

Partisan Unsorting

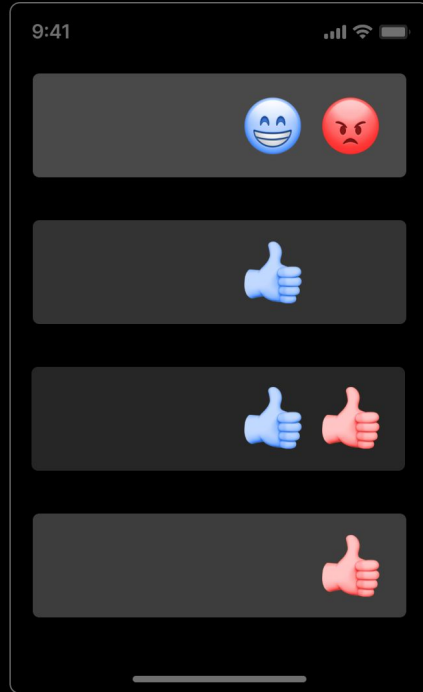
(intuition! arguments! a conjecture!)

Luke Thorburn

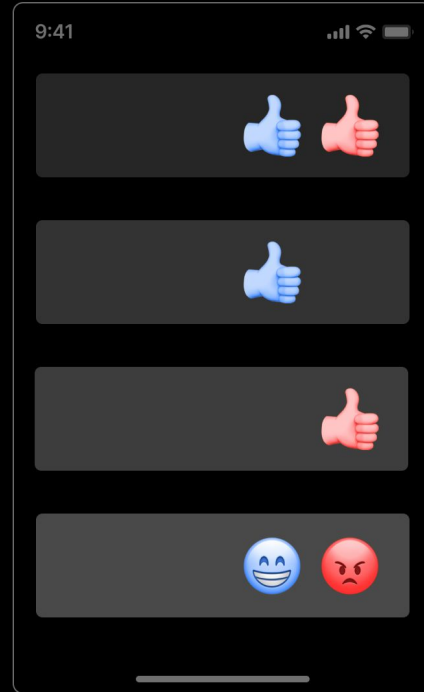
December 2023

Motivation

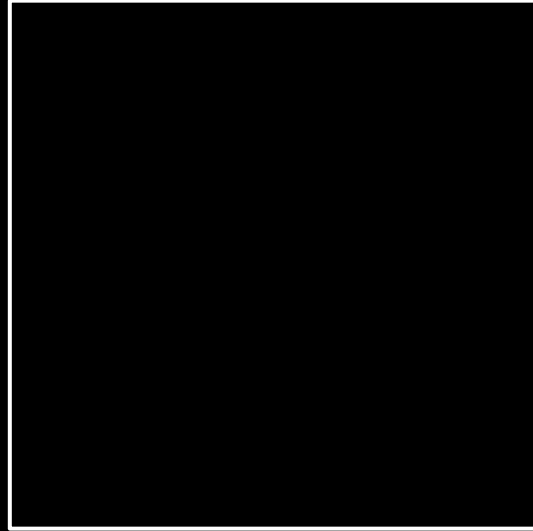
ENGAGEMENT
based ranking
for



BRIDGING
based ranking
for

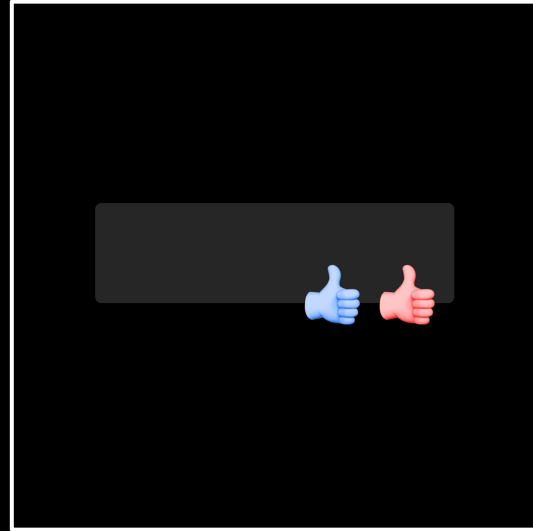


Motivation



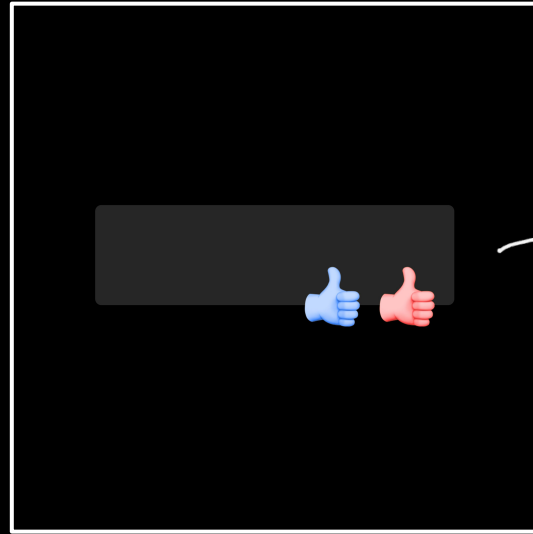
FORMALISM

Motivation



FORMALISM

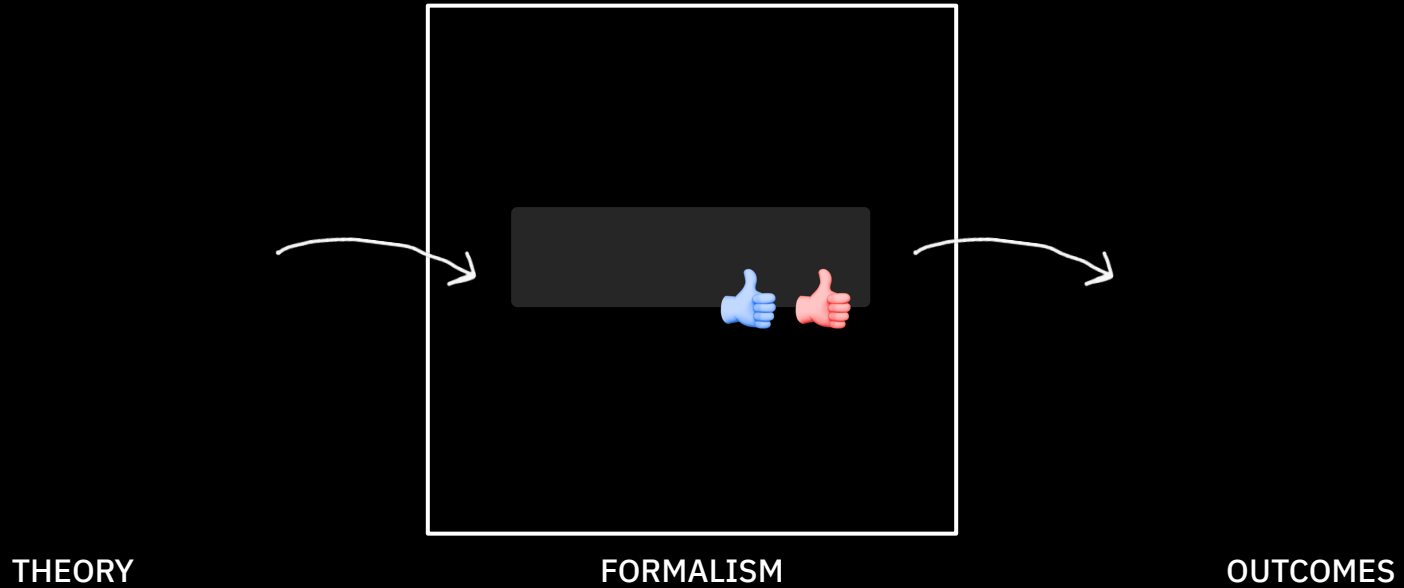
Motivation



FORMALISM

OUTCOMES

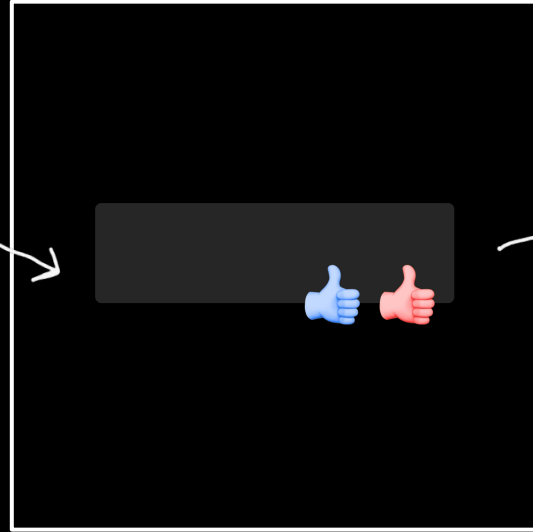
Motivation



Motivation



THEORY



FORMALISM



OUTCOMES

- I. Sortedness
- II. Why unsort?
- III. How to unsort?
- IV. Can we unsort?

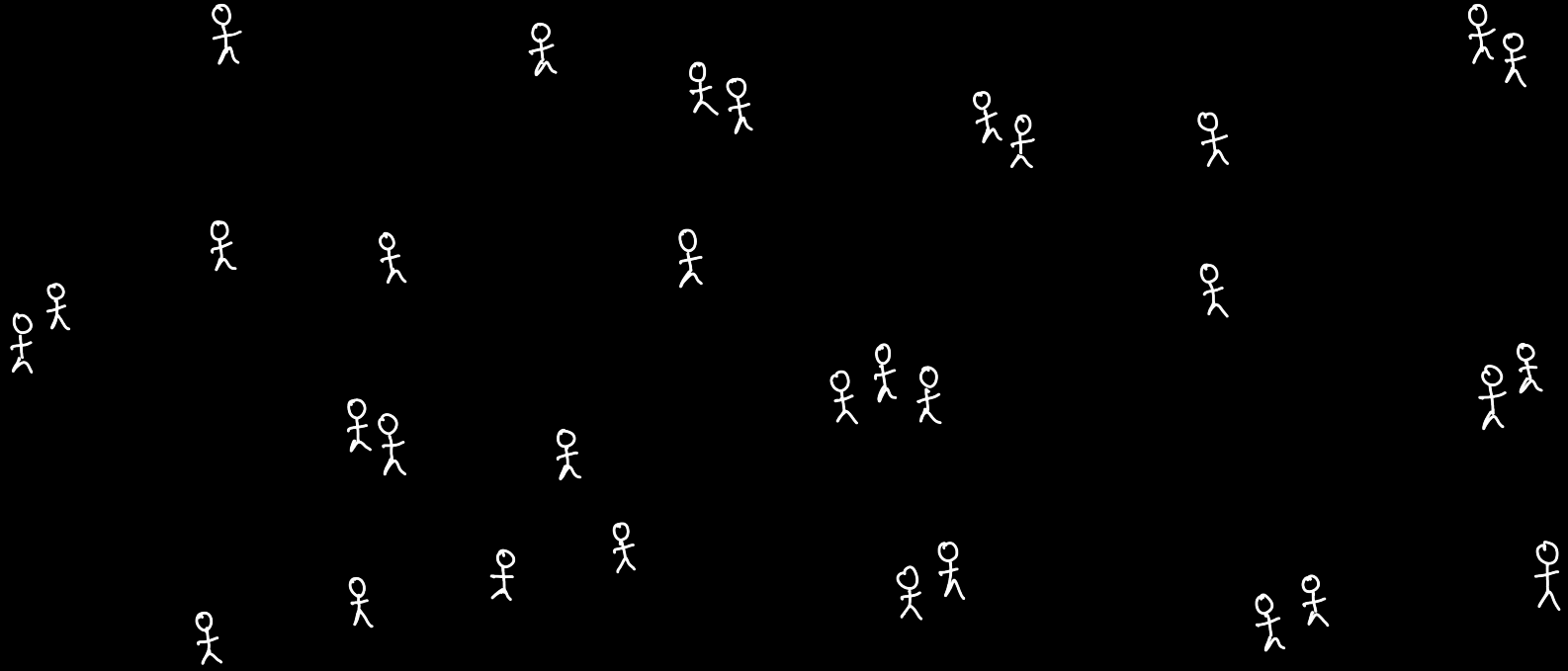
I. Sortedness

II. Why unsort?

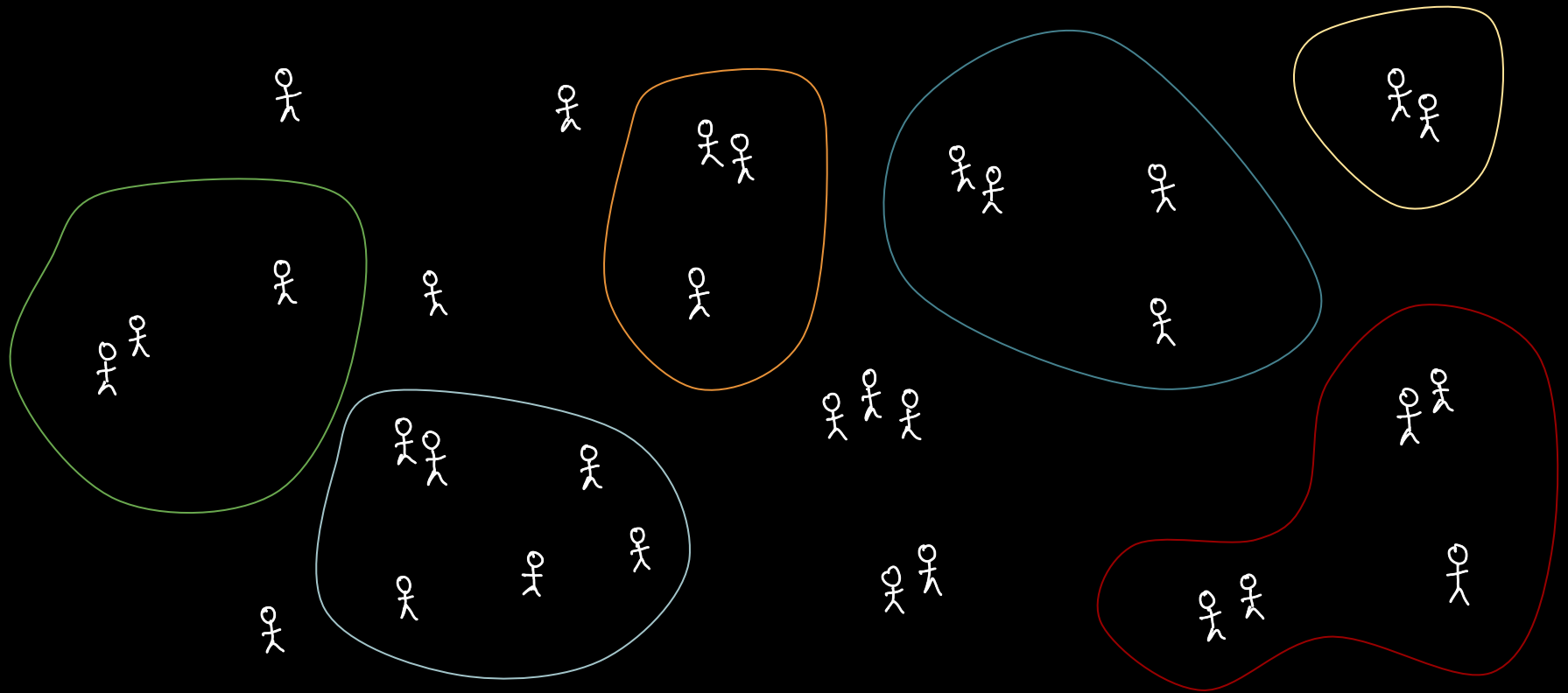
III. How to unsort?

IV. Can we unsort?

Societies are hypergraphs (intersecting groups).



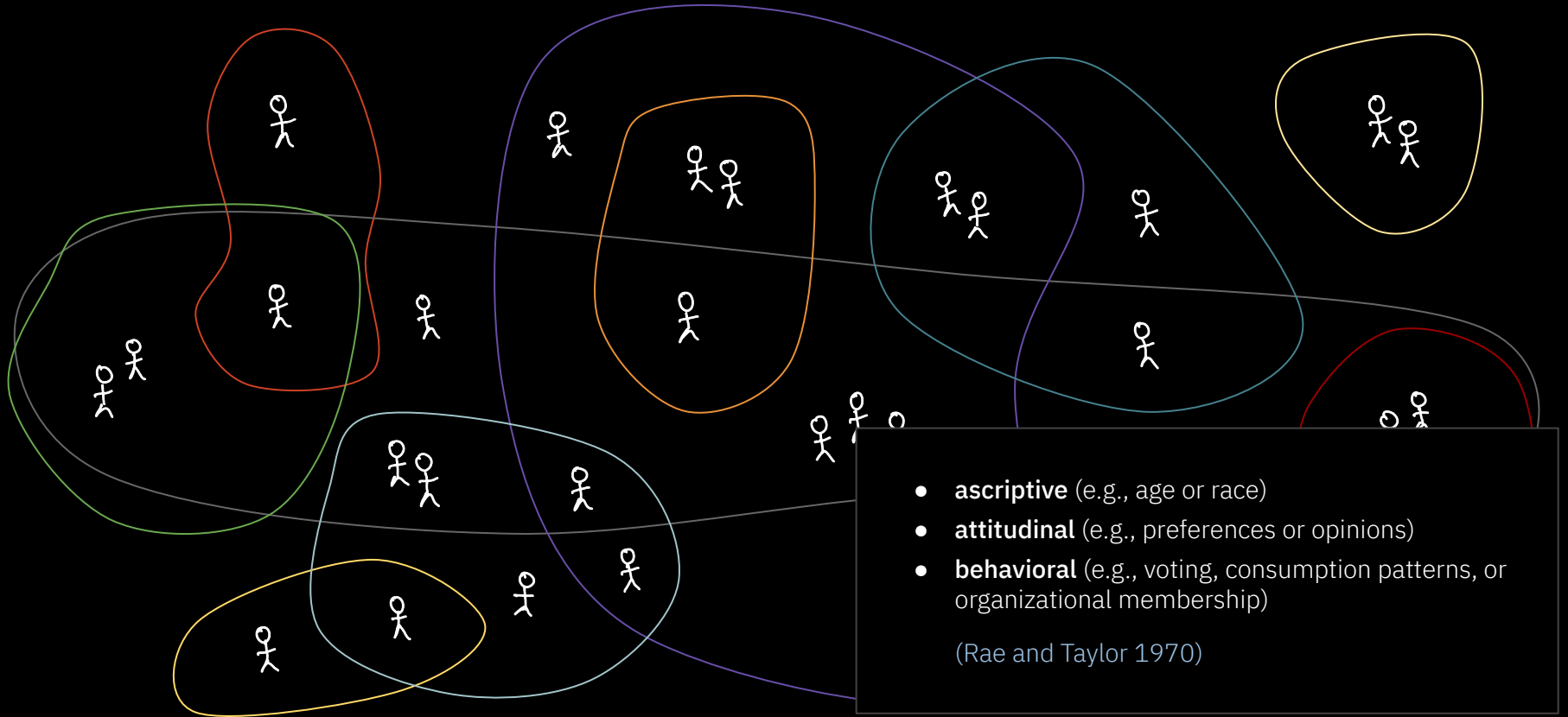
Societies are hypergraphs (intersecting groups).



Societies are hypergraphs (intersecting groups).



Societies are hypergraphs (intersecting groups).



- **ascriptive** (e.g., age or race)
- **attitudinal** (e.g., preferences or opinions)
- **behavioral** (e.g., voting, consumption patterns, or organizational membership)

(Rae and Taylor 1970)

Societies are hypergraphs (intersecting groups).



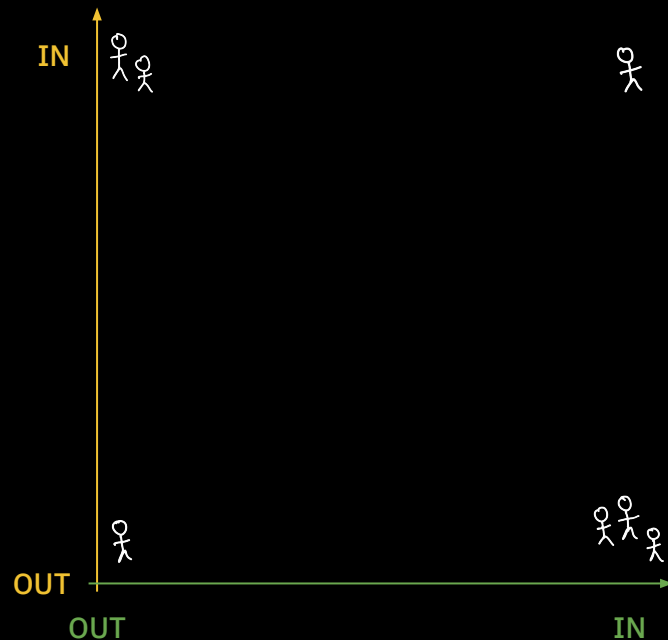
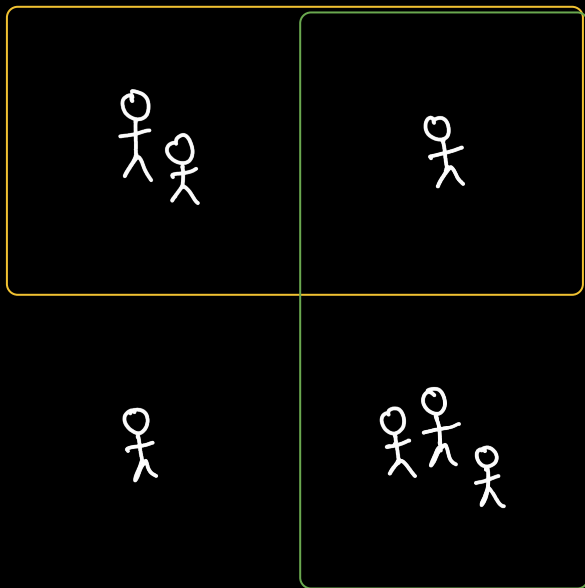
How to quantify the overall amount of crosscutting?



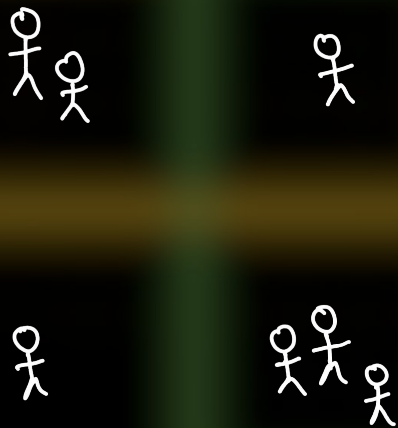
How to quantify the overall amount of crosscutting?



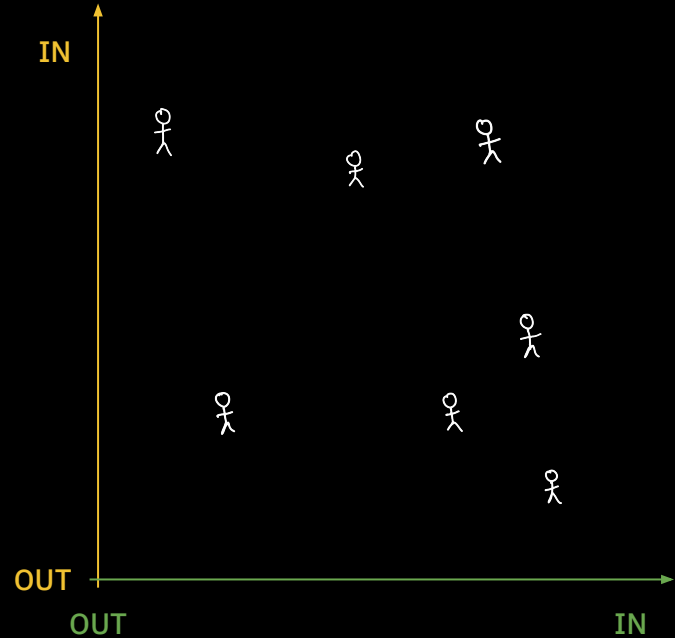
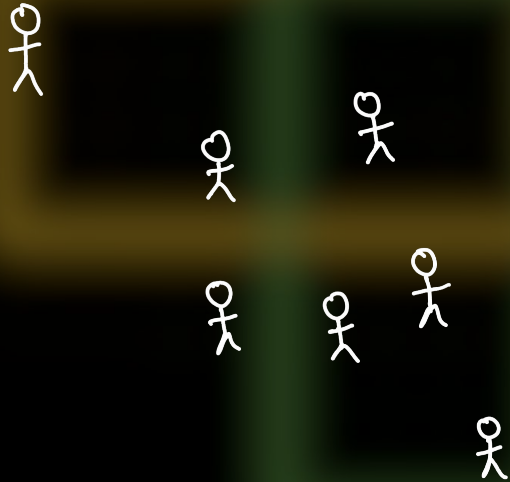
There is a correspondence between hypergraphs and distributions.



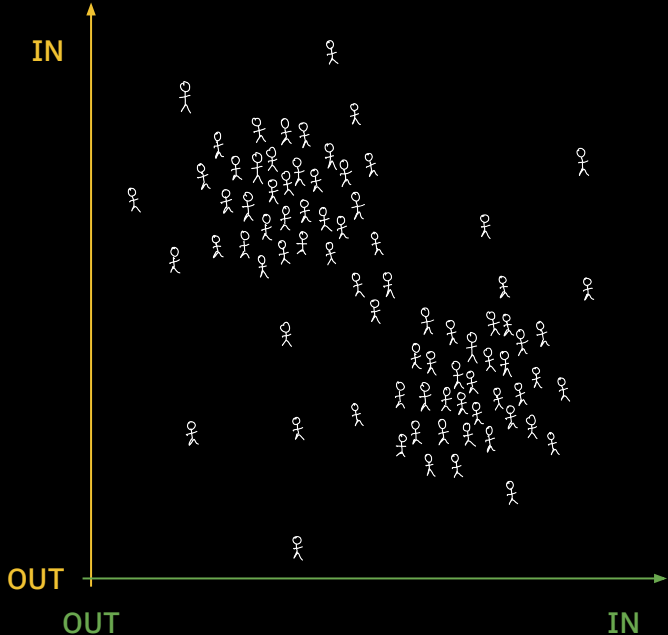
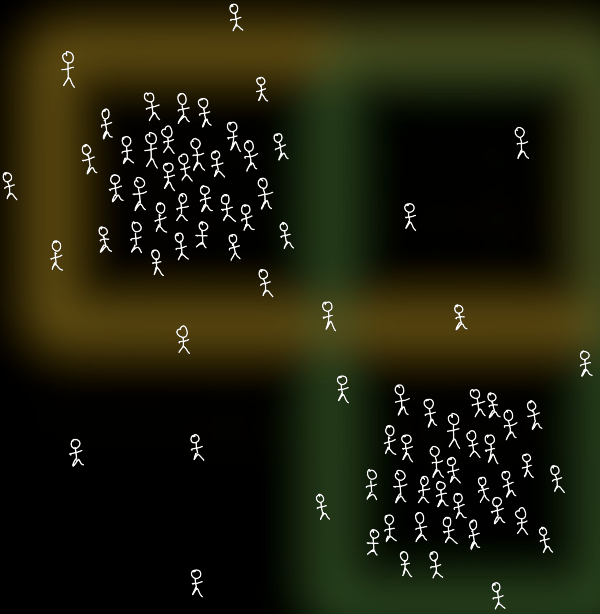
There is a correspondence between hypergraphs and distributions.



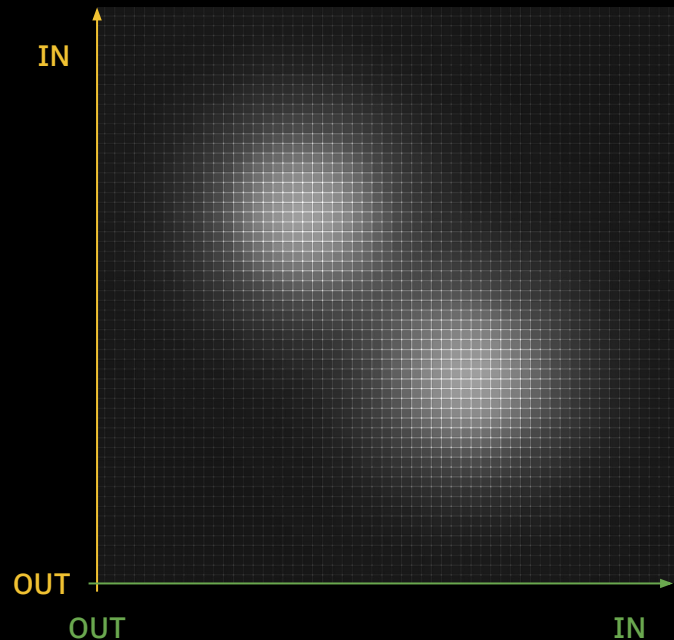
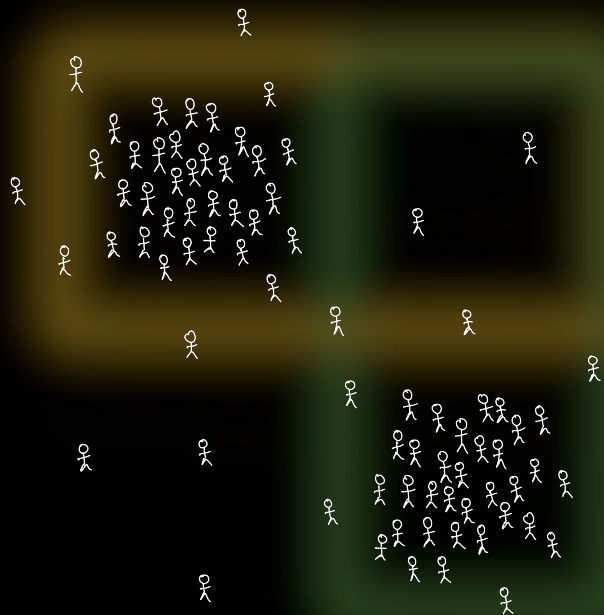
There is a correspondence between hypergraphs and distributions.



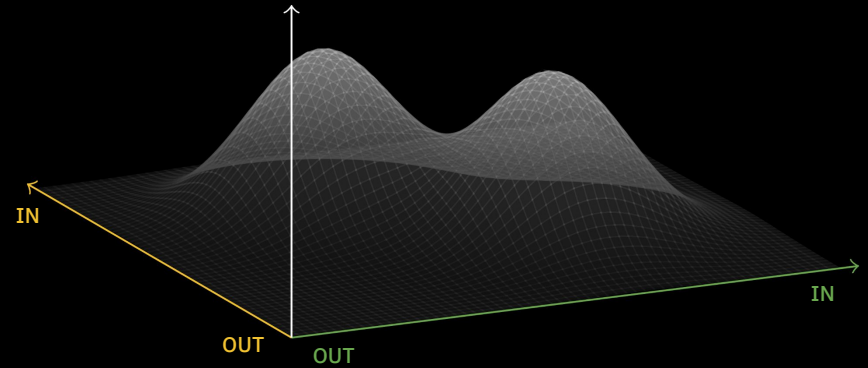
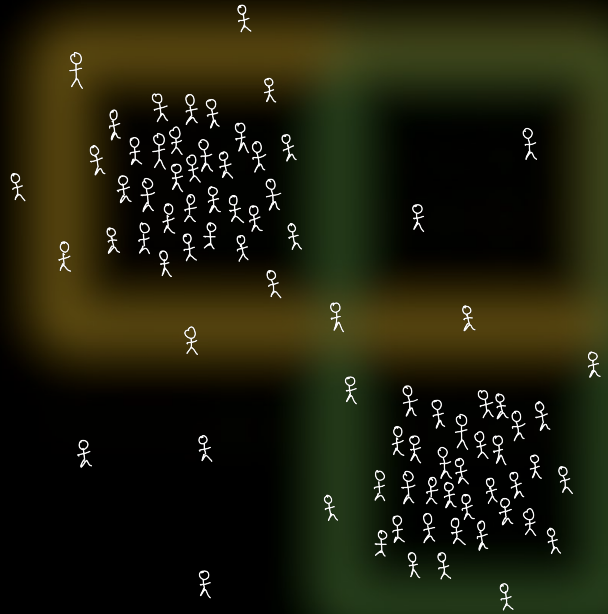
There is a correspondence between hypergraphs and distributions.



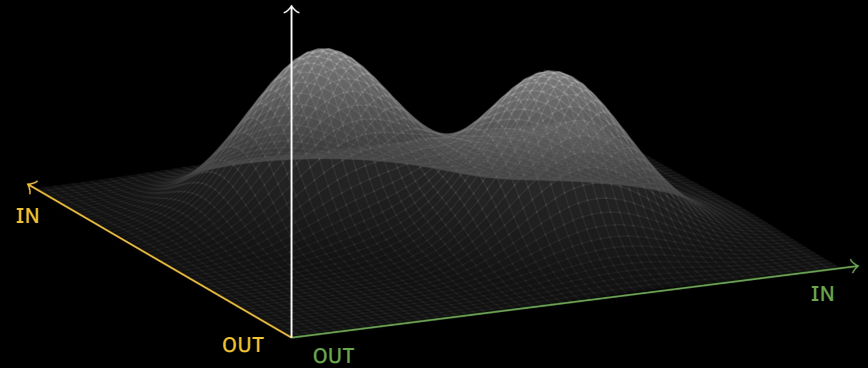
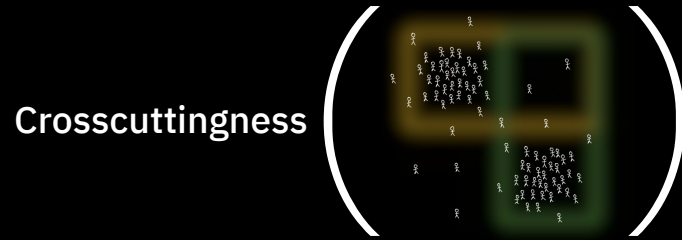
There is a correspondence between hypergraphs and distributions.



There is a correspondence between hypergraphs and distributions.

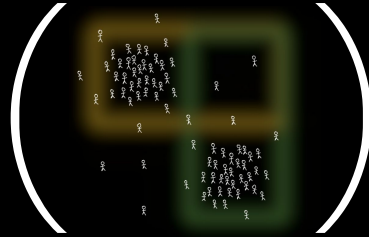


Crosscutting \propto Dependence

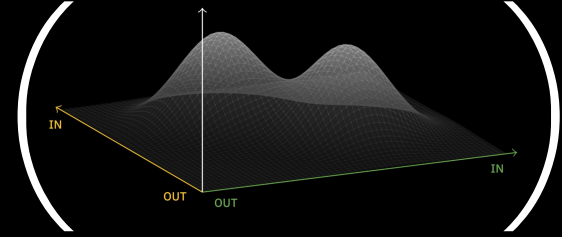


Crosscutting \propto Dependence

Crosscuttingness

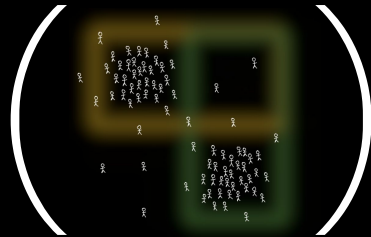


\propto Dependence

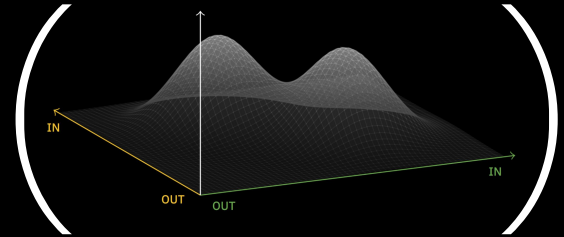


Crosscutting \propto Dependence = Sorting

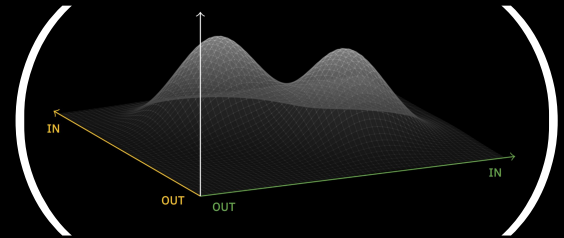
Crosscuttingness



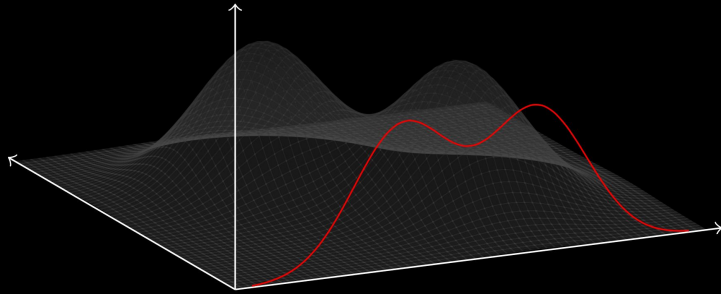
\propto Dependence



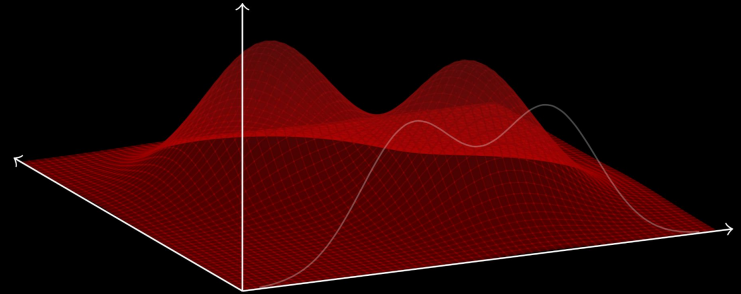
= Sorting



What is sorting?

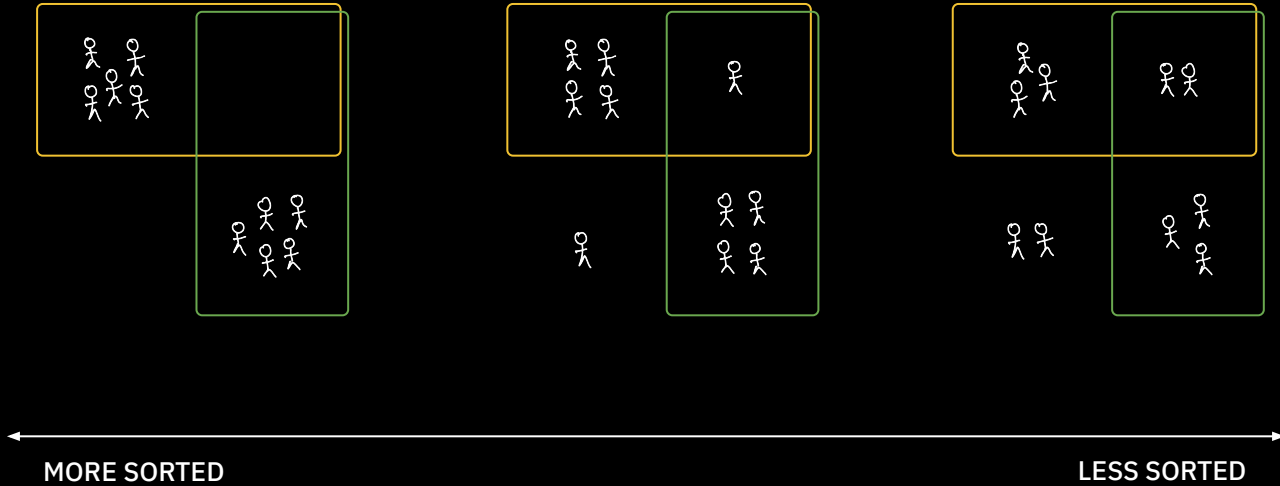


polarization

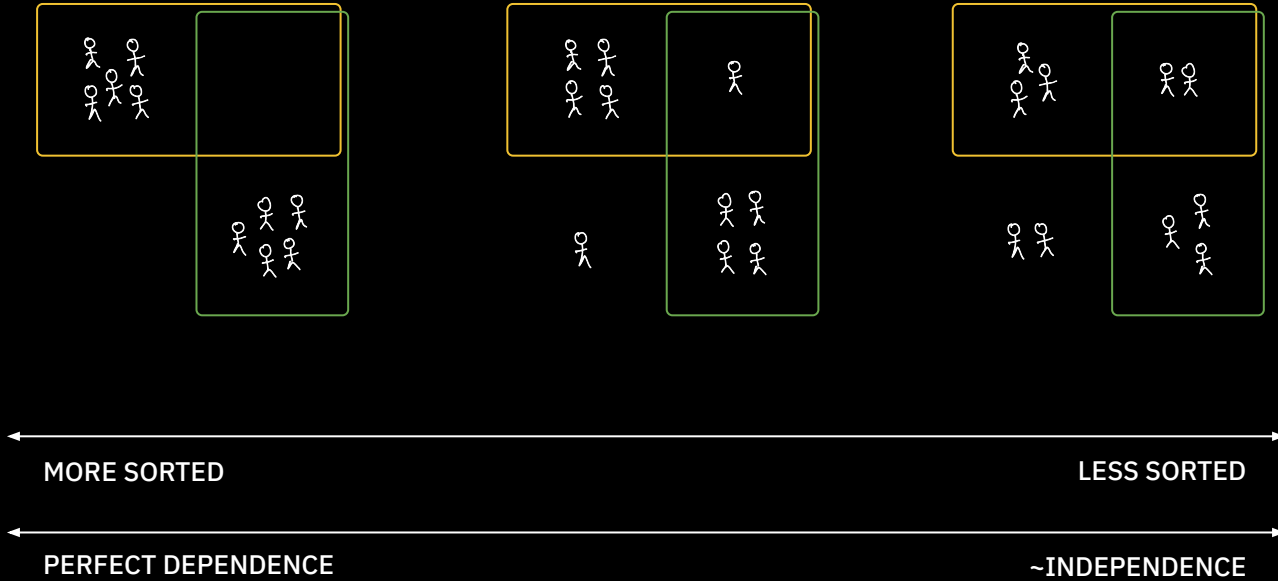


sorting

What is sorting?



What is sorting?



What is sorting?



I. Sortedness

II. Why unsort?

III. How to unsort?

IV. Can we unsort?

- I. Sortedness
- II. Why unsort?
- III. How to unsort?
- IV. Can we unsort?

Sorting is real.

Direct measurement:

(e.g., Abrams et al. 2015, Kaplan et al. 2022)

- ↑ correlations between issue positions
- “no evidence of polarization; the middle has not shrunk”
- ↑ geographic sorting

Explains empirical trends:

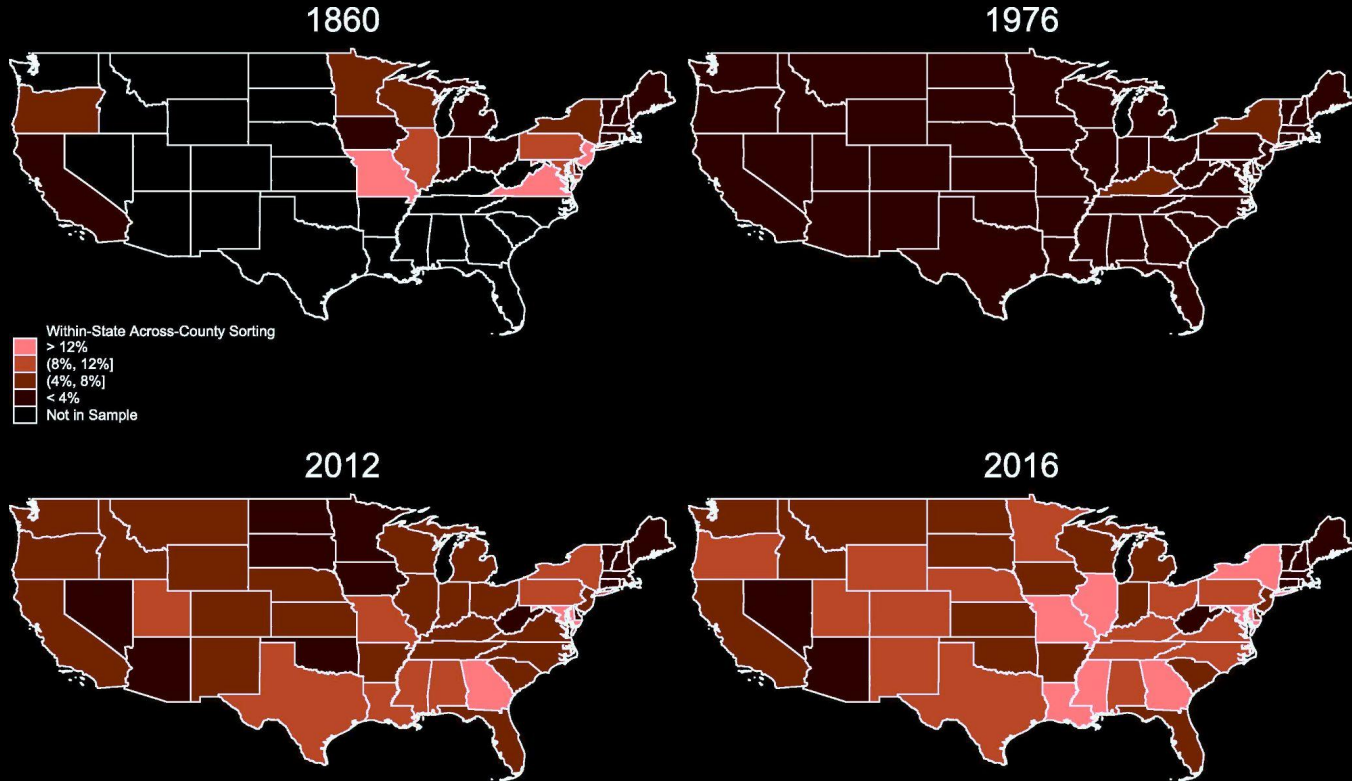
(Levendusky 2009; Abrams & Fiorina 2015; Fiorina 2017)

- ↑ difference in approval ratings
- ↓ split ticket voting
- campaigning to convince → campaigning to mobilize
- ↑ affective polarization

Sorting is bad.

Unsorting is good.

Sorting is real.



Direct m
(e.g., Abram

- ↑ cor
- “no e
shrur
- ↑ ge

nobilize

Sorting is real.

Direct measurement:

(e.g., Abrams et al. 2015, Kaplan et al. 2022)

- ↑ correlations between issue positions
- “no evidence of polarization; the middle has not shrunk”
- ↑ geographic sorting

Explains empirical trends:

(Levendusky 2009; Abrams & Fiorina 2015; Fiorina 2017)

- ↑ difference in approval ratings
- ↓ split ticket voting
- campaigning to convince → campaigning to mobilize
- ↑ affective polarization

Sorting is bad.

Unsorting is good.

Sorting is real.

Direct measurement:

(e.g., Abrams et al. 2015, Kaplan et al. 2022)

- ↑ correlations between issue positions
- “no evidence of polarization; the middle has not shrunk”
- ↑ geographic sorting

Explains empirical trends:

(Levendusky 2009; Abrams & Fiorina 2015; Fiorina 2017)

- ↑ difference in approval ratings
- ↓ split ticket voting
- campaigning to convince → campaigning to mobilize
- ↑ affective polarization

Sorting is bad.

- ↑ pigeonholing / stereotyping
- ↓ representation of nuanced, crosscutting positions (Fiorina 2016)
- ↑ risk of civil war (Selway 2011; Gubler and Selway 2012; Siroky and Hechter 2016)

Unsorting is good.

Sorting is real.

Direct measurement:

(e.g., Abrams et al. 2015, Kaplan et al. 2022)

- ↑ correlations between issue positions
- “no evidence of polarization; the middle has not shrunk”
- ↑ geographic sorting

Explains empirical trends:

(Levendusky 2009; Abrams & Fiorina 2015; Fiorina 2017)

- ↑ difference in approval ratings
- ↓ split ticket voting
- campaigning to convince → campaigning to mobilize
- ↑ affective polarization

Sorting is bad.

- ↑ pigeonholing / stereotyping
- ↓ representation of nuanced, crosscutting positions (Fiorina 2016)
- ↑ risk of civil war (Selway 2011; Gubler and Selway 2012; Siroky and Hechter 2016)

Unsorting is good.

- ↑ “surprising validators” (Glaeser and Sunstein 2014)
- ↑ extent to which any majority will have something in common with a minority
- ↑ weak/long ties → ↑ economic outcomes (Jahani et al., 2023)

Sortedness by other names:

safeguards against factionalism

James Madison, *The Federalist No. 10* (1787)

“intersection of social circles”

Georg Simmel, *Soziologie* (1908)

“overlapping memberships”

Robert Dahl, *A Preface to Democratic Theory* (1956)

“overlapping consensus”

John Rawls, *Political Liberalism* (1993)

“diverse diversities”

Amartya Sen, *Identity and Violence* (2006)

“connected society” / “polypolitanism”

Danielle Allen, *Justice by Means of Democracy* (2023)

Why not unsort?

- Probably **too neutral** a goal
- Maybe **absurd if taken to the extreme**
- Maybe **the necessary interventions would be unethical**
- Makes **engaging in politics** more complicated

- I. Sortedness
- II. Why unsort?
- III. How to unsort?
- IV. Can we unsort?

THIS EXAMPLE

- What isn't clear?
- Have you thought about unsorting in your work, maybe by another name? If so, how do you think about it?
- In what contexts is unsorting is an appropriate goal?

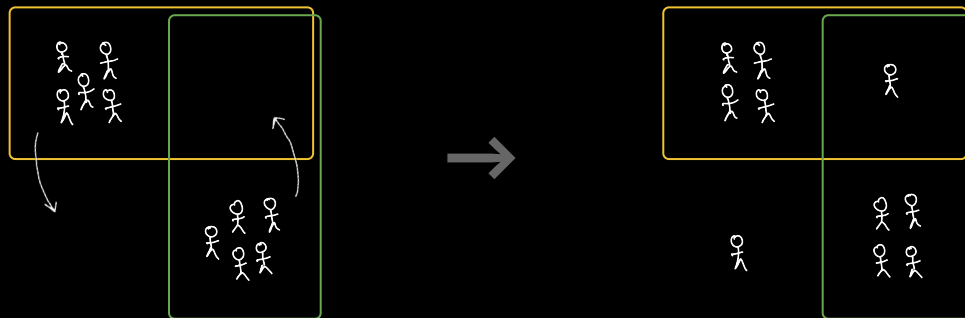
IN GENERAL

- Are there times in your peacebuilding work when you have consciously excluded certain goals in favour of others?
- How should we decide what goals are appropriate in different contexts?

- I. Sortedness
- II. Why unsort?
- III. How to unsort?
- IV. Can we unsort?

Mechanism 1

Conversion



EXAMPLES

common ground
symmacy / common enemies
surprising validation

consilience
weak / long ties
“complicate the narratives”

Most bridging algorithms use “diverse approval”.



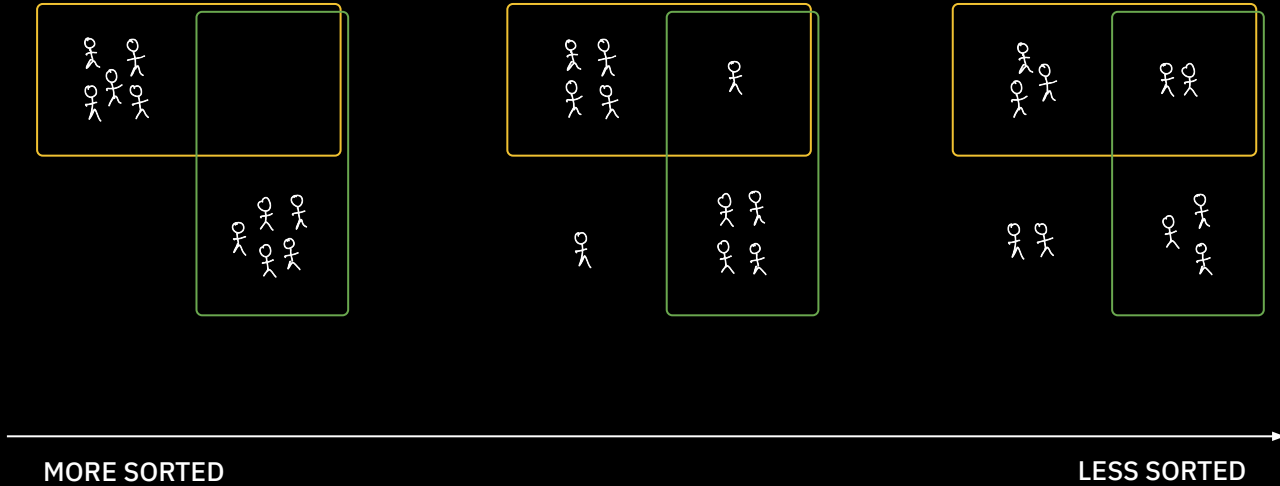
Most bridging algorithms use “diverse approval”.



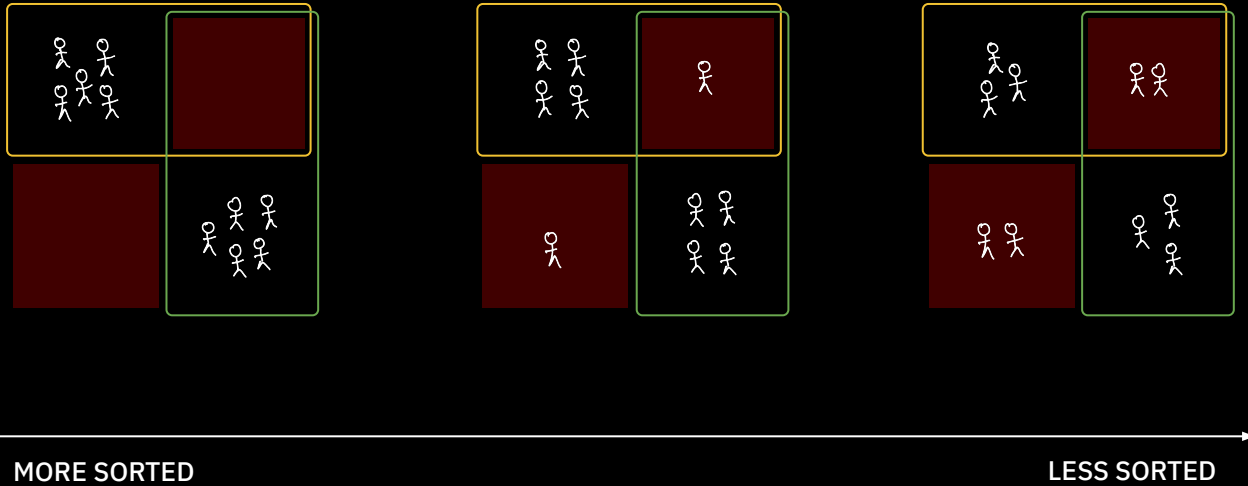
EXAMPLES



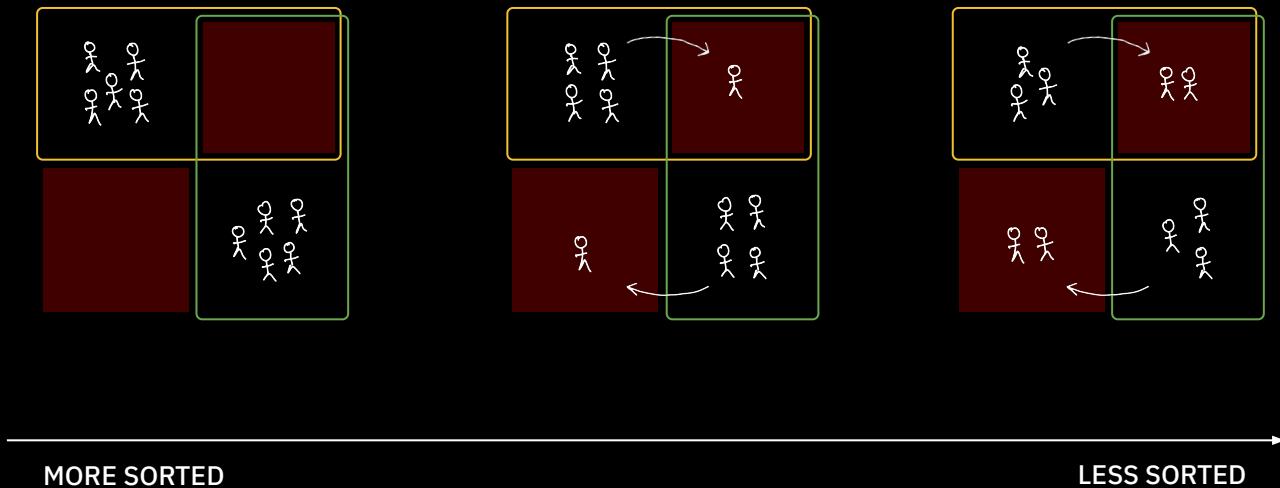
Diverse approval selects for unlikely combinations of attributes.



Diverse approval selects for unlikely combinations of attributes.



Diverse approval selects for unlikely combinations of attributes.



Diverse approval selects for unlikely combinations of attributes.

Cognitive “biases”

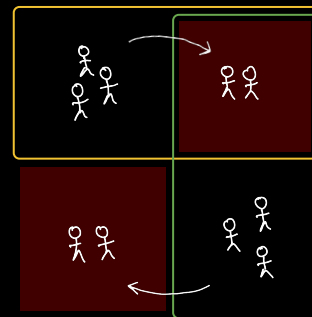
- mere-exposure effect
- illusory truth effect
- experience effects
- anchoring
- pressures to conform

Learning

- learning new facts
- discovering new interests

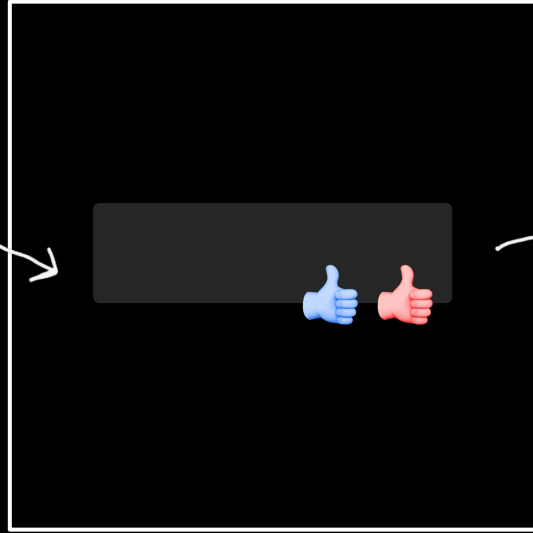
Algorithmic incentives (Brady et al., 2023)

- observational learning
- reinforcement learning
- intentional strategic adaptation





THEORY

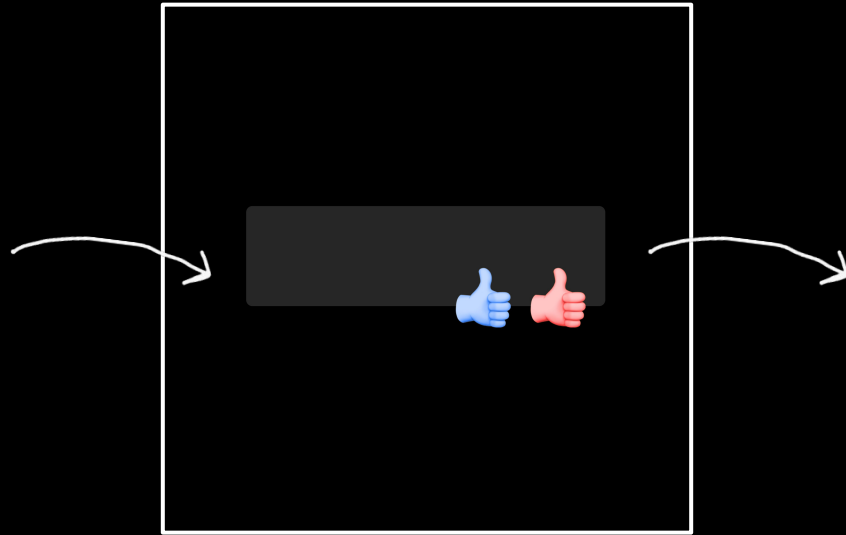


FORMALISM



OUTCOMES

Diverse approval
contributes to
unsorting.



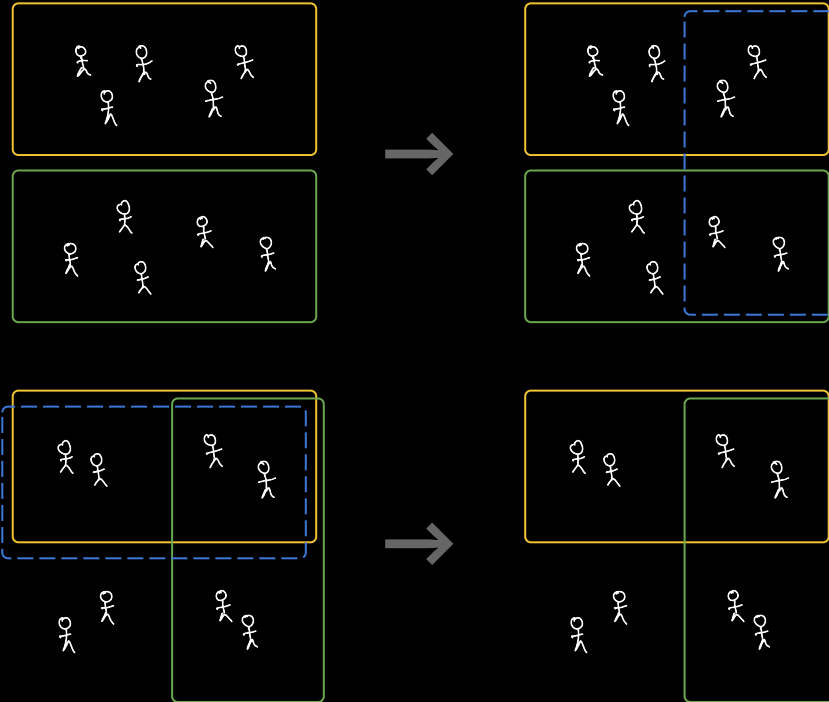
THEORY

FORMALISM

OUTCOMES

Mechanism 2

Adding or removing groups/dimensions

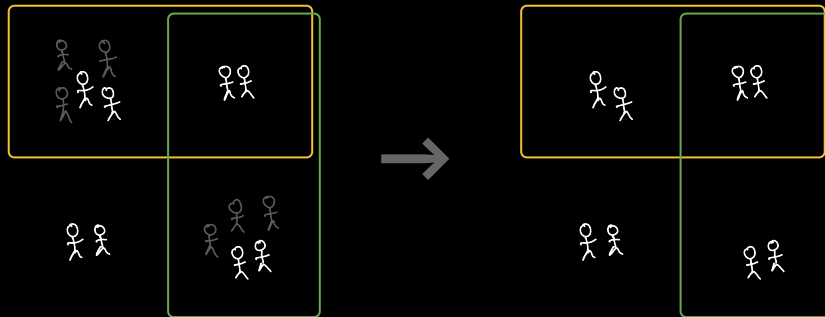
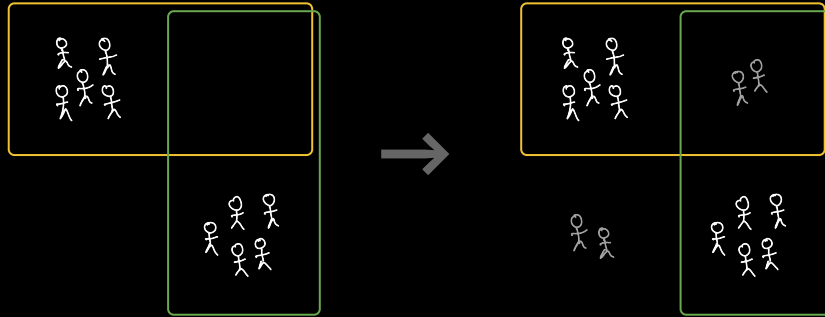


EXAMPLES

humanization
intergroup contact
depoliticization

Mechanism 3

Entry or exit of people



EXAMPLES

- migration
- generational change
- account creation / deletion

THIS EXAMPLE

- What isn't clear?
- How does this theoretical mechanism change your view of diverse approval?
- Does it increase your confidence in it?

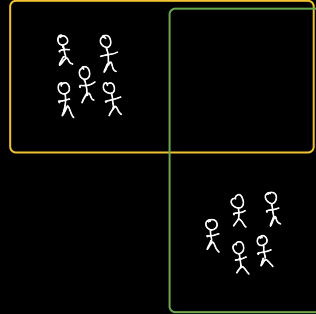
IN GENERAL

- To what extent does theory of this sort inform your work? Examples?
- How important is it to have this kind of theoretical, mechanistic understanding?
- Should theory of this sort change our confidence in a formalism?

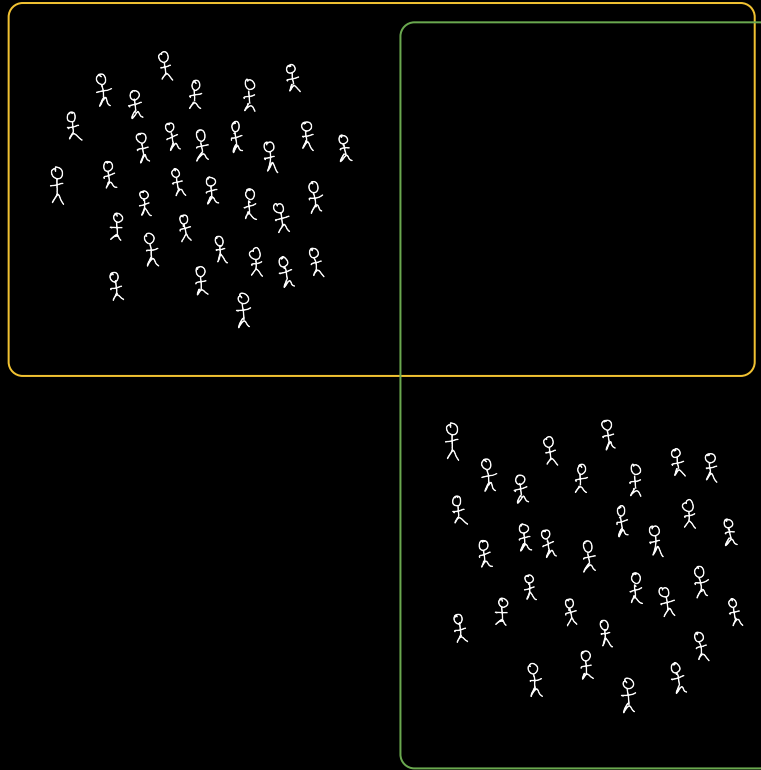
- I. Sortedness
- II. Why unsort?
- III. How to unsort?
- IV. Can we unsort?

- I. Sortedness
- II. Why unsort?
- III. How to unsort?
- IV. Can we unsort?

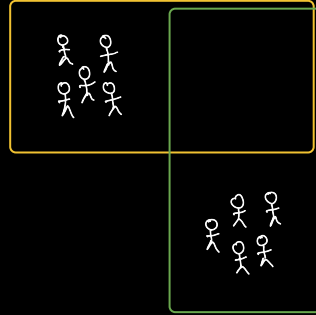
Sortedness can be reduced globally by intervening locally.



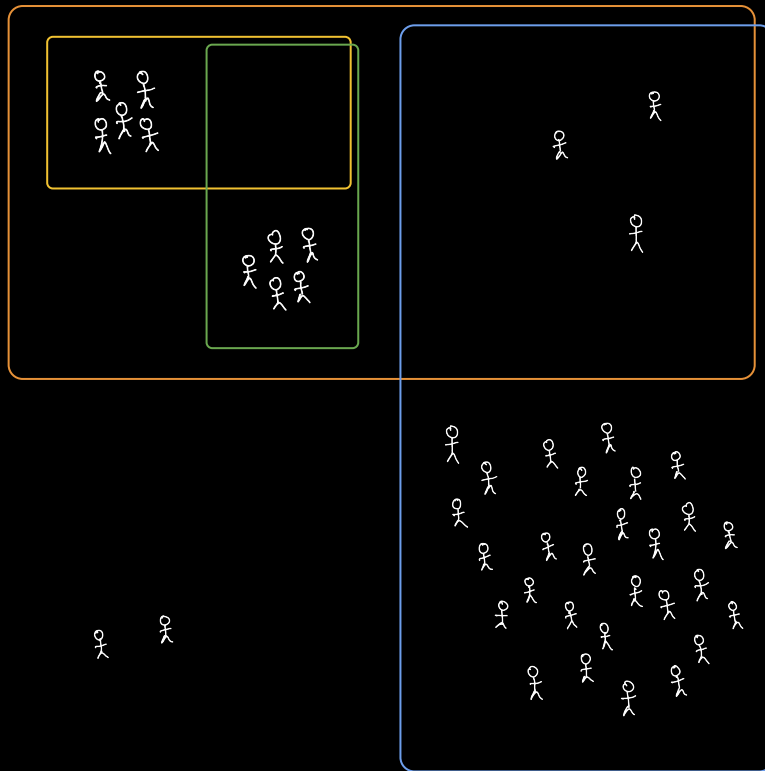
Sortedness can be reduced globally by intervening locally.



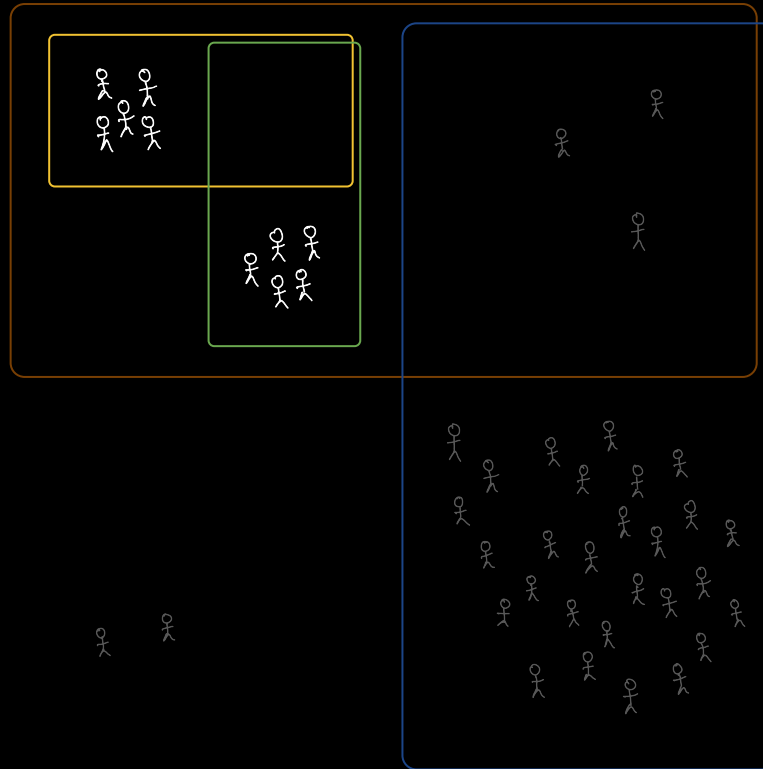
Sortedness can be reduced globally by intervening locally.



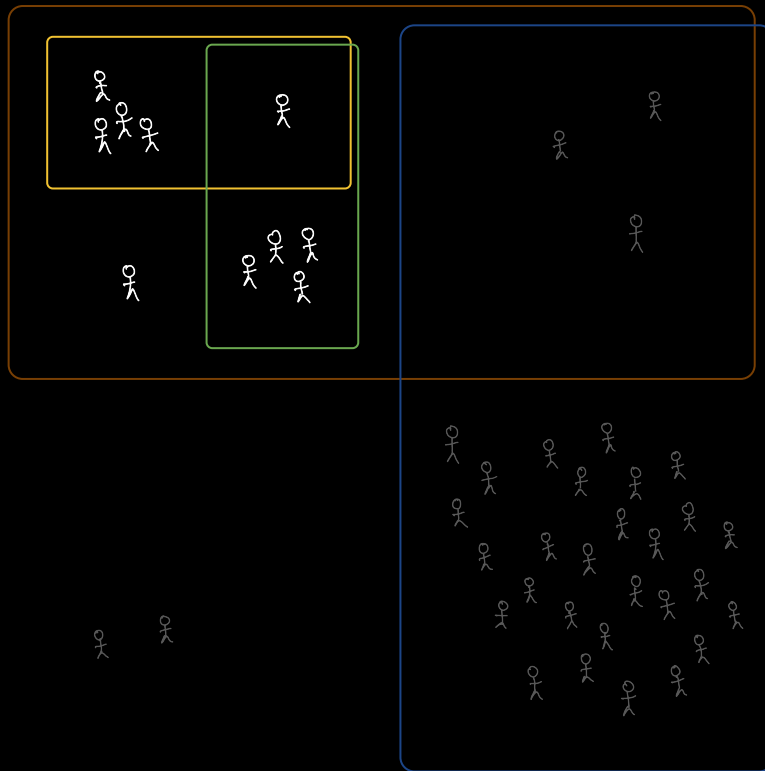
Sortedness can be reduced globally by intervening locally.



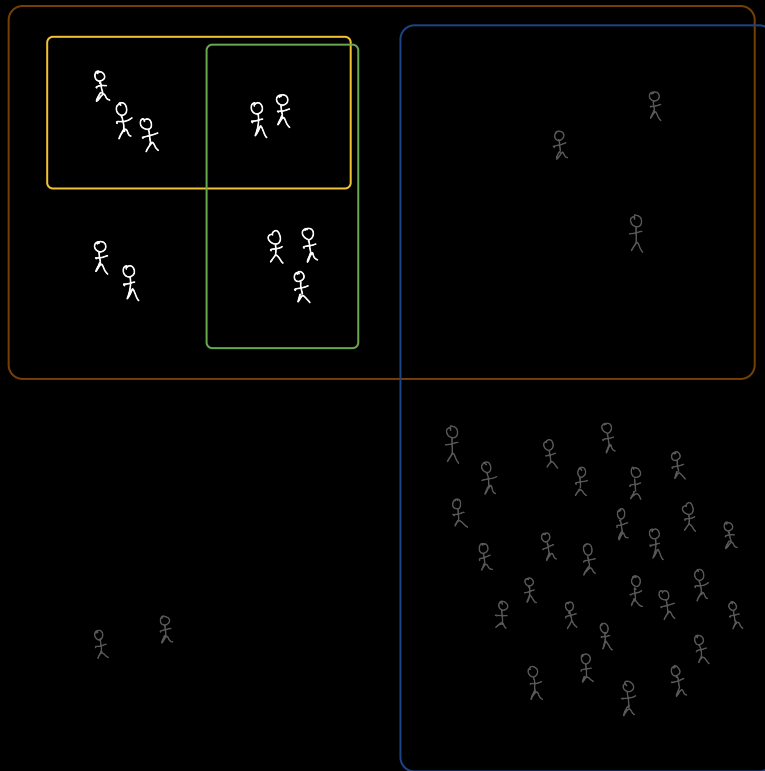
Sortedness can be reduced globally by intervening locally.



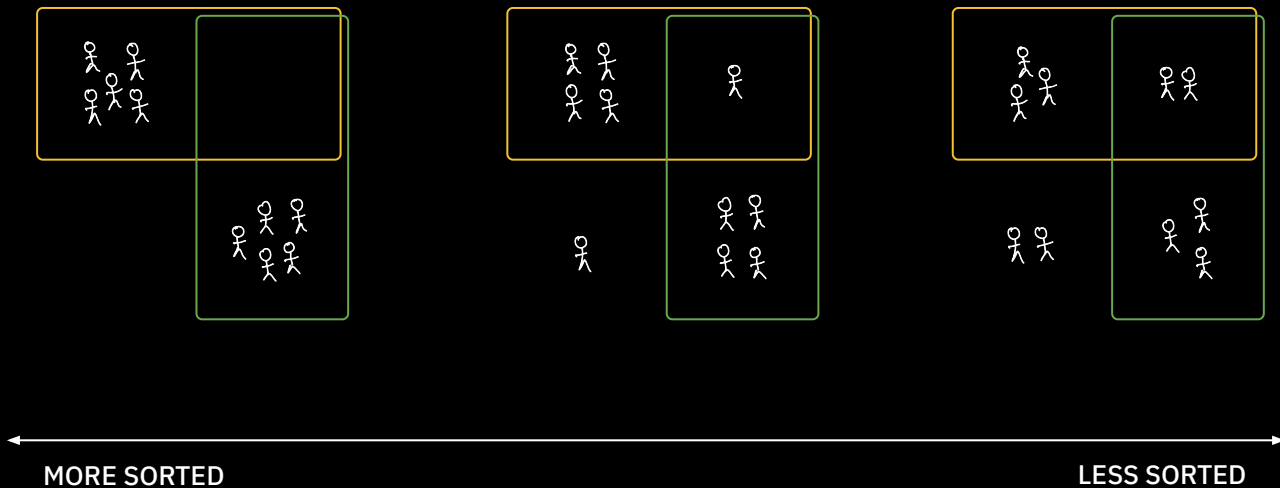
Sortedness can be reduced globally by intervening locally.



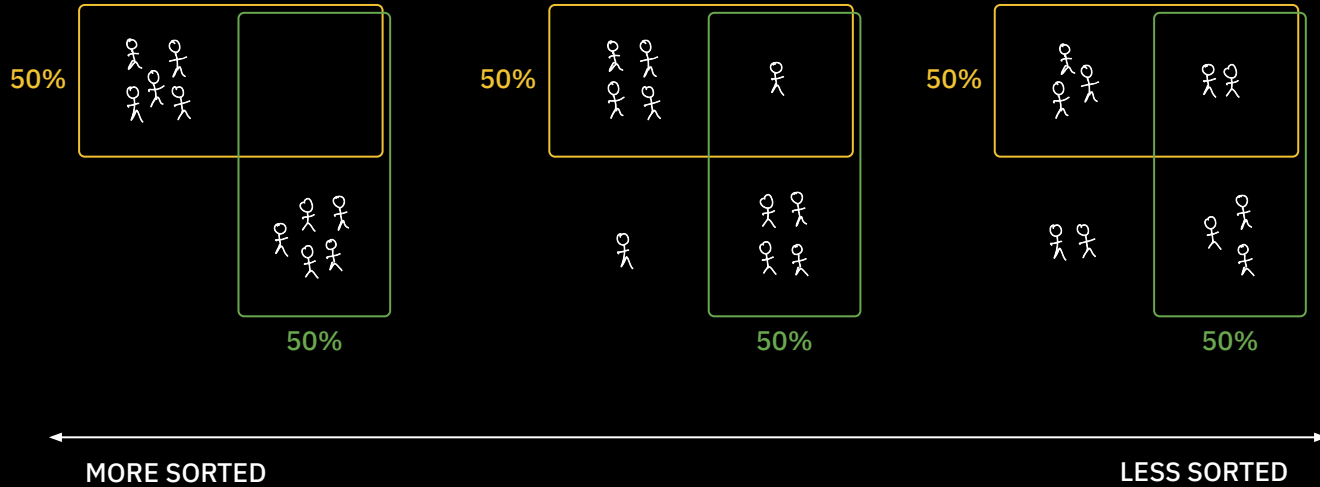
Sortedness can be reduced globally by intervening locally.



Sortedness is orthogonal to “public opinion”.



Sortedness is orthogonal to “public opinion”.



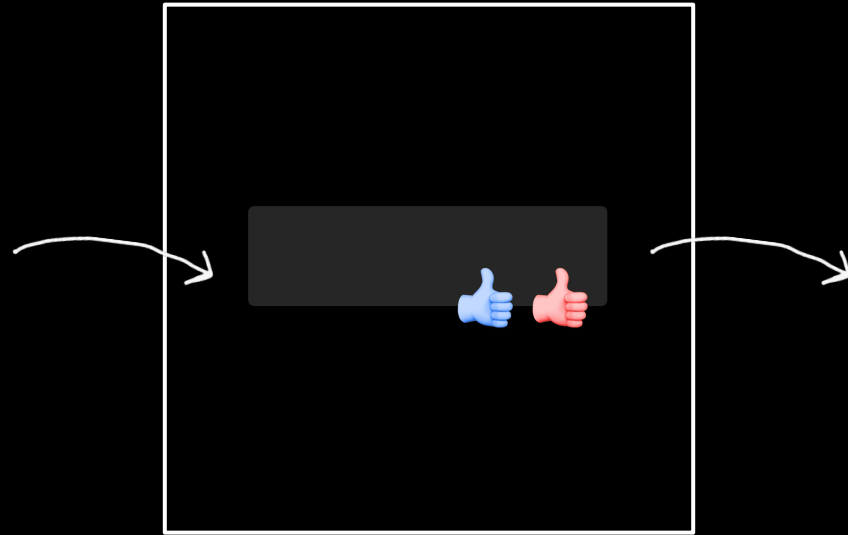
THIS EXAMPLE

- How important are these kinds of formal properties?

IN GENERAL

- What properties should formalisms have?

THEORY



FORMALISM

OUTCOMES