

Data Visualization

ASSIGNMENT 1: RESULTS

Tea Tušar, Data Science and Scientific Computing, Information retrieval and data visualization

Assignment 1: Analyze the two visualizations

For each, write down

- Which data attributes can you see? What type are they?
- Which visual channel (position, length, etc.) is used for which data attribute?
- What actions are required to compare *dancing* to *golfing*? Are they easy or hard to do?

Which visualization is more informative? Why?

12 responses

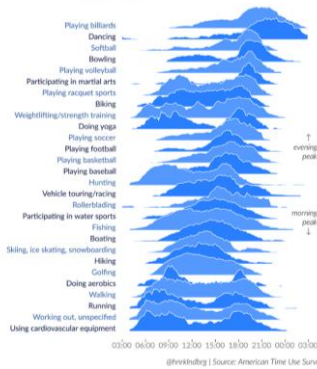
This is not a group task, work on it individually

Send the response to me via a private chat on Teams by **Friday, September 29**

Small multiples – partially overlapping area plots

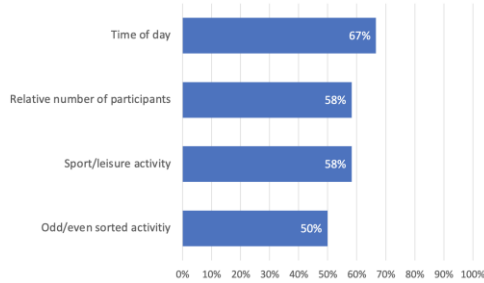
Peak time of day for sports and leisure

Number of participants throughout the day compared to peak popularity. Note the morning and evening everyday workouts, the middle hobbies, and the evenings late nights out.



Data attribute	Attribute type	Visual channel
Time of day	Quantitative	Position on x axis
Relative number of participants	Quantitative	Position on y axis; area plot
Sport/leisure activity	Categorical	Plot position (sorted by peak time)
Odd/even sorted activity	Categorical	Color (light and dark blue)

Correct identification of the visual encoding



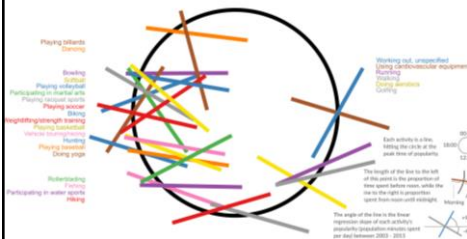
<https://github.com/halhen/viz-pub/tree/master/sports-time-of-day>

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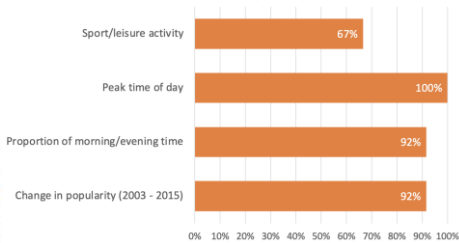
Custom visualization

Peak time for sports and leisure

Source: American Time Use Survey



Correct identification of the visual encoding

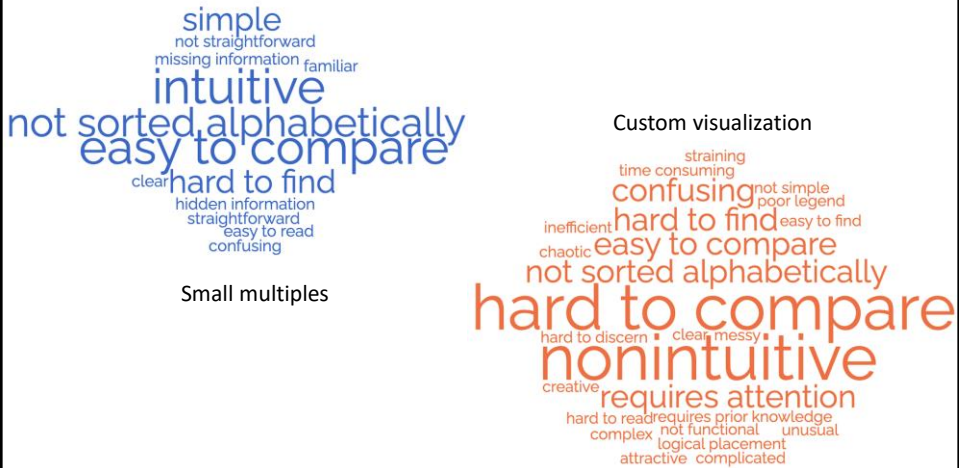


Data attribute	Attribute type	Visual channel
Sport/leisure activity	Categorical	Colored line (random colors)
Peak time of day	Quantitative	Location on the circle
Proportion of morning/evening time	Quantitative	Line length to the left/right of the intersection
Change in popularity (2003 - 2015)	Quantitative	Line slope

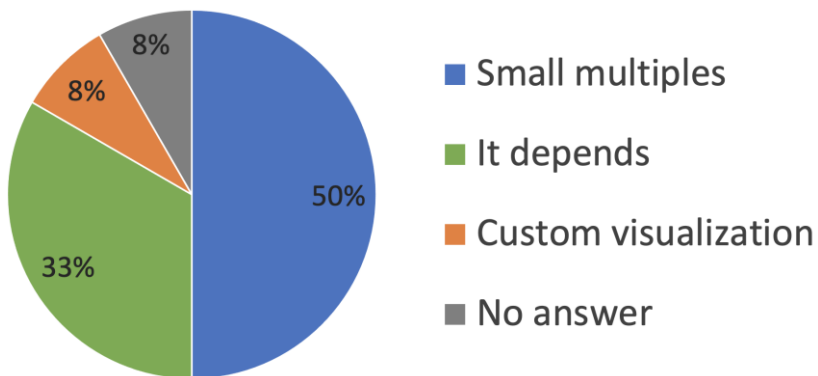
<https://github.com/halhen/viz-pub/tree/master/sports-depeche-plot>

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Impressions when comparing *dancing to golfing*



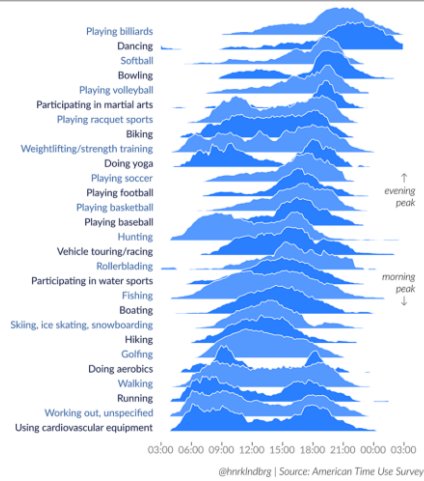
Which visualization is more informative?



Clarification

28 sport/leisure activities ≠
28 attributes

28 sport/leisure activities =
1 attribute with 28 values



<https://github.com/halhen/viz-pub/tree/master/sports-time-of-day>