

Superheat

Extending heatmaps for the visualization of complex data

Rebecca Barter

(package developed together with Bin Yu)

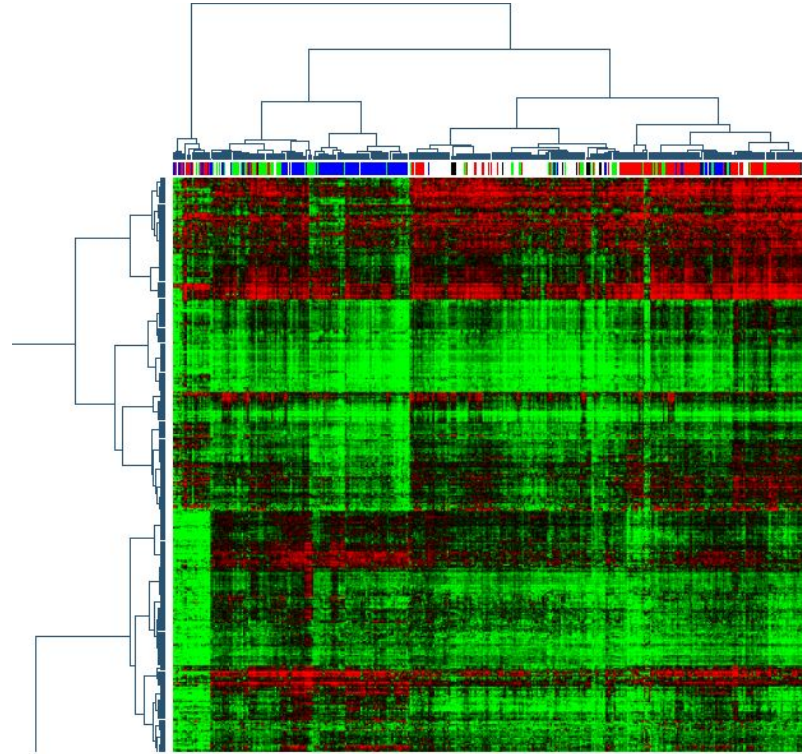
@rlbarter

Materials available on Github:

<https://github.com/rlbarter/R-Ladies-Superheat>

9	5	1	10				
9	6	6	3				
4	9	7	0				
8	5	5	2				
3	0	10	9				

Heatmaps in bioinformatics





uperheat to the rescue!

Organ donation trends

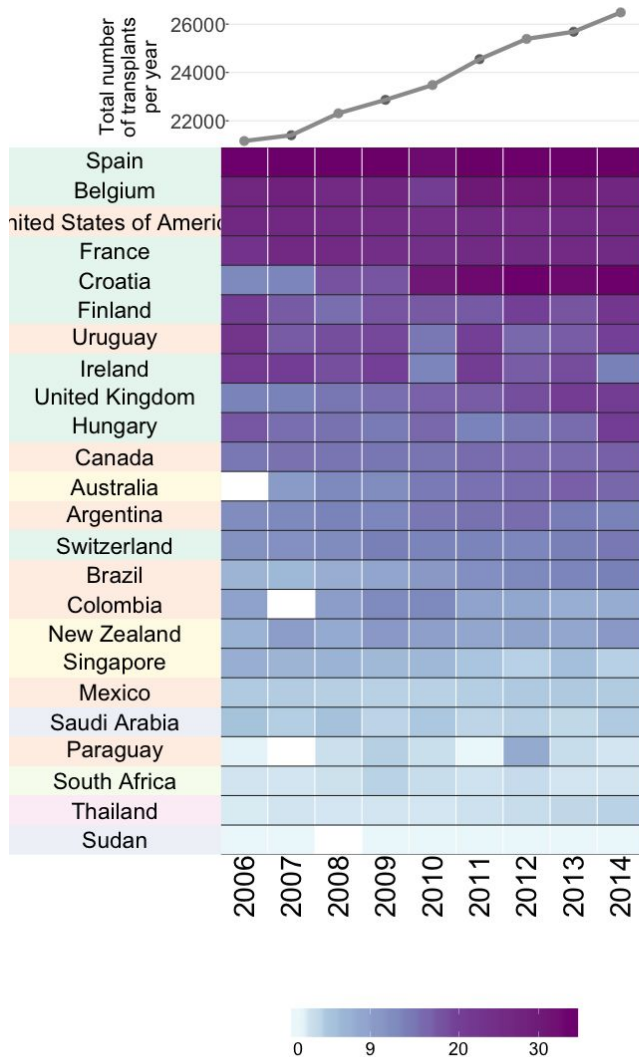
This heatmap visualizes the number of international tourists per country from 2006 to 2014. The color scale ranges from 0 (lightest) to 30+ (darkest). The data is as follows:

Country	2006	2007	2008	2009	2010	2011	2012	2013	2014
Spain	25	25	25	25	25	25	25	25	25
Belgium	25	25	25	25	25	25	25	25	25
United States of America	25	25	25	25	25	25	25	25	25
France	25	25	25	25	25	25	25	25	25
Croatia	10	10	15	20	25	25	25	25	25
Finland	25	25	15	15	15	15	15	15	15
Uruguay	25	25	25	25	15	20	15	15	15
Ireland	25	25	25	25	15	20	25	25	25
United Kingdom	10	10	15	15	15	15	15	15	15
Hungary	25	25	25	25	25	25	25	25	25
Canada	10	10	15	15	15	15	15	15	15
Australia	0	10	15	15	15	15	15	15	15
Argentina	10	10	15	15	15	15	15	15	15
Switzerland	10	10	15	15	15	15	15	15	15
Brazil	10	10	15	15	15	15	15	15	15
Colombia	10	0	15	15	15	15	15	15	15
New Zealand	10	10	15	15	15	15	15	15	15
Singapore	10	10	15	15	15	15	15	15	15
Mexico	10	10	15	15	15	15	15	15	15
Saudi Arabia	10	10	15	15	15	15	15	15	15
Paraguay	10	0	15	15	15	15	20	15	15
South Africa	10	10	15	15	15	15	15	15	15
Thailand	10	10	15	15	15	15	15	15	15
Sudan	10	10	0	15	15	15	15	15	15

A superheat example:

Organ donation trends

With a **trendline**



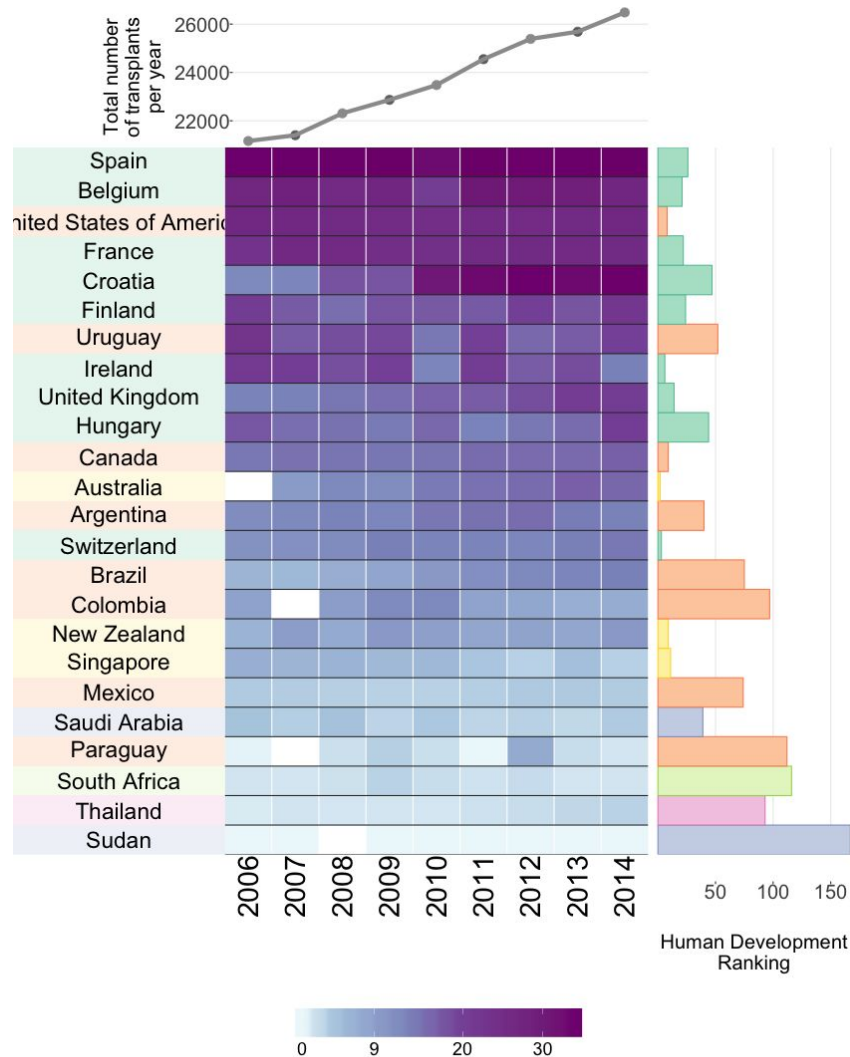
A superheat example:

Organ donation trends

With a **trendline**

and

Country **HDI**

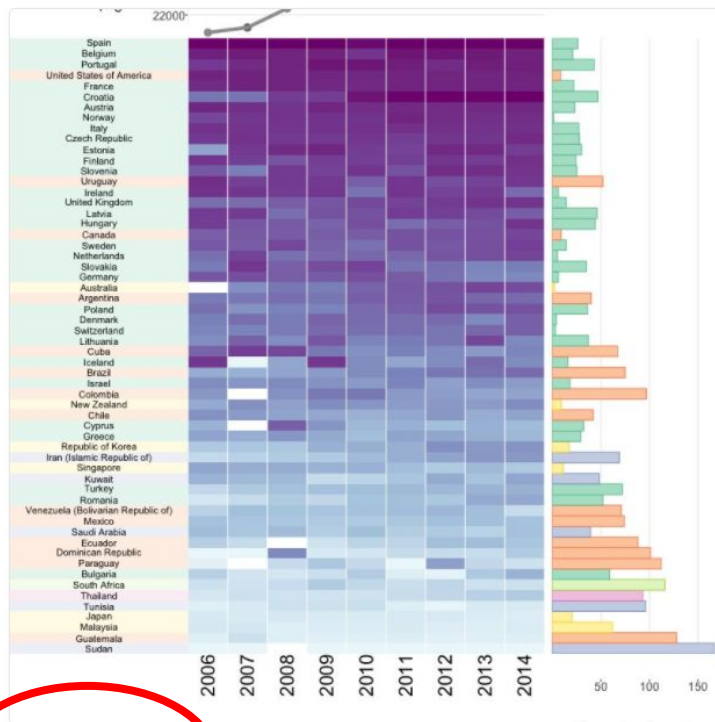




Rebecca Barter

@rbarter

My paper on R package, Superheat, designed for creating beautiful and extendable heatmaps now on arXiv: arxiv.org/pdf/1512.01524...



RETWEETS

345

LIKES

710





Hadley Wickham @hadleywickham · Feb 2

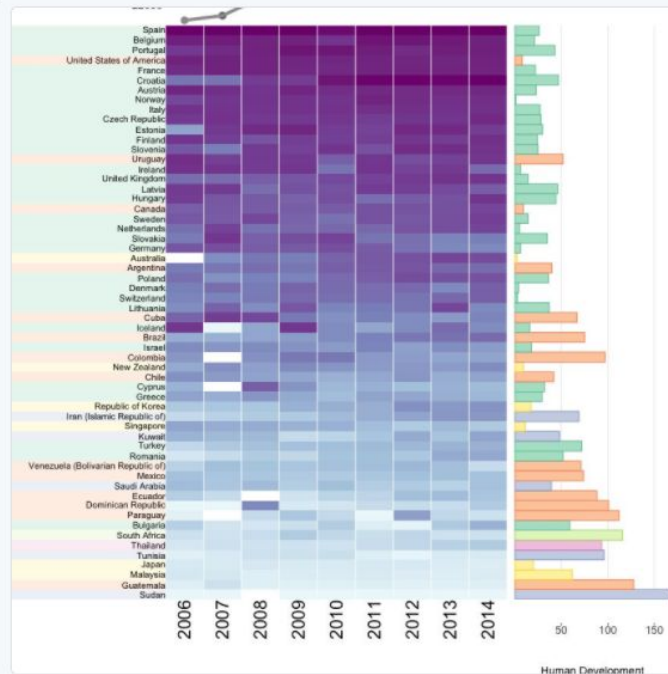
Replying to @rbarter

I think the text would look better if you aligned it towards the plot



Rebecca Barter @rbarter · Feb 2

I'd like right-justification better if I hadn't coloured the labels



Hadley Wickham @hadleywickham · Feb 2

you need a small margin to the right. Text might also look better if dark gray rather than black



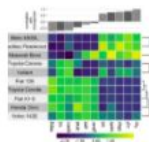
Emily Jane Dennis

@emilyjanedennis

 Follow



this is the best thing to come to R since ggplot2.
FINALLY a great way to make sensible and pretty
heatmaps. Thanks @rlbarter!



Rebecca Barter @rlbarter

superheat 0.1.0 now available on CRAN:
rlbarter.github.io/blog/2017-02-0... Thanks everyone for all the
excellent feedback! #rstats

LIKES

2



5:41 PM - 28 Apr 2017

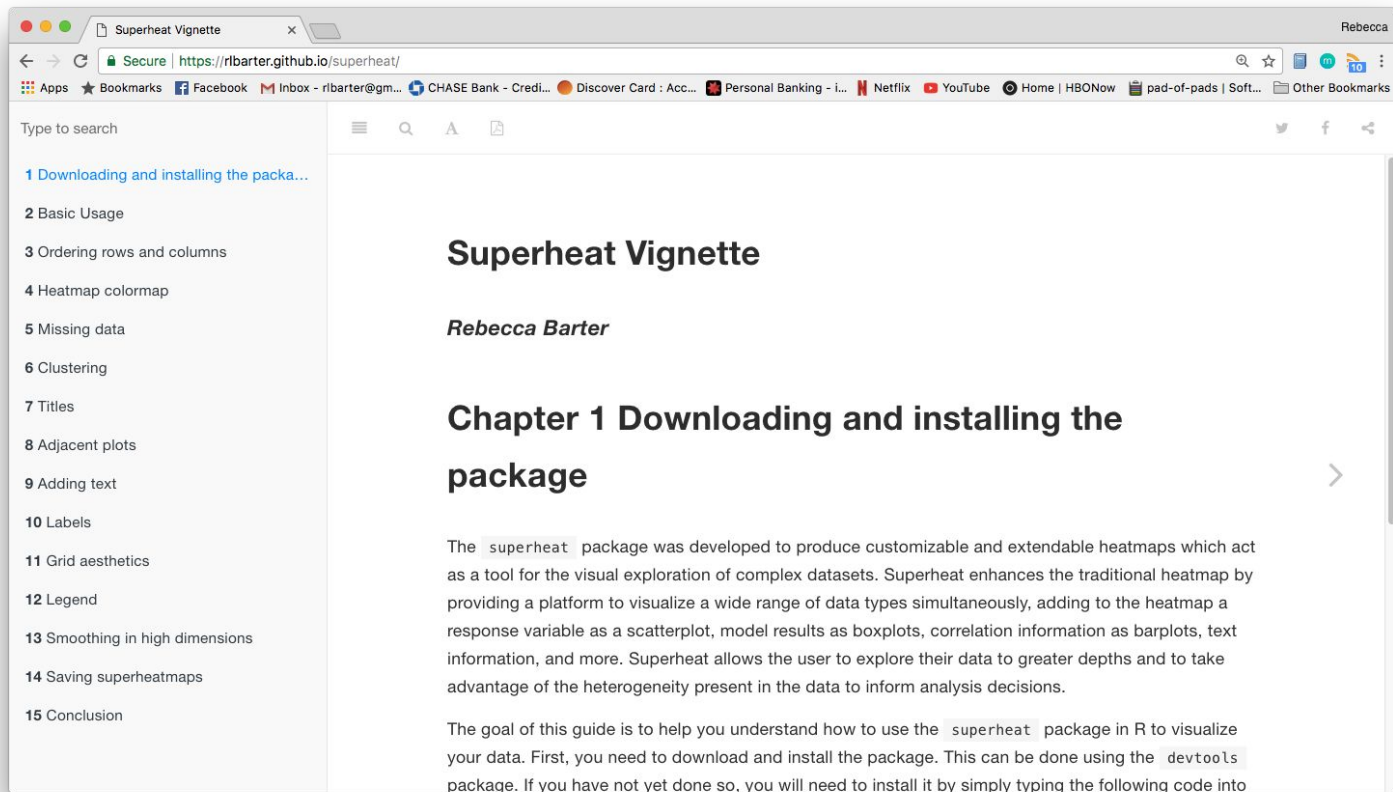


2

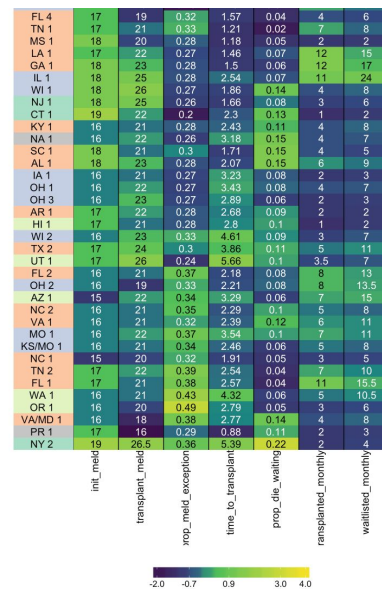
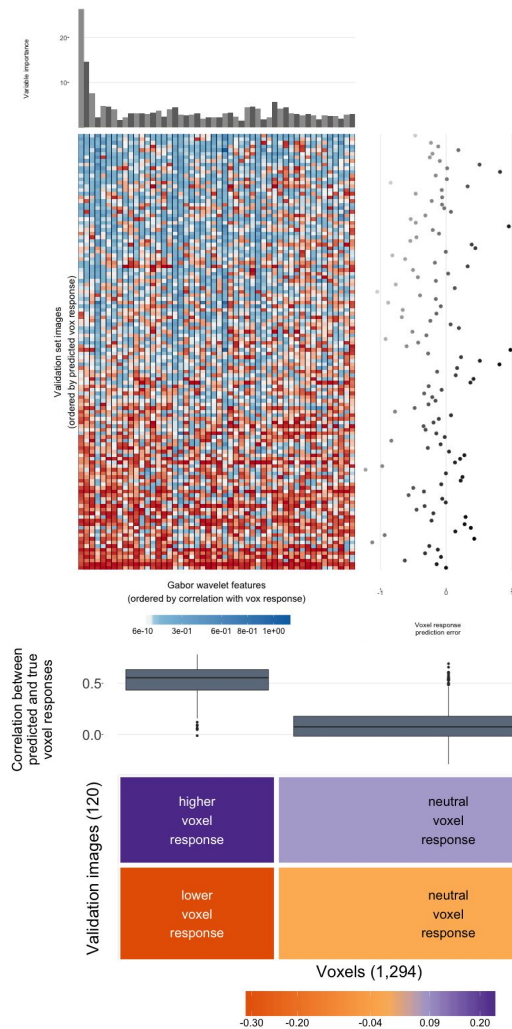
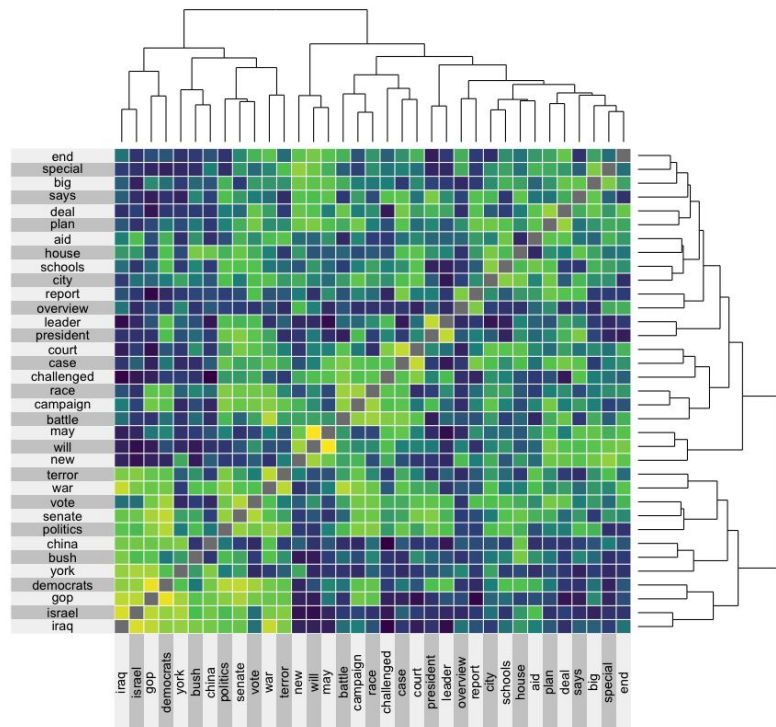


Tweet your reply

Crazy detailed vignette (rlbarter.github.io/superheat/)
made with bookdown & github pages!



Other examples



Where to find superheat?

Because I know that you all
really, really want to use it for
your data exploration
adventures!

Currently available on:

CRAN, **GitHub**

github.com/rlbarter/superheat

(detailed vignette!)

Barter and Yu (2017), *Superheat: An R
package for creating beautiful and
extendable heatmaps for visualizing
complex data*

<https://arxiv.org/abs/1512.01524>