Experiments

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Why Experiments Work

Random assignment:

$$E(Y_{i,1}|T_i = 1) \approx E(Y_{i,1}|T_i = 0)$$
$$E(Y_{i,0}|T_i = 1) \approx E(Y_{i,0}|T_i = 0)$$

Example: Cross-Cutting Cleavages in Mali

Ethnicity vs. Cousinage

Example: Cross-Cutting Cleavages in Mali

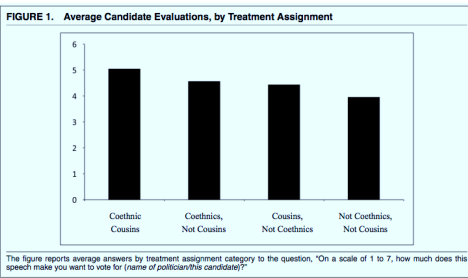**TABLE 1. Experimental Design: Subjects Assigned to Treatment and Control Conditions**

	Subject and politician are joking cousins	Subject and politician are not joking cousins
Subject and politician are from the same ethnic group	$N = 136$	$N = 122$
Subject and politician are from different ethnic groups	$N = 124$	$N = 152$
	Control conditions	
Politician's last name not given	$N = 132$	
Subject and politician have the same last name	$N = 158$	

Example: Cross-Cutting Cleavages in Mali

TABLE 2.   Typical Row of Our Random Assignment Matrix

Subject's Surname (Ethnicity)	(1) Coethnic/ Cousin	(2) Coethnic/ Not Cousin	(3) Not Coethnic/ Cousin	(4) Not Coethnic/ Not Cousin	(5) No Name	(6) Same Name
Keita (Maninka)	1. Sissoko 2. Konaté	1. Diané	1. Doucouré 2. Sacko 3. Sylla 4. Coulibaly 5. Touré	1. Diallo 2. Cissé 3. Dambelé 4. Théra 5. Touré 6. Togola 7. Watarra	Pas de nom	Keita

Example: Cross-Cutting Cleavages in Mali

FIGURE 1. Average Candidate Evaluations, by Treatment Assignment

The figure reports average answers by treatment assignment category to the question, "On a scale of 1 to 7, how much does this speech make you want to vote for [name of politician/this candidate]?"

Example: Cross-Cutting Cleavages in Mali

TABLE 4. Average Candidate Evaluations, by Treatment Assignment

	Subject and politician are joking cousins A	Subject and politician are not joking cousins B	Difference of means A–B
Subject and politician are from same ethnic group C	5.05 (0.15)	4.57 (0.16)	**0.49*** (0.22)**
Subject and politician are from different ethnic groups D	4.44 (0.17)	3.96 (0.13)	**0.48*** (0.21)**
Difference of means C–D	**0.61*** (0.22)**	**0.61*** (0.20)**	

	Control conditions
Politician's last name not given	4.33 (0.12)
Subject and politician have same last name	4.84 (0.15)

The cells report average answers to the question, "On a scale of 1 to 7, how much does this speech make you want to vote for (*name of politician/this candidate*)?" Estimated standard errors are reported in parentheses. *** $p < .001$.

Example: Cross-Cutting Cleavages in Mali

FIGURE 2. Effects of a Cousinage Alliance on Evaluations of Candidate Attributes (Differences of Means, Cousins Minus Noncousins)
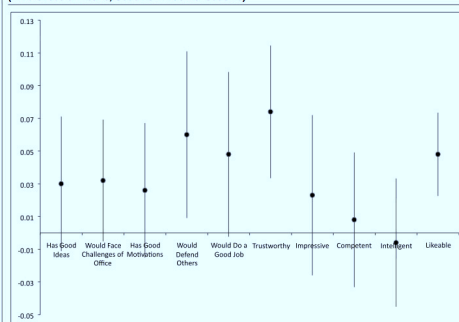
The figure reports the estimated effect of cousinage alliances on subjects' evaluations of the candidate's attributes. All variables are rescaled to run from 0–1, so effect sizes are on that scale. The darkened circles give point estimates, whereas vertical lines show 95% confidence intervals. The analysis pools across coethnicity; that is, mean responses of subjects assigned to the "coethnic, noncousin" or "non-coethnic, noncousin" conditions are subtracted from the mean responses of subjects assigned to the "coethnic cousin" or "non-coethnic cousin" conditions.

Issues for Experiments

- Compliance rates

- Power

- Appropriate significance tests

Issues for Experiments

- Meaning of the treatment
- Measurement of the outcome
- Networks
- Exhaustiveness
- Moderation

Experimental Realism

Experimental realism refers to impact in its most important sense: Do subjects believe the situation, problem, or issue they confront? Does it engage and interest them? Does it capture their attention? (McDermott 2002: 333)

Psychological Realism

Anti-Americanism and Female Representation in Jordan

Bush and Jamal:

> *A pillar of American foreign policy in the Middle East since September 11, 2001, has been promoting democracy, with particular emphasis on support for women's representation. Given high levels of anti-Americanism in the region, does foreign pressure for policy reform undermine this project?*

Anti-Americanism and Female Representation in Jordan

Survey experiment using a random sample of adult Jordanians.

Anti-Americanism and Female Representation in Jordan

Interviewers read this script to respondents in the control group: In 2003, the electoral law in Jordan was revised to include a six-seat minimum quota for women in the national parliament. The new electoral law, which was announced in May 2010, raised the quota to 12 seats that are reserved for women.

Anti-Americanism and Female Representation in Jordan

Treatment 1 adds:

> *Many US government-funded organizations in Jordan, including the National Democratic Institute, have strongly supported women's political participation and the women who were elected via the quota in the past.*

Anti-Americanism and Female Representation in Jordan

Treatment 2 adds:

> *Many imams and other religious leaders in Jordan have strongly supported women's political participation and the women who were elected via the quota in the past.*

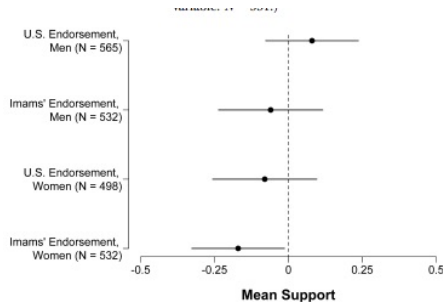# Anti-Americanism and Female Representation in Jordan

Fig. 3. How the Endorsements Affect Support for Women's Representation. (*Notes.* Dots represent the average treatment effects (ATEs). Error bars are 95% confidence intervals. Negative (positive) ATEs show a reduction (improvement) in support of women's representation.)

Measurement of the Outcome

- Subjective meaning of the outcome
- Differential item functioning

Emotion	Politics Only %	Politics and Culture %	P-value
Anger	39%	30%	0.002
Disgust	28%	27%	0.90
Fear	38%	26%	0.0002
Sadness	42%	37%	0.15

BLM is organized and funded by Socialists/Communists Ayers, Soros and many like them. They are out to destroy our country and will use anyone to do it. Dr King did not use destruction, hatred, crude behavior back in the 50s/60s. It saddens me to see how these men are leading so many of our young people down a destructive path, just to destroy the freedoms our country. Their dream or ideology is to lead us into communism. Have you heard of the "Progressive Movement" or Saul Alinsky (Rules for Radicals). I would strong encourage you to read it. He was determined to steer our wonderful, free country into communism. Ayers and Soros, evil people are in sync with that theory. Create chaos, diversity (which mean divisity), anarchy and what do you have. An unruly society, Godless, no absolutes. Then what? A person the likes of Hitler steps in and promises solutions. I suppose you have been taught there were no concentration camps. That thousands and thousands were not murdered by Hitler. There are many living today who can testify there were. I don't know who is paying for your college, I'd be willing to bet you are not. If you are working your way thru, as our boys did then I apologize. I would also be willing to bet that the majority of BLM violent protesters are paid. Hummmm, could that be from Soros under the guise of some "wonderful" organization? How many (including innocent children) are murdered daily in places like Chicago. Not by policemen but by the many gangs who own the streets because the cops are not backed. Well, we now have a President who is willing to stand up for our police men/women. Contrary to the previous

I felt there were some very aware people analyzing the horrid events of our day at lightning speed and articulating the issues well. I continually felt the same frustration as the tweeters, as I read their astute observations and clear statements. The progress against racism in this country has seemed to move backwards in some ways, and it's intensely disturbing to know that, it's insane to know that a racist, misogynistic POTUS has been elected. The voices calling for change will have to become very loud, to be heard through the rhetoric.

SUTVA

Electoral Fraud in Russia

Enikolopov et al. 2013:

> *Using a randomized assignment of independent observers coordinated by Citizen Observer, a nongovernmental organization, we estimated the extent of electoral fraud in the city of Moscow during the Russian parliamentary elections held on December 4, 2011.*
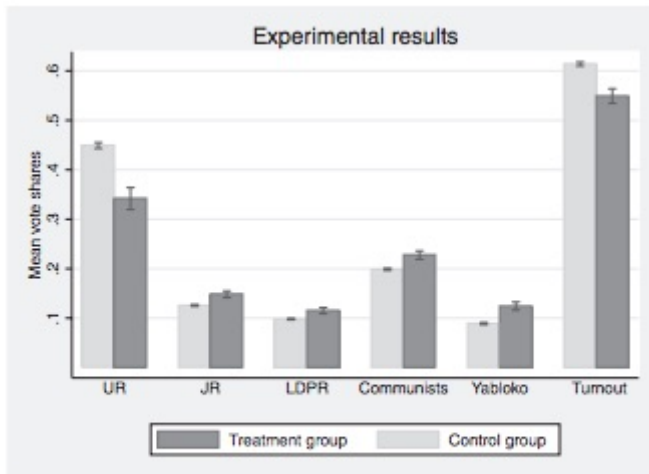
Electoral Fraud in Russia

Fig. 1. Vote shares in 2011.

Electoral Fraud in Russia

The above results are likely to provide a lower bound on the extent of the electoral fraud, because the presence of observers at the polling stations did not fully prevent fraud. There are two additional assumptions that are required to ensure that these estimates are indeed the lower bound.

Electoral Fraud in Russia

First, observers themselves should not be involved in pro-opposition electoral fraud.

Electoral Fraud in Russia

Second, the presence of independent observers at a polling station should not affect the extent of fraud at the polling stations where observers were not present, so that the stable unit treatment-value assumption is satisfied.

Electoral Fraud in Russia

Table 1.   Spillovers

Sample	Vote share of					Turnout
	United Russia	Just Russia	LDPR	Communists	Yabloko	
Observers present	−0.130*** (0.013)	0.029*** (0.004)	0.027*** (0.003)	0.035*** (0.005)	0.034*** (0.004)	−0.086*** (0.009)
Observers present in a neighboring polling station	−0.052*** (0.014)	0.014*** (0.004)	0.022*** (0.004)	0.015*** (0.005)	−0.002 (0.005)	−0.047*** (0.009)
Constant	0.452*** (0.010)	0.125*** (0.003)	0.097*** (0.002)	0.198*** (0.003)	0.089*** (0.004)	0.616*** (0.006)
Observations	3,164	3,164	3,164	3,164	3,164	3,164
r^2	0.03	0.02	0.03	0.02	0.02	0.03

SEs clustered by electoral district are in parentheses. *$P < 0.1$, **$P < 0.05$, ***$P < 0.01$.

Electoral Fraud in Russia

156 of 3,164 polling stations were in the treatment group.

IV Natural Experiments and Encouragement
Designs

Exhaustiveness and Emotion Treatments

Causal processes are hard for experiments

Trace Causal Process

Causal processes are hard for experiments

> *Even when causal relationships are firmly established, demonstrating the mediating pathways is far more difficult – practically and conceptually – than is usually supposed. (Green, Ha, and Bullock 2010)*

Design:

Trace Causal Process

Design:

- Carry out the experiment

Trace Causal Process

Design:

- Carry out the experiment
- Use in-depth interviews, focus groups, or documents to reconstruct decision-making or other processes during the experiment

Trace Causal Process

Experimental ethnography is a tool for answering questions about why programmatic attempts to solve human problems produce what effects, on average, in the context of the strong internal validity of large-sample, randomized, controlled field experiments. . . . This strategy can achieve experiments that create both a strong "black box" test of cause and effect and a rich distillation of how those effects happened inside that black box, person by person, case by case, and story by story. (Sherman and Strang, 2004: 205)

MouseLab

Process Tracing in Experiments

MouseLab
Open-ended questions

"Lost" Cases and Selection Profiles

Changes in Ethnic Identity in South America

Table: Venezuelan Racial and Ethnic Self-Descriptions, 2000-2008

Year	White	Mestizo	Moreno	Black	Other
2000	36%	43%	17%	4%	0%
2004	25%	30%	36%	5%	4%
2008	37%	12%	41%	4%	6%

Table: Bolivian Racial and Ethnic Self-Descriptions, 2004–2008

Year	White	Mestizo	Indigenous	Other
2004	18%	62%	16%	4%
2006	11%	63%	20%	6%
2008	8%	68%	17%	7%

Table: Colombian Racial and Ethnic Self-Descriptions, 2004–2008

Year	White	Mestizo	Indigenous	Black	Other
2004	33%	51%	6%	9%	1%
2006	35%	52%	4%	7%	2%
2008	35%	46%	4%	8%	7%

Table: Peruvian Racial and Ethnic Self-Descriptions, 2006-2010

Year	White	Mestizo	Indigenous	Black	Other
2006	12%	75%	6%	1%	6%
2008	12%	73%	7%	2%	6%
2010	12%	77%	3%	2%	6%

Populism and Ethnicity

Evo Morales's Indigenist Populism

Chávez and 'América Morena'

- Speech, Banco Central de Venezuela, August 18, 2000. 382.

- Speech, Círculo Militar, Caracas, July 10, 2001. 231.

- Speech, Teatro Teresa Carreño, Caracas, November 13, 2001. 596.

- Speech, Avenida Universidad, Caracas, August 24, 2002. 402.

- Speech, Avenida Bolívar, Caracas, April 13, 2003. 277.

Could a populist political ideology built around the centrality of non-European identity help explain the shifts in ethnic identity in Venezuela and Peru?

Experimental Design

Select a country context with relatively lower recent levels of populist discourse and with no major recent transformations in ethnic identity.

Experimental Design

Establish which currently marginalized groups
are core to the national identity.

ELEMENTOS RAICES DE LA NACION PERUANA

Los elementos raíces de nuestra población los encontramos:

En el antiguo Perú, que nos va a otorgar el elemento aborigen, cuya raigambre se proyecta hasta los primeros grupos culturales que se asentaron en nuestro suelo. Allí hallaremos las manifestaciones primigenias de nuestra nacionalidad. Elemento aborigen e indígena que, después, van a expresarse con mayor claridad en la época del Tahuantinsuyo, cuyo sistema político, social y económico, determinó la estructuración de una alta cultura en la que sus manifestaciones, pese al impacto de los rasgos culturales occidentales, traídos por los españoles, subsistieron y aún se mantienen como elementos integrantes de nuestra sociedad.

En la época virreinal, cuando se implantan en nuestro suelo las costumbres e instituciones españolas que, al impacto de un nuevo ambiente, de un nuevo paisaje, de una nueva realidad, van perdiendo, paulatinamente, sus caracteres originales para, de esta manera, adaptarse y afianzarse en nuestro suelo. En idéntica forma, el poblador que así viene, va estructurando un nuevo espíritu, una nueva alma que lo identifica con este territorio y con esta nueva patria que va surgiendo. Nación y Patria que encuentran su rotunda materialización al procederse a la emancipación política del dominio español.

El territorio. Es otro elemento raíz constitutivo de la Nación Peruana. El nos otorga el carácter geográfico, de localidad, área o región. El territorio nos concede, precisamente, ese amor a lo nuestro; nos identifica con nuestros paisajes, con nuestra flora y fauna. El nos indica, pues, el lugar de origen de nuestros antepasados y de nosotros mismos; de allí emana ese sentimiento espiritual que nos liga, indestructiblemente, a todos los peruanos donde quiera que nos encontremos, donde quiera que haya transcurrido el tiempo y donde quiera que sea la circunstancia por la que haya que atravesar, puesto que hay que considerar que para la existencia de una nación es computable su población en común, aun cuando ésta se encuentre diseminada, por diversos motivos, en las distintas partes del mundo.

1. The ancient, indigenous/aboriginal Peru
2. The Viceroyalty of Peru
3. Territory of Peru

A populist political message should tend to decrease social distance vis-a-vis indigenous people, but not other groups such as Afro-Peruvians or women in professions.

Treatments

There is so much inequality in Peru because some powerful people who supposedly know best conspire with the government and transnational companies to steal the country's wealth for themselves. All of us who are part of the real Peruvian people are victims of these so-called leaders of the country. They steal from all of us and dictate the laws to hurt anyone who isn't rich, from Lima, and white like they are.

Treatments

There is so much inequality in Peru because we're still in the intermediate steps of economic development. We need time, patience, investment, and solid economic policy to ensure that our country will keep growing. As our economy becomes bigger and more powerful, it wil create more jobs in our country. Each Peruvian who is willing to work hard and get an education will be able to achieve a good life, and inequality will reduce.

Treatments

There is so much inequality in Peru because our government has not done enough to support social and economic solidarity in our country. All of us Peruvians are one people, and we should support each other so that everyone can enjoy the well-being we've earned. We can achieve this if all those who are already well off pay their taxes and if we use that money to improve our schools, hospitals, and neighborhoods, and to make sure that they are as good as they can and

Social Distance Measures

Bivariate ITT Results

Social Distance From...	Effect Estimate	p value
Indigenous Man	1.78	0.081
Afroperuvian Man	0.26	0.79
Professional Woman	0.50	0.59

Sample includes 300 Peruvians selected randomly from among those walking in a collection of parks throughout the city on several evenings during September and October of 2017.

Causal Forests Technique

- Synthetic random forests
- Out-of-bag estimation
- Separate forests for each potential outcome

(Lu, Sadiq, Feaster, and Ishwaran 2017)

Causal Forests Results

Estimator	Effect Estimate	p value
Bivariate	1.78	0.081
Causal Forests	2.11	0.034