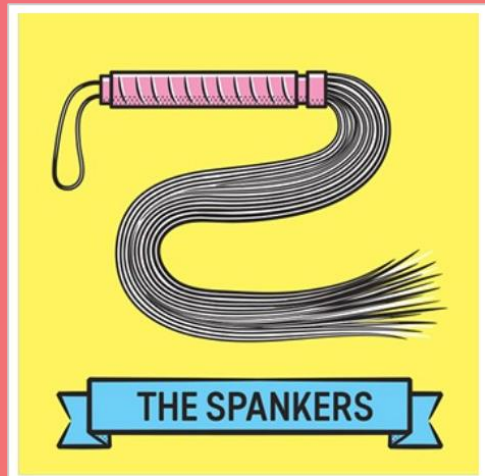


Spanking and Spreadsheets: Data-driven Sex Journalism

Jacqueline Nolis - @skyetetra
Heather Nolis - @heatherklus
nolisllc.com

May 9th, 2019
csv,conf,v4

*Data by The Stranger
Artwork by Mike Merg*



Viewer discretion is advised



[Record scratch] I bet you're wondering how we ended up here

- Married lesbians with a boutique AI consulting company
- Fascination with interesting data sets
- One fateful tweet
 - And a dream



The Stranger 
@TheStranger

Have you taken The Stranger's Sex Survey yet? We've gotten a lot of good responses so far:

TheStranger.com/SexSurvey



Getting the data

- Emails
- Phone calls
- In-person meetings
- “No really I promise we’re responsible”
- Panic
- One fateful flashdrive

The Survey

- 50ish questions
- 8000ish respondents
- Multiple choice and free form

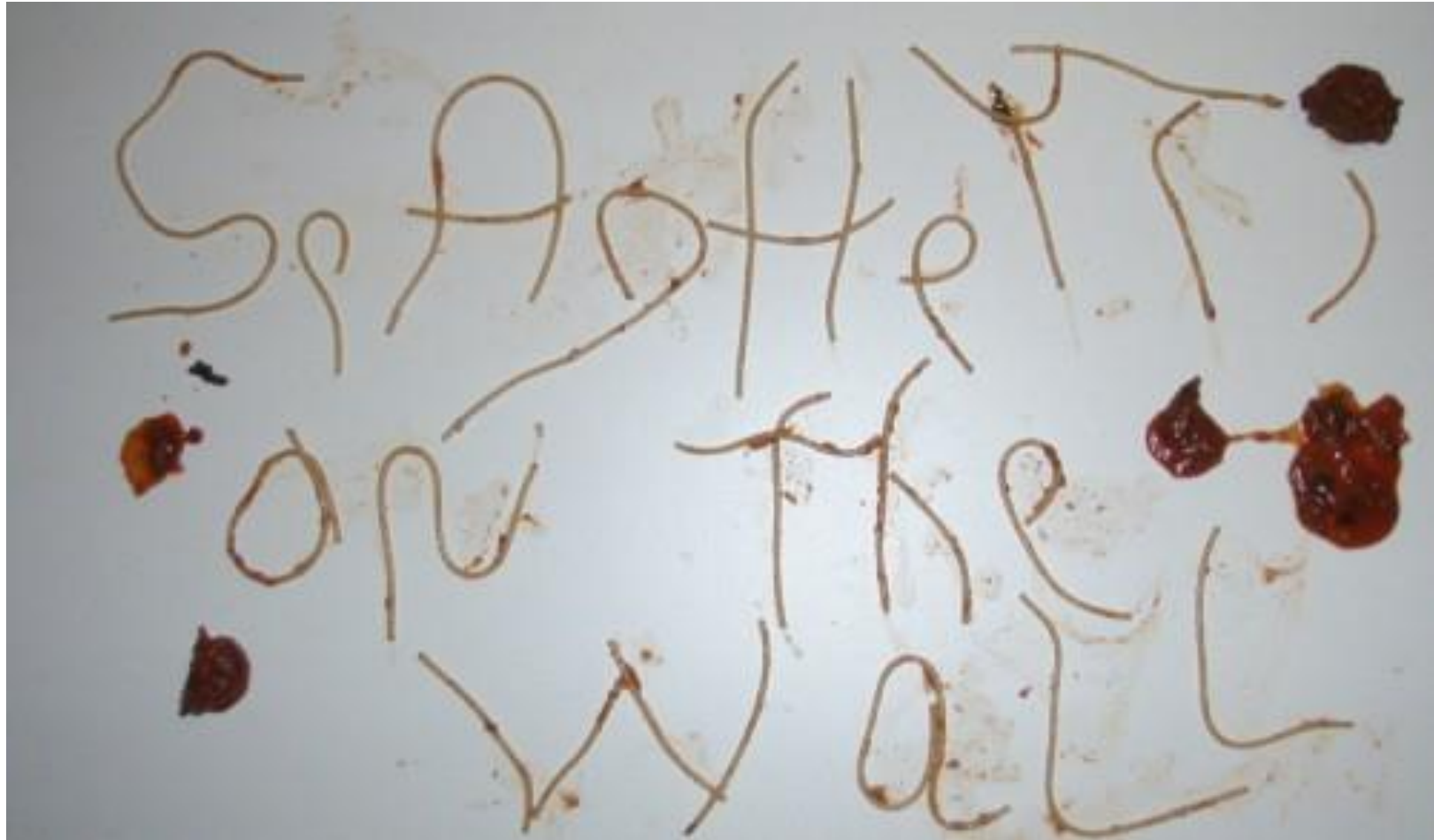
Example questions

The people I have sex with I usually meet through...

What's the sexiest thing you did in the last year?

Have you ever hooked up with your Lyft or Uber driver?





The worst spaghetti

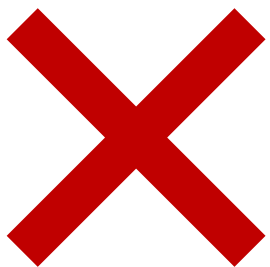
- Analyzing the people who orgasm on an airplane
- What makes people are satisfied with the sex they're having
- Principal component analysis of dating app usage
- What relates to people wearing diapers
- Analyzing the trends of which billionaires people would f*ck, marry, kill

Idea 1 – sexy stories neural network

What's the sexiest thing you did in the last year?

Idea: Let's train a neural network
to generate new sexual experiences!!

It will be funny! People will laugh! Wow!!



Less funny than the
actual answers

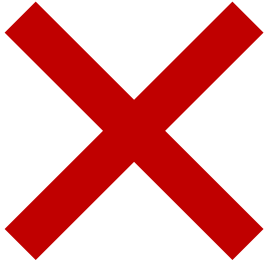
Required far more
model tuning than
worth it for the joke

██████ my partner while my sex got and in the an of my
had sex with a guy who was on the of a me and we had sex
had sex with a guy and i long
to have sex with a guy who my had sex with a
had sex on a beach
had sex with a my partner and i in the
a
██████ on a in my
██████ in a hotel room and i got of and sex on the beach
to a guy

Idea 2 – dating apps & porn

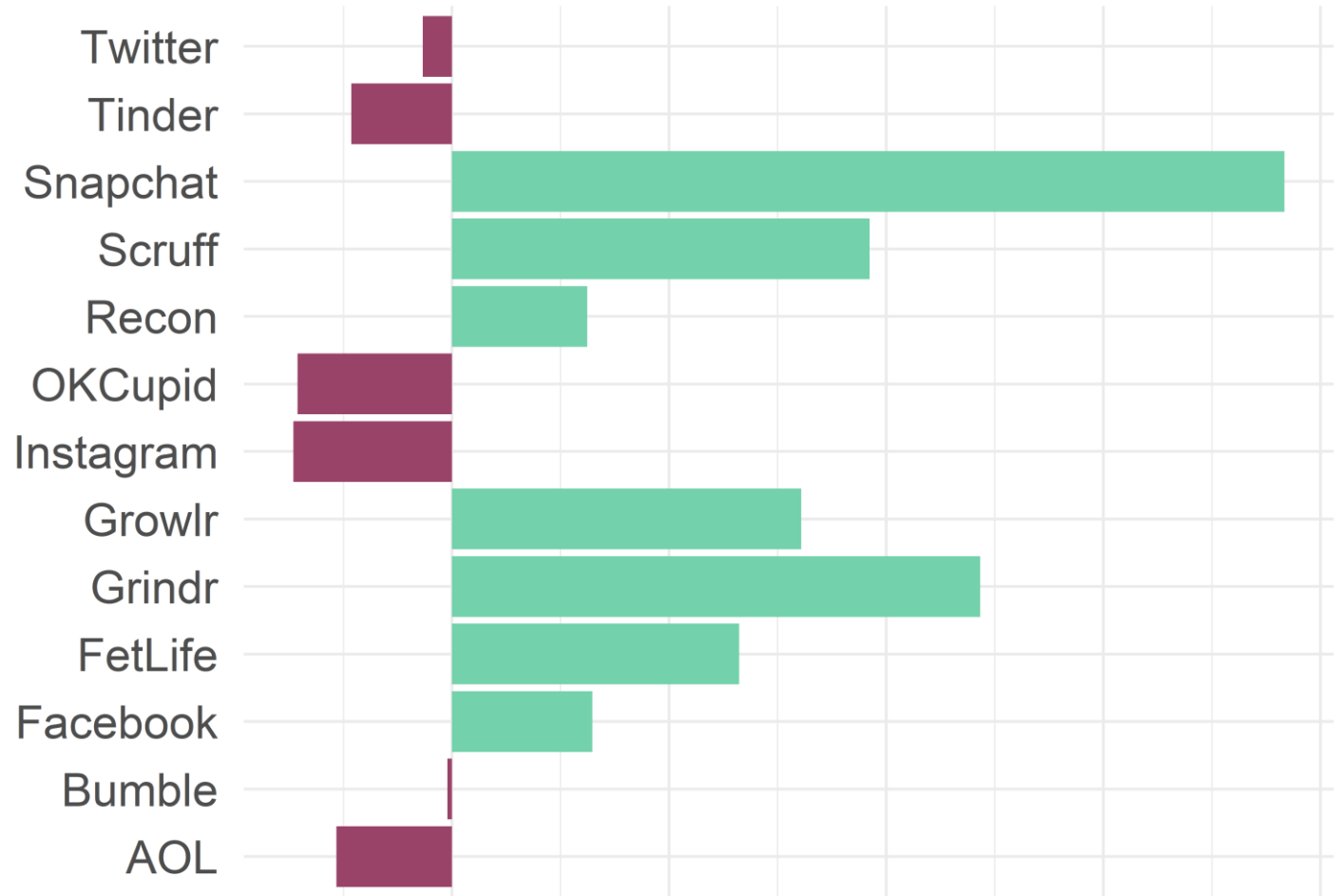
- The people I have sex with I usually meet through...
- Around how many hours of porn do you watch per week?

Tinder and Grindr *feel* sleazy... but are they??



“Importance” is a poorly defined metric

Location where you get sex partners



Importance on if you watch a lot of porn

Idea 3 - related kinks

- What activities have you done?
- What kinks are you into?

Which activities are correlated??



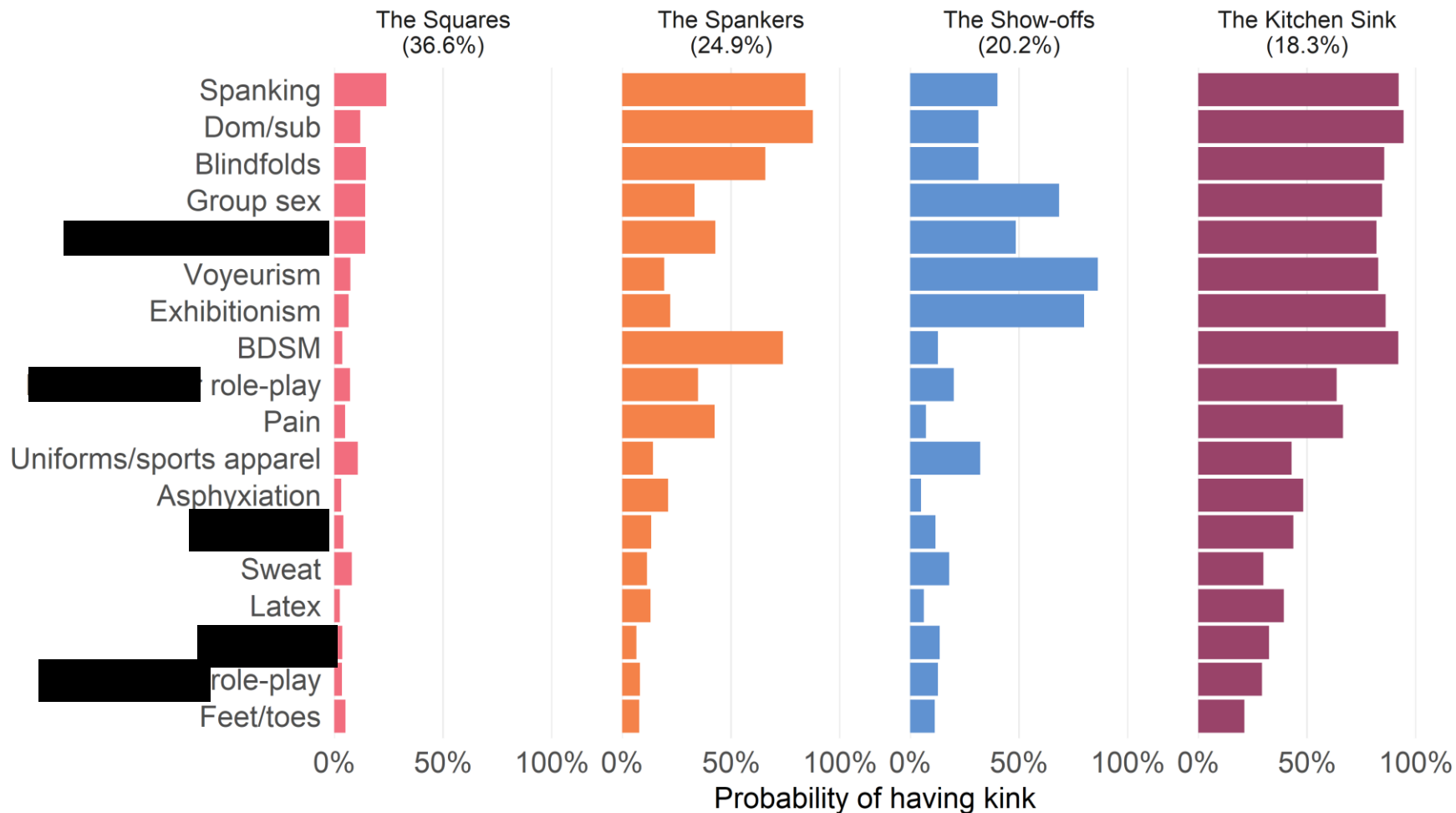
Feet/toes	
Shoes/boots	
Sweat	
Spit/gob	
Vore	
Blindfolds	
Latex	
Medical fetish	
Dom/sub	
Electro/e-stim	
Findom	
Pain	
Uniforms/sports apparel	
Crossdressing/forced feminization	
Feeding/gaining	
Cigar/smoke	
Spanking	
BDSM	
Group sex	
Pup play	
Asphyxiation	
Sounding	
Voyeurism	
Exhibitionism	
	role-play
	role-play





Split the same data with *k*-means

Clear to a newspaper editor!



So clear, the editors used it as the title

There Are Four Kinds of Sex Partners (Which One Are You?)

And other discoveries we've made applying data science and machine learning to *The Stranger's* sex survey results.

by Heather Nolis and Jacqueline Nolis

Idea 4 – check out sexting

- When I'm sexting, I'm most likely to send a pic of my...
- When I'm sexting, the thing I most want the other person to send is a picture of their...

What's the difference between what people send and want?

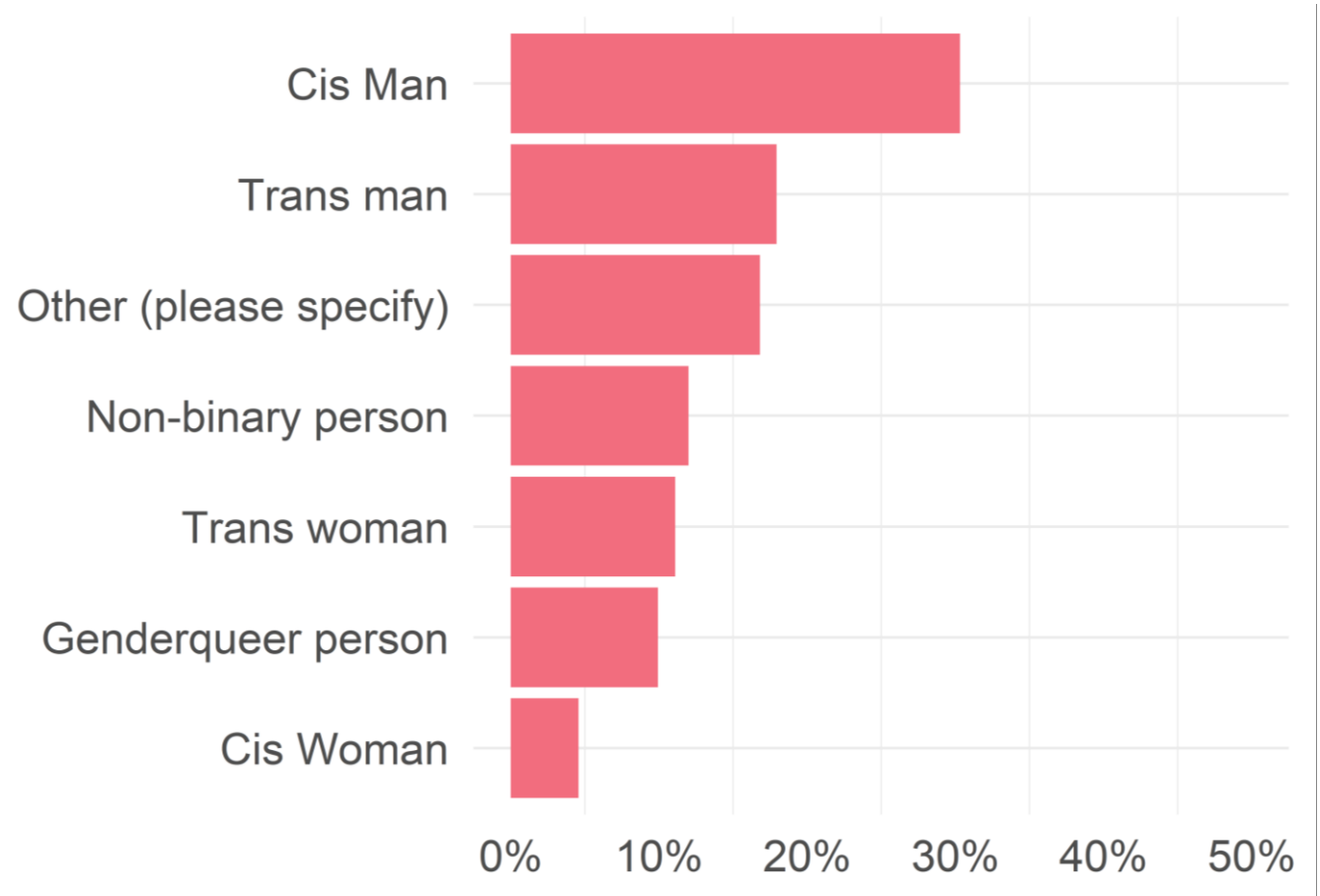


Wait there are like 8
funny things here

Selfish sexters???



“Selfish sexters”
had more
interesting facts



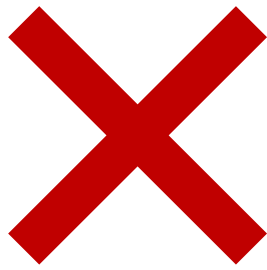
Idea 5 – cross tabs with funny questions

Even though bestiality is illegal in Washington State, if I had to do something sexual with an animal, I would choose a..	Count
Horse	219
Pig	31
Dog	571
Cat	76
Sheep	202
Dolphin	665
Centaur	4275

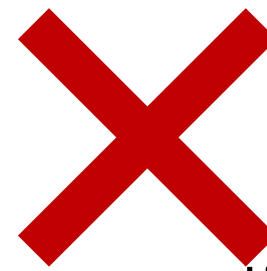
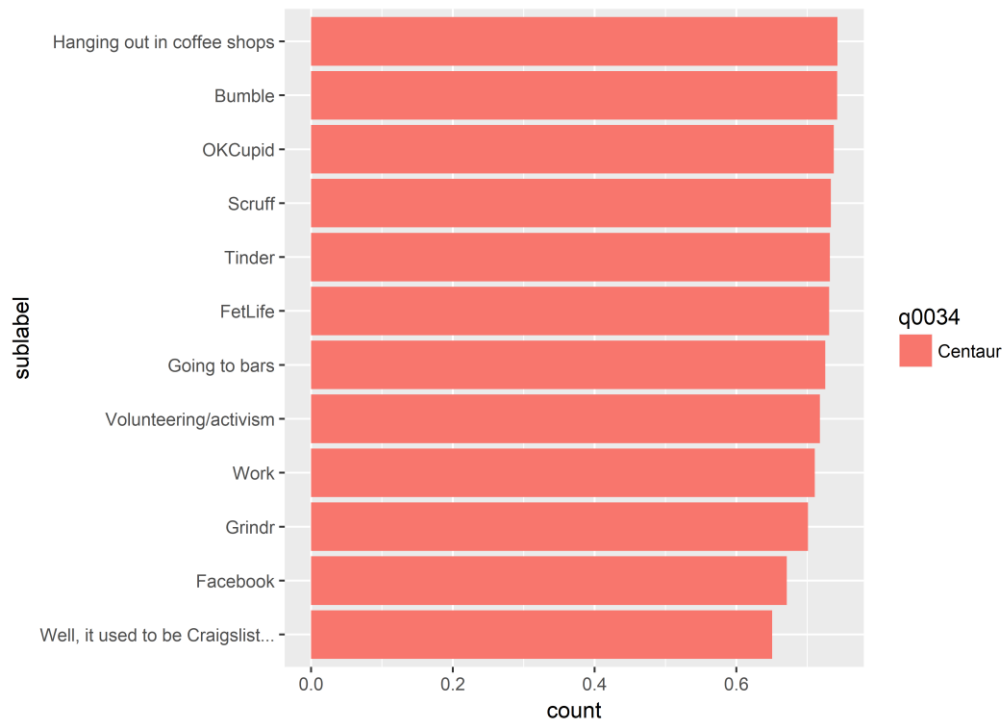
What would you like your sex act with Donald Trump to be?	Count
Pee in his hair	1493
Pee down his throat	1134
Pee in his eyes	2999
Pee on his extra-long tie	861
Pee up his butt	338
No response	459



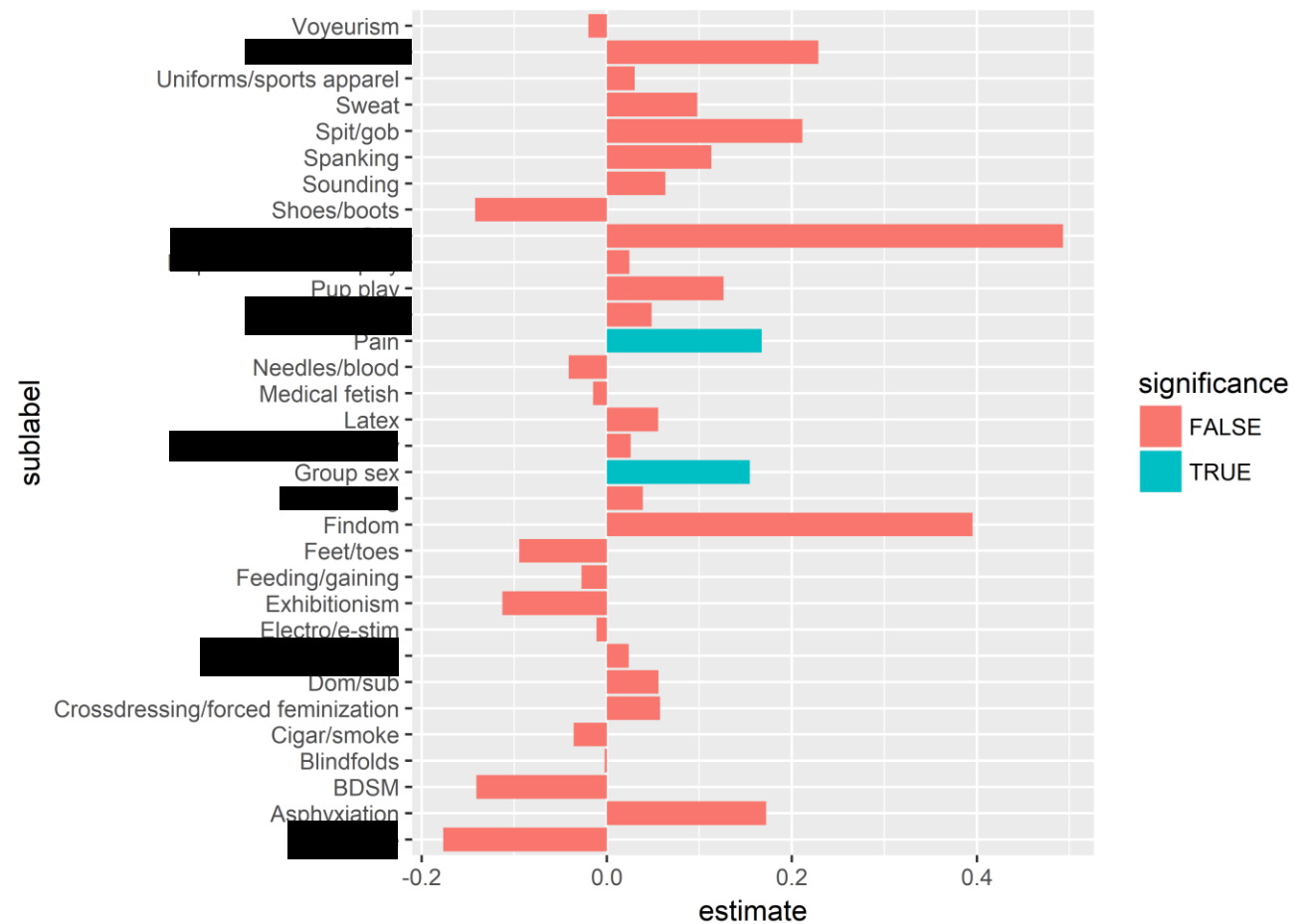
What relates to these?



Bestiality question:
everyone picked centaur



Trump question: no
meaningful relationships



Going to print



Writing the article

- Had three visualizations and supporting facts
- Started too hot on the jokes
 - *(If "data is the new oil," then surely the sex-survey results are crude.)*
- Ended with a good balance of tech terms
 - *(k-means, Sankey diagrams)*
- Added many statistics as text
 - *("people over the age of 55 are twice as likely to have had sex on poppers")*

Going to print

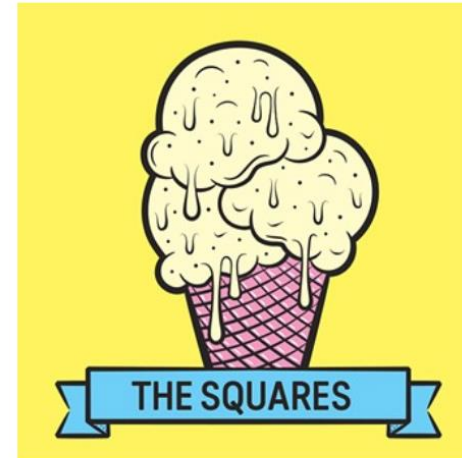
- Article finished June 29th
- July 4th 2018 – the Sex Issue
 - Includes all the survey responses
 - Includes our article!
 - Includes our company logo



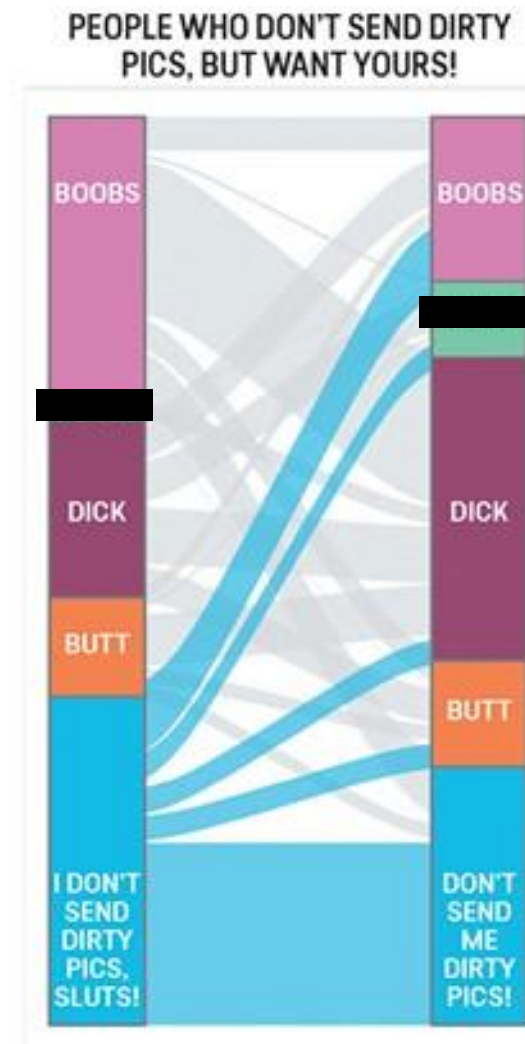
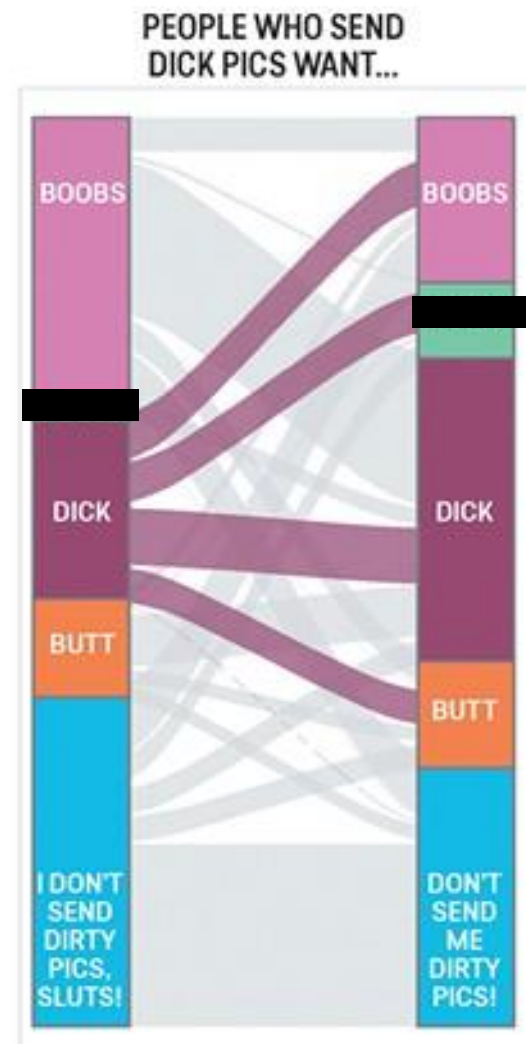
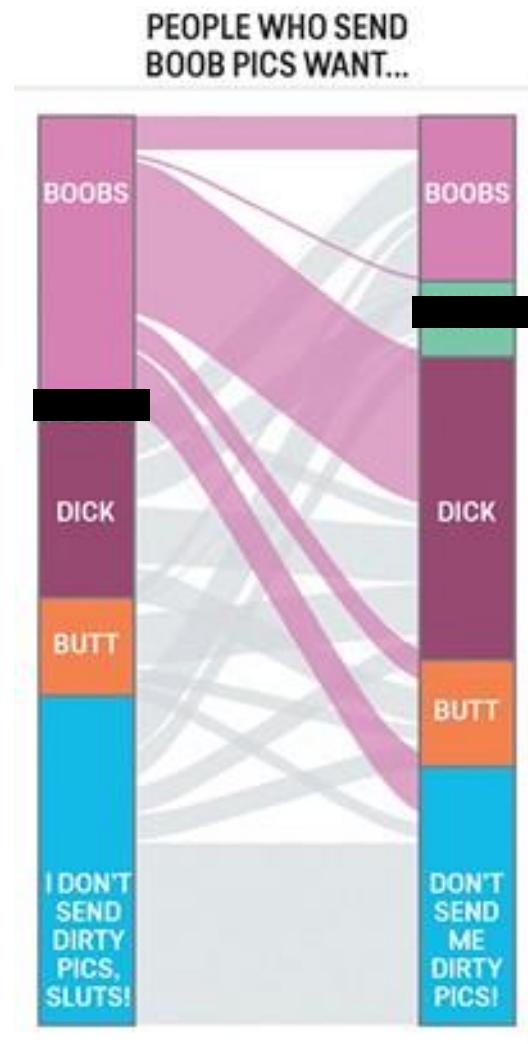
There Are Four Kinds of Sex Partners (Which One Are You?)

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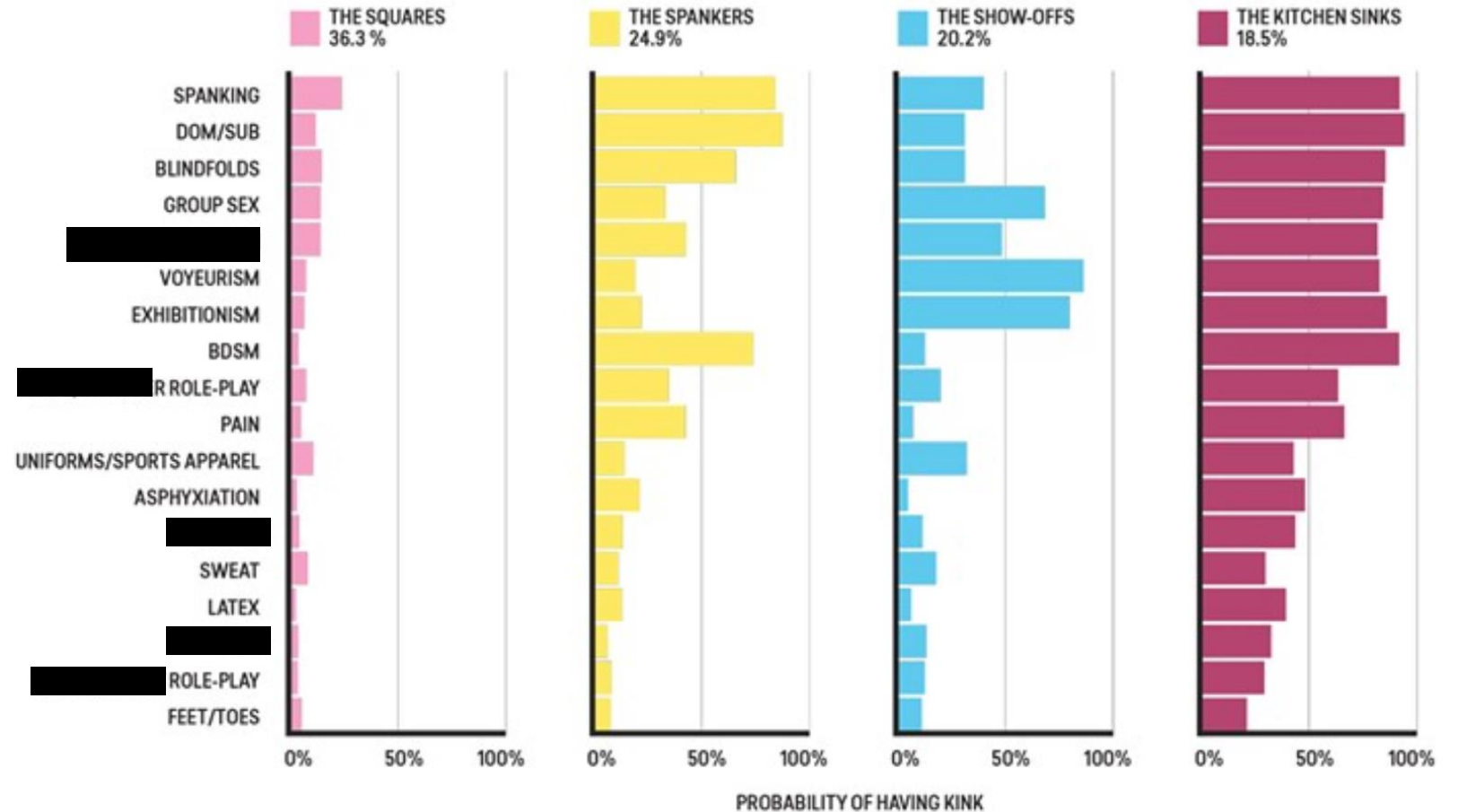
by [Heather Nolis](#) and [Jacqueline Nolis](#)



Not pictured:
hours and hours
of editing



Even after our edits, the artists modified them further



With a powerful method of machine learning called clustering, we narrowed people's kinky interests into four basic groups.

#brand feedback



What did we learn

- “Here’s some data! Tell a us a story.”
 - Nolis LLC Spaghetti Factory
- Good data science != good journalism
- Even the best visualizations need *lots* of editorial cleanup
- Sex stuff is really, endlessly funny



Thank you The Stranger!

the Stranger

Article: <http://bit.ly/sexdatascience>

Jacqueline Nolis - @skyetetra

Heather Nolis - @heatherklus

<https://nolisllc.com>

for *professional* data science and
machine learning consulting

