# Relationships between People, space & time

Workshop

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#### **1 visualization**

Example: Understanding the effect of presidential candidate campaigns



Source: https://eu.usatoday.com/in-depth/news/2020/10/30/where-presidential-candidates-traveling-run-up-election-day/6062441002/

## Agenda:

- 1. Some inspiration
  - 2. Sketching
  - 3. Discussion

### Showing relationships between people

Adjacency matrices (e.g. Helsinki University, 2015)

	Anna	Ellen	Jack	Jane	Harry	Philip	Rosa	William
Anna	0	1	1	1	0	1	0	0
Ellen	1	0	1	0	0	0	0	0
Jack	1	1	0	0	0	1	0	1
Jane	1	0	0	0	1	0	1	0
Harry	0	0	0	1	0	1	1	1
Philip	1	0	1	0	1	0	0	1
Rosa	0	0	0	1	1	0	0	0
William	0	0	1	0	1	1	0	0

Graphs (e.g. Janssen et al., 2006)



#### Hypergraph visualizations (Valdivia et al. 2019)



Adding time to relationships

Storylines (Munroe 2009)



#### There's many more ways to visualize time

Radial time (Brehmer et al., 2016)



Distorted time curves (Bach et al., 2015)





2D+ curves (Perin et al., 2017)

## Combining place and time

Lines on Maps (e.g. Bertin, 1983)



Small multiples & Glyphs (Peña-Araya et al., 2020)





Contiguous



Rectangular







#### Many ways to show place





#### Add your visualization here

(In the original slides for the workshop contained the link to the Miro board. We remove the link and export the content in the supp. material folder)

## Discuss

- What hypotheses do you have about your data? What patterns do you see?
- What is the main message your visualization communicates? What is missing?

### Next session

2 more sketches



#### References

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