

4. Supervised Techniques I (flipped)

DS-GA 1015, Text as Data
Arthur Spirling

March 2, 2021

Housekeeping

HW 1 out: coming in on March 9, 2021, at 11pm (NY time).

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TaD/NLP: Nanyun (Violet) Peng (UCLA), "Controllable Text Generation Beyond Auto-regressive Models."

Dictionaries

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→ just add up the number of times the words appear and multiply by the score (normalizing by doc dictionary presence)

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Director and co-screenwriter Adam McKay (Step Brothers) bungles a great opportunity to savage the architects of the 2008 financial crisis in The Big Short, wasting an A-list ensemble cast in the process. Steve Carell, Brad Pitt, Christian Bale and Ryan Gosling play various tenuously related members of the finance industry, men who made a killing by betting against the housing market, which at that point had superficially swelled to record highs. All of the elements are in place for a lacerating satire, but almost every aesthetic choice in the film is bad, from the U-Turn-era Oliver Stone visuals to Carell's sketch-comedy performance to the cheeky cutaways where Selena Gomez and Anthony Bourdain explain complex financial concepts. After a brutal opening half, it finally settles into a groove, and there's a queasy charge in watching a credit-drunk America walking towards that cliff's edge, but not enough to save the film.

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Harrison's review of *The Addams Family*

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The best gags in this new version update classic jokes: the furious villagers are now controlled via social media fake news, while Wednesday appears identically wan in every one of her friend's Instagram filters. The family predilection for using dangerous weapons survives intact, even if the darkly Gothic spirit of the Barry Sonnenfeld films is largely missing.

The standard of the animation, however, is less than lush, and doesn't sit well in comparison with most recent studio releases, such as the similar Hotel Transylvania franchise. But, with a decent voice cast and a style that pays homage to the original drawings, The Addams Family passes muster as a disconcertingly cheerful, family-friendly romp.

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What rating do you think this received?

3 stars (0.27)

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The writers of Deadpool, Paul Wernick and Rhett Reese, were employed here, and the aim is clearly to replicate that brand of post-modern snark, but the jokes don't stretch further than having One's crew tediously quote lines from other films while pulling off a heist. The explosions and locations are flashy but, without any opportunities for engagement with the narrative, the two-hour-plus runtime is truly punishing.

If Netflix have funded their fair share of lame comedies and stodgy action, this at least provides fans of the low-brow with a two-for-one. Otherwise, it's a laboured Mission Impossible knock-off that offers little more than watching money unenjoyably wasted. In the era of fake news, 6 Underground feels like a fake film: a disposable, unmemorable product that even those seeking Bay's usual high-octane idiocy will find exhausting.

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What rating do you think this received?

1 star (−0.167)

Exercise

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You are working for `rottentomatoes.com`, and want to automatically code (written) movie reviews as being between 1 and 5 stars.

MOVIES OPENING THIS WEEK [Get Tickets](#)

No Score Yet	Gods Of Egypt	FEB 26
58%	Triple 9	FEB 26
78%	Eddie The Eagle	FEB 26
No Score Yet	Crouching Tiger, Hidden Dragon	
100%	Only Yesterday	

TOP BOX OFFICE

83%	Deadpool	
82%	Kung Fu Panda 3	
60%	Risen	
88%	The Witch	\$8.8M
49%	How To Be Single	\$8.2M
60%	Race	\$7.4M
23%	Zoolander 2	\$5.5M

Grandfathered
68% 51%
Christina Milian, Daniel Chun

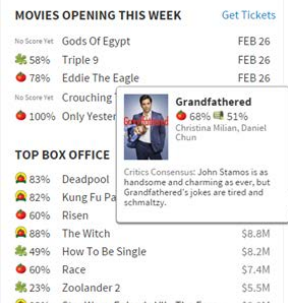
Critics Consensus: John Stamos is as handsome and charming as ever, but Grandfathered's jokes are tired and schmalzy.

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- 1 Would the Hu & Liu approach work better for distinguishing a 1 star review from a 5 star review, or a 4 from a 5 star review? Why? How could you improve upon this?



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The screenshot shows the Rotten Tomatoes homepage. At the top is the 'Rotten Tomatoes' logo and a search bar. Below the logo are navigation links: 'TRENDING ON RT', 'Oscars Personality Quiz', 'Deadpool', and 'Winter T'. A large featured image shows characters from 'The Walking Dead'. Below this is a 'TUMBLR PICKS' section with the text 'Our Favorite Richonne Moments From Last Night's The'. The main section is 'MOVIES OPENING THIS WEEK' with a 'Get Tickets' link. It lists movies with their Rotten Tomatoes scores and release dates: 'Gods Of Egypt' (No Score Yet, FEB 26), 'Triple 9' (58%, FEB 26), 'Eddie The Eagle' (78%, FEB 26), 'Crouching' (No Score Yet), and 'Only Yesterday' (100%). Below this is the 'TOP BOX OFFICE' section, listing movies with their scores and box office revenue: 'Deadpool' (83%, \$8.8M), 'Kung Fu Panda' (82%, \$8.2M), 'Risen' (60%, \$7.4M), 'The Witch' (88%, \$5.5M), 'How To Be Single' (49%, \$5.5M), 'Race' (60%, \$5.5M), and 'Zoolander 2' (23%, \$5.5M). A tooltip for 'Grandfathered' is visible, showing a score of 68% and a quote from critics: 'Critics Consensus: John Stamos is as handsome and charming as ever, but Grandfathered's jokes are tired and schmalzy.'

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- 3 Why might be generally nervous about BOW approaches?

Sarcasm Detection

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btw punctuation adds relatively little to accuracy.

Using LIWC

RESEARCH ARTICLE



Examining long-term trends in politics and culture through language of political leaders and cultural institutions

Kayla N. Jordan, Joanna Sterling, James W. Pennebaker, and Ryan L. Boyd

PNAS February 26, 2019 116 (9) 3476–3481; first published February 11, 2019; <https://doi.org/10.1073/pnas.1811987116>

Edited by Steven Pinker, Harvard University, Cambridge, MA, and approved December 28, 2018 (received for review July 11, 2018)

RESEARCH ARTICLE



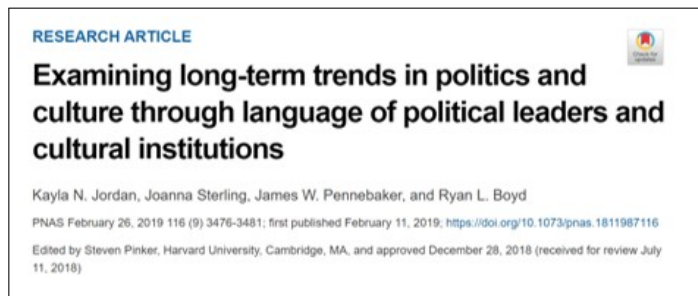
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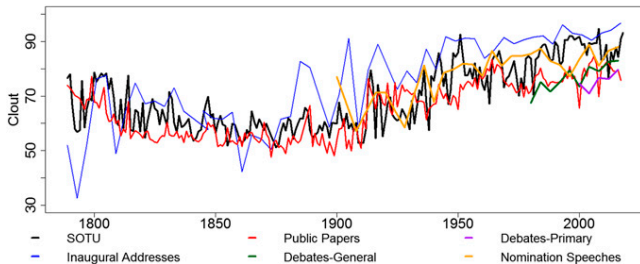
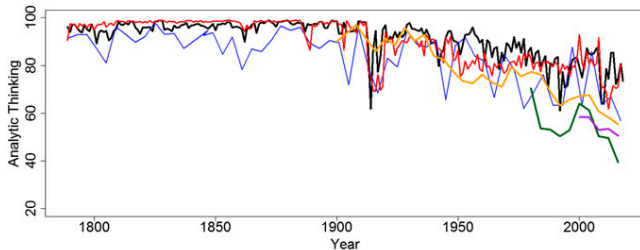
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→ find analytic thinking has decreased; confidence has increased



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How do you think this variable is formed?

Being Careful...

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Q in your field, is there an example of a word(s) that is used in a fundamentally different way, in terms of sentiment, relative to more common uses?

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83% of freq counts of Diction ‘optimistic’ words don’t appear on L&M list. For ‘pessimistic’ words, 70% of Diction word frequencies don’t appear on L&M. Also show that L&M word lists (from company filings) are statistically significant predictor of volatility and direction makes sense (not so for Diction).

Events

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Scholars of [International Relations](#) need access to [events](#)

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England bounce back to defeat Italy in the Six Nations



England managed to secure victory against Italy despite going behind early on. Photo by David Rogers/Getty Images

Why are these stories hard to parse?

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HEALTH • COVID-19

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Prime Minister warns tier restrictions could come back in England

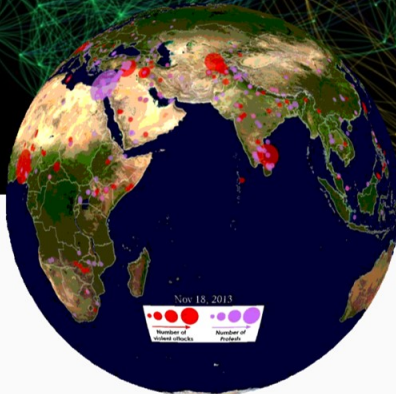
The road map will start as a national approach

SHARE   

By Neil Shaw
19:01, 22 FEB 2021

NEWS

Watching Our World Unfold



A Global Database of Society

Supported by [Google Jigsaw](#), the GDELT Project monitors the world's broadcast, print, and web news from nearly every corner of every country in over 100 languages and identifies the people, locations, organizations, themes, sources, emotions, counts, quotes, images and events driving our global society every second of every day, creating a free open platform for computing on the entire world.

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Example from Sept 2015

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Information received since the Federal Open Market Committee met in July suggests that economic activity is expanding at a moderate pace. Household spending and business fixed investment have been increasing moderately, and the housing sector has improved further; however, net exports have been soft.

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The Committee continues to see the risks to the outlook for economic activity and the labor market as nearly balanced but is monitoring developments abroad. Inflation is anticipated to remain near its recent low level in the near term but the Committee expects inflation to rise gradually toward 2 percent over the medium term as the labor market improves further and the transitory effects of declines in energy and import prices dissipate.

Problem and Approach

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→ rising to ~ 0.25 when all sources included (NB: speeches generally uninformative)

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What *exactly* is being modeled here? That is, suppose you were building a predictor of interest rate changes from scratch, what would you include?

Using Twitter to Predict Financial Markets

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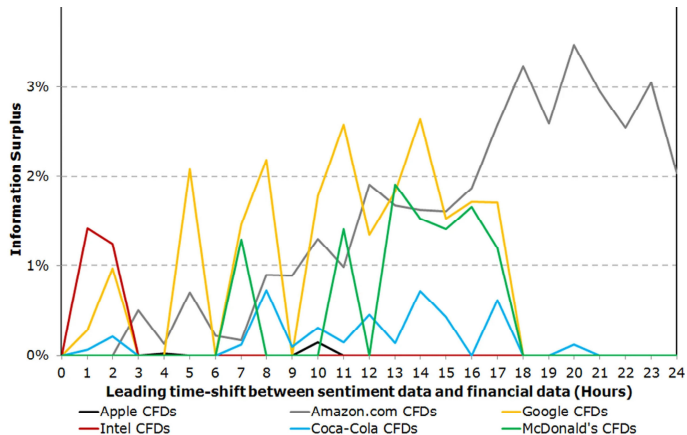
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Using Twitter to Predict Financial Markets



Authors want to predict (future) stock price movements from **sentiment** of tweets about those stocks (e.g. “\$TSLA looks great!”)
Find: some information in sentiments for 12 of 28 assets they investigate.

Results



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- Q Authors find that sentiment is **informative** about price time series. Does that mean it **causes** it?