

# Spilling the Beans: Coffee Ratings

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#### Intro to the Data:

- Collected between 2018-2022
  - From Kaggle

### **Important variables:**

- roast = the type of roast, ranging from light to dark
  - loc\_country = the location of the roaster
  - origin = the country where the beans originated
- 100g\_USD = the price per 100 grams of beans, measure in US dollars
  - rating = the score the coffee received out of 100

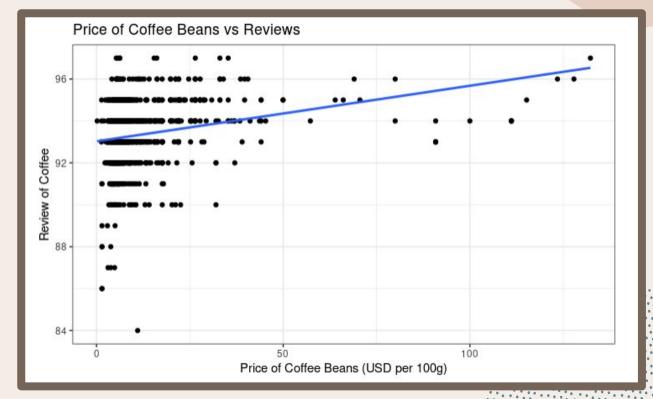
### Questions of Interest:

- 1. Is there a correlation between the price of beans of a coffee and the quality of its reviews?
- 2. Does the proportion of each type of coffee roast change based on where it was roasted?
- 3. What country sells the best rated coffee?
- 4. Which type of roast costs the most?
- 5. Are coffees grown and roasted in the same country rated better than those from other countries?

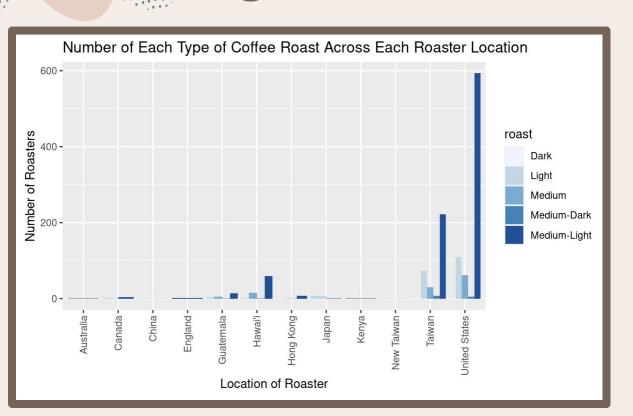
# 1. Is there a correlation between the price of beans of a coffee and the quality of its

### reviews?

- The line of best fit does have a positive correlation.
- The graph is very dense in cheap beans, likely because they are bought and used the most.

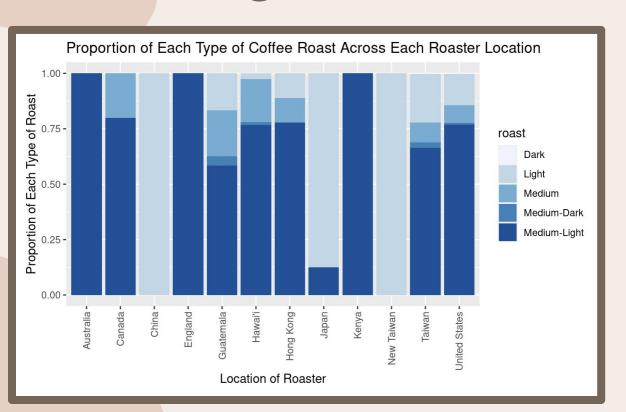


## 2. Does the proportion of each type of coffee roast change based on where it was roasted?



- The United States roasts a majority of the coffee in this dataset
- Many roasts are Medium-Light
- The small values are hard to read with this graph, and it doesn't show proportions

### 2. Does the proportion of each type of coffee roast change based on where it was roasted?



- This graph shows proportions and actually helps answer the question
- Light and Medium-Light are the most common
- There is a large amount of variety between distributions within each country

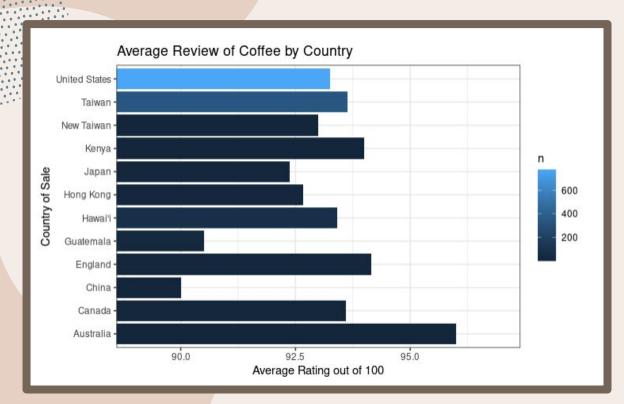
# 2. Does the proportion of each type of coffee roast change based on where it was roasted?

	Australia	Canada	China	England	Guatemala	Hawai'i	Hong Kon	Kong	ng Japan	Kenya	New 7	Taiwan	Taiwan	United	States
	0	0	0	5	0		0	0	0	0		0	4		3
Dark	0	0	0	0	0	(	0	0	0	0		0	1		2
Light	0	0	1	0	4		2	1	7	0		1	73		109
Medium	0	1	0	0	5	15	5	1	0	0		0	30		62
Medium-Dark	0	0	0	0	1		1	0	0	0		0	8		5
Medium-Light	1	4	0	2	14	59	9	7	1	1		0	222		593

		Dark	Light	Medium	Medium-Dark	Medium-Light
Australia	0.0	0.0	0.0	0.0	0.0	1.0
Canada	0.0	0.0	0.0	0.2	0.0	0.8
China	0.0	0.0	1.0	0.0	0.0	0.0
England	0.7	0.0	0.0	0.0	0.0	0.3
Guatemala	0.0	0.0	0.2	0.2	0.0	0.6
Hawai'i	0.0	0.0	0.0	0.2	0.0	0.8
Hong Kong	0.0	0.0	0.1	0.1	0.0	0.8
Japan	0.0	0.0	0.9	0.0	0.0	0.1
Kenya	0.0	0.0	0.0	0.0	0.0	1.0
New Taiwan	0.0	0.0	1.0	0.0	0.0	0.0
Taiwan	0.0	0.0	0.2	0.1	0.0	0.7
United States	0.0	0.0	0.1	0.1	0.0	0.8



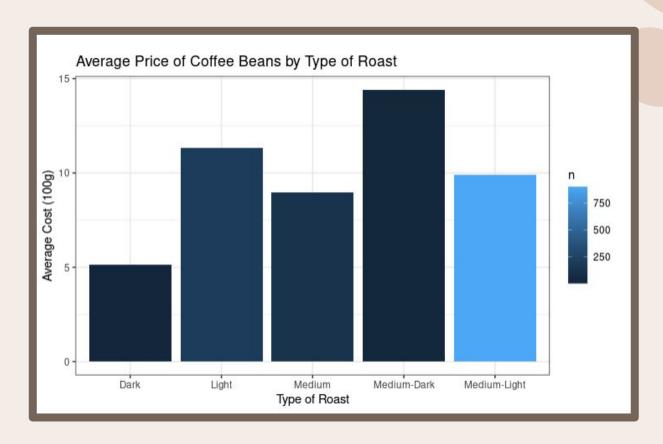
### 3. What country sells the best rated coffee?



- Australia has the highest average rating at 96, but only has one coffee that was rated.
- Only the United States, Guatemala, and Taiwan have over 10 rated coffees.
- China has the worst rated coffee, but only has one rated coffee in the dataset

### 4. Which Type of Roast Costs the Most?

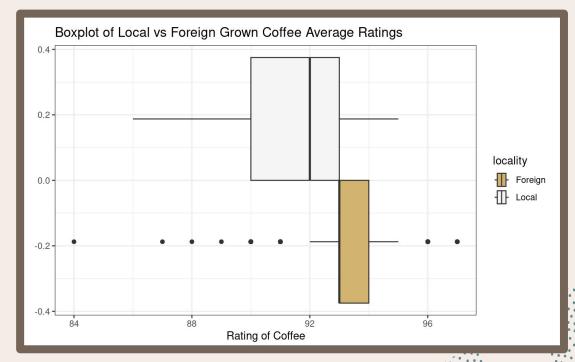
- Medium-Dark roasts cost the most on average, but have a small sample size.
- Medium-Light roasts are the most abundant, and have an average cost.



# 5. Are coffees grown and roasted in the same country rated better than those from

other countries?

- Coffee beans sourced from foreign countries created better rated coffee on average.
- There are far more foreign sourced coffees than coffees sourced locally.



### **Our Process**



### **Further Research**



Does locally sourced coffee cost more than foreign sourced coffee?



Do chain coffee brands have better or worse rated coffee than small businesses?



How consistent is the rating/cost relationship across different countries?