
Human Language reveals a universal positivity bias

Nak Won Rim

Pollyanna hypothesis [principle]

- Universal positivity bias in communications

Methods

Sunshine



Read the word and click on the face that best corresponds to your emotional response.

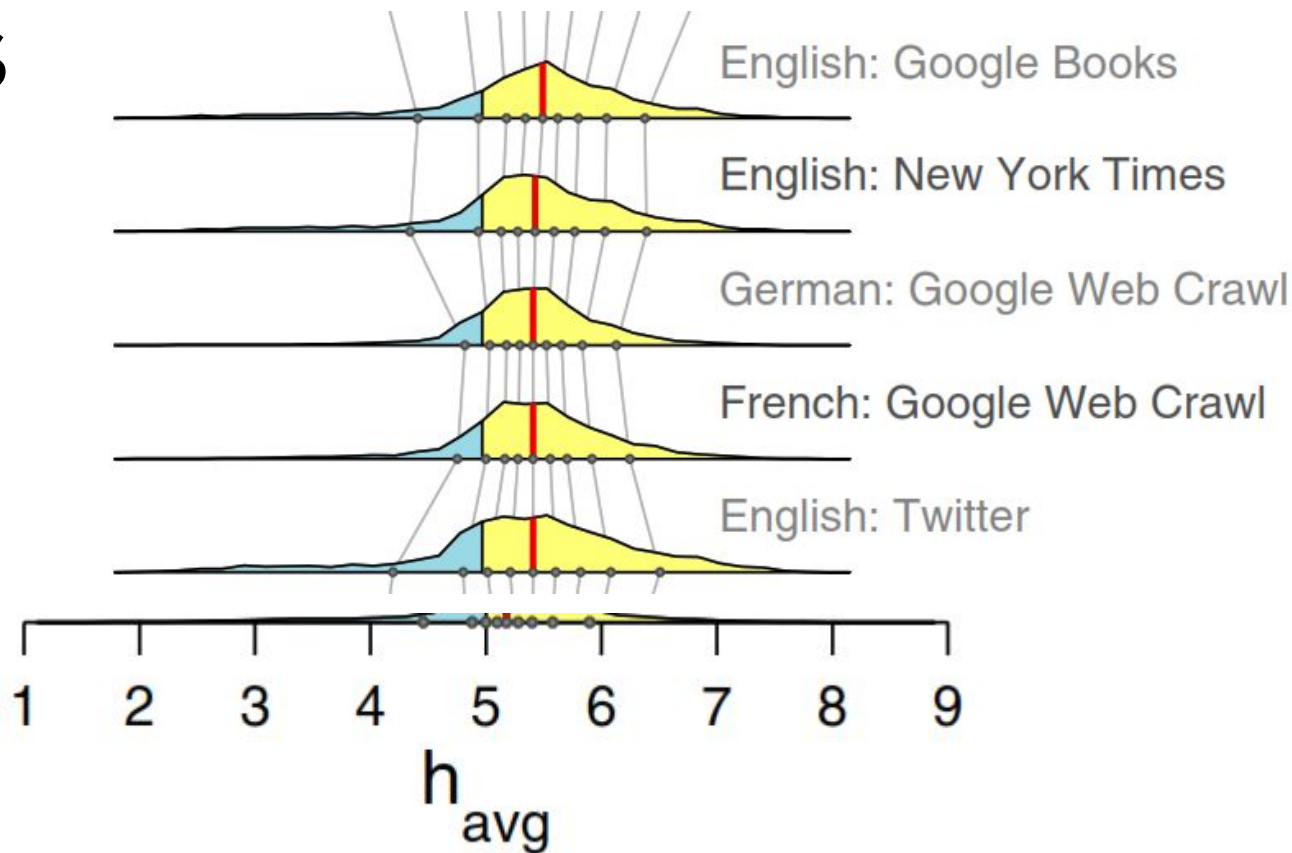
+

1896 raters in Mturk

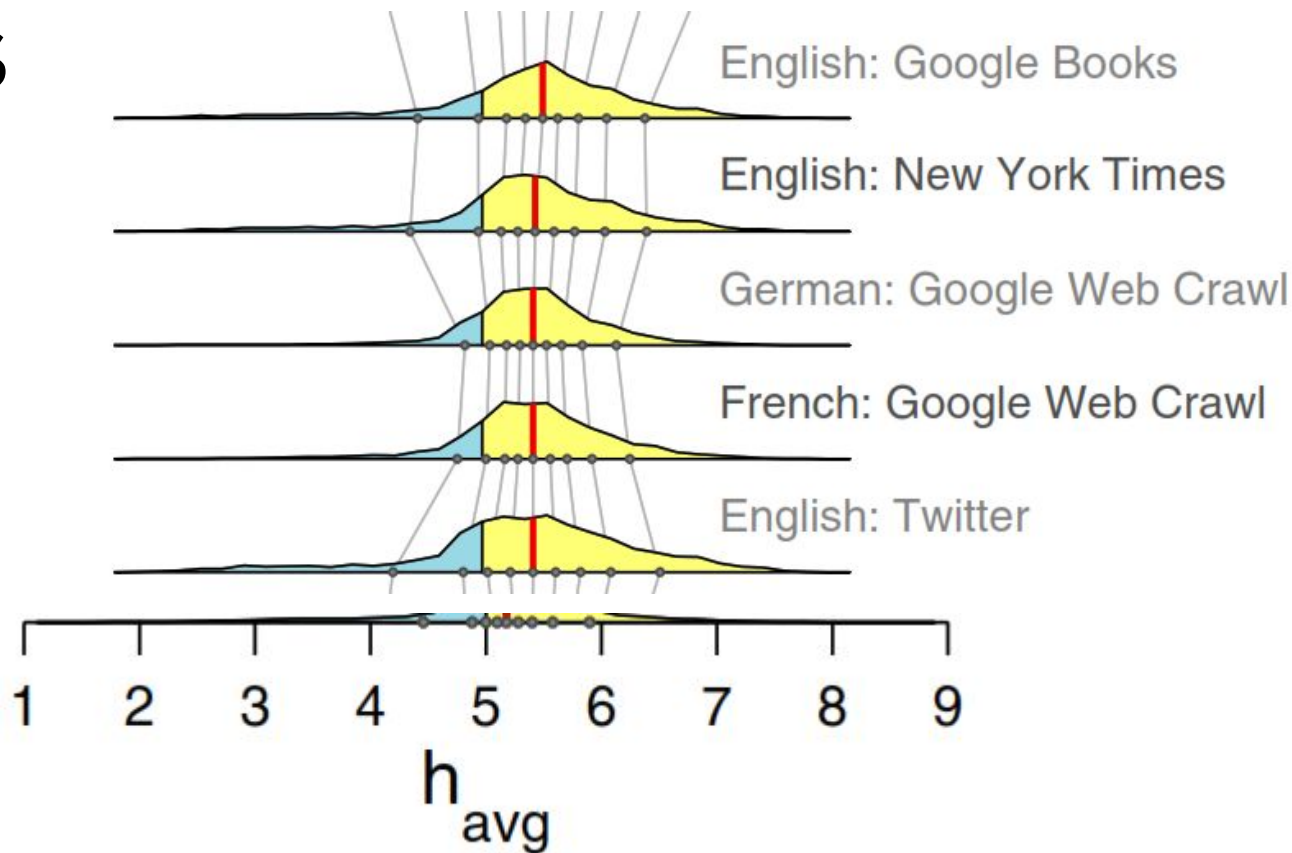
Word Selection

- 24 corpora across 10 languages
- Ranked/chose words based on frequency (5,000 ~ 10,000 words per language)

Results

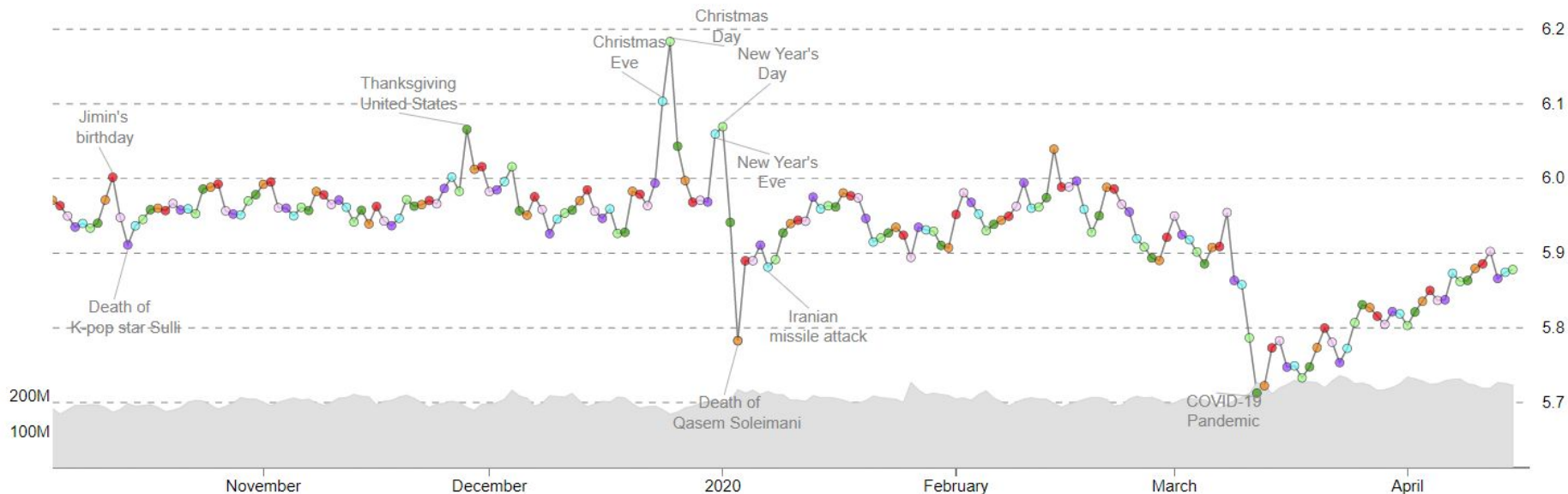


Results

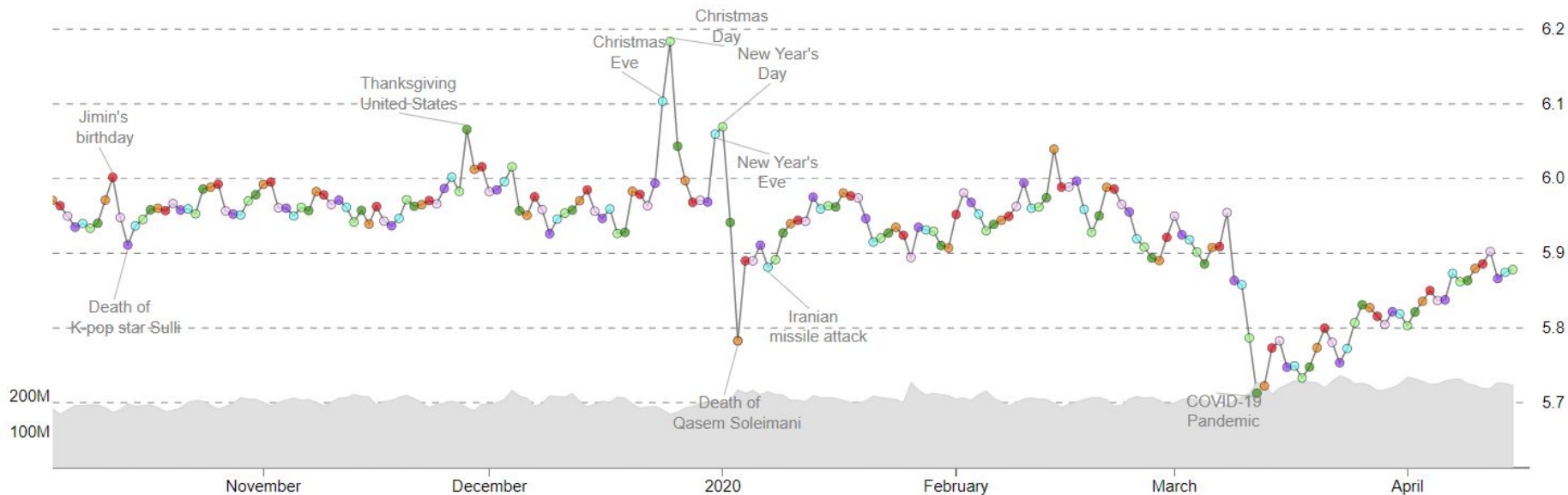




Applications: sentimentality analysis in large-scale





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Forecasting the onset and course of mental illness with Twitter data



Andrew G. Reece , Andrew J. Reagan, Katharina L. M. Lix, Peter Sheridan Dodds, Christopher M. Danforth  & Ellen J. Langer

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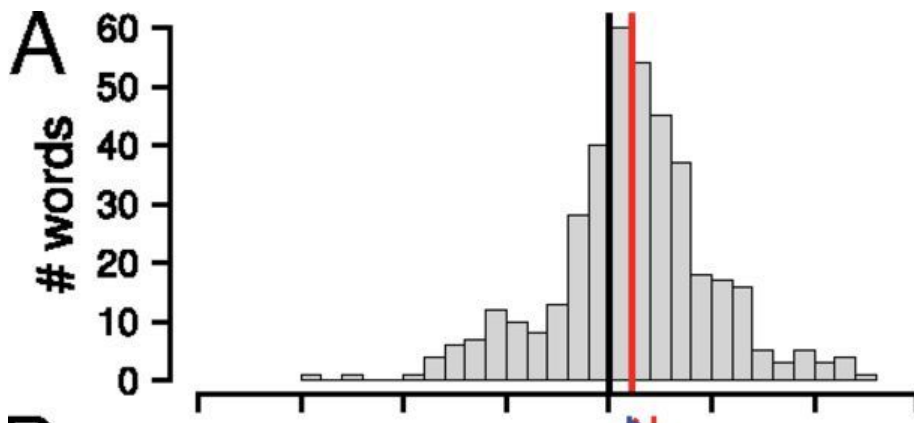
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Critical Assessment

- Importance == Frequency?

Critical Assessment

- stop words (LIWC's function words) (Garcia et al, 2015)



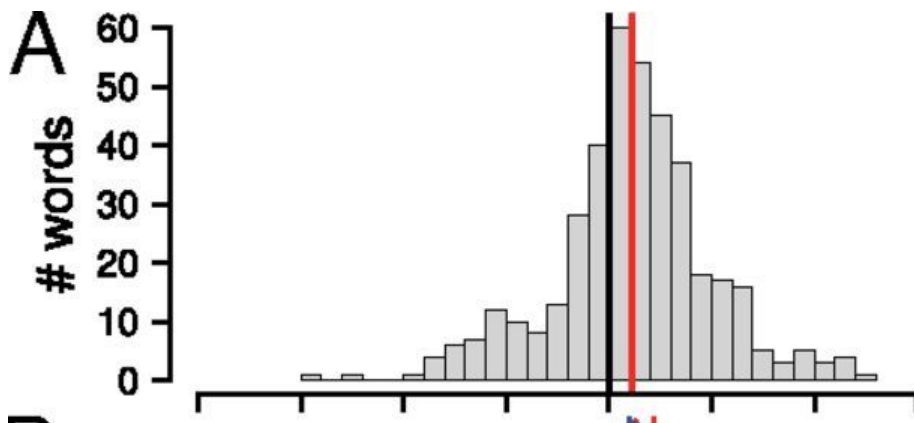
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6

Critical Assessment

- stop words (LIWC's function words) (Garcia et al, 2015)



5



6

Critical Assessment

- Is 24 corpora from 10 languages **universal**?
- If the claim is to generalize universally, this is essentially a **convenience sampling**

Critical Assessment

"But man is not made for defeat. A man can be destroyed but not defeated."

not: 3.86, defeat: 3.2, destroyed: 2.04, defeated: 2.74
but: 4.24, man: 5.9, is: 5.18, made: 5.96, for: 5.22
can: 5.62, be: 5.68

Critical Assessment

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Critical Assessment

- Word → Language (Communication)?



Critical Assessment

- Word → Language (Communication)?



— Question/Alternative approach

- Can people reliably annotate sentiments in sentence-level?
- See you at the coding presentation!