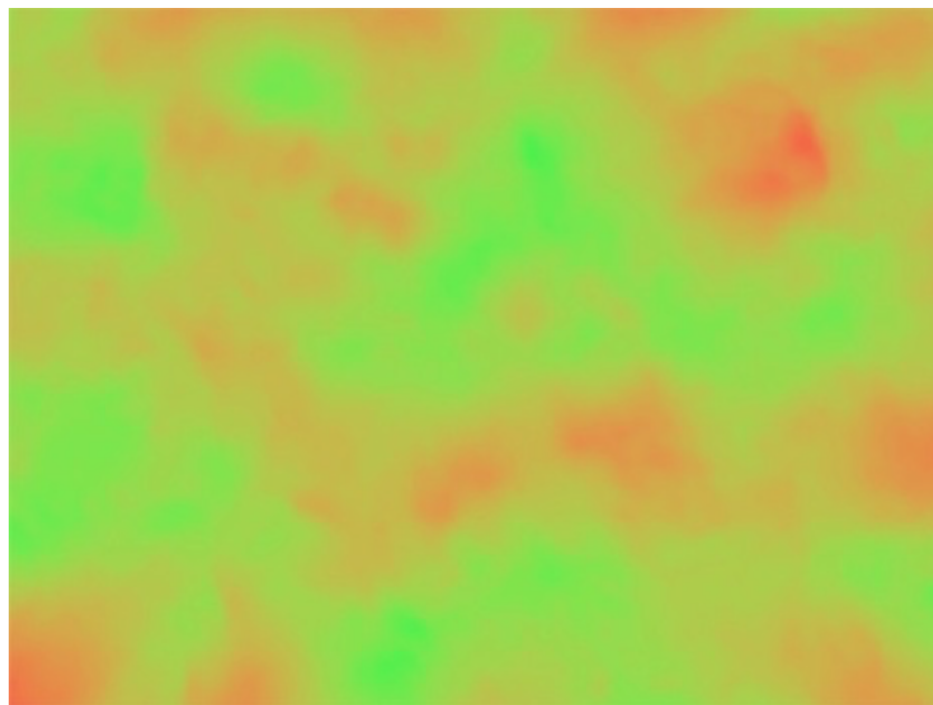


Troxler effect

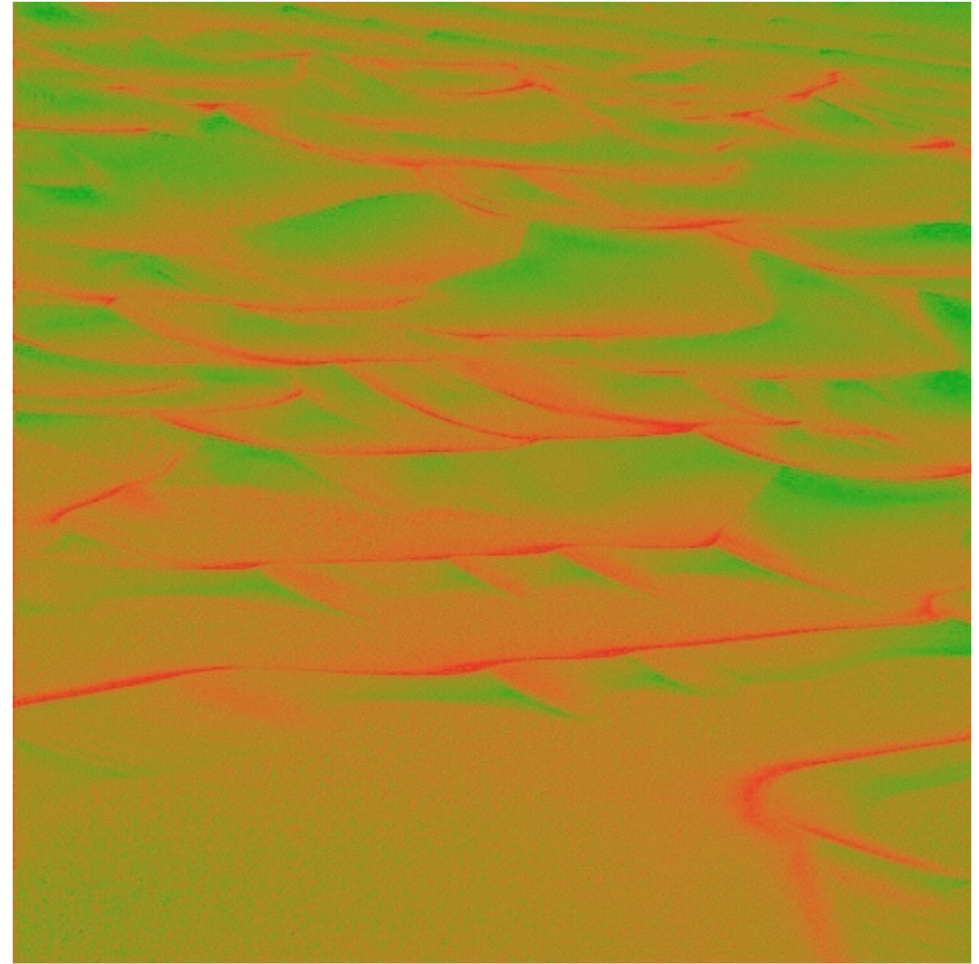




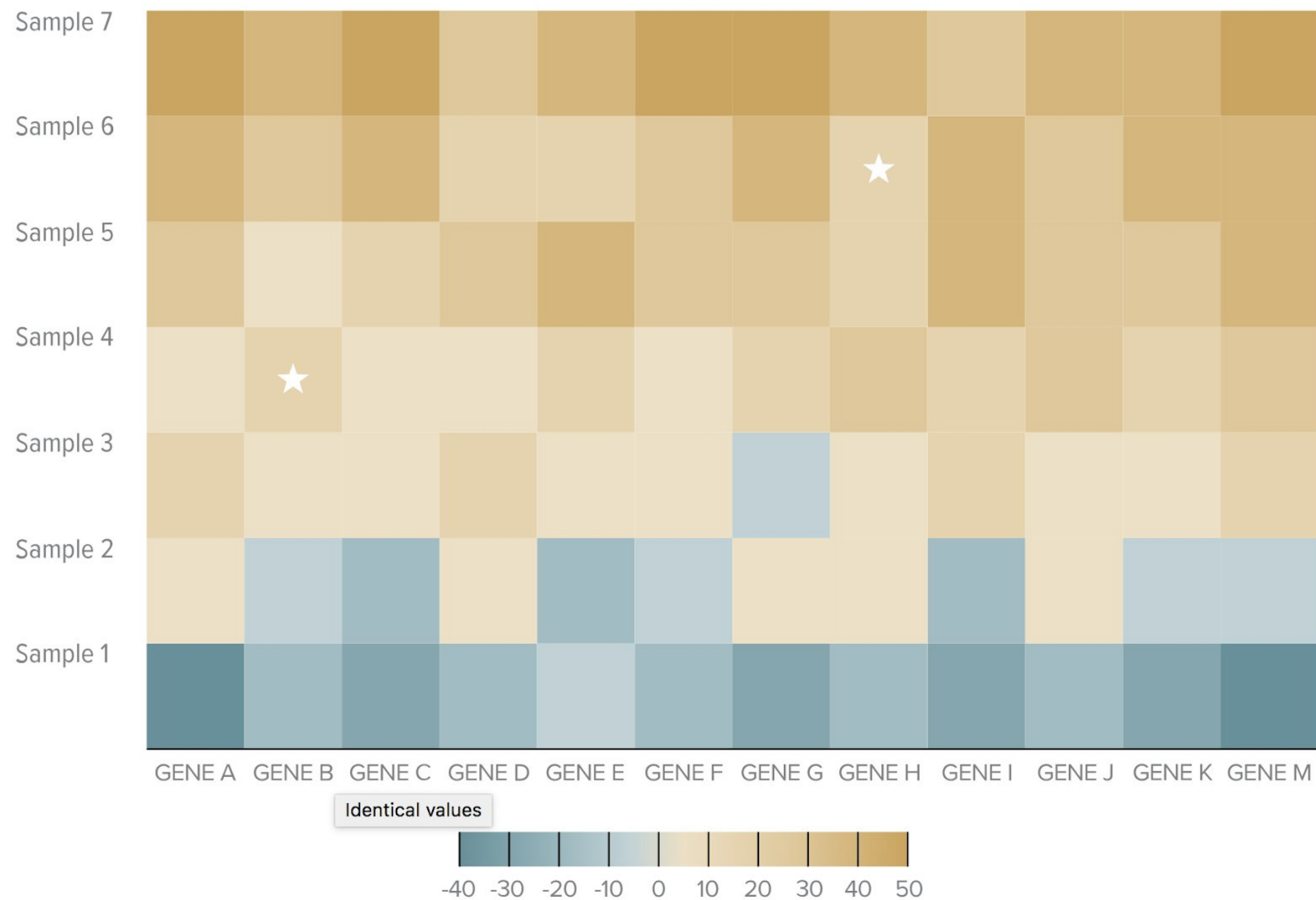
Lilac Chaser



Colin Ware



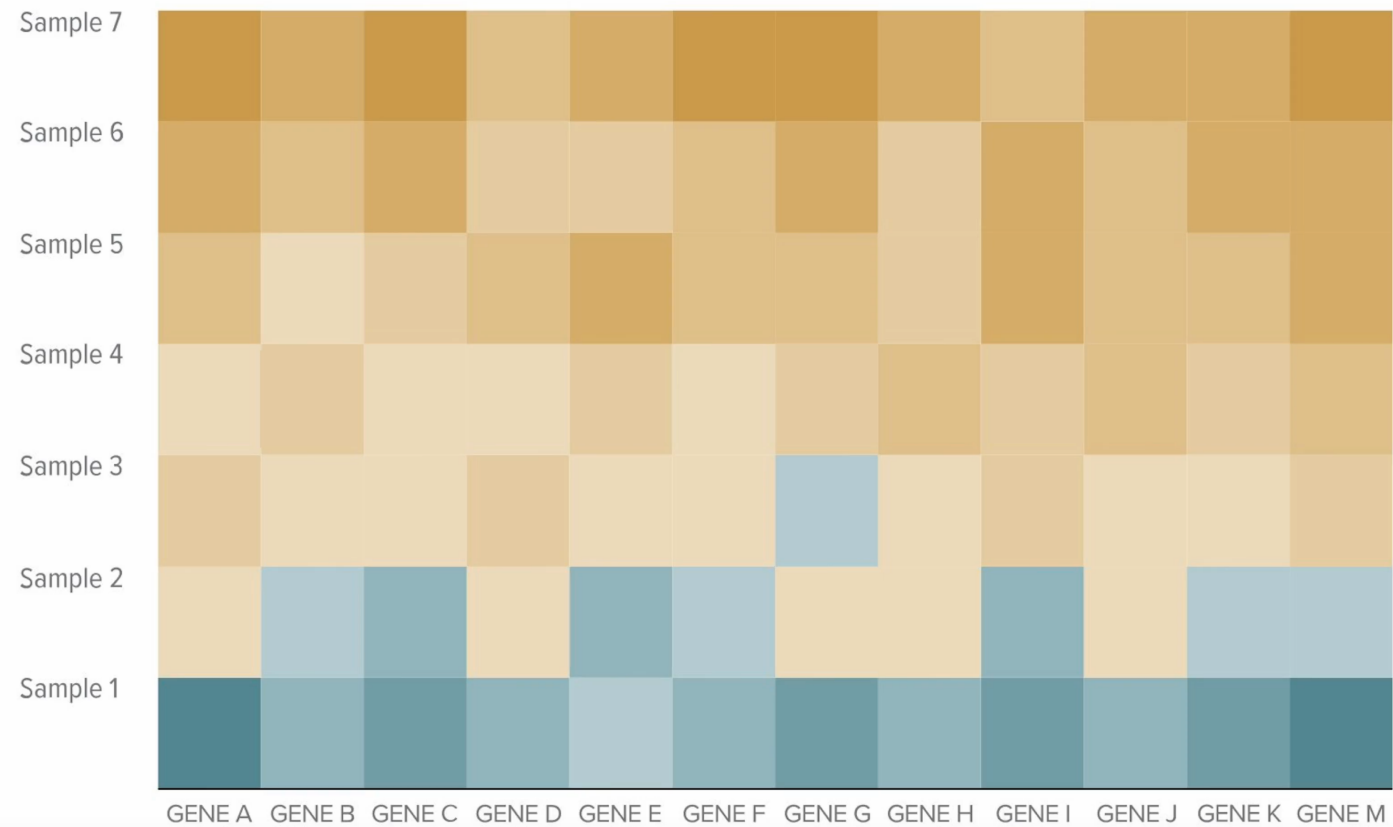
Colin Ware



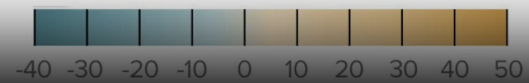
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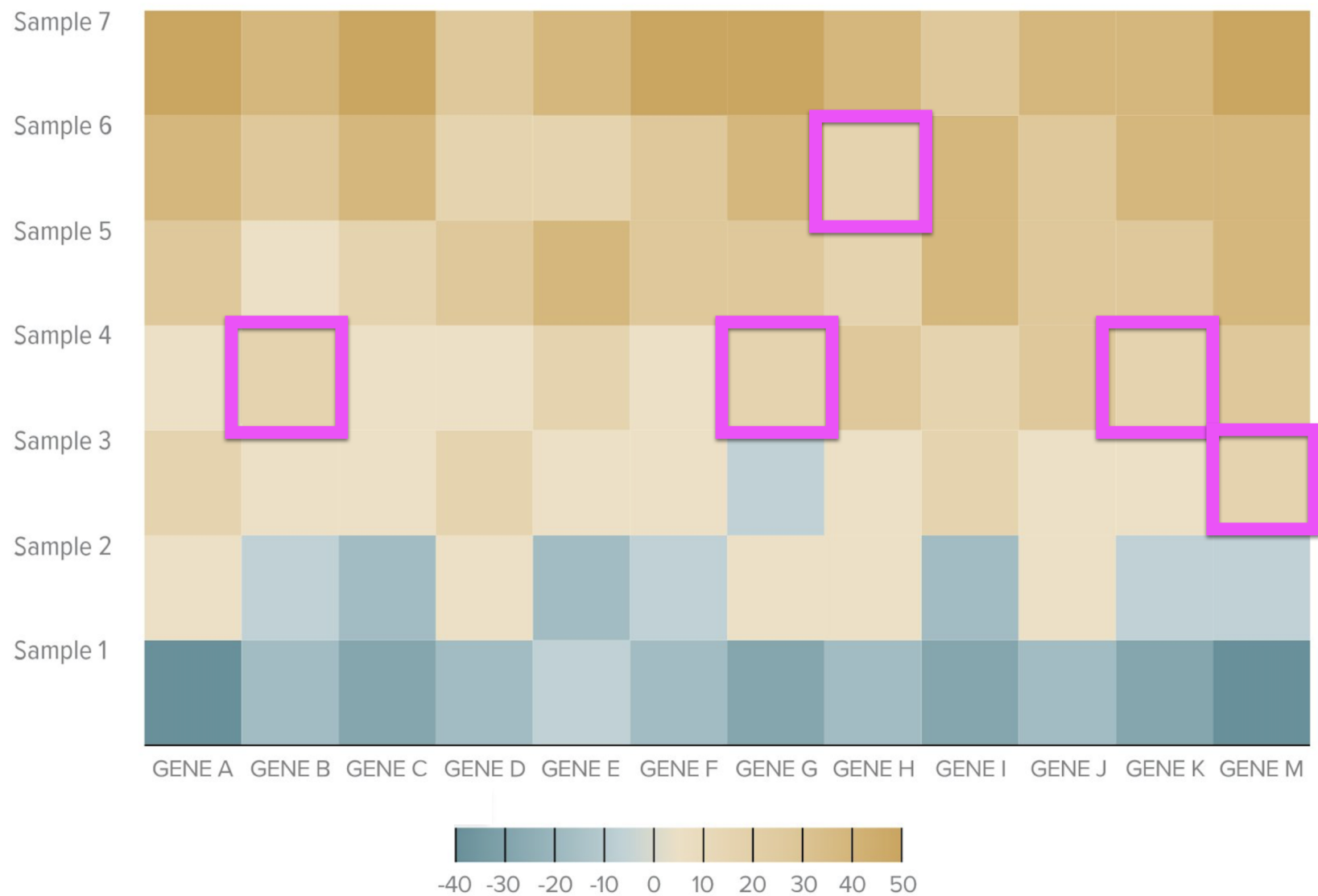
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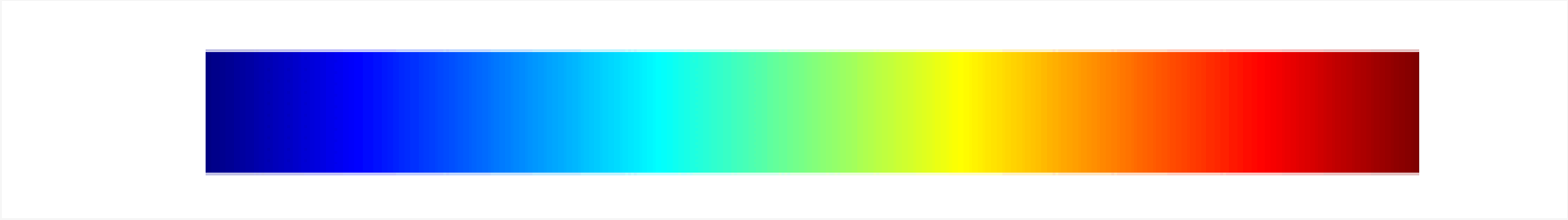
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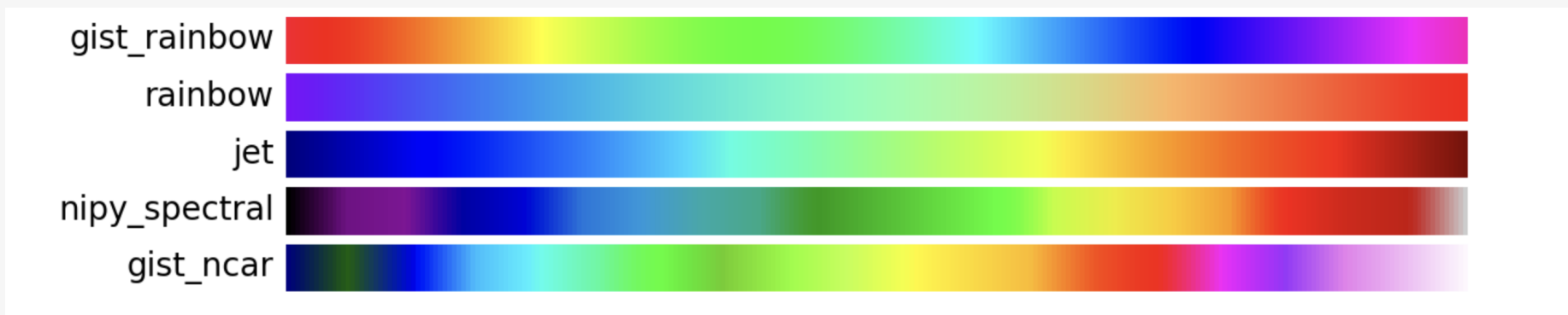




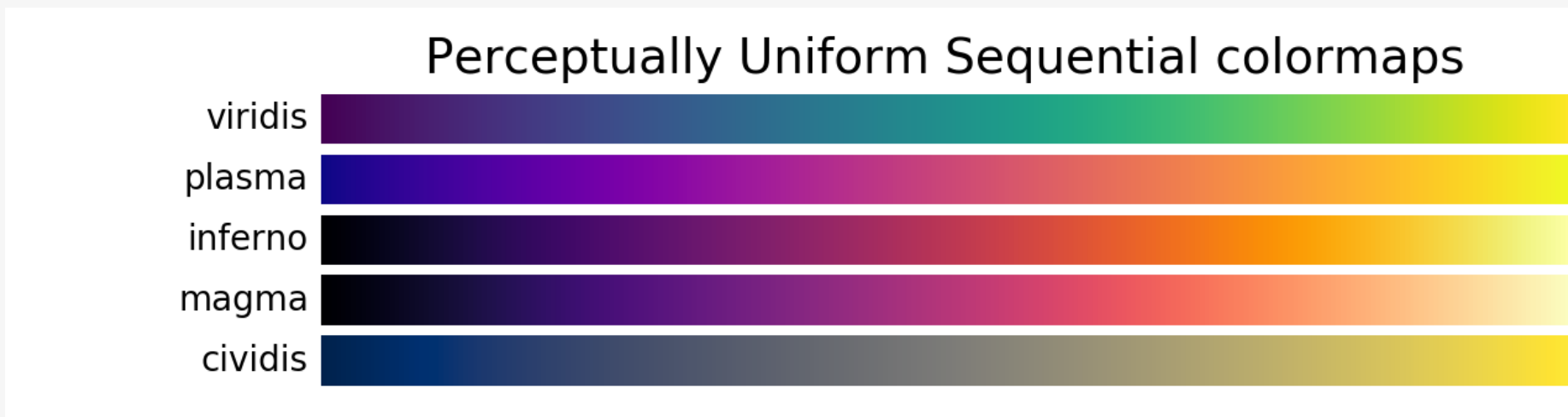
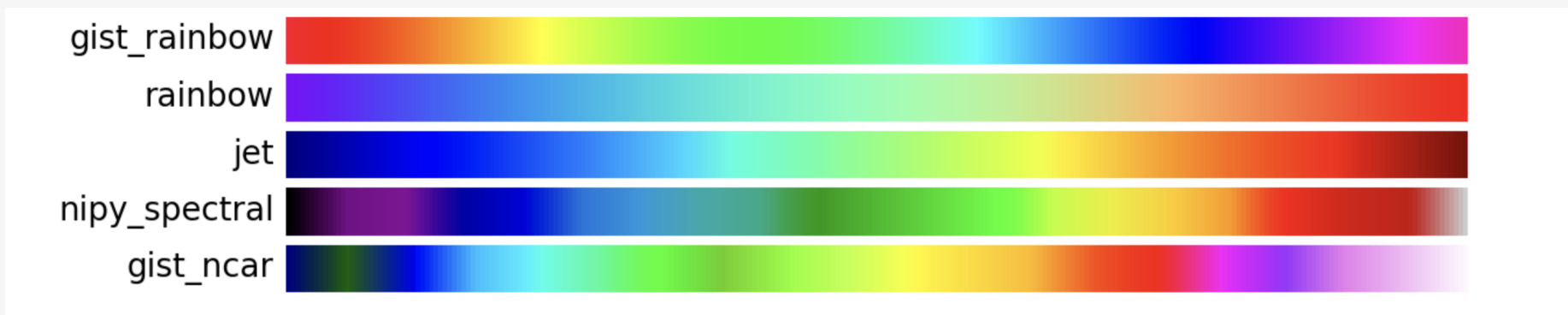
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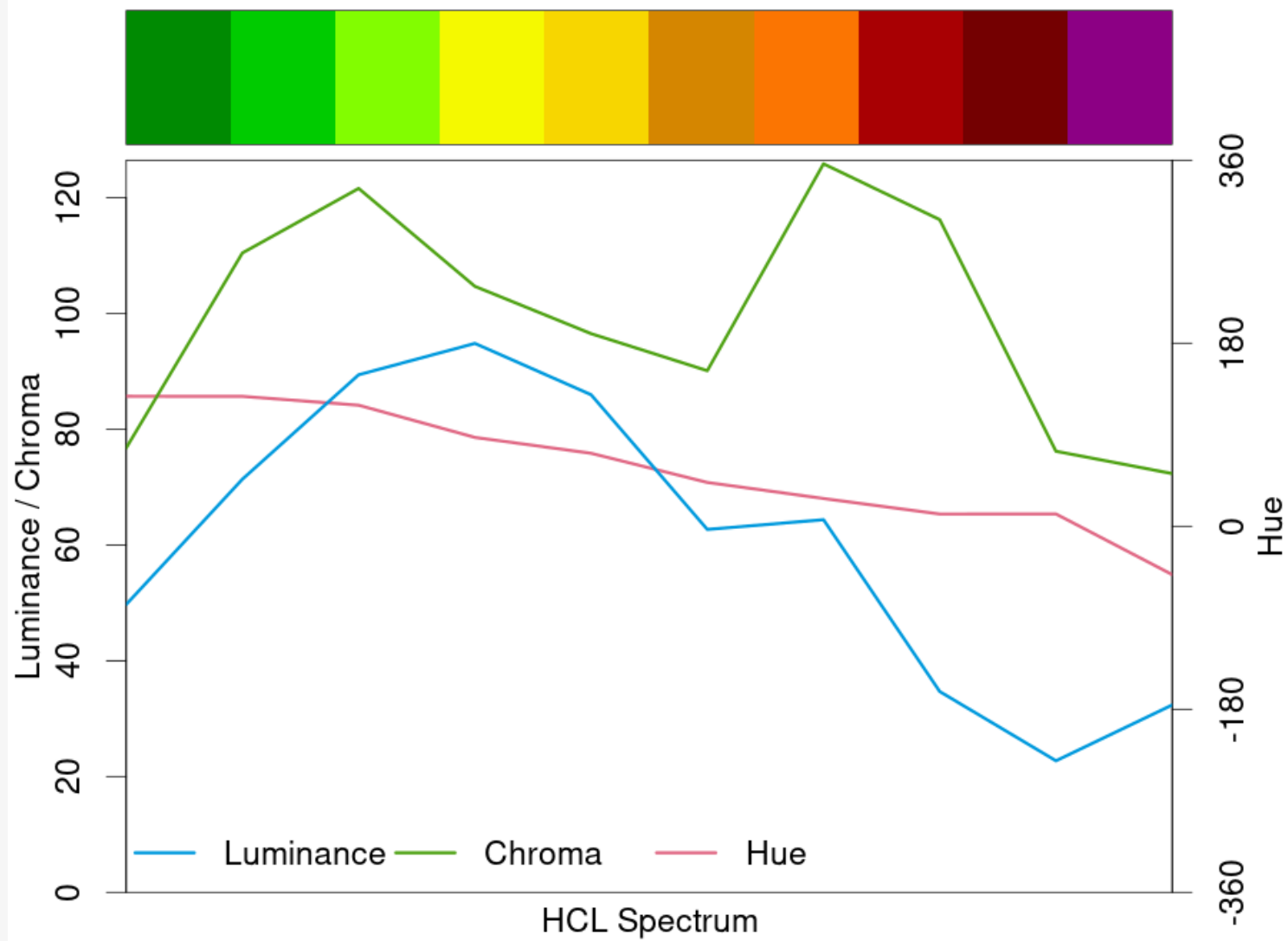
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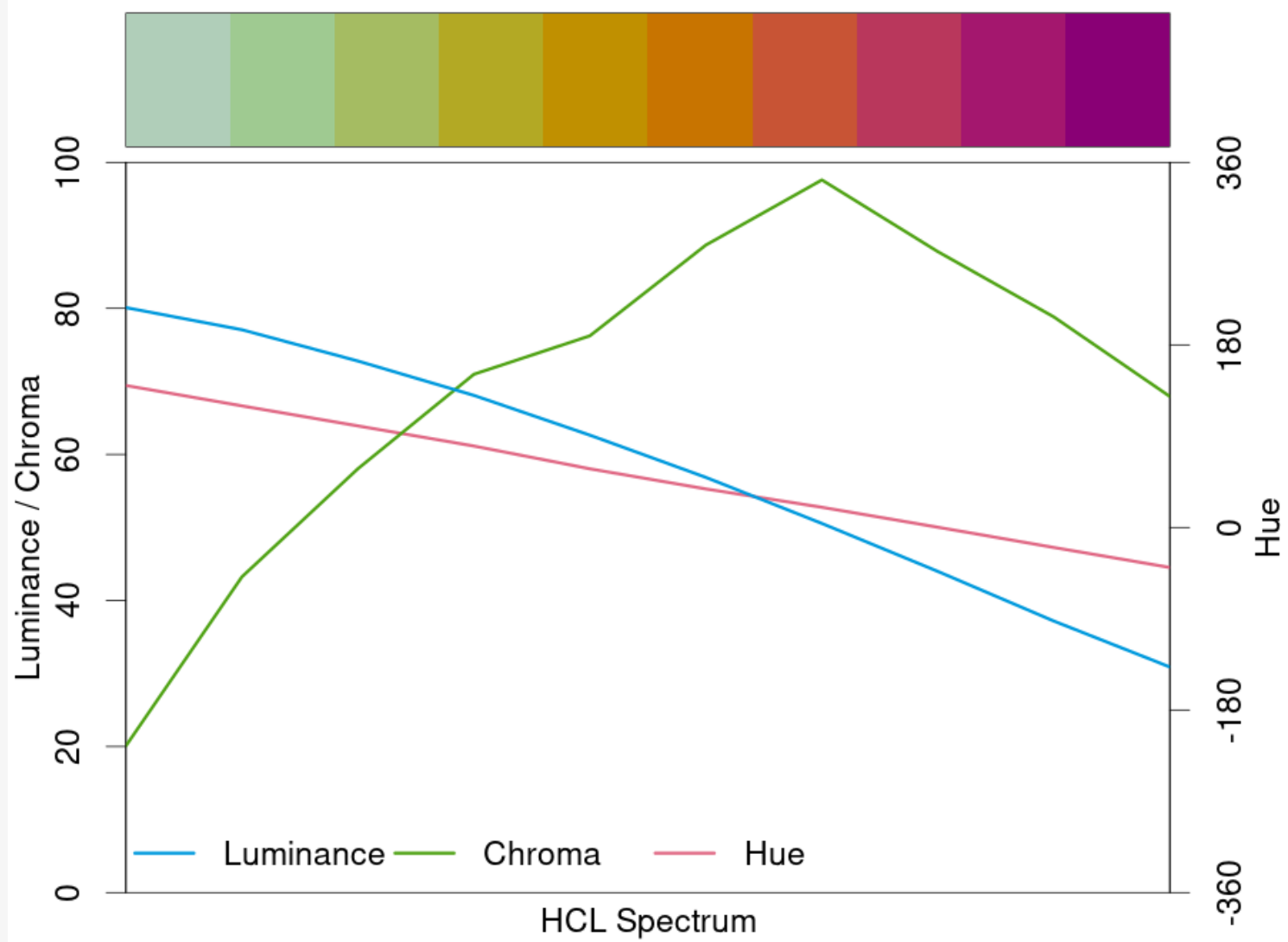


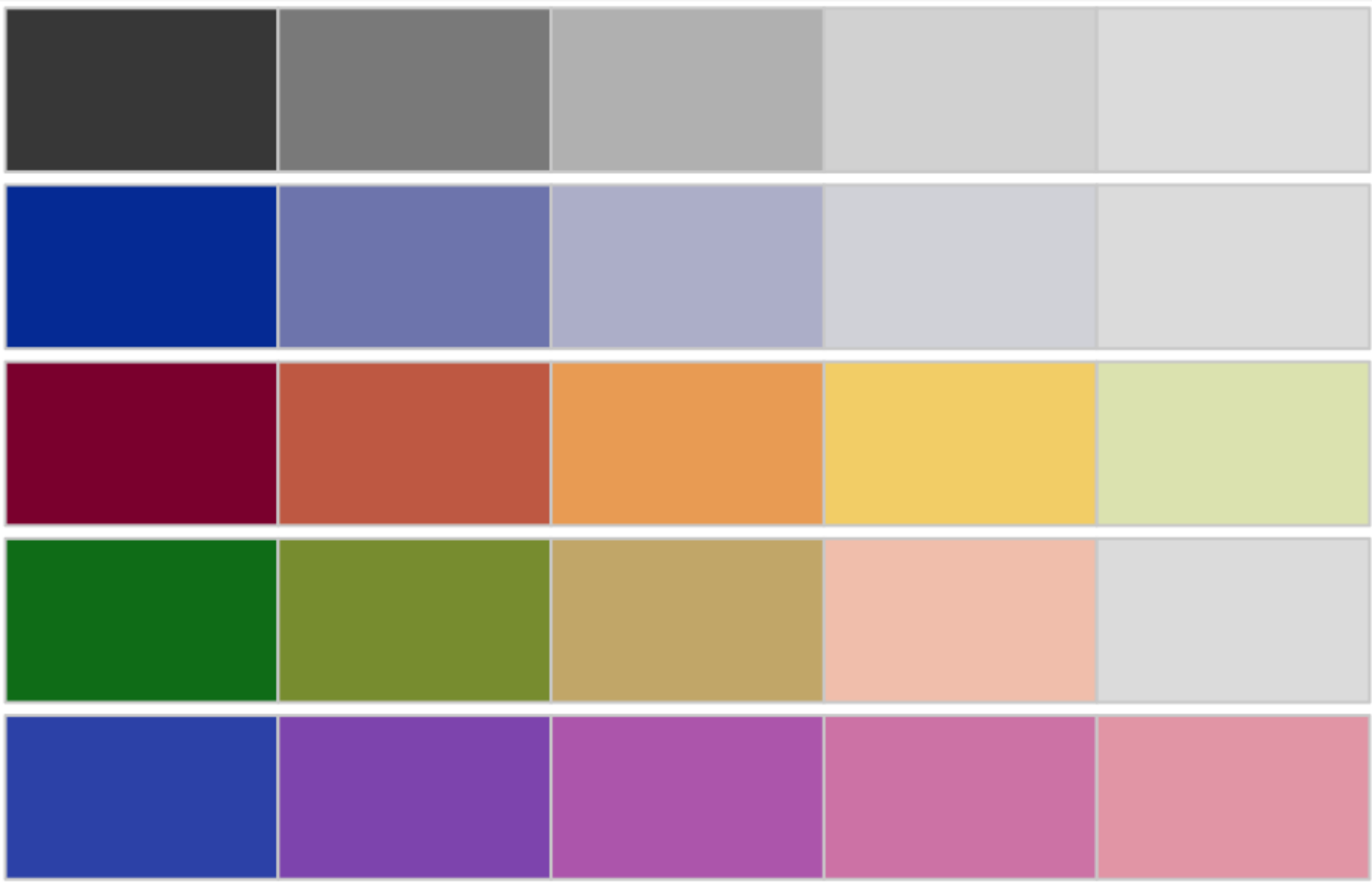






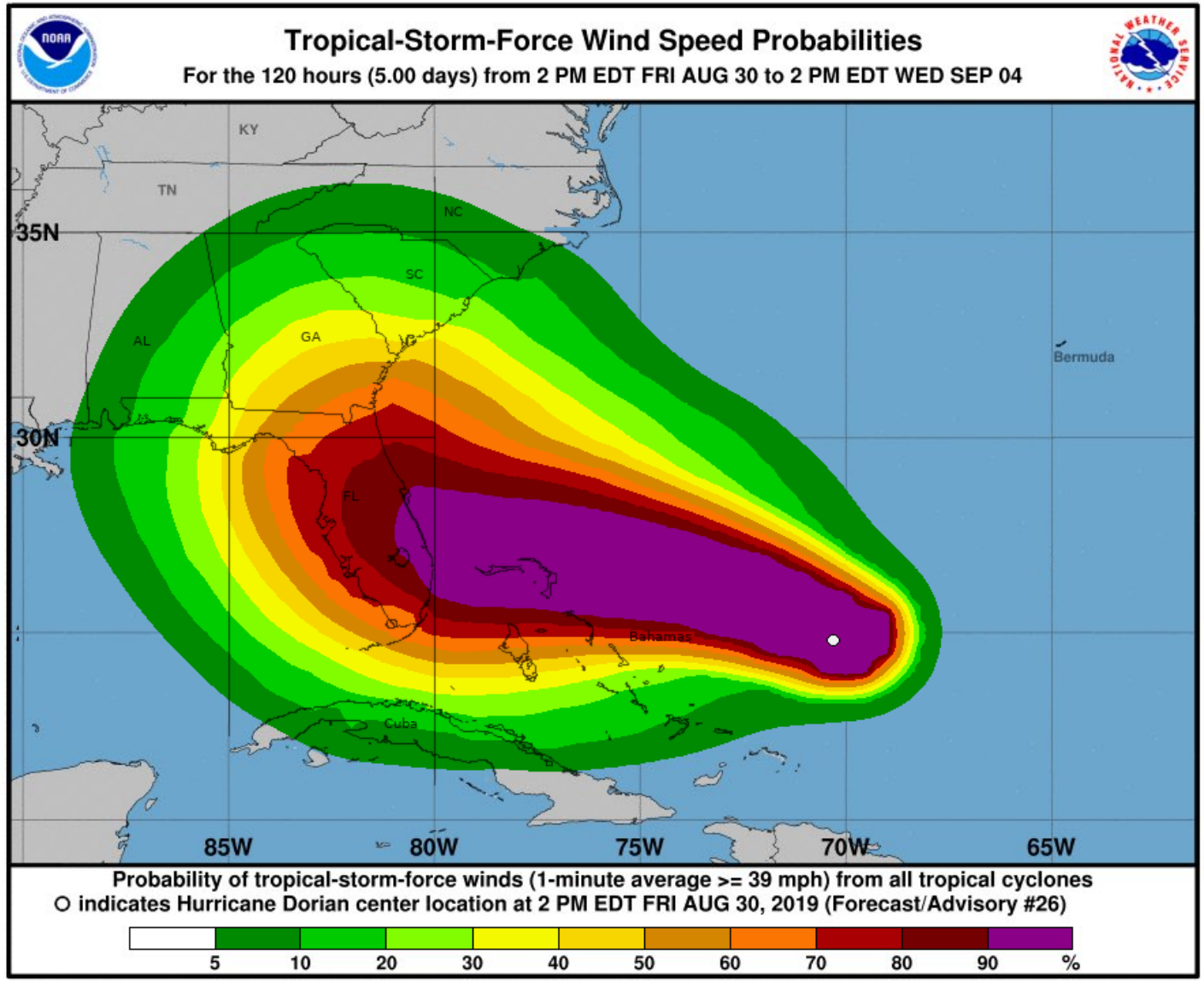




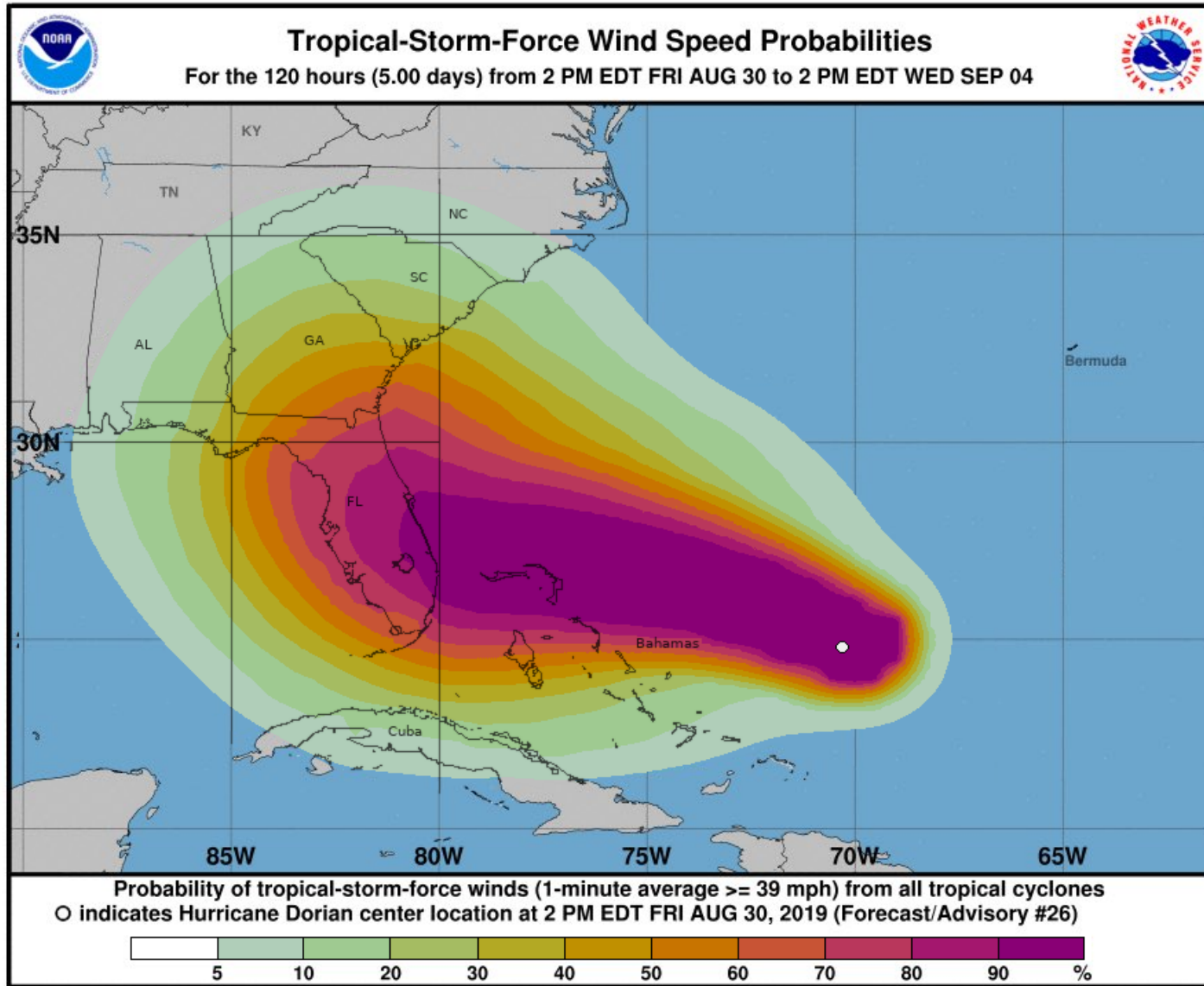




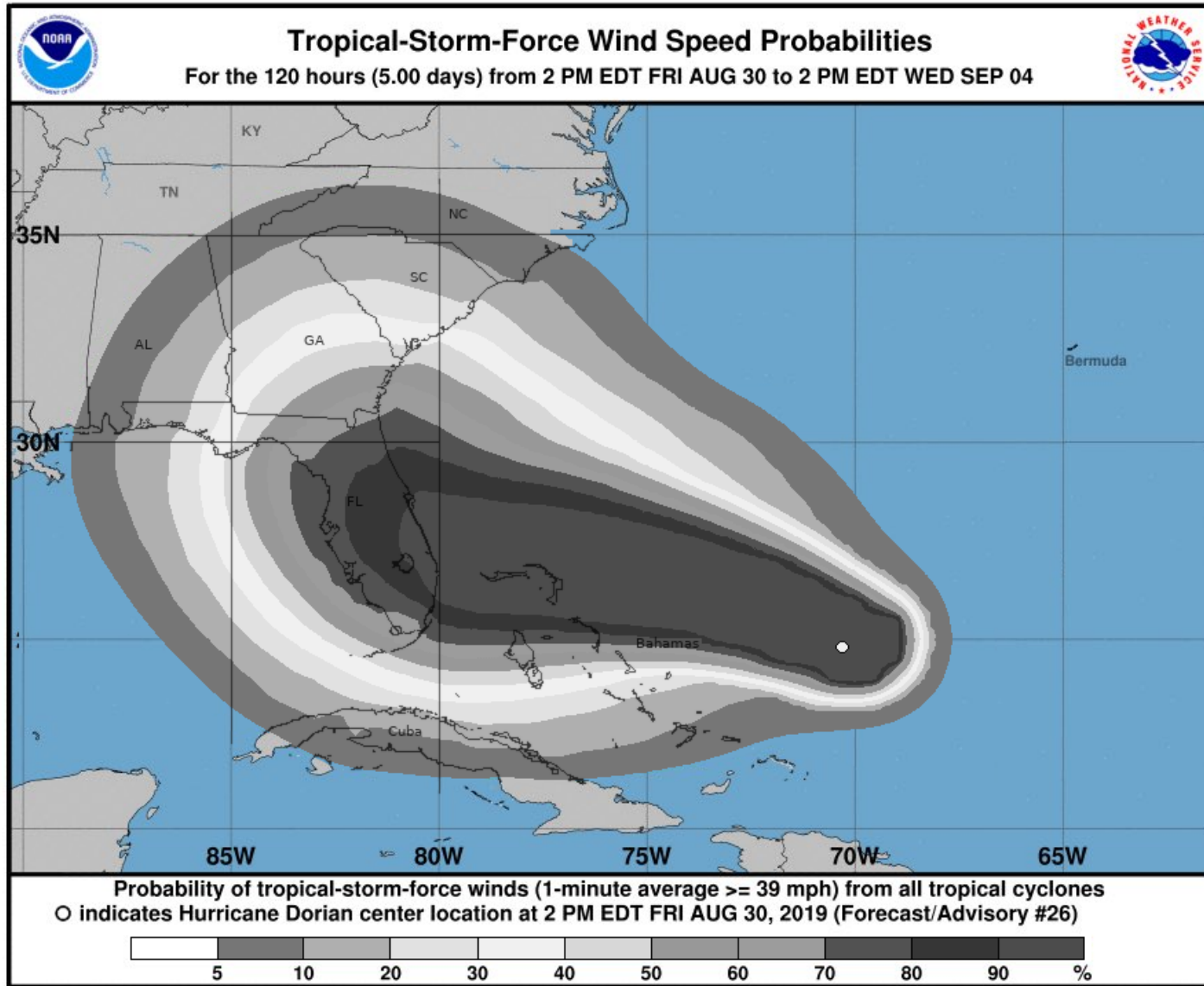




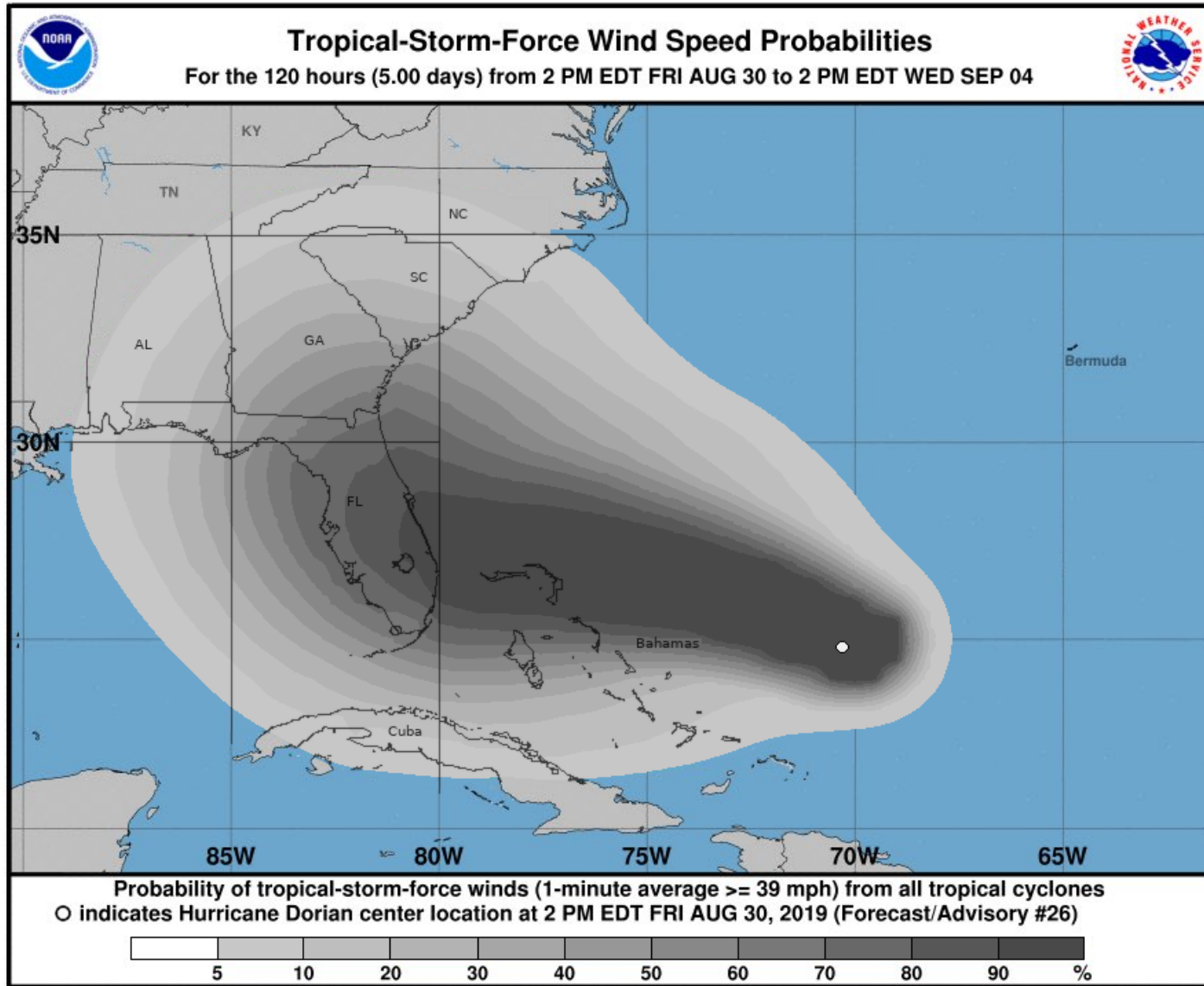
National Weather Service



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