

Retelling Princeton's History: A Textual Analysis

By David M. Liu '18

Adviser: Dr. Brian Kernighan

Motivation and Goals

1. Capture historical trends related to college campus issues
2. Take advantage of OCR'd daily newspaper dataset
3. Present the vast archive in a more digestible manner.

The Princetonian.

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With the present number of THE PRINCETONIAN a change of printers takes place. Although the change had to be made in the midst of a great pressure of work, still there will be no delay in its issue. The typographical part of the business has been put into the hands of Mr. Wm. S. Sharp, of Trenton. We feel that we can assure our readers that there will be no occasion to mock and say, "Where is the promise of its coming?" for all things will be better than they were from the beginning.

The world does move, and Princeton moves with it. The charge of conservatism so often remorselessly hurled against us by sister Colleges, has again received a blow. We have at last obtained the "substance of things hoped for." Sunday morning chapel and the Sunday afternoon lecture have been abolished. In lieu thereof, a service of about twenty minutes has been placed at five o'clock in the afternoon of that day. But what of that? It serves, you know, as a sort of "grace before meat." The ancient custom of ushering in the sacred day by a meeting for praise and prayer—that bugbear of our fathers and joy of our children's children, that they will have it not—both doubled up and floated away like a kite on a spring day. It has gone to the land of its fathers, and, so far as we know, its end was peace. It has passed away, slowly passed, but still has passed.

So we all pass—pass by the chapel door in the morning. The Freshman, who looked forward to this exercise as his stay and support in the midst of College temptations, will sit under the old elms at midnight, and chant its solemn requiem; and the grave Senior, who has served under its tutorship a sad three years, will banish the sarcastic smile which played on his lips as he thought of the "hollow mockery," while singing in chapel "Sweet Sabbath of Rest;" and in his morning slumbers he will hum over in his dreams, in the low, sweet voice of a contented spirit, "Day of all the week the best."

We have spoken of the abolition of chapel Sunday morning and the lecture Sunday afternoon, in another article. Another reform, hardly less important, but as much desired, has been accomplished in the substitution of a study of the "Word" in King James' version, in place of Greek Testament, on Monday morning. The object aimed at is to study the Bible in the spirit of honest inquiry after the real truth contained in its pages. The President announced in his talk to the Senior Class last Monday morning, that we would study, this year, the life of Christ, as recorded in the New Testament. And surely no one ever saw Dr. McCosh to better advantage than when his eye brightened and his face beamed with a radiance that seemed to be caught from the Master of

Prior Work: Sentiment Analysis



- Definition
- Implementations
 - Unigram model
 - Machine learning Classifiers
- Applications
 - Social Media (e.g. Twitter)

Questions

1. Will modern sentiment analysis techniques still apply to century-old data?
2. If so, what historical trends can be found?

Scraping

128

Years

20,000+

Issues

390K

Headlines

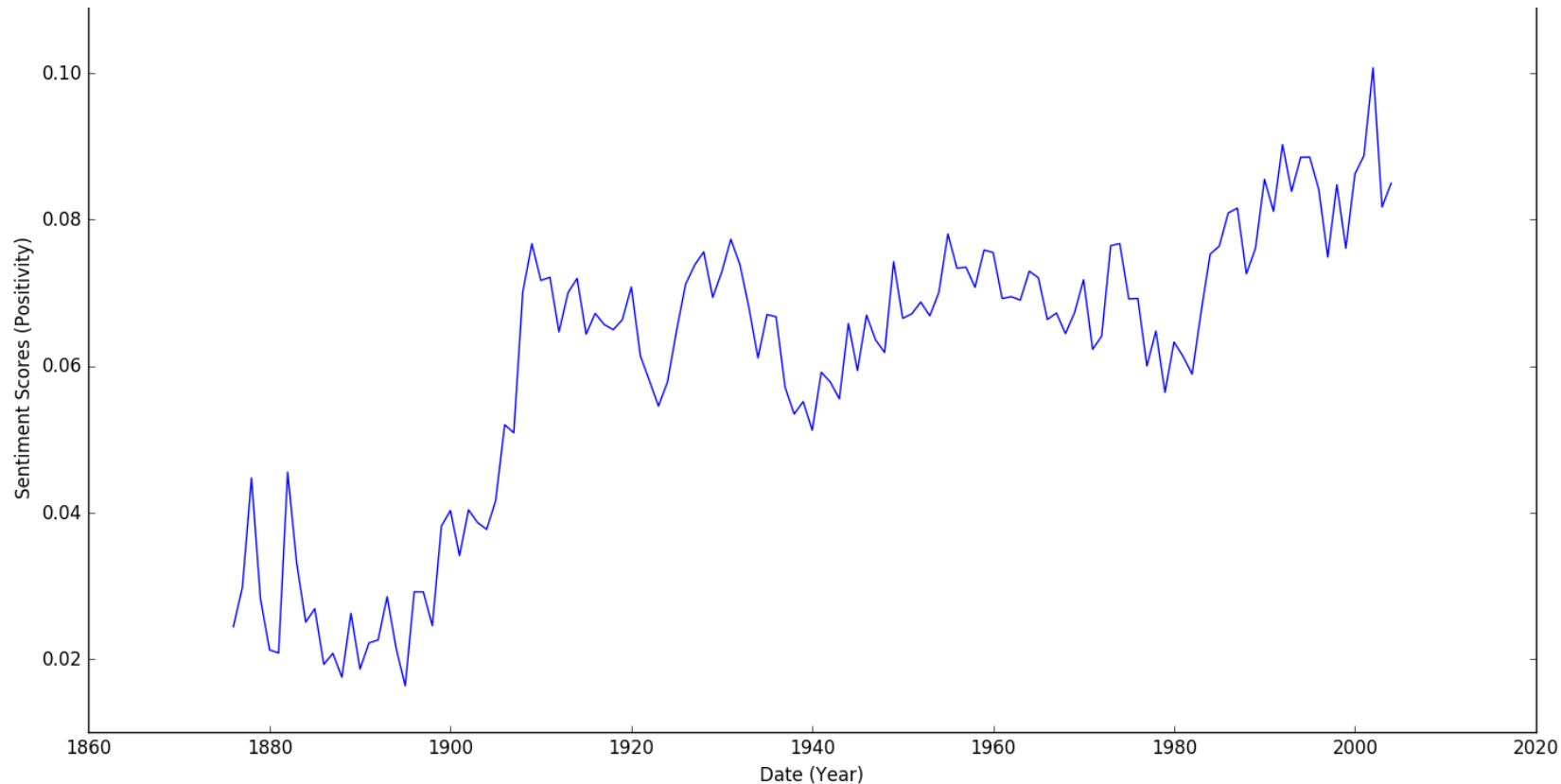
VADER: A Sentiment Analysis Library

Gold Standard List (Excerpt)	
Word	Positive Valence
“okay”	0.9
“good”	1.9
“great”	3.1
“horrible”	-2.5

- NLTK Module
- “Gold Standard” Vocabulary List
- Five Additional Heuristics
 1. Punctuation (!)
 2. Capitalization
 3. Degree Modifiers (eg: *extremely*)
 4. Contrastive Conjunction (eg: *but*)
 5. Negation Detection

Results: Sentiment Analysis

Yearly Positivity Scores from 1876 - 2004



Pros

- NLTK library usable on historical dataset
- Computationally efficient and convenient

Cons

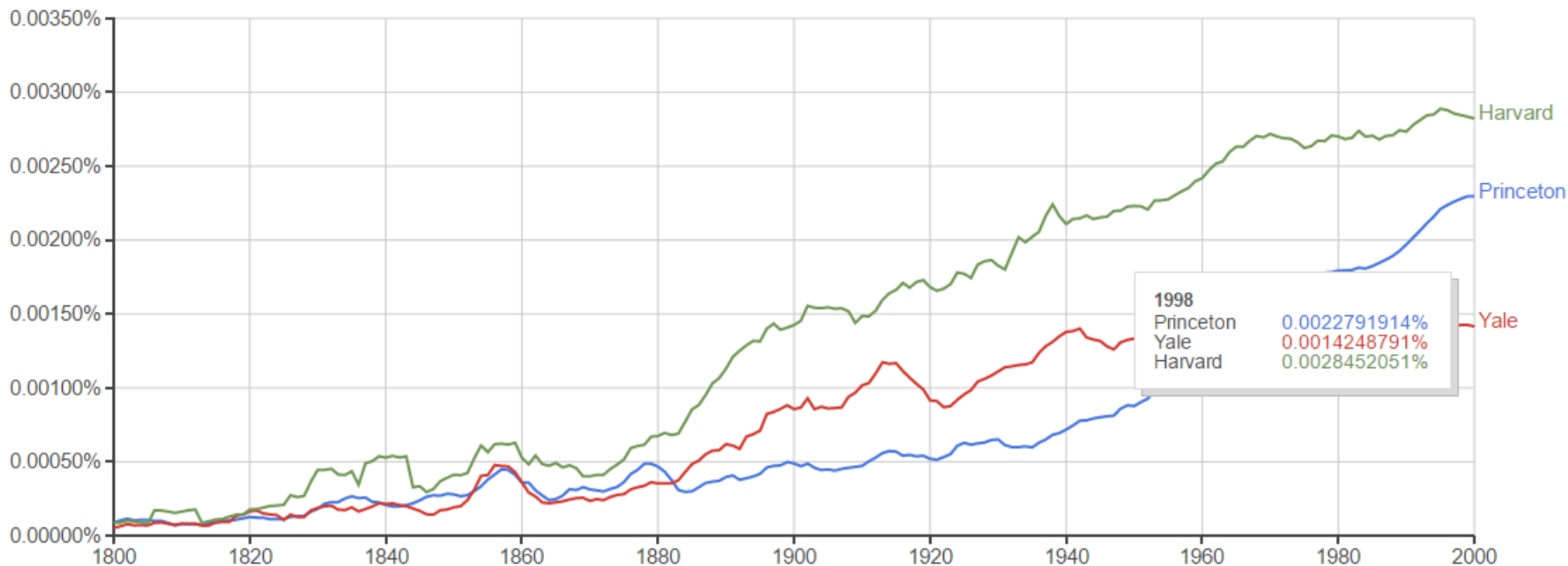
- Difficult to make conclusions without grand assumptions
- Lack of clear trends

Prior Work: N-grams

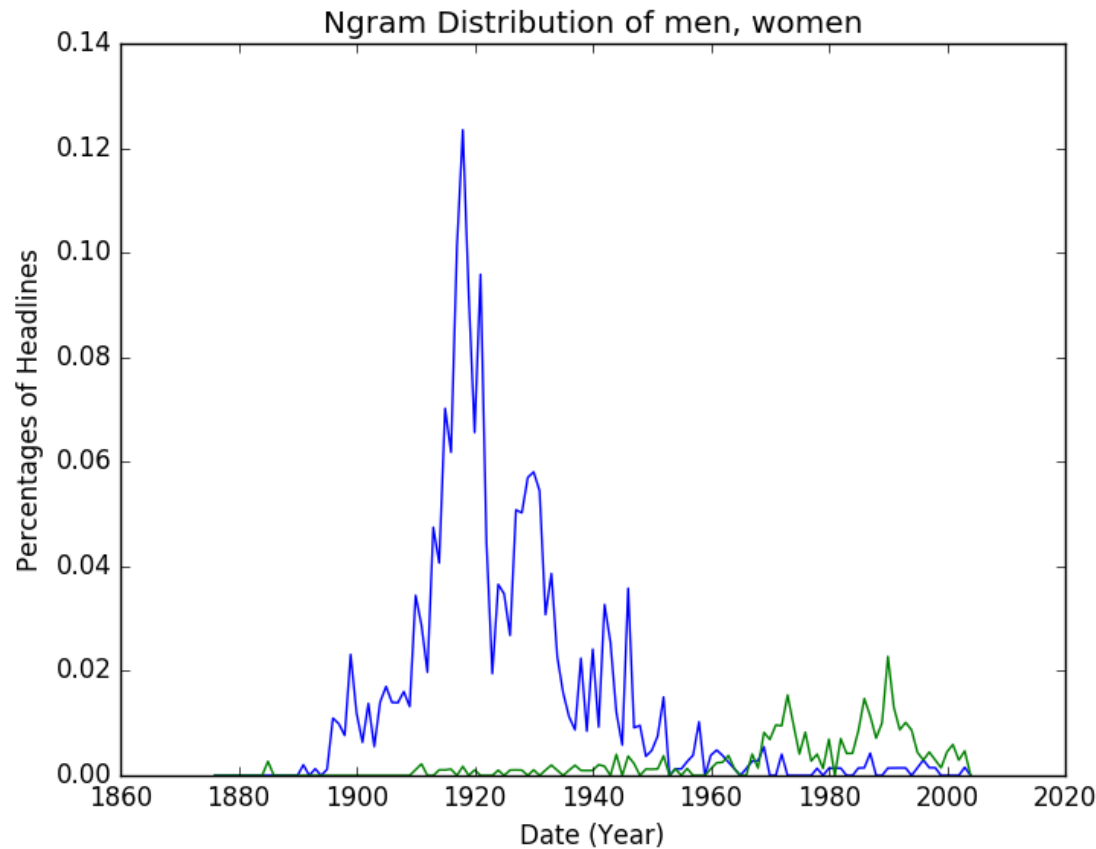
Google Books Ngram Viewer

Graph these comma-separated phrases: ☐ case-insensitive

between and from the corpus with smoothing of [Search lots of books](#)



Results: N-gram + Sentiment Analysis



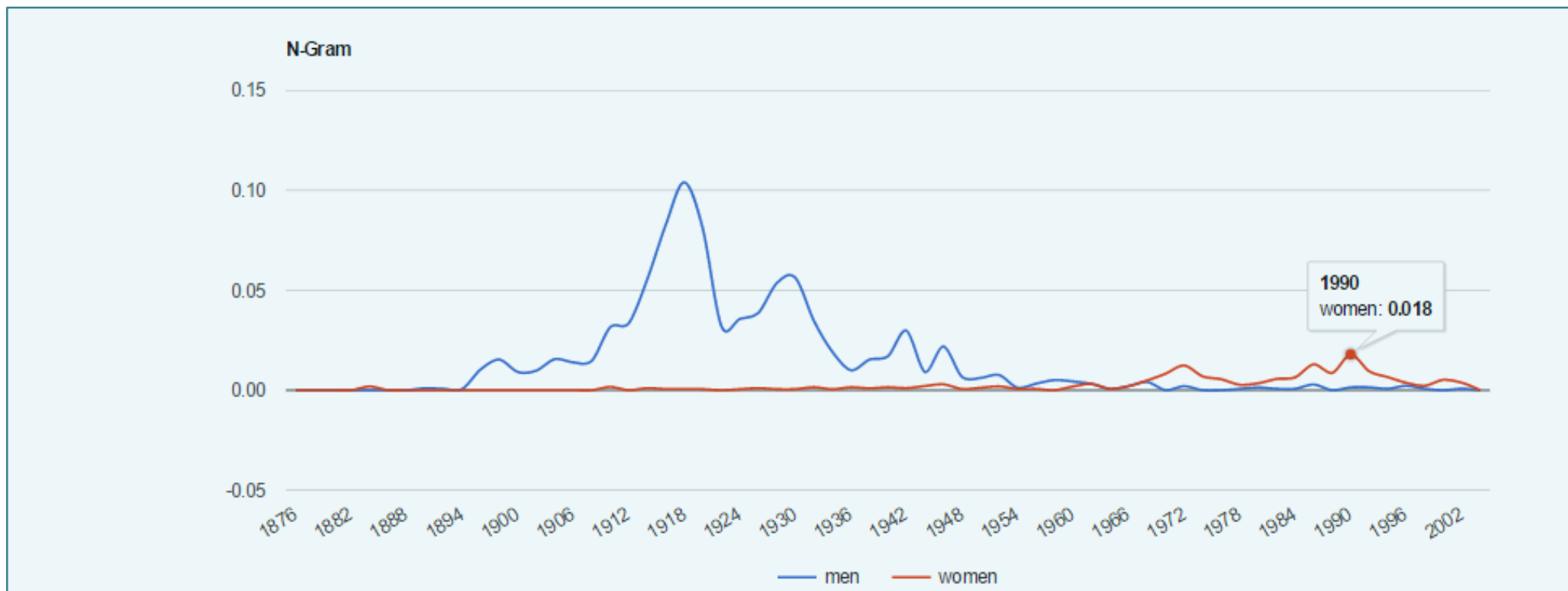
Most Negative Headlines

19510418	five men suspended	0.608
19101031	more men forced to strike.	0.614
19930421	women complain of harassing calls	0.667
19120403	strikers trouble station men	0.683

Most Positive Headlines

19110309	sophomore honor men	0.615
19720922	women join security forces	0.697

Extremes > Trends

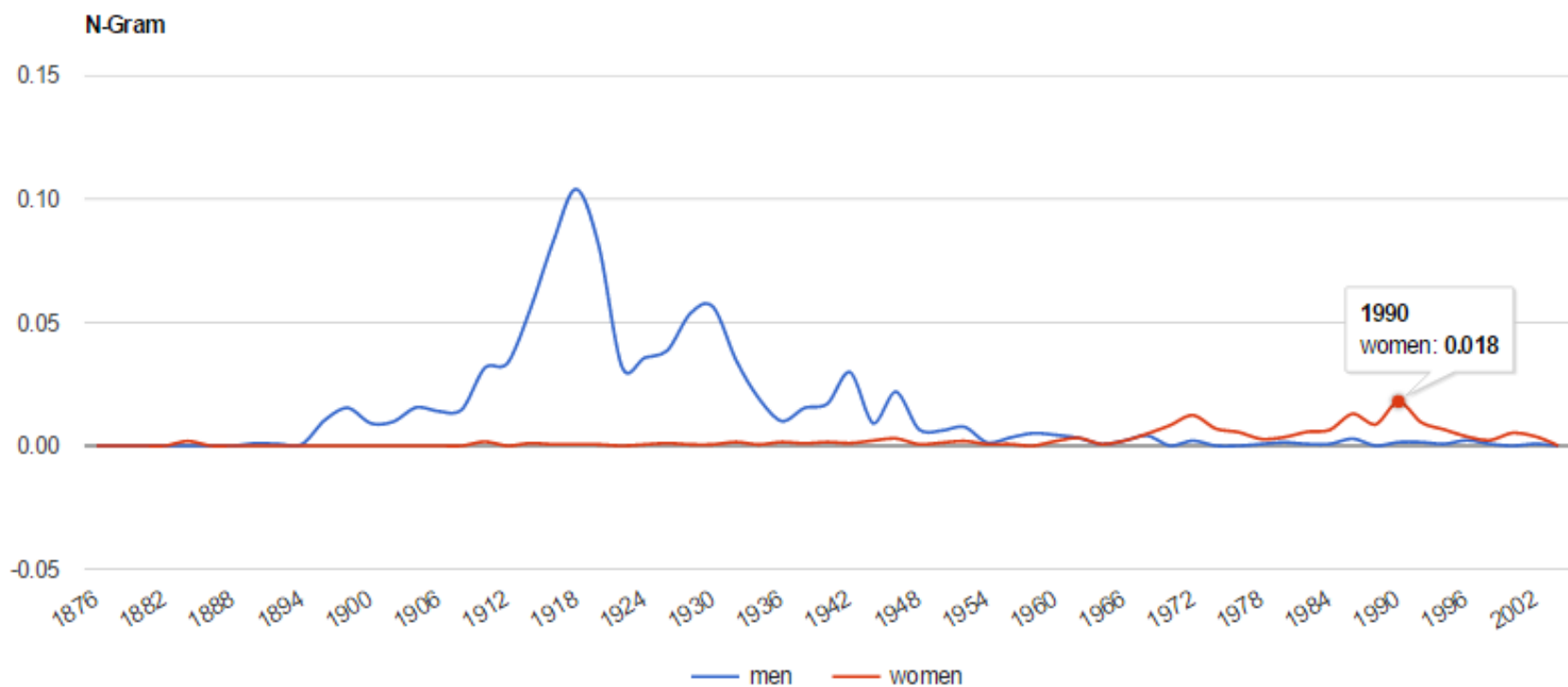


Most Positive Headlines

Year	Score	Link
1972	0.697	women join security forces
1911	0.615	sophomore honor men
1927	0.587	army strong men win over tiger grapplers

Most Negative Headlines

Year	Score	Link
1912	0.683	strikers trouble station men
1993	0.667	women complain of harassing calls
1910	0.614	more men forced to strike.

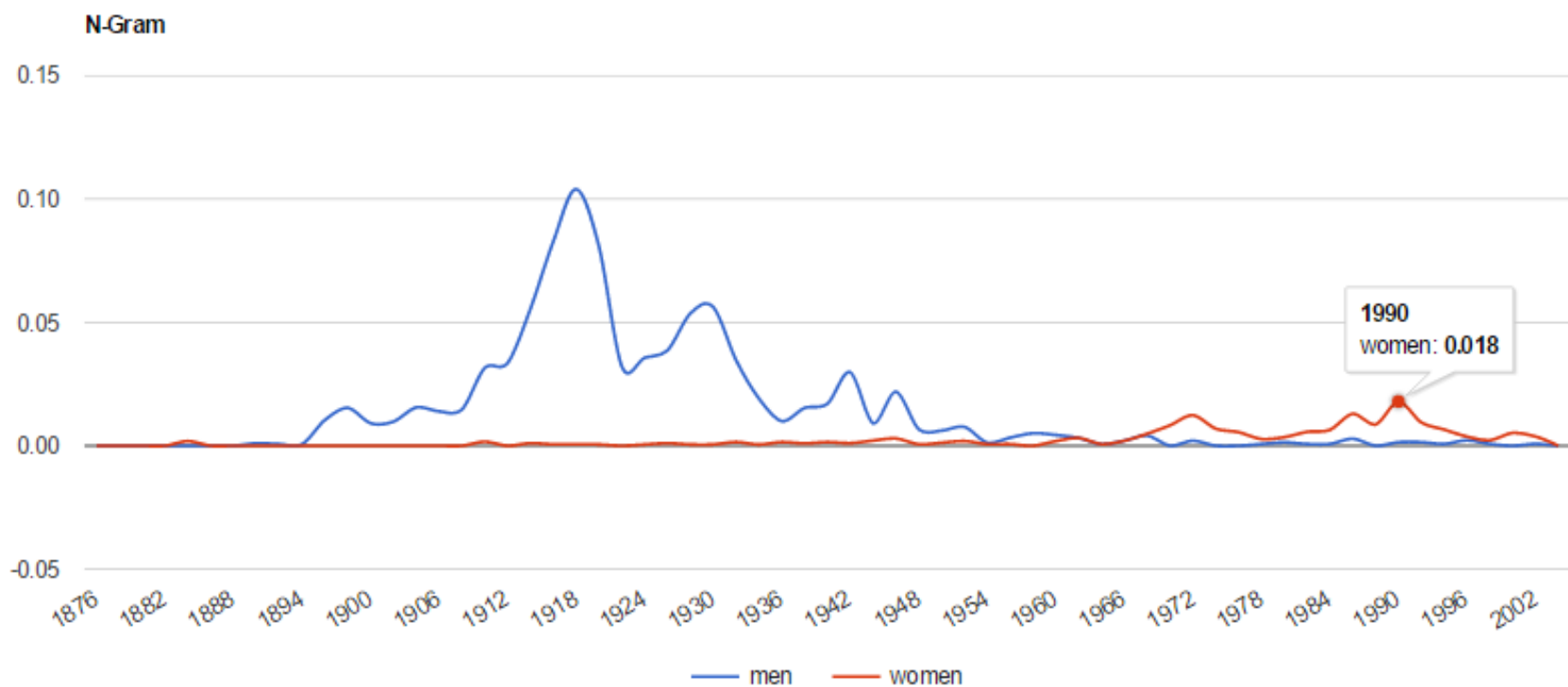


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PAPERS OF PRINCETON

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 Daily Princetonian, Volume 117, Number 54, 21 April 1993 [Issue PDF \(19.21 MB\)](#)
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Text

Why may this text contain mistakes?

Women complain of harassing calls

By JILL SCOTT

After one African-American woman described her experience with telephone harassment at Saturday's Take Back the Night march, several minority women on campus have complained of similar incidents. Minority women said the caller claims he is responding to their advertisement for worn underwear, which he says he read either in *The Daily Princetonian* or a local adult magazine. One African-American female sophomore explained how the

Issue

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D. CHUNG

computer use can lead to eye-strain, headaches, wrist pain, numb fingers and stiff necks. Little research has been done, however, on computer users on col-

dangerous tool, but at the same time academics are struggling to produce more work through internet systems, (such as) Lexis-Nexis, which adds to repetitive

Women complain of harassing calls

By JILL SCOTT

After one African-American woman described her experience with telephone harassment at Saturday's Take Back the Night march, several minority women on campus have complained of similar incidents.

Minority women said the caller claims he is responding to their advertisement for worn underwear, which he says he read either in *The Daily Princetonian* or a local adult magazine.

One African-American female sophomore explained how the caller introduces himself. "Is this Princeton University? Is this a dorm room? I am calling in response to your personals ad selling worn underwear for \$100," she said.

Since similar calls have been made in the past few years, several minority women said they believe this reflects a general trend.

"A few years ago it was a differ-

The nature of the prank and reoccurring trend of the calls suggest that some organization is responsible, said Jan Strout, Women's Center director. Strout added that minority women first alerted her to these harassment calls two years ago.

"(The calls have) a pattern in two ways. It has affected more than one woman, and it has gone on for more than one year," she explained.

While stories change from year to year, several minority women allege that the harassment has targeted the minority community in a similar manner.

Last year, a male caller — estimated to be the age of an average college student — claimed to be "the official panty sniffer" and said he hoped to purchase dirty underwear, said Machin.

While some non-minority women have received similar phone calls, most believe these calls are

"Bagels Baked Fresh All Day...
The Old-Fashioned Way"

179 Nassau Street
Princeton, New Jersey
Tel: (609) 497-EARL (3275)
6:30 a.m. to 10:00 p.m.

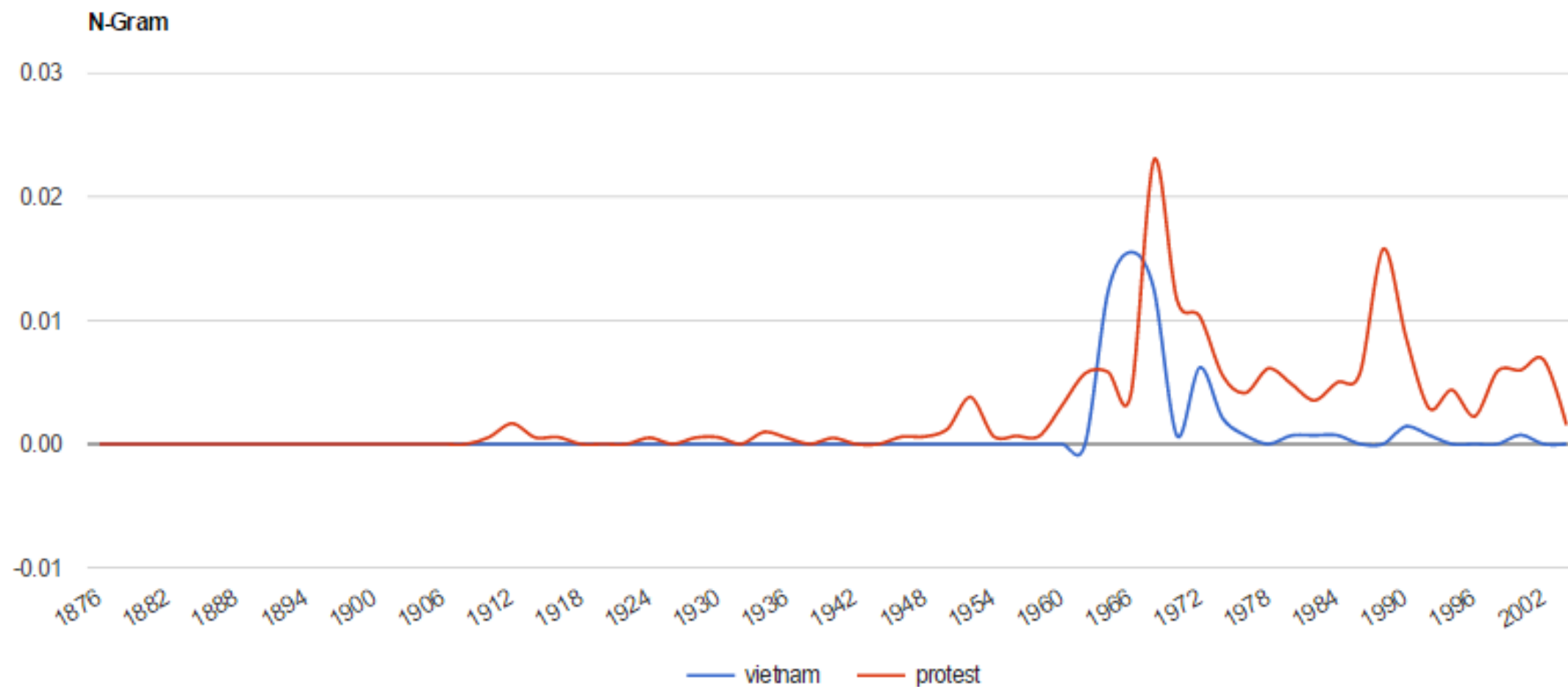
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American Studies Pro
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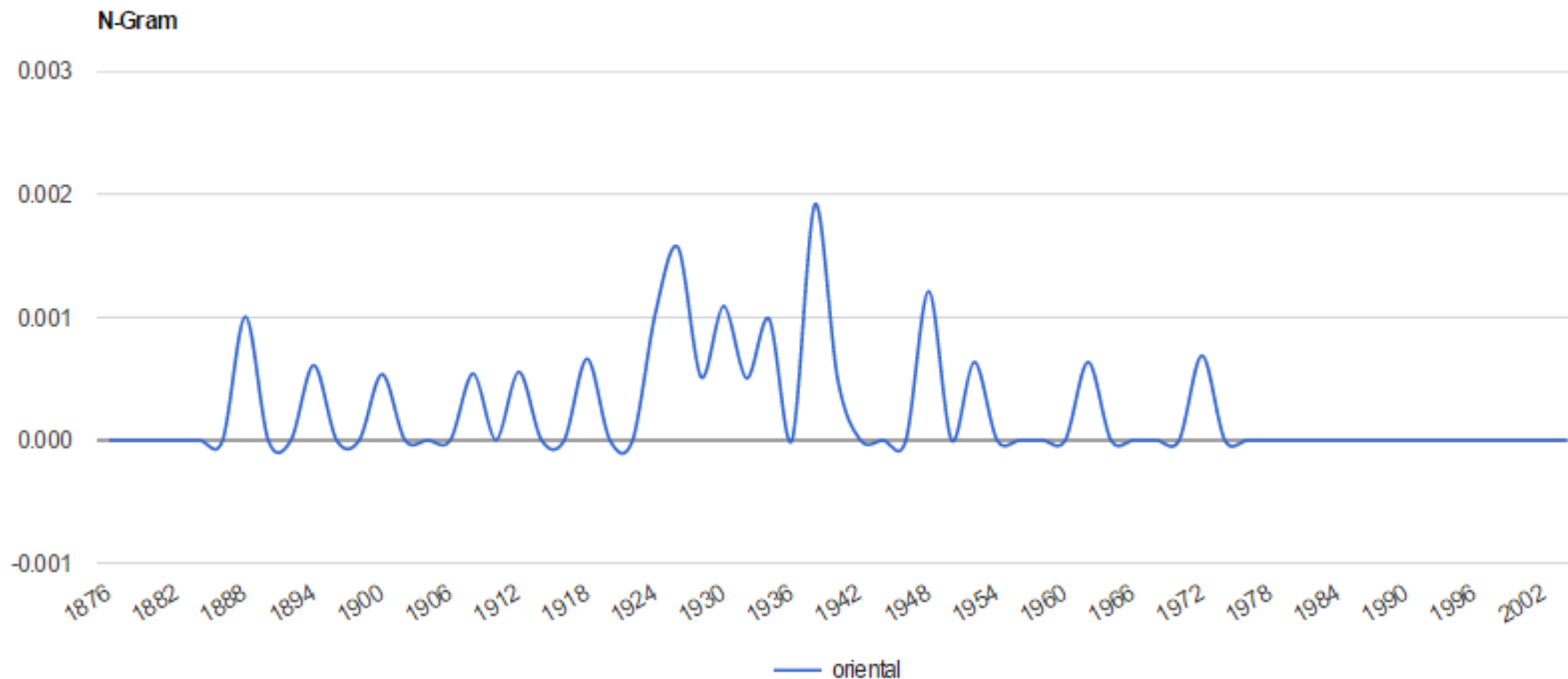
321 Landscape in the Production of the
(ARC 321) — Alessandra Ponte, Scho

The frontier is depicted in the literary and cinematic genre
ing and heroic landscape. Typically, the setting is a *tabula*
promise — a blank page waiting to be written. This land
staging of the familiar but questionable opposition between
the mythical years of the discovery and conquest of the West
culture. But what is the West and what role did the land

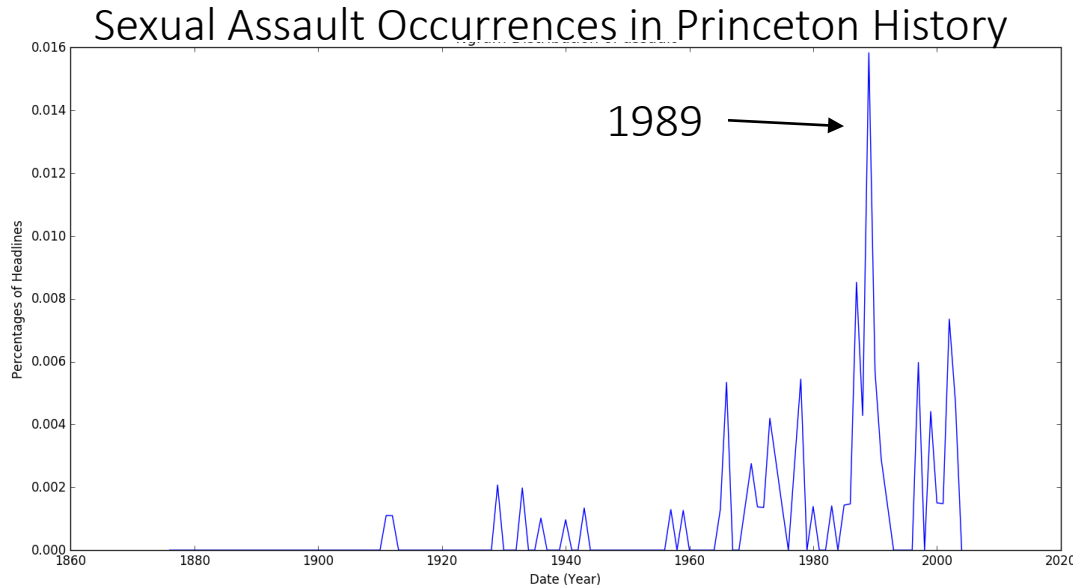
Examples: Major Campus Events



Examples: Patterns in Language



Evaluation and Next Steps



- Topics to study:
 - Gender Inequality
 - Racial Discrimination
 - Crime Rates
- Automate keyword detection
- Compare with national data (NDEA)

The New York Times

N.Y. / Region

WORLD	U.S.	N.Y. / REGION	BUSINESS	TECHNOLOGY	SCIENCE	HEALTH	SPORTS
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Accused Princeton Professor to Retire Early

AP
Published: May 27, 1989

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Sources

Godbole, Namrata, Manja Srinivasaiah, and Steven Skiena. 2007. Large-scale sentiment analysis for news and blogs. *lcwsm* 7 (21): 219-22.

Hutto, C.J. & Gilbert, E.E. (2014). VADER: A Parsimonious Rule-based Model for Sentiment Analysis of Social Media Text. Eighth International Conference on Weblogs and Social Media (ICWSM-14). Ann Arbor, MI, June 2014.

Jean-Baptiste Michel*, Yuan Kui Shen, Aviva Presser Aiden, Adrian Veres, Matthew K. Gray, William Brockman, The Google Books Team, Joseph P. Pickett, Dale Hoiberg, Dan Clancy, Peter Norvig, Jon Orwant, Steven Pinker, Martin A. Nowak, and Erez Lieberman Aiden*. *Quantitative Analysis of Culture Using Millions of Digitized Books*. **Science** (Published online ahead of print: 12/16/2010)

Liu, Bing, and Lei Zhang. 2012. A survey of opinion mining and sentiment analysis. In *Mining text data.*, 415Springer US.

Pang, Bo, and Lillian Lee. 2008. Opinion mining and sentiment analysis. *Foundations and Trends in Information Retrieval* 2 (1-2): 1-135.