Chapter 2, Episode 3: Operable barriers

Operable
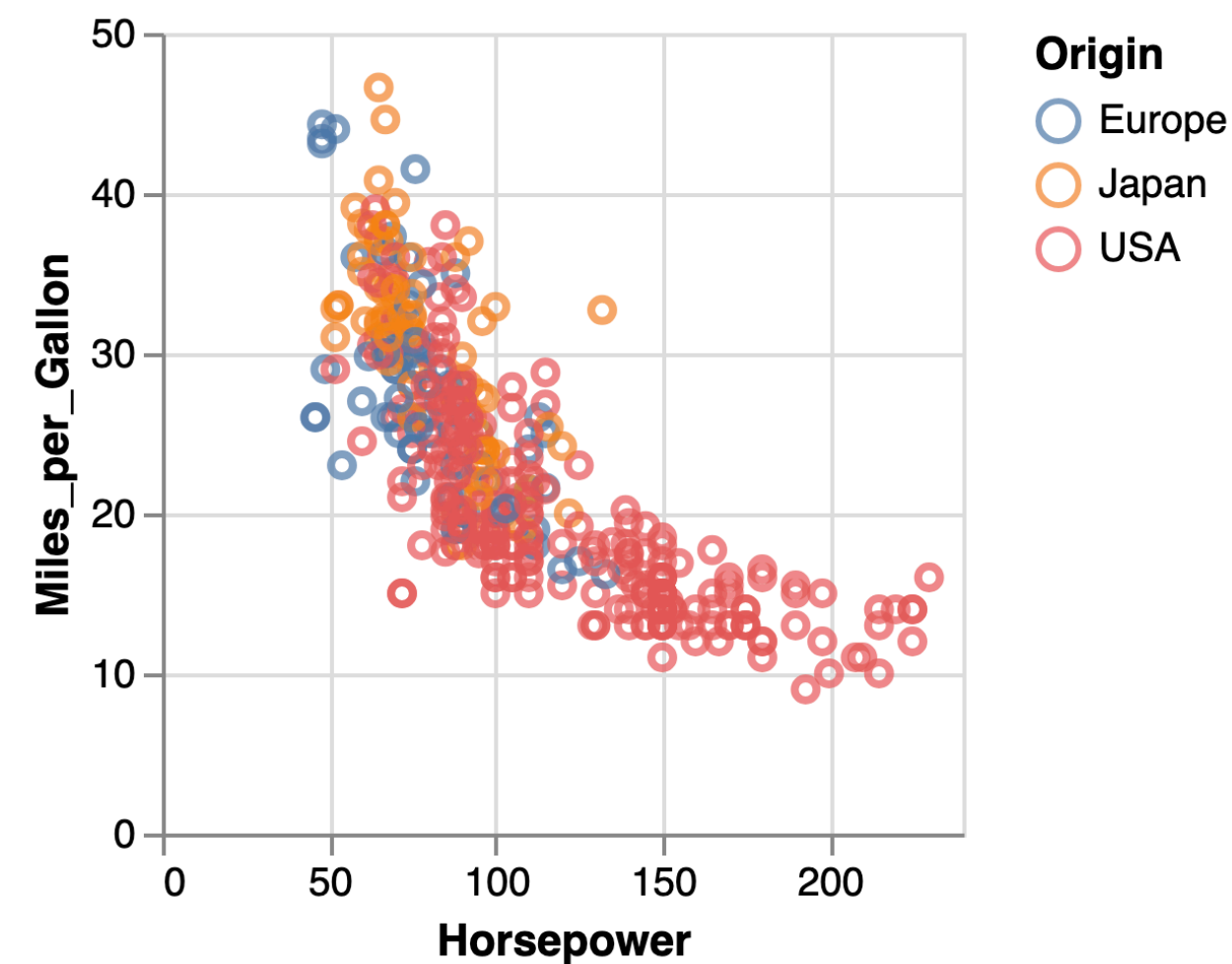**Can someone operate this in multiple ways? Is each way easy?**

Why "keyboard-only?"
Some things work for screen readers but not for keyboard-only users!
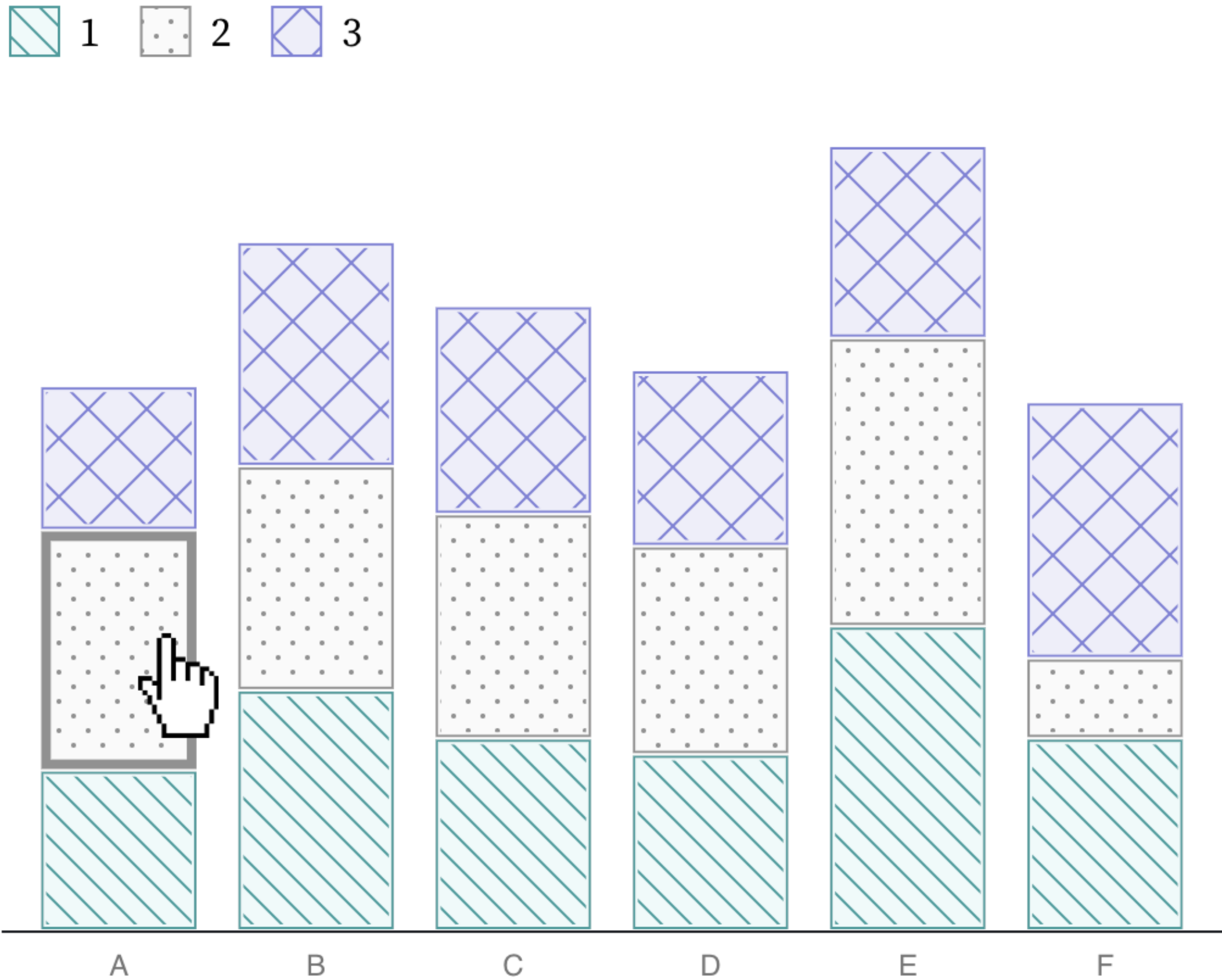

Scatterplot with External Links and Tooltips

A scatterplot showing horsepower and miles per gallons that opens a Google search for the car that you click on.

https://vega.github.io/vega-lite/examples/point_href.html
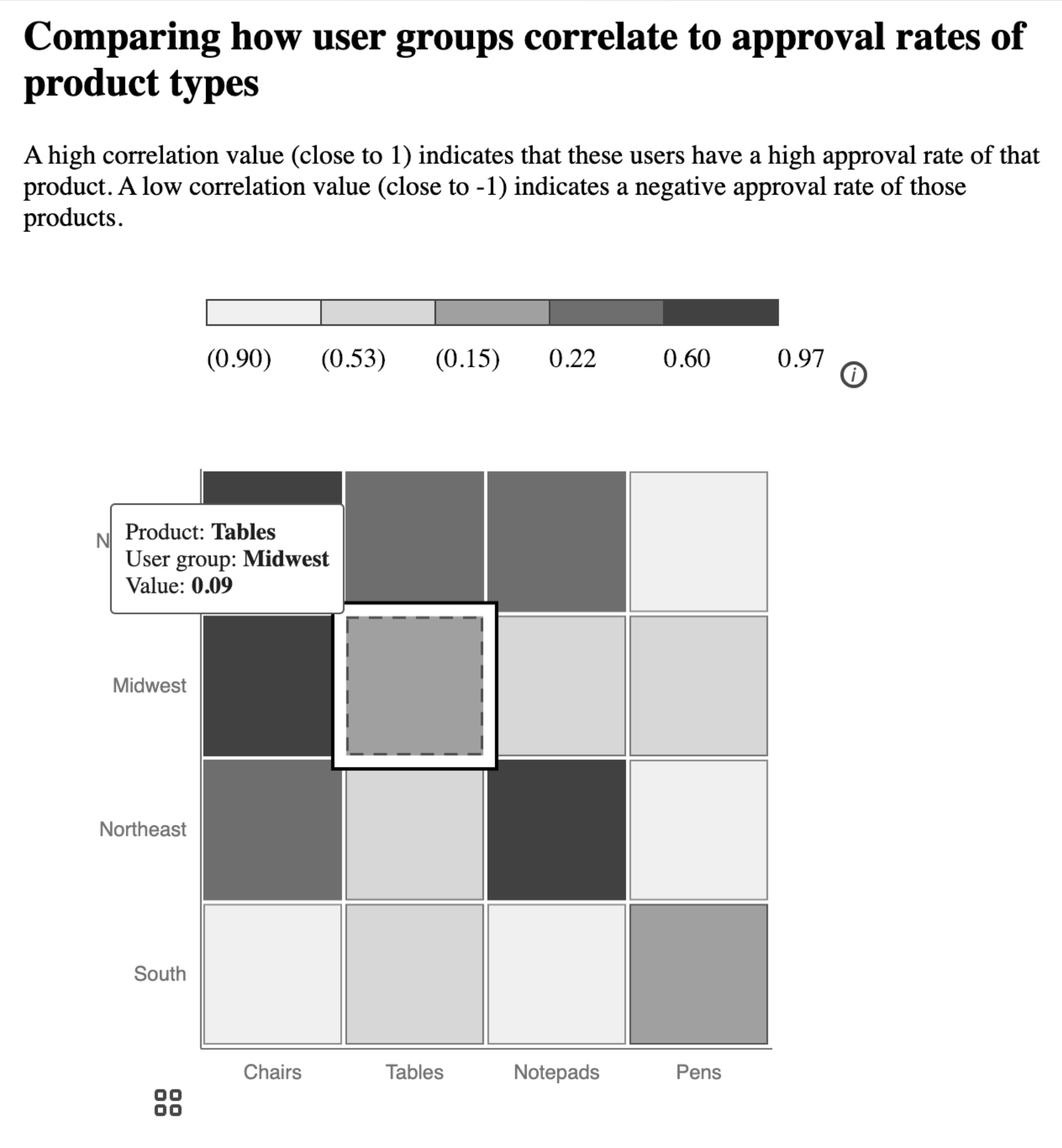
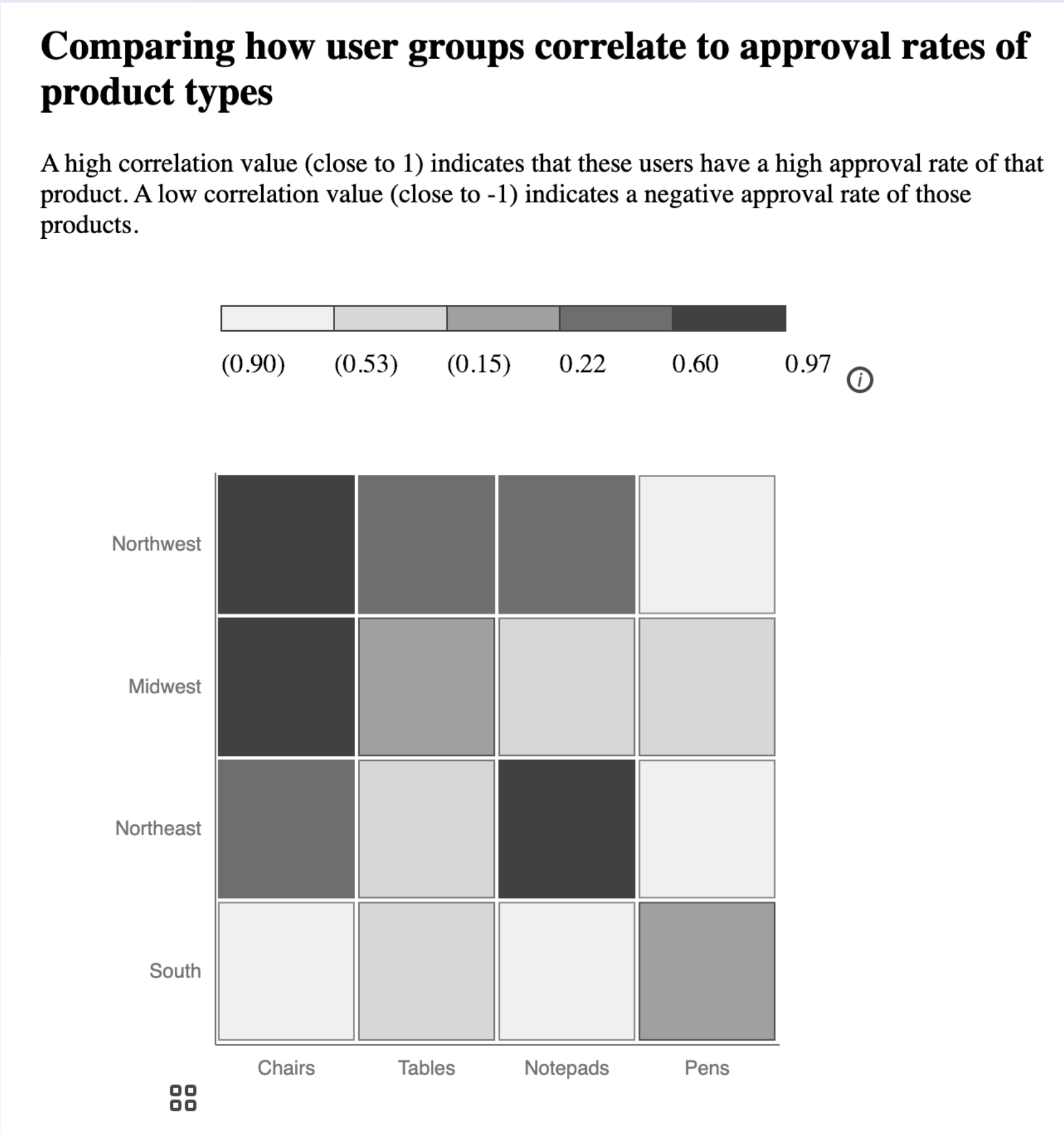# Ensure keyboard access (if interactive)

Provide feedback (visually and non-visually)

Comparing how user groups correlate to approval rates of product types

A high correlation value (close to 1) indicates that these users have a high approval rate of that product. A low correlation value (close to -1) indicates a negative approval rate of those products.

(0.90)   (0.53)   (0.15)   0.22   0.60   0.97 ⓘ

Northwest

Midwest

Northeast

South

Chairs   Tables   Notepads   Pens

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(0.90)   (0.53)   (0.15)   0.22   0.60   0.97 ⓘ

Product: **Tables**
User group: **Midwest**
Value: **0.09**

Midwest

Northeast

South

Chairs   Tables   Notepads   Pens

See "Fourth Chart" in my accessible demos of Visa Chart Components

Alt text should communicate operability
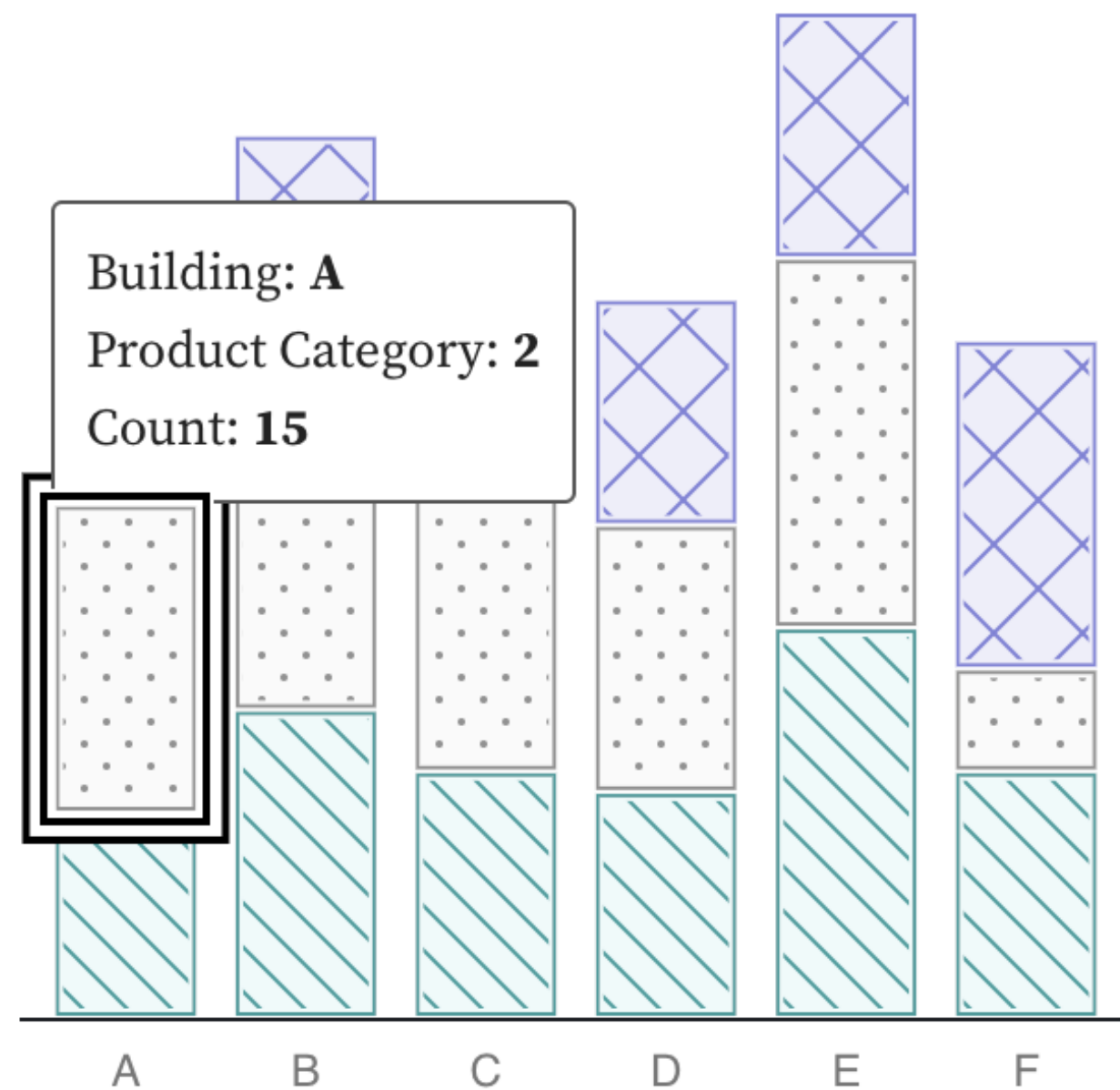
Semantics matter
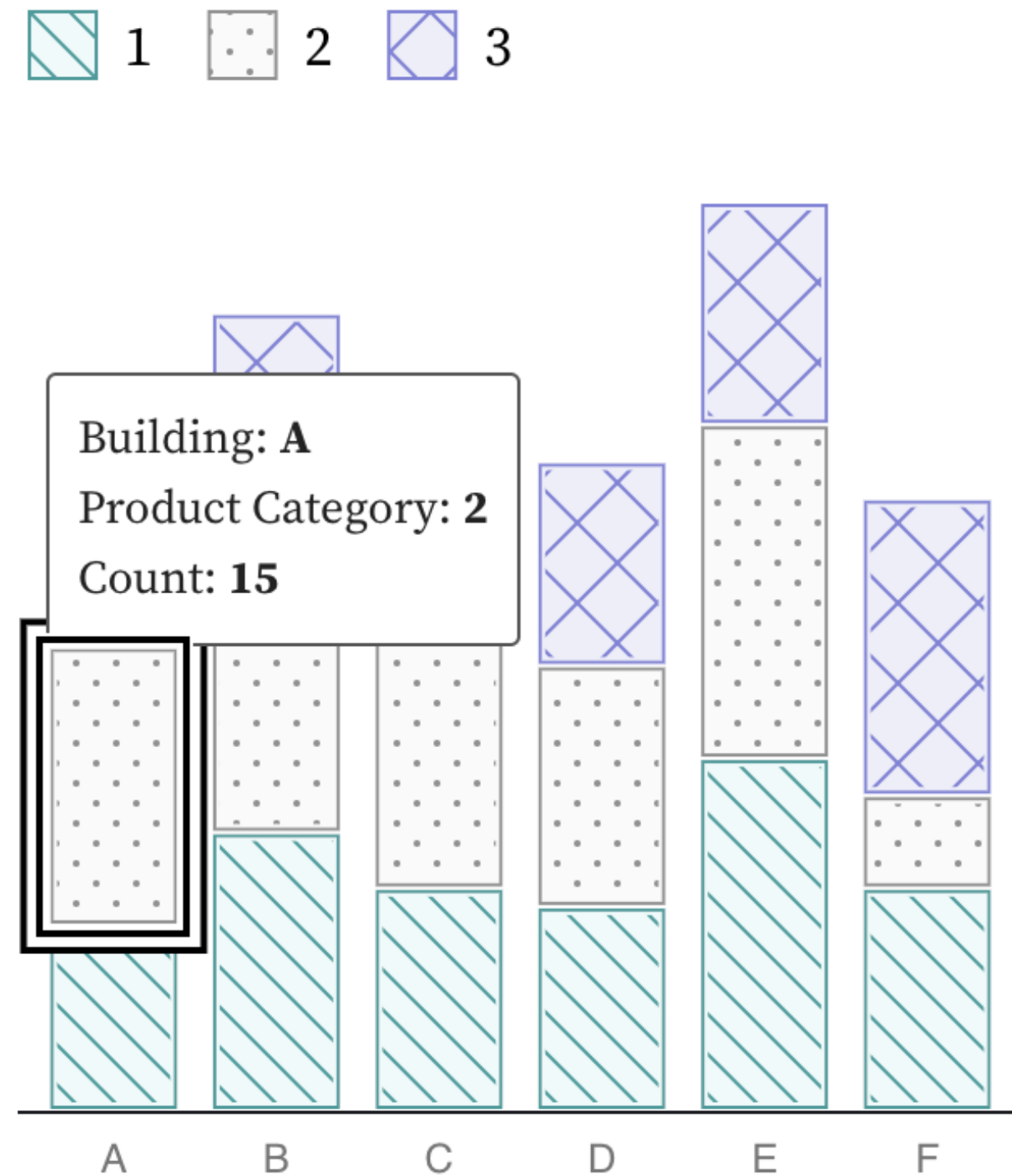
"Image" doesn't signal interactivity!

"Aria" states and roles are standardized
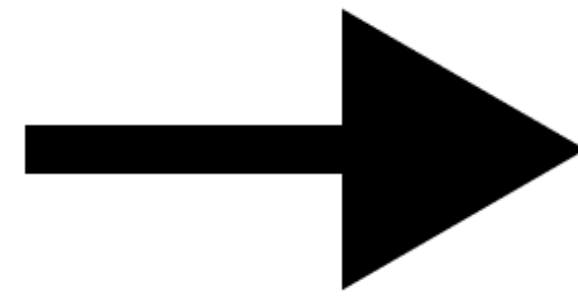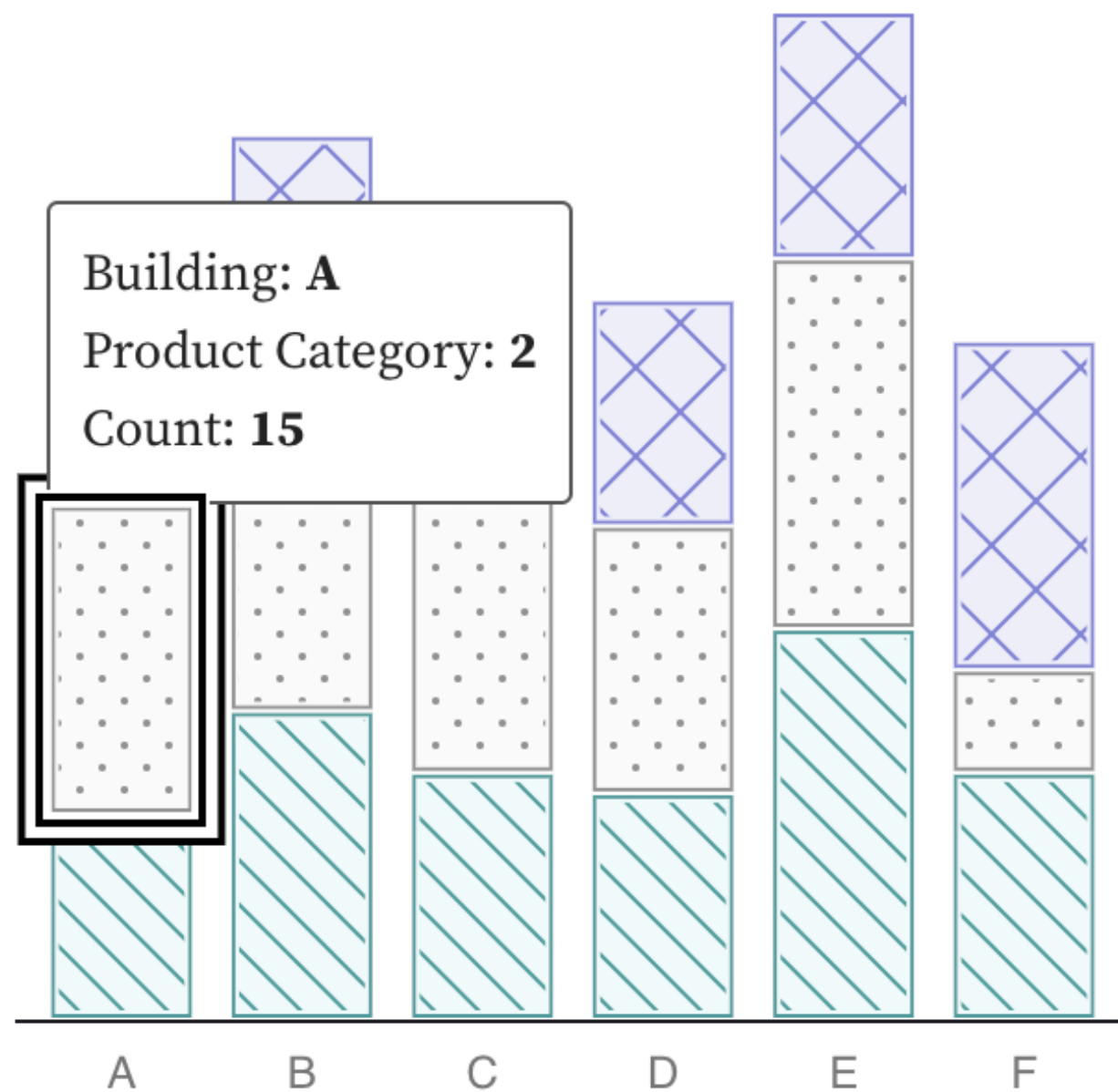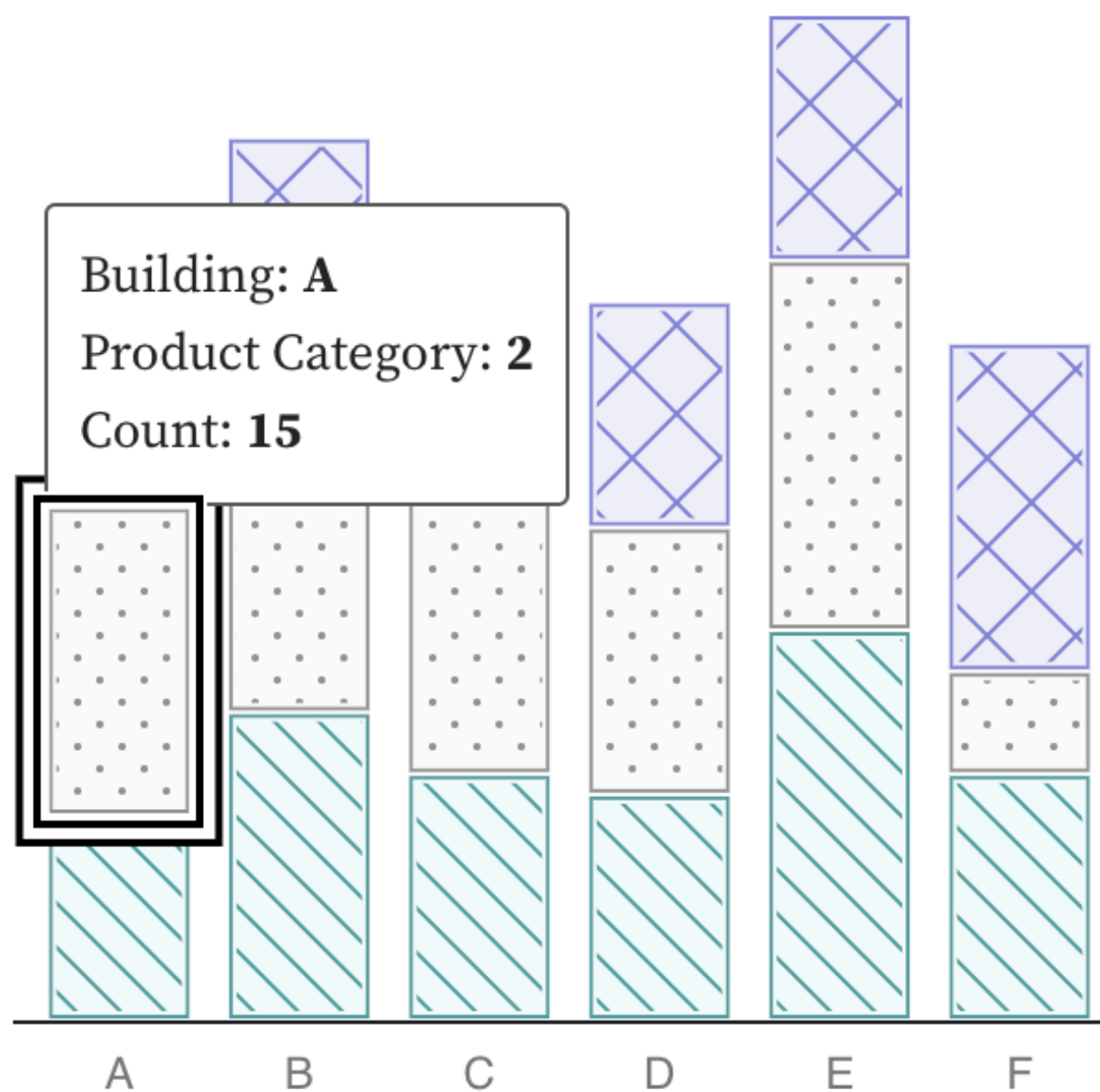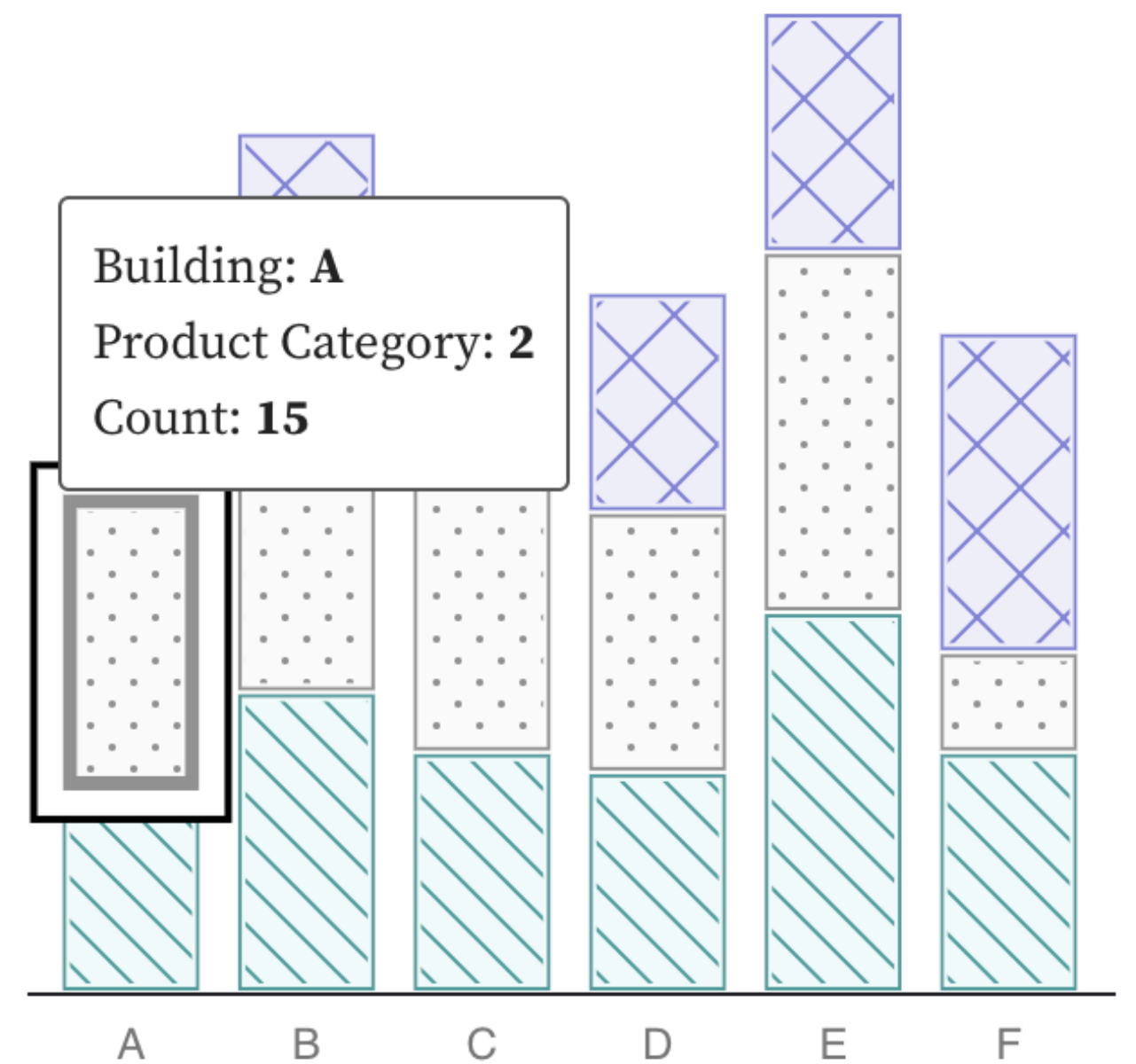
Communicating operability should be visual too
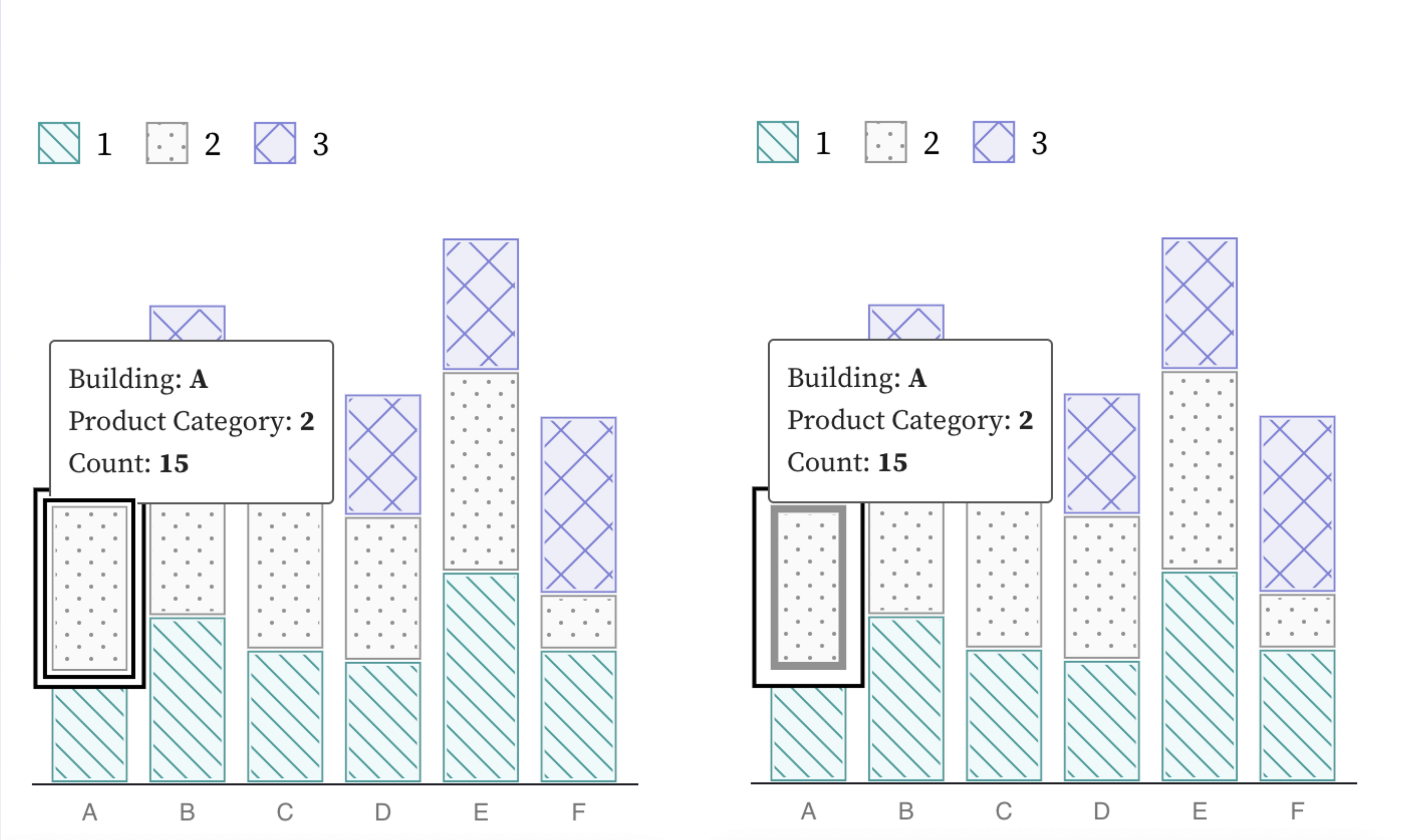
Hovered/focused   **Selected**

Design your own interaction styling

Default Hovered Focused Selected **Hovered +**
Selected **Focused +**
Selected
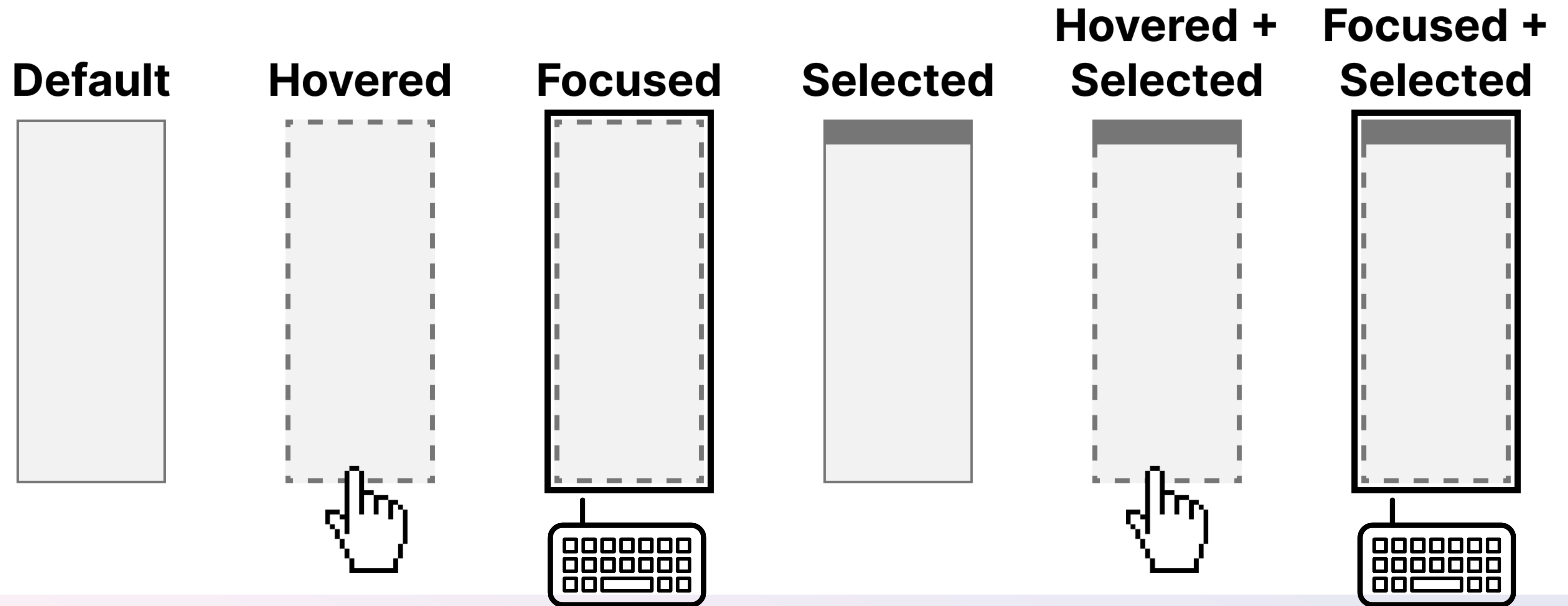
Expecting users to hover on something tiny is an accessibility design failure
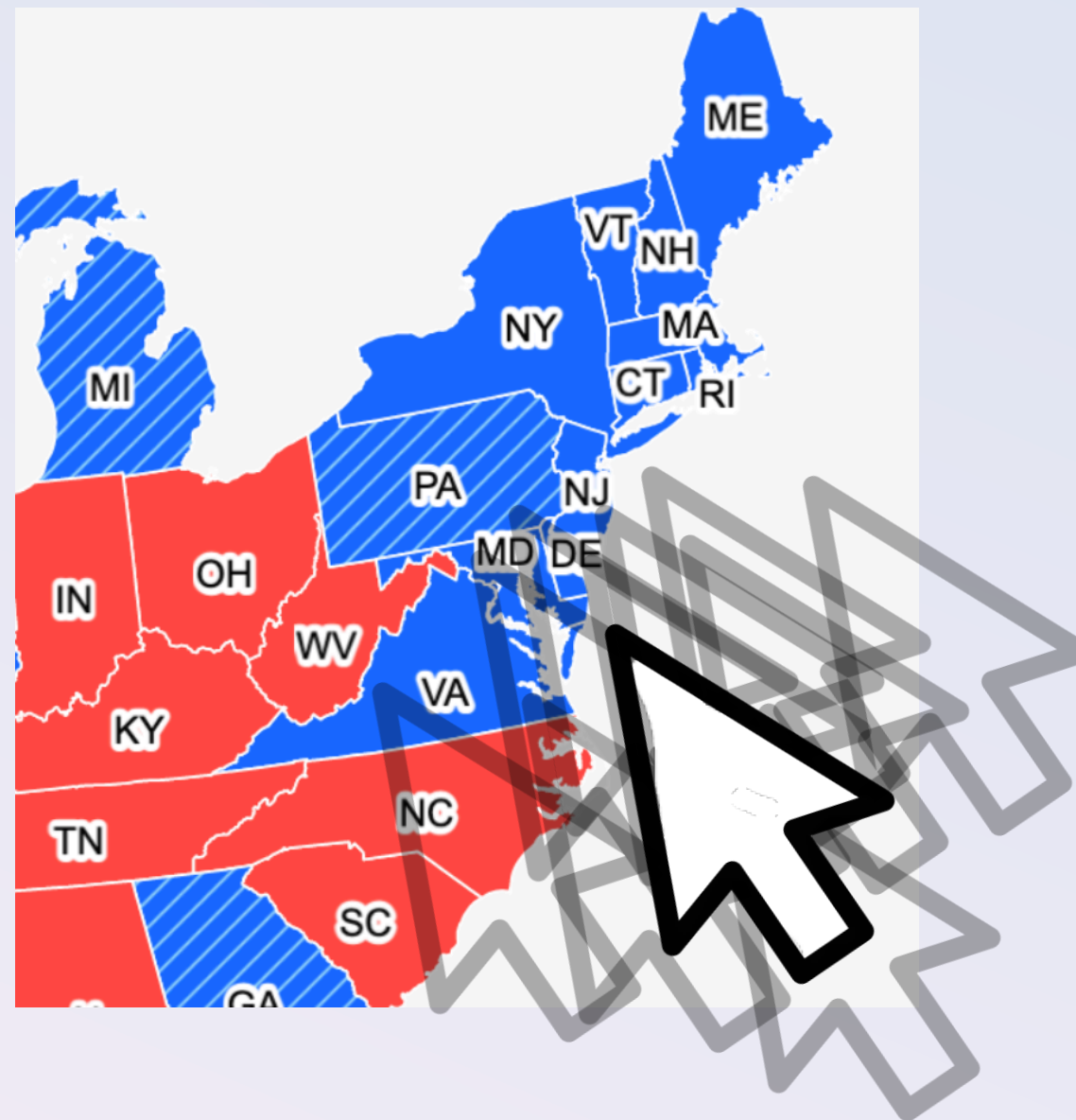
Operable Evaluation Toolkit:

1. **Use your mouse**: can it do something meaningful? (tooltip, click event, etc) If so:

   A. Test using a **keyboard-only**: can you navigate *and* use keyboard activation (spacebar/enter) on the visualization?

   B. Test using a **screen reader**: Can you use a screen reader to navigate and use keyboard activation on the visualization?

2. **Check sizes:** can a mouse *easily* interact with this?