### Reading Between (the Party) Lines

by

Sophie Beiying Chou

Submitted to the MIT Media Lab, School of Architecture and Planning in partial fulfillment of the requirements for the degree of

MS in Media Arts and Sciences

at the

#### MASSACHUSETTS INSTITUTE OF TECHNOLOGY

June 2016

© Massachusetts Institute of Tech	hnology 2016. All rights reserved.
Author	
	MIT Media Lab
	May 5, 2016
Certified by	
	Deb Roy
	Associate Professor
	Thesis Supervisor
Accepted by	WHO IS THE CHAIR(WO)MAN
Chairman Denartm	ent Committee on Graduate Theses

### Reading Between (the Party) Lines

by

Sophie Beiying Chou

Submitted to the MIT Media Lab on May 5, 2016, in partial fulfillment of the requirements for the degree of MS in Media Arts and Sciences

#### Abstract

TO-DO

Thesis Supervisor: Deb Roy Title: Associate Professor

	The following	people served as readers for th	is thesis:
Sepandai	r Kamvar		
		Associate Professor of Media	Arts and Sciences MIT Media Lab
			mir modia bas
Ivad Dala			
iyau nai.	ıwalı	Associate Professor of Media	
			MIT Media Lab

### Acknowledgments

[FILL IT WITH GRATITUDE]

## Contents

1	Intr	roduction	7
2	In I	Media We Trust?	9
	2.1	Why Does Media Trust Matter?	10
	2.2	How is Media Trust Formed?	10
		2.2.1 The Role of the Reader	10
		2.2.2 The Role of Media Brands	10
		2.2.3 The Role of Language	10
3	Me	trics for Measuring Trust	11
	3.1	Computing Reading Level	11
		3.1.1 Flesch-Kincaid	11
	3.2	Crowdsourcing Science	11
4	Doe	es Reading Level Matter?	13
	4.1	Motivation	14
	4.2	Experimental Design	14
		4.2.1 Quality Control	14
		4.2.2 Dataset	14
		4.2.3 Survey	14
	4.3	Analysis	14
	4.4	Conclusions	14
	4.5	Limitations	14

5	Doe	s Media Brand Matter?	15			
	5.1	Motivations	15			
	5.2	Experimental Design	16			
		5.2.1 Dataset	16			
		5.2.2 Survey	16			
		5.2.3 Quality Control	16			
	5.3	Analysis	16			
	5.4	Conclusions	16			
	5.5	Limitations	16			
6	Futi	ure Work	17			
	6.1	Designing Interventions	17			
7	Conclusion					
8	3 Tables					
9	Figi	ires	23			

### Introduction

Does anyone trust the news anymore? Not according to the latest Gallup Poll, which showed that only 4 in 10 Americans believe that mass media does a good job of reporting the news "fully, fairly, and accurately." It's a major decline since the poll was first taken in 1999, back when more than half (55%) of Americans believed the news was trustworthy [8].

And the trend has been steadily downward: in short, the majority of Americans have had little to no trust in mass media news coverage since 2007: a discouraging view for a tumultuous time in journalism.

But beyond frustrated readers and reporters, why does distrust in the news matter? For one, media bias—or at the very least, the *belief of* a biased media bias—may have a significant impact on the practice of democracy. A 2006 study from Georgetown University shows that those with more negative attitudes towards the news tend to be more highly influenced by their partisan prior beliefs and less by contemporary issues and messages when voting [5]. This implies that distrust of media plays a large role in the polarization of American politics.

In light of the upcoming 2016 elections, this thesis explores perceptions of media

trust and fairness in coverage of the presidential candidates. Claims of media bias and favoritism are especially high-stakes in election years, where trust has been shown to plummet [8]. And in this election cycle, cries of bias have been especially loud: Analysis at the New York Times showed that the news media gave Republican candidate Donald Trump a \$1.9 billion advantage in free publicity, an amount 190 times as much as paid advertising [3].

In this thesis, we examine some of the factors that contribute to the perception of media bias. In particular, how does the *content* of a story (reading level and vocabulary) affect the reader versus the *context* (publication and author)?

We break down the larger question of media bias in two dimensions: trust and fairness in reporting, and examine the role of language in influencing the reader. Although studies have been conducted to both examine the psychological effect of wording on believability and the impact of media brands and bias, separating and comparing these two factors remains largely unexamined [10, 4]

Two studies are performed: a preliminary and main experiment to collect reader's perceptions of news stories through crowdsourcing. We manipulate the source of the story to examine effects of media brands on the reader, and also compare trust and fairness rankings between high and low reading level stories.

Although the general consensus of mistrust is clear, perception of media bias is a complex phenomenon to dissect, as it combines social and psychological effects with the traits of the story itself. This thesis hopes to shed new light on understanding what motivates readers' trust and distrust of news media.

### In Media We ... Trust?

Despite the news media ecosystem's rapid evolution in the past decade, the question of fairness in reporting remains a valued one. Although counterarguments for subjective reporting exist (Glenn Greenwald, most famous for his coverage of whistleblower Edward Snowden's leaks, said that "All journalism is a form of activism. Every journalistic choice necessarily embraces highly subjective assumptions—cultural, political or nationalistic—and serves the interests of one faction or another"), fair treatment of subjects and sources remain a central tenant to most publications [1].

But an attempt at fairness on the side the reporter is not always perceived in equal effect under the eyes of the reader. Presenting contradictory facts to a reader's beliefs can even sometimes *strengthen* their oppositions to it, a concept known as "motivated skepticism" [9].

In this section, we explore the theories behind three main potential sources of media distrust: In addition to the characteristics of the reader, we examine the source of the story and its use of language.

### 2.1 Why Does Media Trust Matter?

### 2.2 How is Media Trust Formed?

#### 2.2.1 The Role of the Reader

It comes as no surprise that our own political stances have a significant effect in our perceptions of bias in the media.

#### 2.2.2 The Role of Media Brands

#### 2.2.3 The Role of Language

## Metrics for Measuring Trust

- 3.1 Computing Reading Level
- 3.1.1 Flesch-Kincaid
- 3.2 Crowdsourcing Science

Talk about platform, vs. turk, basic demographics (later show ones we found)

## Does Reading Level Matter?

- 4.1 Motivation
- 4.2 Experimental Design
- 4.2.1 Quality Control
- 4.2.2 Dataset
- **4.2.3** Survey
- 4.3 Analysis
- 4.4 Conclusions
- 4.5 Limitations

## Does Media Brand Matter?

### 5.1 Motivations

[Hypotheses]

- 5.2 Experimental Design
- 5.2.1 Dataset
- 5.2.2 Survey
- 5.2.3 Quality Control
- 5.3 Analysis
- 5.4 Conclusions
- 5.5 Limitations

## Future Work

6.1 Designing Interventions

Conclusion

Tables

Figures

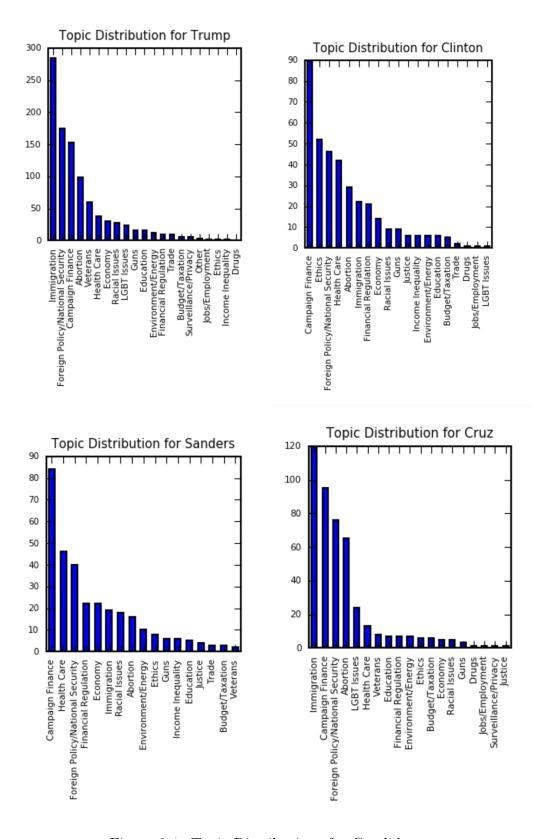


Figure 9-1: Topic Distributions for Candidates

### **Bibliography**

- [1] Is glenn greenwald the future of news? the new york times. http://www.nytimes.com/2013/10/28/opinion/a-conversation-in-lieu-of-a-column.html?mtrref=www.google.com&gwh=450466A4B52C2124639CE220312812D5&gwt=pay&assetType=opinion. (Accessed on 04/20/2016).
- [2] March 1 election results 2016 updates the washington post. https://www.washingtonpost.com/2016-election-results/super-tuesday/. (Accessed on 04/06/2016).
- [3] Measuring donald trump's mammoth advantage in free media the new york times. http://www.nytimes.com/2016/03/16/upshot/measuring-donald-trumps-mammoth-advantage-in-free-media.html. (Accessed on 04/20/2016).
- [4] Matthew A Baum, Phil Gussin, et al. In the eye of the beholder: How information shortcuts shape individual perceptions of bias in the media. *Quarterly Journal of political science*, 3(1):1–31, 2008.
- [5] Jonathan McDonald Ladd. Attitudes toward the news media and voting behavior. In *Annual Meeting of the Midwest Political Science Association*, 2005.
- [6] Amy Mitchell, Jeffrey Gottfried, Jocelyn Kiley, and Katerina Eva Matsa. Political polarization & media habits. *Pew Research Center*, Oct 2014. (Accessed on 04/02/2016).
- [7] Associated Press. Faqs. http://www.ap.org/company/FAQs, 2016. (Accessed on 04/21/2016).
- [8] Rebecca Riffkin. Americans' trust in media remains at historical low. http://www.gallup.com/poll/185927/americans-trust-media-remains-historical-low.aspx. (Accessed on 04/20/2016).
- [9] Charles S Taber and Milton Lodge. Motivated skepticism in the evaluation of

- political beliefs. American Journal of Political Science, 50(3):755–769, 2006.
- [10] Deena Skolnick Weisberg, Frank C Keil, Joshua Goodstein, Elizabeth Rawson, and Jeremy R Gray. The seductive allure of neuroscience explanations. *Journal of cognitive neuroscience*, 20(3):470–477, 2008.