Understanding the Complexity of Detecting Political Ads

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Motivation The rise on online political advertising

- 2012 US election cycle, digital media accounted for **1.5%** of political ad spend
- 2016 US election cycle, digital media accounted for **3%** of political ad spend
- 2020 US election cycle, digital media accounted for **18%** of political ad spend

Misuses of political ads

Cambridge Analytica: political ads targeted based on personality

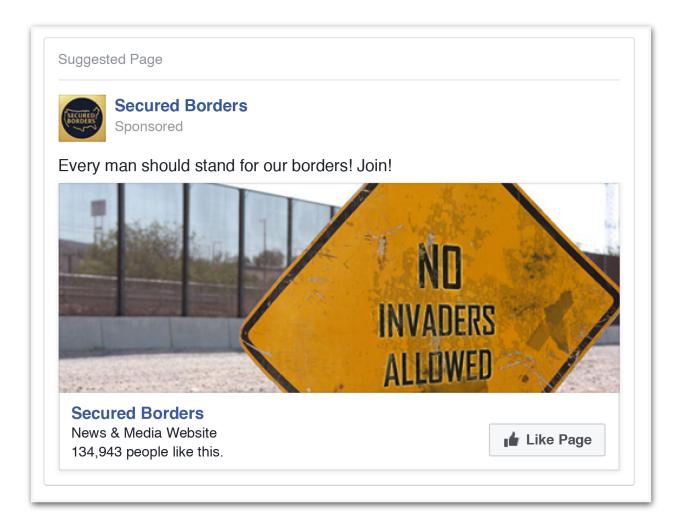
Agreeableness: "A Safer World for Our Children"

A Safer World for Our Children





Russian Internet Research Agency: foreign interference in elections



Platforms' regulations:

- Facebook: advertisers have to verify their account, have to self-label their political ads and advertisers can only send political ads in the country they reside
- **Google**: advertisers can only use geographic location, age, gender, and contextual targeting to target political ads
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Legislative level: European Commission is working on the Digital Services Act and the European **Democracy Action Plan**

Věra Jourová (European Commission vice-president), Dec 2020

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- limit the microtargeting as a method which is used for the promotion of
- political powers, political parties or political individuals," she added.

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Democracy Action Plan

Underlying assumption: we know which ads are political

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Can we reliably distinguish political ads from non-political ads?

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Christians around the world are suffering for their faith, and there is a critical need for Bibles to help them stand strong. Help us meet our goal to reach 10,150 persecuted Christians with God's Word and training to disciple more believers.

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Political or not?

This paper

Can reliably distinguish political ads from non-political ads?

We take an empirical approach to test the assumption by:

- Analyzing if people agree on what ads are political
- Analyzing the characteristics of ads considered political by ordinary people
- Analyzing the characteristics of ads that lead to disagreement

Do platforms agree what ads are political?

- Made by, on behalf of, or about a candidate for public office, a political figure, a political party or advocates for the outcome of an election to public office; or
- About any election, referendum, or ballot initiative, including "go out and vote" or election campaigns; or
- About social issues in any place where the ad is being placed; or
- Regulated as political advertising. \bullet

Social issues: civil and social rights, crime, economy, education, environmental politics, guns, health, immigration, political values and government, security and foreign policy

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Definitions of political ads

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Issue ads

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No consensus across platforms

- Facebook and TikTok are considering issue ads as political
- Twitter and Google do not consider issue ads as political

Definitions of political ads

Political actors ads

Election ads

Issue ads

Do users agree on what ads are political?

Data set: ProPublica

- ProPublica is an investigative journalism organization
- Dataset contains labels from volunteers and advertisers
- 55k ads with at least 3 volunteer votes





World Wildlife Fund Sponsored · Paid for by World Wildlife Fund

An estimated 1 million pangolins were poached in just 10 years. Sign the Pangolin Pledge today to help save the species from extinction.



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Do volunteers agree which ads are political?

Strong political ads (fr=1)

Political ads (0.5≤ fr<1)

Marginally political ads (0<fr<0

Non-political ads (fr=0)

	26k
	19.7k
0.5)	7.6k
	1.3k



Do volunteers agree which ads are political?

Strong political ads (fr=1)

Political ads $(0.5 \le \text{fr} < 1)$

Marginally political ads (0<fr<0

Non-political ads (fr=0)

Answer: No! Volunteers disagree on more than 50% of ads

	26k
	19.7k
0.5)	7.6k
	1.3k



Do volunteers and advertisers agree?

	Official political	Official not political
Strong political ads	96 %	4 %
Political ads	93 %	7 %
Marginally political ads	74 %	26 %
Non-political ads	100 %	NA

Do volunteers and advertisers agree?

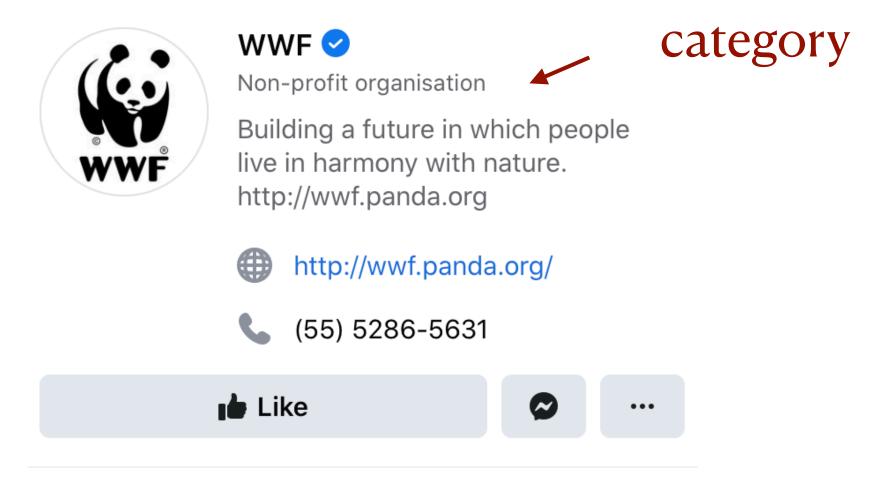
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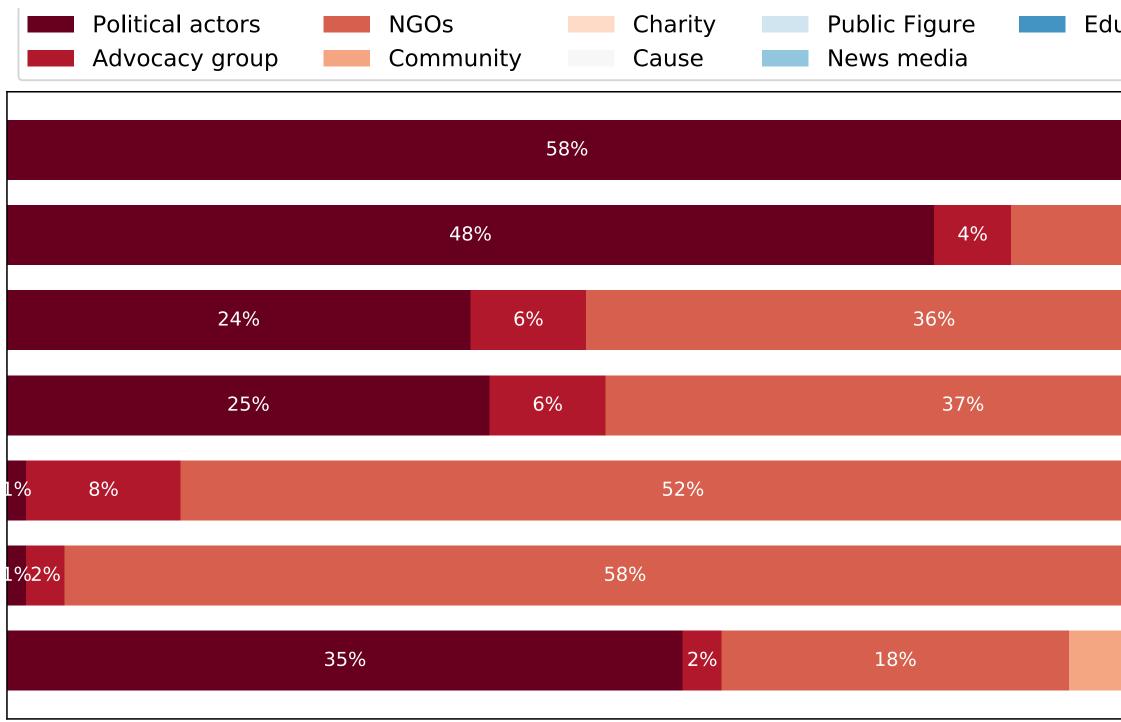
Answer: No! Many ads considered political by advertisers are not regarded as political by volunteers

What are the characteristics of the ads labeled as political?

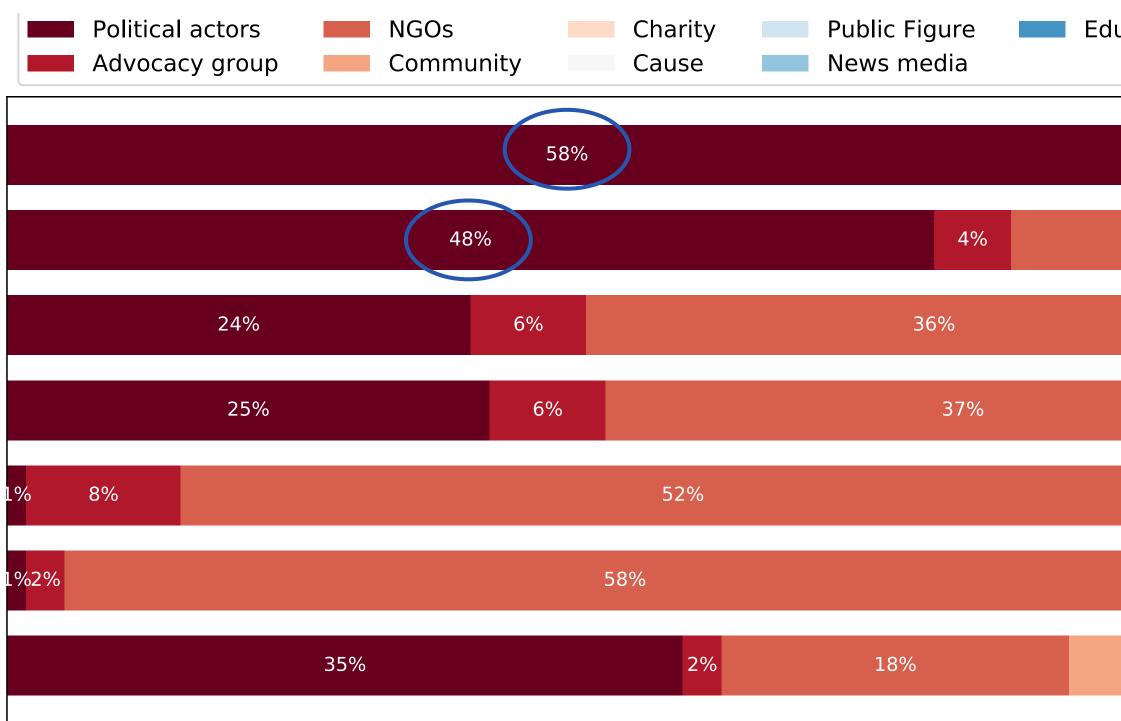
- Advertisers have to select a page's category from a pre-defined list
- Extracted categories for 82% of advertisers





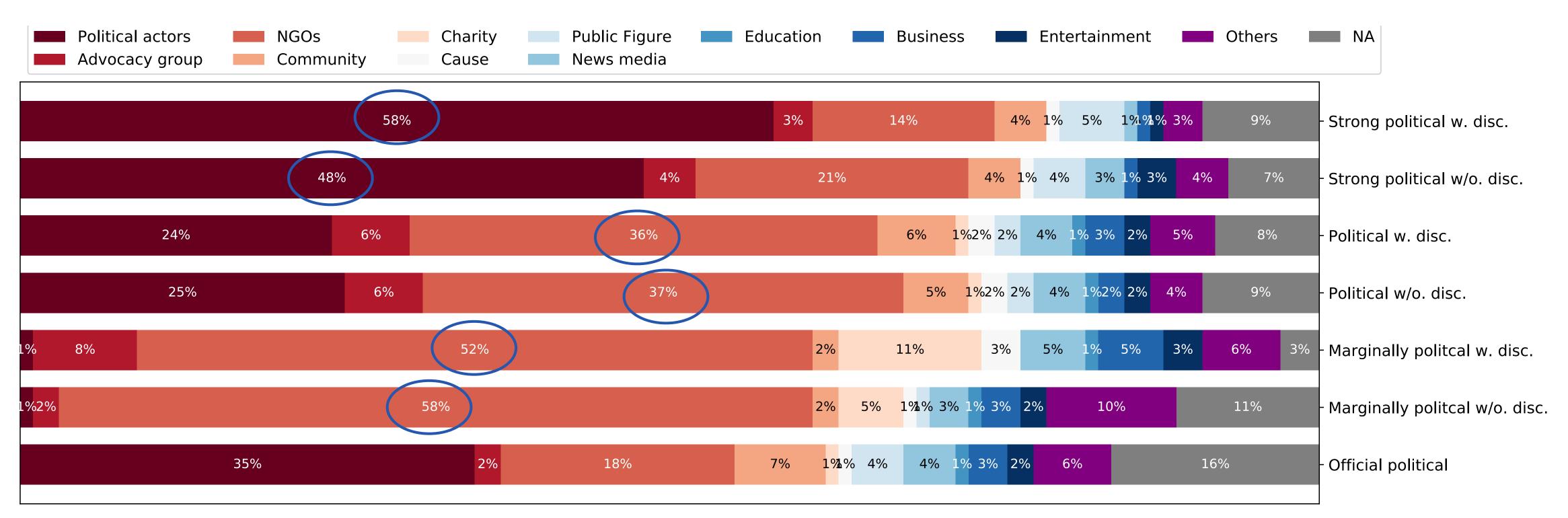


ducation	Business	Ente	rtainment		Others 🛛	NA
3%	14%	4% 1%	5% 1%%	6 3%	9%	- Strong political w. disc.
21%		<mark>4%</mark> 1% 4%	3% 1% 3%	6 4%	7%	- Strong political w/o. disc.
	6% 1%	<mark>2%</mark> 2% 4% 1	.% 3% 2%	5%	8%	- Political w. disc.
	5% 1	<mark>%</mark> 2% 2% 4%	1%2% 2%	4%	9%	- Political w/o. disc.
2%	11%	3% 5%	1% 5%	3%	6% 3%	- Marginally politcal w. disc.
2%	<mark>5% 1%</mark> % 3% 1	% 3% 2%	10%		11%	- Marginally politcal w/o. disc.
7% 1%1%	4% 4% 1%	3% 2% 6%	6	16%		- Official political

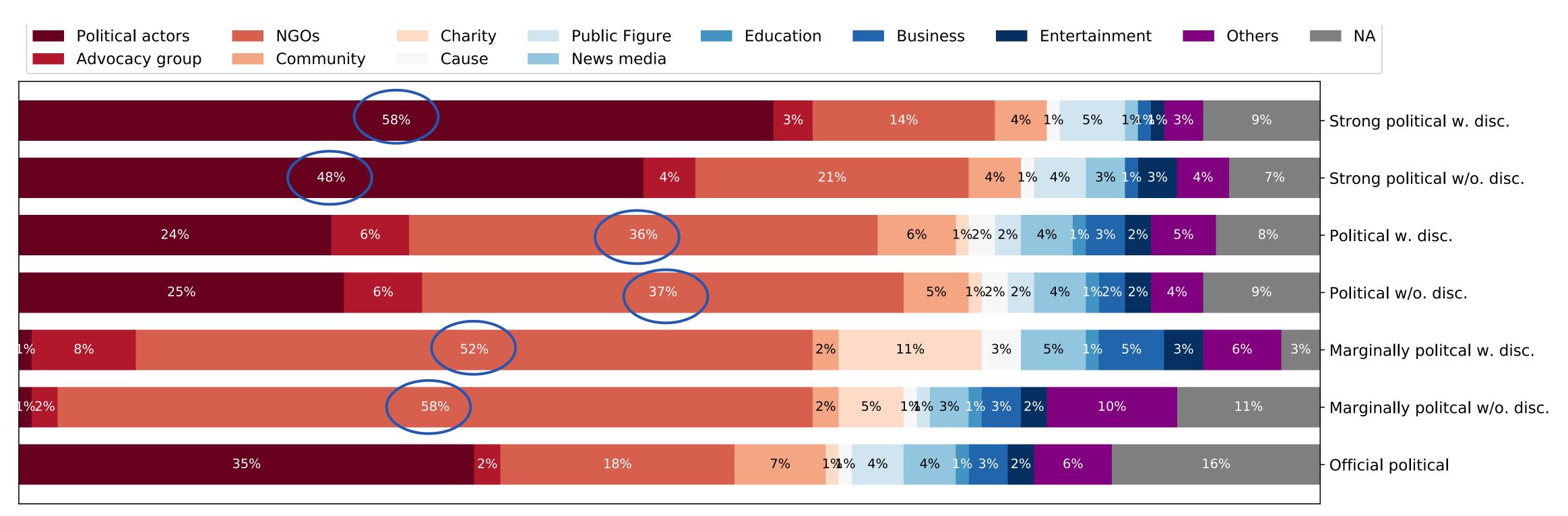


• Most strong political ads come from political actors

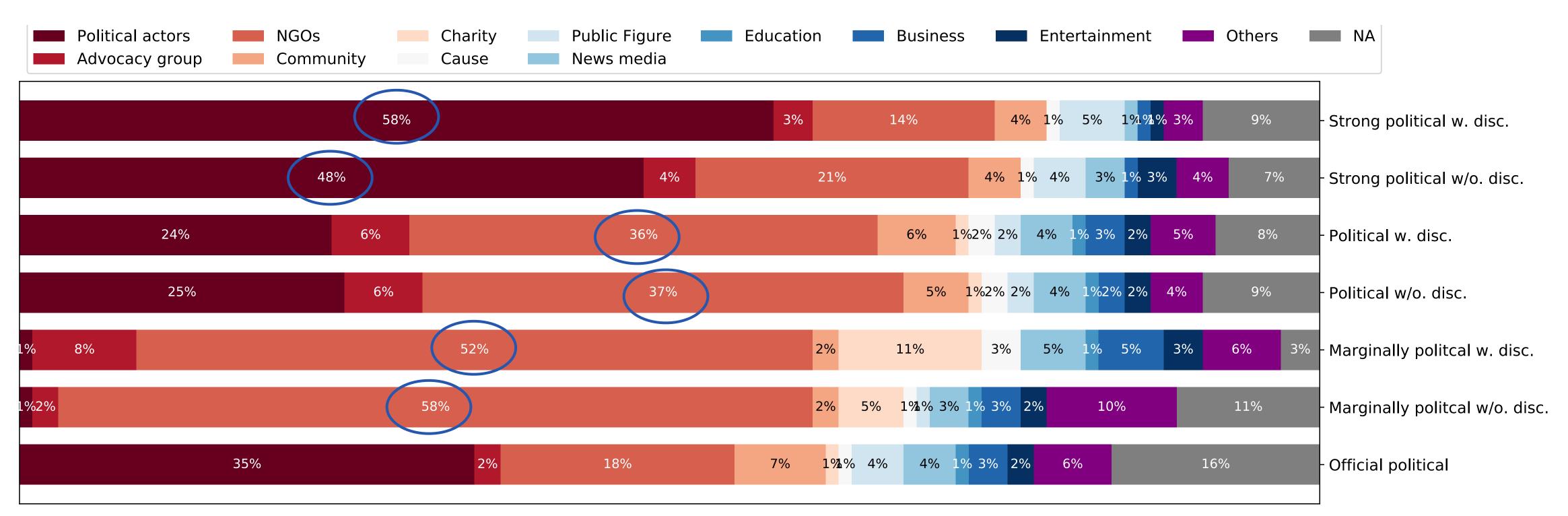
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- Most political ads and marginally political ads come from NGOs



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- Official political ads has a wide variety of advertisers' categories



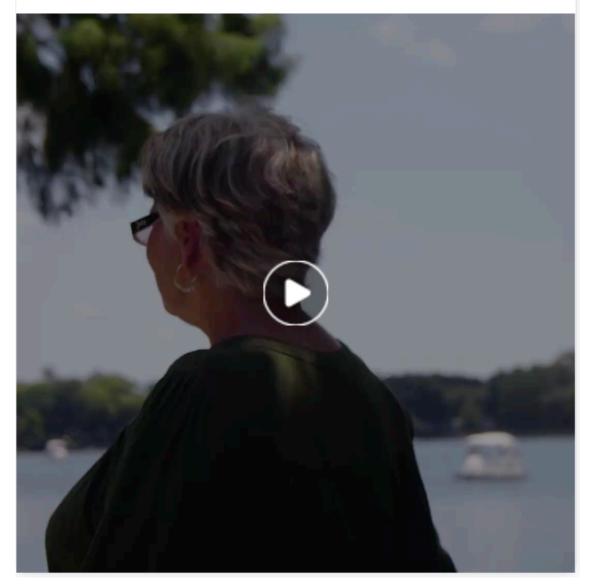
- Most strong political ads come from political actors
- Most political ads and marginally political ads come from NGOs
- Official political ads has a wide variety of advertisers' categories
- Implication: specific electoral legislation should not regulate (and impose restrictions on) ads only from political actors (as some countries do)

Observations

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Ben & Jerry's Sponsored • Paid for by Ben & Jerry's

Vote yes on 4 and reinstate voting rights for 1.4 million Floridians!



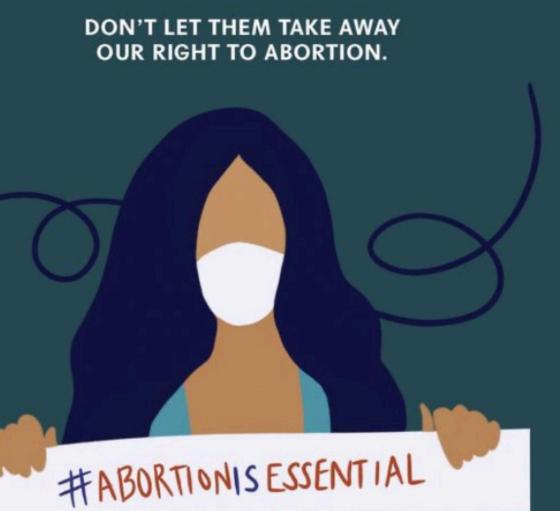
• The ice-cream company ``Ben and Jerry'' (a business) is inciting citizens to vote

Observations





Abortion is essential health care. Contact Congress to protect access to abortion.



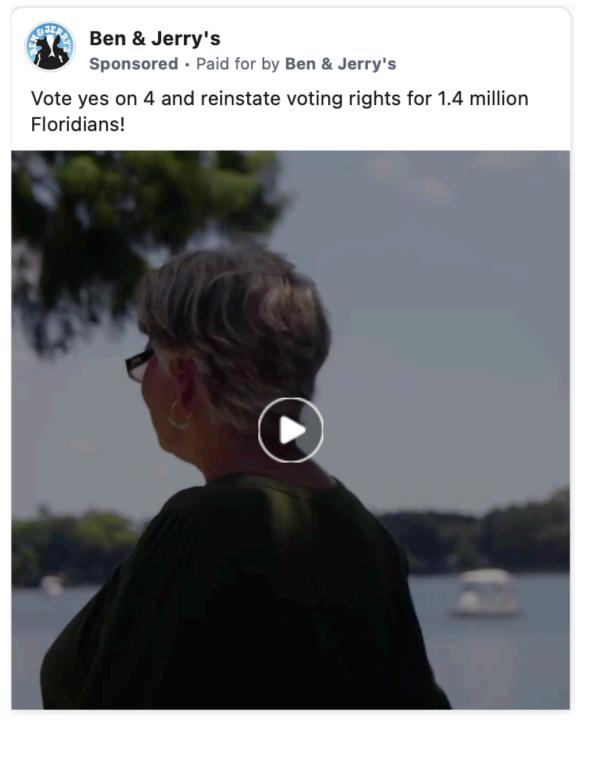
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Center for Reproductive Rights

Sponsored • Paid for by Center for Reproductive Rights

• Center for Reproductive Rights (NGO) is addressing advocacy messages about abortion issues

Observations







- The ice-cream company ``Ben and Jerry'' (a business) is inciting citizens to vote
- Center for Reproductive Rights (NGO) is addressing advocacy messages about abortion issues
- World Food Program (a charity) is addressing social issues (do not have association to legislation)

Center for Reproductive Rights

Sponsored · Paid for by Center for Reproductive Rights

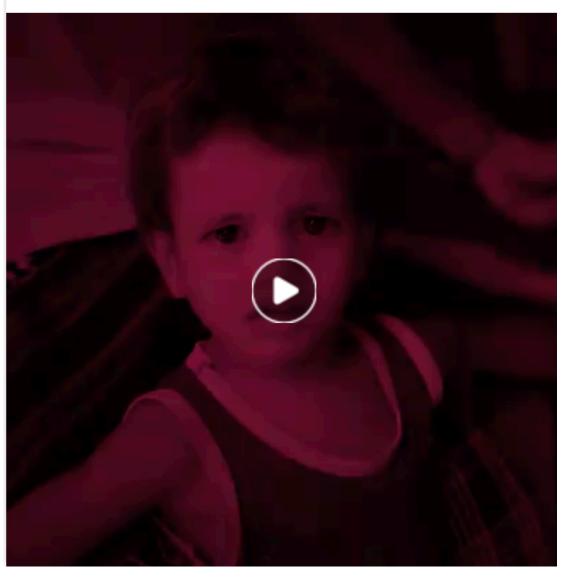
Abortion is essential health care. Contact Congress to protect access to abortion.



World Food Program USA

Sponsored • Paid for by World Food Program USA

Don't forget about children in Yemen, like Amir, who risk starving to death. You can help a child get their next meal for only \$0.50.



Analysis of ads' messages

Study ads' messages:

- 300 random ads with disclaimer and 300 random ads without disclaimer from each groups of ads.
- 200 ads without disclaimer from AdAnalyst dataset
- Each worker labeled 20 random ads from the pool of 2300 ads
- Each ad was labeled by 3 workers

For each ad, we asked the following questions:

- Is this ad made by, on behalf of, or about a political actor?
- Is this ad about elections?
- Does this ad refer to a social issue?



Our beautiful and fragile planet faces serious threats—from climate change to ation. Walruses are just one of the many species feeling the effects of these threats Help us protect vulnerable species and habitats around the world. Join us today.

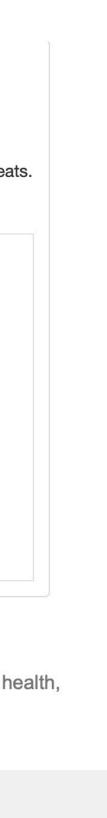


Does this ad refer to a social issue?

(such as civil and social rights, crime, economy, education, environmental politics, guns, health, immigration, political values and government, security and foreign policy)

Yes

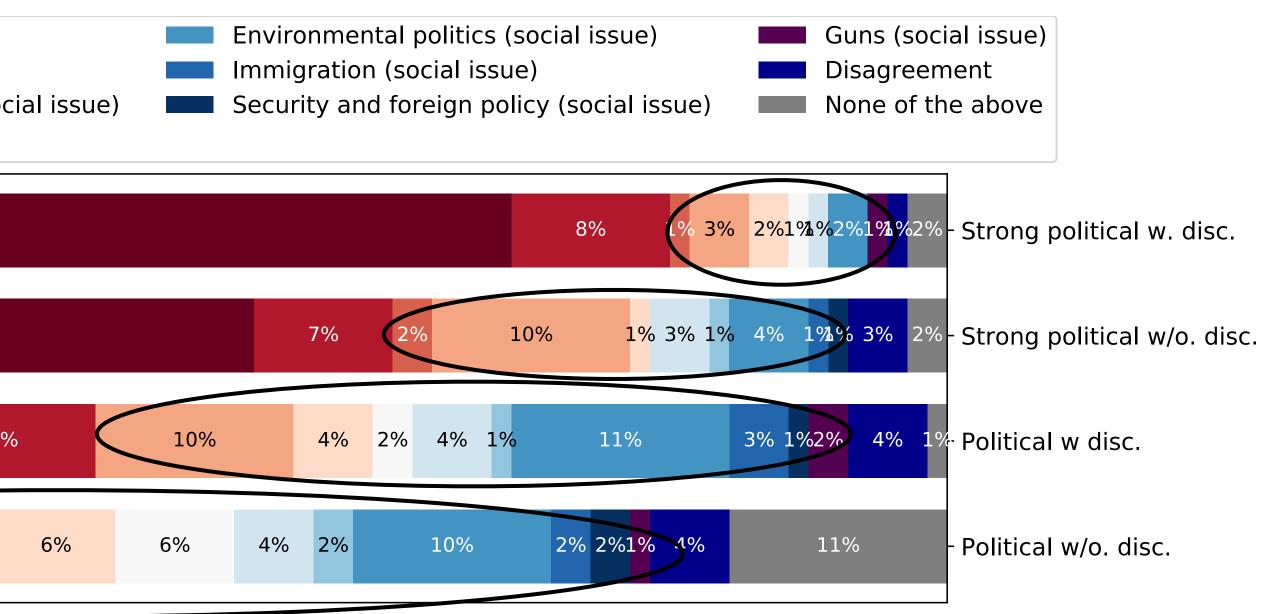
No



Analysis of ads' messages

Political figure or polit	ical party	Health (social issue)	
Elections		Education (social issue)	
Economy (social issue	(د	Political values and governance (s	50
Civil and social rights		Crime (social issue)	
		78%	
		65%	
	47%	1	۵ ⁰
17%	7% 4%	24%	

- political actor or elections!)



• A large fraction of ads labeled as political are about social issues (social issues ads do not mention a

Implication: issue ads should be considered political! (Google and Twitter do not consider them political)



A wide range of ads are considered political



AFSCME 3299

Sponsored • Paid for by AFSCME Local 3299

Stand up for immigrant families. Tell UC to cancel its contracts with ICE collaborators now!



Should all ads related to social issues be considered political and have the same restrictions? If not: where should we draw the line between political and humanitarian?



Boston Rescue Mission

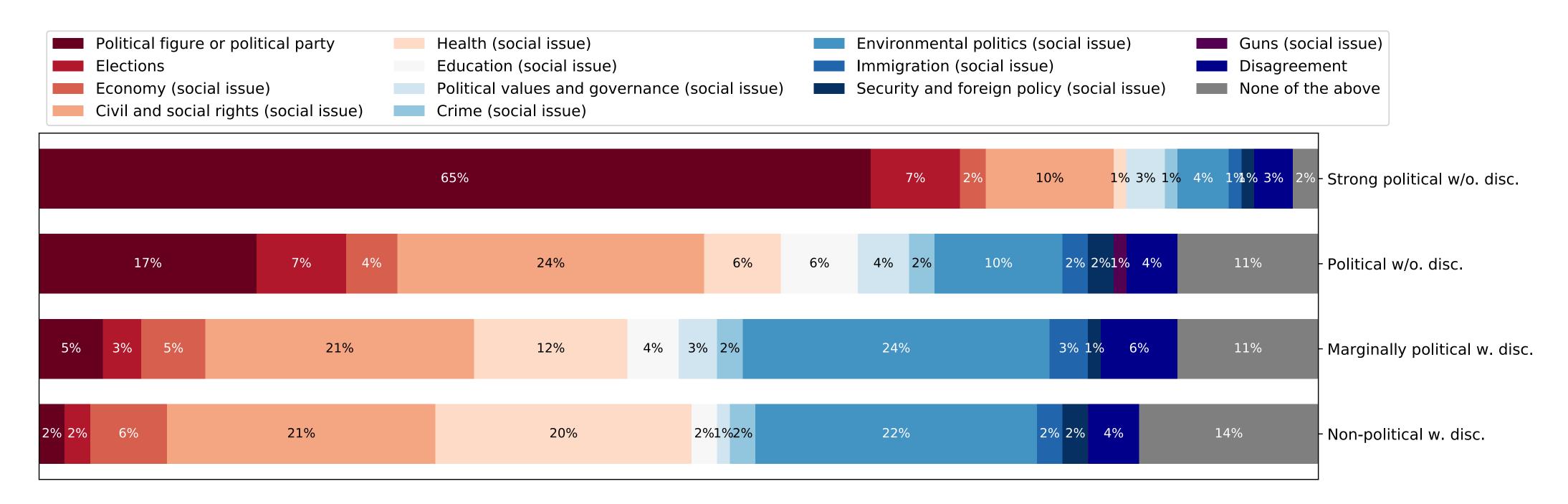
Sponsored • Paid for by Boston Rescue Mission

It's tragic to be all alone and hungry. Your gift can bring hearty, nutritious meals to men and women who struggle with homelessness.



What can we learn from disagreement?

Advertisers vs. volunteers



- Both advertisers and volunteers underreport ads about social issues Reason: the definition of social issue ads are too broad which leads to different interpretations among people
- Advertisers mislabel ads as political or non-political

Reason: advertisers maybe want to avoid scrutiny; they are forced to label their ads as political by enforcement mechanisms

• Large proportion of the ads volunteers labeled as political are about social issues

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- Should we treat ads that call for precise actions differently than ads that just inform citizens?
- How much weight should be given to the advertiser's identity?

The end