

## Measuring web emotions & opinions

## Social Media Lab



EPFL: Ecole polytechnique fédérale de Lausanne (Swiss Federal Institute of Technology) 10,124 students 13,834 with staff members **120** nations represented







Research





Tech Transfer

Innovation





# BIG DATA +40% per year

# SOCIAL MEDIA 2.3B active users + 10% per year

Sources: IDC, Smartinsights



## An opportunity to measure audience emotions and opinions



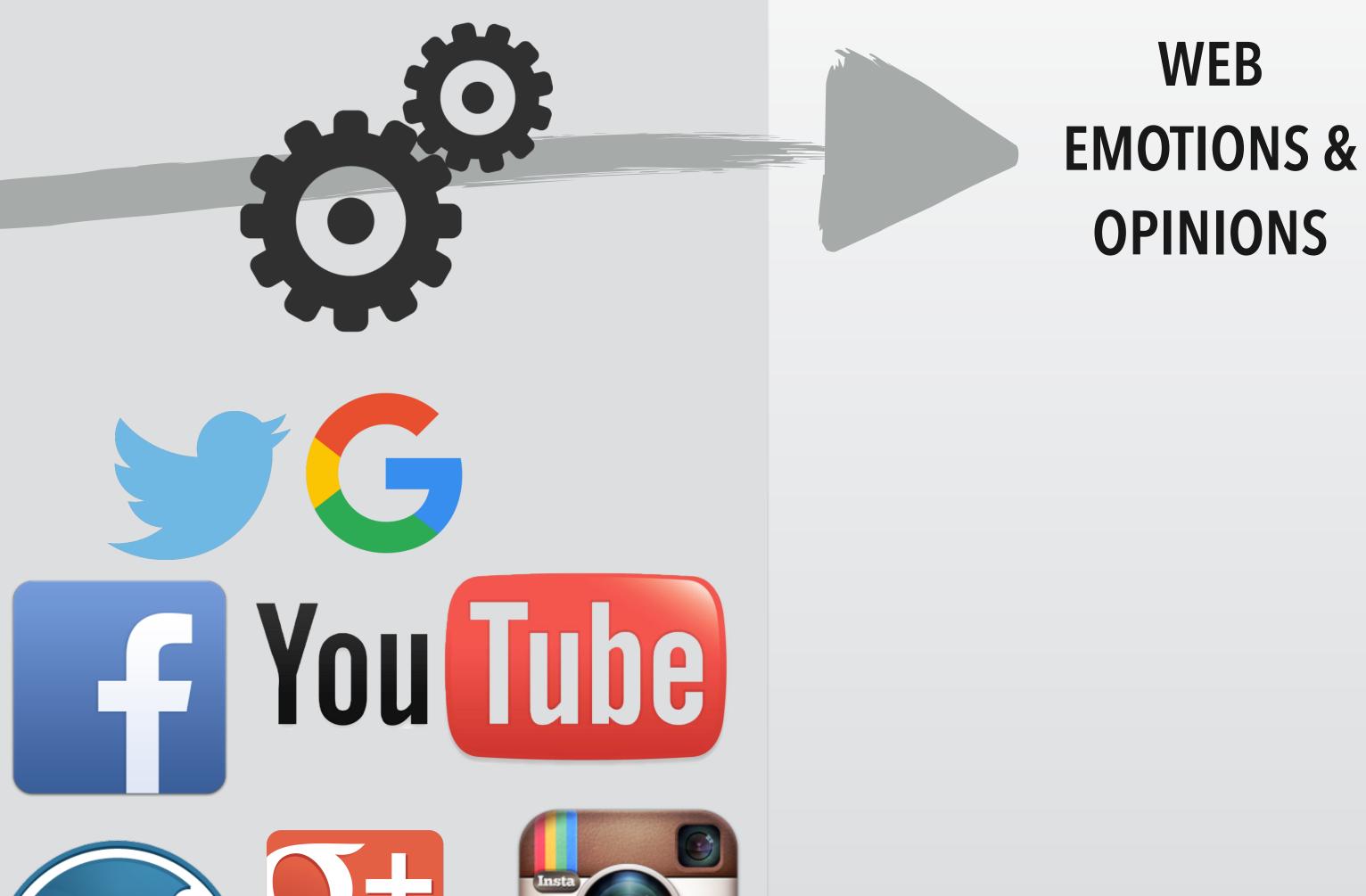
## SOCIAL MEDIA = MASS FEEDBACK

## OPINIONS ARE CROSS MEDIA AND NOT ONLY #s

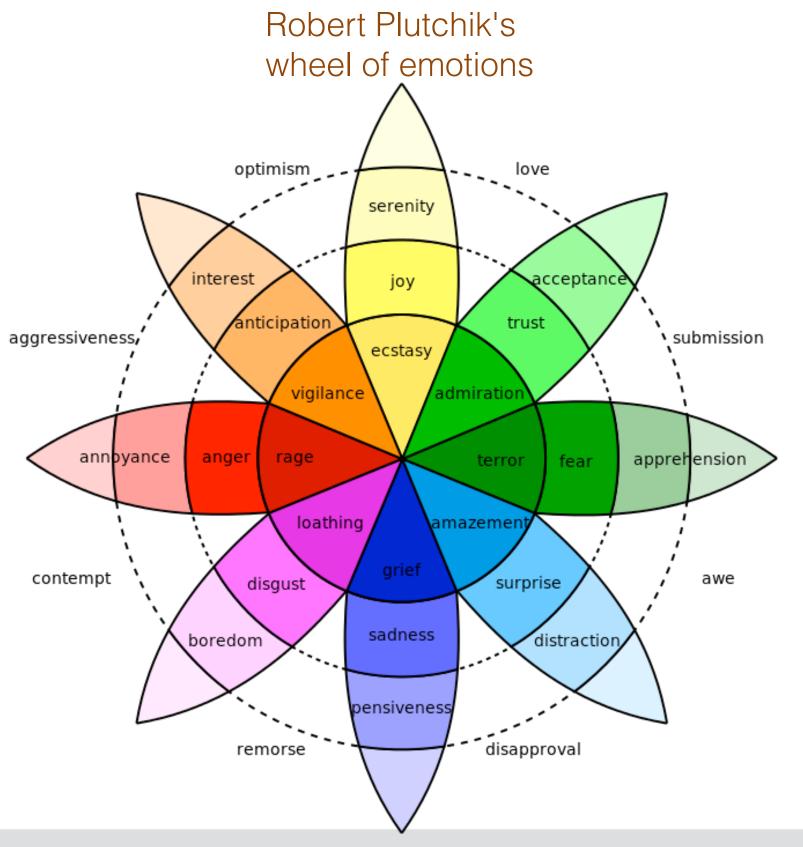
### TOPICS

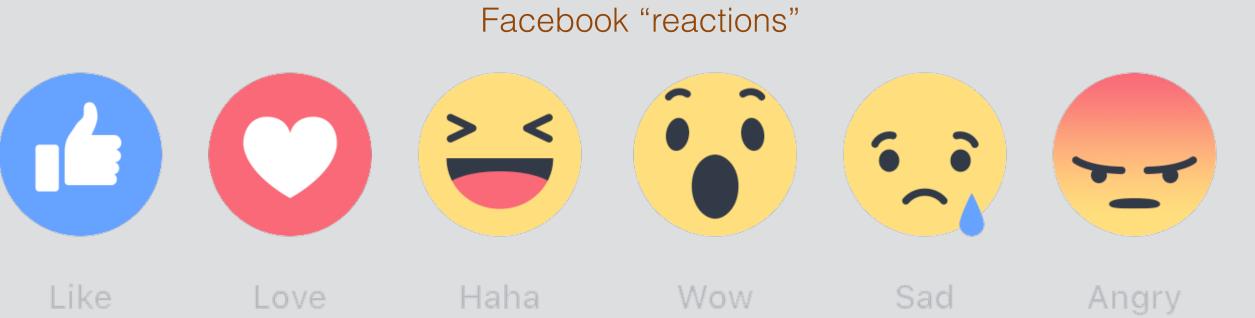
E.g. Climate Change TV Content Political debates

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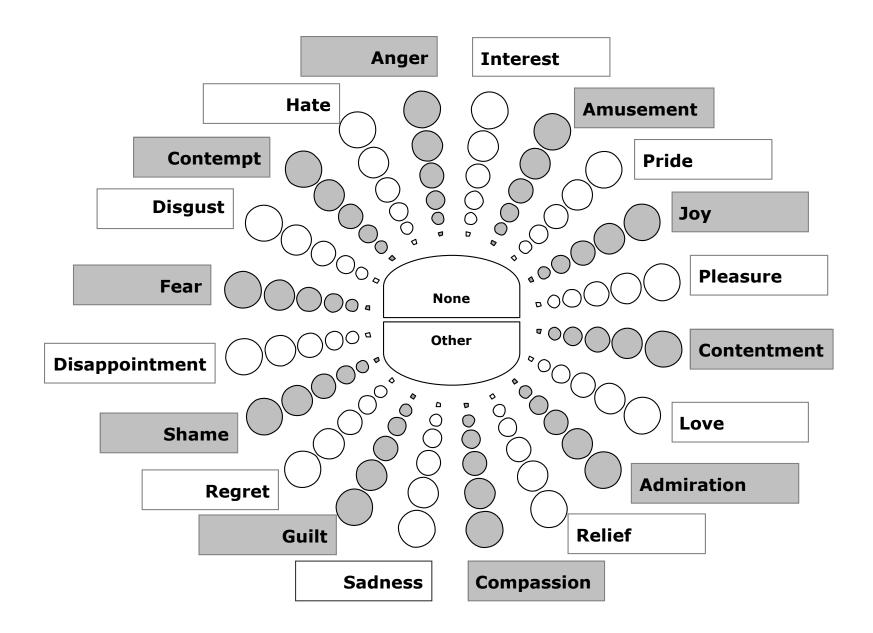


## **EMOTIONS ENTERING THE SOCIAL MEDIA SCENE**





### Geneva Emotion Wheel



## WEB EMOTIONS AND OPINIONS

## CLIMATE CHANGE @ COP21

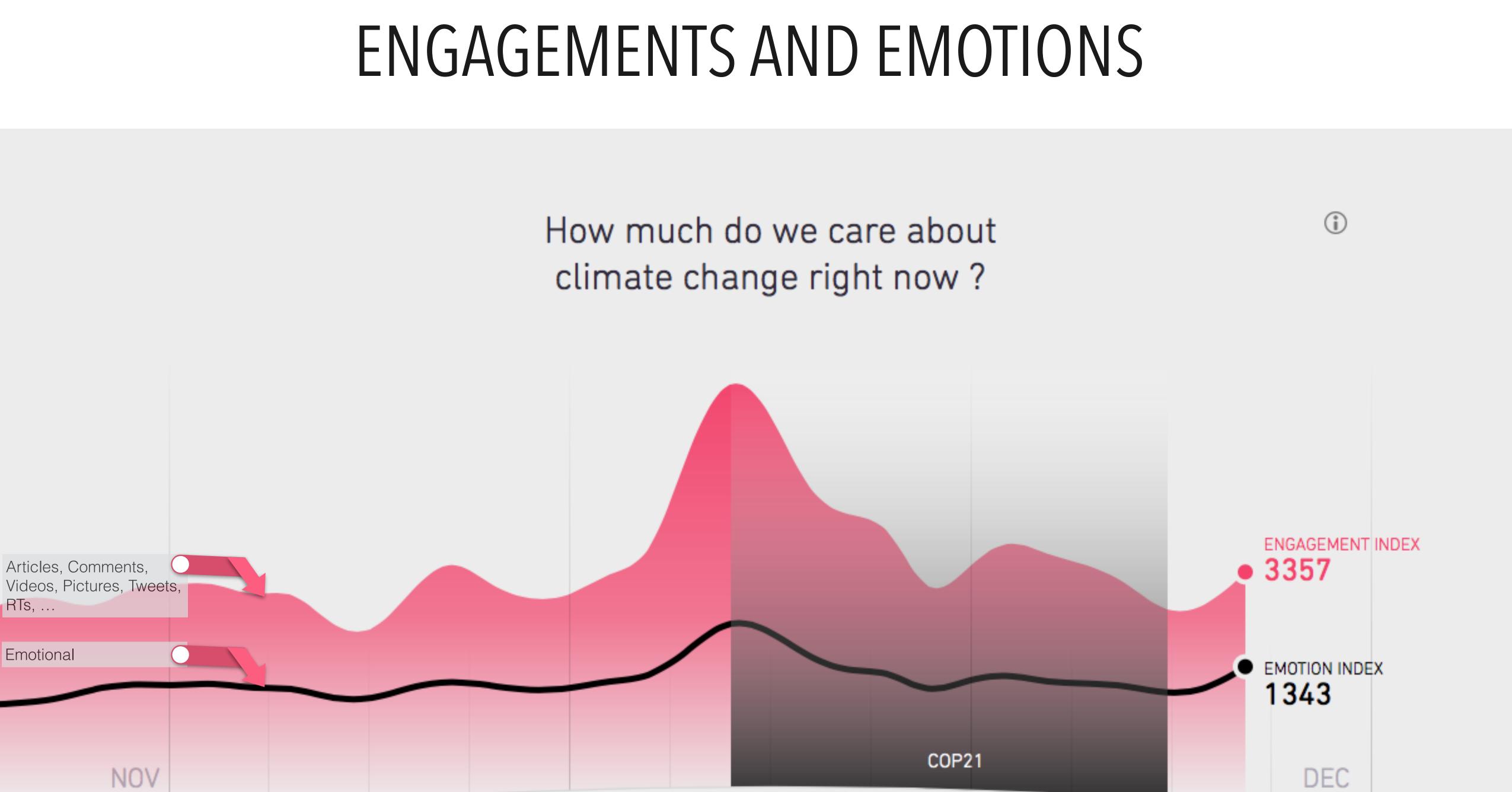
## http://cop21horizon.com/

### **COP21 · CMP11** IS 2015 **UN CLIMATE CHANGE CONFERENCE**





climate change right now ?



### "Should we put a price on carbon?"

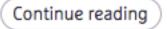
### ENERGY

### **Companies divided on** "carbon price"



While 79% of Internet users believe we should be putting a price on carbon, only 55% of companies worldwide agree. Australian businesses are least favorable.

- 😕 Julie Bernichan
- 🕓 08 Dec 2015
- 모 0 Comments

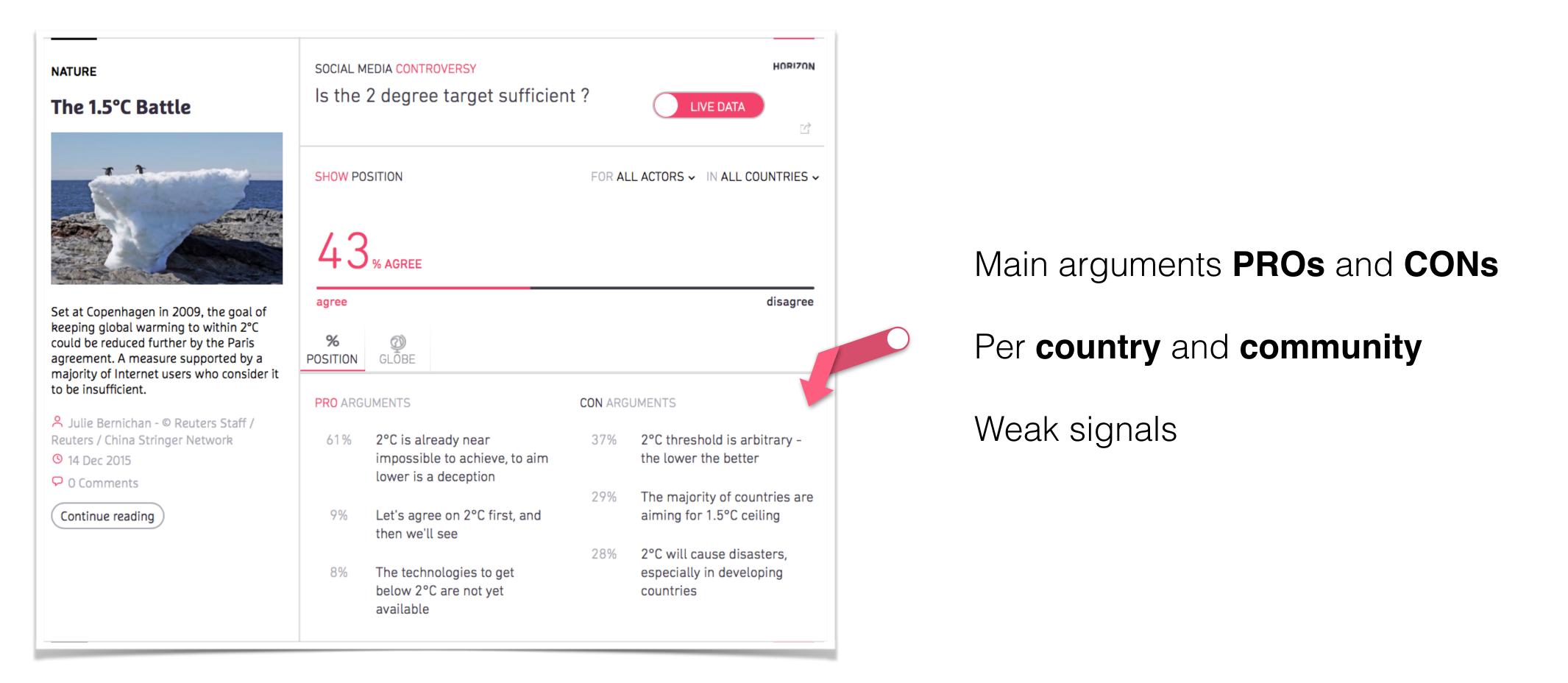


SOCIAL MEDIA CONTROVERSY								
Should we put a price on carbon ?								
COMPARE POSITION FOR ALL ACTORS VS ENTERPRISES VS V IN ALL COU								
<b>79</b> % AGREE								
agree								
55% of the enterprises agree								
agree								
$82_{\rm \%}$ of the media agree								
agree								
% Ø   POSITION GLOBE								

## POSITION DETECTION



## **ARGUMENT DETECTION**



"Is the 2 degree target sufficient?"

## WEB EMOTIONS

ENERGY Out with the conventional, in with the	social media topic Clean Technology	LIVE DATA
electric!	SHOW EMOTION INDEX	FOR JOY VS TRUST VS 🗸 IN ALL COUNTRIES 🗸
Considered environmentally-friendlier, electric cars are winning over more drivers every year. Although a majority of Internet users trust in clean technology, some remain wary. Julie Bernichan 10 Dec 2015 O Comments	32% concern 5% anger 1% surprise 5% disgust	
Continue reading	6% FEAR 2% SADNESS	

"Clean Technology"

### Emotions from the web, per topic

8 primary emotions, up to 20

Joy Trust Anticipation Surprise Anger Disgust Fear Sadness

Per country and community





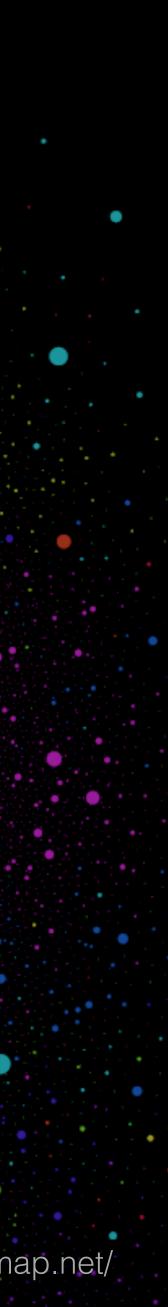
facebook.com

google.com

youtube.com

http://internet-map.net/

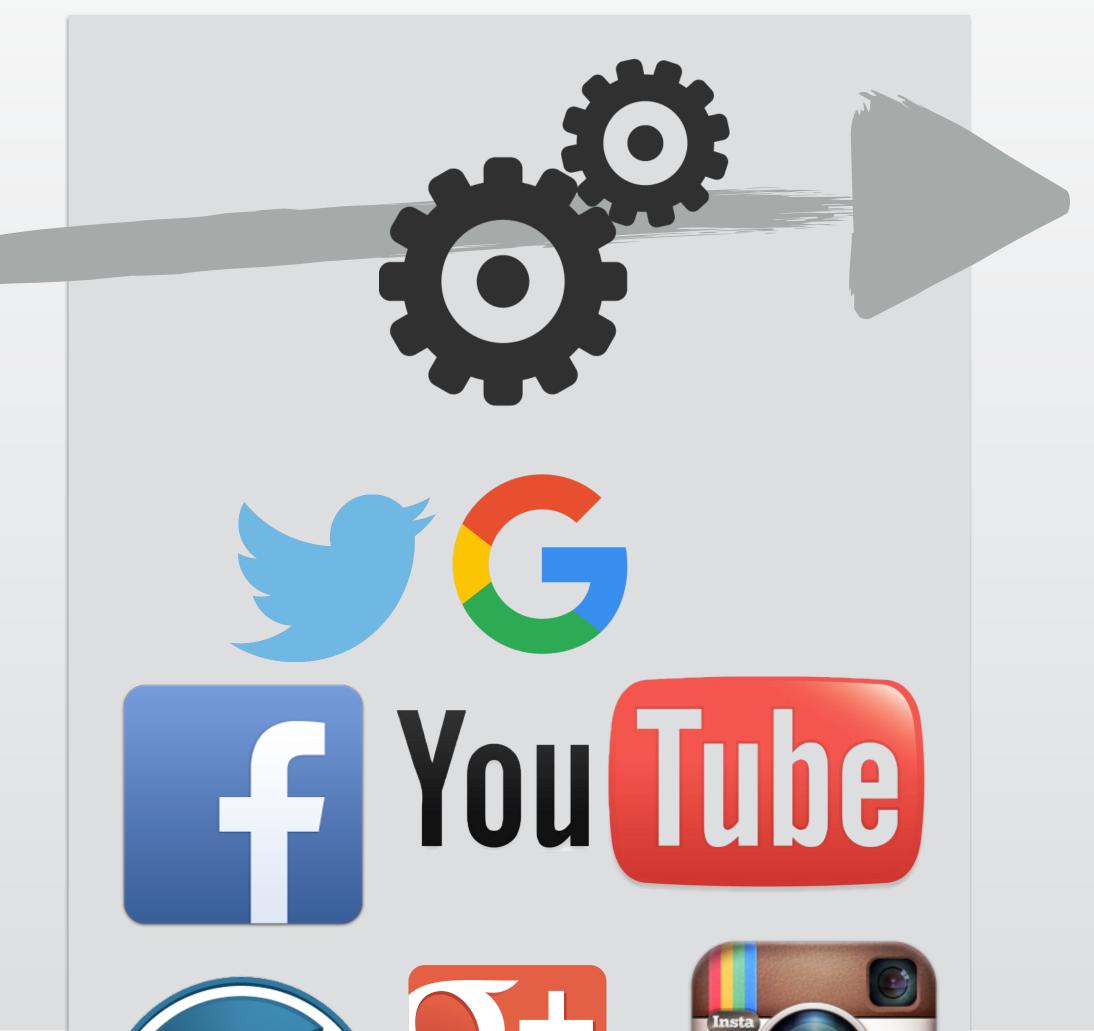
live.com

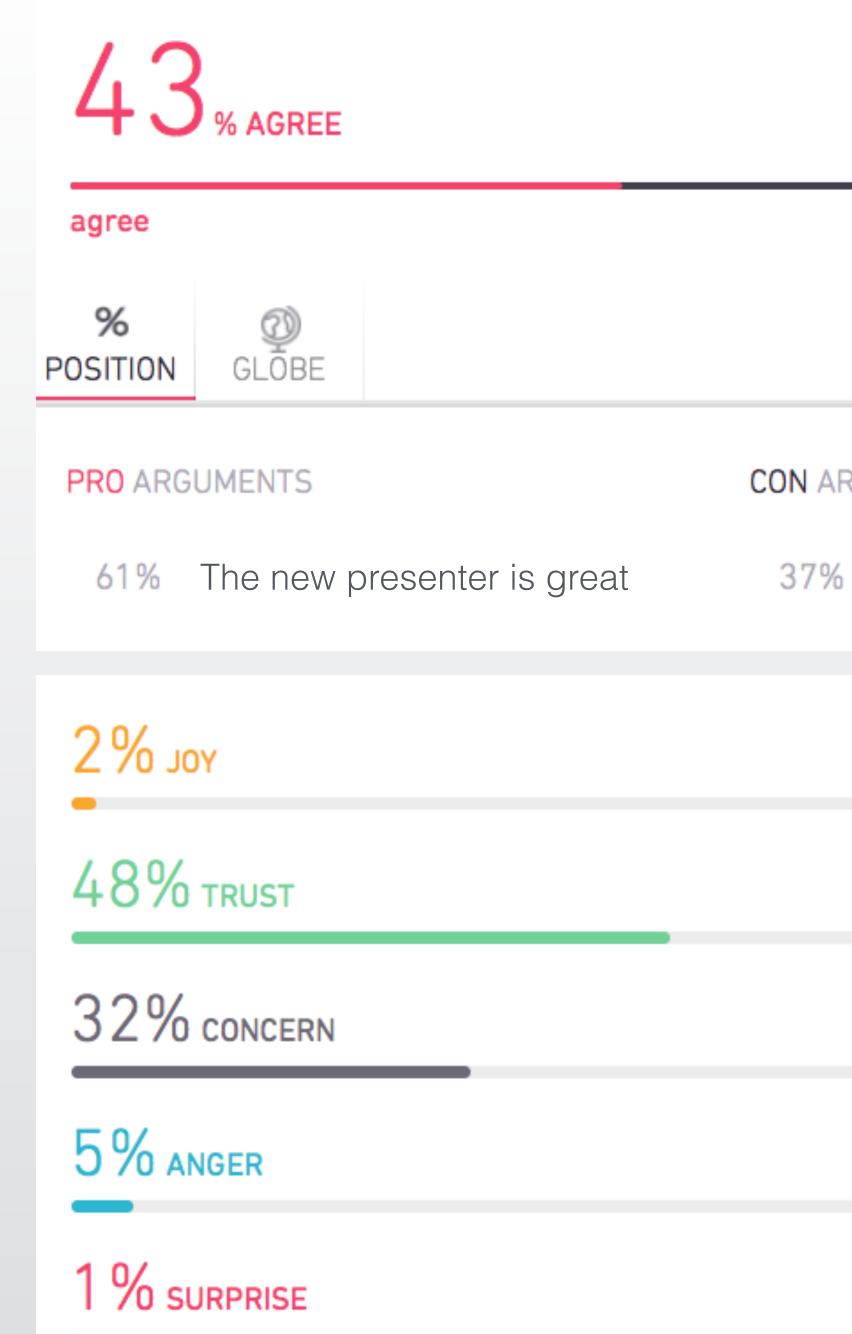


### TV CONTENT ANALYSIS

TV Content News Political debates Live sport

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GU	M	ΞN	TS
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### LIVE EVENT EMOTIONS











COMMENTS

LIVE TRANSMISSION Historical First - landing in 0:10:47

An idea born in Switzerland









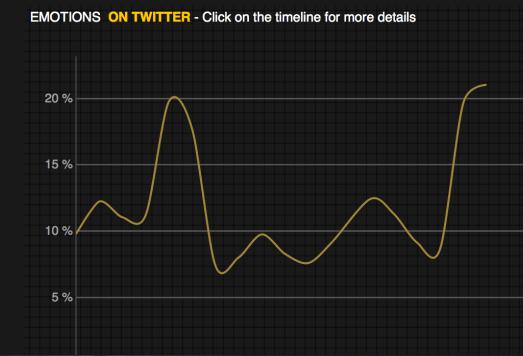






Follow our audience's emotions about the current <u>flight</u>, browse the different e most significant messages sent on twitter.

### EMOTIONS TOPICS



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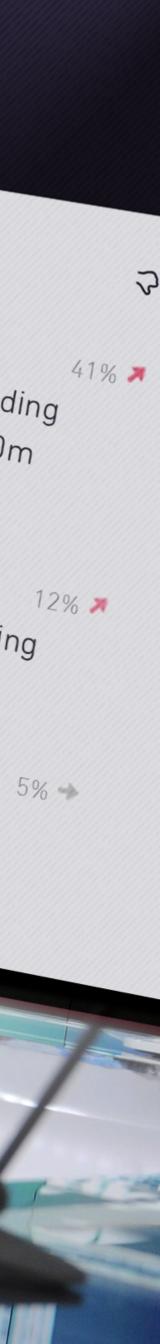






## SOURCES 13.2K • ACTIVITY 345 ← ACTIVITY 345 ←

	PRO ARGUMENTS			
	1. Raini	3	CON ARGUMENTS	
	Raising carbon price is more efficient than regulatory curl	63% 🛪	1.	
	4.		Kyoto protocol's carbon tr increased emissions by 60 tonnes	ac
OCT	Emission rising in Australia af carbon tax removal	ter		)0
	3.	Z Tł	he internation	
	New research: carbon tax decrea	29	arket leads to corruption	diı
		•••	Carbon tax impact is not	
			sound	
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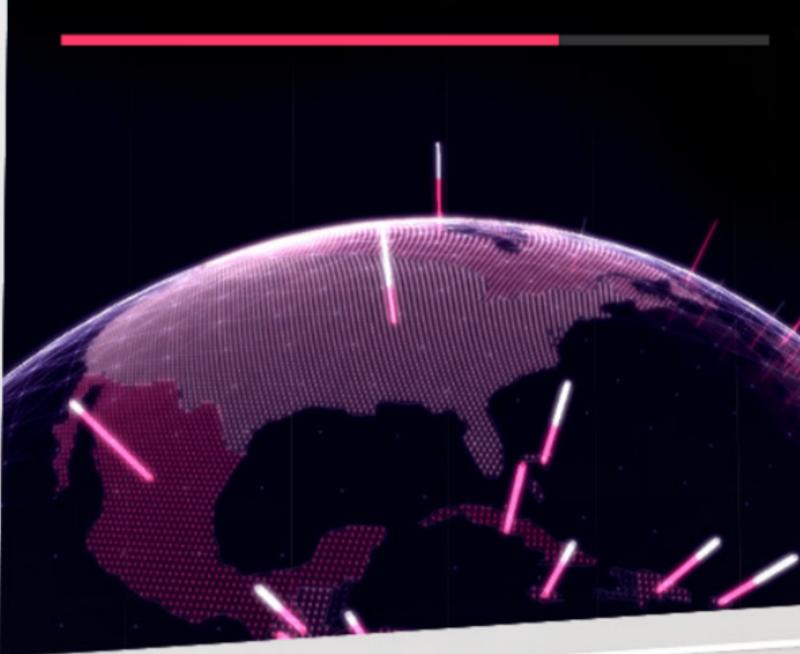


hillaryclinton.com





### **75%**







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