Identity Economics…..
and Inequality

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HCEO – NES – CREC Summer School

July 2021

Introduction – Identity and …. Inequality

- Inequality – some people have more, some people have less.
- Why do we care?
- As social scientists, we want to describe such patterns.
- But why do we concentrate on inequality as a pattern of interest?
  - Maybe bad for growth, development overall.
  - Maybe its unfair, unjust.
- Particularly unjust: inequality associated with social difference
  - Systematic – certain social groups have more and others have less.
- Inequality is not randomly distributed.
  - US – blacks, Hispanics,
  - Europe – North Africans, Africans, Roma
  - Many parts of the world – women

Introduction – Social Categories

- Identity –
- At a minimum a designator of a social group.
- How does identity figure into inequality??
  - Mere descriptors?
  - Part of processes and structures that create and sustain inequality?

Introduction – Preferences & "Identity"

- What is "identity?"
  - A person's sense of self; a person's self-image.
  - How a person views him/herself and/or others view him/her.
  - Note "identity" is used as a descriptor: "I am Hispanic."
  - And "identity" is used as way of feelings/emotions
    - "I have a strong sense of identity; I feel good about myself."
      - Judgment depends on ideals, norms a person holds for onself and others hold for that person – depends on social norms for who you are
    - "I am proud to be Hispanic"
      - This judgment depends on how "Hispanic" one feels, and whether you and other Hispanics are living up to norms and ideals.

Introduction - "Identity"

- Identity-contingent utility/payoff function.
  - Individuals have preferences over own and others' actions, depending on identity and norms
  - Social categories & norms for categories

- Individuals care about own actions, depending on identity.
- Utility enhanced when abide by norms for own category.

- Individual care about others' actions - externalities
  - Externality: Others suffer a utility loss (offended?) when norms are violated.
  - Externality: Others retaliate against those who break the norms – incur a cost but restore utility loss from offense.

Introduction - “Identity”

- Why do we want a model with identity?

- Add identity to economic framework:
  - Individuals make choices, interact strategically when utility depends on identities and norms for categories

  ⇒ patterns of behavior

- Identity model can explain patterns that cannot be explained (or uncomfortably explained) with standard model

- Add a new understanding to phenomena and policy

Outline of Lecture

- Identity & Inequality – Part 1 – Theory
  - Overview theoretical approaches to social norms/social differences
    - * Standard Models: Preferences & Constraints
    - * Strategic Interaction
    - * "Identity Economics" as a new approach
      - * *Human capital acquisition (schooling) as an example*
      - * *Identity and Redistribution as an example*

- Identity & Inequality – Part 2 – Experiments
  - Experimental evidence for impact of identity on behavior
  - Experiments with identity variation
  - Do people have preferences for "inequality"? YES

Identity and Inequality
Part 1
Economic Theory

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2021

Introduction – Why theory?

- Putting identity/social category markers is standard practice in empirical study of socioeconomic outcomes.
  - (Dummy) variables: black, female, ethnicity, region, state
  - Interaction effects: black, female, etc.

- To fix ideas – consider education
  - child or adolescent "underachieves" in school; does not get the education that would be predicted by benefits and costs
    - Black children in the United States
    - Roma children in Hungary
    - Girls in a developing country

- What can account for the dummy variables, the interaction effects?

- Unpack the black box of these effects.

General Overview of Theoretical Approaches

- Basic Economic Model
  - Individuals have utility from own choices/actions
  - Idiosyncratic preferences, which are exogenous
  - Technology (constraints)
    - → choices lead to patterns of behavior

- Strategic Interaction
  - Individuals have payoffs from own and others' actions
  - Idiosyncratic costs/benefits, which are exogenous
  - Game form (institutions), specifying information asymmetries etc.
    - → equilibria give patterns of behavior

- Preferences determine utilities and payoffs
  - Preferences – what a person "likes" or "doesn't like" (Becker)
  - Preferences – what a person "should" or "shouldn't do" (A&K)
  - Combine with technology & constraints, strategic interaction
    - → choices & equilibria give patterns of behavior

General Overview: Basic Economic Model

- Utility Function: individual w/exogenous, idiosyncratic preferences
  - Makes choice given technology and constraints.

- Child likes or not school (or is more or less talented at schoolwork)
  - Weighs costs and benefits of schooling, given school quality and opportunity cost of attending school, job networks, discrimination.
    - Pattern: Blacks have lower levels of academic achievement because they attend worse schools, have worse job networks.
    - Pattern: Girls have lower levels of academic achievement because they have high opportunity cost of time (household).

- Useful, because there could be such technology, constraints.

- Begs the question why blacks attend worse schools, why women "should" attend to household chores, why there is discrimination.

- Pushes the inequality question up one level, to what is behind the assumptions in our models.

General Overview: Strategic Interaction

- Strategic Interaction:
  - •Individual payoffs depend on own preferences and others' actions.
  - •Makes choices strategically, taking into account how others'react.
  - •Equilibria social pattern

- Repeated game, punish those who violate the equilibrium action
  - Equilibrium can be a "bad social norm"

- Signaling game, actions indicate underlying unobserved attribute
  - Equilibrium is a social norm – but notice signaling costs

- Add labels – and then have a theory of an outcome

  - •Girls invest less in school to not have bad marriage prospects.

  - •Black children achieve less in school to signal more "sociable" type (Austen-Smith & Fryer 2009)

  - •Blacks are not hired by firms to avoid boycott by consumers.

General Overview: Strategic Interaction

- Inequality is the capricious outcome of strategic interaction –
- Has no social context per
- There is nothing particularly meaningful about being black, female, North African, etc.

  - This view is useful. Social norms may indeed be "bad equilibria." Intervention needed to change the equilibrium.
    - United States civil rights law.

- But consider three basic points:

  - Theoretical requirements to sustain equilibria are very strong

  - There is much social context associated with norms – discussions in literature, press, law, activists, etc.

  - People die over these issues

General Overview – Preferences and "Identity"

- Preferences and norms are a possible source of inequalities.

- Becker: a taste-based theory of discrimination
  - In the same way some people like apples and others like oranges, some people may not want to work with Black co-workers or women.
  - Workers with these tastes would require a wage premium.
  - Blacks/women then have lower benefits of education
  - But competition could eliminate such high-cost firms.

- Point: maybe preferences per se matter.

- Akerlof & Kranton: preferences both "likes;" and "shoulds"
  - Preferences are not all idiosyncratic, rather socially derived
  - Depend on peoples' social identities
  - Identity-based preferences are contested

Akerlof & Kranton – Identity & Preferences (Norms)

- Build a model where individuals think of themselves and other (more or less consciously) in terms of social categories.

- People have tastes, but also norms for how people *should* behave.

- People have utility from own actions, and others' actions
  - people internalize norms
  - punish others who violate "social code"

- Use this utility function to study schooling and minority poverty.

Identity – General Framework

- Start with a standard model of utility.

- The utility of person j is represented as

$$W_j = W_j(a_j, a_{-j})$$

  where a_j are j's actions, a_{-j} are others' actions.

- The inclusion of a_{-j} captures the possibility of externalities or strategic interaction.

- For example:
  - a_j is the effort of j in school, and a_{-j} is the effort of others in school, which may hurt or help j's academic achievement

Identity - General Framework: *Utility & Identity*

- Add identity ingredients
- Set of Social Categories: *C*.
- Individual *j*'s assignment of self and others to categories: c_j.
- Norms, *N*, give appropriate behavior, ideal attributes of each social category.
- Utility Function

$$U_j = U_j(a_j, a_{-j}, I_j)$$

a_j are *j*'s actions, a_{-j} are others' actions, I_j is *j*'s self-image:

$$I_j = I_j(a_j, a_{-j}; c_j, \varepsilon_j, N)$$

where ε_j are *j*'s given attributes.

Identity - General Framework: *Utility & Identity*

$$U_j = U_j(a_j, a_{-j}, I_j) \qquad I_j = I_j(a_j, a_{-j}; c_j, \varepsilon_j, N)$$

- Overall utility depends on how actions a_j , a_{-j} affect "economic utility," and how they affect self-image, I_j.
- Self-image (identity, I_j) depends on
  - Acting as should: match between actions and category norms N
  - Fitting in: match between ε_j and ideal of category specified by N
  - Status: status of assigned category, given by $I_j()$
- In basic case, person j chooses a_j to max utility, taking as given category assignment (c_j) own attributes (ε_j) norms (N).
- In general, a person could act to change own category, own attributes, and societal norms. Third parties have incentives.

Example of Identity Model – Education & Schooling

Akerlof & Kranton (2002)

- Basic model of education = investment in human capital
- Large population of individuals
  - Each individual n_i = "ability"
  - Marketable Skills/Payoffs from effort choice e_i and ability:
    $v_i = n_i e_i - k(e_i)$
- Optimal effort (schooling level) balances benefits and effort costs
- Not a good model of children or adolescents
- Identity model makes the child/adolescent the decision-maker
  - Considers *their* motives and interactions – US high school

Example of Identity Model – Education & Schooling

Akerlof & Kranton (2002)

- Large population of individuals
  - Each individual exogenously given n_i = "ability"
  - Marketable Skills/Payoffs from ability and effort choice e_i :

    $v_i = n_i e_i - k(e_i)$

- Each individual has a second exogenously given characteristic
  - l_i = "looks" ; i.i.d. uniform on [0,1]

- Social Categories: $C = \{Leading\ Crowd,\ Nerds,\ Burnouts\}$
  - Norms/Ideals: l=1 for Leading Crowd, n =1 for Nerds
  - Norms/Ideals: $e(N) > e(L) > e(B)$

- Identity utilities depend on category, effort, and fit with Ideal
  - $I_c - t\,(1 - \varepsilon_i(c)) - \tfrac{1}{2}\,(e_i - e\,(c))^2$
  - $I_L > I_N > I_B$

Example of Identity Model – Education & Schooling

Akerlof & Kranton (2002)

Individual's overall utility:

$$U_i(e_i, C; \varepsilon_i, Norms) =$$

$$n_i e_i - k(e_i) + I_C - t(1 - \varepsilon_i(C)) - \tfrac{1}{2}(e_i - e(C))^2$$

- Individuals choose effort, e_i, and category, C, to max utility

- Tradeoff: skills, status, fitting in, and abiding by norms

  - E.g., high n_i : choose $C = Nerd$ and $e_i = e(N)$

    high skills, fit in, abide by effort norms for category, but low status

Example of Identity Model – Education & Schooling

Akerlof & Kranton (2002)

- Individuals choose (simultaneously) effort and category.
- Balance payoffs from effort in school, "fitting in" to category
- High *l*, also high *n*, individuals choose to be L rather than N
- Low *l* and low *n* students choose to be B, rather than L or N.
  - (don't want to be a "wannabe")
- Choose effort in school according to norms $e(C)$
- Identity payoffs lead lower academic achievement/schooling

Example of Identity Model – Education & Schooling

Akerlof & Kranton (2002)

- School policy to affect achievement through social arrangements

- Introduce athletics, and social category *Jocks (as part of L)*
- Students have another characteristic a_i = *athletic ability*

- Students make choice of category and effort:
  - High *a* but low *l* and low *n* students now choose to be L
  - High *a* but high *n* now choose to be L rather than N

- Overall increase or decrease academic achievement

- But less divergence in academic achievement

  fewer B's and fewer N's

Example of Identity Model – Education & Schooling

Akerlof & Kranton (2002)

- Consider a population with different ethnic, social groups.
- Curriculum thought to favor one of the groups (dominant/majority)
- Marketable skills depend on effort at mastering this curriculum but curriculum has identity associations, payoffs
  - Math vs. English class. data
- School policy to affect achievement by changing curriculum to affect identity payoffs of effort.

Example of Identity Model – Redistribution

Shayo (2009)

- fasdlfkjas;fdjk;lasjfdaksjfdajfkasjfdkasjfdklsdjfkljsklfjklsfjklsd jfklsdjfklajjdsfljkalfslfjadf;kaljflasjflk
  - ..., less redistribution

Standard setting:

- Population of agents *N*
- Set of actions *A* available for each agent *i*
- Social outcomes *T* that follow from individual actions *A*
  - e.g., voting → tax rate
- Each agent *i* earns economic payoff $\pi_i(t)$ for outcome t
- Agents take actions that lead to outcome that maximizes $\pi_i(t)$
  - *Poor should vote for more redistribution*

Example of Identity Model – Redistribution

Shayo (2009)

Add identity considerations – groups and utility

- Set of groups, each group *J* characterized by ideal attribute q_J
- Status of group *J* based on relative income vis a vis *J'*
- *Ideal attribute and status depend on social outcome t*
- Each agent *i* has individual attribute q_i
- An agent *i* identifies with group *J* if *i*:
  - prefers social outcomes in which group *J*'s status higher
  - prefers social outcomes in which *i*'s distance from group *J* ideal is lower

Example of Identity Model – Redistribution

Shayo (2009)

- Identity model of politics and redistribution
  - explain empirical pattern: more nationalistic, less redistribution

Standard setting:

- Population of agents N
- Set of actions A available for each agent i
- Social outcomes T that follow from individual actions A
  - e.g., voting → tax rate
- Each agent i earns economic payoff $\pi_i(t)$ for outcome t
- Agents take actions that lead to outcome that maximizes $\pi_i(t)$
  - *Poor should vote for more redistribution*

Example of Identity Model – Redistribution

Shayo (2009)

- *Social Identity Equilibrium* = actions and identities for each agent and outcome *t* such that
  - each agent's identity choice optimal given *t*
  - each agent's action is optimal given identity *J*
  - *t* is determined by agent's actions via aggregation process
- *Multiple Social Identity Equilibria* =
  - poor identify with lower class, vote for redistribution (which enhances status of lower class)
  - poor identify with the nation, do not vote for redistribution, status derives from national group

Identity and Inequality
Part 2
Economic Experiments

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Experiments with Social Groups, Identity

- Do people behave differently (towards others) depending on identity/social group?

- Experiments where social category/identity is research objective
  - *Own Actions* – do people have different behavior when identity is "salient"
  - *Strategic Play* – do people play differently depending on identity/social group?
  - Social Preferences (fairness, inequity aversion)

    Do people have preferences for inequality? YES

- Challenge is to design experiments with social group variation.
  - Real-world groups – different ethnicity, club membership
    - Preserve anonymity to avoid repeated game effect
  - Create groups in the lab.

Experiments: Own Behavior

- "Stereotype Threat"
  - Steele & Aronson (1995)

- Incentives and Stereotype Threat?
  - "Discrimination, Social Identity and Durable Inequality
    Hoff & Pandey (2006)

  - Children in India, paid to solve mazes – piece rate

  - Three conditions –
    anonymous, caste revealed integrated, caste revealed segregated

  - Lower caste subjects completed fewer mazes in both caste revealed conditions relative to control

Experiments: Strategic Games

"Discrimination in a Segmented Society" Fershtman & Gneezy (2001)

- Objective: test for "taste for discrimination" vs. "stereotypes"
  - Do people discriminate per se or are they concerned about actions others will stereotypically take?

- Israeli Jewish students – European vs. Eastern origin (last name)
- Trust game – sent less to Eastern (though return about the same)
- Dictator game – sent about the same to both types
- Ultimatum game – sent more to Eastern ("concern for respect"?)

- Trust result only for males.

Experiments: Social Preferences

- Social Preferences = value placed on other's income

Many experiments where subjects allocate income to self and to others. E.g., *i* chooses top or bottom row

π_i	π_j
π'_i	π'_j

Show inequity aversion, social welfare max.

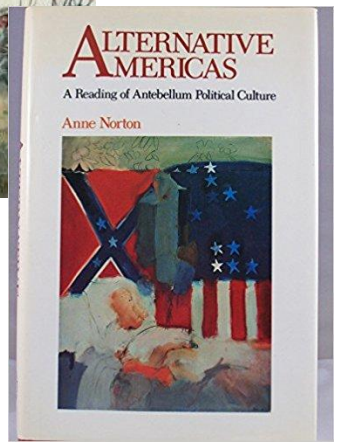
People not only self-interested.

Fehr & Schmidt (1999), Bolton & Ockenfels (2000), Andreoni & Miller (2002), Charness & Rabin (2002)

Reality Check on Social Preference Experiments

- Group conflict feature of human history
  - Groups defined on religion, "race," nationality, culture
  - NOT inequity averse: Forcibly extract labor, resources from others

  - Country and regional borders, civil wars, alternative identities



Experiments: Group Conflict, Identity, Social Prefer

- Social Psychology Experiments (1950's – 1970's)
  - Robbers Cave (Sharif & Sharif)
  - Minimal Group Experiments (Tajfel & Turner)

- Social Preferences and Groups – Chen & Li (2009)
  - Minimal Groups

  - Allocate income to self and others
    - in-group vs. out-group

  - Results: less inequality averse to those in other group

Social Preferences Estimation

- $U_i(\pi_i, \pi_j) = \beta_i \pi_i + \rho_i(\pi_i - \pi_j)r + \sigma_i(\pi_j - \pi_i)s$
- β_i weight on own income
- ρ_i weight on income difference for $\pi_i > \pi_j$ $(r = 1; s = 0)$
- σ_i weight on income difference for $\pi_i \leq \pi_j$ $(r = 0; s = 1)$

$\beta_i > 0$	$\sigma_i = 0$	$\sigma_i > 0$	$\sigma_i < 0$
$\rho_i = 0$	*Selfish*	*Total Income Max** *if* $\beta_i - \sigma_i > 0$	*Inequity Averse/ Dominance Seeking*
$\rho_i < 0$	*Inequity Averse/ Total Income Max** *if* $\beta_i + \rho_i > 0$	*Total Income Max** *if* $\beta_i + \rho_i - \sigma_i > 0$	*Inequity Averse*
$\rho_i > 0$	*Dominance-Seeking*	*Inequity Loving ***	*Dominance-Seeking*

But what about ubiquitous group conflict??

- Group conflict feature of human history
  - Groups defined on religion, "race," nationality, culture
  - NOT inequity averse: Forcibly extract labor, resources from others

  - Country and regional borders, civil wars, alternative identities

“Deconstructing bias in social preferences reveals groupy and not-groupy behavior”

Rachel Kranton, Matthew Pease, Seth Sanders, Scott Huettel

PNAS (2021)

"Deconstructing Bias" – Introduction

- *Maybe stronger identification with group ?*

- *Do people who identify more with a group engage in discriminatory behavior?*

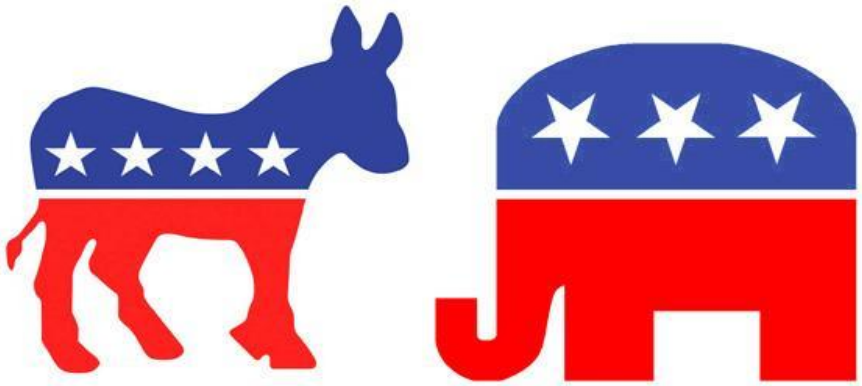
- Findings: No ..... but
  - Groupy vs. Non-Groupy Individuals

    - Some people have no ingroup bias – same towards everyone
    - Some people have strong ingroup bias - destructive
      (consistent with average of "inequity averse")

    - tendency for ingroup bias could be individual tendency

    - …..Individual correlates of groupy/not groupy ?
    - …. Settings/information change behavior towards others?

“Deconstructing Bias” – Introduction



- *Two conditions*: minimal group, political group – w/i subject
- *Individuals*: more or less identify with assigned group
- Replicate ingroup bias on average, but large heterogeneity

Groupy vs. Not Groupy individuals

"Deconstructing Bias" – Overview of Experiment

- Duke University subject pool - no deception lab
- Schematic of experimental session:

Instructions	3-5 minutes
Asocial Control 52 Choices	12 minutes
Minimal or Political Group Treatment Survey 78 Choices	2-5 minutes 17 minutes
Minimal or Political Group Treatment Survey 78 Choices	2-5 minutes 17 minutes
Post-experiment Survey	10 minutes

- Paid for one choice in each – control, MG, POL group

"Deconstructing Bias" – Overview of Political Treatment

- Political Group: participants self-identified as

Democrat Republican Independent None of the Above

closer to Dem closer to Rep

Democrats

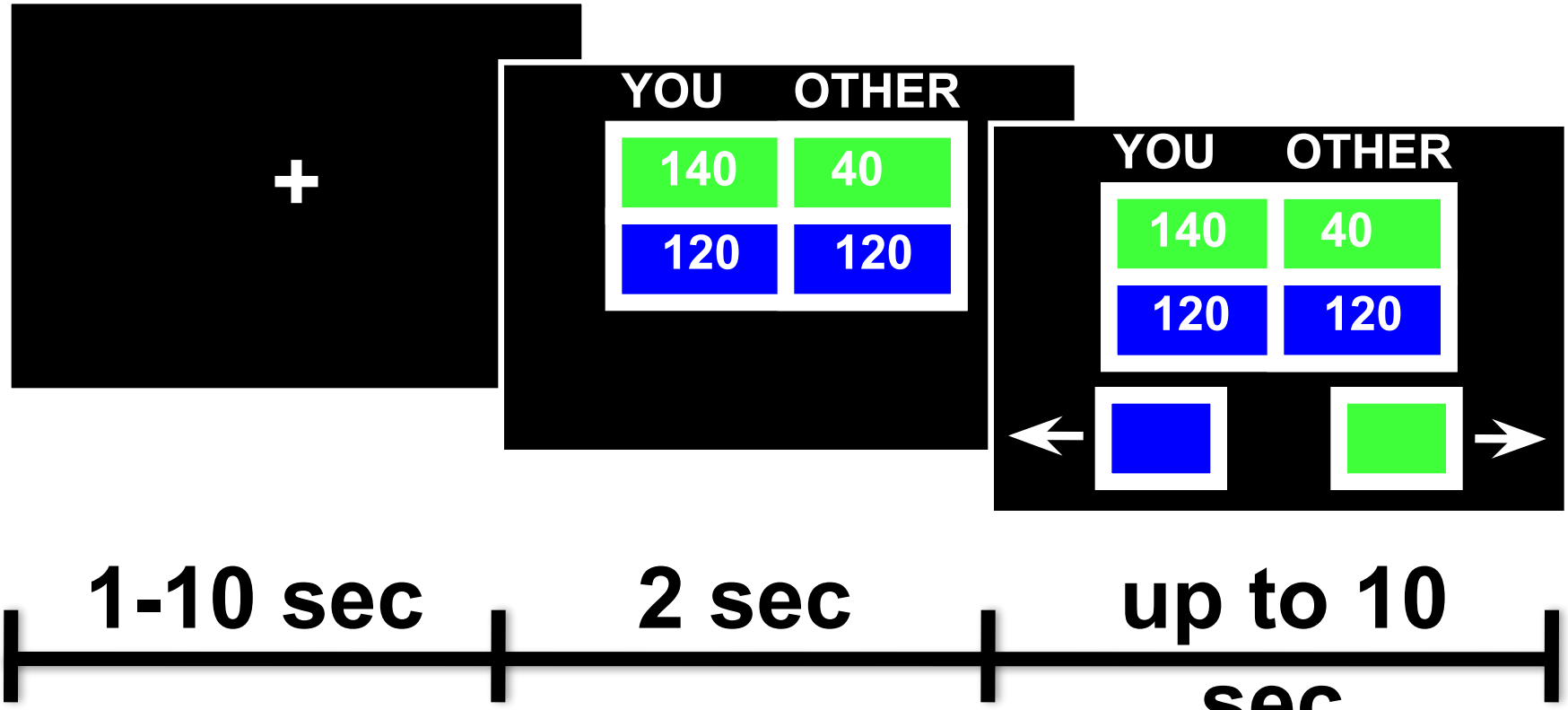
D-Leaning Ind

Republicans

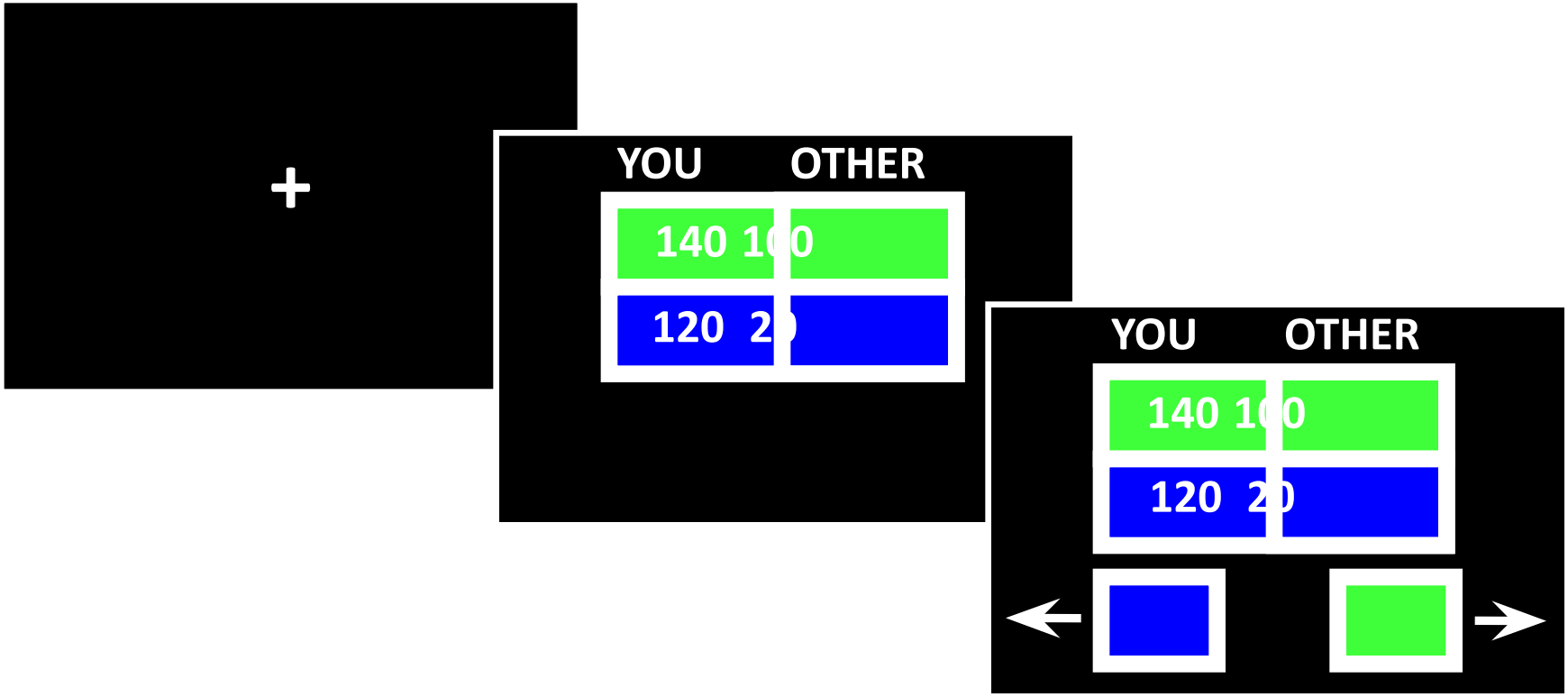
R-Leaning Ind

"Deconstructing Bias" – Details of Experimental Task

- Allocation choices, timed as follows:



- 26 matrices, 26x7 = 208 decisions per subject
- Top, bottom, green, blue, left, right: all randomized

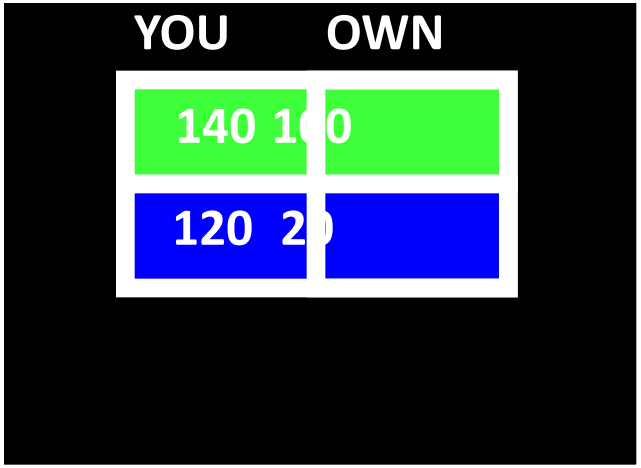


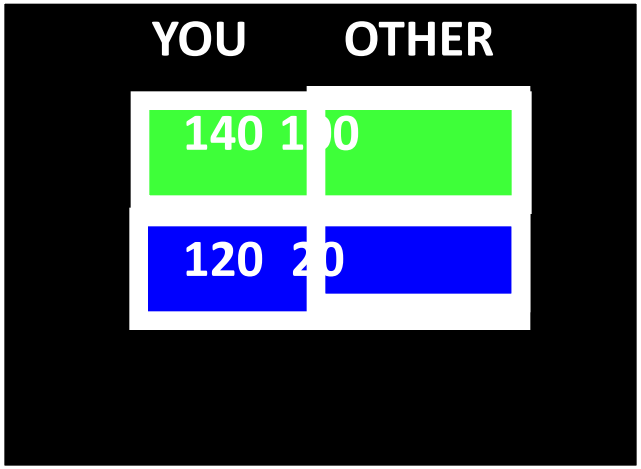
Choose Bottom **= Dominance-Seeking/Inequity Loving**

"Deconstructing Bias" – Basic Results - Favoritism

- Consider individual "favoritism" in allocating income

  For an individual *i* in condition g, for a given matrix *m*:





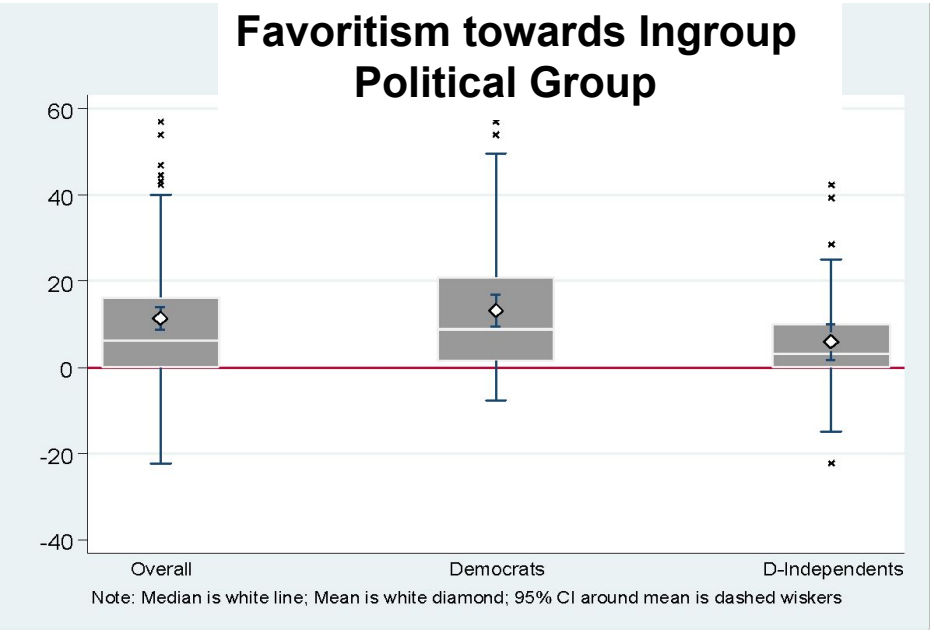
Income given to own – Income given to other

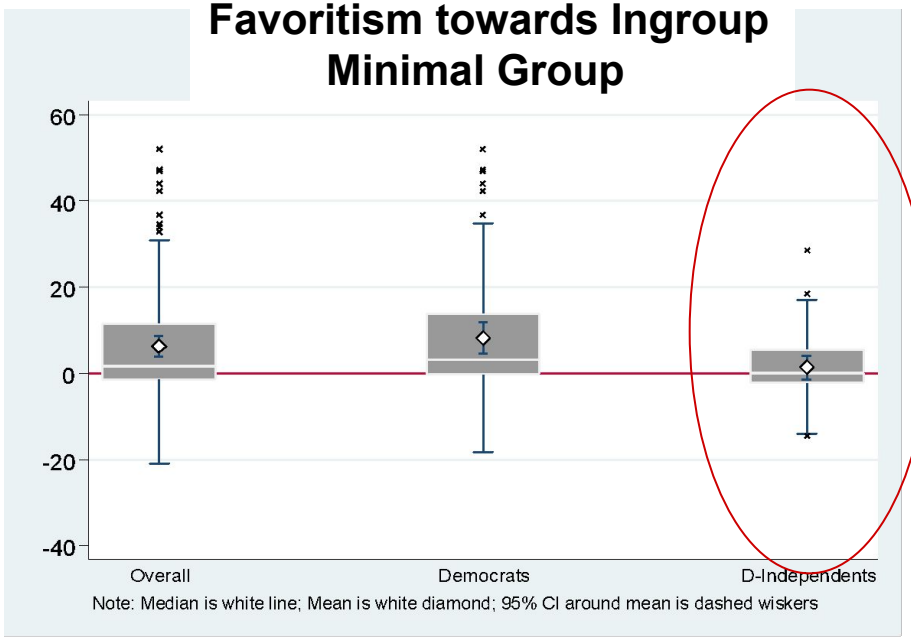
E.g., (100 – 20)

Average across *m* gives "favoritism" for individual *i* in *g*

- *i*'s favoritism in *g* = MG, and *i*'s favoritism in *g* = POL

“Deconstructing Bias” – Basic Results - Favoritism





All **Democrats** **D-Indep**

13.19 **5.83**
(1.89) **(2.15)**

Δ: 7.36
(3.08)

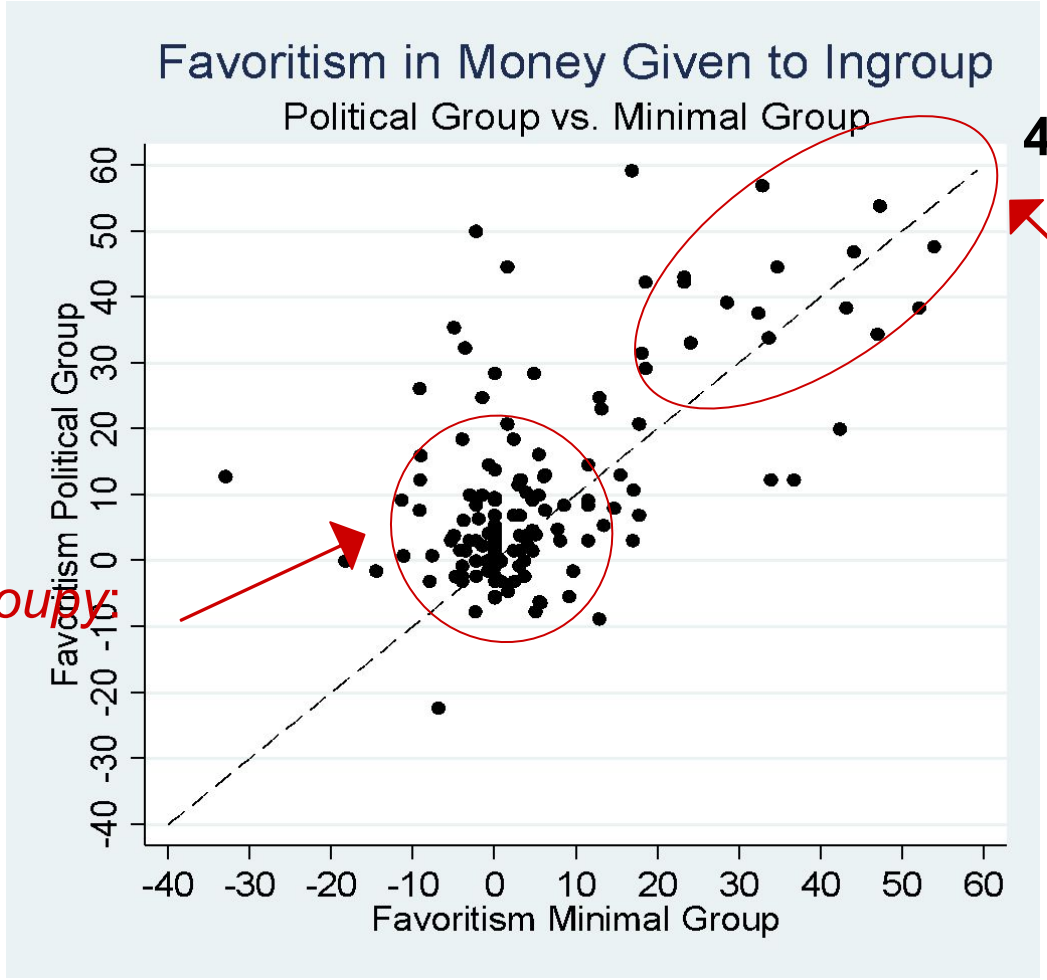
Δ Δ : 0.6
(2.6)

All **Democrats** **D-Indep**

8.14 **1.38**
(1.85) **(1.39)**

Δ: 6.76
(2.81)

“Deconstructing Bias” – Basic Results - Favoritism



45^0 POL= MG

Groupy

Not Groupy:

Correlation 0.63 **Linear Regression $R^2 = 0.4$**

"Deconstructing Bias" – Social Preferences (replication)

- $U_i(\pi_i, \pi_j) = \beta_i \pi_i + \rho_i(\pi_i - \pi_j)r + \sigma_i(\pi_j - \pi_i)s$
- β_i weight on own income
- ρ_i weight on income difference for $\pi_i > \pi_j$ $(r = 1; s = 0)$
- σ_i weight on income difference for $\pi_i \leq \pi_j$ $(r = 0; s = 1)$

$\beta_i > 0$	$\sigma_i = 0$	$\sigma_i > 0$	$\sigma_i < 0$
$\rho_i = 0$	*Selfish*	*Total Income Max** *if* $\beta_i - \sigma_i > 0$	*Inequity Averse/ Dominance Seeking*
$\rho_i < 0$	*Inequity Averse/ Total Income Max** *if* $\beta_i + \rho_i > 0$	*Total Income Max** *if* $\beta_i + \rho_i - \sigma_i > 0$	*Inequity Averse*
$\rho_i > 0$	*Dominance-Seeking*	*Inequity Loving ***	*Dominance-Seeking*

"Deconstructing Bias" – Individual Social Preferences

- Individual Estimates – Mixing Model
  - estimate $(\beta_t , \rho_t , \sigma_t)$ for given number of "types" $t = 1, \ldots n$.
  - estimate for $t = 4$
  - (just enough, 5 does not give much more precision)
  - *data* gives parameters of "types" & % of pop of each type

- Given "types," categorize each individual as a type
  - each individual has a type in each treatment and for each pairing

- Identify groupy vs. non-groupy individuals –
  - not groupy = same utility type own v.s other
  - groupy = different utility type own vs. other

“Deconstructing Bias” – Groupy/Non-groupy Individuals

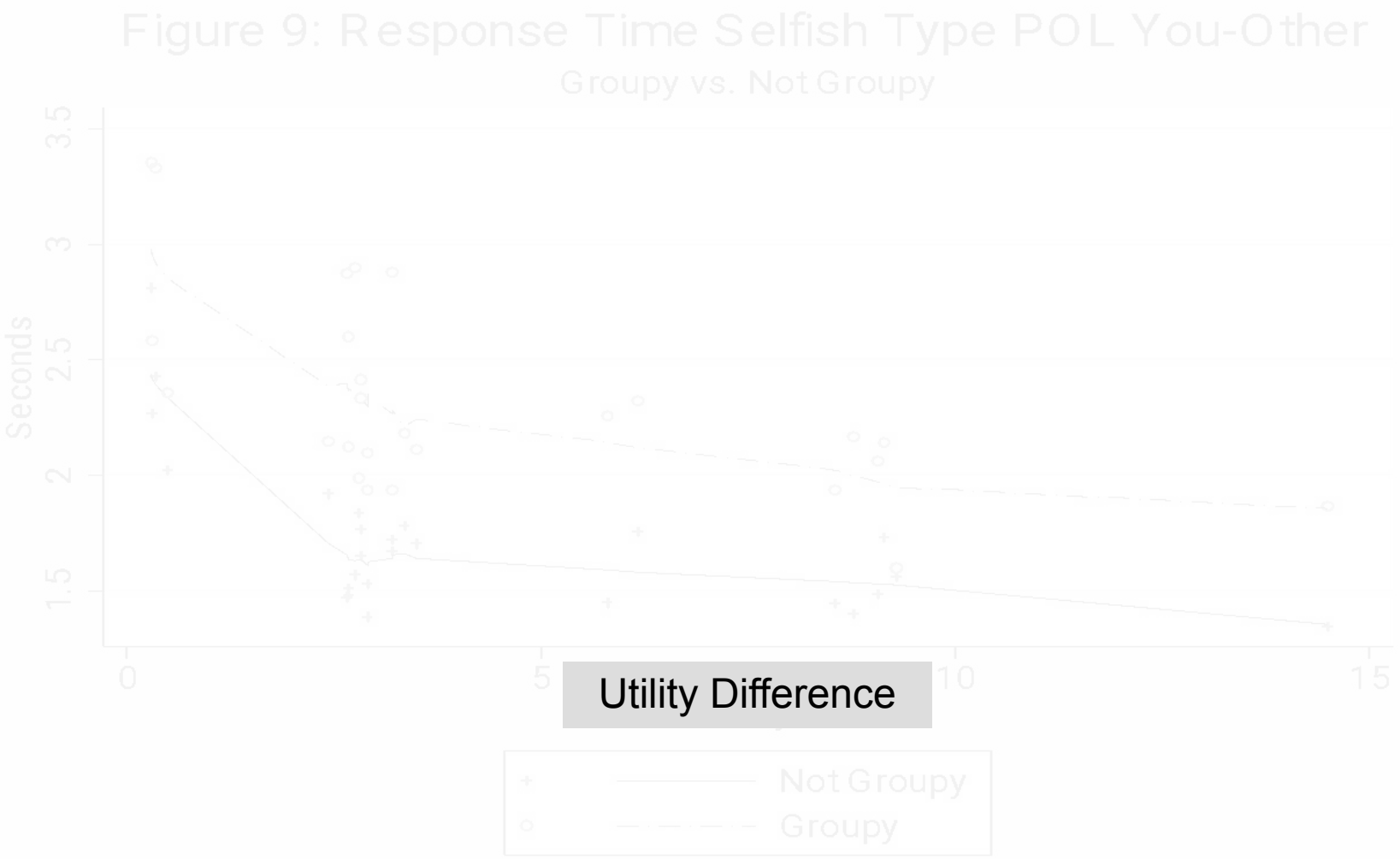
Cross Tabulations of Subjects’ Types

Minimal Group You-Own		Minimal Group You-Other: SELFISH	TOTAL INC	INEQUI	DOMIN	Total
	SELFISH	34	3	1	0	38
	TOT INC MAX	3	12	8	4	27
	INEQUITY A	4	4	36	10	54
	DOMIN	0	0	0	4	4
	Total	41	19	45	18	123

- Diagonal = non-groupy – same preferences toward in and outgroup
- Off – diagonal = groupy – distinguish between in and outgroup

- Dominance seeking vis a vis Other

“Deconstructing Bias” – Groupy/Non-groupy Individuals



“Deconstructing Bias” – Groupy/Non-groupy Correlates

	Groupy (N=85)	Not Groupy (N=48)	P-Val
Female	65%	65%	0.98
African American	19%	19%	0.99
Born in United States	85%	78%	0.32
Mostly Distrust Strangers	68%	69%	0.95
No Religious Attendance	23%	29%	0.42
Political Party			
Republican	14%	13%	0.44
Democrat	54%	40%	0.11
Political Independent *	32%	48%	0.06
Lived with Both Parents	74%	83%	0.22
Mother Advanced Degree	35%	46%	0.24
Father Advanced Degree **	48%	69%	0.02

“Deconstructing Bias” – Groupy/Non-groupy Correlates

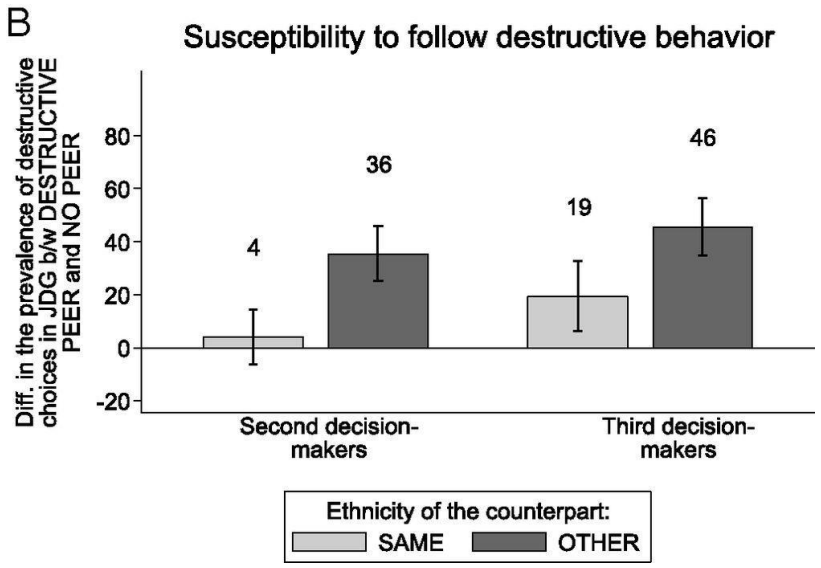
- Groupiness correlated “real-world” behavior/demog
  - Political affiliation
    - In the main study and in follow up M-Turk study
  - Regional differences (Mturk)
    - Republicans in Deep South
    - Decline in jobs from manufacturing (selection?)

"Social contagion of ethnic hostility" (PNAS, Bauer et. al. 2018)

- **PNAS, Bauer et. al. 2018**
- Study of destructive behavior "Joy of Destruction" game
  - Two counterparts each receive €2.
  - Simultaneously choose to pay €0.20 to reduce other's income by €1.
- Comparison of behavior towards majority or minority co-ethnic counterpart
  - Slovak vs. Roma counterpart
  - Slovak high school student participants
  - Counterpart was Same (Slovak) or Other (Roma)
    (distant school, last name indicator)
- Comparison of behavior when others' choices observed or not
  - Three participants, decisions made sequentially vis à vis counterparts
  - One of three decisions was implemented

"Social contagion of ethnic hostility" (PNAS, Bauer et. al. 2018)

- Results – large influence of peers' behavior
  - First movers Destructive or Peaceful uncorrelated with observable charact.
  - First and second movers greatly influenced later choices
  - *Influence more than double when counterpart was Roma*



Empirical work on identity

- What “identity effects” can we observe in data?
- With emphasis on inequality…..
  - Two studies – gender, ethnic/religious conflict
  - Research innovatively exploiting data sets.

Empirical work on the identity

"Gender Identity and Relative Income within Households"

Bertrand, Kamenica & Pan (2013)

- Gender norms in US = women *shouldn't* earn more than men
- US administrative data, US Census data
- Distribution of share of household income earned by wife exhibits a discontinuity at ½.
- When a randomly chosen woman becomes more likely to earn more than a randomly chosen man, marriage rates decline.

Empirical work on the identity

"Persistent Antimarket Culture: A Legacy of the Pale of Settlement after the Holocaust" Grosfeld, Rodnyansky & Zhuravskaya (2013)

- Voting patterns, attitudes towards markets relate to pre-WWII Jewish population in area in Russia.
- People who lived in separated communities developed animosities toward each other, and opposite values.
- Region = either side of Pale of Settlement
- Jews deported/killed during WWII – no Jews left
- Difference in attitudes on different sides of the border

Summary & Directions for Future Research

- Social groupings are important features of patterns of inequality.

- Theories give different implications for policy.
  - In a model of individual choice, people from different groups face different constraints, technology. Necessarily have worse outcomes.
    - Policies- remove constraints, improve technology.
  - In a model of strategic interaction, there can be equilibria where people from different groups have worse outcomes.
    - Policies – law, collective action to change equilibrium.
  - In a model where preferences and identity norms are key, people from different groups may have different outcomes due to norms, preferences, social exclusion, social/strategic interactions.
    - Policies – change social arrangements, social meanings of action, categories and norms . .

Summary & Directions for Future Research

- Social groupings are important features of patterns of inequality.
- *Theory:* Develop deeper theory as to how norms, categories emerge and evolve.
- *Experiments:* field studies/geographic variation – how do different norms/identity play out in different places ?
- *Empirics:* use of "natural experiments" to find "exogenous" variation - also possible interplay between experiments and survey data?