Group Identity

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Introduction

- Will present some very preliminary work on group identity.

- Our behavior is shaped by our identities (e.g., class, gender, race, nationality).

- Crucial first steps have been made towards modeling identity (e.g., by G. Akerlof and Kranton, Benabou and Tirole, Shayo, Carvalho).

Introduction

- But, there are many outstanding questions:
  - Why are “minimal groups” salient?
  - How are identities shaped by social interaction?
  - How do “prescriptions” arise/change?
  - How to explain disagreement about who is part of a group?
  - Multiple identities?

Introduction

- Goal: try to make progress towards understanding how identities form.

- I'll start with a very simple model; accounts for the findings of "minimal group" studies.

- Will then add layers to build a richer picture.

Introduction

- The model explores how identities are shaped by the desire for esteem.

- Builds on an earlier paper of mine, which explores how *values* are shaped by the desire for esteem.

- In that paper, agents care both about *self-esteem* and *peer esteem*:
  - Desire for peer esteem motivates conformity in choice of values.
  - Desire for self-esteem motivates differentiation.

Introduction

- Here:
  - Desire for peer esteem motivates identification with peers.
  - Desire for self-esteem motivates disidentification.
- Intuition:
  - People adopt self-serving beliefs/"narratives" about their identity groups, become partisans for their groups.
  - Benefit of a larger identity group: more people who are partisan for your group (peer esteem).
  - Benefit of a smaller identity group: it is more special to be a member (self-esteem).
  - "When everyone is somebody, then no one's anybody." – The Gondoliers, Gilbert & Sullivan

Introduction

Before turning to the details of the model, let me take a step back to put things into a larger context.

The broad topic:

- Belief formation — in particular, the role of social interaction in shaping beliefs.

- Two types of beliefs:

  1. Positive: what is the world like?

  2. Normative: what is better/worse?

Introduction

- Values: a type of normative belief.

- Identity: a package of beliefs.

  1. Who am I? Who are others?
     - Beliefs about own type and others type
     - Identification: belief that aspects of type are shared.
  2. How are people of a certain type supposed to behave? ("Prescriptions")

Introduction

A Useful Framework: Demand and Supply of Beliefs

1. Demand: What do I want to believe?
   - Esteem considerations fit in on the demand side.
2. Supply: What am I able to believe?
   - Information constrains positive beliefs.
   - Ethical principles constrain normative beliefs.
   - Arguably, beliefs of other agents — independent of their informational content — are constraining.

Introduction

- Standard economics: all about supply.
- No normative beliefs; information is the only thing on the supply side.
- Much to be learned by loosening supply, introducing demand-side considerations.
- My focus will be almost exclusively on the role of demand in shaping identities.
- In particular, I assume in the baseline model that agents are unconstrained regarding the identities they can adopt.

Setup

Population P consisting of N agents.

Achievement level of agent i, a_i, is exogenously given.

$T = \{1, 2, ..., M\}$ denotes the set of possible identities for agents.

$M \geq N$.

Setup

Utility of agent i given by:

$$U_i = \beta \cdot E_i^i + \frac{1}{N} \sum_{j \in I_i} E_i^j$$

I_i: agent i's interaction group.

$\beta \in (0, 1)$: weight placed on self-esteem.

Setup

Esteem:

$$E_l^i = [\bar{a}(t_l) + b_i(t_l)] - [\bar{a} + \bar{b}_i].$$

$\bar{a}(t_l)$: the average achievement within l's identity group (t_l).

$b_i(t_l) \in [0, 1]$: agent i's belief about how much better identity group t_l is than it appears based on its achievement.

$\bar{a}$: the average achievement of the whole population.

$\bar{b}_i$: the average value of b across the whole population.

Setup

Time 1

Each agent chooses an identity (t_i).

Time 2

Agents choose:

1. Beliefs about how much better each group is than it appears ($b_i(t) \in [0, 1]$ for all t).
2. With whom to initiate interaction ($x_i^j \in \{0, 1\}$ for all $j \neq i$).

Agents i and j interact if they both initiate it ($x_i^j = x_j^i = 1$).

Agents prefer to initiate interaction if otherwise indifferent.

Homogeneous Case

Simple Case: Homogeneous Achievement

Can analyze the game by backward induction.

Take identity choices at time 1 as given and consider time 2.

Agents will choose to view their own identity groups as better than they appear ($b = 1$) and other groups as no better ($b = 0$).

Agents will interact exclusively with those in their own group.

Homogeneous Case

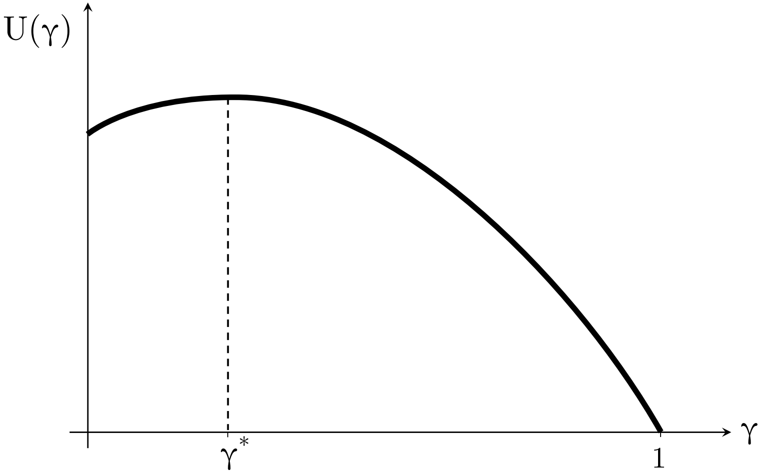
Utility from membership in an identity group containing a fraction γ of the population:

$$U(\gamma) = (\gamma + \beta - \frac{1}{N}) \cdot (1 - \gamma).$$

To avoid "integer issues," will focus on case where $N \to \infty$:

$$U(\gamma) = (\gamma + \beta) \cdot (1 - \gamma).$$

Homogeneous Case



Homogeneous Case

Group size that maximizes utility is:

$$\gamma^* = \frac{1-\beta}{2}$$

γ^* is lower when agents care more about self-esteem (β is larger).

Homogeneous Case

Agents divide into groups of equal size in equilibrium.

In equilibrium, it cannot be profitable to:

1. Switch groups.

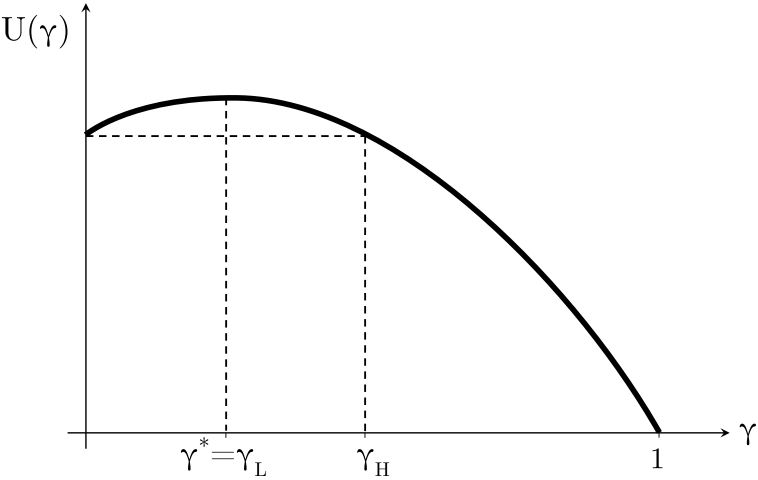
   $\implies \gamma_{eq} \geq \gamma_L$

2. Start a new group.

   $\implies \gamma_{eq} \leq \gamma_H$

Homogeneous Case

Equilibrium Group Size:



Homogeneous Case

$\gamma_L = \gamma^* = \frac{1-\beta}{2}$.

$\gamma_H = 1 - \beta$.

Both the upper and lower bounds on the group size are decreasing in concern about self-esteem (β).

Homogeneous Case

Let G_{eq} denote the equilibrium number of groups.

Corresponding size of groups in equilibrium: $\gamma_{eq} = \frac{1}{G_{eq}}$.

G_{eq} can be any integer satisfying:

$$\gamma_L \leq \frac{1}{G_{eq}} \leq \gamma_H.$$

Homogeneous Case

Remarks

- Accounts for the findings of "minimal group" studies.
- Random division of subjects (e.g., into Klees and Kandinskys).
- Subjects view their own groups as superior; care about the relative amount awarded to groups.
- Haslam (2001): "[The] quest for *positive distinctiveness* means that when people's sense of who they are is defined in terms of 'we' rather than 'I', they want to see 'us' as different to, and better than 'them' in order to feel good about who and what they are."

Forced Interaction

So far, we've assumed agents are free to choose their interactions.

What if agents are forced to interact?

How does this affect identity choice?

If agents are forced to interact, they care more about obtaining one another's esteem $\Longrightarrow$ increases incentive to identify.

Forced Interaction

Suppose agents do not choose interactions at time 2.

Instead, agents are exogenously partitioned into interaction groups: $I^1, I^2, ..., I^k$.

Result: People identify with the set of people they are forced to interact with.

Remark: In line with results of Robber's Cave Study (Sherif).

Heterogeneous Case

Suppose, once again, agents choose their interactions.

But, now, they are heterogeneous.

Heterogeneity introduces an additional consideration.

Agents gain self-esteem by identifying with high achievers, lose self-esteem by identifying with low-achievers.

Heterogeneous Case

Might think equilibria do not exist:

- Low achievers want to identify with high achievers; high achievers do not want to identify with low achievers.

But, desire for peer esteem creates some willingness to identify with low achievers.

Let $\Delta = a_{\max} - \bar{a}$: a measure of inequality.

Whether equilibria exist (and what they look like if they do) depends upon Δ.

Heterogeneous Case

For simplicity, will focus on equilibria in which all groups have the same level of achievement: $\bar{a}(t) = \bar{a}$ for all t.

In equilibria of this type, groups will be of the same size.

More generally, inability to exclude means all groups must yield the same utility.

Heterogeneous Case

As before, in equilibrium, it cannot be profitable to:

1. Switch groups.

   $$\implies \gamma_{eq} \geq \gamma_L(\Delta)$$

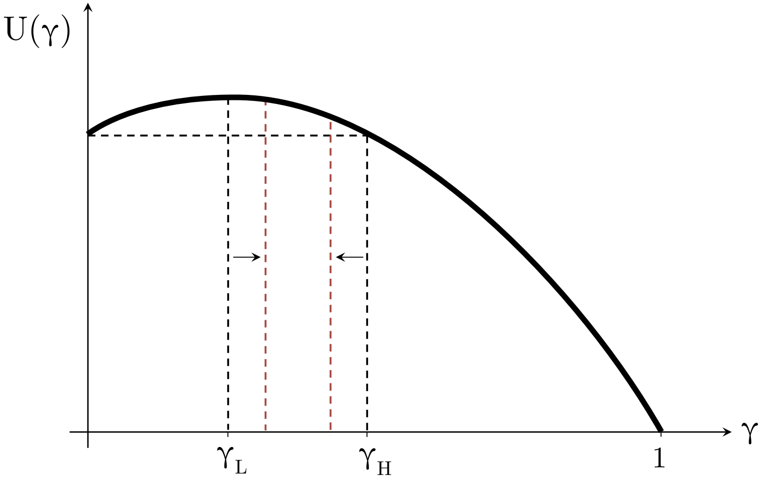
2. Start a new group.

   $$\implies \gamma_{eq} \leq \gamma_H(\Delta)$$

In both cases (1) and (2), it is the highest achievers who are most tempted to deviate.

Heterogeneous Case

Δ increases:



Heterogeneous Case

If $\gamma_L > \gamma_H$, equilibria do not exist.

Can show that $\gamma_L < \gamma_H$ if and only if Δ is below a cutoff (Δ_{max}).

Δ_{max}: bound on the amount of inequality that can be sustained.

Δ_{max} is decreasing in β (concern about self-esteem).

Heterogeneous Case

$$\gamma_L = \tfrac{1}{4}(1-\beta+\Delta) + \tfrac{1}{4}\sqrt{(1-\beta+\Delta)^2 + 8\Delta}$$

$$\gamma_H = \tfrac{1}{2}(1-\beta) + \tfrac{1}{2}\sqrt{(1-\beta)^2 - 4\beta\Delta}$$

$$\Delta_{\mathsf{max}} = \tfrac{1}{\beta}((\tfrac{1}{2}+\beta)\sqrt{4+5\beta^2} - (2\beta^2 + \tfrac{3}{2}\beta + 1))$$

Heterogeneous Case

Remarks

- Benedict Anderson: nationalism is in tension with the tendency of elites to form common, cross-national identities.
- Medieval Europe: Latin served as a common language for the elite; French and German were the languages of the Romanov court.
- Railways, newspapers, schools often seen as forces leading to nationalism (see, for instance, Weber (1976))
  - In terms of the model, can think of these as promoting within-country interaction.
- Rising inequality today: a strain on nationalism?

Exclusion

We've assumed so far that it's impossible to exclude agents from identity groups.

What if it is possible?

Two reasons to exclude:

1. High achievers' self-esteem is reduced by identification with low achievers.

2. Even in the absence of heterogeneity, groups may be larger than optimal ($\gamma > \gamma^*$).

Exclusion

The following is a simple way to model exclusion.

Time 1a:

Each agent chooses the identity he would like to hold ($\tilde{t}_i$).

Time 1b:

Any agent can oppose agent i's choice of identity at cost $\frac{C}{N}$.

Exclusion

$\Longrightarrow$ Agent i acquires the identity of his choice if unopposed ($t_i = \tilde{t}_i$).

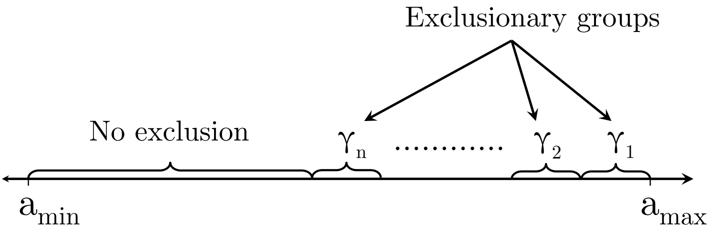
$\Longrightarrow$ Otherwise, agent i acquires an identity no other agent holds.

Exclusion

Case 1: $a_{\max} - a_{\min} < 1$

High ability to form self-serving beliefs about where one stands in the distribution.

If equilibria exist, they look as follows:

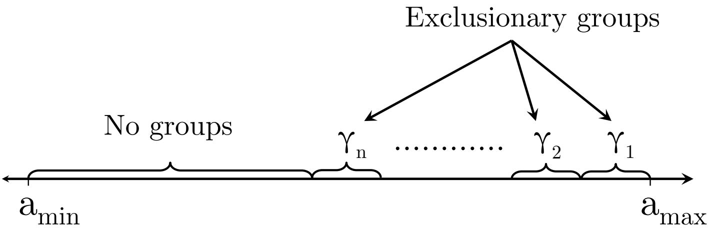


Exclusion

Case 2: $a_{\max} - a_{\min} > 1$

Agents less able to form self-serving beliefs about where they stand in the distribution.

Can get equilibria of the following type:



Exclusion

Suppose achievement is uniformly distributed between $a_{\min}$ and $a_{\max}$.

The amount of exclusion is:

1. Decreasing in the cost (C).
2. Increasing in inequality ($a_{\max} - a_{\min}$).
3. Increasing in concern about self-esteem (β).

Exclusion

Remark:

If agents lack sufficient pride over their achievements, they do not form groups.

A possible story for "burnouts" in high schools? (See Eckert (1989))

Exclusion Revisited

More realistic approach to exclusion?

Baseline model assumes: if agent j asserts to be part of group t, agent i accepts it.

What if agent i can disagree, choose to believe agent j is t' rather than t?

That is, suppose agent i, in addition to choosing his own identity group, chooses $t_i(k)$ for each agent k.

Exclusion Revisited

How does unwillingness of i to accept j as a type t affect agent j?

1. Harder for j to believe himself to be a type t (supply-side effect).
   - Especially if agent i considers himself — and is considered by others — to be a type t himself.
2. Reduces j's desire to identify as a type t (demand-side effect).
   - If agent i considers himself to be type t, he fails to accord j the peer esteem he would to a fellow t.
   - Additionally — and maybe more importantly — agent i sees j as a *pretender*; agent j is only "acting t" in the view of i.
   - Agent i disesteems j for violating the norm/prescription that one should be true to who one is.

Exclusion Revisited

What are i's incentives to accept j as a type t?

1. It may be hard to believe j is a t' if others consider j to be a type t (supply-side effect).

2. If i accepts j as a fellow type t, j will be willing to interact with i and give i peer esteem. (demand-side effect)

3. If j is a high (low) achiever, it raises (lowers) i's self-esteem to claim j as a fellow type t. (demand-side effect)

Exclusion Revisited

We get a relatively simple model if we:

1. Focus on the demand-side effects.

2. Plus, assume it is prohibitively costly for i to believe j is part of i's identity group $(t_i(i))$ unless j agrees.

Exclusion Revisited

Time 1a:

Each agent chooses his own identity group ($t_i(i)$).

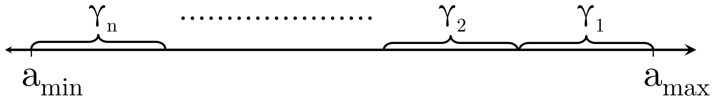
Time 1b:

Each agent chooses beliefs about the identities of other agents ($t_i(j)$, $j \neq i$).

Therefore, agent i decides whether to accept/reject the identity j asserts for himself.

Exclusion Revisited

If $a_{\max} - a_{\min} < 1$ and agents are not too concerned about self-esteem (β low), equilibria look as follows:



Exclusion Revisited

Extension 1

Suppose agents consider themselves more representative of their groups than they in fact are (i.e., overweight their own achievement in computing the group average.)

Equilibria look similar; but there may be disagreement among type t's about who is in the group.

High achievers in group t are the least accepting.

An example: In *Pride and Prejudice*, Lady Catherine de Bourgh doesn't really think of the Bennets as gentry; characters of lower social rank do.

Exclusion Revisited

Extension 2

We've assumed: it is prohibitively costly for i to believe j is part of his group if j disagrees.

What if: the cost is low if many people hold the belief that j is part of i's group.

Can get equilibria in which agents are viewed as part of a group whether they like it or not; disesteemed if they try to exit.

Examples: "acting white," clan loyalty.

Multiple Identities/Values

Suppose there are m activities.

Agent i's achievement at activity s: a_{is}.

Agents have multi-dimensional identities: $t_i = (t_{i1}, t_{i2}, ..., t_{im})$.

Agents can also value activities or not: $\theta_{is} \in \{0, 1\}$.

Agent i's esteem for agent l:

$$E_l^i = \sum_{s=1}^{m} \theta_{is}([\bar{a}(t_{ls}) + b_i(t_{ls})] - [\bar{a}_s + \bar{b}_{is}]).$$

Multiple Identities/Values

Individuals think of themselves as belonging to multiple groups.

A group consists of those people sharing type t_{is}.

Each group takes pride in a different type of achievement.

Note: agents can derive pride from individual – as well as group – accomplishments in this framework.

Can also think about people choosing how to value different types of achievement.

Multiple Identities/Values

What do we learn from consideration of a multi-dimensional space?

Observation 1

Agents will be excluded from identity groups unless they have positive esteem for others in the group.

This creates an incentive to:

1. Value one's individual achievements less (be humble).
2. Value others' achievements more.

Multiple Identities/Values

Observation 2

Identities shape values; values, in turn, shape identities.

1. Identities shape values:

   Hochschild (2016): white, working class often identify with the rich; leads them to value their economic success.

2. Values shape identities:

   Ron Chernow: Washington's great desire was to join the British army.

   He held British values, wanted to identify.

Prescriptions

Final topic I'll address: how to incorporate prescriptions.

What are prescriptions?

1. Belief regarding what constitutes "natural behavior" for a person of type t.

2. Plus, a supply-driven normative belief that people should behave naturally, be true to who they are.

Prescriptions

Views regarding what is “natural behavior” for a type t can change.

Example: it’s now considered natural for women to wear pants, wasn’t in the past.

In principle, prescriptions could be used to exclude people from a group.

But, as this gender-related example makes clear, they are not necessarily about exclusion.

Prescriptions

Question: if there are women who *do* wear pants, why not just adjust one's view of what is natural?

A possible answer:

Agents must tell themselves a story to take pride in group achievements.

They must see those achievements as stemming from shared qualities.

Prescriptions

I've implicitly assumed it is easy for agents to tell themselves such stories.

But, it may not be easy (supply-side constraints).

All women wearing dresses $\Longrightarrow$ helps women believe there are indeed shared qualities. (i.e., helps on the supply-side)

Women can say: "yes, we share certain natural ways of behaving."

Conclusion

Goal of this talk has been to develop a framework for thinking about identity formation.

Key focus has been on the role esteem considerations play in shaping identities.

Basic tension: desire for peer esteem drives identification; desire for self-esteem drives disidentification.

Importantly, there are complementarities between different types of beliefs (identities, narratives, values).

Thank You!