Dogs of Zürich

Data Visualization Project
Gianluca Guglielmo
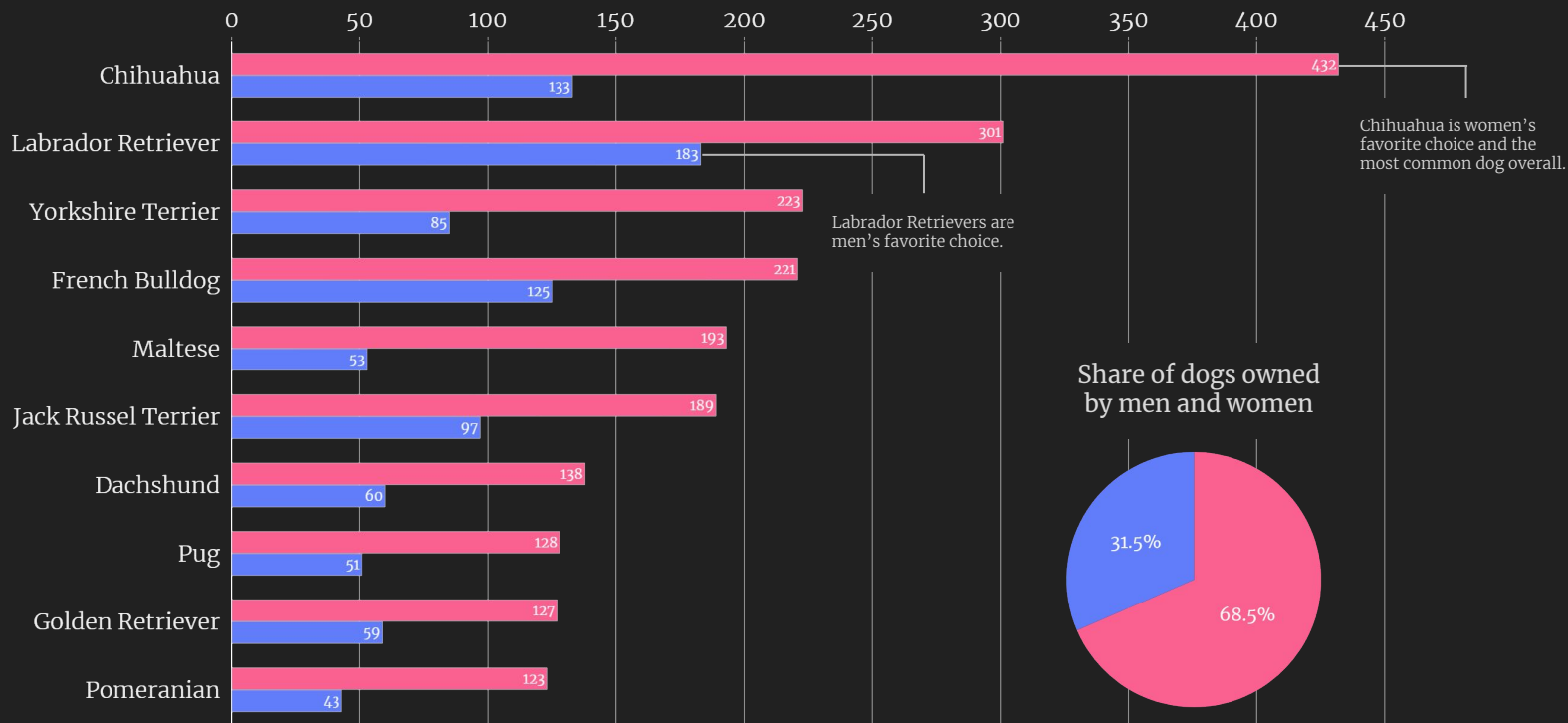06 March 2023

Topic and dataset

- Dog ownership in **Zürich, Switzerland**
- Includes data about registered dogs that were still alive in **2021** and about their **owners**;
- Alongside it, data about Zürich's **population** has been used to trace patterns in dog density throughout the city
- Fields used: `QuarLang`, `KreisLang`, `Rasse1Text`, `AlterV10Sort`, `HalterId`, `StichtagDatJahr`, `SexSort`, `AnzBestWir`;
- Data - dogs: Open Data Zürich;
- Data - population: Open Data Zürich;
- Data - map: Metabolism of Cities - Data Hub.

Addressed questions

1. Do **men** and **women** have similar preferences in **dog** ownership?

2. How does the **age** of the **owner** correlate with the **age** of the **dog**?

3. What are the **areas** with the highest concentrations of **dogs**?

Women own more than two thirds of dogs

Most common dog breeds in Zürich divided by gender of owner, in 2021.

Chihuahua is women's favorite choice and the most common dog overall.

Labrador Retrievers are men's favorite choice.

Breed	Women	Men
Chihuahua	432	133
Labrador Retriever	301	183
Yorkshire Terrier	223	85
French Bulldog	221	125
Maltese	193	53
Jack Russel Terrier	189	97
Dachshund	138	60
Pug	128	51
Golden Retriever	127	59
Pomeranian	123	43

Share of dogs owned by men and women

31.5%

68.5%

Highlights:

- Women have more dogs than men
- **Chihuahua** is the preferred breed by women and the most common choice overall
- **Labrador Retriever** is the preferred breed by men
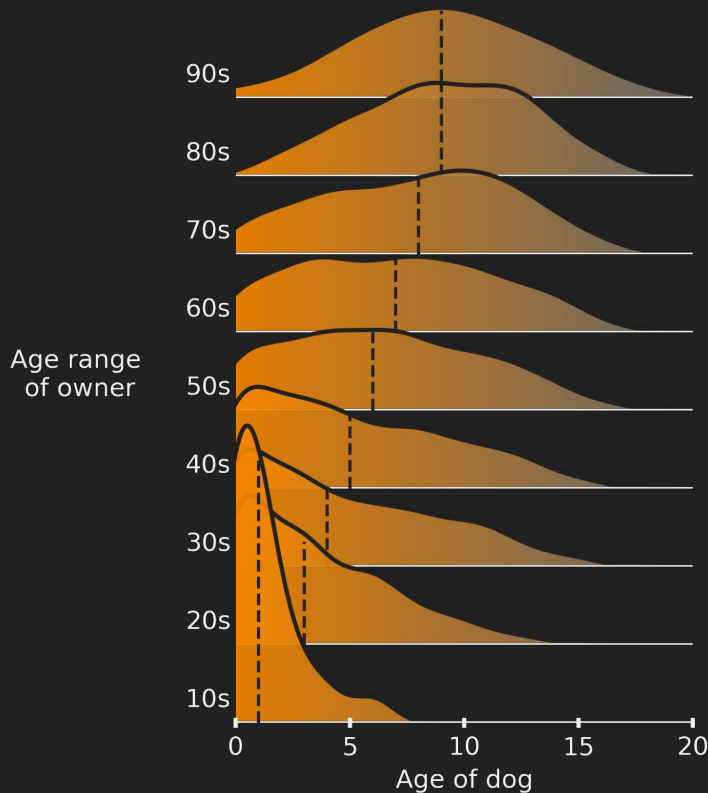
Mapping bar chart:

	Attribute	Visualizer
Dog breed (y-axis)	categorical	position
Owner gender	categorical	color hue
# dogs per breed	quantitative	length

Mapping pie chart:

	Attribute	Visualizer
Owner gender	categorical	color hue
Owner ratio	quantitative	area

Older dogs for older Zürchers

Comparison between the ages of registered dogs in Zürich and the ages of their owners, in 2021.

Source: https://data.stadt-zuerich.ch/dataset/sid_stapo_hundebestand_od1001

Highlights:

Mapping:

- Older people tend to own older dogs
- Children tend to own dogs below the age of 5
- no significant change is observed from 80s to 90s

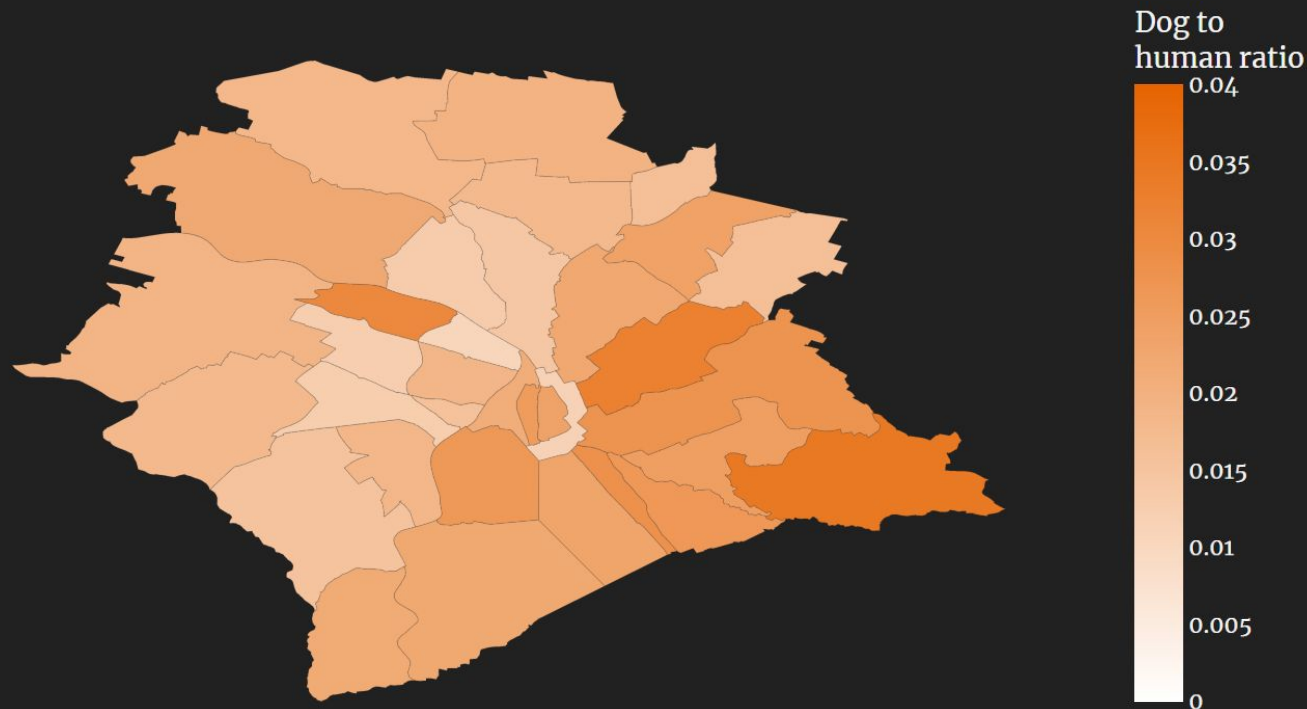|	Attribute	Visualizer
Owner range age (y-axis)	ordinal	position
Dog age	quantitative	color saturation
Dog age frequency	quantitative	height

Note: dog's age distributions are normalized for each owner's age range.

Witikon is the neighbourhood with most dogs per capita

Density of dog to human ratio for neighbourhoods and districts in Zürich, in 2021.

Dog to human ratio

0.04

0.035

0.03

0.025

0.02

0.015

0.01

0.005

0

Highlights:

- **Witikon** is the neighbourhood with the highest density of dogs per capita, while Hoghschulen and Gewerbeschule have the lowest
- **District 7** is the district with the highest concentration, while districts 3 and 4 have the lowest one
- No neighbourhood or district exceeds the value of 0.04 dogs per capita

Mapping:

	Attribute	Visualizer
Neighbourhood and district	categorical	position
Dog to human ratio	ordinal	color tint

Contributions:

- Initial exploration and questions: **Gianluca Guglielmo**
- Dataset preprocessing: **Gianluca Guglielmo**
- Plot design: **Gianluca Guglielmo**
- Aesthetic refinements: **Gianluca Guglielmo**

Thank you for your attention!