

A SENSE FOR THE ABSTRACT

I am a design consultant who makes abstract objects come to life. I specialize in data visualization.

My visualizations invade people's minds and interrupt their discussions. Joyful visual experiences and productive

decision-making make ideas concrete in their memories.

I also work with tangible and embodied interfaces. *MiLa*, originally an art project to create music using hand signs, can also help novice students learn music notation.

DASHBOARDS



Get an overview of key metrics



[Full 2-page dashboard link]

Allow users to choose granularity



[Full 2-page dashboard link]

Summarize active filters for reference



[Full 2-page dashboard link]



[Full 2-page dashboard link]

Leverage baselines
for analysis



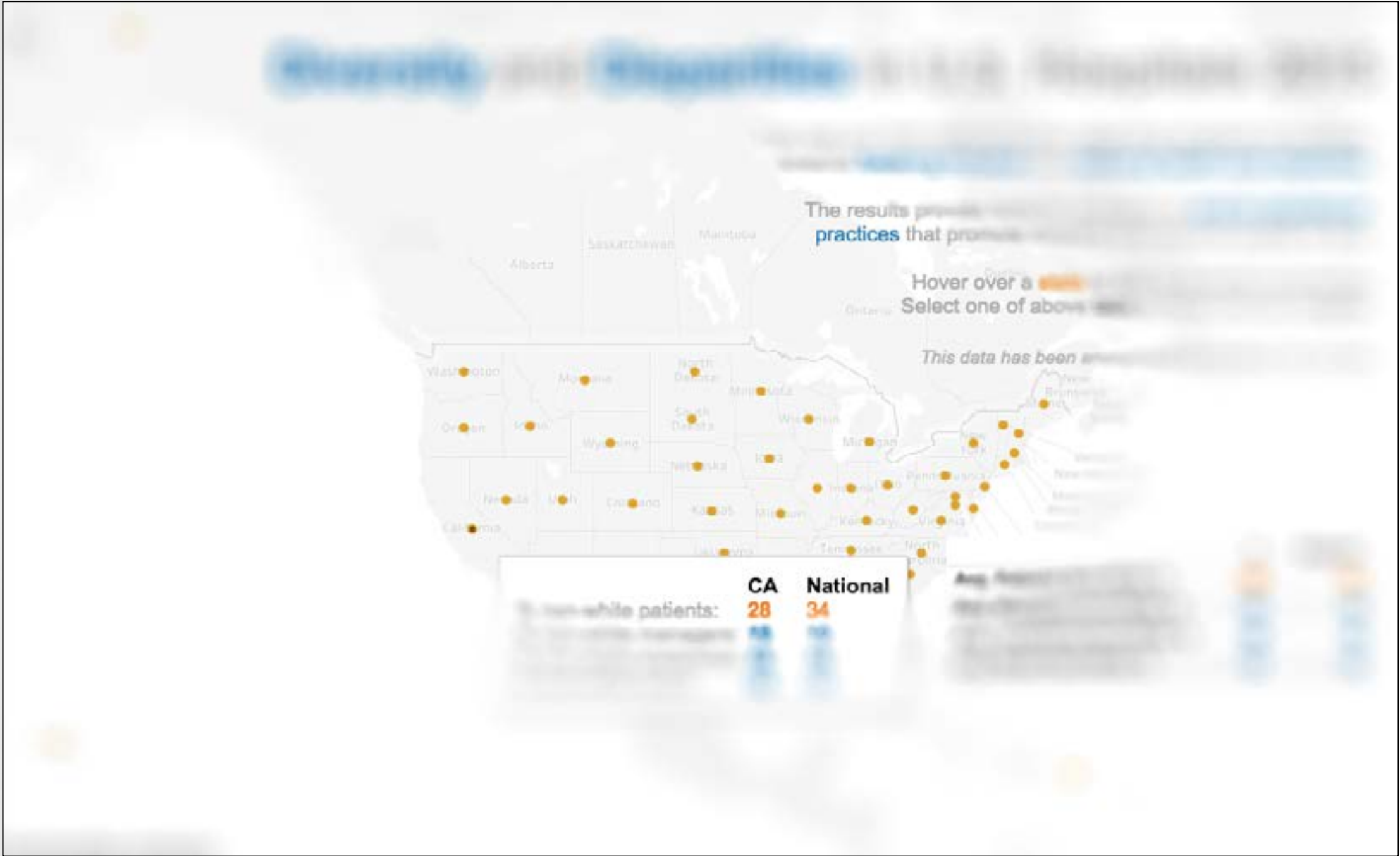
Detailed tables
come last

[Full 2-page dashboard link]



[Full 2-page dashboard link]

Use maps and diagrams as main menus

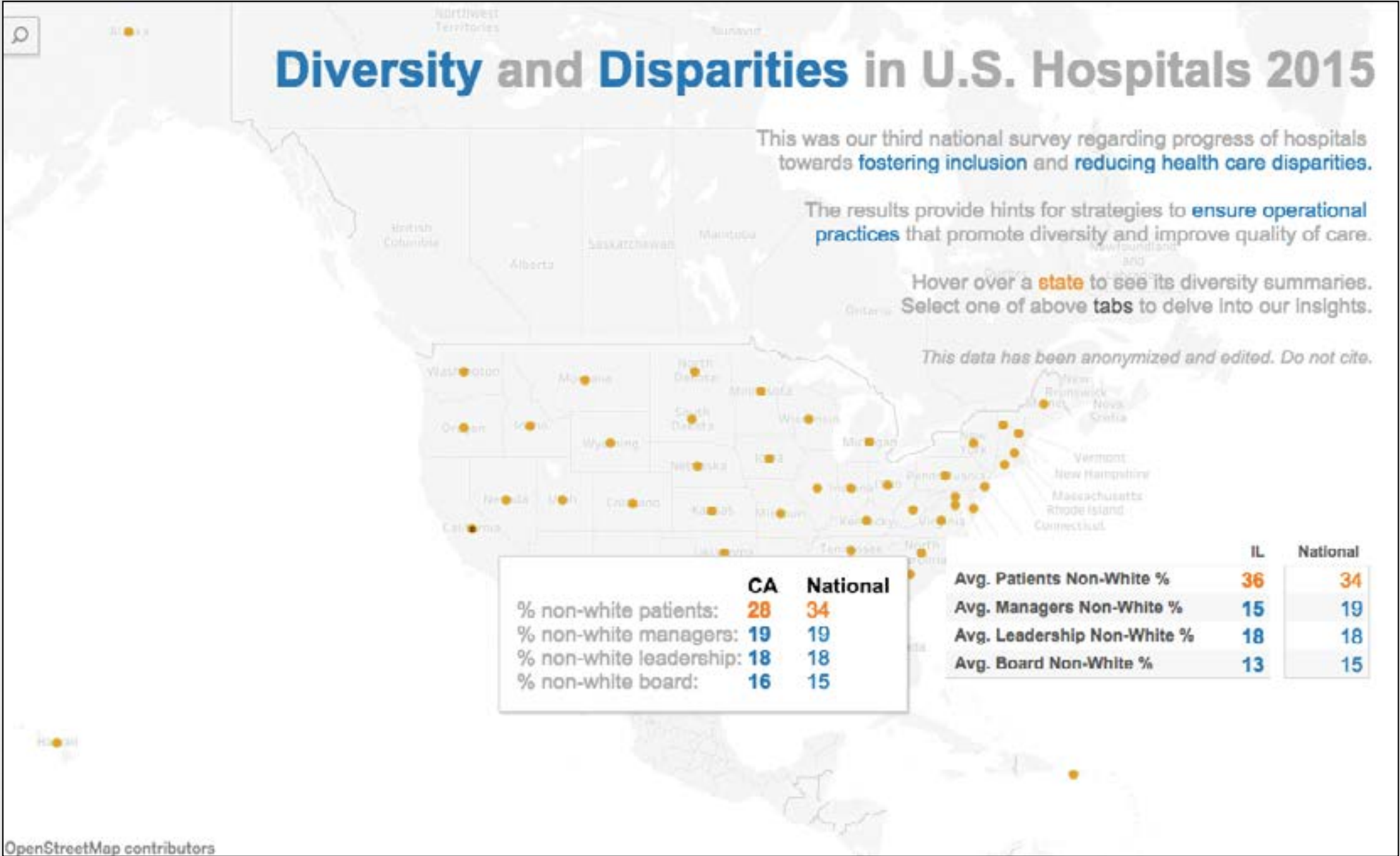


[Full 6-page dashboard link]



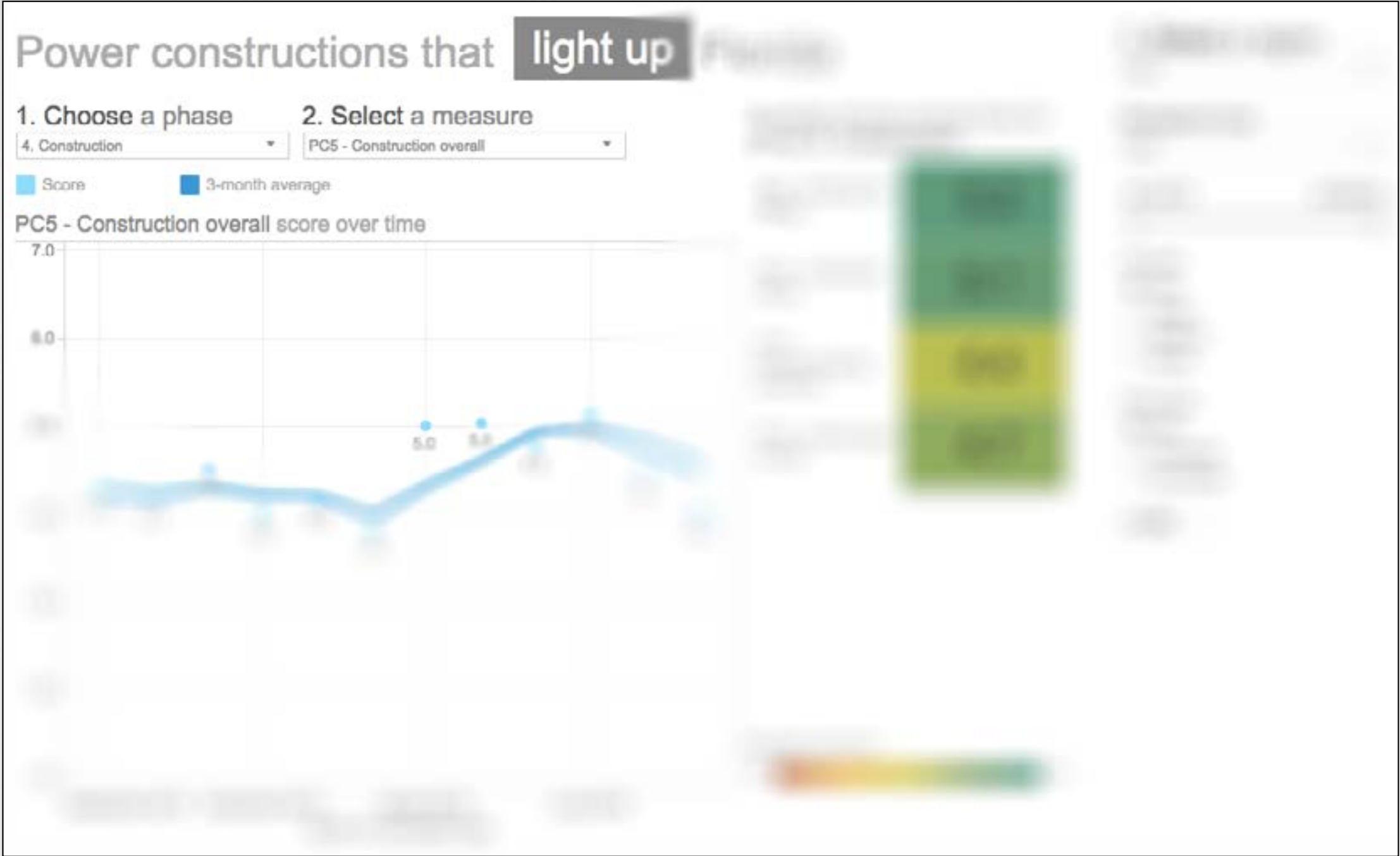
[Full 6-page dashboard link]

Exploit mouseover menus for analysis



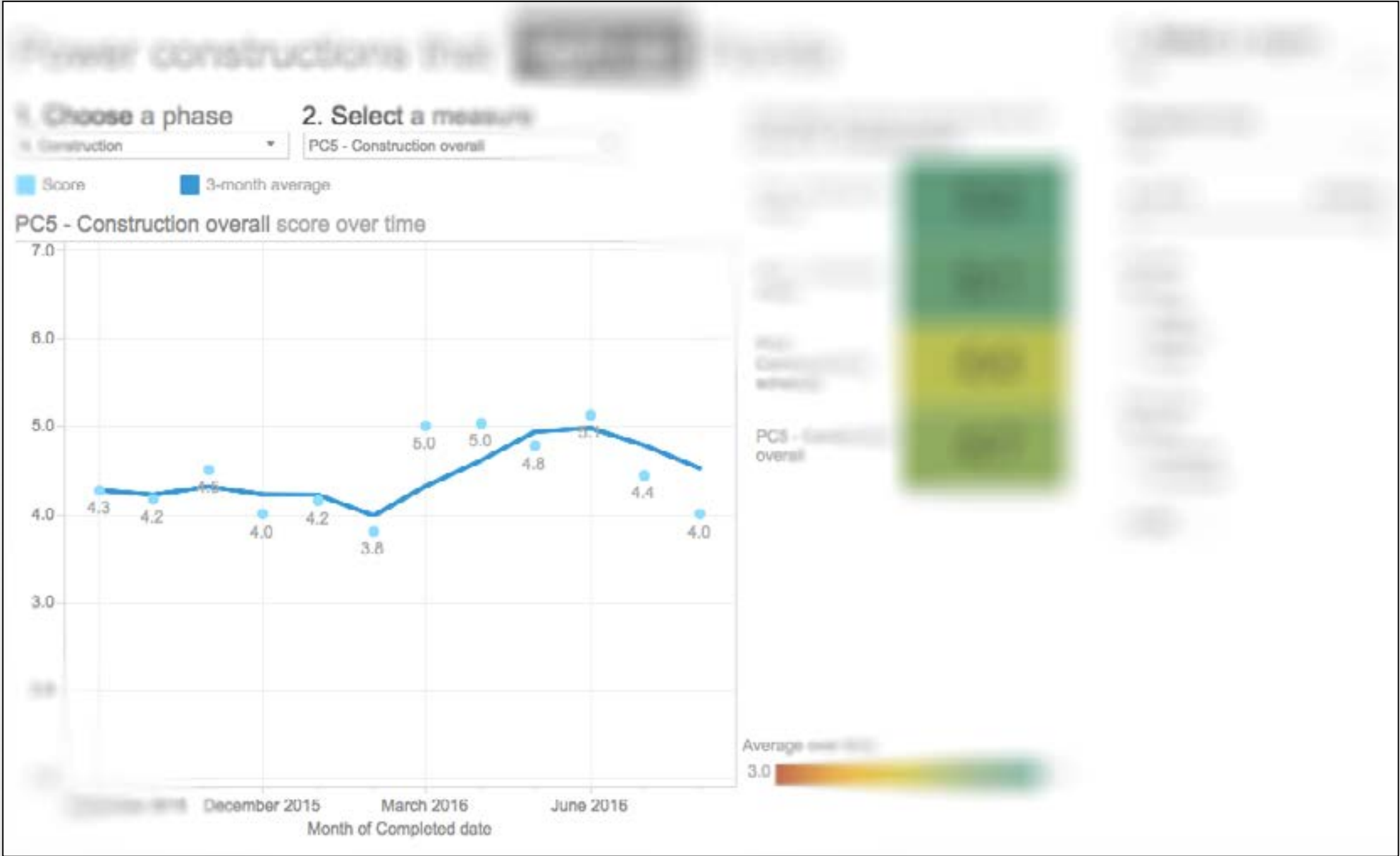
[Full 6-page dashboard link]

Guide users through available filters

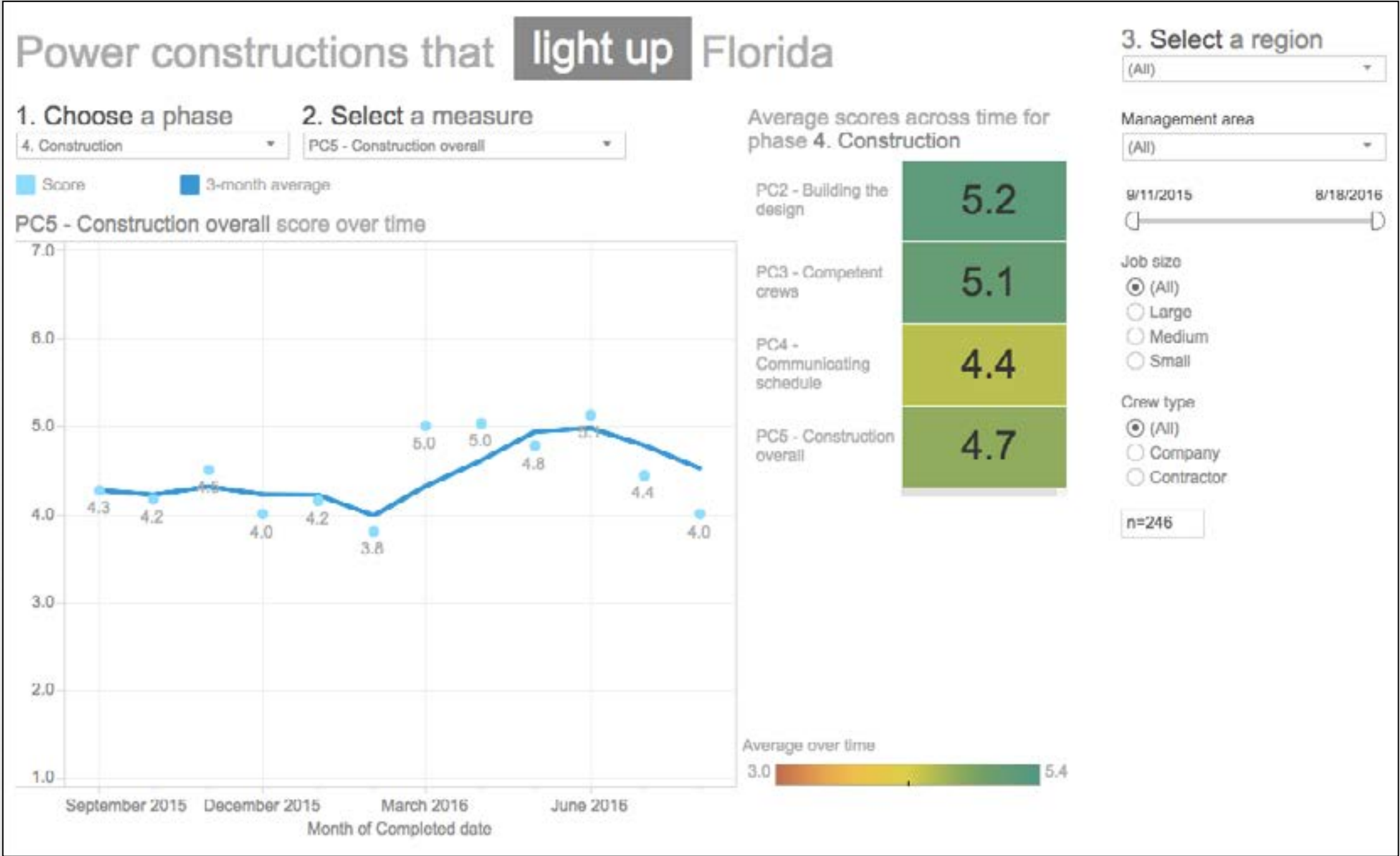


[Full 3-page dashboard link]

Create concise yet detailed graphs

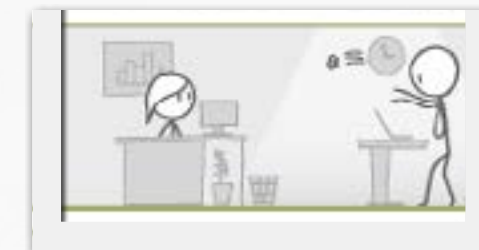
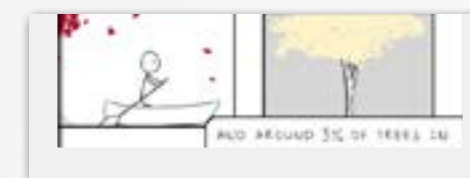


[Full dashboard link]



[Full dashboard link]

DATA COMICS





[Original post link]

Comic strips offer a unique avenue for engagement with quantitative information.

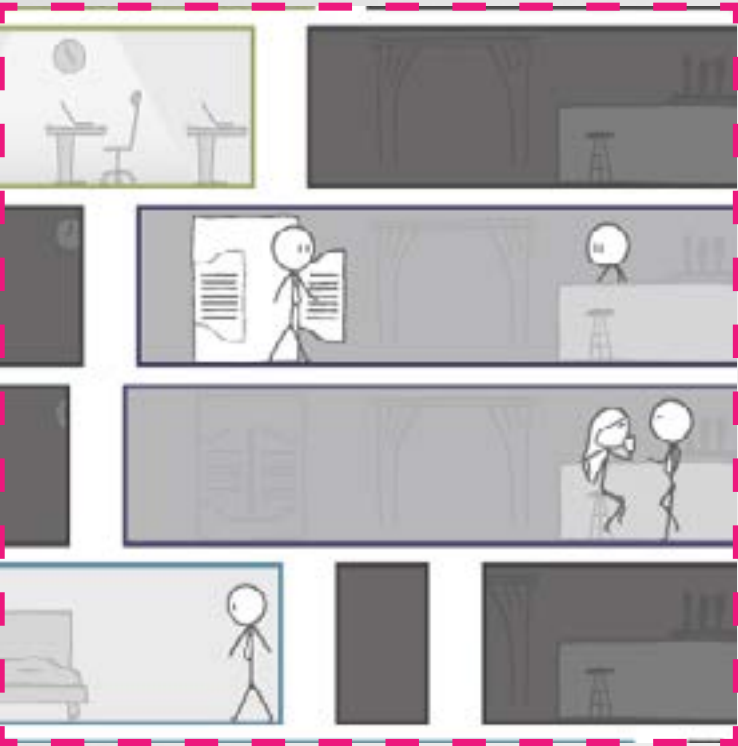
The use of abstract characters in familiar situations can allow the audience to identify with the story, sparking self-reflection: “Is this how I live my life? How am I different?”



[Original post link]

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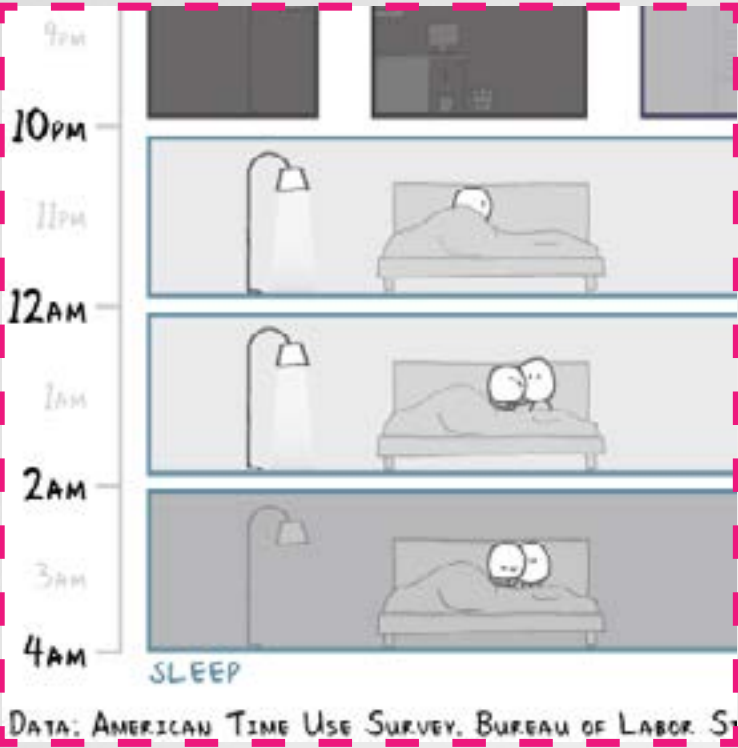
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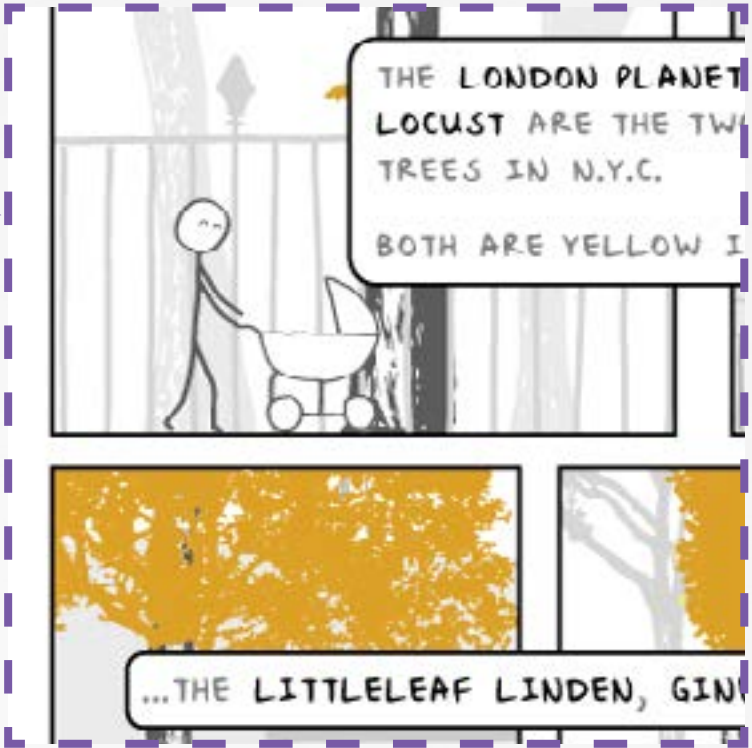
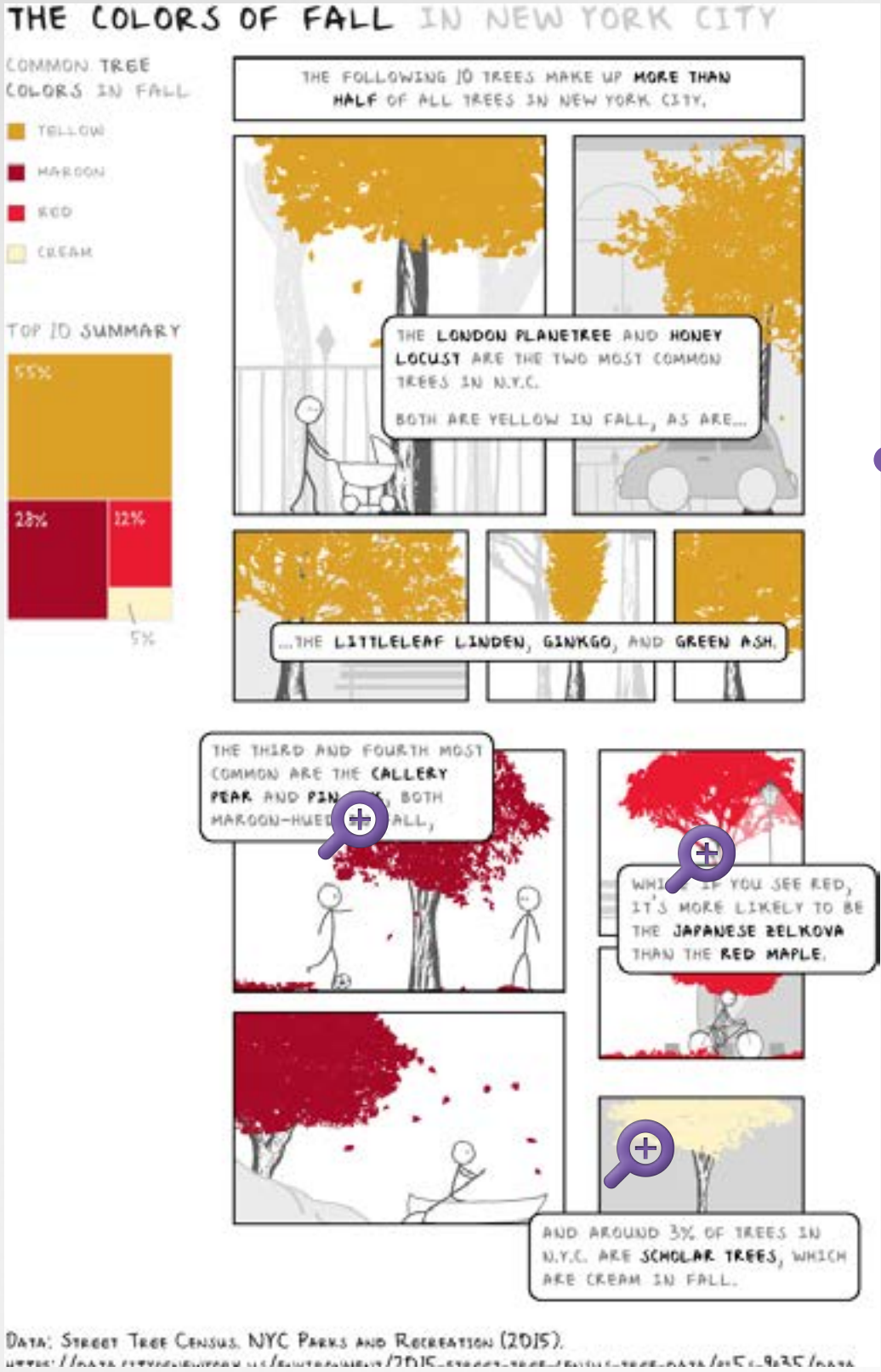
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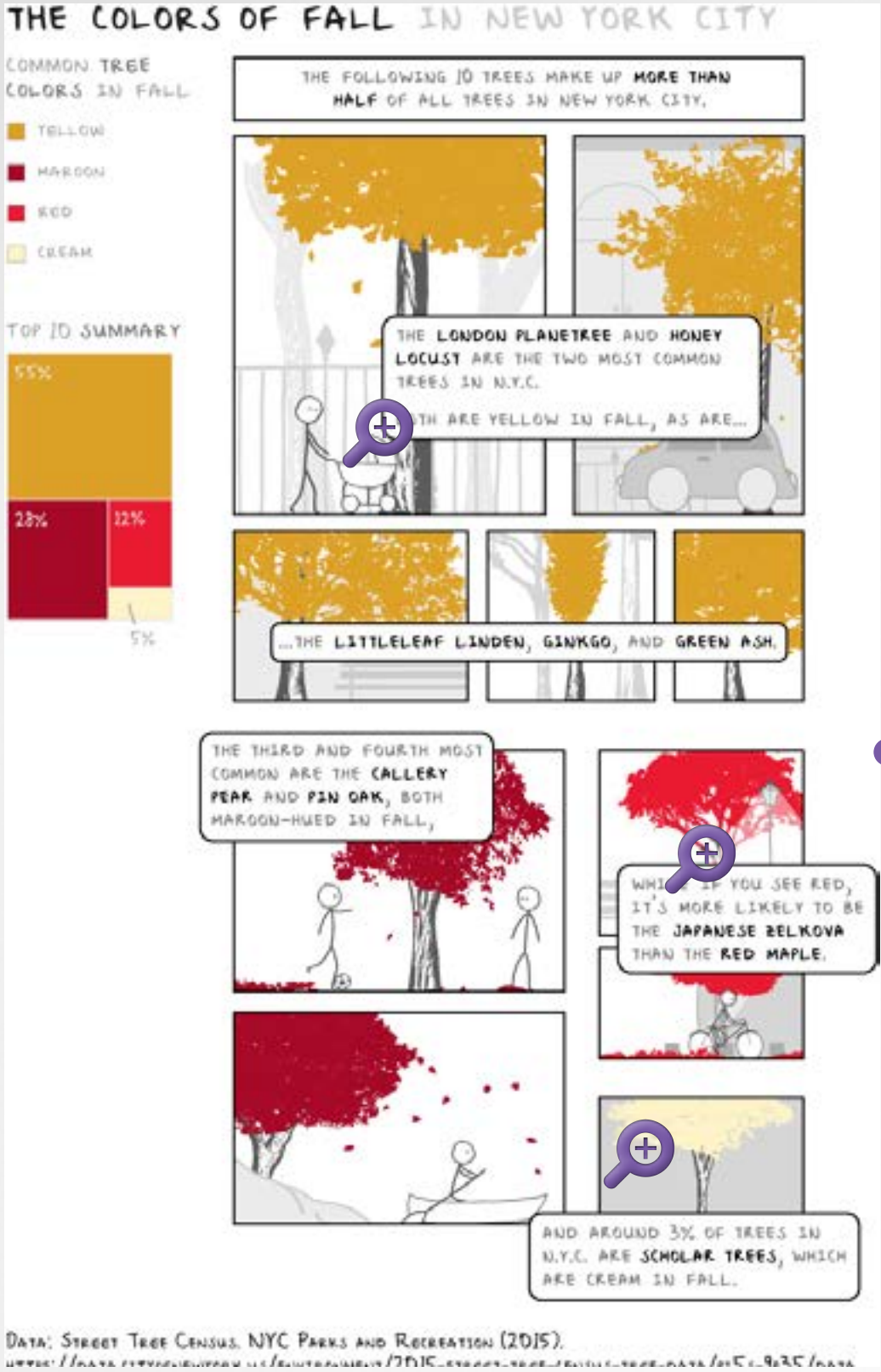
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Speech bubbles (in lieu of labels) can be used to great effect in data comics by augmenting the capacities of visual storytelling.

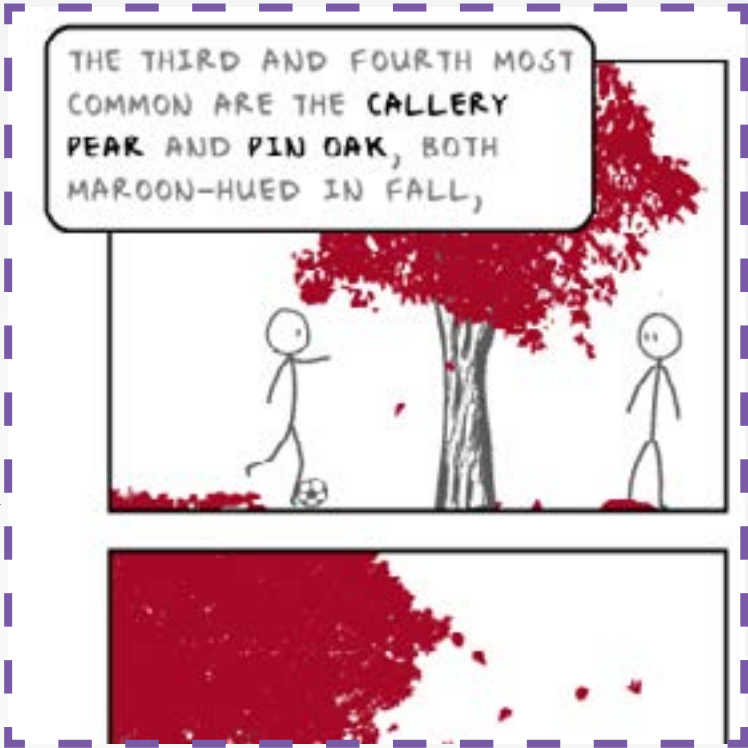
[Original post link]

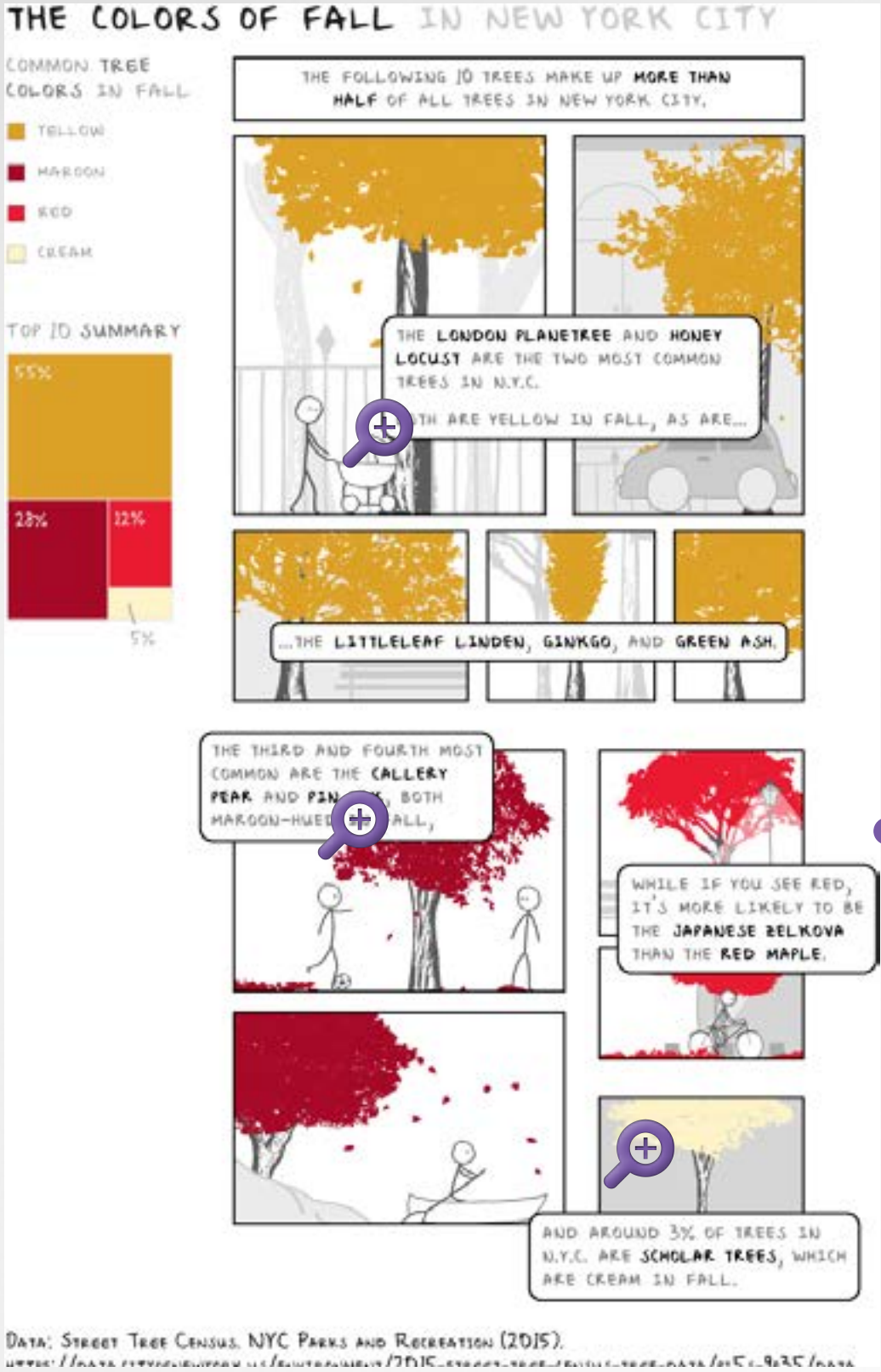
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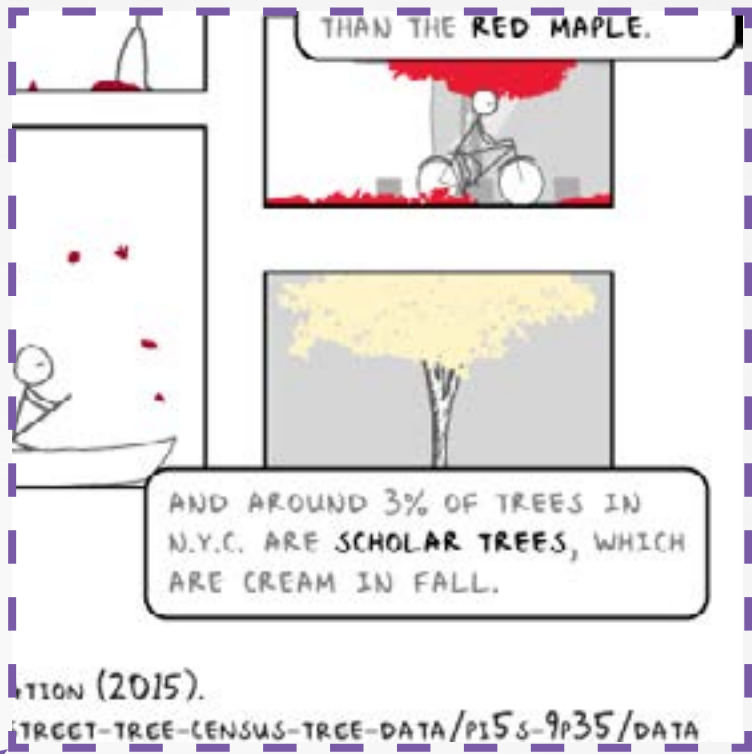
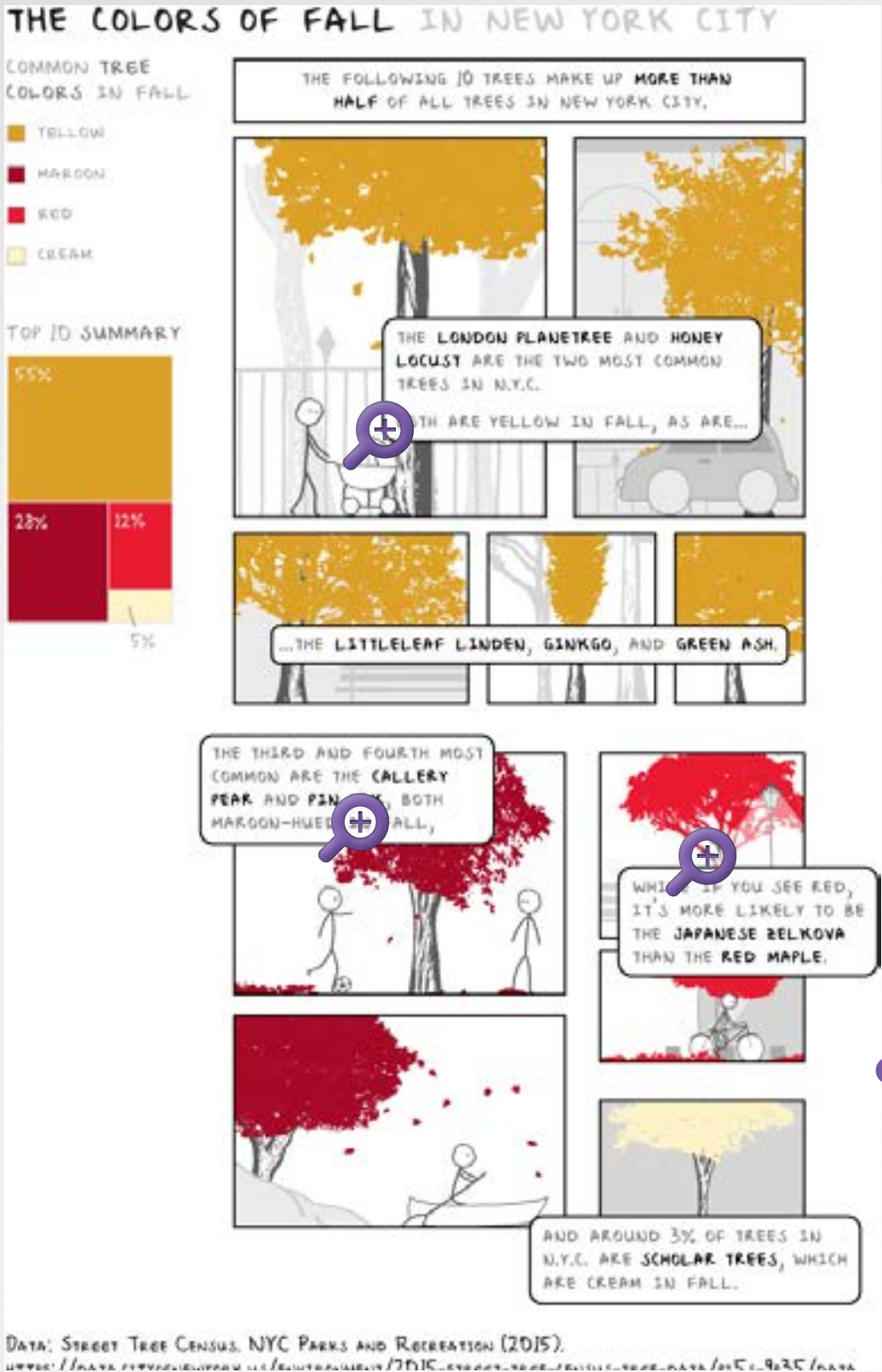
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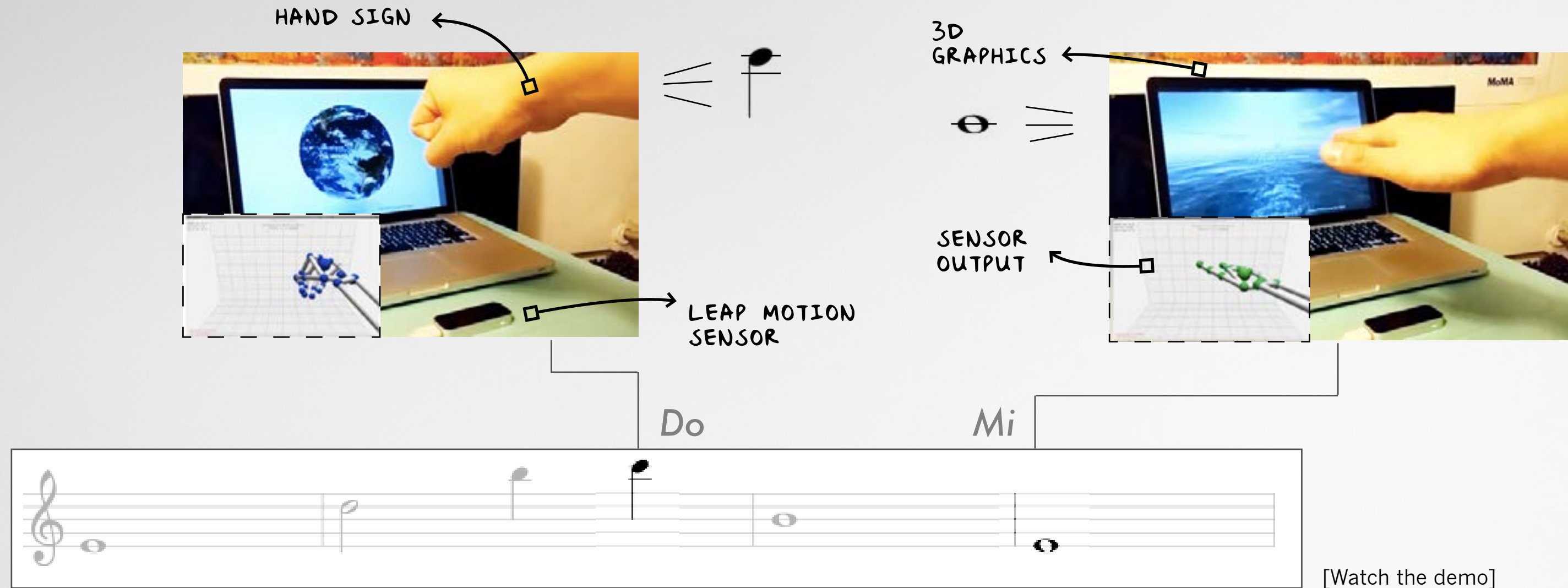
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MiLa is a musical instrument controlled with hand signs and augmented with 3D graphics. Originally a work of visual and sound art meant to create sensations through embodied metaphors, it was later adapted as a tool for music literacy.

This interface was first presented as a short paper at CHI 2016.

The Curwen hand signs are a music notation system used by educators to dictate songs in class.

Created in the 19th century, the signs make sheet music come alive by evoking each tone's mental effect (*Do* [above left] is signalled with a fist, and its mental effect is "strong or firm").

[Read full paper]



MiLa: an Audiovisual Instrument for Learning the Curwen Hand Signs

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Northwestern University

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The Curwen hand signs are used in music classrooms for sight-singing training. Students would follow along to melodies dictated with the hand signs.

Learning what pitch each sign stands for is neither easy nor fun, as until now it has been a rote learning process.

MiLa is an instrument controlled by these hand signs. Getting active auditory and visual feedback for making the postures will facilitate the link between the signs and the syllables.

Example:
Mi is the “steady and calm” tone, and is represented by a hand pointing outward, palm downward.

“I felt *powerful*.”

“The visuals are *soothing*; they are almost *therapeutic*”

-User study participants
(three male, two female total)

Ti
The piercing or sensitive tone

La
The sad or weeping tone

So
The grand or bright tone

Fa
The desolate or awe-inspiring tone

Mi
The steady or calm tone

Re
The rousing or hopeful tone

Do
The strong or firm tone

Once the Leap Motion sensor recognizes the hand sign as *mi*, the corresponding tone is played and a 3-D scenery displayed.

Mi is a flat but moving ocean.

