

# Interactive Graphics

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Interactive Graphics

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# Introduction to Interactive Graphics

## **Interactive Graphics:**

- ▶ Graphic that displays additional dimensions to the base visualization via some feature with which the user/viewer can control
- ▶ “Dimension” = variables/attributes, model changes, subsetting

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## Types of Interactive Graphics:

- ▶ Alt-text / “hovering”: Display additional features or information about an observation/group/category/etc via user’s cursor control (mouse, tapping, etc)
- ▶ Filtering / subsetting (the data): Updates graphic to show only a *conditional* subset of the data
- ▶ Dynamic graphics / animation: Not really “interactive”, but add an extra dimension to the visualization (usually changes over time)

# Dynamic $\neq$ Informative



**Thomas Lin Pedersen**

@thomasp85

Following



Can anyone explain to me what value animating the layout algorithm iterations adds to any network visualisation



**Thomas Lin Pedersen**

@thomasp85

Following



We need to focus on removing interaction- and animation junk much more than removing chart junk

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3. Demonstrate how to use the interactive features in doing so
4. Do NOT just demo interactive features because they're cool – that's not enough!

# Interactive Graphics in R

There are three ways to do interactive graphics in R

1. **Plotly:** `cpsievert.github.io/plotly_book/`  
(Interface to JavaScript graphing library plotly.js)
2. **Shiny:** `shiny.rstudio.com`  
(web application framework for R)
3. **HTML Widgets:** `www.htmlwidgets.org`  
(R interface to other JavaScript graphing tools)