## **Viral Political Action**

**Topic Introduction** 

#### The Course

A combination of ideas and actions

Invited speakers with a range of analyses and techniques

Your projects

The challenge is translating a physical event into a virtual one

Readings: Facebook experiment



### Viral

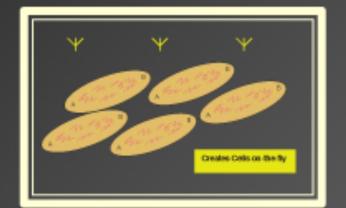
Grassroots
peer-to-peer
scalable
no *a priori* agreement

# Smart Radios bypass Towers

Disruption is in the eye of the beholder







Viral Communications, 2003







# **Viral Spaces**







## Viral Politics, 2012: Upstairs/downstairs

Fox		<b>VS</b>
-----	--	-----------

Three live channels plus digital	One newspaper one digital, channel
Graphics, Statistics, Production teams (100's)	Graphics, Statistics, Production teams (10's)
Satellite Trucks	iPhone app for 2000 reporters records 45 seconds
Teleprompter	Skype; YouTube/Twitter/etc

Readings: Obama's Lost Army



## **Upstairs/Downstairs Production**







## **Upstairs/Downstairs graphics**





# **Upstairs/Downstairs Sets**







## **Upstairs/Downstairs Social Media/Feedback**

NA





## Viral Politics, 2016: FiftyNifty

A "Challenge" to enlist a network to make calls in 50 states

Calls matter - they are hard

Networks matter - they are powerful



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Leaderboard

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#### **Call Congress now**

Real calls really matter.

#### **Amplify your voice**

Build your network, spread the word.

#### **Cover the country**

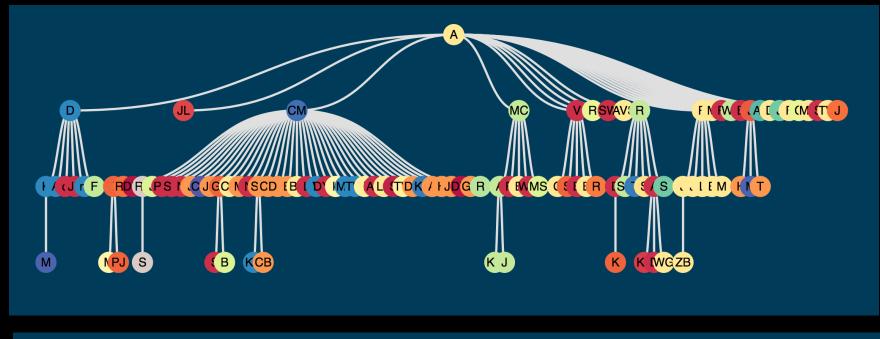
Reach 50 states.

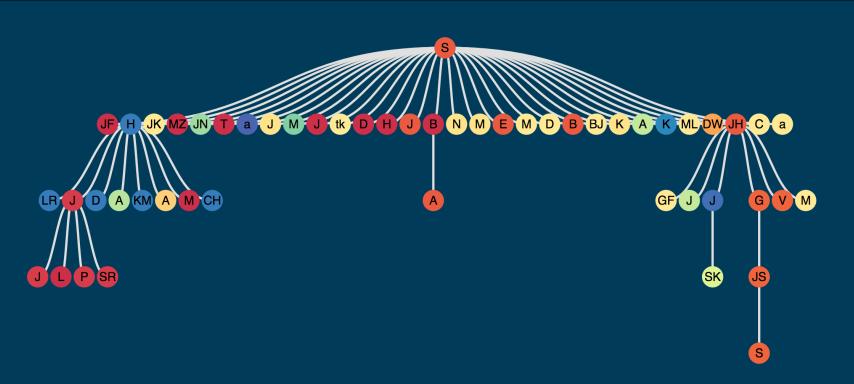
Join the Challenge: Reach 50 states to win. Enlist friends across the country. We'll speed dial for you. We'll help you prime your network. Three clicks and you're done. Track your progress.

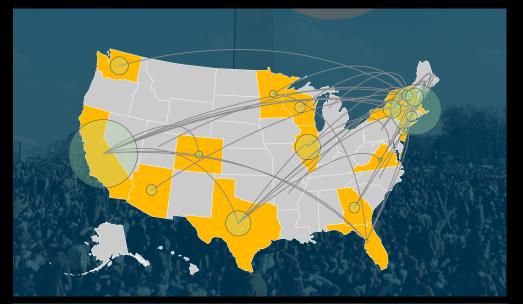
Readings: Johnson Blog; Network cascades (Optional)

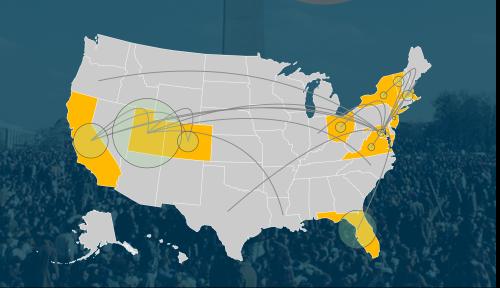


## Viral Politics, 2016: FiftyNifty









#### **Readings: Influencers**



## DARPA Red Balloon, Shredder, Tag

5th December 2009

"Find 10 balloons, win \$40,000 "

What is the role of the internet and social networking in real-time communication, widearea team-building, and urgent mobilisation required to solve broad-scope, time-critical problems

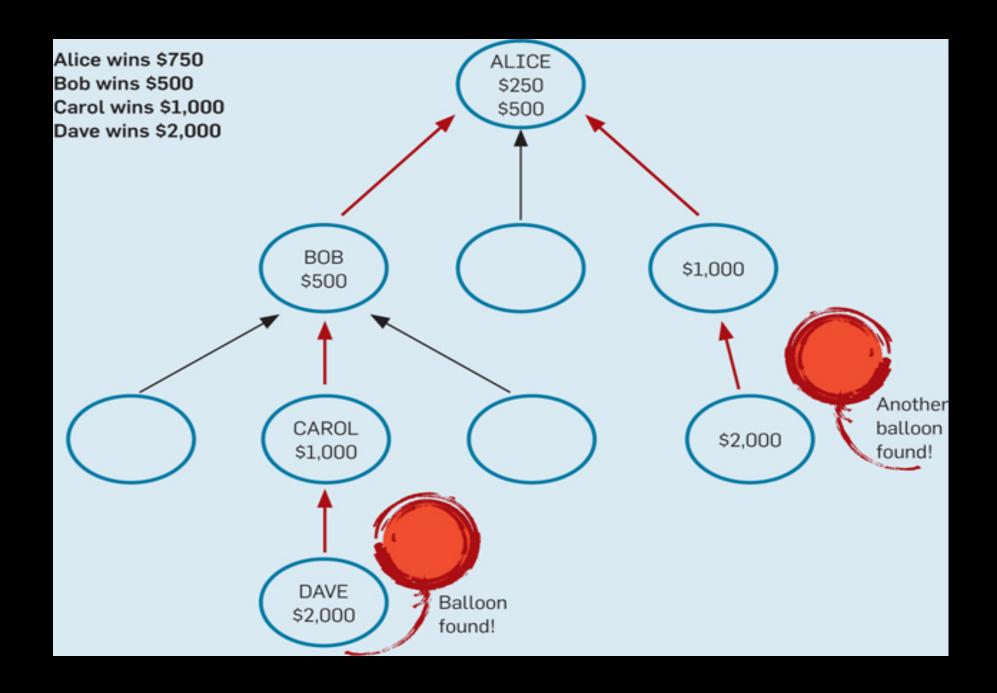
Impossible by conventional intelligence.



Readings: Red Balloon

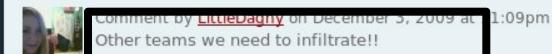


## DARPA Red Balloon, Shredder, Tag





## DARPA Red Balloon, Shredder, Tag



http://balloon.media.mit.edu/ - the MIT team

nttp://pailoonfinger.superfunnappy.com/goku.pnp

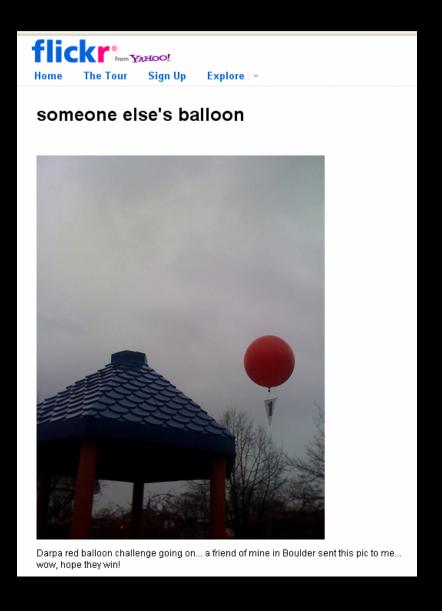
http://theredballoons.com/ - seems pretty dead-ish

<u>http://www.darpaballoon.com/</u> - Stiff competition, they even have "outreach posts" for facebook, myspace, twitter, etc.

http://www.ispyaredballoon.com/ - Georgia Tech's group



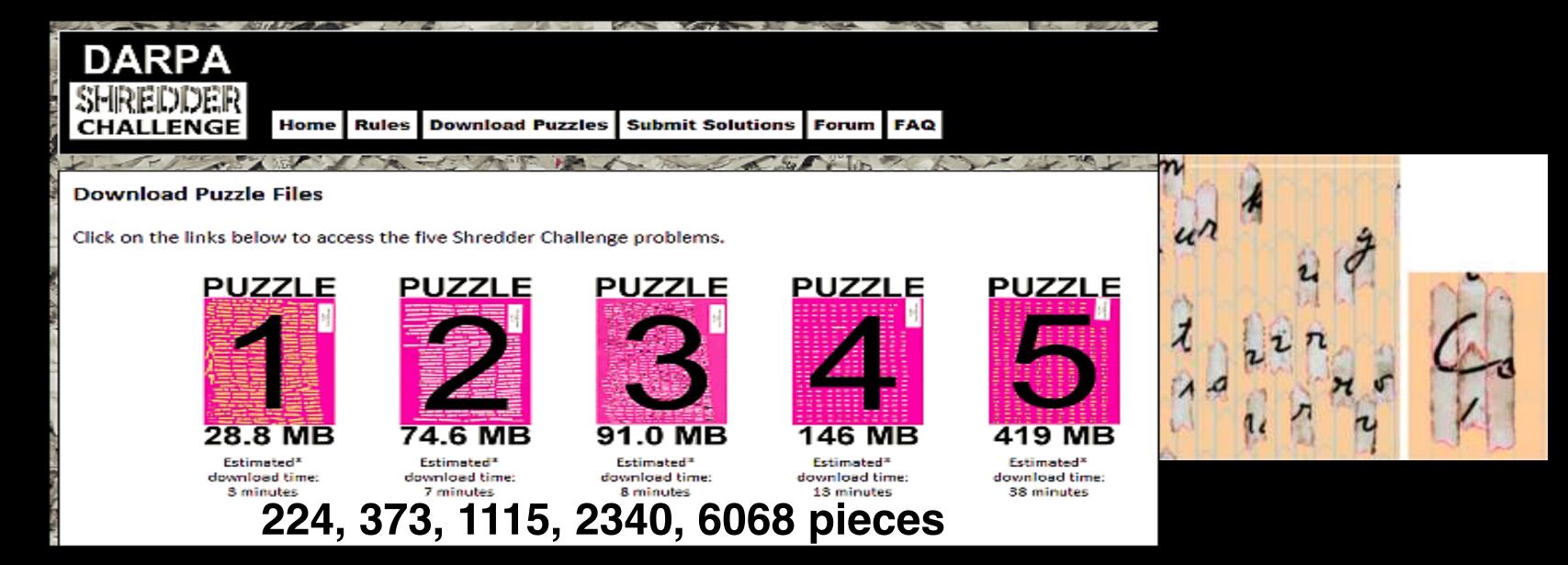




We had a good time romping about and sending balloons up in Cambridge, Belmont, Somerville and some other places. We didn't have time to stick around and pretend to be DARPA employees, but once back home, we uploaded some photos from iphones with hacked exif data to modify the GPS coordinates.



### **DARPA Shredder**



#### Readings: Cebrian (optional)



#### **DARPA Shredder**

From: ucsdsaboteur@hushmail.com

To: mcebrian@ucsd.edu

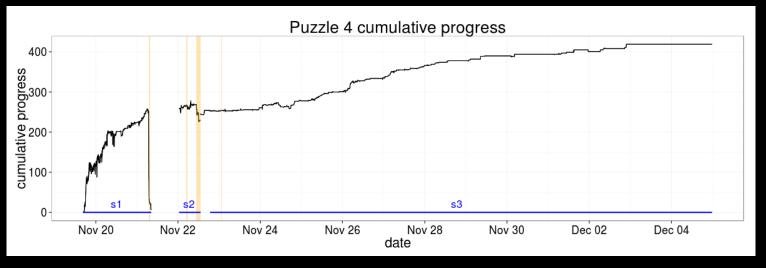
Date: Thu, Nov 24, 2011 at 4:20 AM

Subject: UCSD shredder challenge sabotage

I appreciate your acknowledging the cleverness of my exploitation of the weaknesses in your shredder challenge puzzle solving implementation. But do you really think they were that smart?

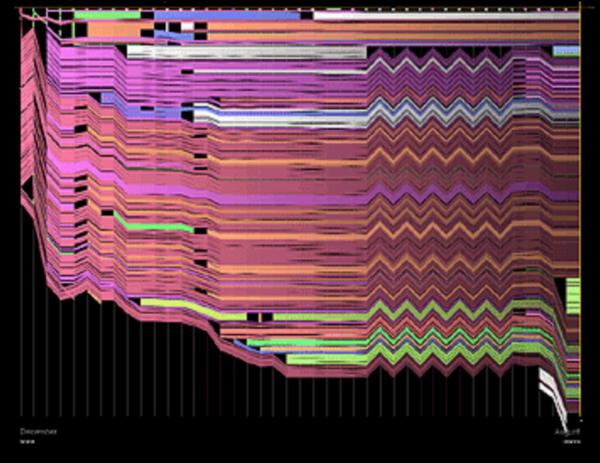
For my first attack, [...] moving all the pieces into a single pile. [...]

However, it seems all you did was lock the pieces together and ban my IP address.





## Wikipedia



#### Chocolate

#### (Revision as of 20:32, 6 Aug 2003)

chocking is a common ingredient in many kinds of events — one of the most popular in the world — made from the termested, masterd, and ground speeds of the tropped capabilities from the termested, income as cooks. Cittonaries refer to this capabilities as substance as "shootbare," which is an internal if flavored bitter (not event) freed, withough the is legally defined as capabilities in many countries. This is usually sneedened with sugar and other ingredients and made into choosite burn (the substance of which is also and commonly referred to as choosite), or heverages (selfed occors or her placefalls).

Chocolate is often produced in the form of little southures, for example as rabbit or equisheded chocolates, near a heliday in many countries called batter.

Table of contents showTooToogle("show","hide"

2. The history of chapping

d Why phocolate tastes so pas to make thecolate is made

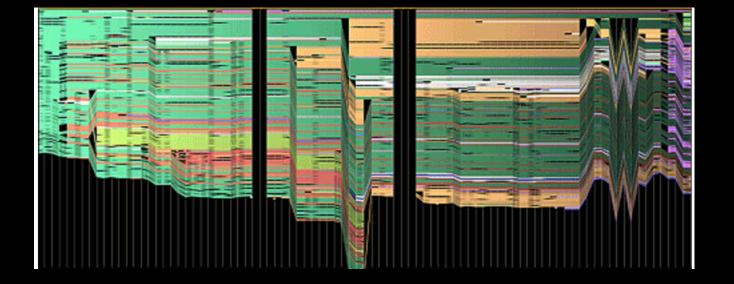
6 Chocolate in the mod

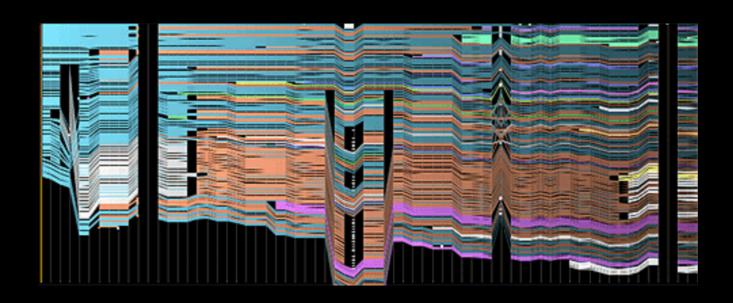
#### Different kinds of chocolate

Chocolate is an entremely popular ingressent, analytic in meny trace, and great quartity. Cifferent forms and flavors of chocolate are usually produced by verying the amount of the ingredients used to make the chocolate.

Dark chocolate Višc chocolate

eminated character Amed for carbino encurrent

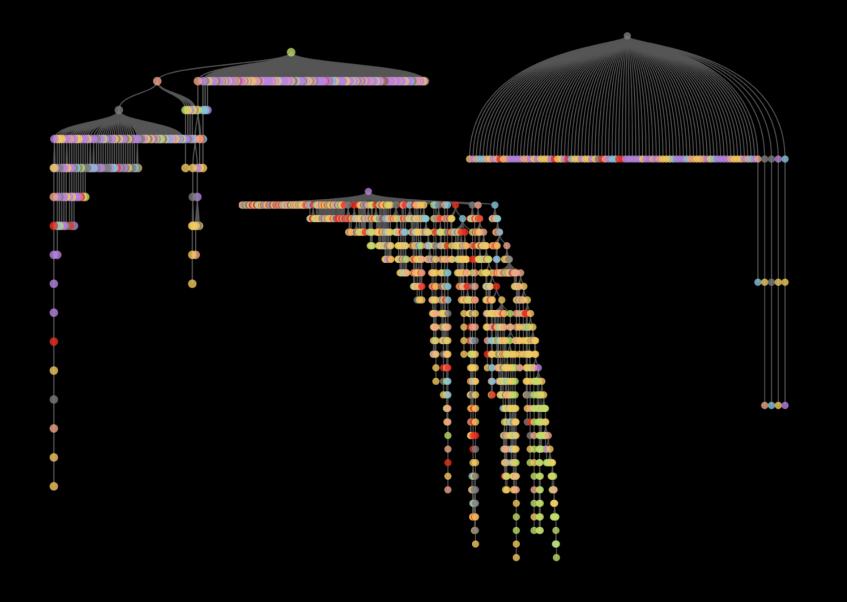


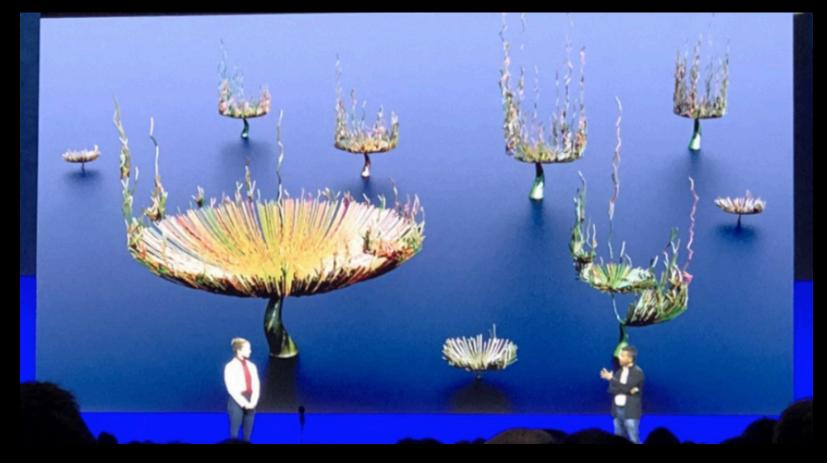


#### Readings: History Flow, Viegas



## **Negative retweets**





Readings: Mendler, Media Lab, Vosoughi (optional)



#### Conclusion...

- A. The use of networked media platforms **flattens** the structure of society.
- B. This new structure allows for **better information spread and mobilization.**
- C. At the same time, the participatory nature of networked social media platforms removes effective power (control) from society: Whenever change tries to be implemented, it is faced with counter-change mobilisation.
- D. Crowdsourcing cannot overcome these blockages via morally viable methods.
- E. So on the one hand, we **CAN MOBILISE BETTER** (through social media), but we do not **HAVE ENOUGH POWER TO EXECUTE THE SOLUTION.**

Reprise: Cebrian



#### Conclusion...

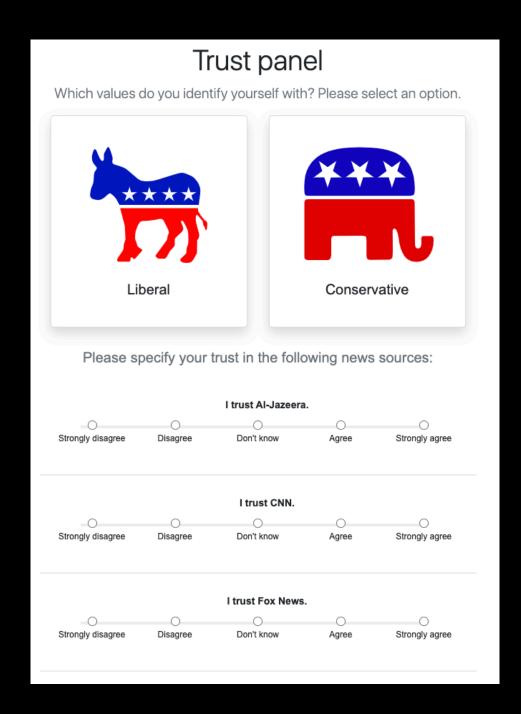
- 1. You always need mass media.
- 2. You can rally people, but your opponent does as well (Often using the very same platform you thought you could only benefit from.)
- 3. The hardest problems are the most vulnerable to attack.
- 3.1. The most sophisticated operations you ask from the crowd, the most difficult to defend as sabotage becomes almost impossible to detect.
- 4. Security and freedom form complex, dynamical tradeoffs.
  - 4.1 The most challenging problems need freedom to find a solution.
- 5. Algorithmic solutions may find themselves in an (apparent) zerosum game against a crowdsourced solution.

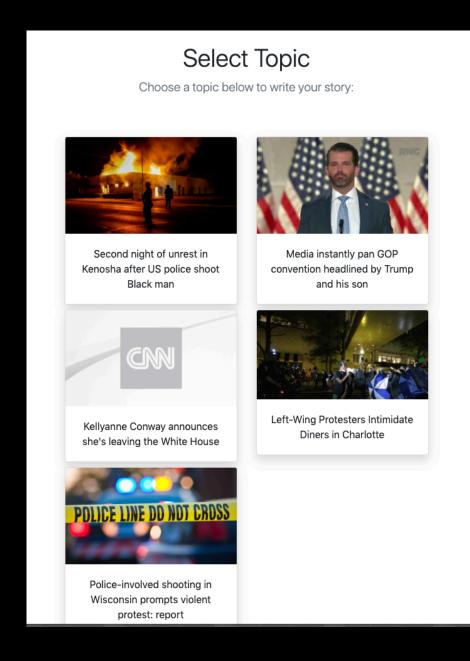
(Luddites will rise again!)

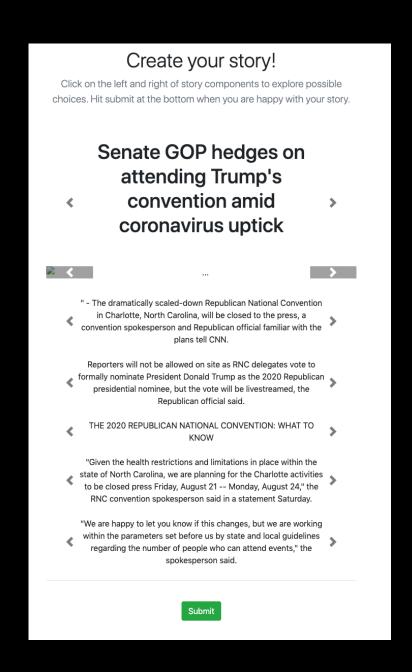
Reprise: Cebrian



#### Newsmaker



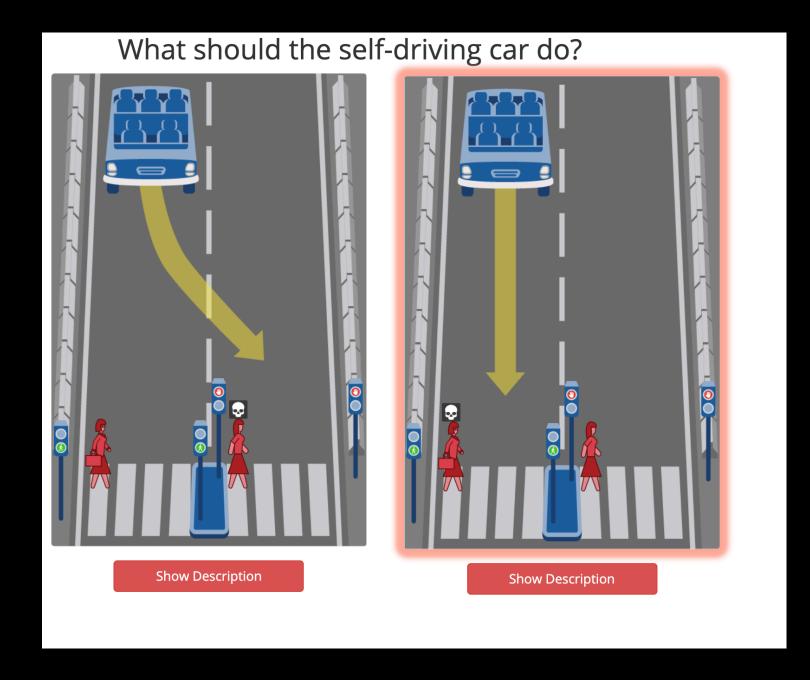


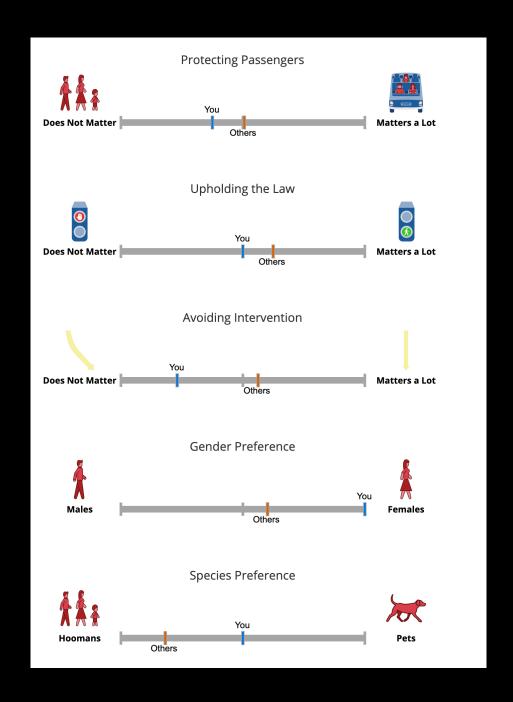


#### **Readings: Anderton Thesis (opt)**



## **Moral Machine**

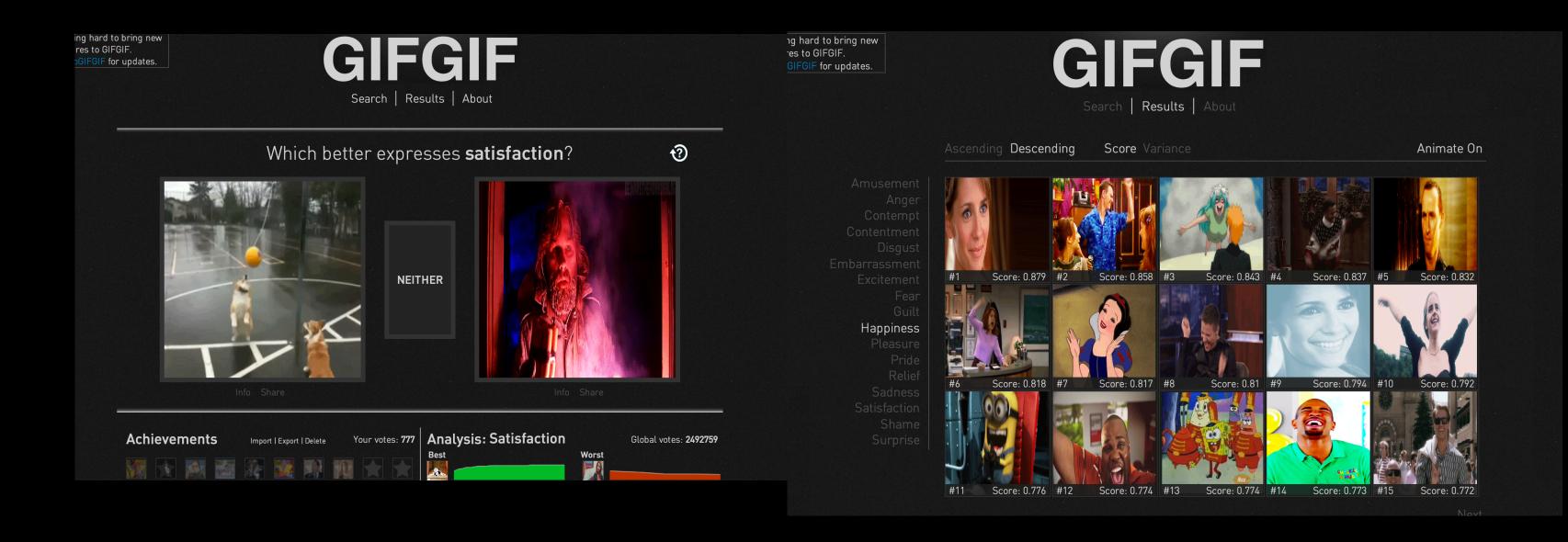




### Readings: Rahwan

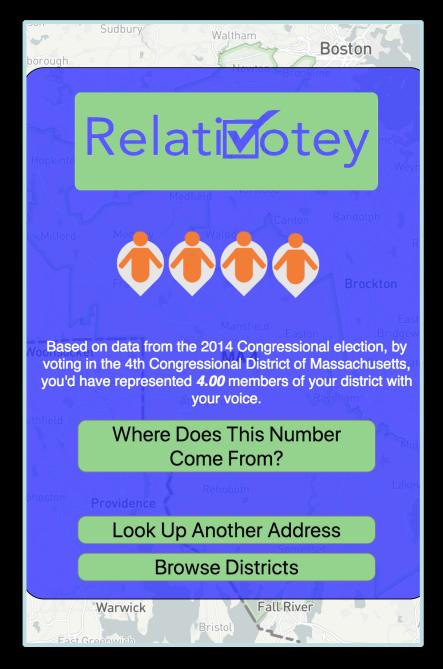


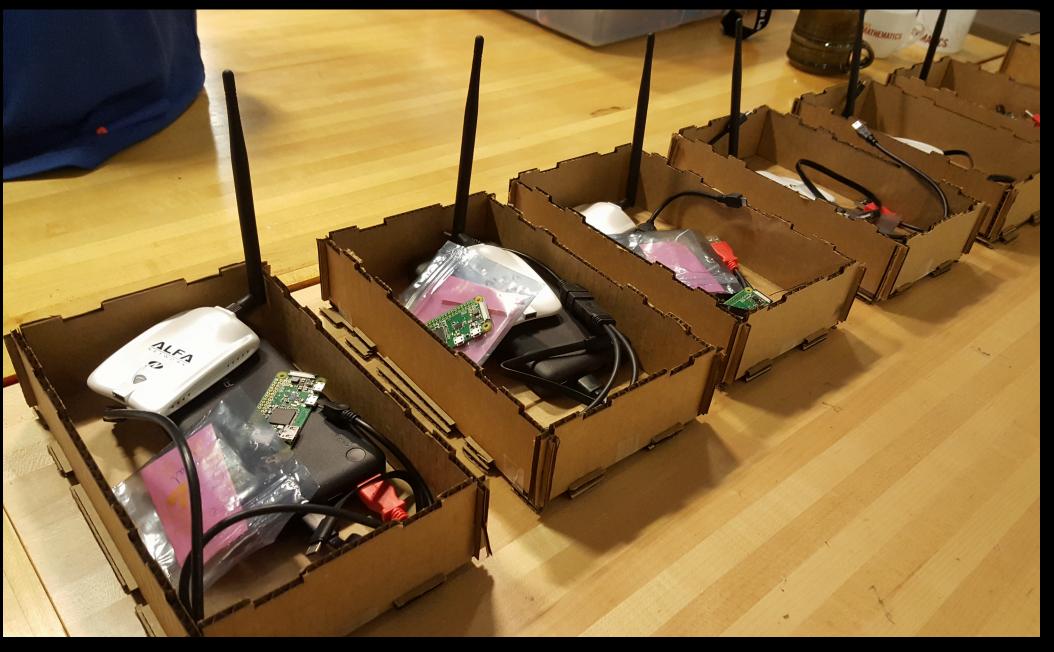
## **GifGif**





## Organizing/Mobilizing







#### **Additional Cebrian References of use**

Time-Critical Social Mobilization. Science (2011)

Limits of Social Mobilization. PNAS (2013)

Crowdsourcing contest dilemma. Nature Scientific Reports (2014).

Reflecting on the DARPA Red Balloon Challenge. Comm of the ACM (2011)

Finding red balloons with split contracts: robustness to individuals' selfishness. **STOC** (2012)

Verification in referral based crowdsourcing. PLOS ONE (2012)

Bandit strategies in social search. EPJ Data Science (2016)

Targeted social mobilization in a global manhunt. PLOS ONE (2013)

Global Manhunt Pushes the Limits of Social Mobilization. Computer (2013)

Error & attack tolerance of collective problem solving. EPJ Data Science (2014)

Beyond Viral Comm of the ACM (2016)

