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]

MATT HONG

⏮ ◀◀ ▶▶ ⏭

Show numbers

Now showing
Consultant
All
Question
All
Year
All
Type
All
Role
All

Sample size

I am
satisfied...

This
company...

Summarize active
filters for reference

[Full 2-page dashboard link]

[Full 2-page dashboard link]

Leverage baselines
for analysis

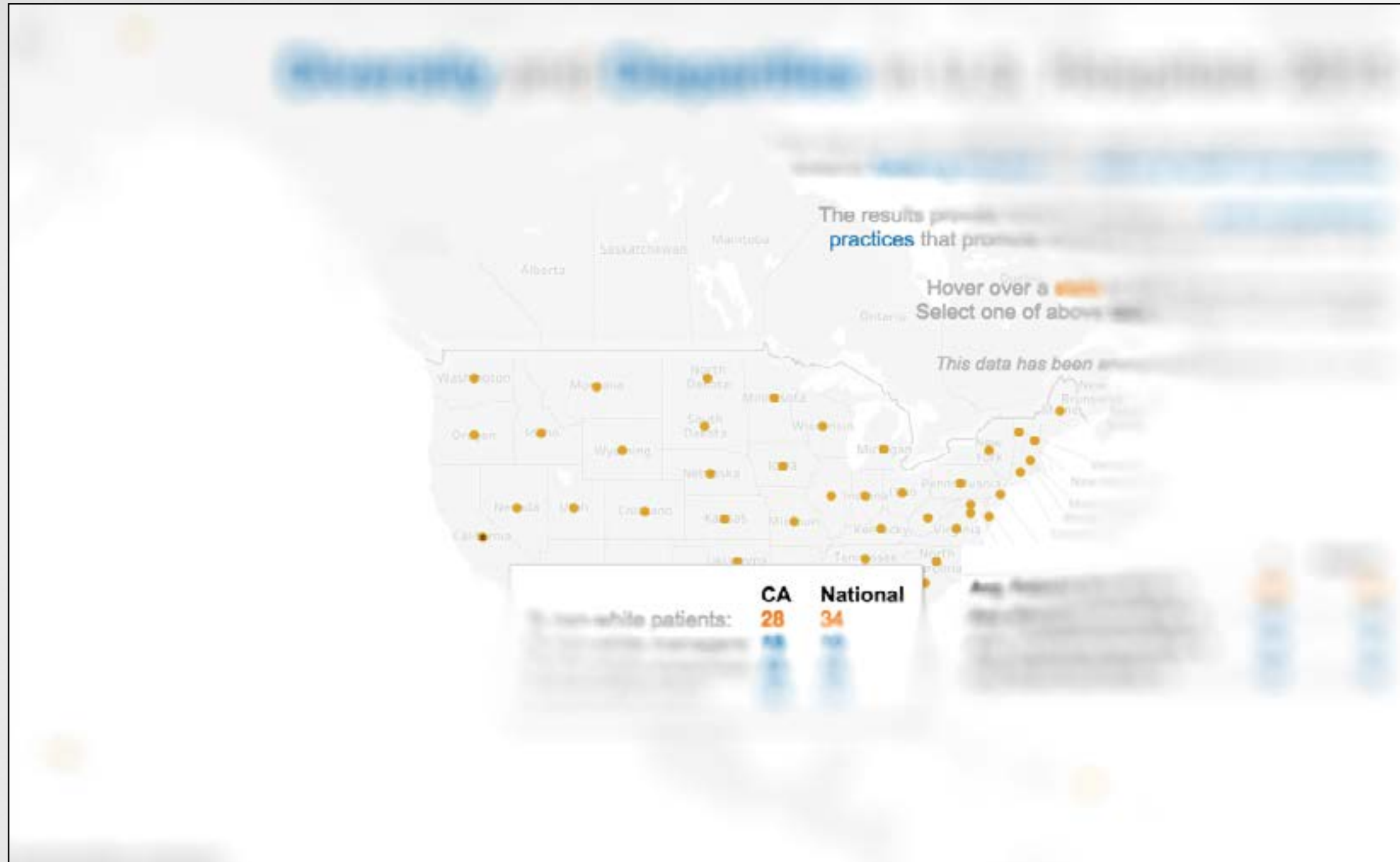Mean satisfaction scores by type, role

Type1	Role1			
	Cast	Exec.	Gov.	Total
Type B	5.7	5.7	5.2	5.7
Both	5.1	5.8	5.4	5.4
Type A	4.3	5.2		4.4
Total	5.2	5.7	5.4	**5.4**

Detailed tables come last

[Full 2-page dashboard link]

Evaluating employee satisfaction toward external consultants

[Full 2-page dashboard link]

Use maps and diagrams
as main menus

[Full 6-page dashboard link]

	CA	National
% non-white patients:	28	34
% non-white managers:	19	19
% non-white leadership:	18	18
% non-white board:	16	15

Avg. Patients Non-White %
Avg. Managers Non-White %
Avg. Leadership Non-White %
Avg. Board Non-White %

[Full 6-page dashboard link]

Exploit mouseover
menus for analysis
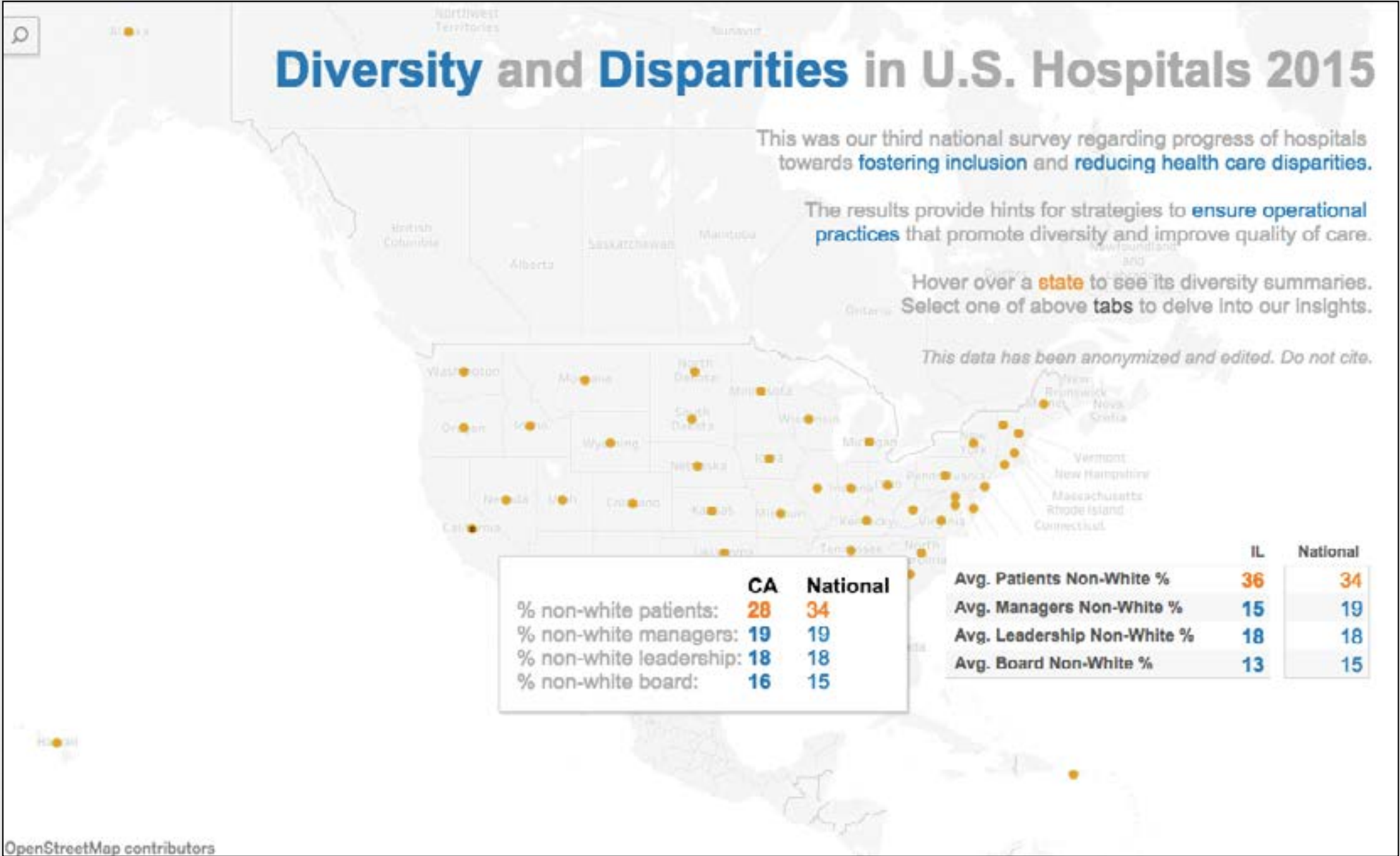
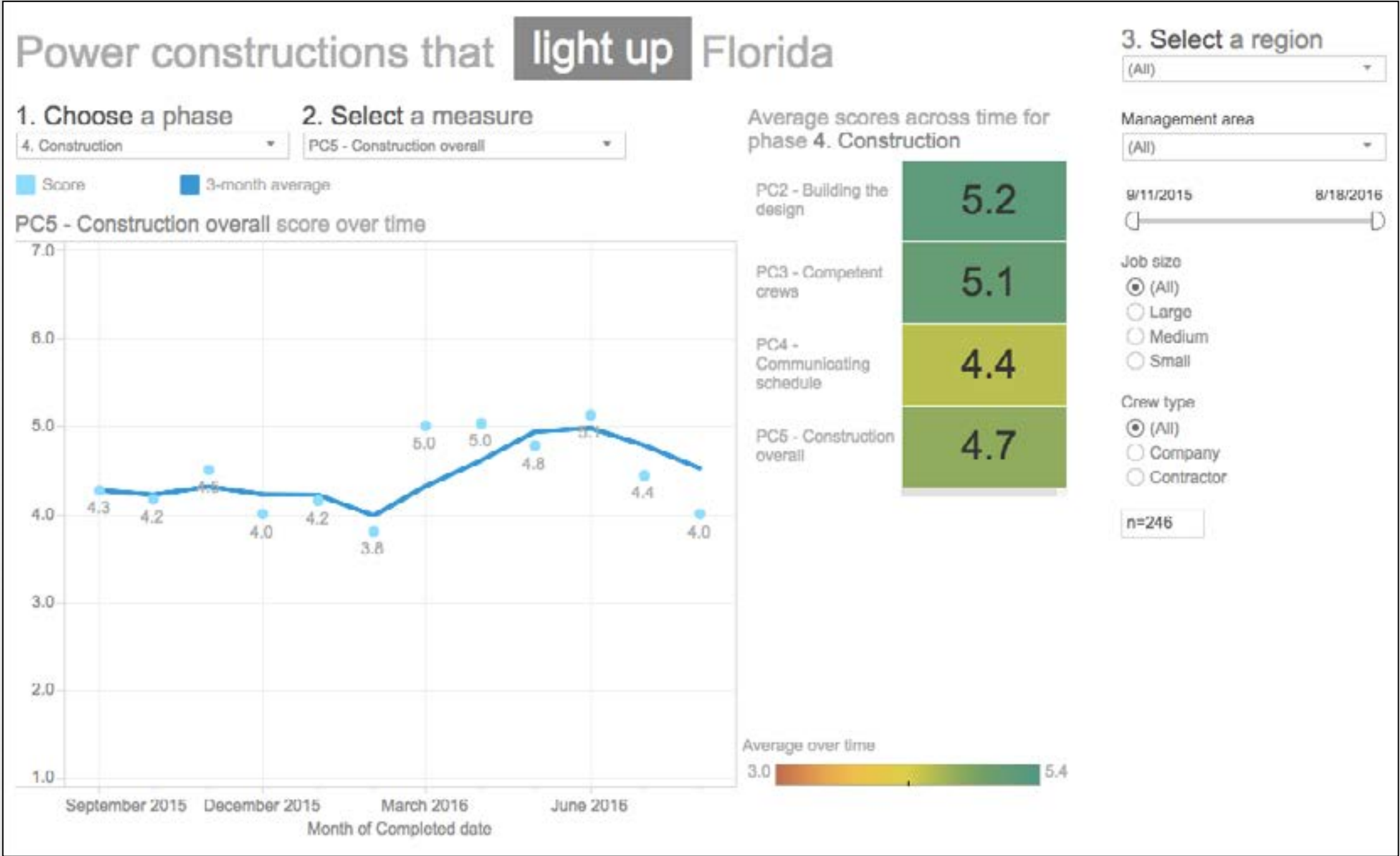[Full 6-page dashboard link]

Guide users through
available filters

Power constructions that **light up**

1. Choose a phase
4. Construction

2. Select a measure
PC5 - Construction overall

Score   3-month average

PC5 - Construction overall score over time
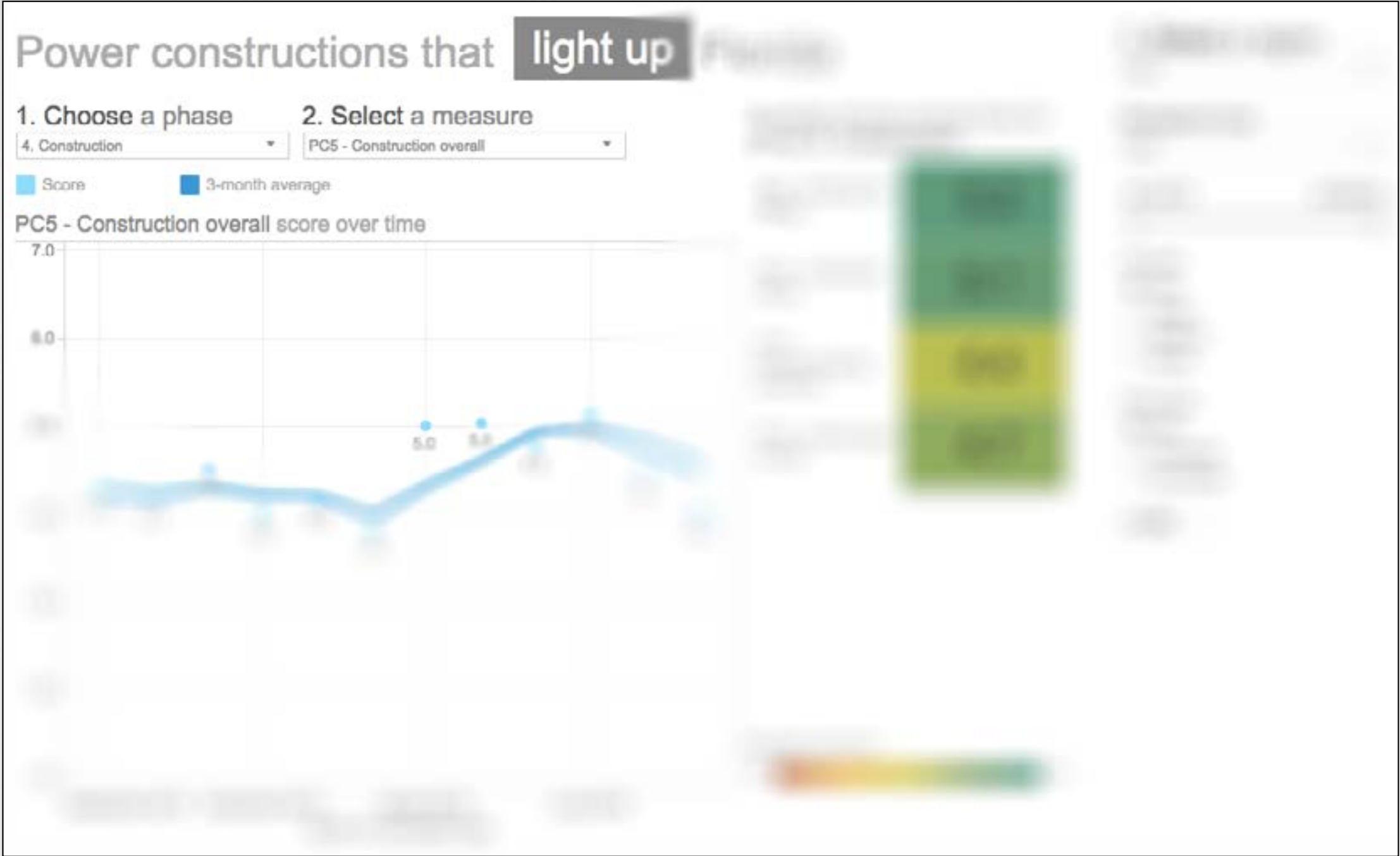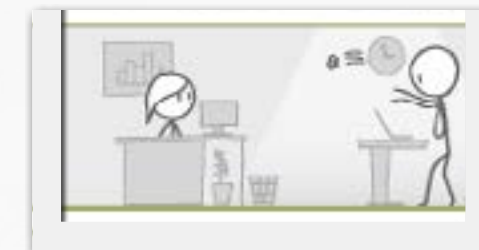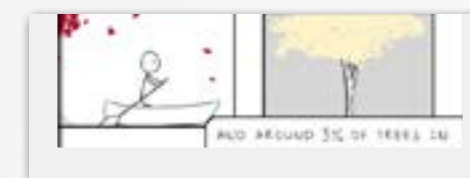
[Full 3-page dashboard link]
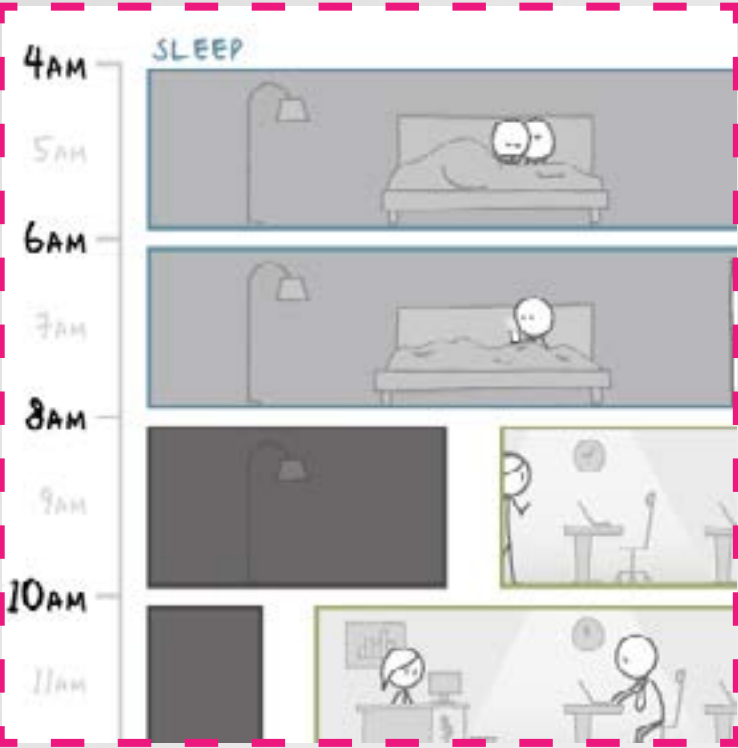
Create concise yet detailed graphs
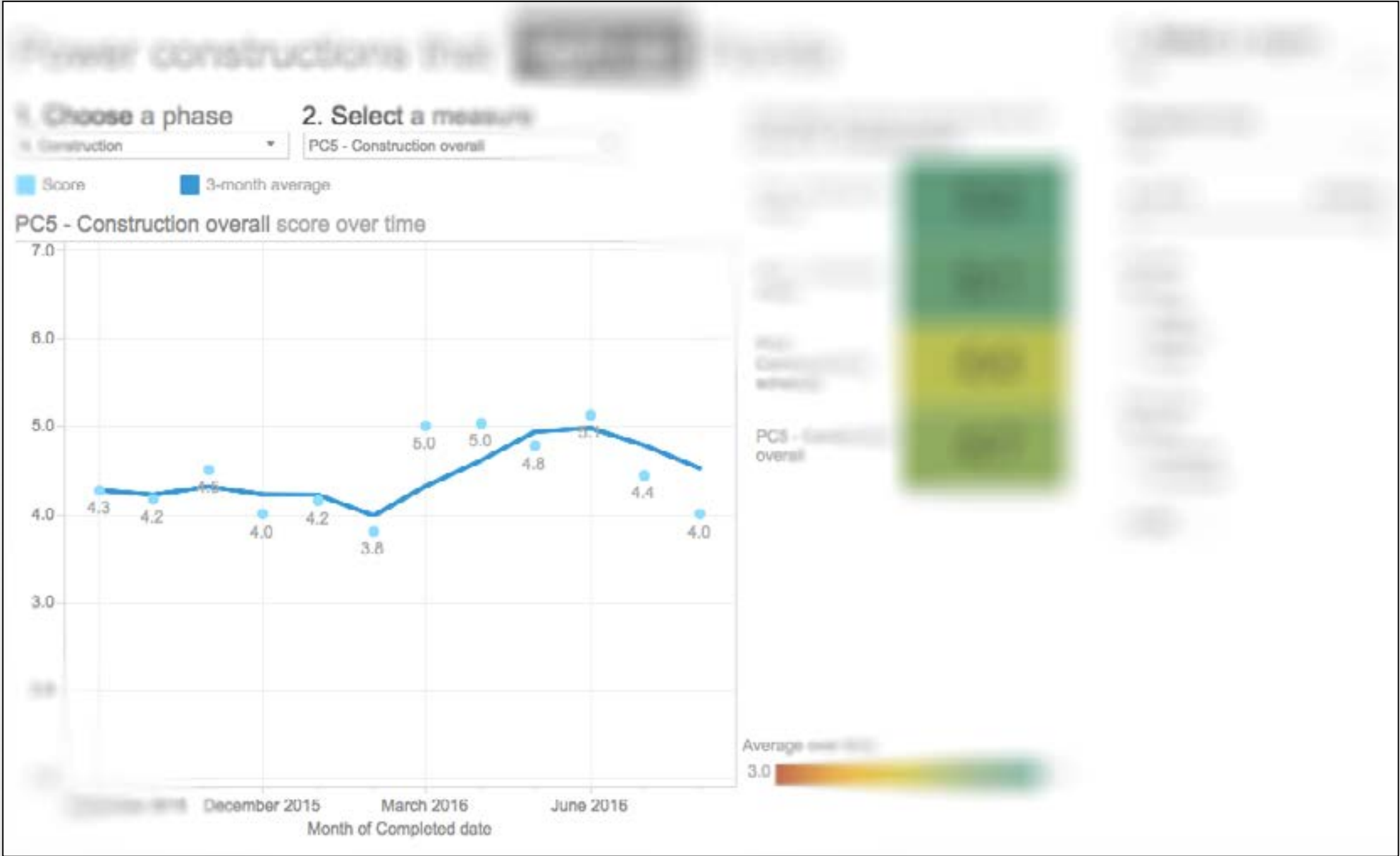
[Full dashboard link]

[Full dashboard link]

DATA COMICS

[Original post link]

Comic strips offer a unique avenue for engagement with quantitative information.
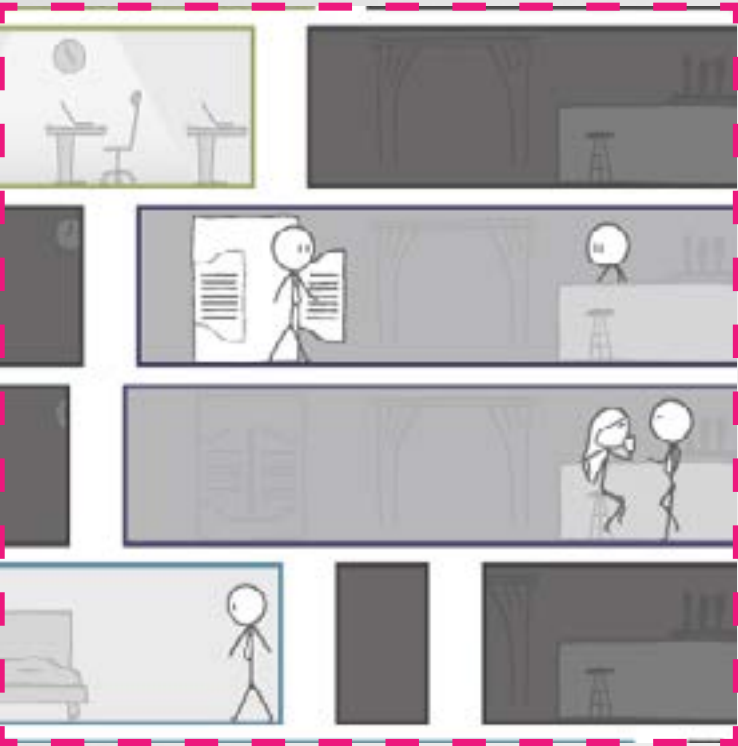
The use of abstract characters in familiar situations can allow the audience to identify with the story, sparking self-reflection: "Is this how I live my life? How am I different?"

[Original post link]

Comic strips offer a unique avenue for **engagement** with quantitative information.
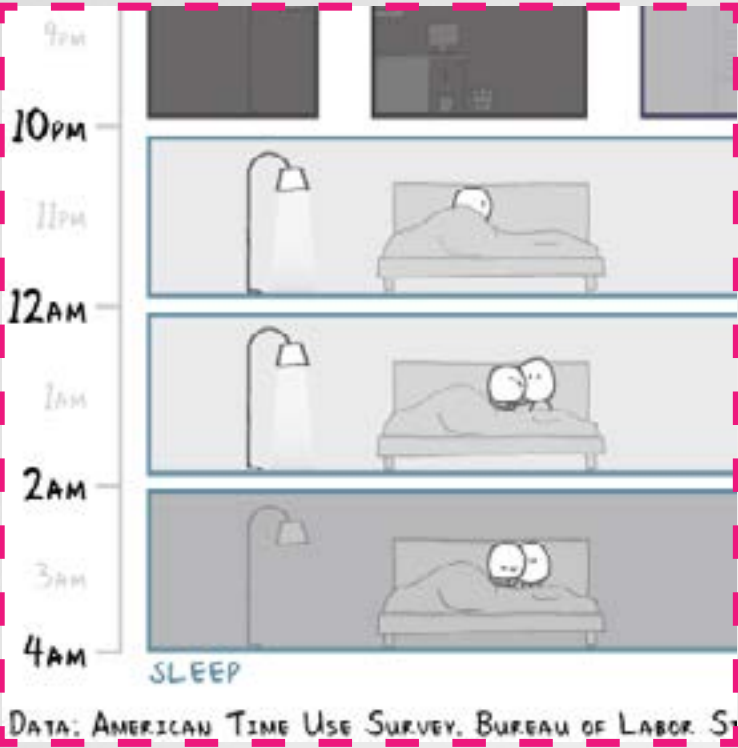
The use of abstract characters in familiar situations can allow the audience to **identify** with the story, sparking self-reflection: "Is this how I live my life? How am I different?"

A DAY IN THE LIFE OF AMERICANS

[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]

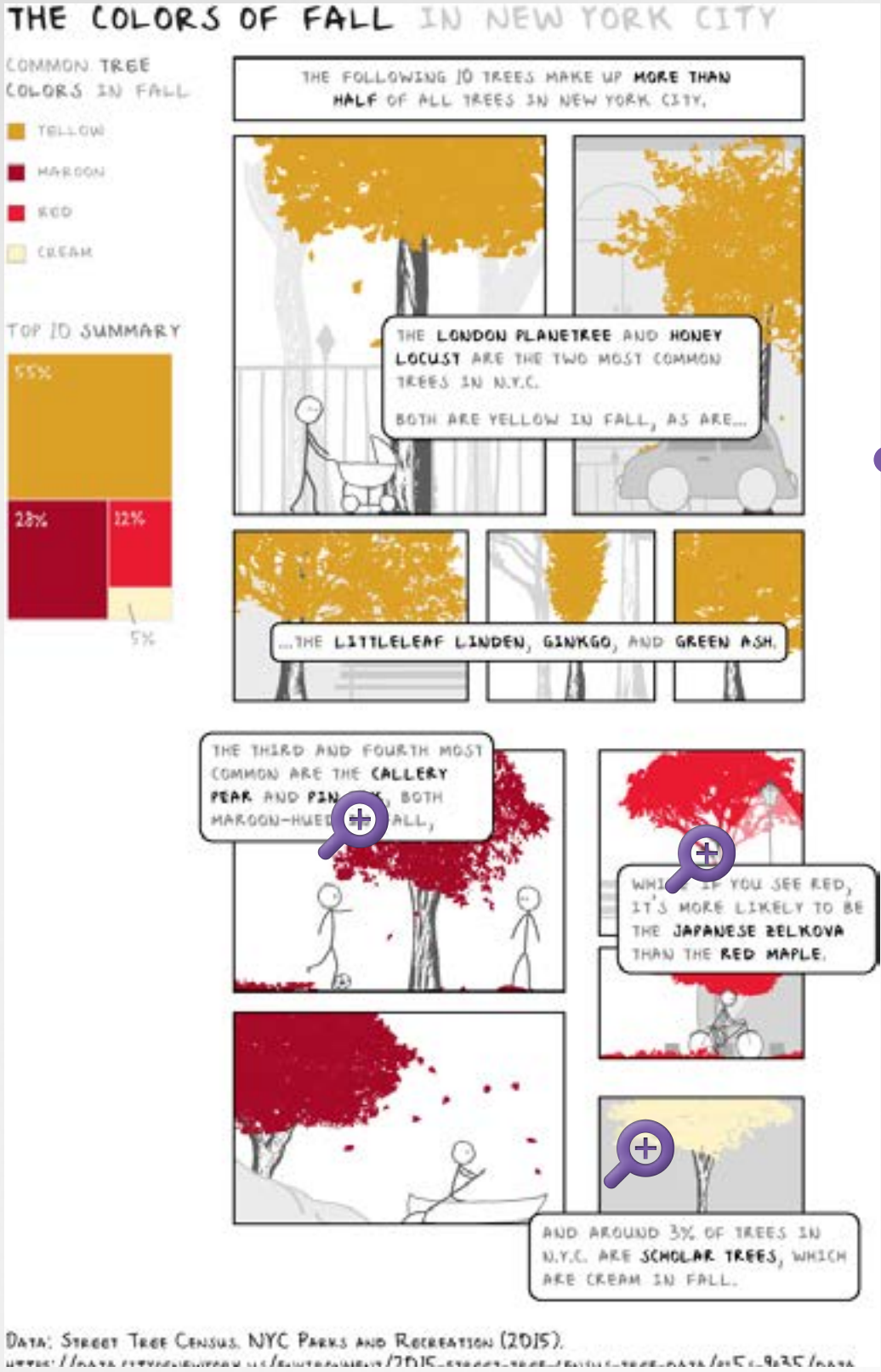Comic strips offer a unique avenue for engagement with quantitative information.

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?"
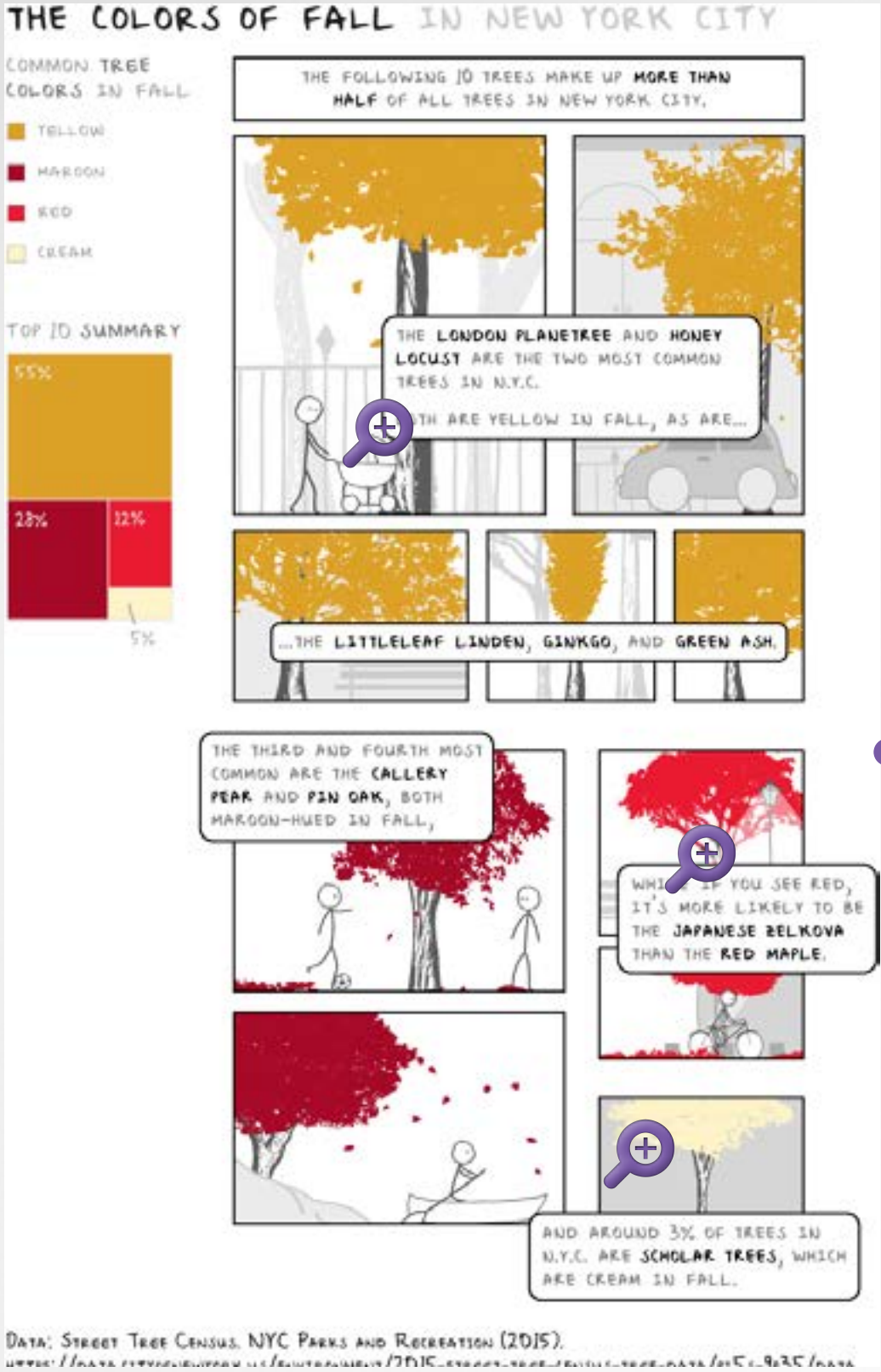
Data comics might challenge the conventions of data visualization.

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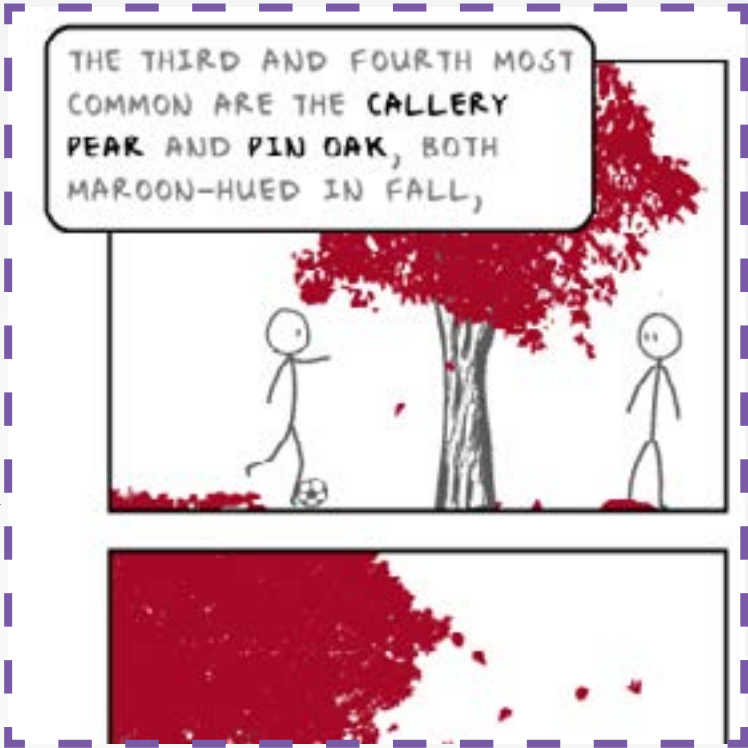
[Original post link]

[Original post link]

Data comics might challenge the conventions of data visualization.

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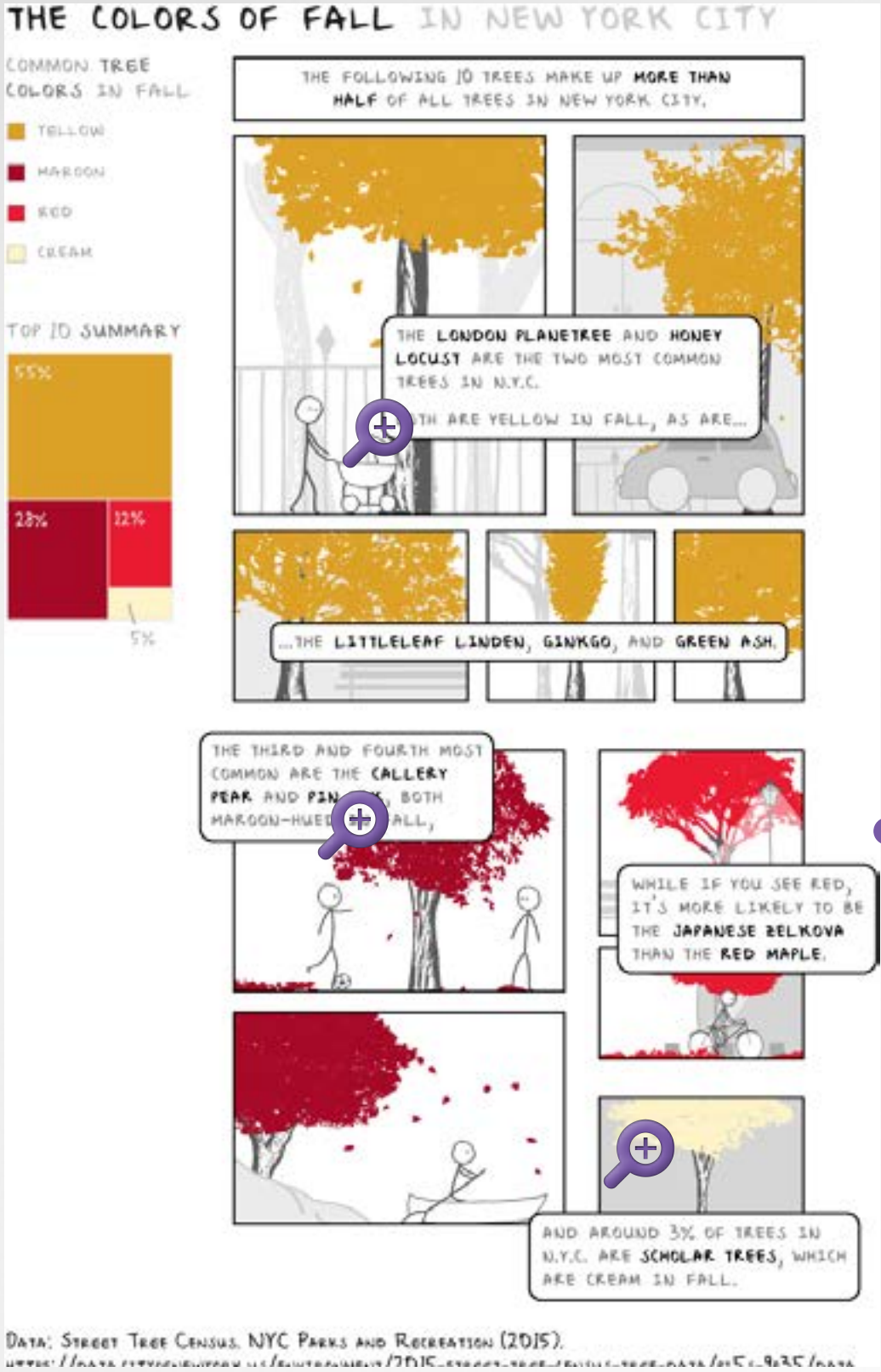
[Original post link]

Data comics might challenge the conventions of data visualization.

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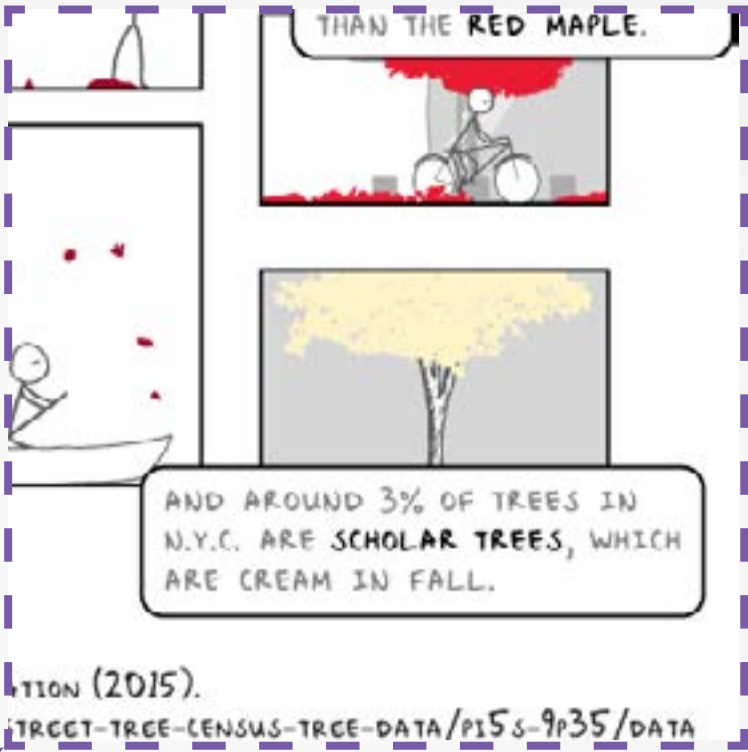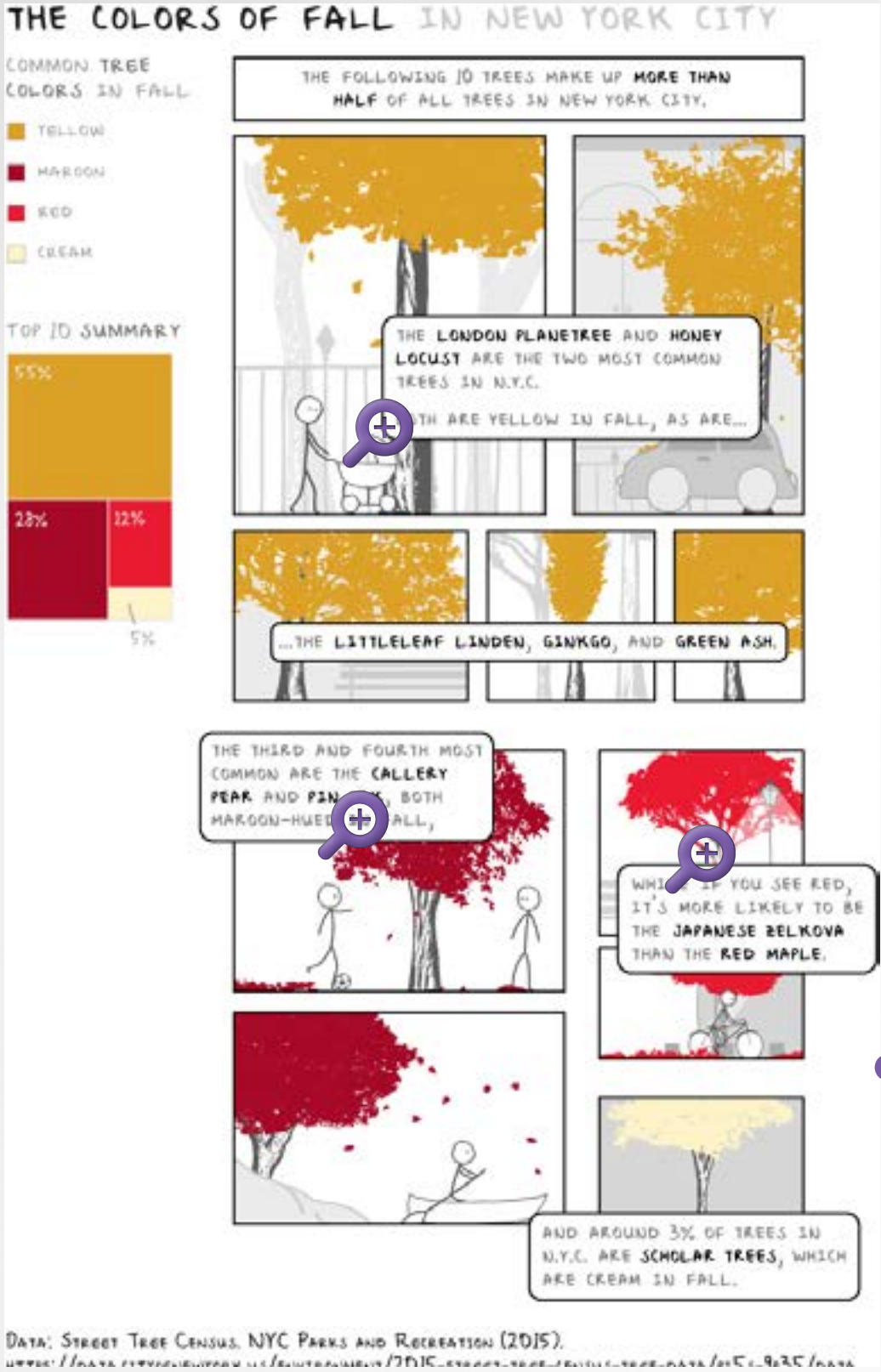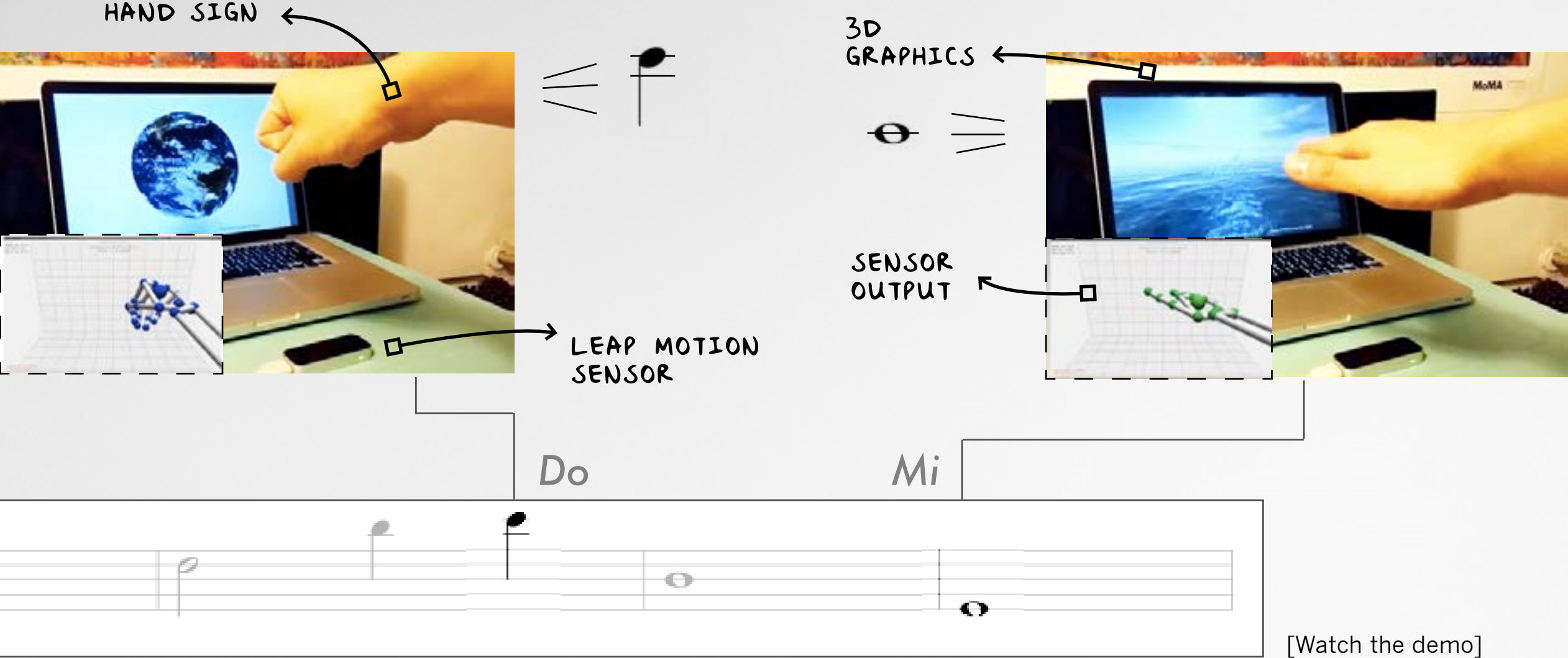
[Original post link]

Data comics might challenge the conventions of data visualization.

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

HAND SIGN

3D
GRAPHICS

LEAP MOTION
SENSOR

SENSOR
OUTPUT

Do   Mi

[Watch the demo]

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

Matt H. Y. Hong, William S. Hicks, Michael S. Horn
Northwestern University

Twitter: @var_matt
hong@u.northwestern.edu

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.

Demo video