

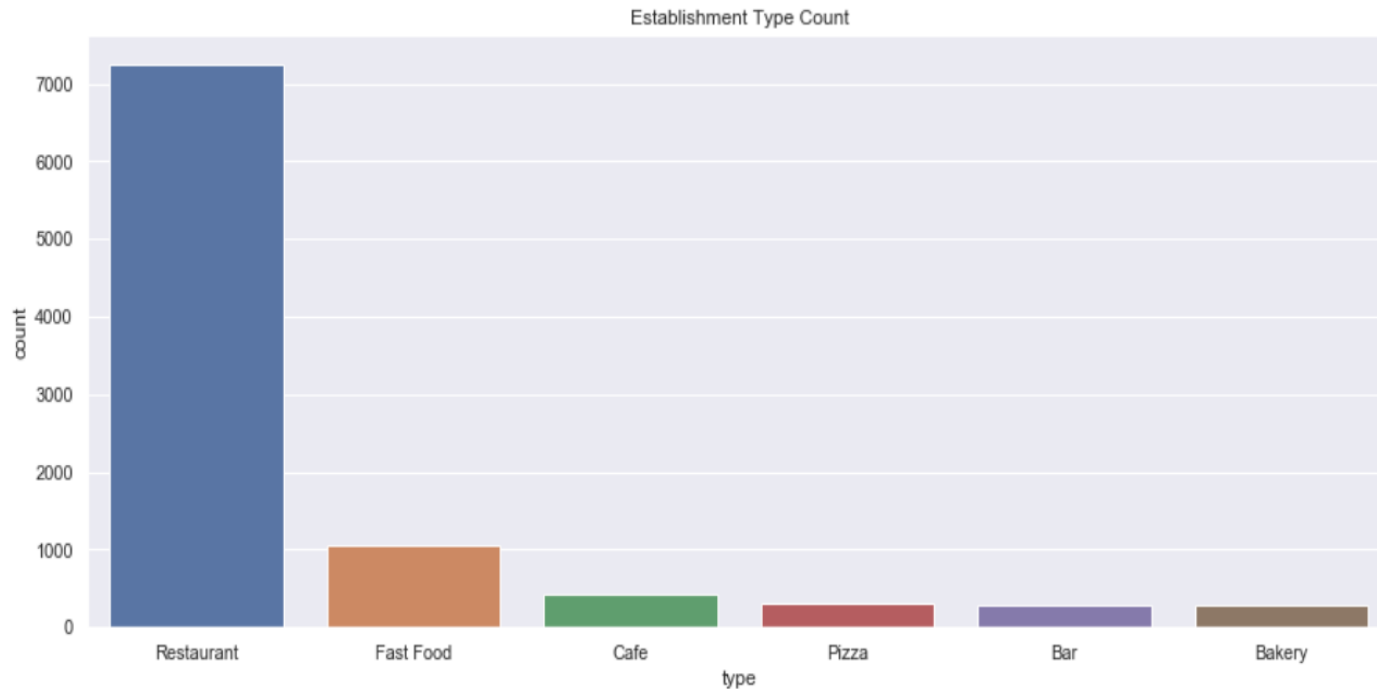
A Robot Run Café in Los Angeles

Analysis of Restaurant-type establishments

Conclusions:

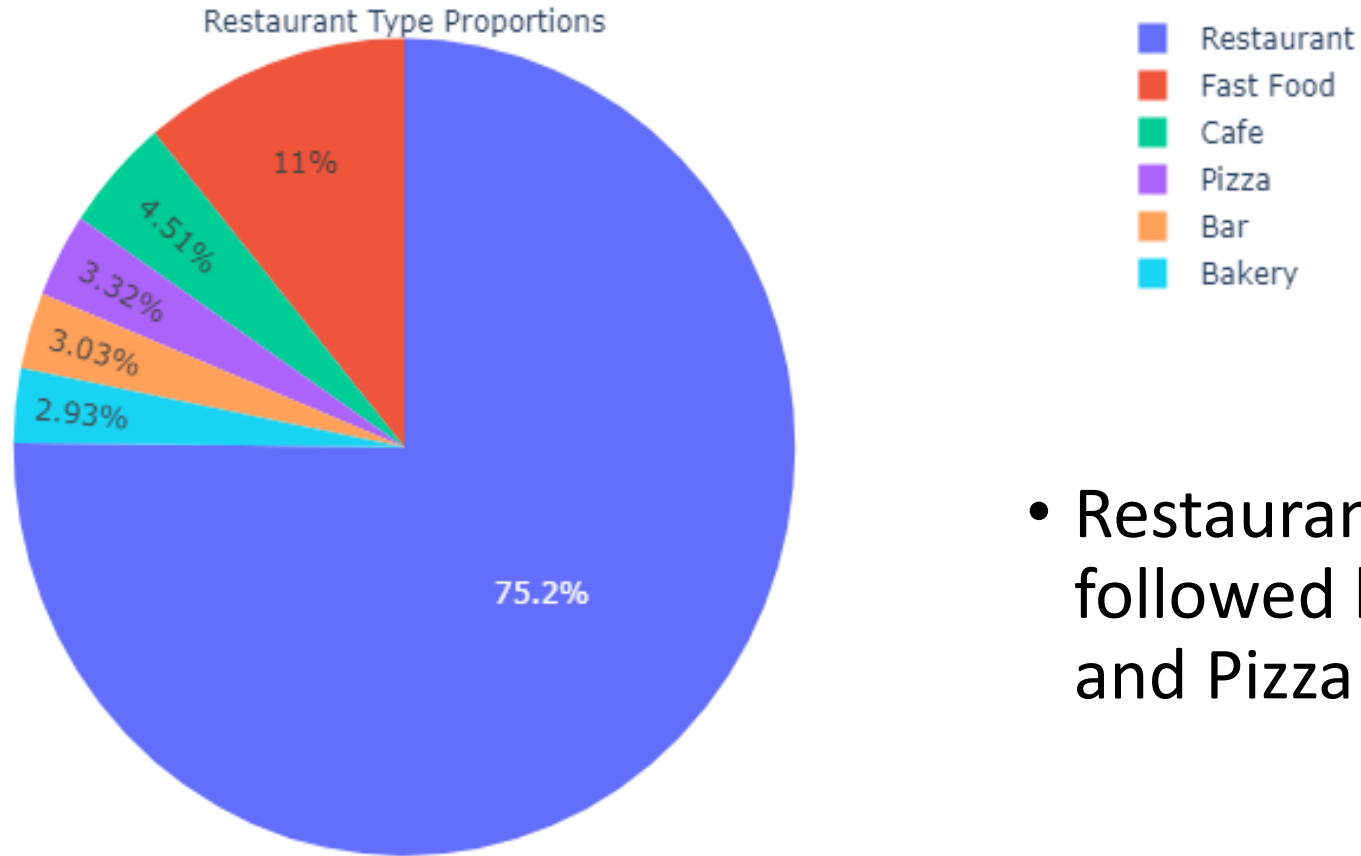
- A Robot run Cafe is a very specific niche, therefore we'll focus on Cafe related conclusions
- The number of seats for the robot cafe should not be more than 22 if there is an interest in developing a chain and following the data on the number of seats per cafe in LA's street with the most cafes.
- If we are interested in opening just a single Cafe, the number of seats can be more than 20 and even start at a higher number.
- Depending on the strategy that the owners want to follow we could choose to compete with the chains by opening our own franchise in the top 20 streets and see if those coffee lovers would like to try a different kind of experience. This is considering there is a good volume of coffee addicts in those popular spots.
- Another strategy would be to start with one establishment in a location where there is little competition , however there is a risk of having a low volume of coffee drinkers.
- Another strategy would be to open(at least the first one) in a street that is in the top 20 list but doesn't have any chain related Cafes. This way we could befriend fellow independent coffee sellers and cater to their hipster-tech clientele and give them more range in their coffee drinking habits. ***This street is N Figueroa ST.***

Type of establishments in L.A



- Looking at the overall data set we see that the Restaurants are the most popular types of establishments by far

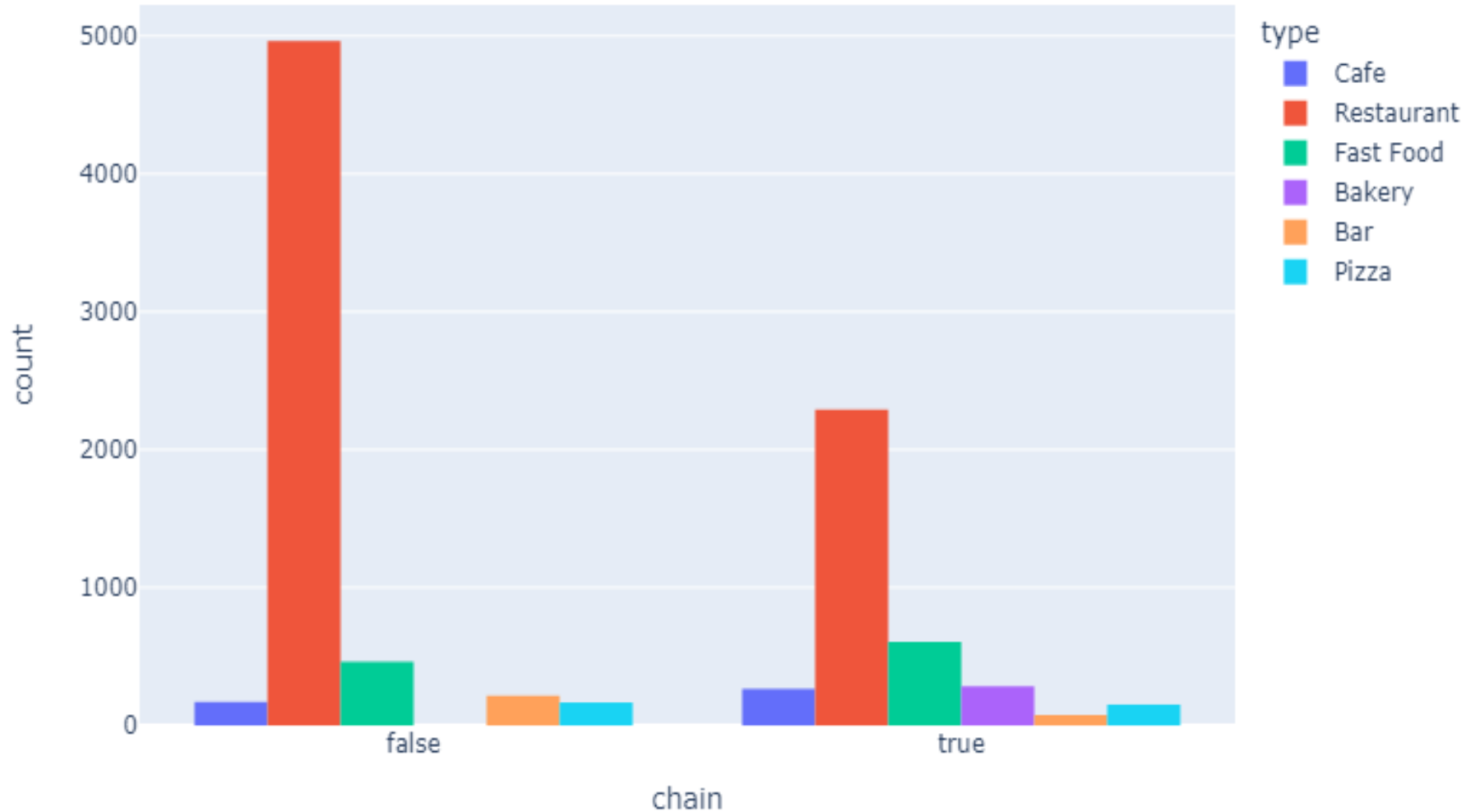
Type of establishments in L.A



- Restaurants lead followed by fast food and Pizza places

Non-Chain vs Chain Establishments

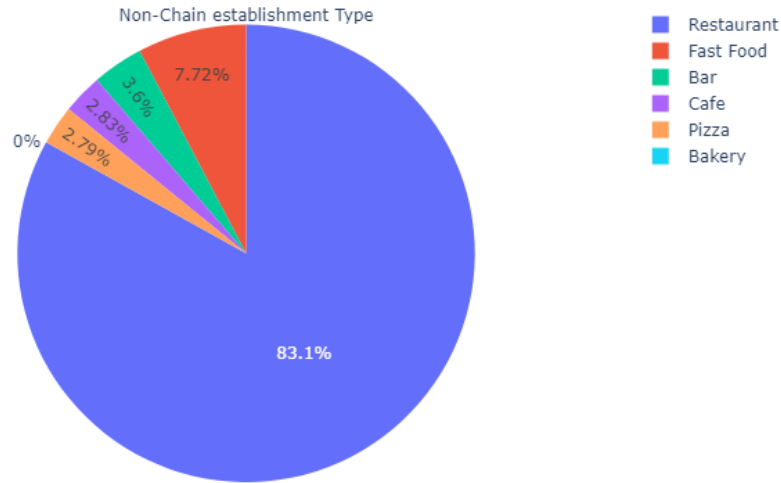
Non-Chain vs Chain



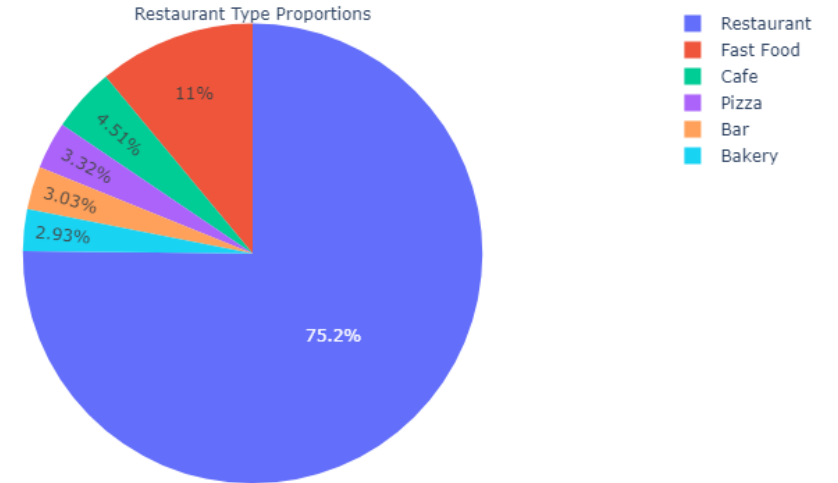
- The data set also lets us know about establishments being part of a chain
- False – not being part of a chain
- True – being part of a chain

Non-Chain vs Chain Establishments

Non-Chain Establishments



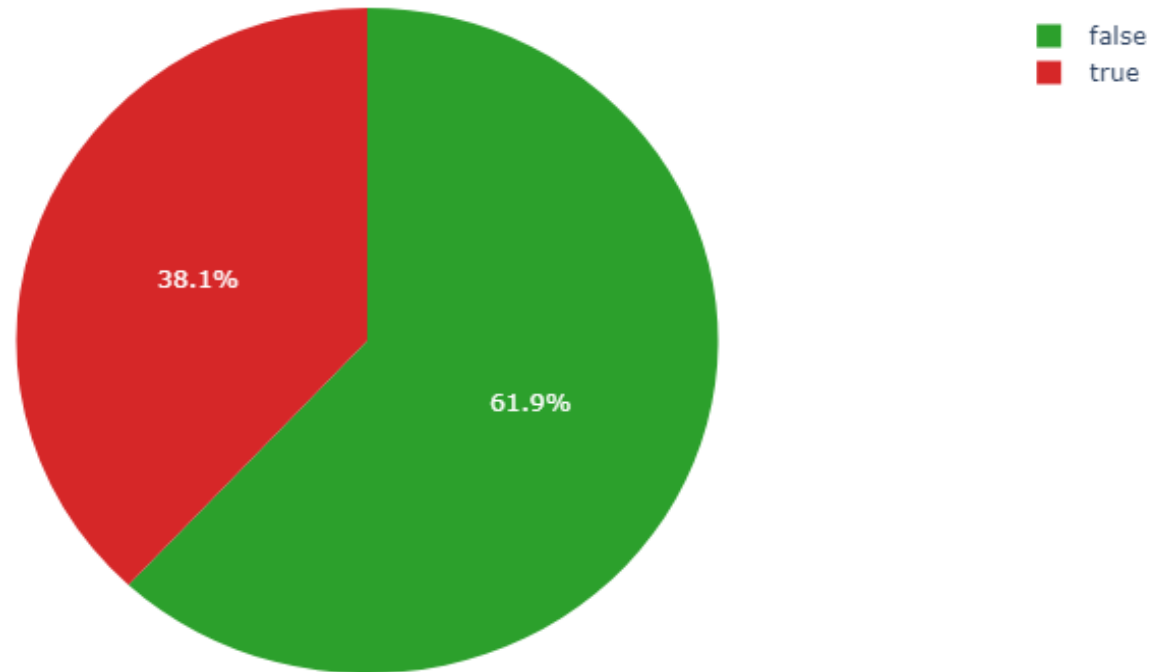
Chain Establishments



- In both slices of the data Restaurants are the most popular

How likely is an establishment to be part of a chain

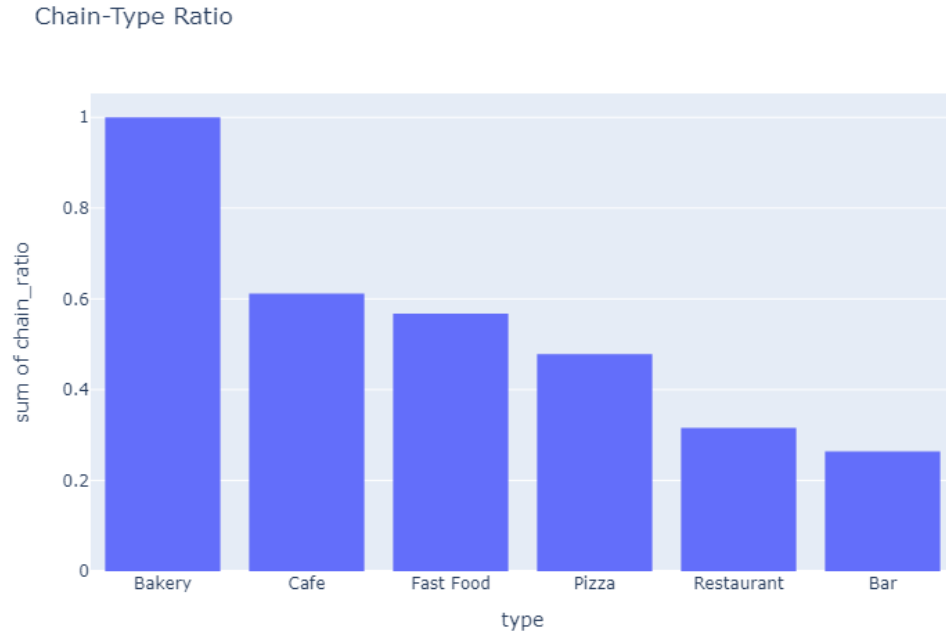
Overall Chain Membership



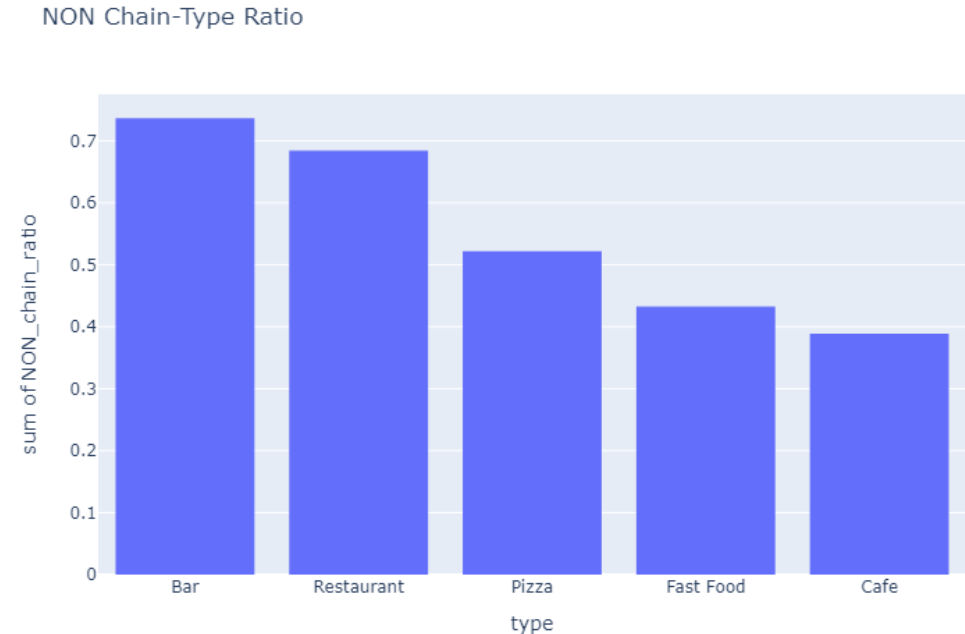
- Its clear that there are more non-chain establishments than chain ones
- When looking at both groups 'Restaurants' still have the highest count
- However because we are interested in opening a Robot Cafe, we should take notice that there are more proportionally Chain-member cafe's than non-chain - I suspect Starbucks has hand in here

How likely is an establishment to be part of a chain

Chain Establishments to Type ratio



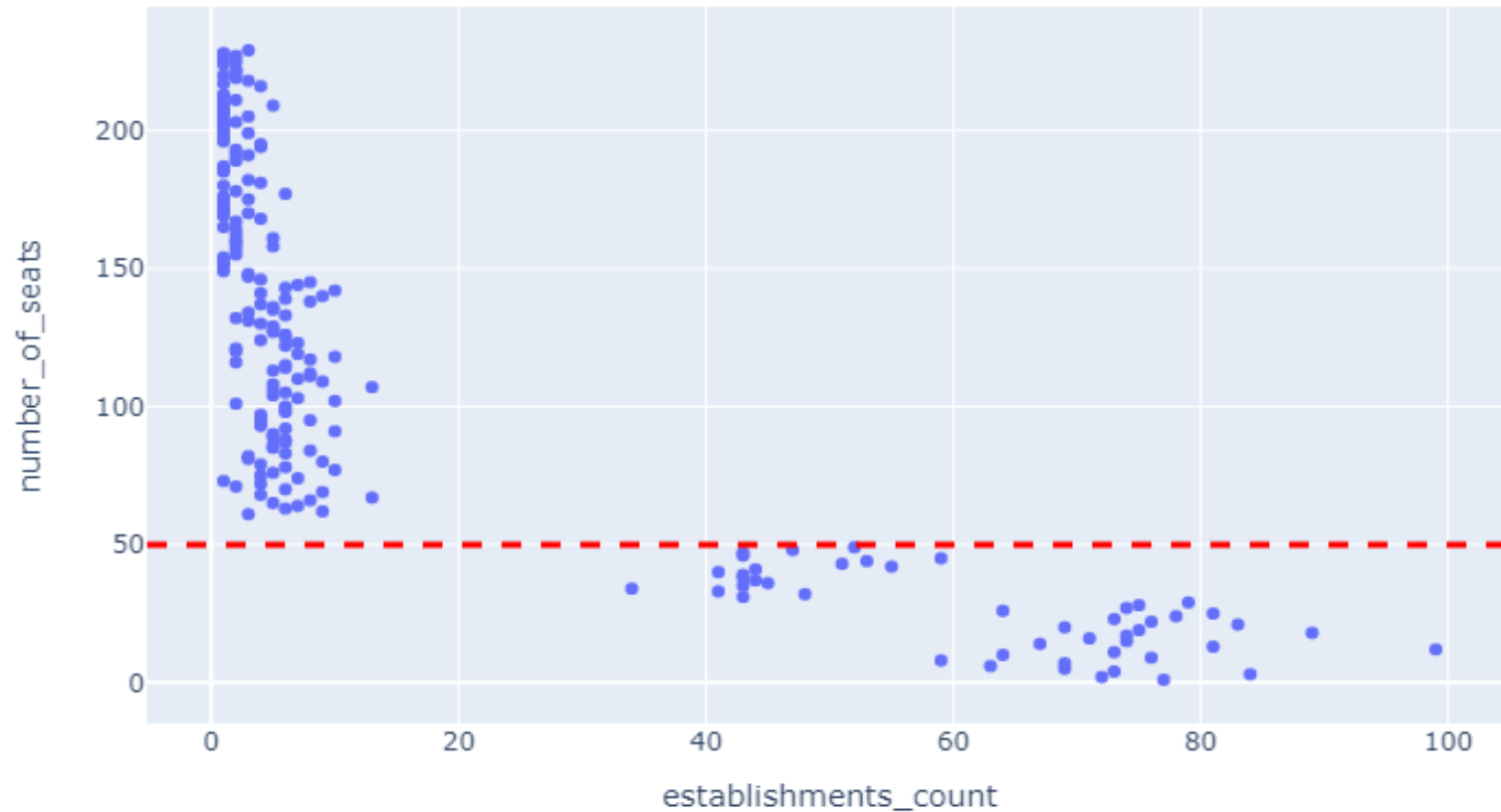
Non Chain Establishments to Type Ratio



- Looking at the Chain-Type Ratio **Bakery** establishments are 100% likely to be part of a chain, followed by Cafes and Fast Food types.
- In the Non-Chain-Type Ratio there are no bakeries (of course) but we see that **Bars** are the most likely to be type of non-chain establishments

What characterizes chains: many establishments with a small number of seats or a few establishments with a lot of seats?

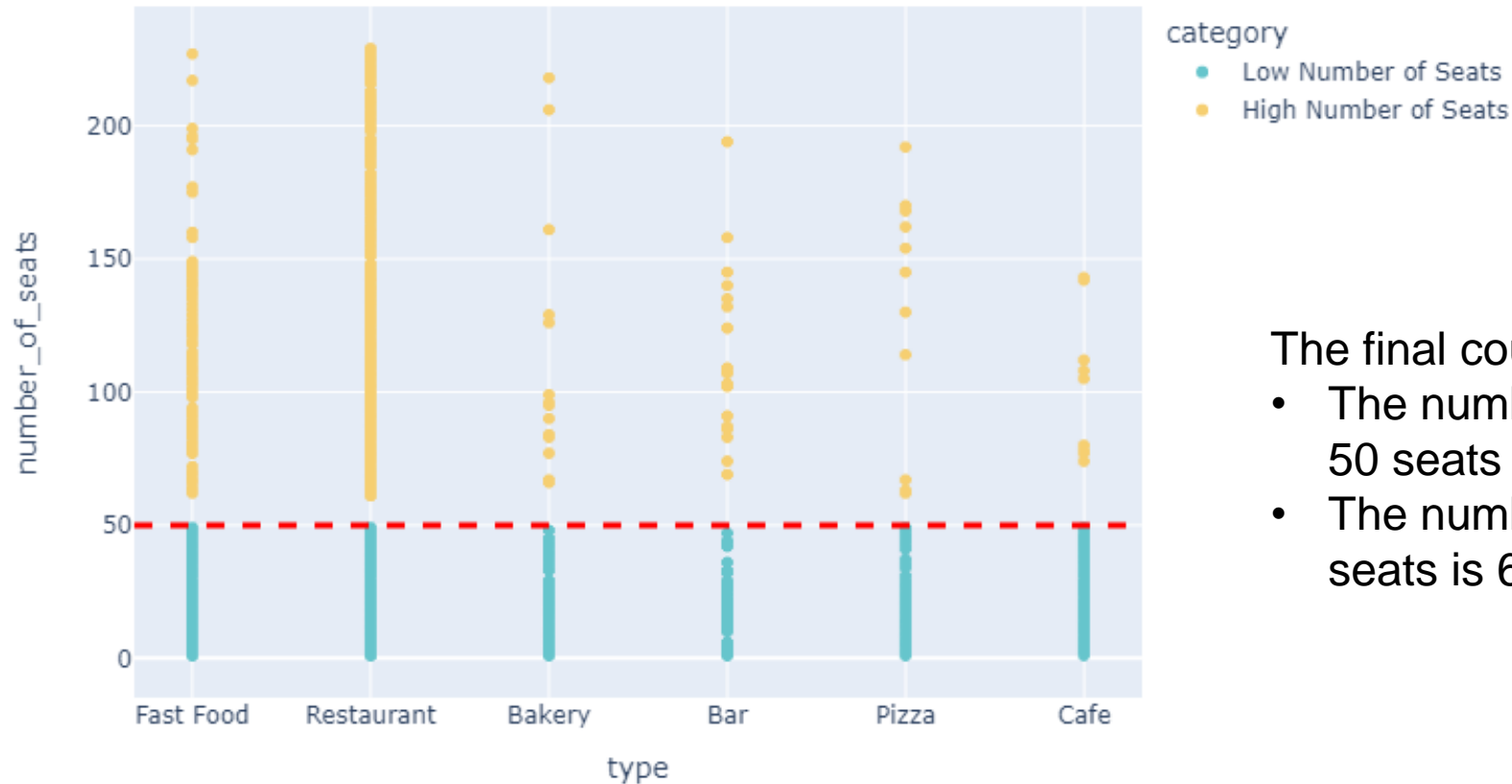
Establishment Count with Said number of seats



- To answer this question, I aggregated the seats allocation per number of establishments - e.g there are 13 establishments with 107 seats, there are 99 establishments with 12 seats - and from the scatter plot we see a clearer pattern from which we can set a threshold of 50 seats to define small or high number of seats

What characterizes chains: many establishments with a small number of seats or a few establishments with a lot of seats?

Type of Establishment vs Number of Seats



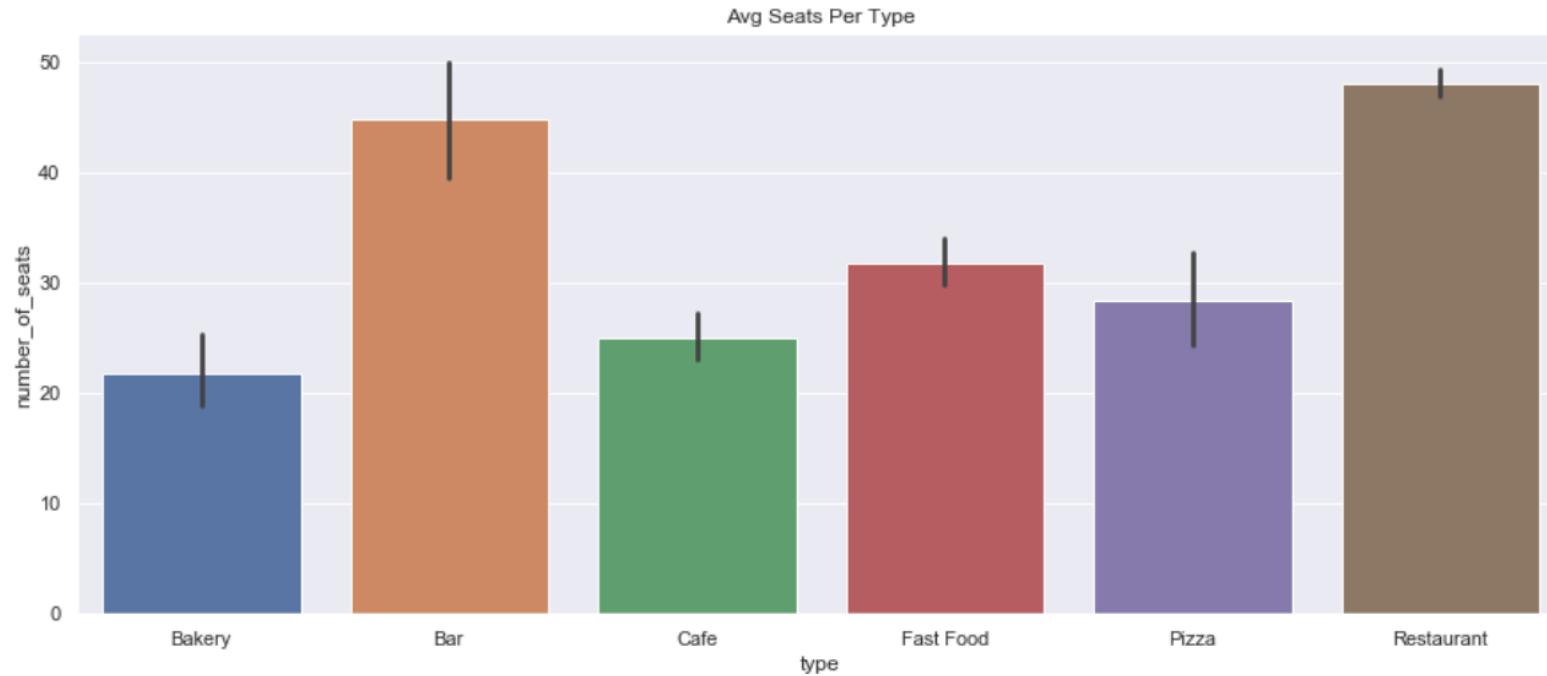
- Coming back to the type of establishment we visualize the threshold and the establishment count

The final count:

- The number of establishments with less than 50 seats is 3033
- The number of establishments with more than 50 seats is 643

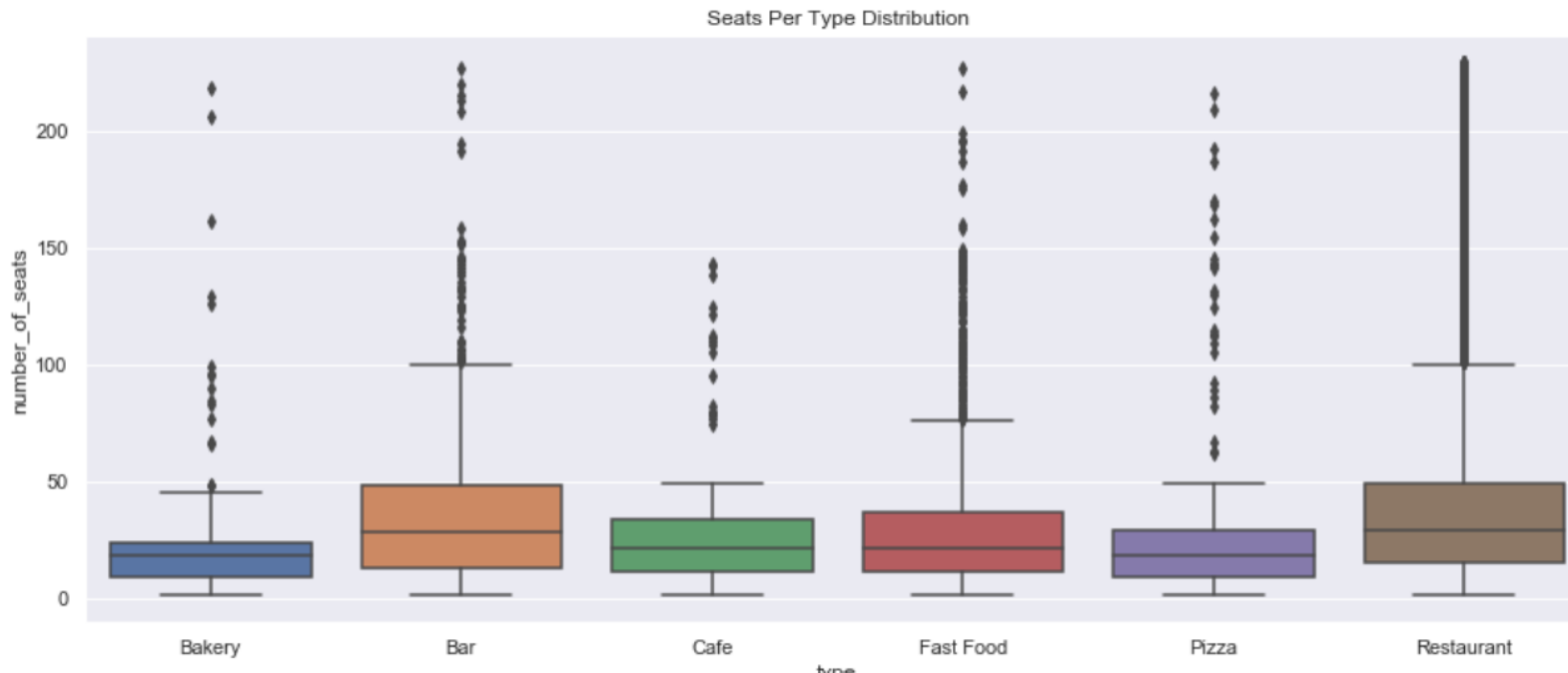
Answer: Chains are characterized by large number of establishments with a small number of seats

Determine the average number of seats for each type of restaurant. On average, which type of restaurant has the greatest number of seats?



- From the overall data set we calculated the average number of seats per type of establishment

Determine the average number of seats for each type of restaurant. On average, which type of restaurant has the greatest number of seats?

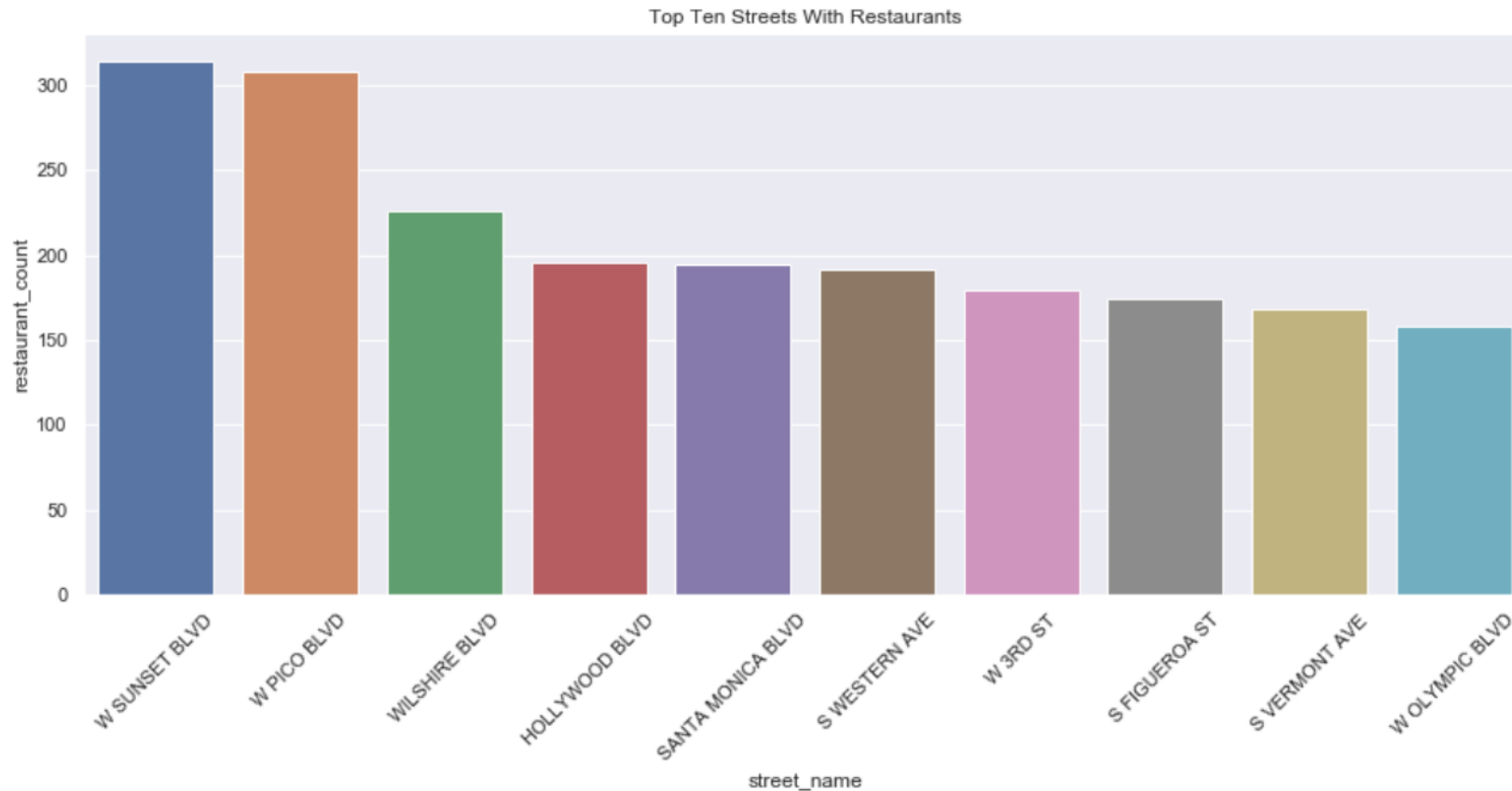


Type	Avg Number of Seats
Restaurant	48.04
Bar	44.77
Fast Food	31.84
Pizza	28.46
Cafe	25.00
Bakery	21.77

Answer : *Restaurant* Type have the greatest avg number of seats

- And here we can see the distribution of number of seats per type of establishment – from the overall data set

Top 10 streets by number of Establishments

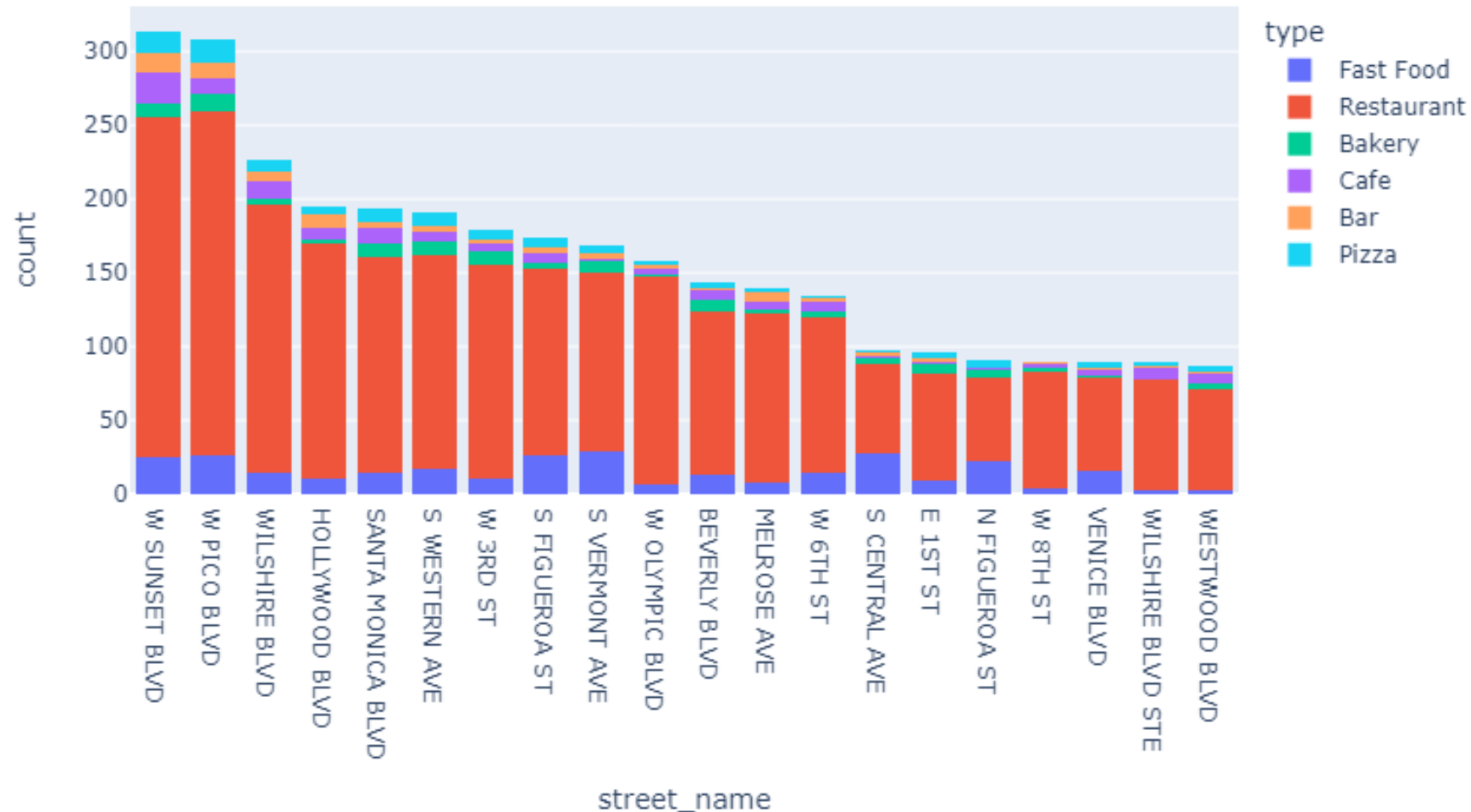


street_name	restaurant_count
W SUNSET BLVD	314
W PICO BLVD	308
WILSHIRE BLVD	226
HOLLYWOOD BLVD	195
SANTA MONICA BLVD	194
S WESTERN AVE	191
W 3RD ST	179
S FIGUEROA ST	174
S VERMONT AVE	168
W OLYMPIC BLVD	158

- Looking at the top the streets in L.A with the highest number of establishments feels like something is missing,
- How about the type distribution per street? (next slide)

Top 20 streets by number of Establishments

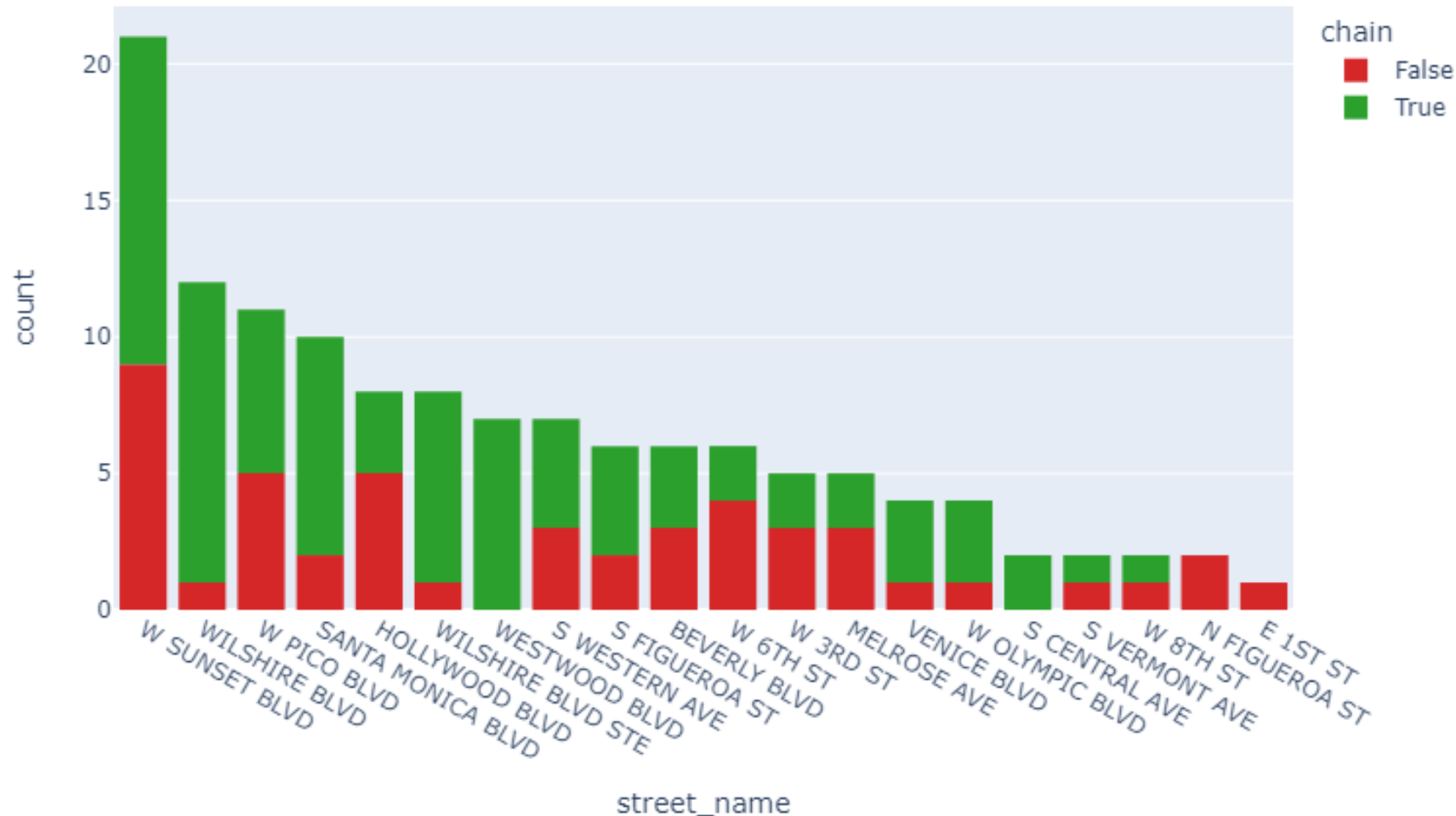
Top 20 L.A Streets with Establishments and Number of Chairs



- Across the top 20 streets we see how the 'restaurant' type have the most presence

Top 20 streets by number of Cafes

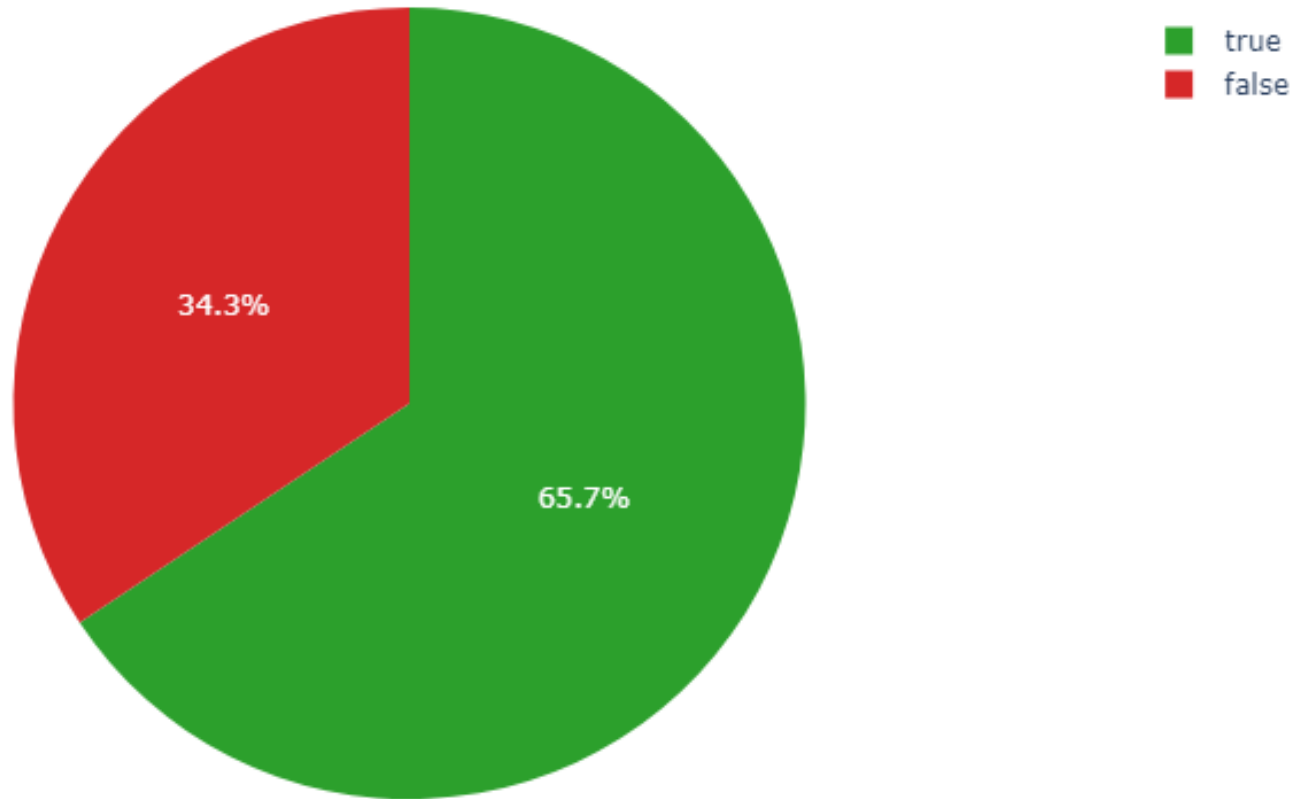
Top 20 L.A Streets with Cafes



- But we are interested in opening a Café
- WE therefore zoom in on the number Cafes on the most popular streets
- We can also see the chain membership proportions per street
- I'll point out to the last two streets where there are no chain-related cafes:
- N Figueroa St and E 1st St

Top 20 streets by number of Cafes

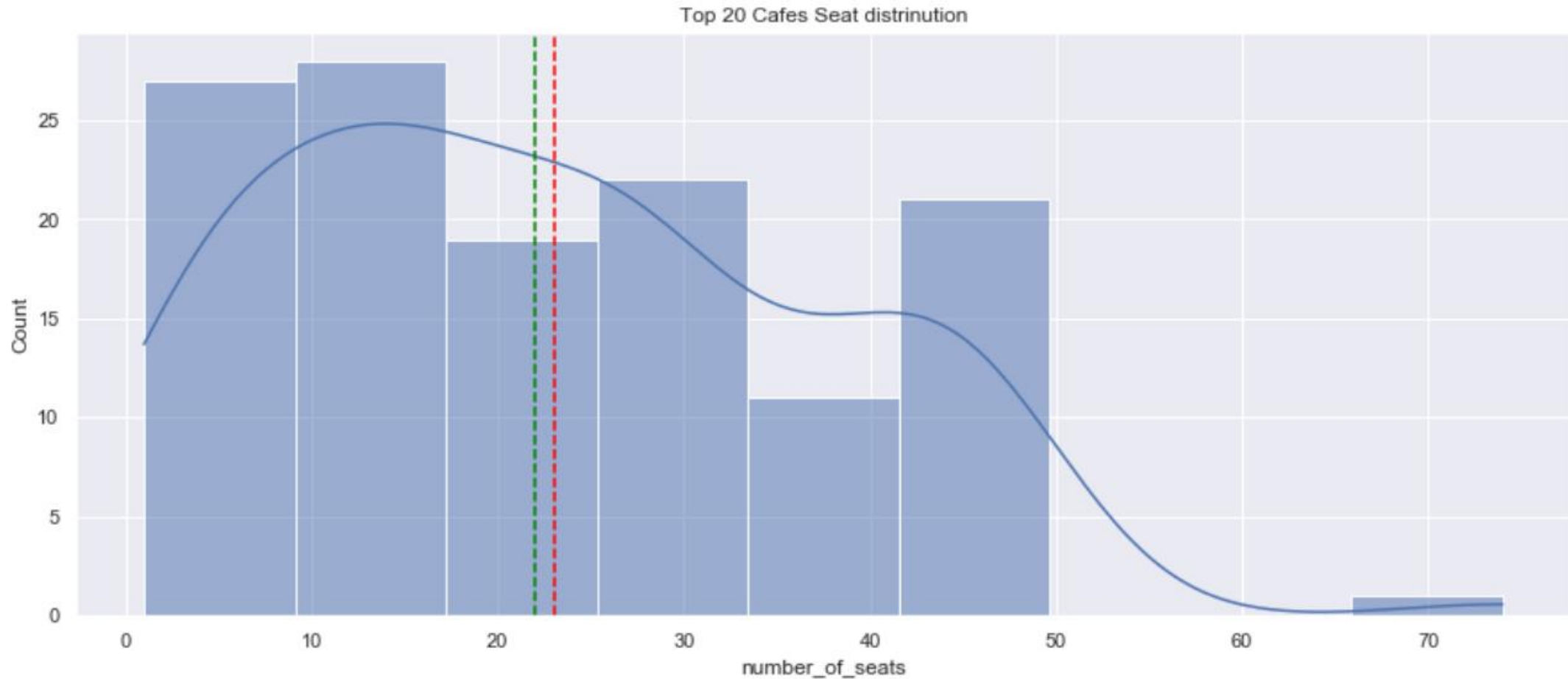
Top 20 Streets Cafe"s Chain Membership



- To summarize - this pie chart confirms that most Cafes are part of a Chain on L.A's top 20 streets

Top 20 streets by number of Cafes

Number of seats distribution



- The mean is : 23.05 seats
- The median is : 22.00 seats
- We can set the number of seats in our Robot-Café based on these numbers

