Legitimize through Endorsement

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- In May 2012, while campaigning to win a second term, US President Barack Obama publicly declared: "[...] I think same-sex couples should be able to get married."
 - The net approval by Americans toward same-sex marriages increased from +2% in early May 2012 to +7% in late November 2012.

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 - The net approval by Americans toward same-sex marriages increased from +2% in early May 2012 to +7% in late November 2012.
- In the midst of the 2015 European migrant crisis, German Chancellor Angela Merkel famously declared "We will manage it!".
 - The declaration politically backfired → "Alternative for Germany" obtained historically high electoral support in subsequent regional and federal elections.

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- Under which conditions a leader's public statement can affect a prevailing social norm?
- And when is such endorsement most effective?

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- And when is such endorsement most effective?

We investigate these questions in a model of information transmission enriched with social pressure toward norm abidance

The Story

- There is an established social norm.
- A shock hits the society and modifies the heterogeneous propensity of a minority of citizens to violate the norm.
- Majority does not know the sign and the extent of such a shock.
- Random interaction of individuals: they must choose whether to abide by the norm or violate it.

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- Majority does not know the sign and the extent of such a shock.
- Random interaction of individuals: they must choose whether to abide by the norm or violate it.
- A strategic **opinion leader** knows something more about the shock: she decides whether to endorse the violation or not.
- The leader's endorsement decision **can** affect individuals' beliefs and thus their actions.
- As such, it **can** influence (foster vs. hinder) the ongoing change.

- We characterize the type of opinion leaders that can influence societal change through their endorsement decision.
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- We study:
 - the factors that influence an opinion leader's ability to influence social norms.
 - the factors that influence the size of her impact.
 - these factors include the level of entrenchment of the social norm, the heterogeneity of individuals' preferences, the width and deepness of the ongoing societal change.

- Evolution of social norms:
 - Long run (Alesina et al. 2013, Acemoglu and Jackson 2015, ...)
 - Short run (Bursztyn et al. 2020, ...)
- Information transmission:
 - with reputational concerns (Morris 2001, Ottaviani and Sorensen 2006, ...)
 - persuasion by experts and politician (Jackson and Tan 2013, Chan et al. 2019, ...)
 - media bias (Gentzkow and Shapiro 2006, Prat and Strömberg 2013, ...)
- Market for online endorsements (Fainmessner and Galeotti 2021, Hinnosaar and Hinnosaar 2021, ...)

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The Model I

- Unit mass of individuals + opinion leader; t = 1, 2
- Individuals' actions: follow ($a_i = 0$) or violate ($a_i = 1$) the norm

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	$a_j = 0$	<i>a_j</i> = 1
$a_i = 0$	0,0	$0, \theta_j - \lambda$
<i>a_j</i> = 1	$ heta_i - \lambda, 0$	θ_i, θ_j

- $\theta_i \sim U[-\gamma, \gamma]$ is *i*'s payoff from violating the norm
- $\lambda > 0$ is the level of entrenchment of the norm

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- $\theta_i \sim U[-\gamma, \gamma]$ is *i*'s payoff from violating the norm
- $\lambda > 0$ is the level of entrenchment of the norm
- Let \overline{a}_1 be the share of violators in period 1. Then

$$u(a_i, \overline{a}_1; \theta_i) = a_i[\theta_i - (1 - \overline{a}_1)\lambda]$$
(1)

- In t = 2, the preferences of a share $\alpha \in (0, \frac{1}{2})$ change
 - share (1α) is the traditional group: $\theta_i \sim U[-\gamma, \gamma]$ (as before)
 - share α is the novel group: $\theta_i \sim U[\omega \gamma, \omega + \gamma]$

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- Information:
 - novel group knows ω ; traditional group does not: $\omega \sim U[-\psi,\psi]$
- Let \overline{a}_2 be the share of violators in period 2. Then

$$u(a_i, \overline{a}_2; \theta_i) = a_i [\theta_i - (1 - \overline{a}_2) \lambda]$$
(2)

The Model III - The Opinion Leader

 At the beginning of t = 2 an opinion leader decides whether to endorse (b = 1) or not (b = 0) the violation of the norm.

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- The OL knows something about ω: she observes a private signal s ∈ {0, 1}, with

$$\Pr(s=0 \mid \omega) = \frac{1}{2} - \frac{\omega}{2\psi}$$
 and $\Pr(s=1 \mid \omega) = \frac{1}{2} + \frac{\omega}{2\psi}$.

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• Her payoff:

$$v(b;\overline{a}_2) = b[k - (1-k)(1-\overline{a}_2)]$$
(3)

- *k* is the weight on ideology
- (1 k) is the weight on popularity concerns

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$$K = \frac{k}{(1-k)}$$
 is the relative strength of ideology

• We are interested in tracking the share of violators in t = 2. This is given by:

$$\overline{a}_{2}(\omega) = \overline{a}_{1} + \frac{\alpha}{2\gamma - \alpha\lambda} \left(\omega + \frac{(1 - \alpha)\lambda}{2\gamma - \lambda} \mathbb{E} \left[\omega \mid \mathcal{I}_{2}^{T} \right] \right),$$

where $\mathcal{I}_2^{\mathcal{T}}$ is the information available to individuals in the traditional group at the beginning t = 2.

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where \mathcal{I}_2^T is the information available to individuals in the traditional group at the beginning t = 2.

- The OL's endorsement decision $b \in \{0, 1\}$ can affect $\mathbb{E} \left[\omega \mid \mathcal{I}_2^T \right]$ and thus impact on $\overline{a}_2(\omega)$
 - When this is the case \rightarrow Informative equilibria (fully vs. partially)
 - When this is not the case \rightarrow Uninformative equilibria

Fully Informative Equilibria

- OL's payoff depends on a
 ₂(ω).... credibility of her endorsement decision is an issue!
- Remember: $K = \frac{k}{(1-k)}$ is the OL's type, the relative strength of her ideology wrt her popularity concerns.

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Proposition

A fully informative equilibrium exists if and only if $K \in \left[\underline{K}, \overline{K}\right]$ where

$$\underline{K} = \frac{1}{2\gamma - \lambda} \left(\gamma - \frac{\alpha \psi}{3} \right)$$
$$\overline{K} = \frac{1}{2\gamma - \lambda} \left(\gamma + \frac{2\gamma - \lambda - (1 - \alpha)\lambda}{2\gamma - \alpha\lambda} \cdot \frac{\alpha \psi}{3} \right).$$

Most Informative Equilibria



Figure 1: The opinion leader's equilibrium behavior.

Notes: The solid red line shows the probability with which the opinion leader endorses the violation of the norm after receiving signal s = 0, $\beta(0)$. The dashed blue line shows the probability with which the opinion leader endorses the violation of the norm after receiving signal s = 1, $\beta(1)$.

- The type of the opinion leader: What changes the bounds that ensure existence of informative equilibria?
- The impact of the opinion leader: By how much she moves (one way or the other) the share of norm violators $\overline{a}_2(\omega)$?

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- Extensions:
 - Homophily
 - Uncertainty about the opinion leader's type
 - Multiple opinion leaders
 - Signal's informativeness

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- Nowadays, opinion leaders contribute to shape societal behavior for better or worse.
- We studied when and to what extent an OL can ease or hinder societal change by endorsing (or not) the violation of an established social norm.
- The OL's endorsement decision is credible (and thus influences individuals' behavior) when she is neither too ideologically sided against the norm, nor too popularity concerned.
- Her impact is larger in societies where the uncertainty concerning the societal change is relatively large, the social cost incurred by norm-violators is high, the preference shock hits a large share of the population, and there is homophily.

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Thank You!

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