

A SENSE FOR THE ABSTRACT

I am a design consultant who makes the abstract come alive.

Graphs should invade your headspace and interrupt your discussions. You should end up reliving these moments in your head because you truly enjoyed them – whether your

beliefs were confirmed, or you were taken aback.

In my academic work, I have made abstract music notation easier to teach in classrooms by inventing a novel musical instrument.

Dashboards

<u>1</u> <u>2</u> <u>3</u>

Comics

MiLa

DASHBOARDS





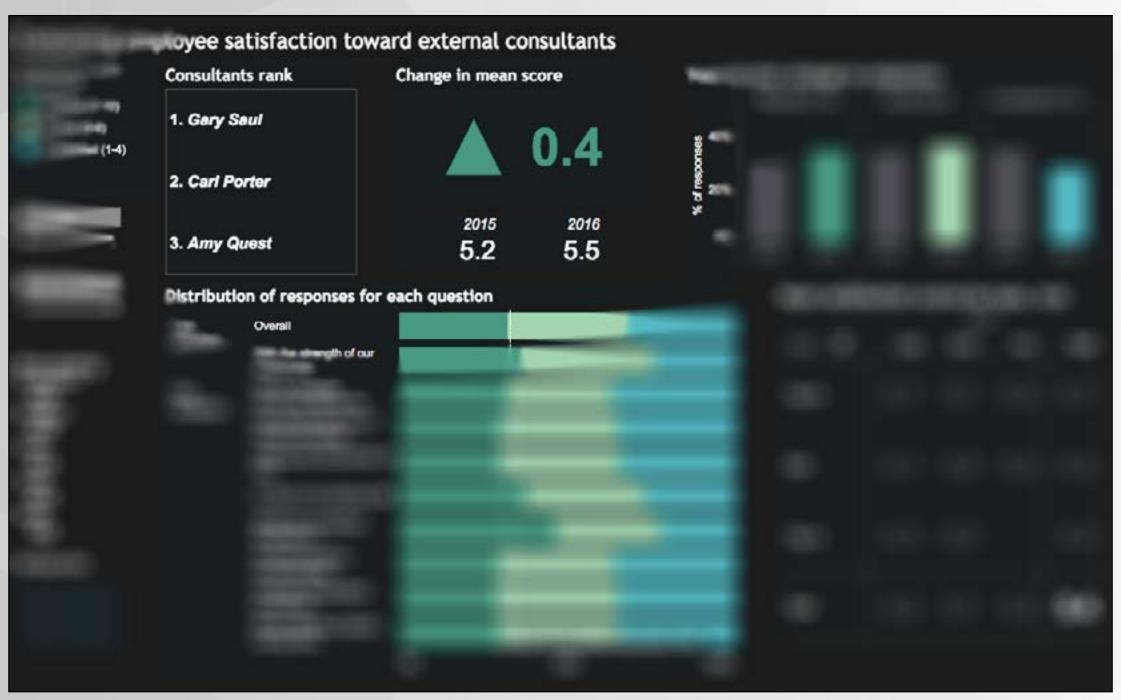
Dashboards

Comics

MiLa

1 <u>2</u>

Get an overview of key metrics



[Full dashboard link]



Dashboards

Comics

MiLa

<u>2</u> <u>3</u>

Allow users to choose granularity



[Full dashboard link]



Dashboards

Comics

MiLa

<u>2</u> <u>3</u>



Summarize active filters for reference

[Full dashboard link]



Dashboards

Comics

MiLa

<u>2</u> <u>3</u>



[Full dashboard link]

Leverage baselines for analysis

<u>2</u> <u>3</u>



Detailed tables come last

[Full dashboard link]



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Dashboards

Comics

MiLa

<u>1</u> 2 <u>3</u>

Use maps and diagrams as menus



[Full dashboard link]

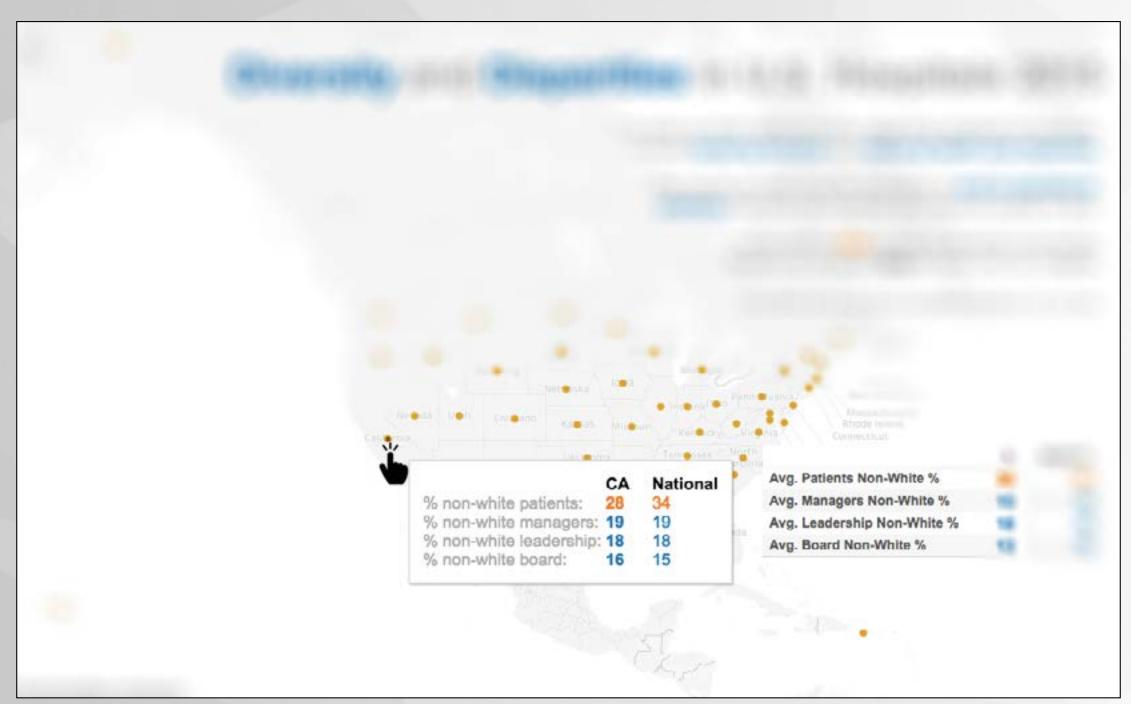


Dashboards

Comics

MiLa

<u>1</u> 2 <u>3</u>



[Full dashboard link]

Exploit mouseover menus for analysis

<u>1</u> 2 <u>3</u>



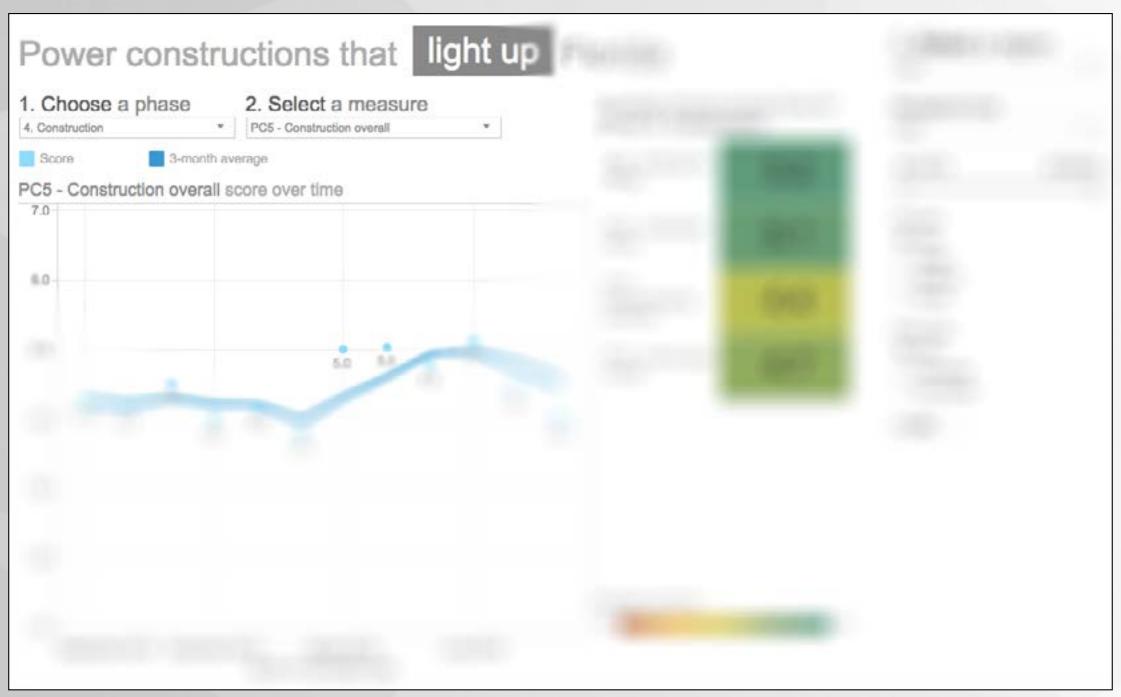


Comics

MiLa

<u>2</u> 3

Guide users through available filters

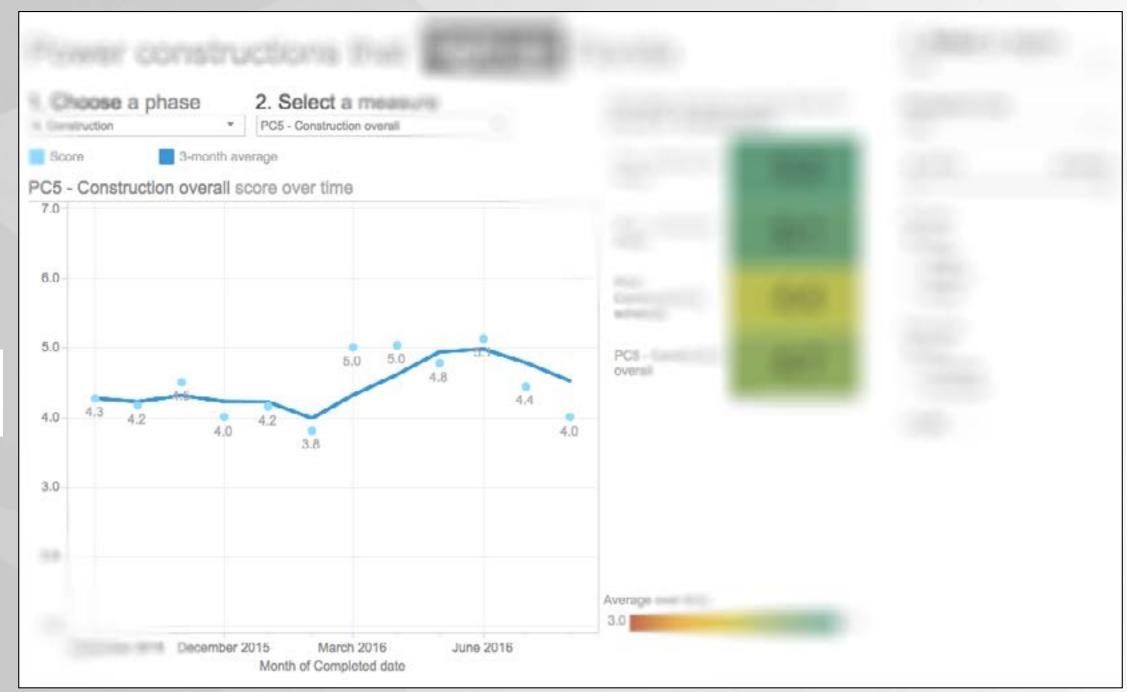




Comics

MiLa

<u>1</u> <u>2</u> 3

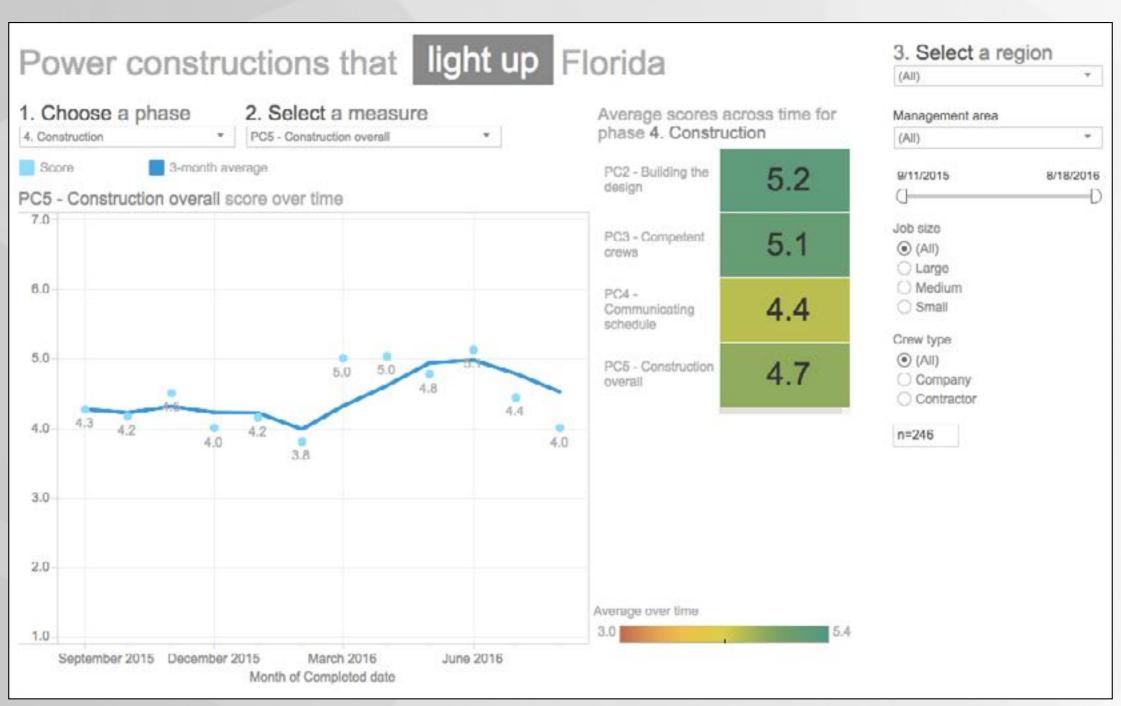


5.0

Create concise yet

detailed graphs

<u>2</u> 3



[Full dashboard link]

Dashboards

Comics

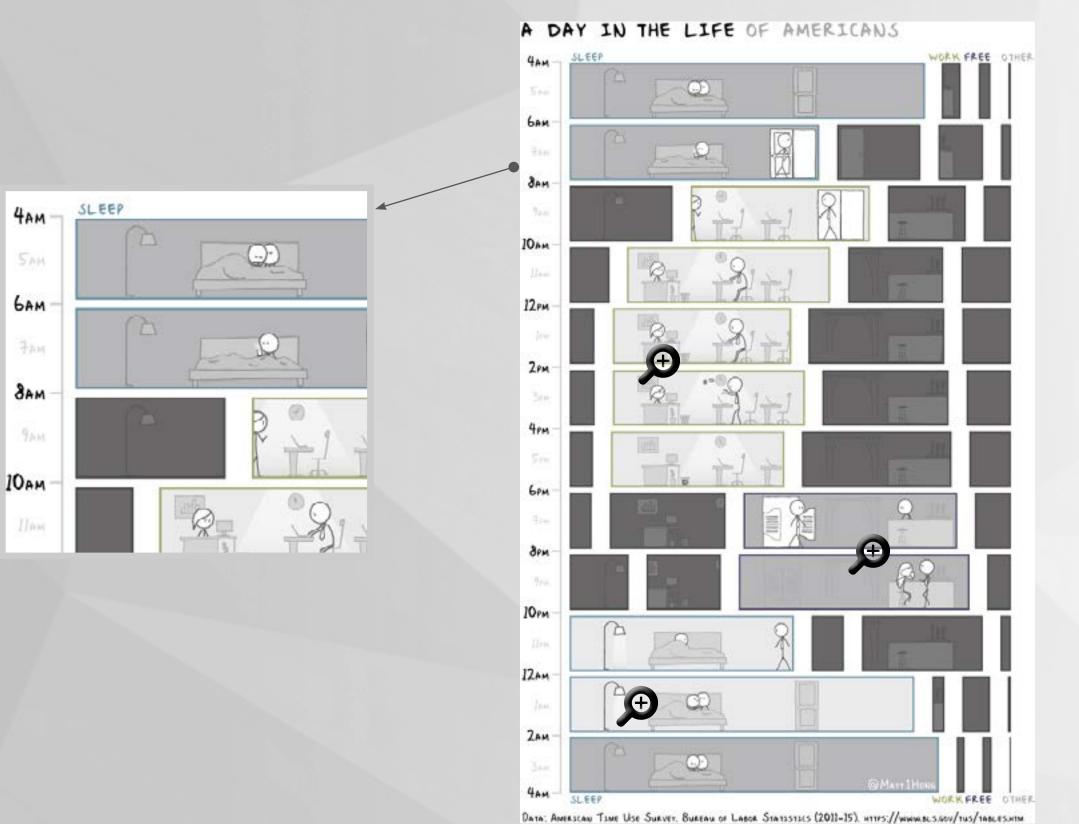
MiLa

<u>1</u> <u>2</u>

DATA COMICS

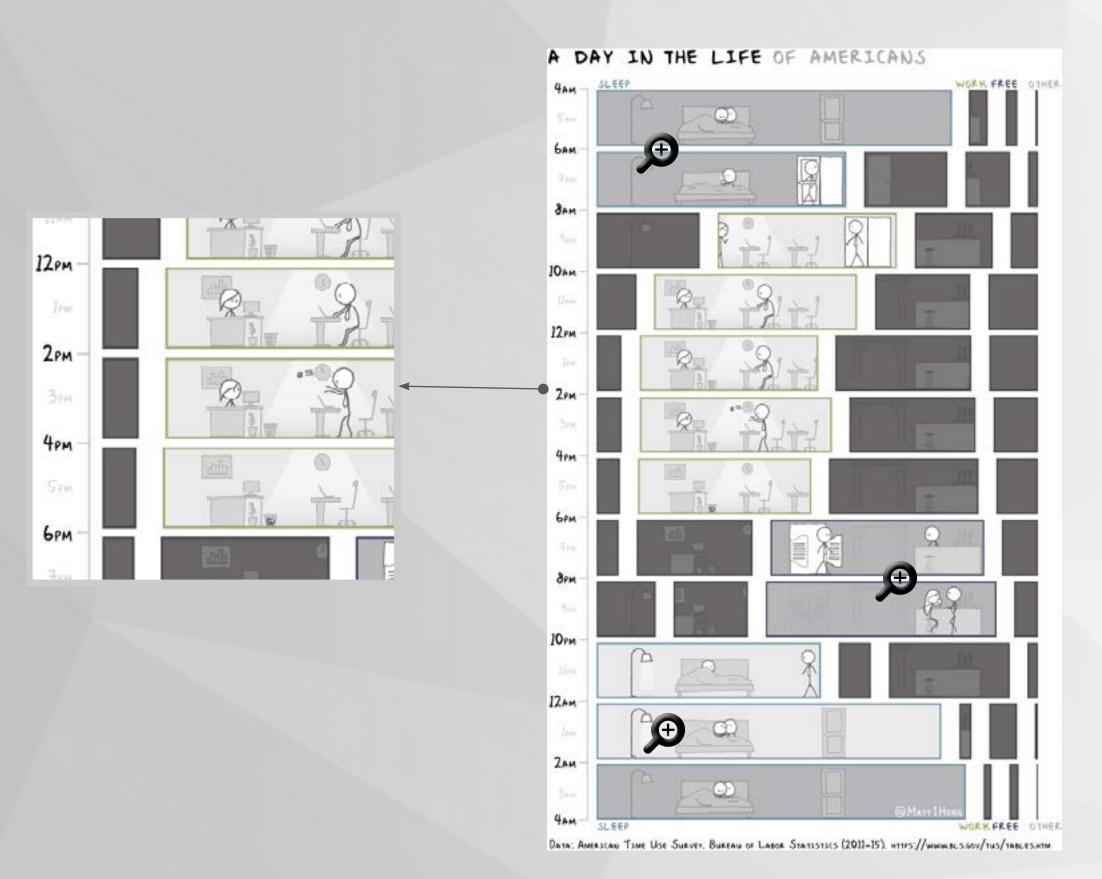


<u>2</u>

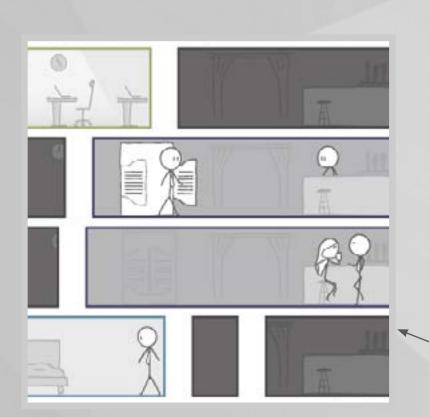


I am rethinking potential avenues for engagement with quantitative information.

<u>2</u>

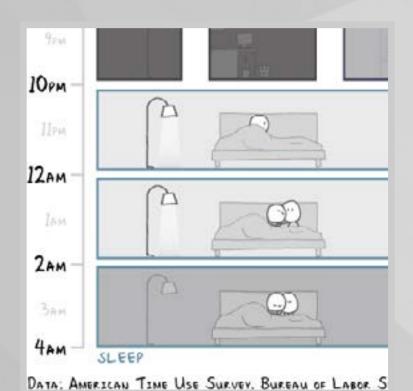


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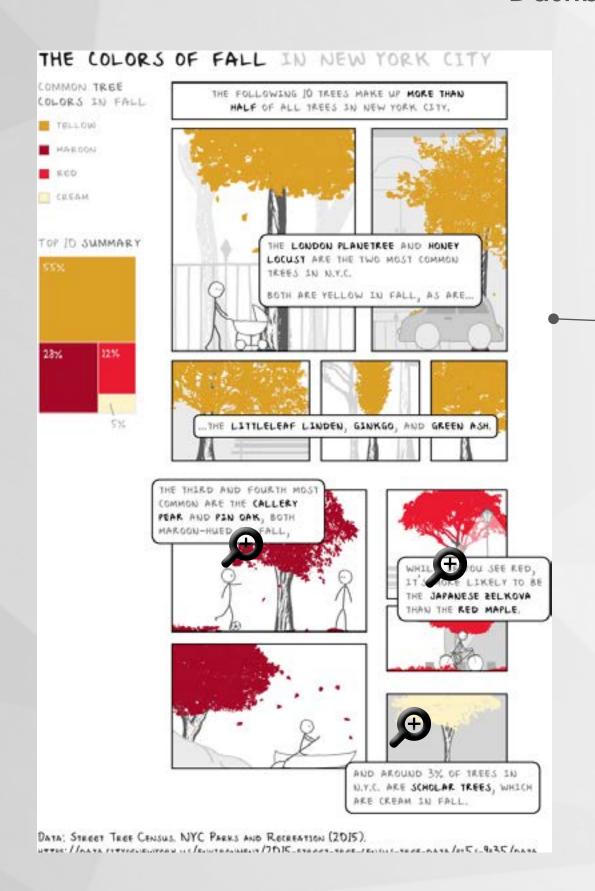


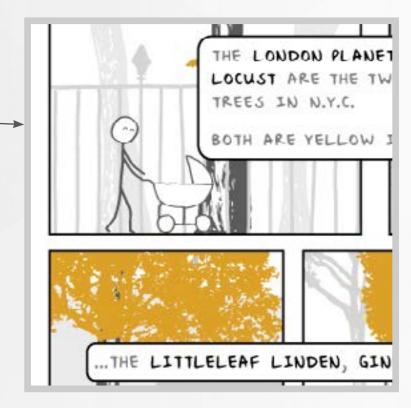


I am rethinking potential avenues for engagement with quantitative information.

2

Data comics can be used to challenge the conventions of data visualization.





Comics

MiLa

<u>1</u> 2

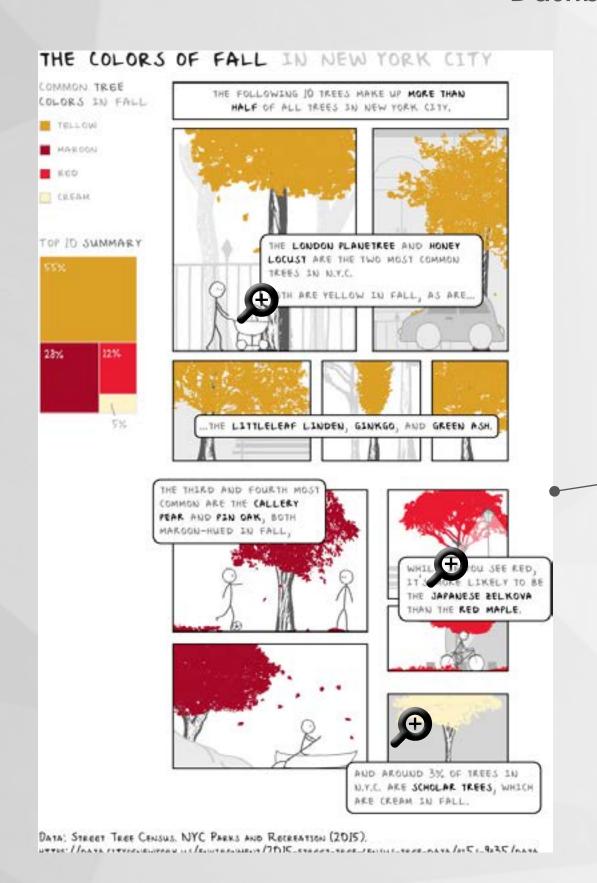
THE THIRD AND FOURTH MOST

COMMON ARE THE CALLERY

PEAR AND PIN OAK, BOTH

MAROON-HUED IN FALL,

Data comics can be used to challenge the conventions of data visualization.



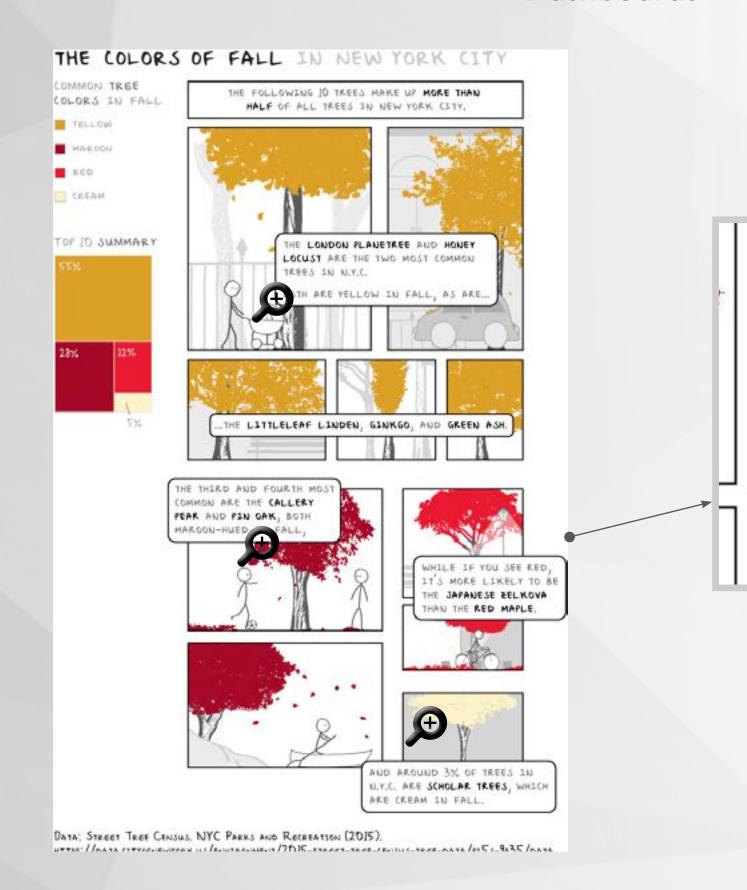
<u>1</u> 2

WHILE IF YOU SEE RED, IT'S MORE LIKELY TO BE

THE JAPANESE ZELKOVA

THAN THE RED MAPLE.

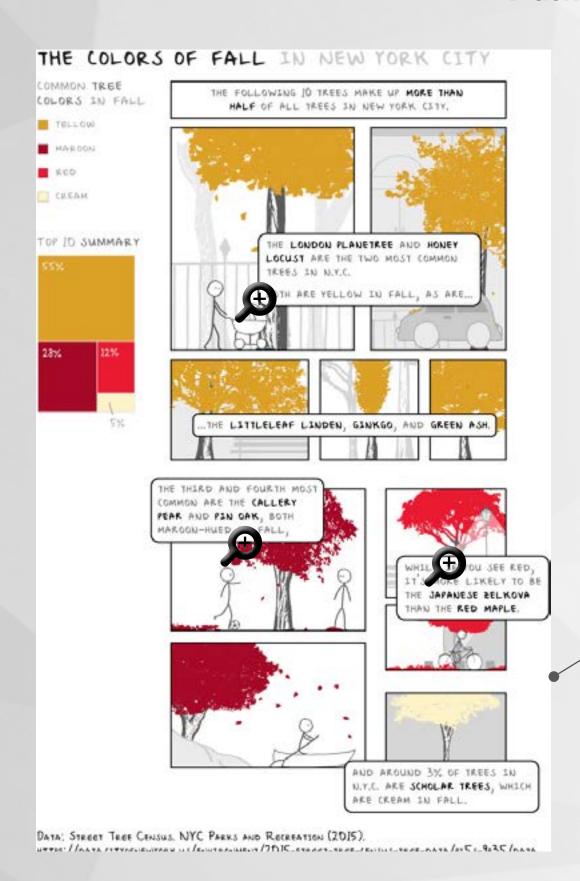
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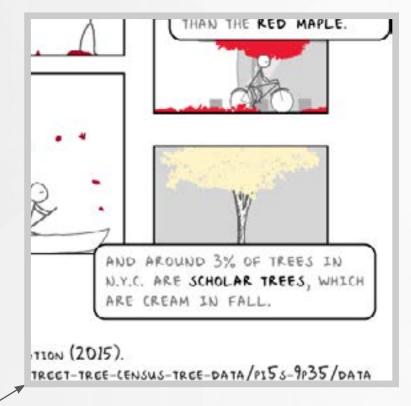


Comics

MiLa

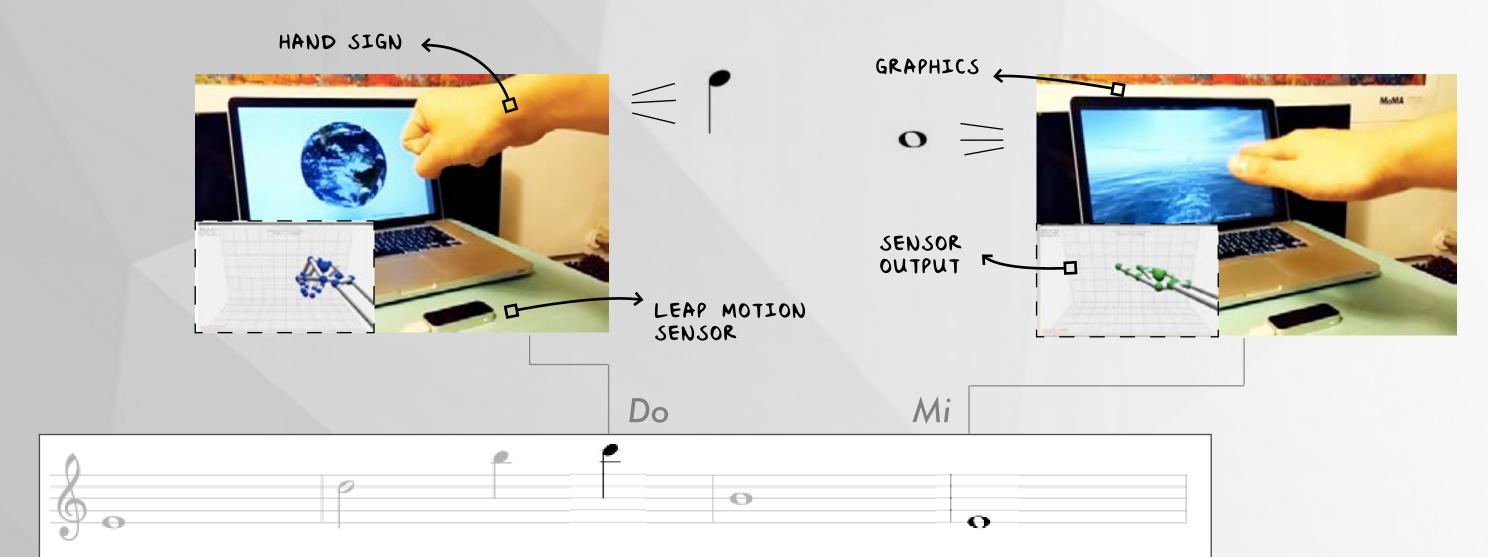
Data comics can be used to challenge the conventions of data visualization.





Comics

MiLa

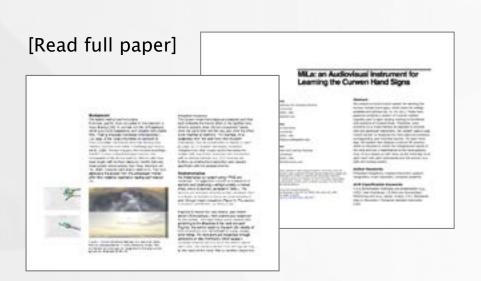


With the TIDAL (Tangible Interaction Design and Learning) Lab, I invented an audiovisual instrument controlled with hand signs.

Known as the Curwen hand signs, they are a music notation system typically used by educators to dictate music in front of a class.

Students could use this musical instrument to toy with tunes and visuals whilst improving their music literacy.

This interface was first presented as a short paper at CHI 2016, one of the world's most prestigious computer science conferences.



Mila

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

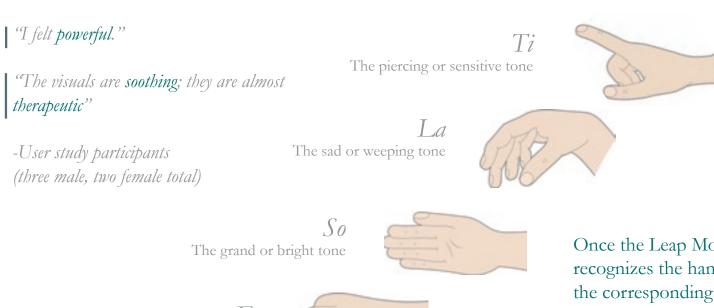
The Curwen hand signs are used in music classrooms for sight-singing training. Students would follow along to melodies dictated with the hand signs.

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.





MiThe steady or calm 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.









The strong or firm tone