

Sean A. Munson

@smunson
smunson@uw.edu
smunson.com

HCDE Human
Centered
Design &
Engineering

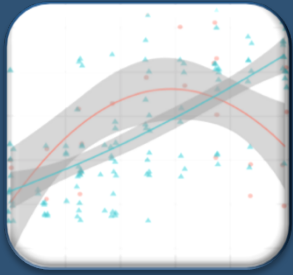
dub

1 In online political spaces, better understand:

- **preferences for opinion diversity**
- **ways to encourage people to access diverse viewpoints.**

2 Look into whether there are **other online spaces** where access to diverse viewpoints might occur despite people's preferences.

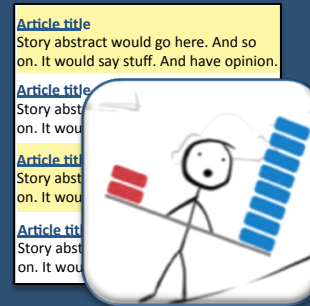
← political news sites and aggregators → ← non political sites →



Preferences for content diversity

	A	B	C	D	E	F
1	✓	✓		✓		✓
2		✓		✓		✓
3	✓	✓		✓		
4	✓	✓				✓
5					✓	
6					✓	
total	3	4	0	3	0	3

Selecting diverse content

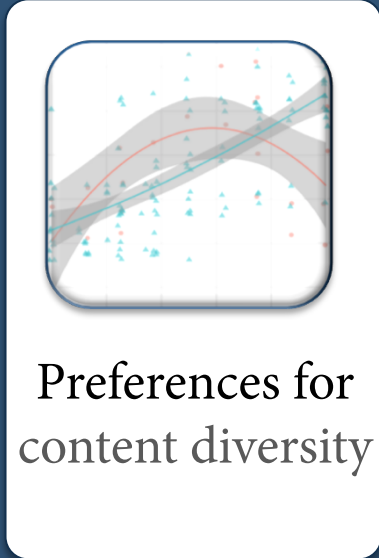


Presenting diverse content



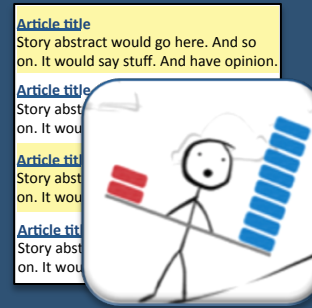
Spaces where diverse exposure already occurs

← political news sites and aggregators → ← non political sites →



	A	B	C	D	E	F
1	✓	✓		✓		✓
2		✓		✓		✓
3	✓	✓		✓		
4	✓	✓				✓
5					✓	
6					✓	
total	3	4	0	3	0	3

Selecting diverse content



Presenting diverse content



Spaces where diverse exposure already occurs

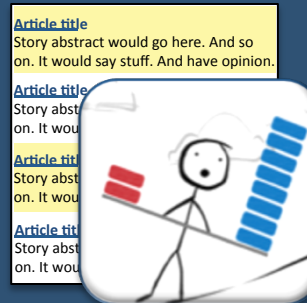
← political news sites and aggregators → ← non political sites →



Preferences for content diversity

	A	B	C	D	E	F
1	✓	✓		✓		✓
2		✓		✓		✓
3	✓	✓		✓		
4	✓	✓				✓
5					✓	
6						✓
total	3	4	0	3	0	3

Selecting diverse content



Presenting diverse content



Spaces where diverse exposure already occurs

- **Select diverse collections without a priori knowledge of groups**

Sidelines (Munson & Resnick 2009); Maximum Marginal Relevance (Carbonell & Goldstein 1998); divRank (Mei, Guo, Radev 2010)

- **Classify articles according to lean**

(Deghani 2011, Oh et al 2009, Zhou et al 2011)

- **Identify and cluster aspects of stories in coverage**

(Baumer et al 2013, Park et al 2009)

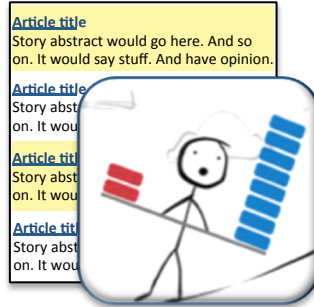
← political news sites and aggregators → ← non political sites →



Preferences for content diversity

	A	B	C	D	E	F
1	✓	✓		✓		✓
2		✓		✓		✓
3	✓	✓		✓		
4	✓	✓				✓
5					✓	
6					✓	
total	3	4	0	3	0	3

Selecting diverse content



Presenting diverse content



Spaces where diverse exposure already occurs

Highlighting & Ordering?

BASELINE

[Article title](#)
Story abstract would go here. And so on. It would say stuff. And have opinion.

[Article title](#)
Story abstract would go here. And so on. It would say stuff. And have opinion.

[Article title](#)
Story abstract would go here. And so on. It would say stuff. And have opinion.

[Article title](#)
Story abstract would go here. And so on. It would say stuff. And have opinion.



HIGHLIGHT

[Article title](#)
Story abstract would go here. And so on. It would say stuff. And have opinion.

[Article title](#)
Story abstract would go here. And so on. It would say stuff. And have opinion.

[Article title](#)
Story abstract would go here. And so on. It would say stuff. And have opinion.

[Article title](#)
Story abstract would go here. And so on. It would say stuff. And have opinion.



HIGHLIGHT + ORDER

[Article title](#)
Story abstract would go here. And so on. It would say stuff. And have opinion.

[Article title](#)
Story abstract would go here. And so on. It would say stuff. And have opinion.

[Article title](#)
Story abstract would go here. And so on. It would say stuff. And have opinion.

[Article title](#)
Story abstract would go here. And so on. It would say stuff. And have opinion.

- [Why the public option matters \(Paul Krugman - NYTimes.com\)](#)

Most arguments against the public option are based either on deliberate misrepresentation of what that option would mean, or on remarkably thorough misunderstanding of the concept, which persists to a frustrating degree. Aside from the essentially circular political arguments — centrist Democrats insisting that the public option must be dropped to get the votes of centrist Democrats — the argument against the public option boils down to the fact that it's bad because it is, horrors, a government program. And sooner or later Democrats have to take a stand against Reaganism — against the presumption that if the government does it, it's bad.

- [It's come to this August wasn't a setback for us at all, says Gibbs \(Hot Air\)](#)

In which Beltway Bob channels Baghdad Bob. Despite a month of near-daily "Obama's approval rating at new low" headlines and deteriorating numbers for ObamaCare itself, the spin oozes unceasingly forth, with Gibbs mindlessly asserting that the left is closer than ever to fulfilling its dream of the boondoggle to end all boondoggles. Er, closer than they were last month? Wasn't the whole point of trying to ram a bill through Congress before the recess to avoid precisely the sort of inevitable grassroots backlash that stirred in August? I realize it's Gibbs's job to lie for his boss, but providing comic fodder for righty blogs with transparent garbage like this can't be helping much. At another point during the briefing, Tapper asked him what the big deal is about tomorrow night's speech given that Obama's been recycling the same rote talking points for months. Gibbs's answer: Well, it's a big forum. The correct answer, via Jay Cost: They're out of moves. It's Hail Mary time.

- [Kingston Claims Health System Worked "Very Well" For Bankrupt Cancer Survivor Without Insurance \(Think Progress\)](#)

At a recent town hall held by Rep. Jack Kingston (R-GA), an elderly gentleman named Jim Parker stood up and told the congressman that he was recently treated for colon cancer. "I did not have insurance," he said, because "things didn't quite work out" after he started his own business. Parker informed Kingston that "a friend of mine was in the same position, and we buried him last January." Kingston responded by telling the man that "you did do very well" because he was able to get treated when he arrived at the hospital. Parker responded, "I am functionally bankrupt!" Kingston cut him off and reiterated his point. Kingston has been telling the media that the August town halls have helped to defeat Obama's health care plan. And he recently told Politico that the GOP is "going to keep the nightmare going through the fall." A nightmare all too real for people like Jim Parker.

- [Gay Marriage Rage \(Maggie Gallagher - Townhall.com\)](#)

I was in Maine on the day that marriage qualified for the ballot this November. I went to Maine as president and founder of the National Organization for Marriage, which helped local groups organize the signature drive in Maine, as we did in California for Proposition 8. Most of the people in Maine were enthusiastic, but one clergyman asked me, "Shouldn't we live with our neighbors in peace?" His question haunts me for its debased presumptions: Is using democracy to fight for shared values somehow an act of war against our neighbors? "Agree with me or you're a hater" is not the authentic voice of peace and tolerance. But the question underscored an increasingly obvious truth: Gay marriage advocates now rage against Americans who disagree with them, no matter how civilly we conduct the debate. They believe only one side has the moral right to be heard.

- [Perry making use of stimulus boost \(Houston Chronicle\)](#)

Gov. Rick Perry rallied opposition to federal stimulus spending, but he now is the manager of one of the biggest pots of federal gold in Texas: crime grants to local law enforcement agencies. And those grants have become an integral part of Perry's political machine. Perry in the past has decided what law enforcement agencies receive about \$23 million a year in Edward Byrne Memorial Justice Assistance grants. Now, because of the American Recovery and Reinvestment Act, Perry will have an additional \$90 million to hand out. While Perry's office is the conduit for the federal money, the governor chooses which agencies receive the money and how it is spent. The political payoff has been great. About \$6 million in Byrne grants helped Perry win the endorsement of border sheriffs in 2006. Every time Perry doles out the federal Byrne grants, he sounds like the money is his.

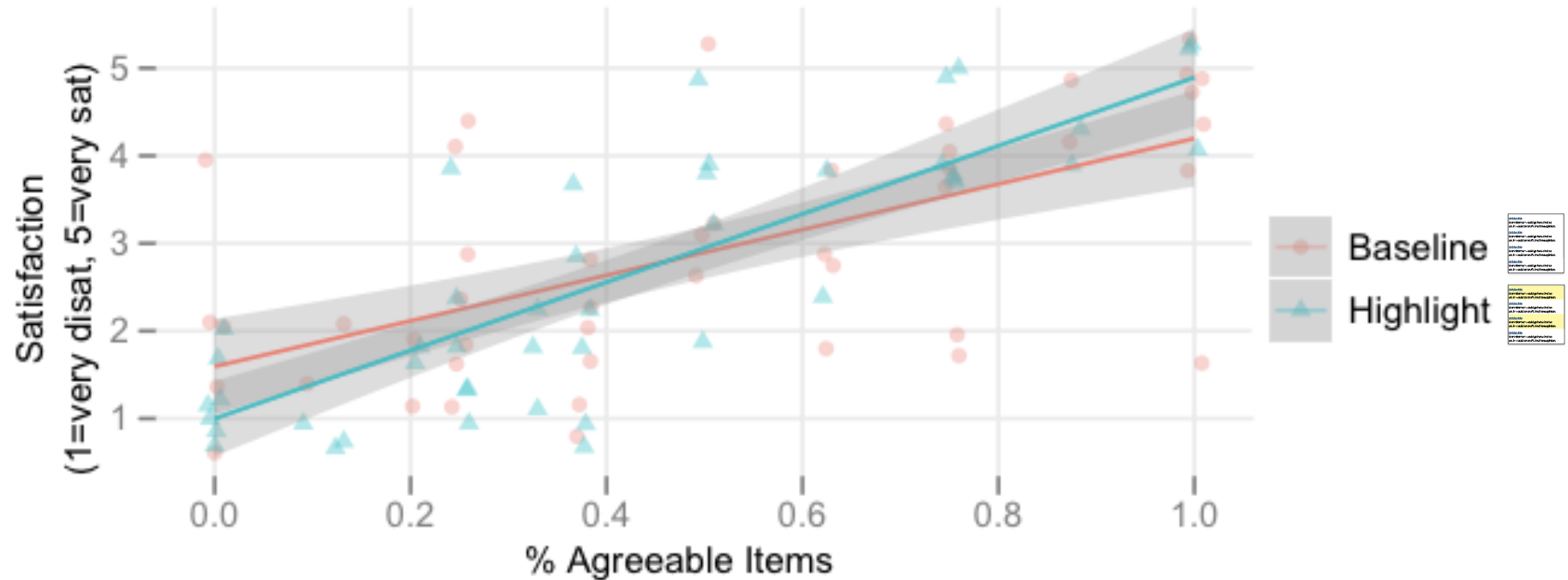
Suppose this was the front page of a political opinion aggregator. How would you feel about the viewpoints represented in it?

- Very dissatisfied
- Somewhat dissatisfied
- Neither satisfied nor dissatisfied
- Somewhat satisfied
- Very satisfied

Please say a bit about why you responded the way you did:

Submit

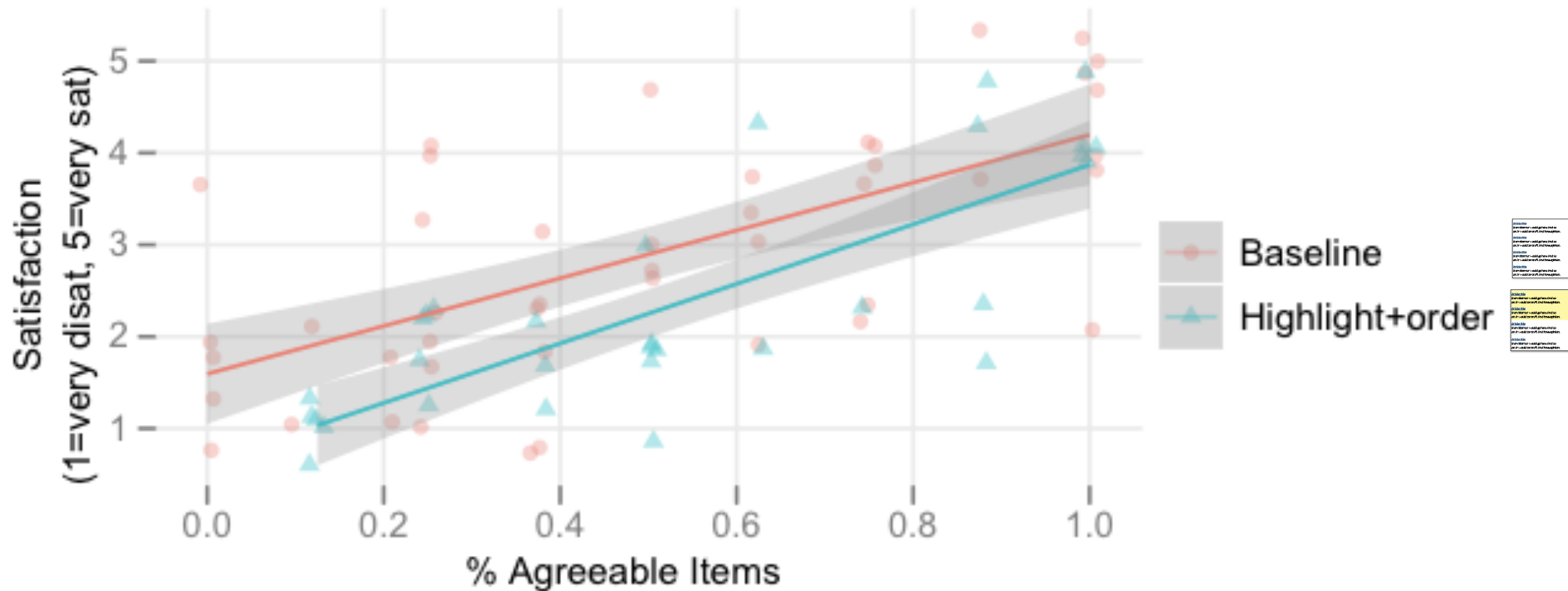
Highlighting: Strong reactions



OLS model for a challenge-averse reader's satisfaction (1-5).

$n = 121$ from 30 subjects, clustered standard errors, $F(5,29) = 67.42$, $p < 0.001$, adjusted $R^2 = 0.564$.

Highlighting + Agreeable First: Decreased satisfaction?



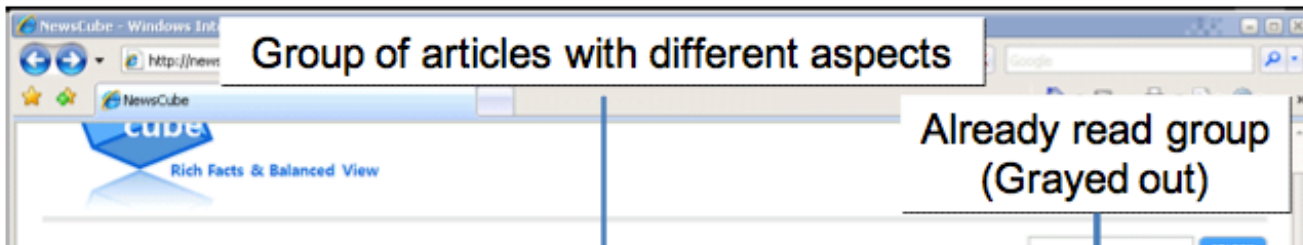
OLS model for a challenge-averse reader's satisfaction (1-5).

$n = 121$ from 30 subjects, clustered standard errors, $F(5,29) = 67.42$, $p < 0.001$, adjusted $R^2 = 0.564$.

Tactics that work

- Piquing **curiosity**
- Reminding of **norms of fairness and balance**
- **Reducing individuals' confidence** in their knowledge

NewsCube (Park et al 2009)



NewsCube - Windows Internet Explorer

Rich Facts & Balanced View

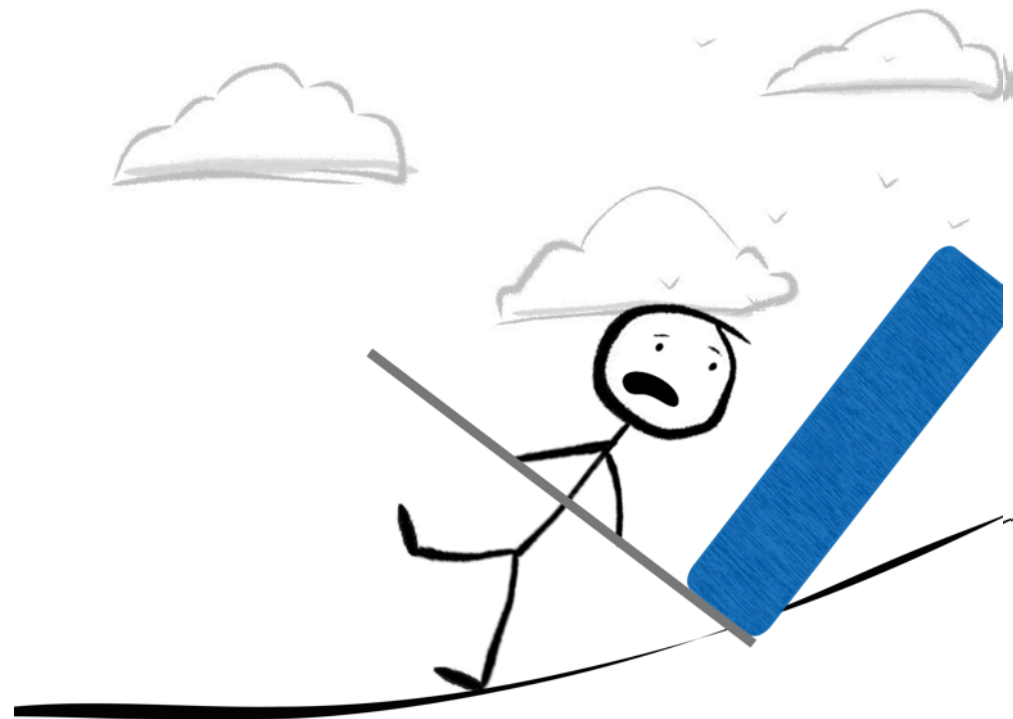
Home | NewsCube에 대하여 | NewsCube 블로그 (의견 남기기)

Title	News text	Aspect traversal cue
<p>그림 1. 다수 기사가 전하는 내용</p> <p>"이명박 특검 대부분 합헌" ...수사 계속</p> <p>이준바 이명박 특검법이 대부분 합헌 당초 일정대로 특검수사가 진행되며 소식으로 이소정 기자가 보도합니다 이준바 '이명박 특검법'에서 논란이 은 모두 4가지. ...</p> <p>"이명박 특검법은 합헌", 특검 수사 예정대로 BBK 특검 상고의 경제소환 무효 Keywords: 특검법, 상고, 나대자, BBK 특검법</p>	<p>그림 3. 소수 기사가 전하는 내용</p> <p>'이명박 특검' 시민반응, "이참에 말끔히 아"</p> <p>일명 '이명박 특검법'에 대해 헌법재판소가 합헌 결정을 내린 데은 대체로 당연한 결과라면서 이를 계기로 이 당선인을 둘러싼</p>	<p>그림 1. 다수 기사가 전하는 내용 (이미 본 그룹) "대운하 투자제한 들어오면 완벽하게 하겠다" 대운하- "총계천 4000번 넘게 만나 살득" 의지 보여 "대운하 민공 사업자 2~3년후에 나올수도"</p> <p>그림 2. 소수 기사가 전하는 내용 이명박 "대운하 100% 민자사업, 인수위와 '엇박자'"</p>

주요기사 정치 경제 사회

민간기업 제안 앞세워 '일방추진' 비판 에둘러가기 반대 높으면 추진 안해 → "의견 수렴해 추진" 바
 께
 이명박 대통령 당선인은 14일 신년 기자회견에서 "대운하 사업은 원칙적으로 국민적 납득과 합의를
 중요시한다"고 강조했다. 찬반이 첨예하게 갈리는 대운하 사업을 새 정부가 밀어붙인다는 비판을 감
 재우고 여론을 수렴해 풀어나가겠다는 뜻으로 풀이된다.
 이 당선인은 "100% 민자사업이기 때문에 (민간사업자가) 당장 나오지, 2~3년 후에 나오지, 아예 나
 오지 않을지 모른다. 정부는 스케줄이 없다"는 말을 통해 정부개입을 최소화하고 대운하 사업을 민
 간 주도로 하겠다는 뜻을 내비쳤다. 강승규 대통령직 인수위원회 부대변인은 이를 두고 "민간부문에
 서 사업 제안을 해야 하는 것을 전제로 하는 것이기 때문에 정부가 일방적으로 추진할 근거가 없다
 는 점을 강조한 것"이라고 말했다. 대운하 사업을 민자방식으로 한다고 해서, 새 정부가 손을 놓고
 있지는 않을 것이란 이야기다.

Balancer balancestudy.org/balancer



Balancer balancestudy.org/balancer

.com/politics/

SI Resnick Group delicious Pin It

2012 Barack Obama Armchair Detective More

July 5, 2012

HUFFPOST
THE INTERNET NEWSPAPER

Search The Huffington Post

ENTERTAINMENT MEDIA WORLD

2012 Elections • Speculation • HuffPost

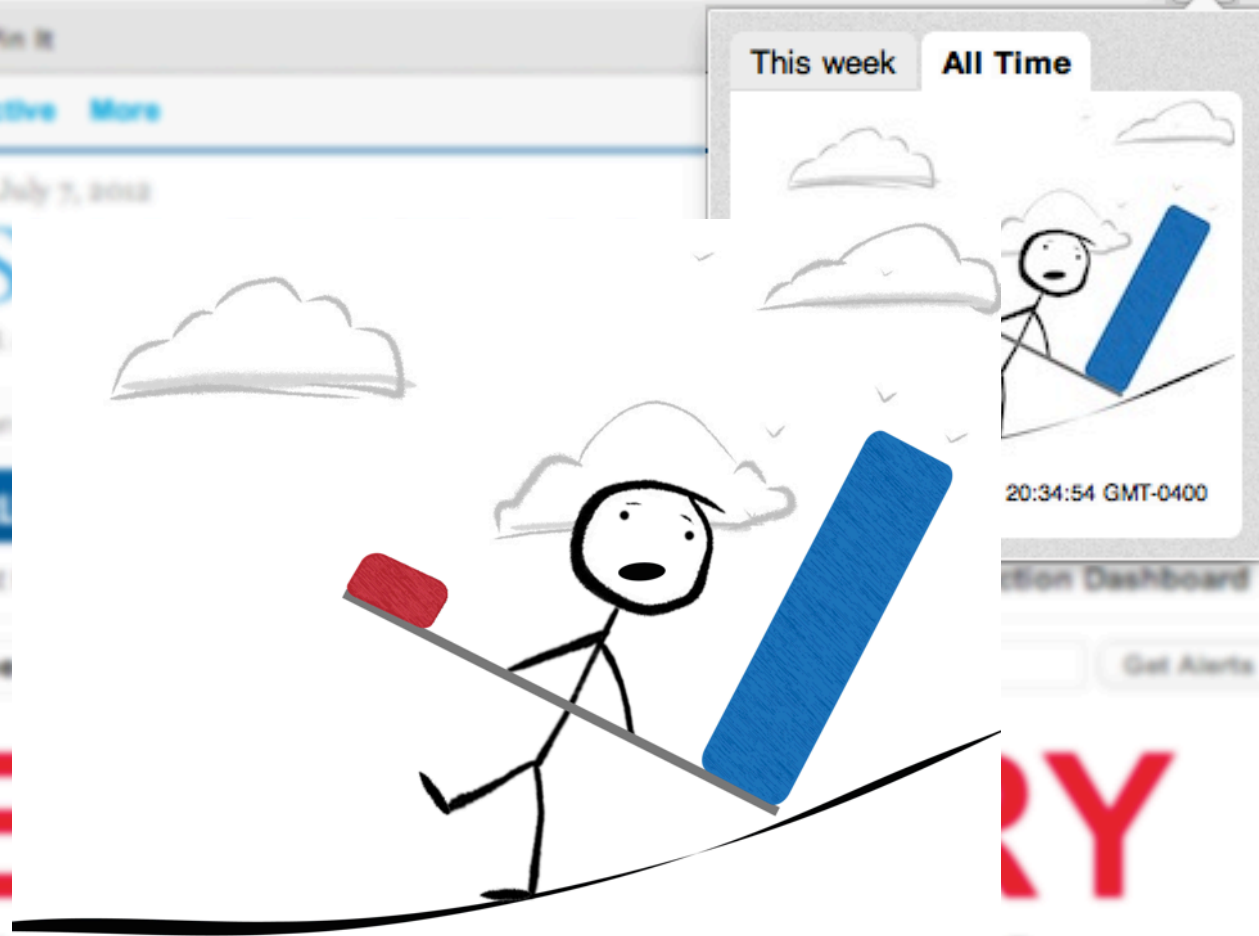
1 hour 18 minutes ago FROM AP With Tree

LANNE

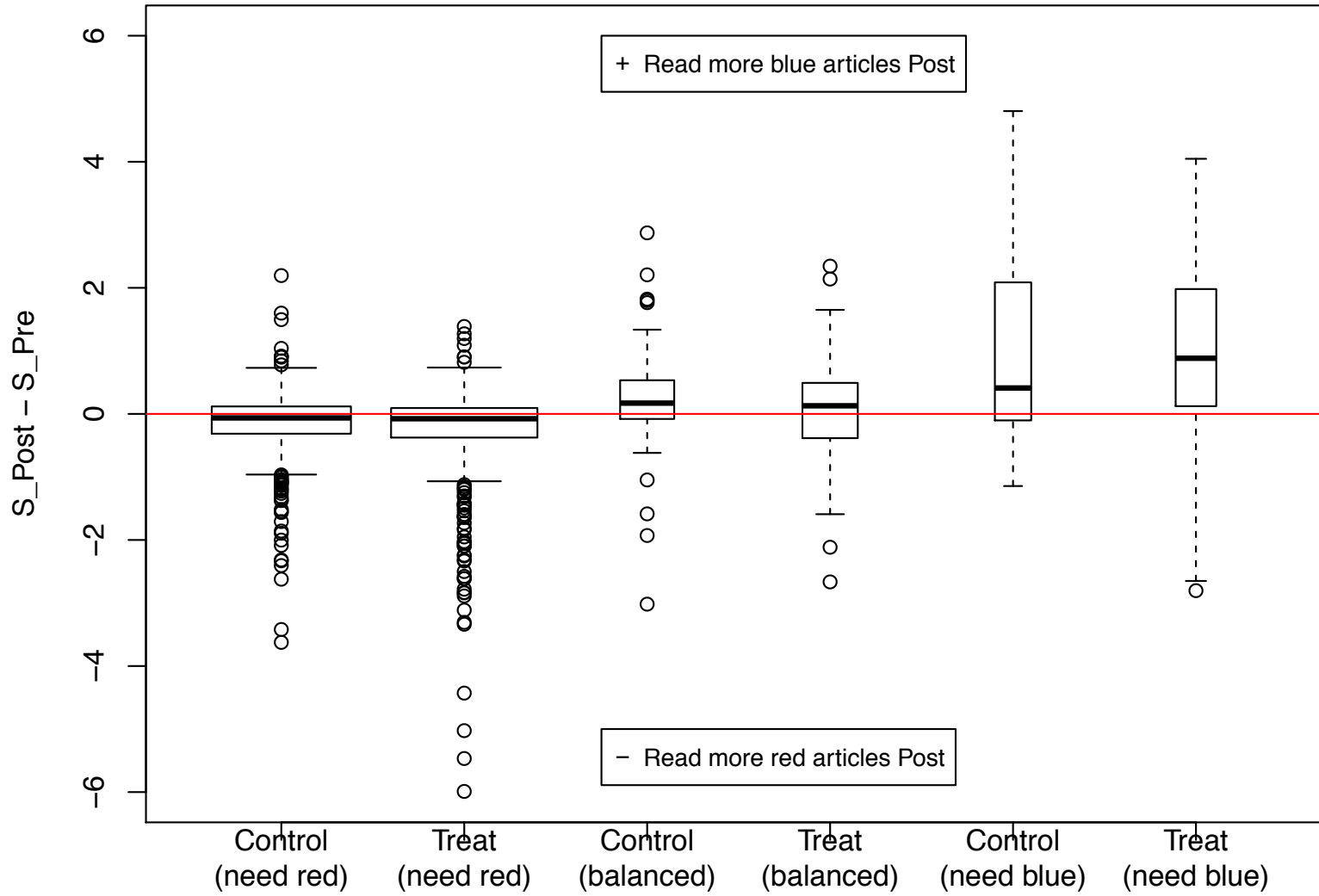
RTS ACCIDENTALLY SAVE PLANNED PARENTHOOD?

This week

All Time



Postscore – Prescore (28 days)



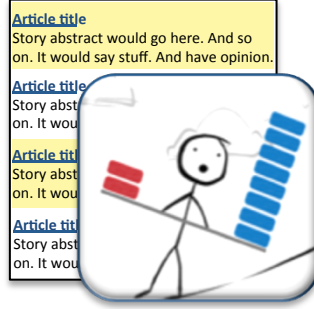
← political news sites and aggregators → ← non political sites →



Preferences for content diversity

	A	B	C	D	E	F
1	✓	✓		✓		✓
2		✓		✓		✓
3	✓	✓		✓		
4	✓					✓
5					✓	
6					✓	
total	3	4	0	3	0	3

Selecting diverse content



Presenting diverse content



Spaces where diverse exposure already occurs

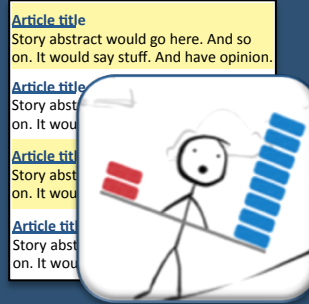
← political news sites and aggregators → ← non political sites →



Preferences for content diversity

	A	B	C	D	E	F
1	✓	✓		✓		✓
2		✓		✓		✓
3	✓	✓		✓		
4	✓					✓
5					✓	
6					✓	
total	3	4	0	3	0	3

Selecting diverse content



Presenting diverse content



Spaces where diverse exposure already occurs



the White House



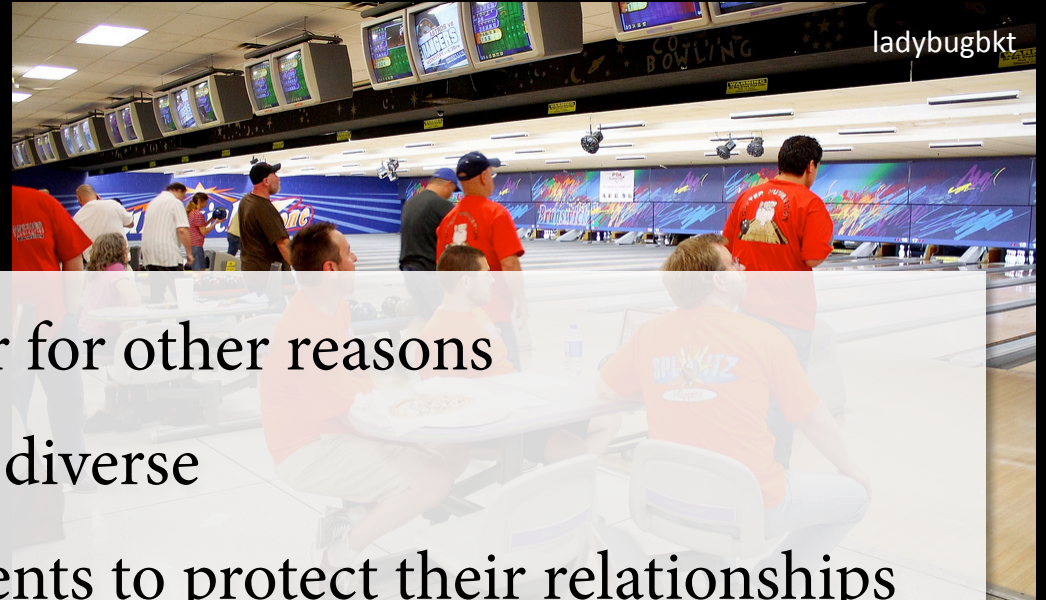
jmtimages



Mr. Wright

ight





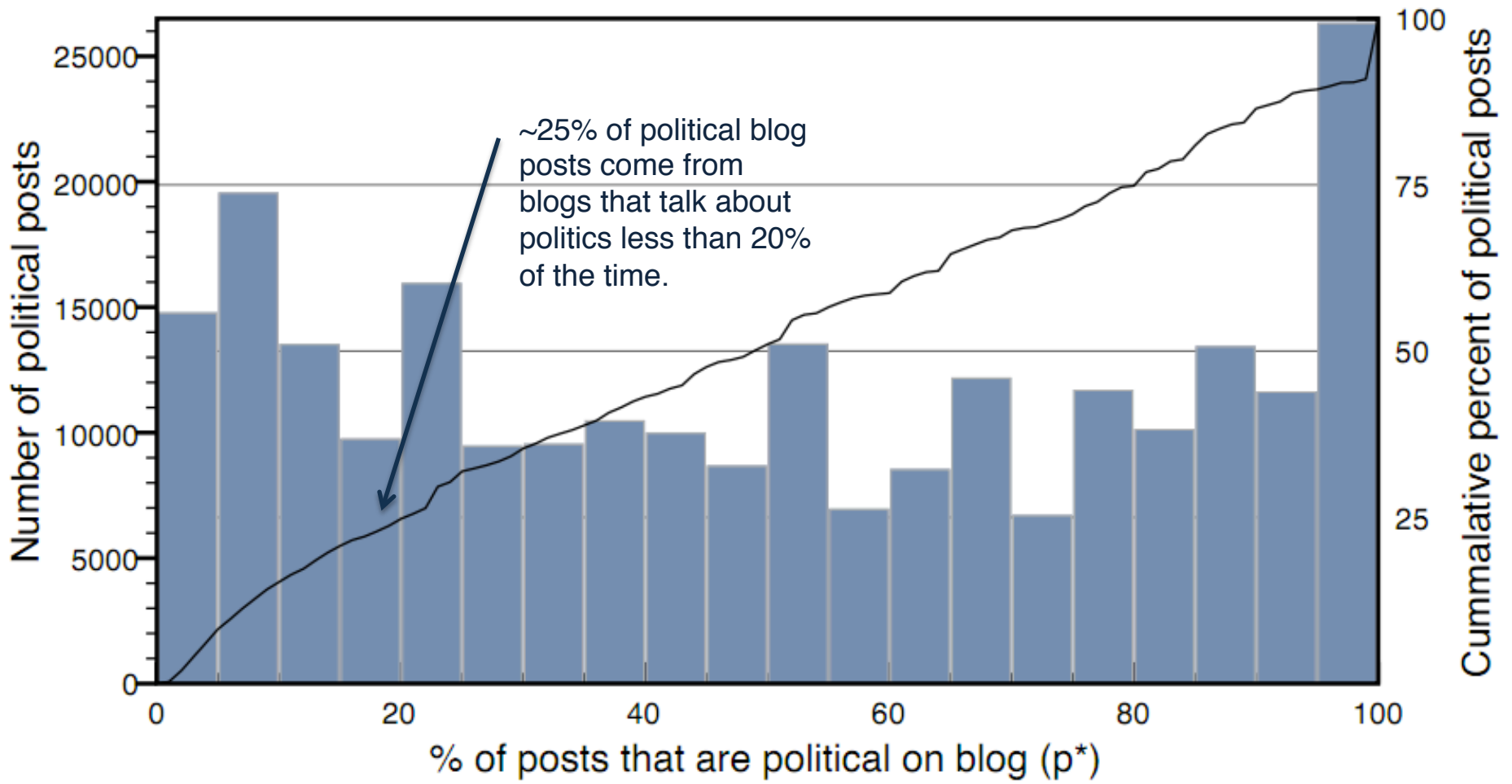
People who come together for other reasons

- may be more politically diverse
- listen and frame arguments to protect their relationships

... but they may also avoid political discussion or disagreement, also to protect relationships.



on Blogger...



On non-political blogs, political posts:

- get at least as many comments,
negative binomial regression, random effects by blog
- have at least as many or slightly more commenters than non-political posts on the same blog, and
negative binomial regression, random effects by blog, $p < 0.001$
- have a slightly higher amount of anonymous comments
negative binomial regression, random effects by blog, $p < 0.001$

compared to non-political posts.

engagement & agreement

Among 990 comments on 244 political posts, on non-political blogs:

	n	%
Engaged political content of post	823	83%

Among comments engaging with political content

Expressed	agreement	334	41%
	neither / balanced	370	45%
	disagreement	119	14%

engagement & agreement

Among 990 comments on 244 political posts, on non-political blogs:

	n	%
Engaged political content of post	823	83%

Among comments engaging with political content

Expressed	agreement	334	41%
	neither / balanced	370	45%
	disagreement	119	14%



[Redacted name]

Do I really have FB friends that "like" Mitt Romney?

[Like](#) · [Comment](#) · 2 hours ago ·




Politics blocked. [undo](#)



[Like This Page](#)

 Diana Try, Mark Moll and Elisa Tan like G-Star Raw

 G-Star Raw
[Like](#)

 Suny Gao likes Alameda

 Alameda
[Like](#)

Bonobos

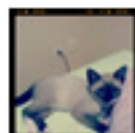
 Click Like: some love Ninjas. Fis complex h Boom!

[Like](#) · Jason Kligler likes this

Gentleman Jack NYC
 NYC. Art, Lyrics: Yos

Tweets [Top](#) / [All](#) / [People you follow](#)

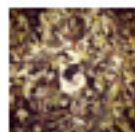
 Jason



Politics blocked [@undo](#)

Sat, 27 Oct 2012

Check out some animals instead:
<http://www.buzzfeed.com/animals>



Politics blocked [@undo](#)

Sat, 27 Oct 2012

Check out some animals instead:
<http://www.buzzfeed.com/animals>

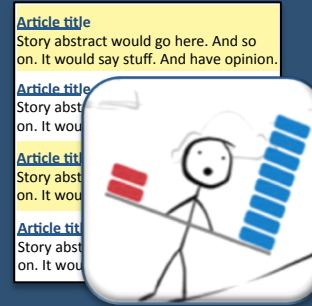
← political news sites and aggregators → ← non political sites →



Preferences for content diversity

	A	B	C	D	E	F
1	✓	✓		✓		✓
2		✓		✓		✓
3	✓	✓		✓		
4	✓					✓
5					✓	
6					✓	
total	3	4	0	3	0	3

Selecting diverse content



Presenting diverse content



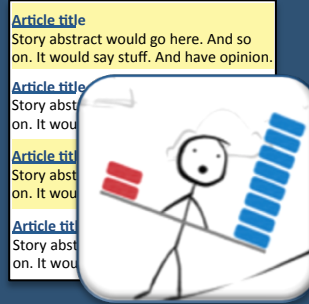
Spaces where diverse exposure already occurs



Preferences for content diversity

	A	B	C	D	E	F
1	✓	✓		✓		✓
2		✓		✓		✓
3	✓	✓		✓		
4	✓					✓
5					✓	
6					✓	
total	3	4	0	3	0	3

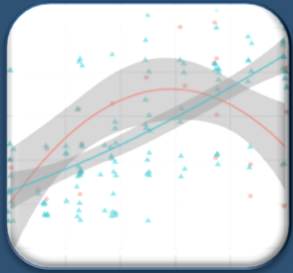
Selecting diverse content



Presenting diverse content



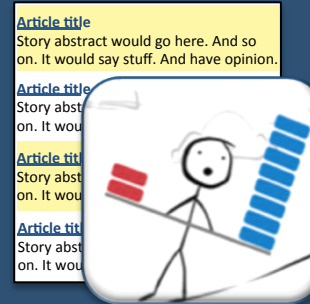
Spaces where diverse exposure already occurs



Preferences for content diversity

	A	B	C	D	E	F
1	✓	✓		✓		✓
2		✓		✓		✓
3	✓	✓		✓		
4	✓					✓
5					✓	
6					✓	
total	3	4	0	3	0	3

Selecting diverse content



Presenting diverse content



Spaces where diverse exposure already occurs

Collaborators

Paul Resnick

Daniel Zhou

Cat Hong Le

Emily Rosengren

Stephanie Lee

Erica Willar

Jeremy Canfield

Brian Ford

Peter Andrews

Funding

NSF Awards IIS-0916099 & IIS-0812042

Intel PhD Fellowship

Yahoo! Key Technical Challenge Grant

More

balance.projects.si.umich.edu

@smunson | smunson@uw.edu

smunson.com