DSE 241 – Data Visualization
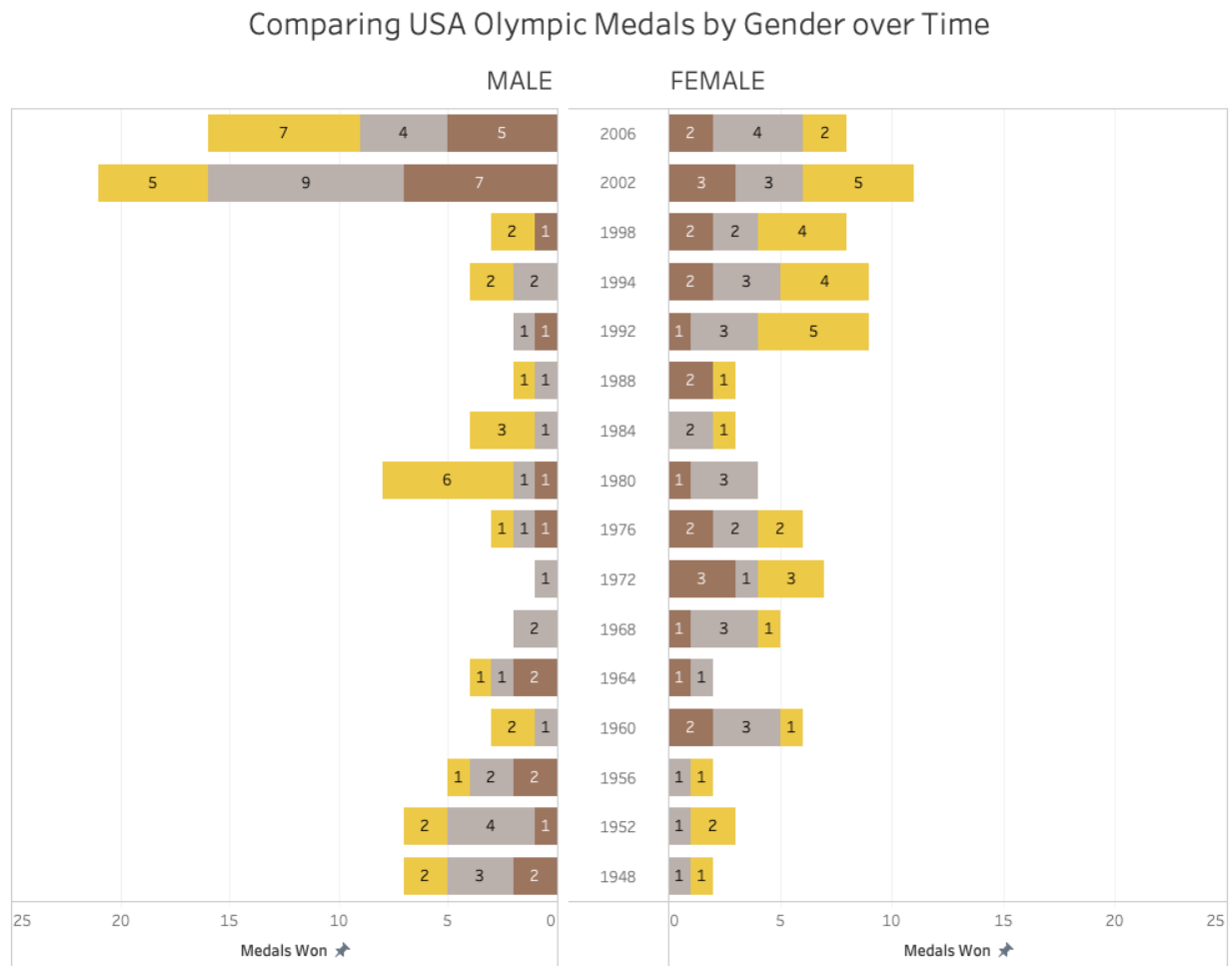
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Exercise 1 Report: Comparing USA Olympic Medals by Gender over Time

Report Contents

The Viz

Comparing USA Olympic Medals by Gender over Time

	MALE			FEMALE		
2006	7	4	5	2	4	2
2002	5	9	7	3	3	5
1998		2	1	2	2	4
1994		2	2	2	3	4
1992		1	1	1	3	5
1988		1	1	2	1	
1984		3	1	2	1	
1980	6	1	1	1	3	
1976	1	1	1	2	2	2
1972			1	3	1	3
1968			2	1	3	1
1964	1	1	2	1	1	
1960		2	1	2	3	1
1956	1	2	2	1	1	
1952	2	4	1	1	2	
1948	2	3	2	1	1	

Medals Won

Motivation

This visualization is intended to convey *USA Olympic medals by Gender over Time*, including the type of medal (Gold/Silver/Bronze), in the post-WW2 era. It is intended to allow the viewer to see what shifts, if any, there are to medals won, and whether there is general parity between the Olympic success of genders. It should be noted that the medals included are only for sports at the winter Olympics:

- Biathlon
- Bobsleigh
- Curling
- Ice Hockey
- Luge
- Skating
- Skiing

Data augmentation (if any)

This viz requires a left-right balance to compare male-female. Unassigned genders ('X' in the raw data) make up a small proportion of total medals won by the USA (11 / 216 = 5%) and have been excluded to help provide symmetry.

Due to WW2, the games were not held in 1940 & 1944. To maintain the four-year cadence for this viz, the data was filtered to exclude the 1924-1936 Olympics, which are present in the dataset.

Tasks

The viewer is not required to complete any tasks to see the general trend, but there is tertiary information that can be derived e.g. the viewer can focus on Gold medals and compare between Genders.

Expressiveness of design

The vertical gridlines help the viewer to quickly compare in a given year, though the row total is not included in the viz.

Though it could very tediously be computed, the subtotal by gender is also not included (Males=114; Females=91).

Effectiveness of the solution

The color channel for type of medal (Gold/Silver/Bronze) is not explicitly stated in the viz using a legend or annotation. Despite this, anyone with a vague familiarity of the Olympics should recognize the significance of the channels. A viewer who is wholly unfamiliar with the Olympics would have no clue as to the significance, so the context of where this viz is deployed helps inform the design decision.

Interaction

There is no interaction associated with this viz. A good interactive dashboard would allow filtering on medal type and sport type, or even some comparison between countries and their respective genders.

Conclusions

The viewer can see there is not a general trend of one gender outperforming the other. Both Males and Females outperformed the opposing segment in eight of the sixteen given years. There is also not a trend over time. In the most recent two Olympics, the Males dominated over Females, with their largest overall metal totals. However, Females outperformed in the previous four Olympics. Generally, Females have had higher win totals in more recent Olympics, but without the context of Female participation in Olympic sports, it's dubious to draw too many conclusions.