

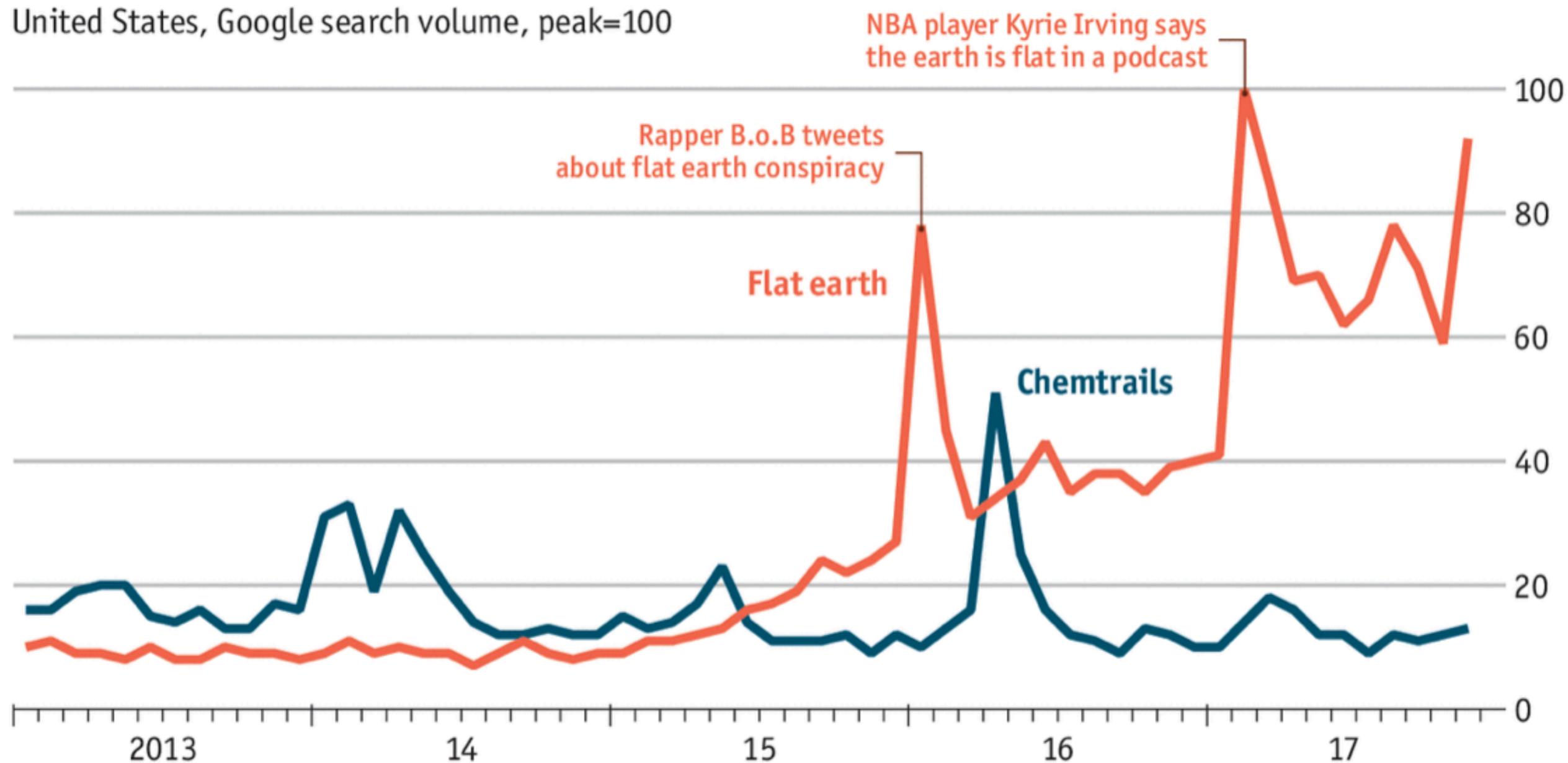
IV ISA Forum of Sociology
23 February 2021

“No room for thinking, under the dome”. Flat earth and the boundary construction between science and non-science on Twitter.

Luca Carbone (KU Leuven)
Peter Achterberg (Tilburg University)

Spheres of influence

United States, Google search volume, peak=100



Source: Google Trends (<https://www.economist.com/graphic-detail/2017/11/28/americas-flat-earth-movement-appears-to-be-growing>)

- How does the public discuss the topic of FES?
- Does science acquire its legitimacy among the public through public discussions about FES?

Core

|

Periphery

Periphery

Shortcomings:

- Origins and motives of non-science (Harambam & Aupers 2015, 2016)
- Classificatory power to demarcate systems of knowledge (Agrawal, 1995, 2002)

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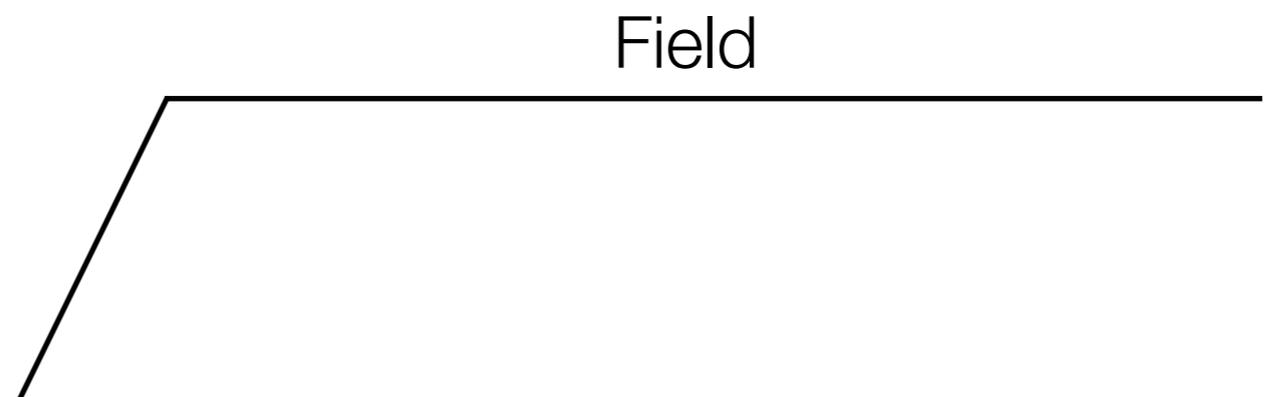
Constructivist approach:

- Not only content-based (essentialist)
- Attention to representations: boundary-work (Gyerin, 1995)

Periphery

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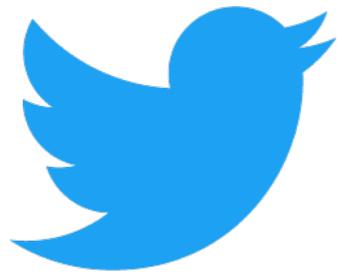
Periphery

Constructivist approach:

- Not only content-based (essentialist)
- Attention to representations: boundary-work (Gyerin, 1995)
- Twitter: symbolism, density
- Process (Abbott 1988, 1995)



#FlatEarth
(N = 7138)

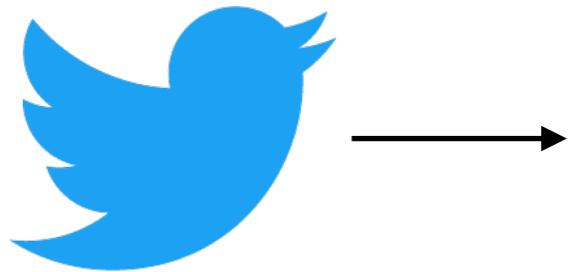


#FlatEarth
(N = 7138)

Content analysis

$N_{\text{coding schema}} = 350$

$N_{\text{main analysis}} = 700$

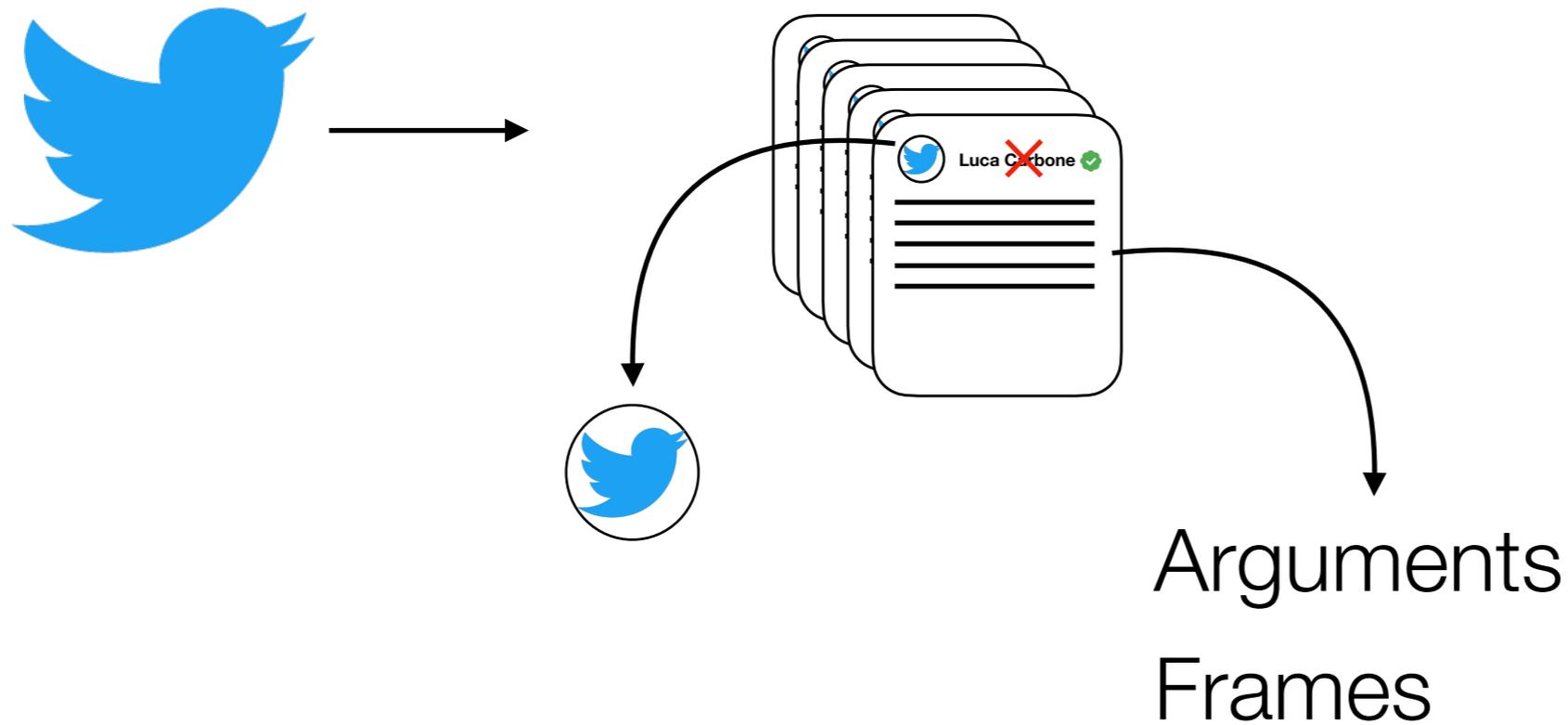


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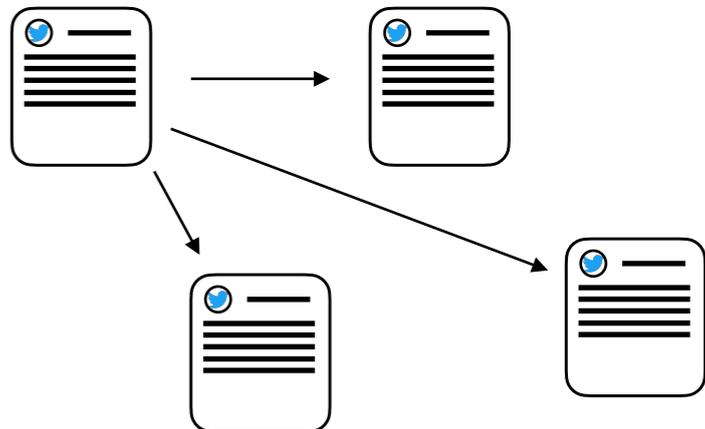
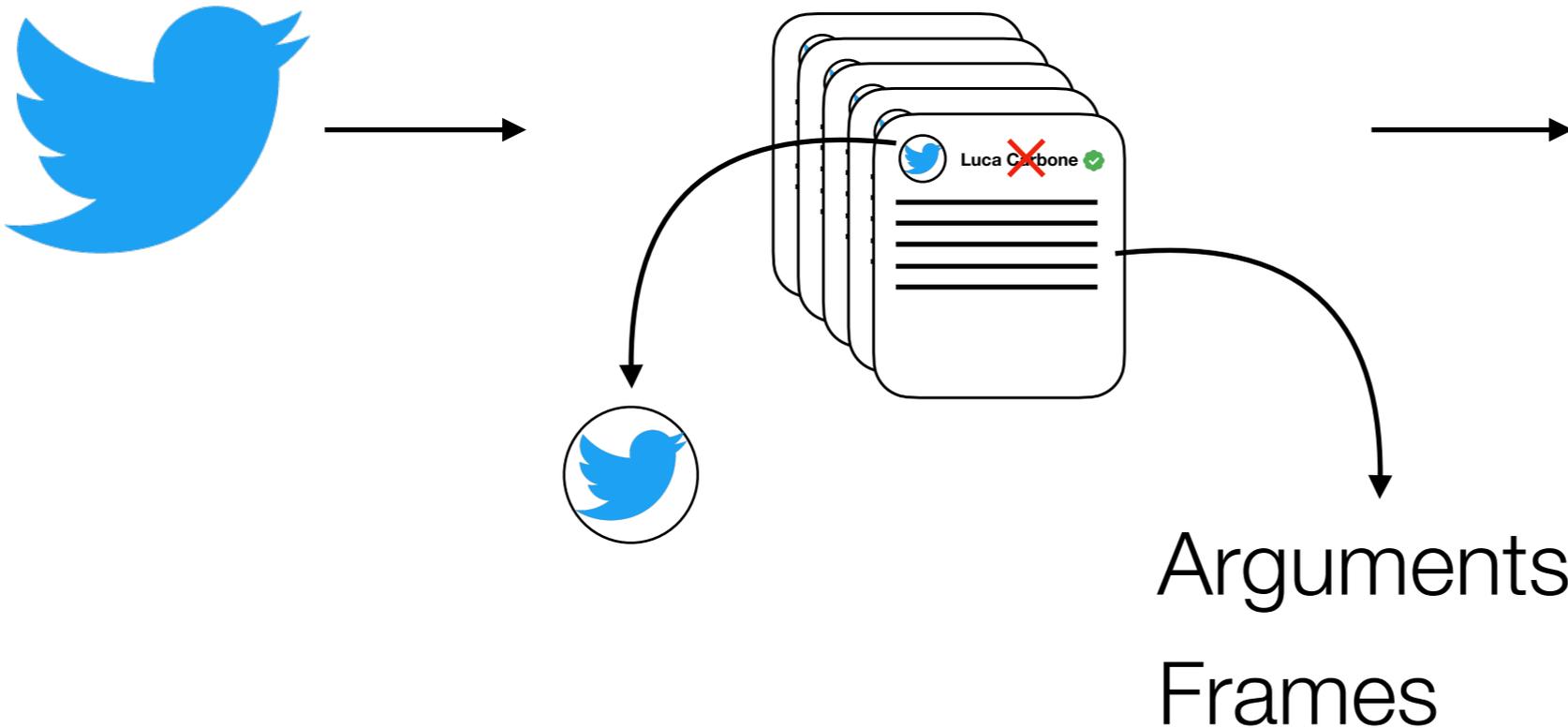
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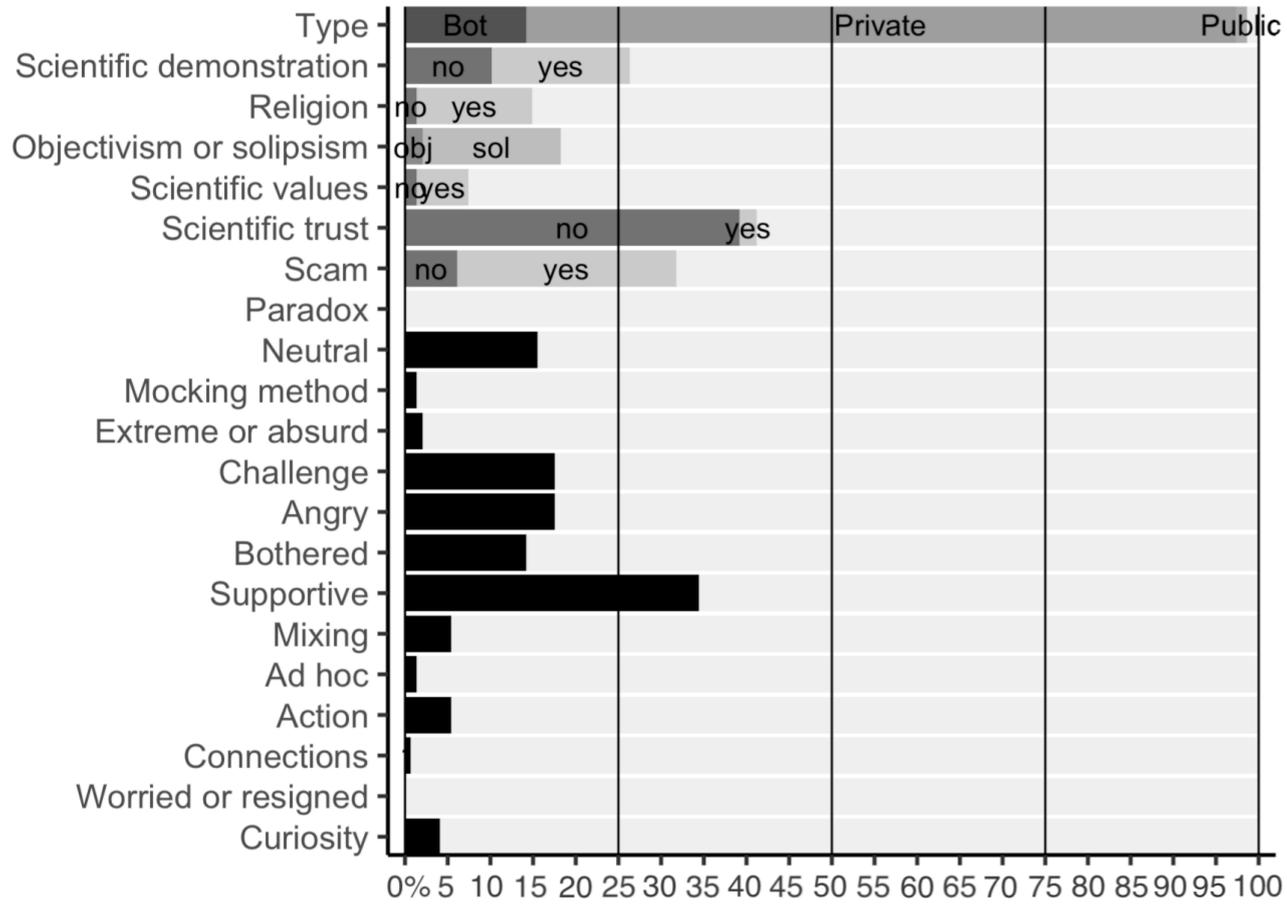
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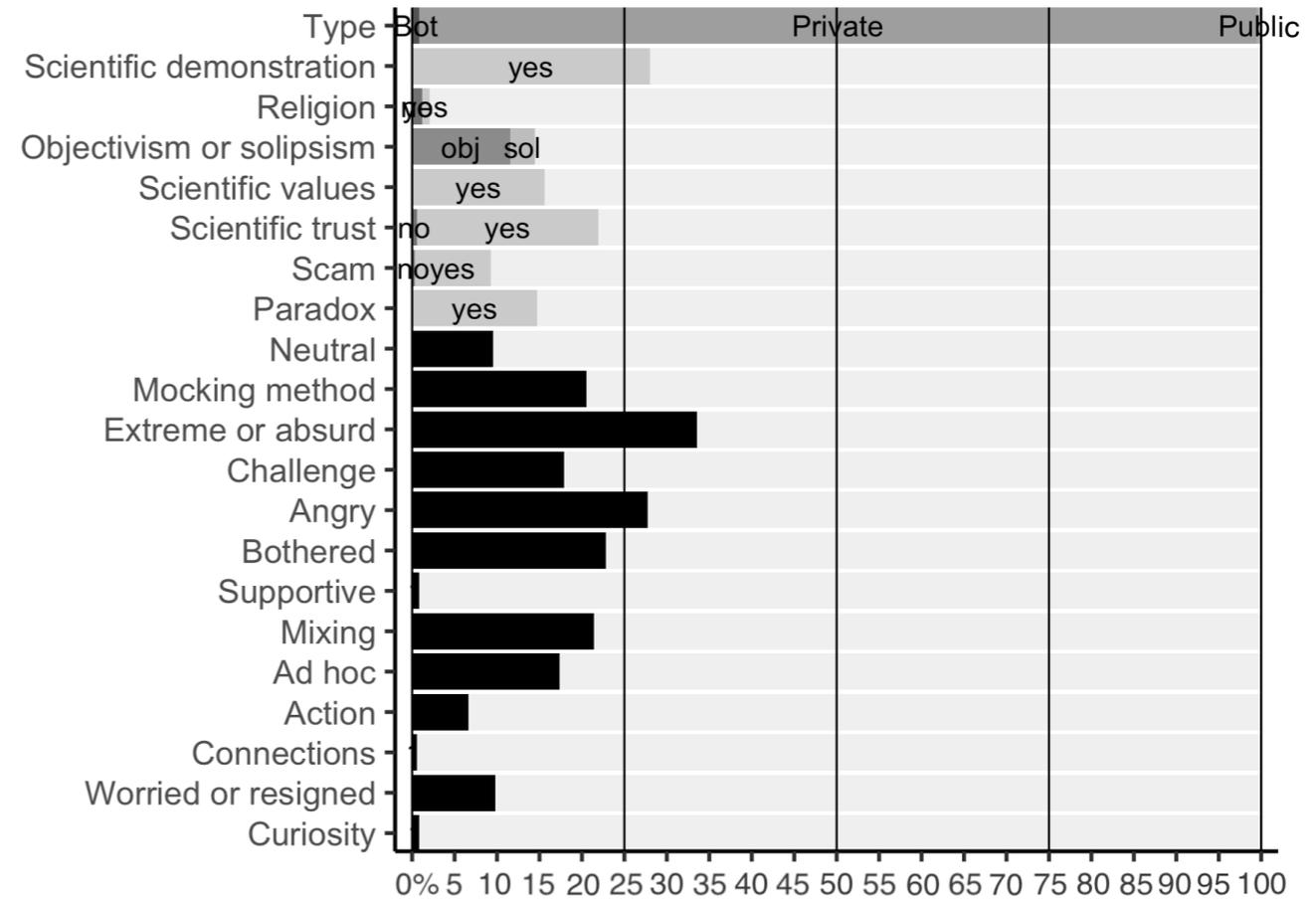
Discourse network
analysis (Leifeld &
Haunss, 2012)



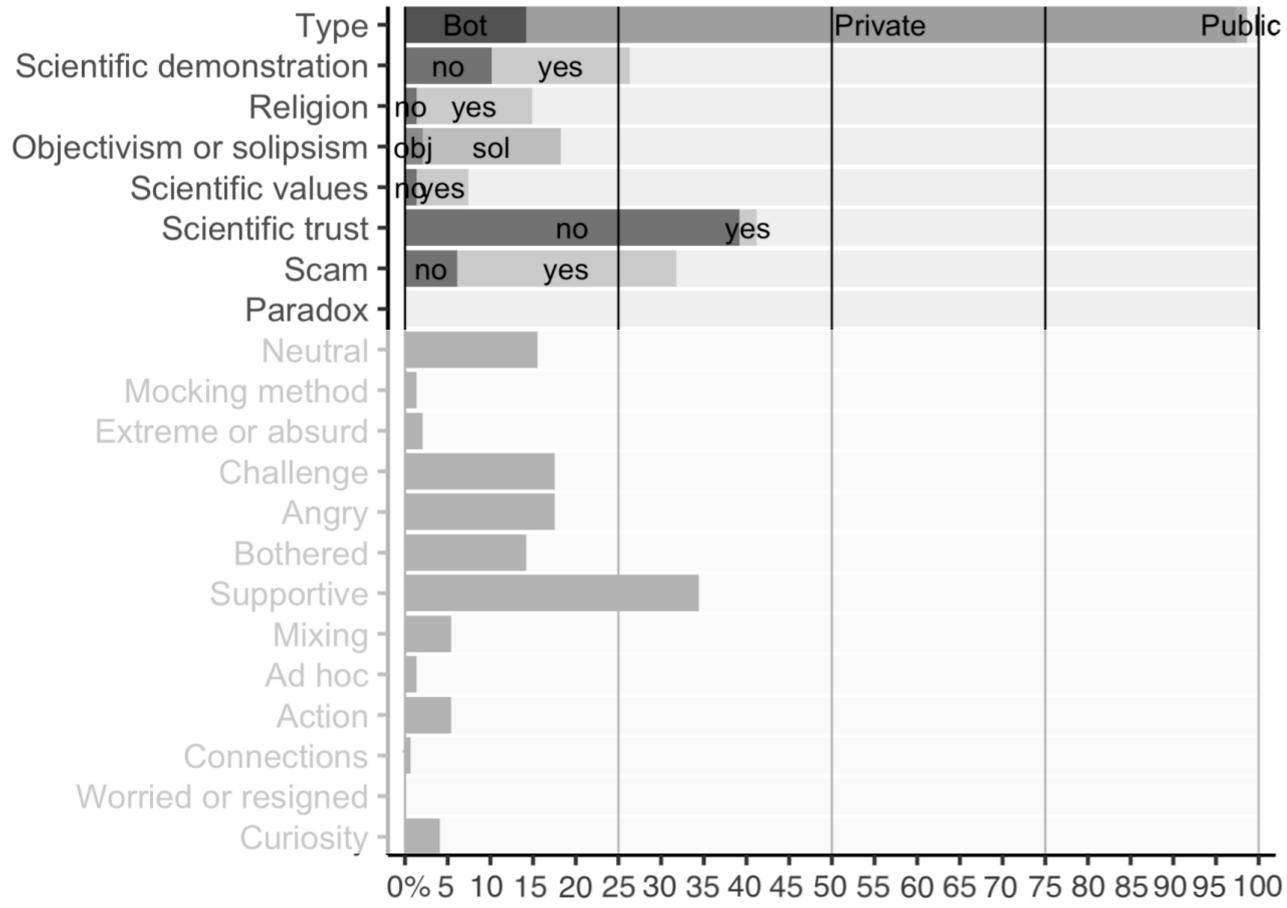
Supporters of FES (N = 148)



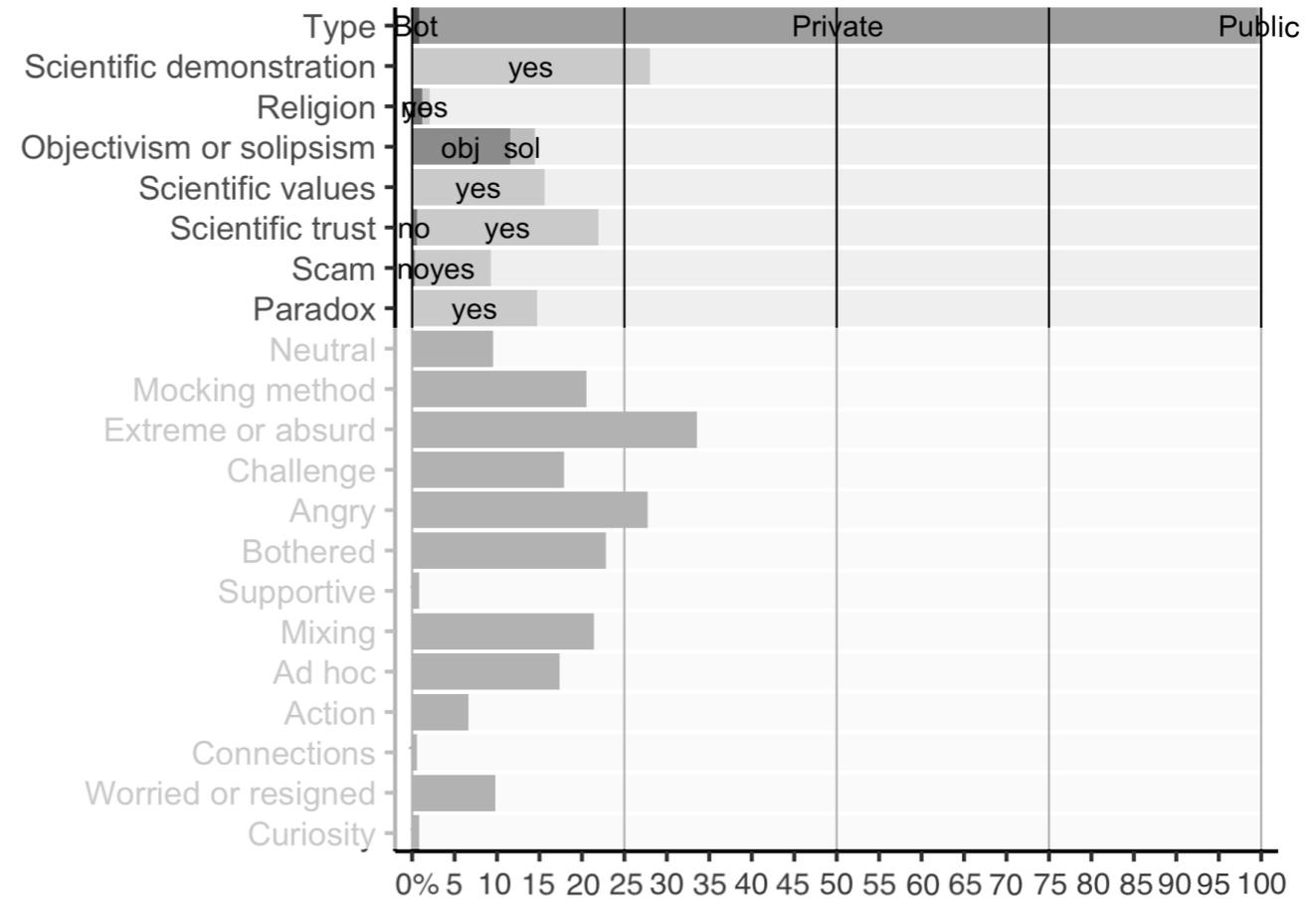
Adversaries of FES (N = 346)



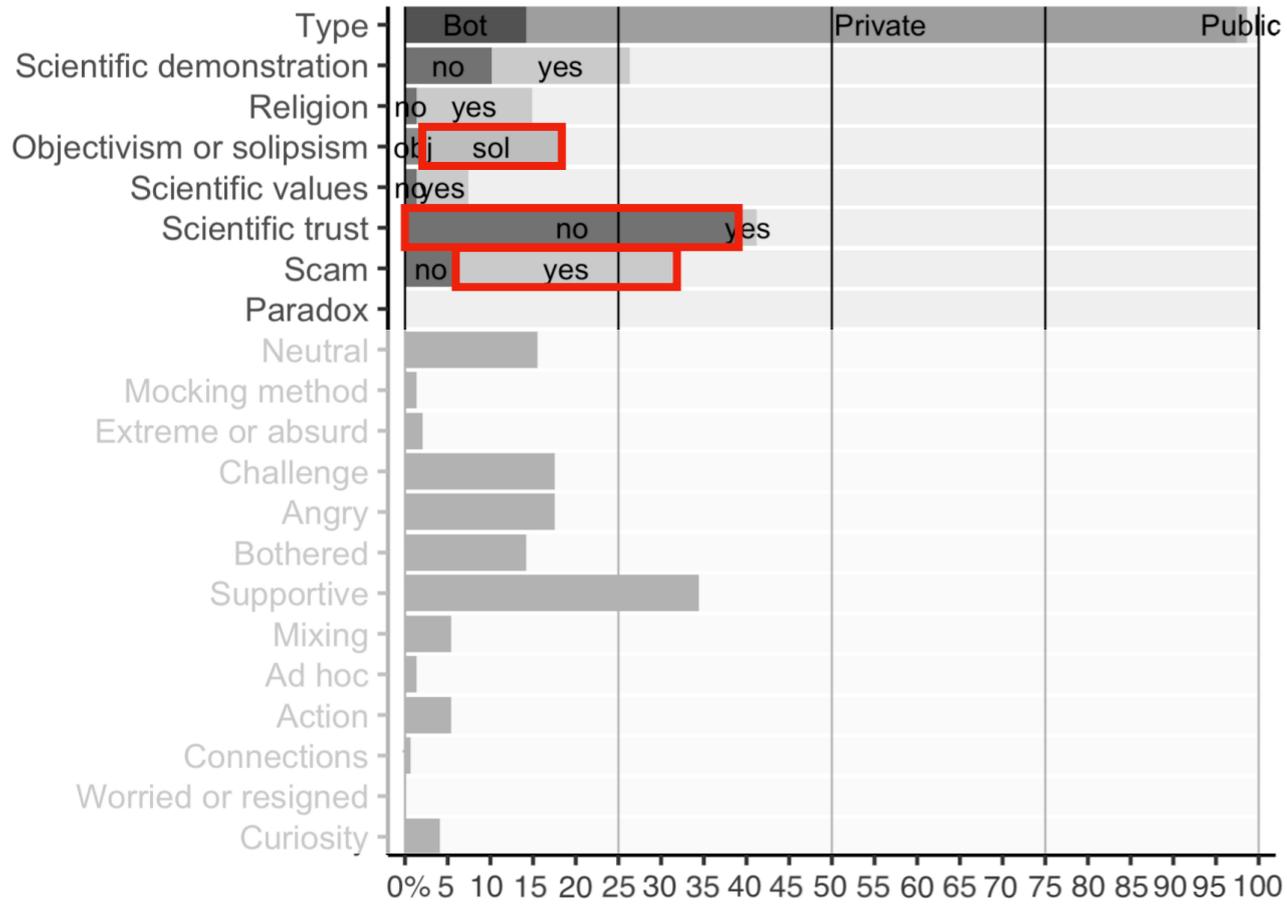
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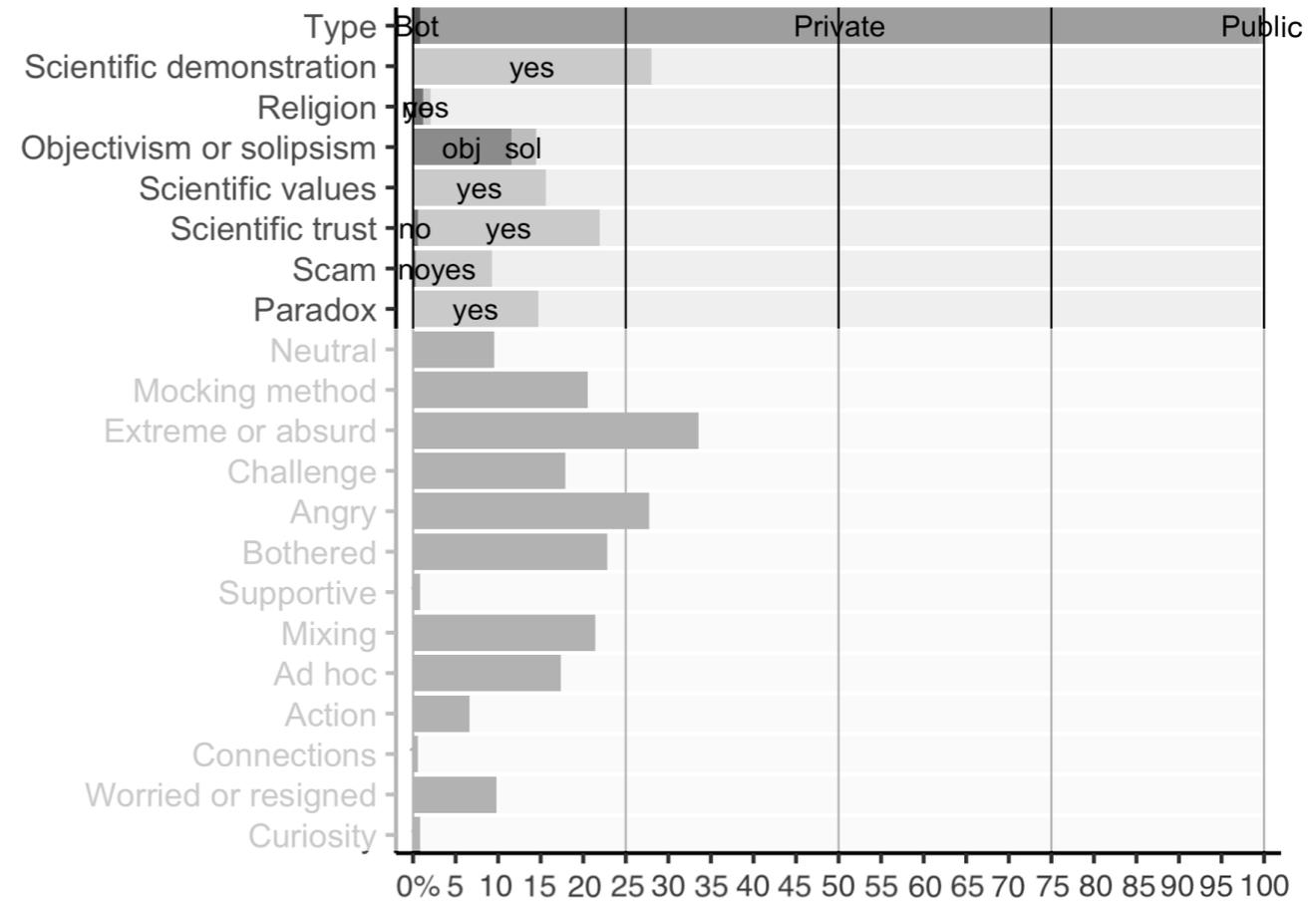
Adversaries of FES (N = 346)



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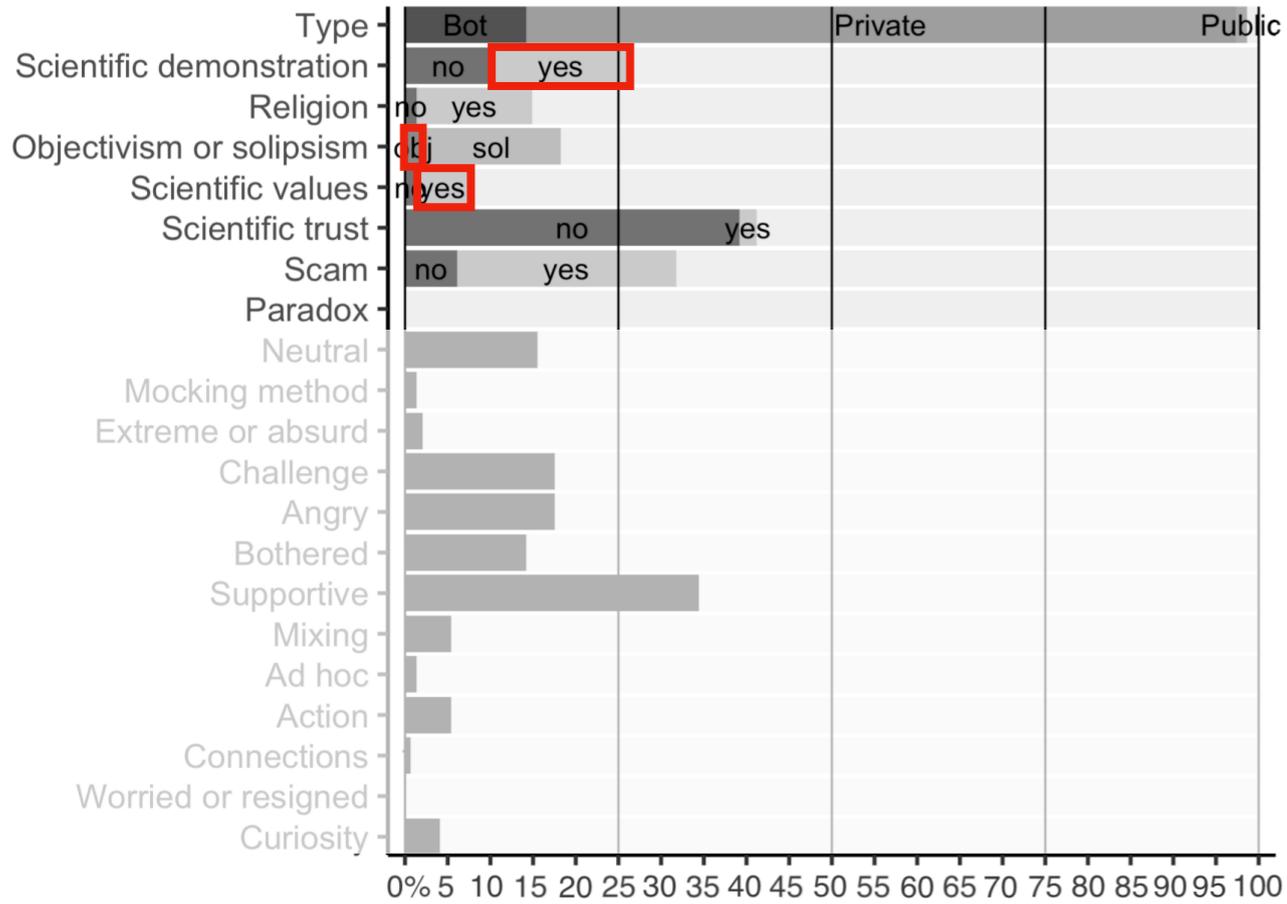


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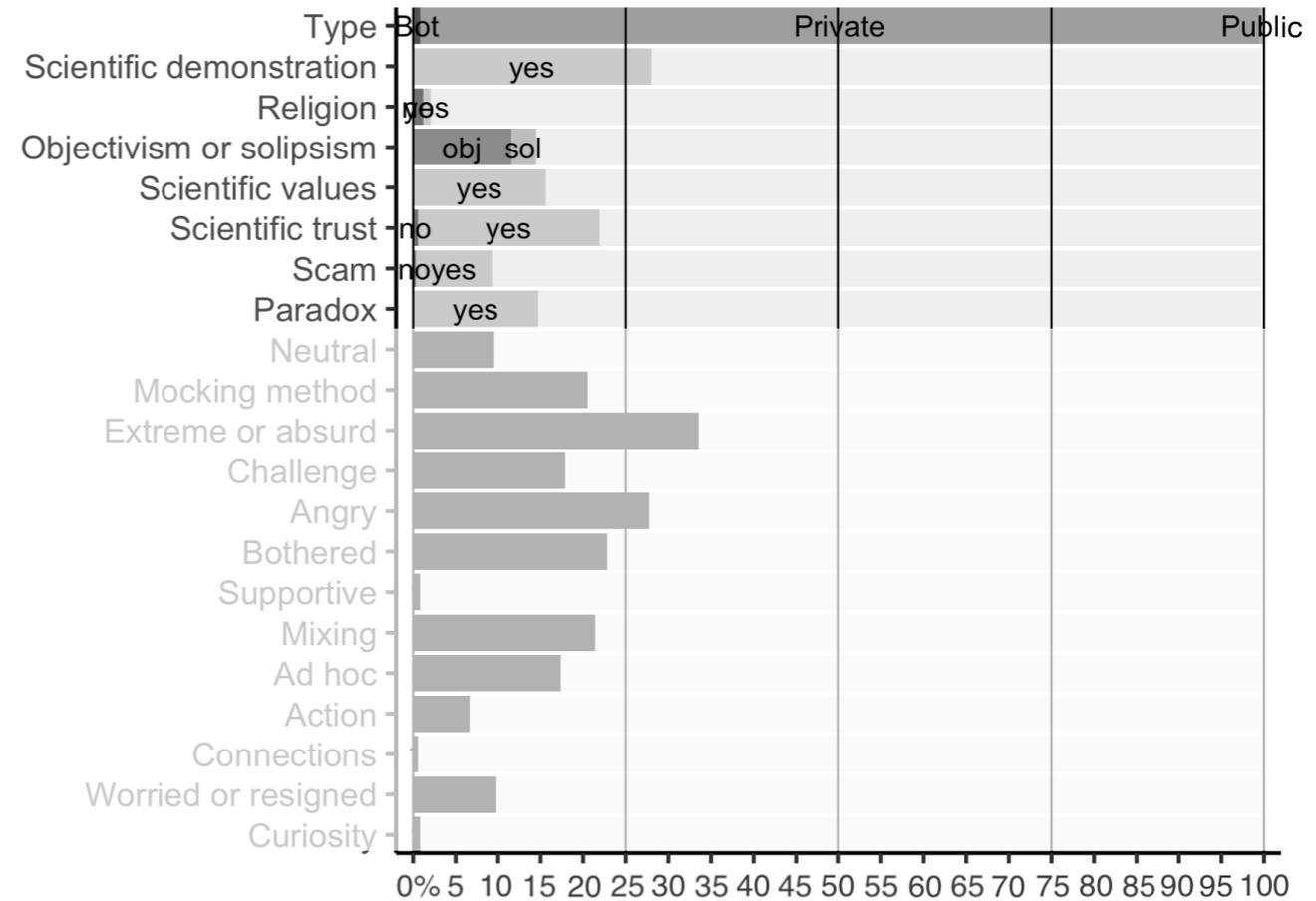


Conspiracy (27%)

Supporters of FES (N = 148)



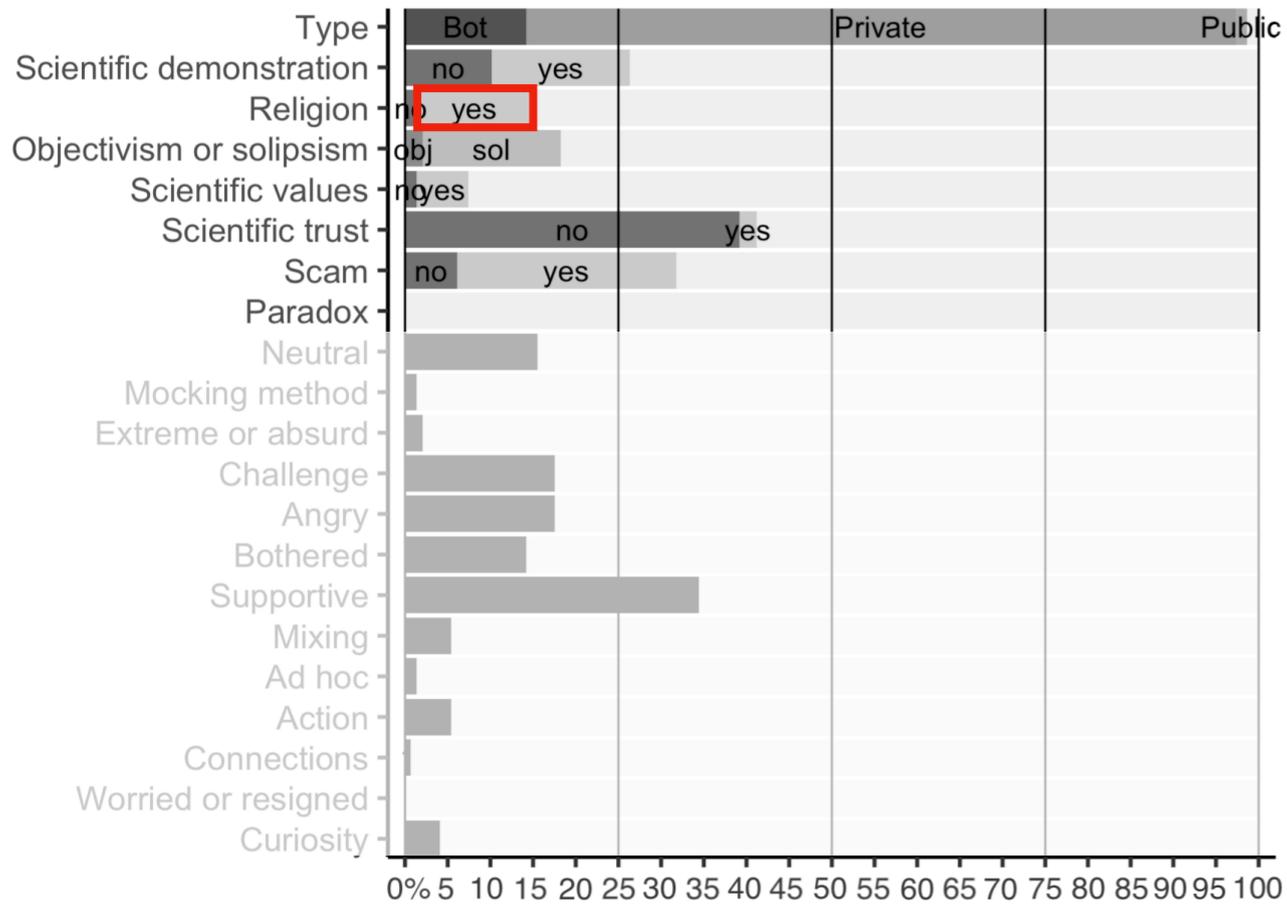
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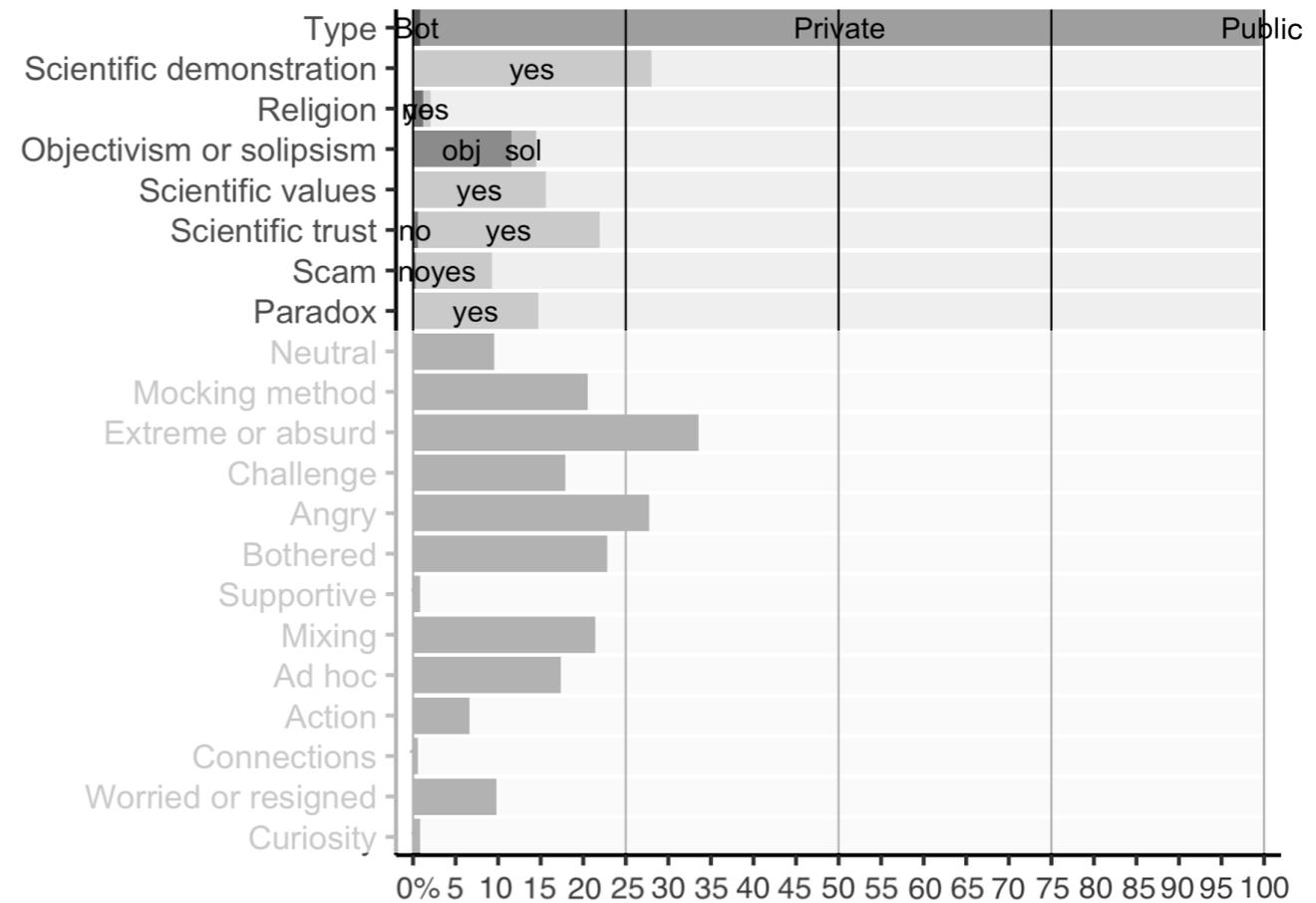
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Scientific (18%)

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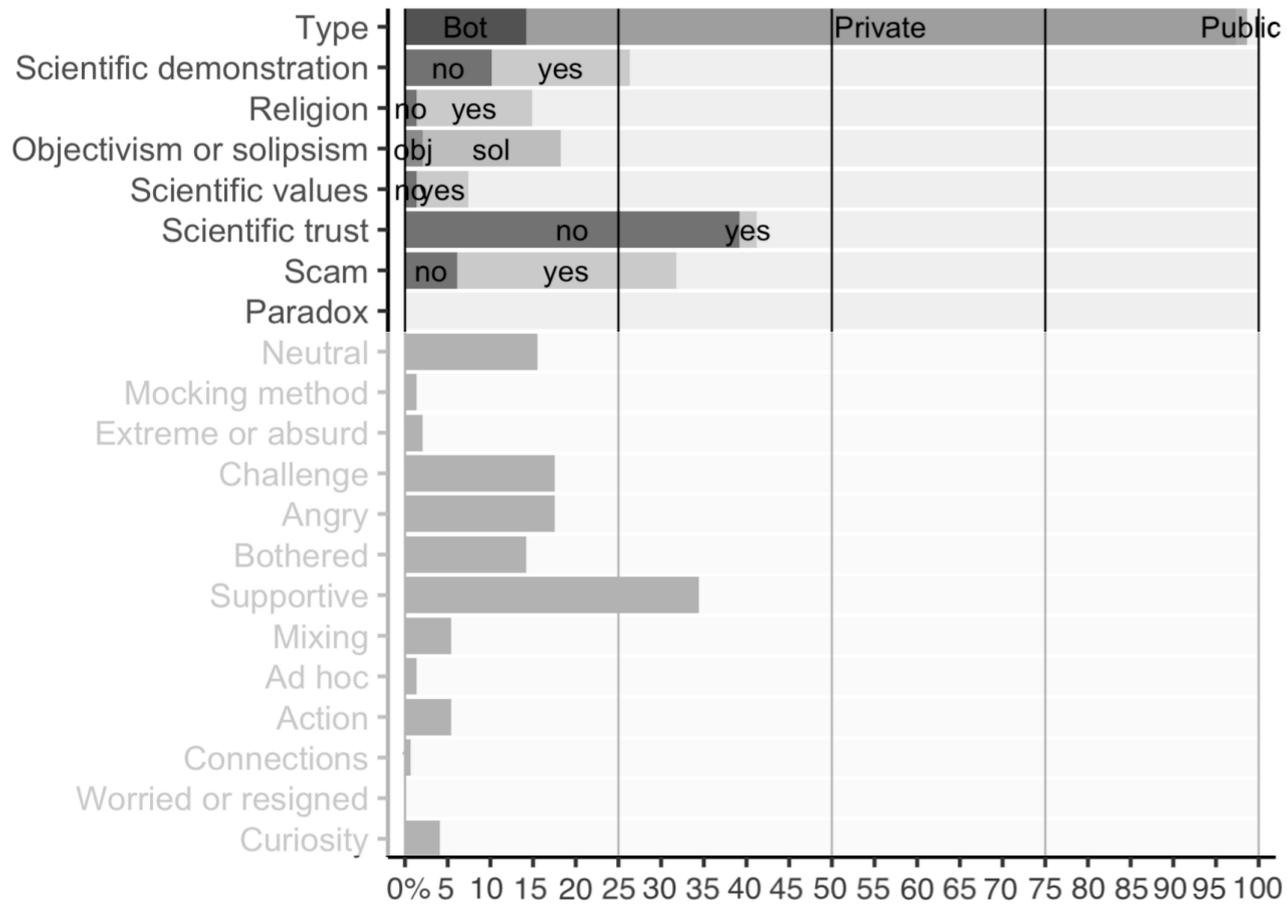


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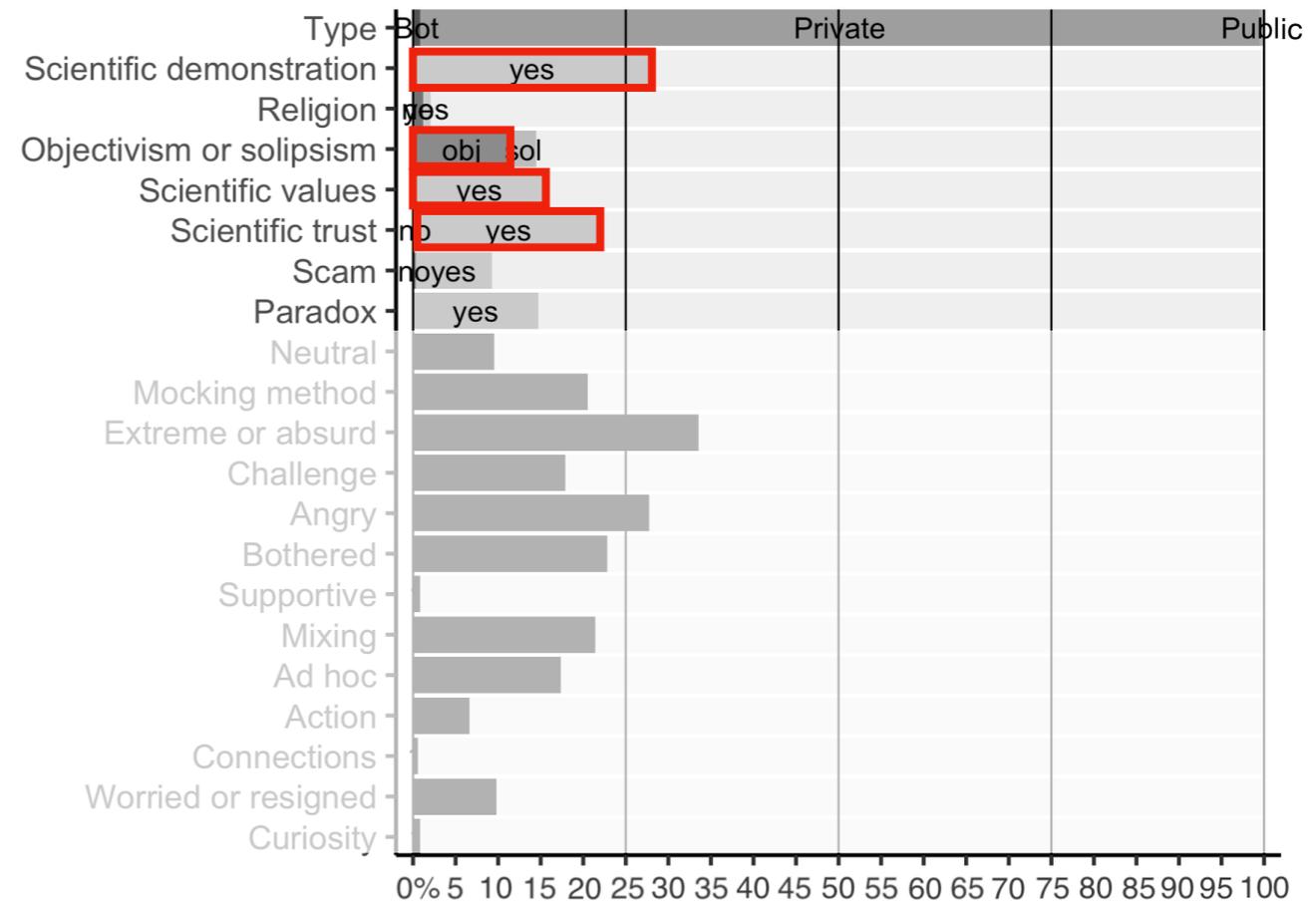
Scientific (18%)

Religious (14%)

Supporters of FES (N = 148)



Adversaries of FES (N = 346)



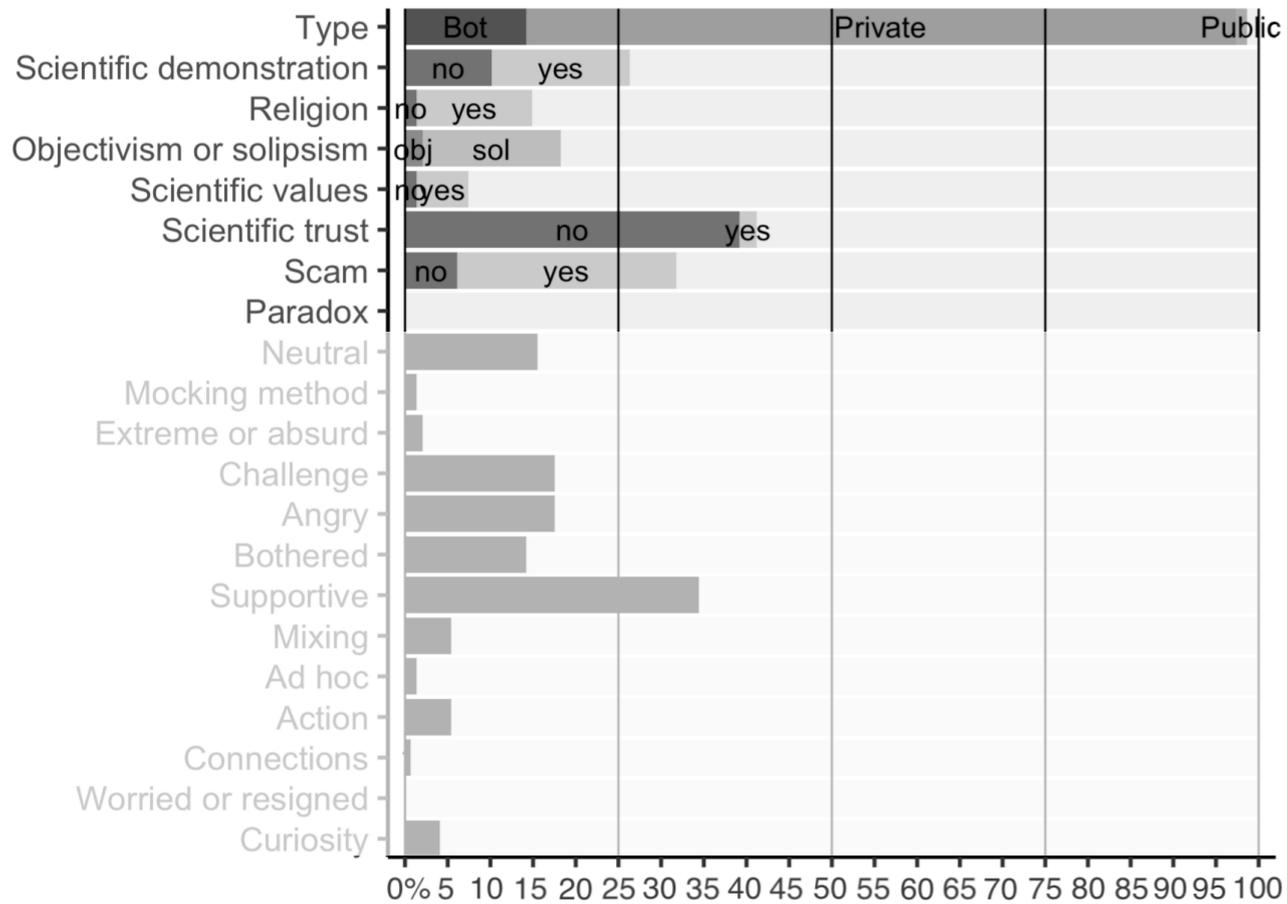
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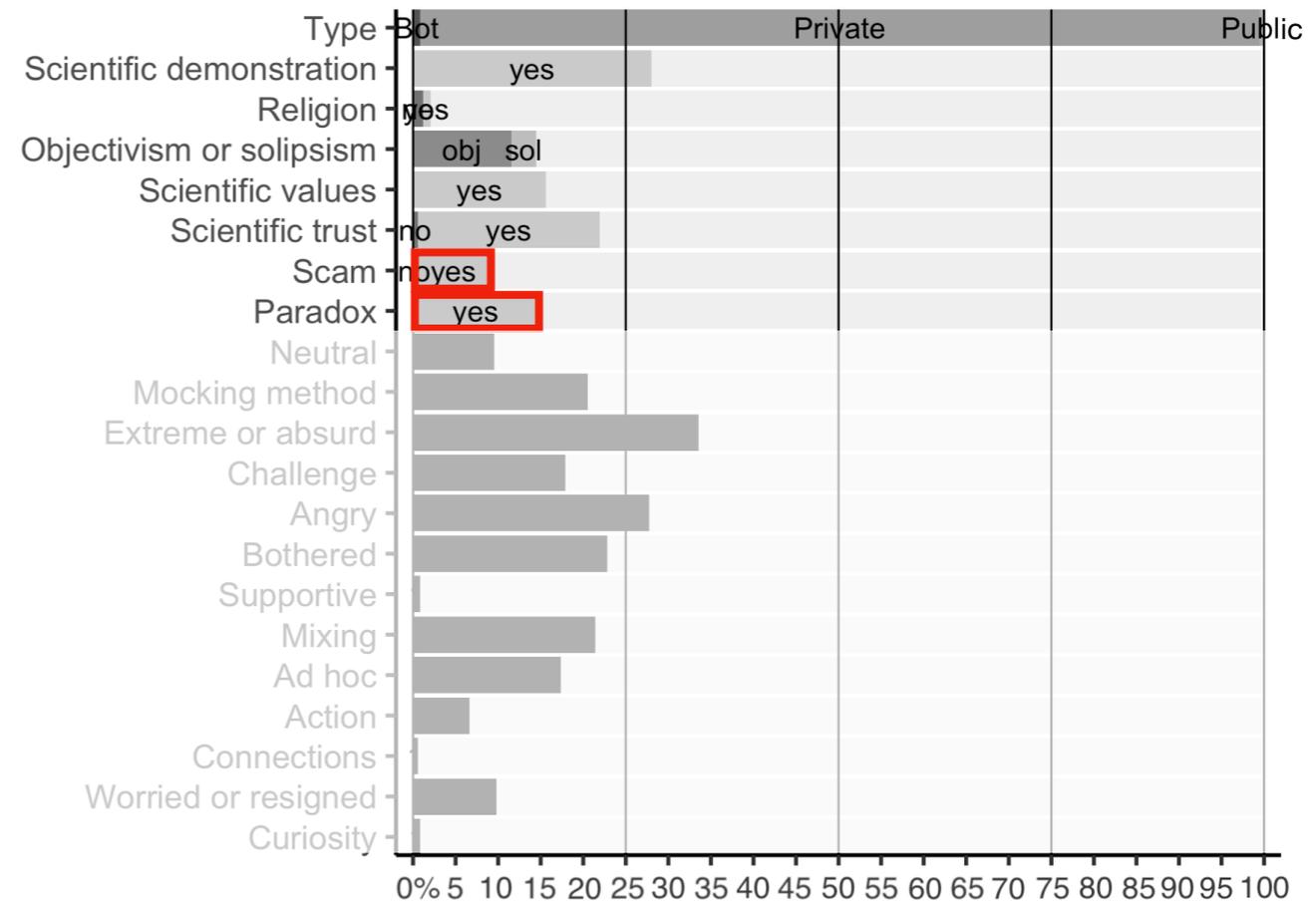
Religious (14%)

Debunkers (12%)

Supporters of FES (N = 148)



Adversaries of FES (N = 346)



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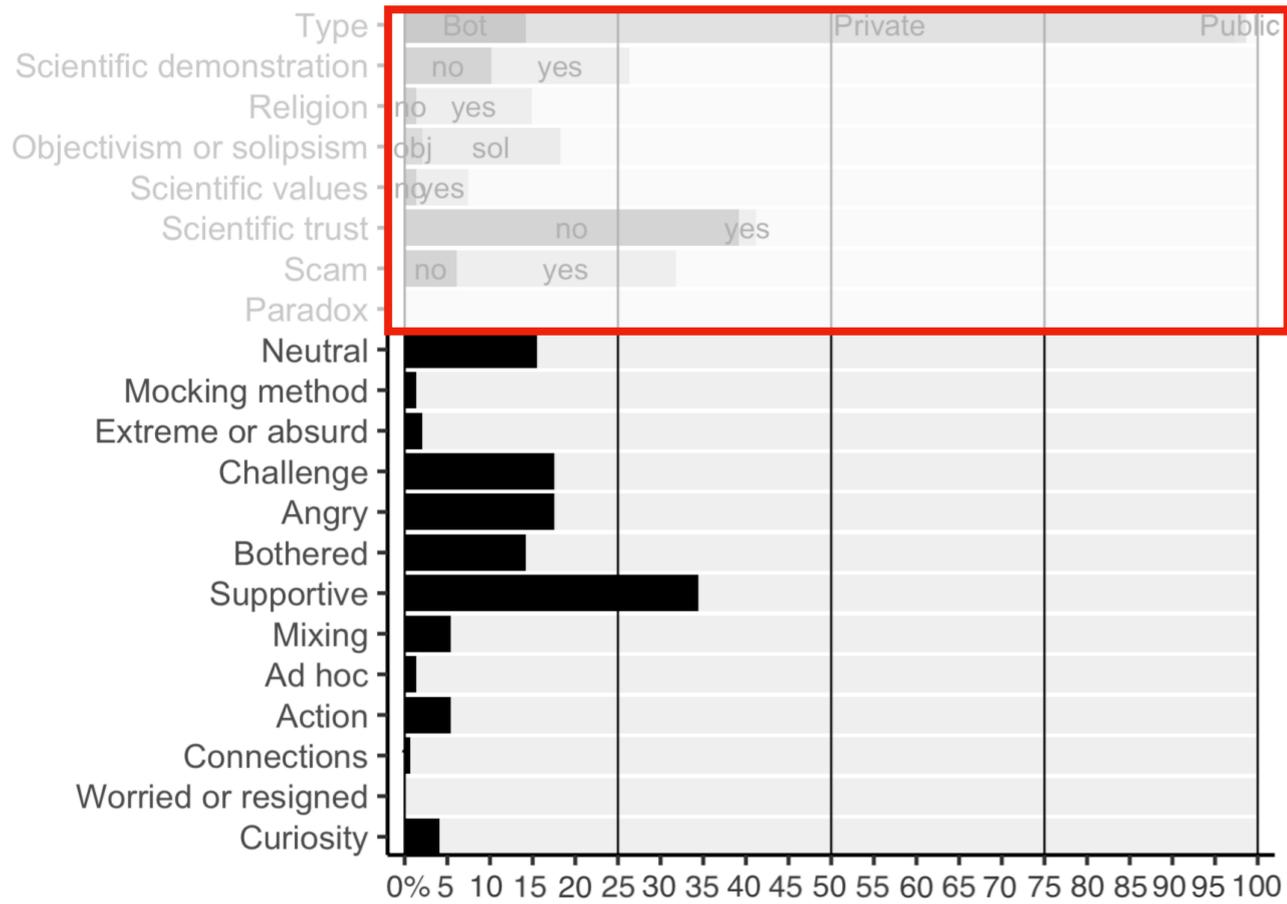
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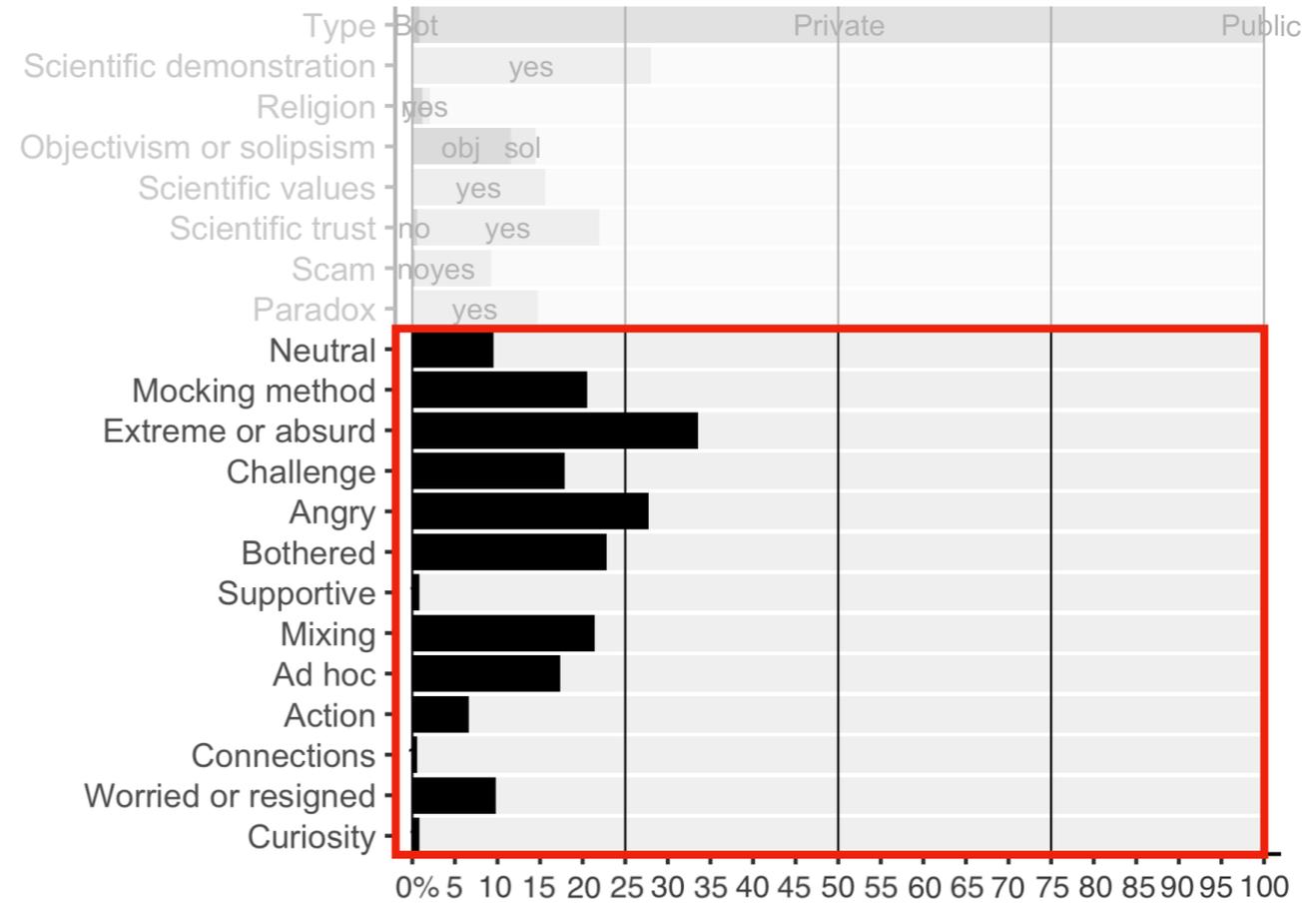
Debunkers (12%)

Skepticals (23%)

Supporters of FES (N = 148)

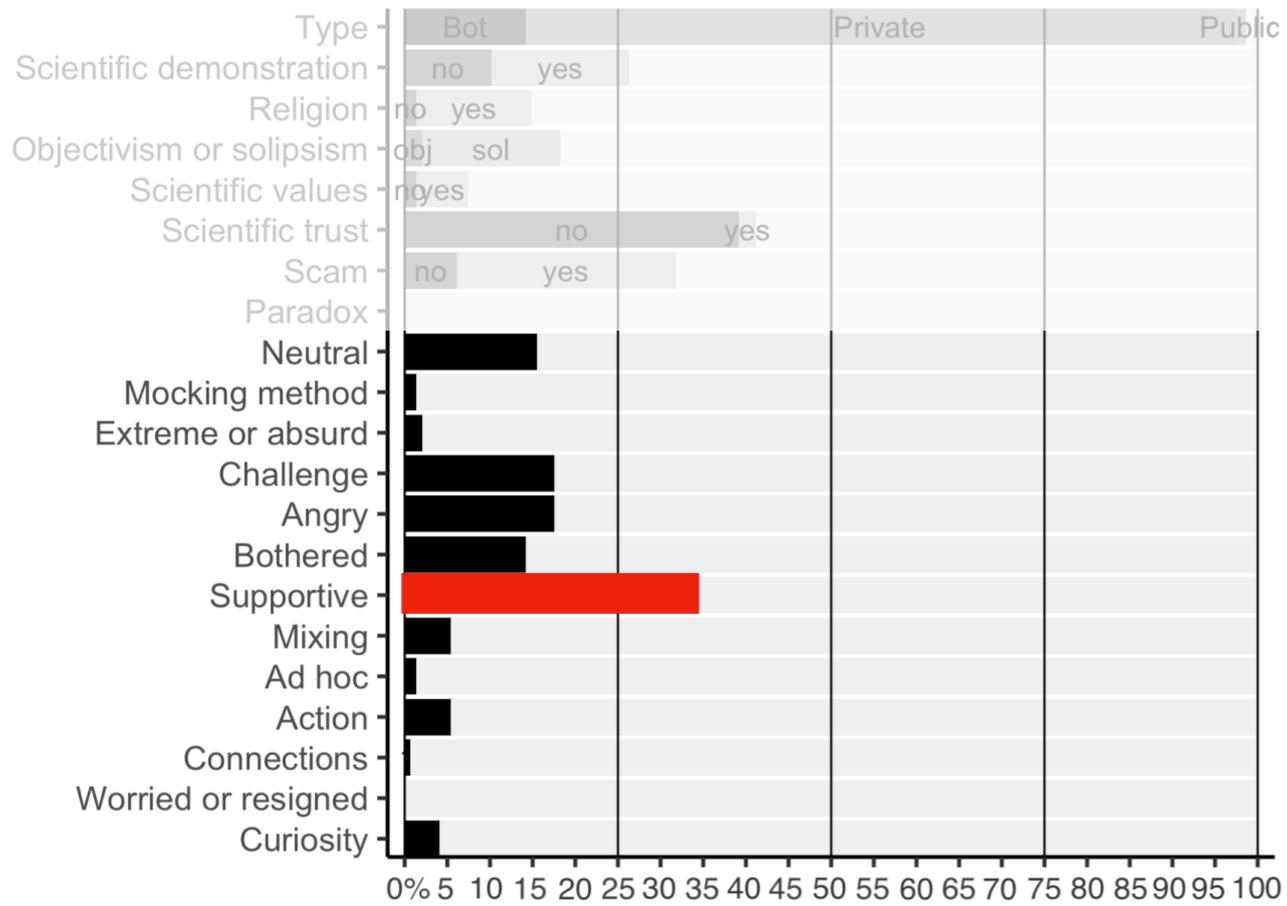


Adversaries of FES (N = 346)

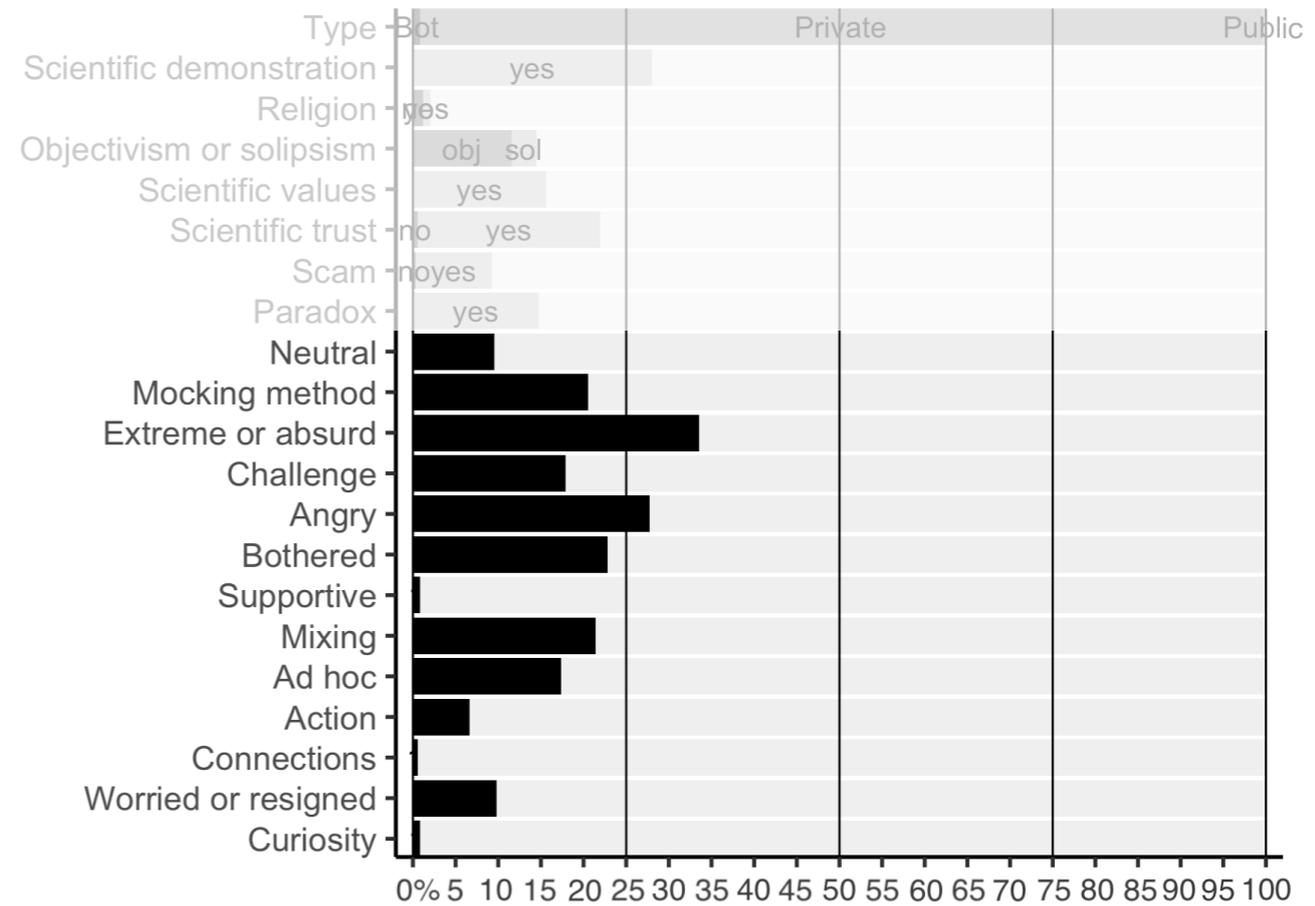


More active in framing strategies

Supporters of FES (N = 148)



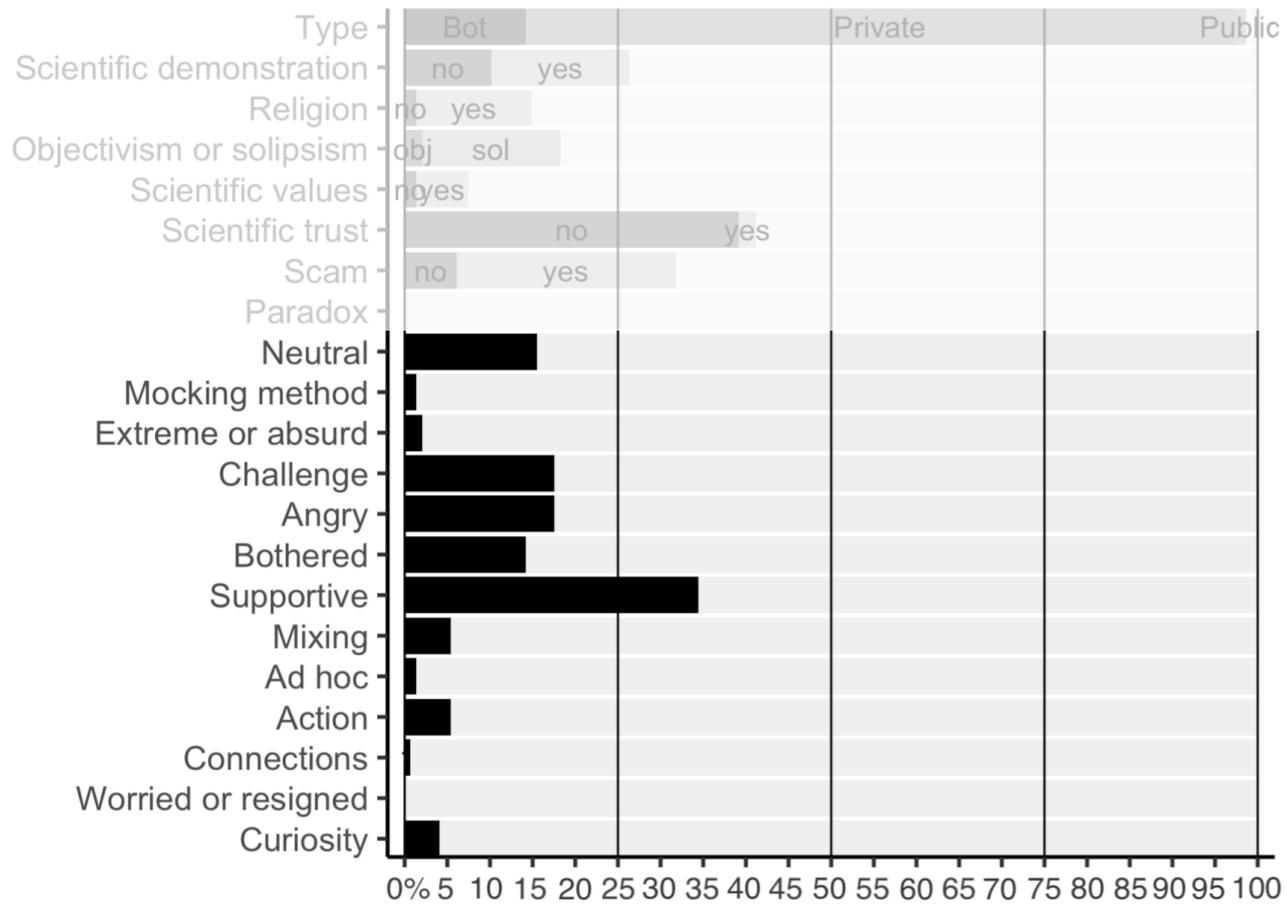
Adversaries of FES (N = 346)



Social boundary: ingroup

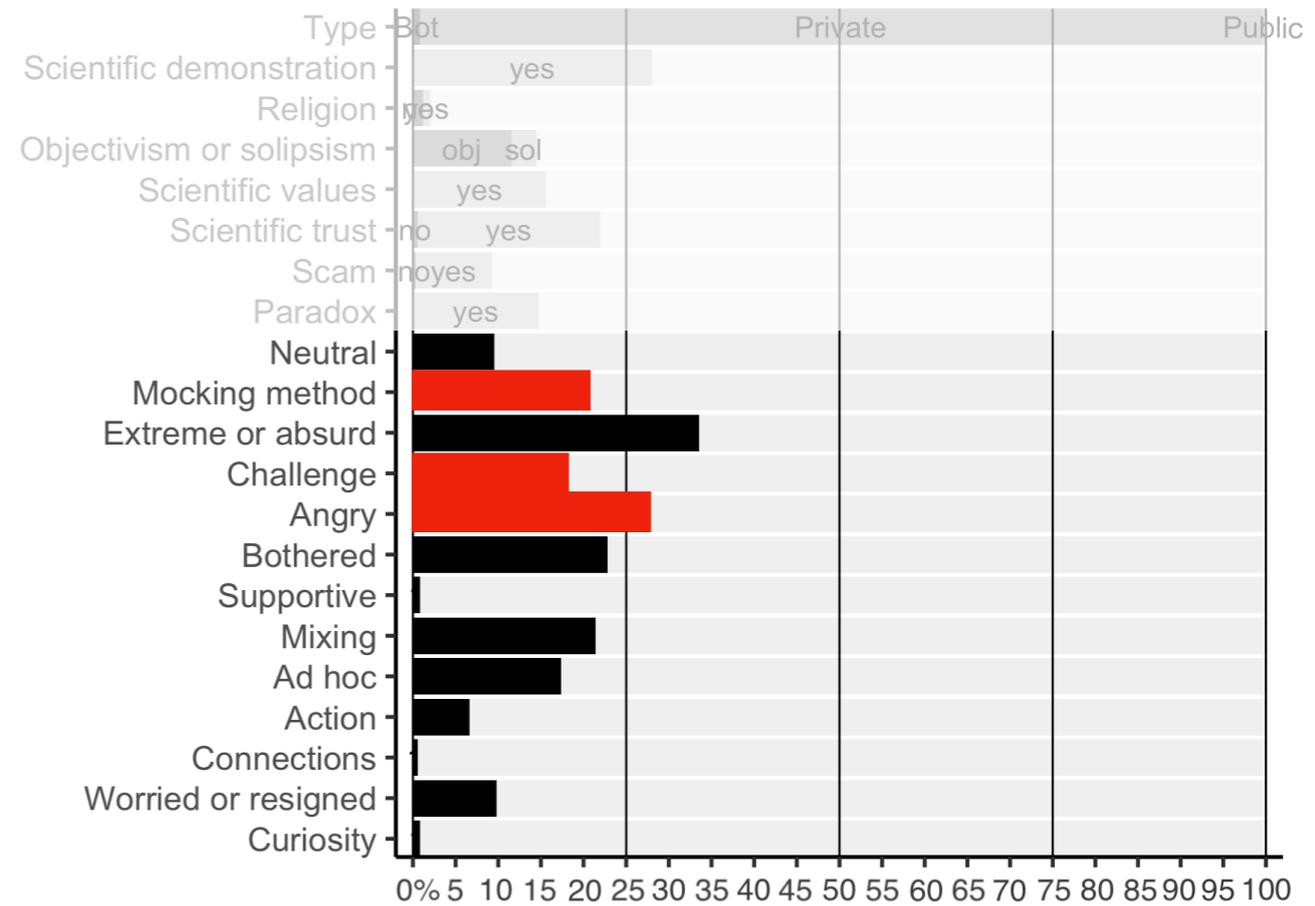
More active in framing strategies

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Social boundary: ingroup

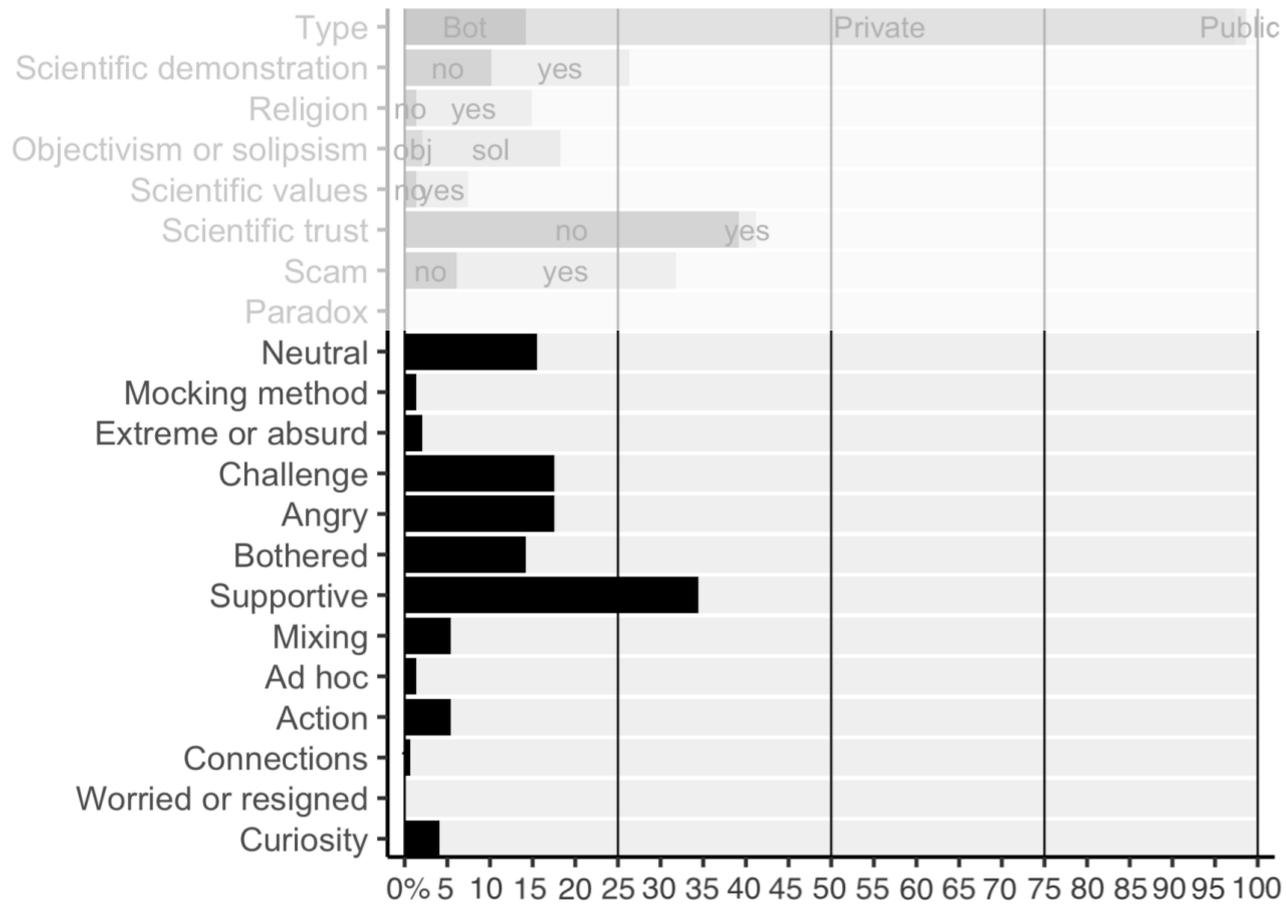
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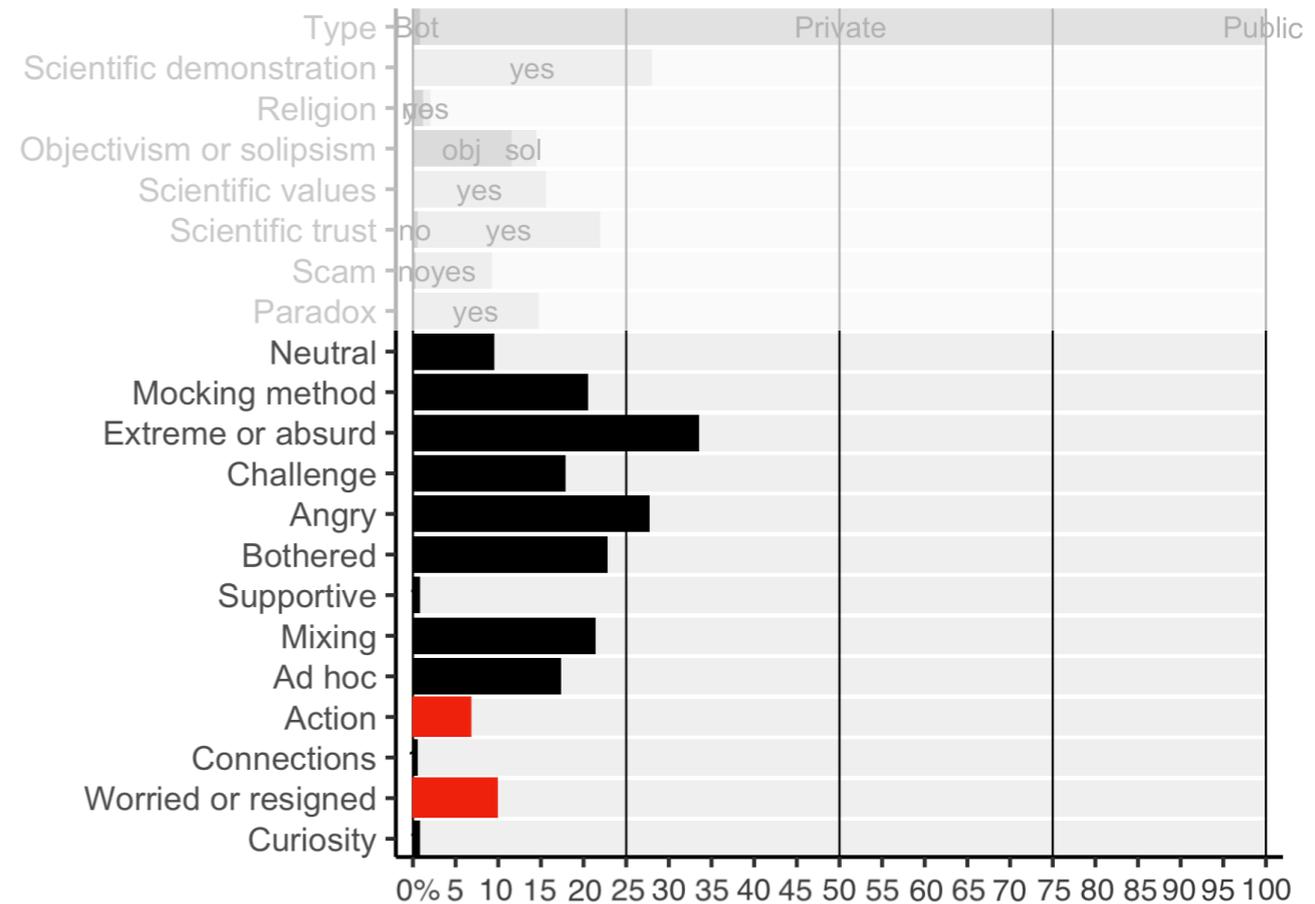
More active in framing strategies

Social boundary: outgroup

Supporters of FES (N = 148)



Adversaries of FES (N = 346)



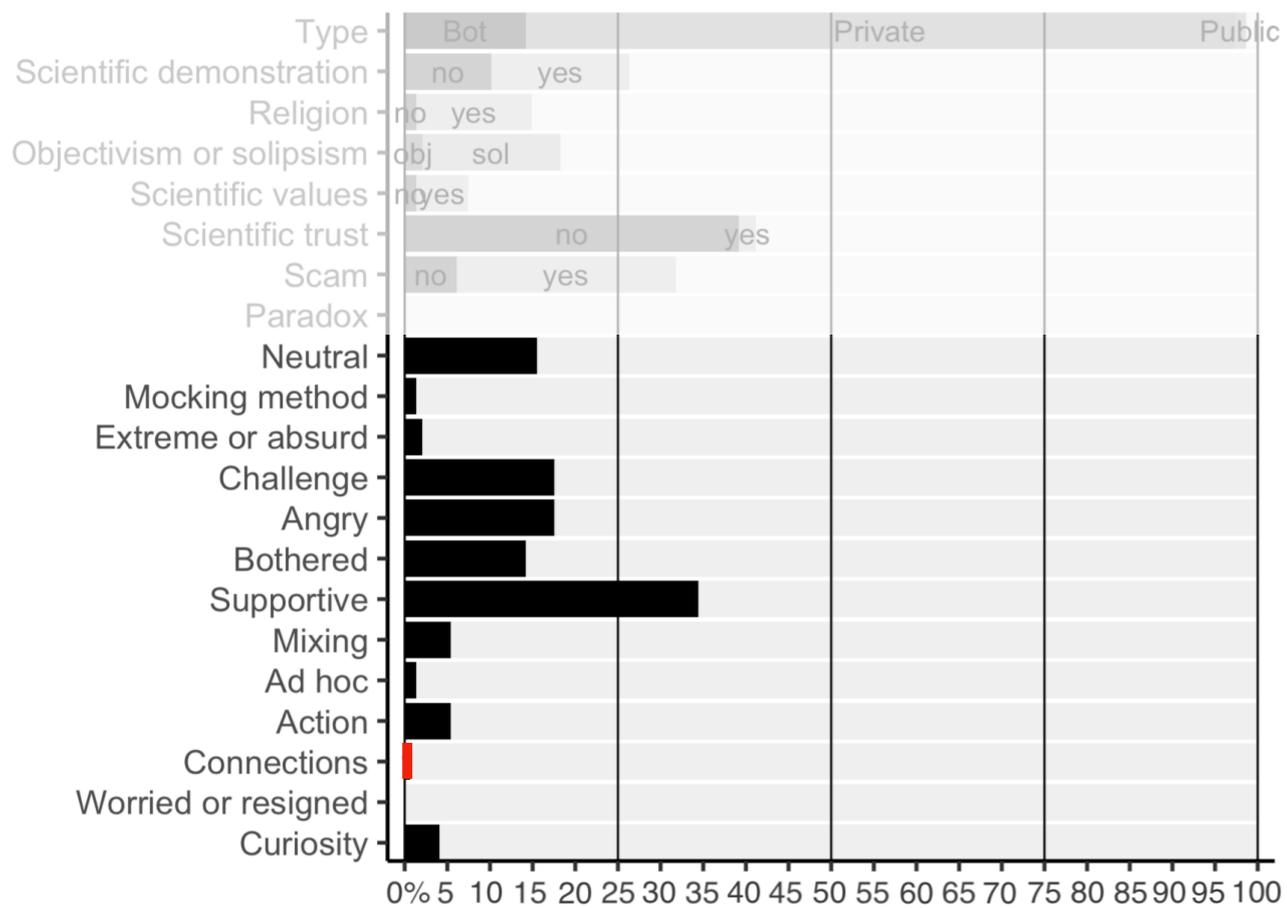
Social boundary: ingroup

More active in framing strategies

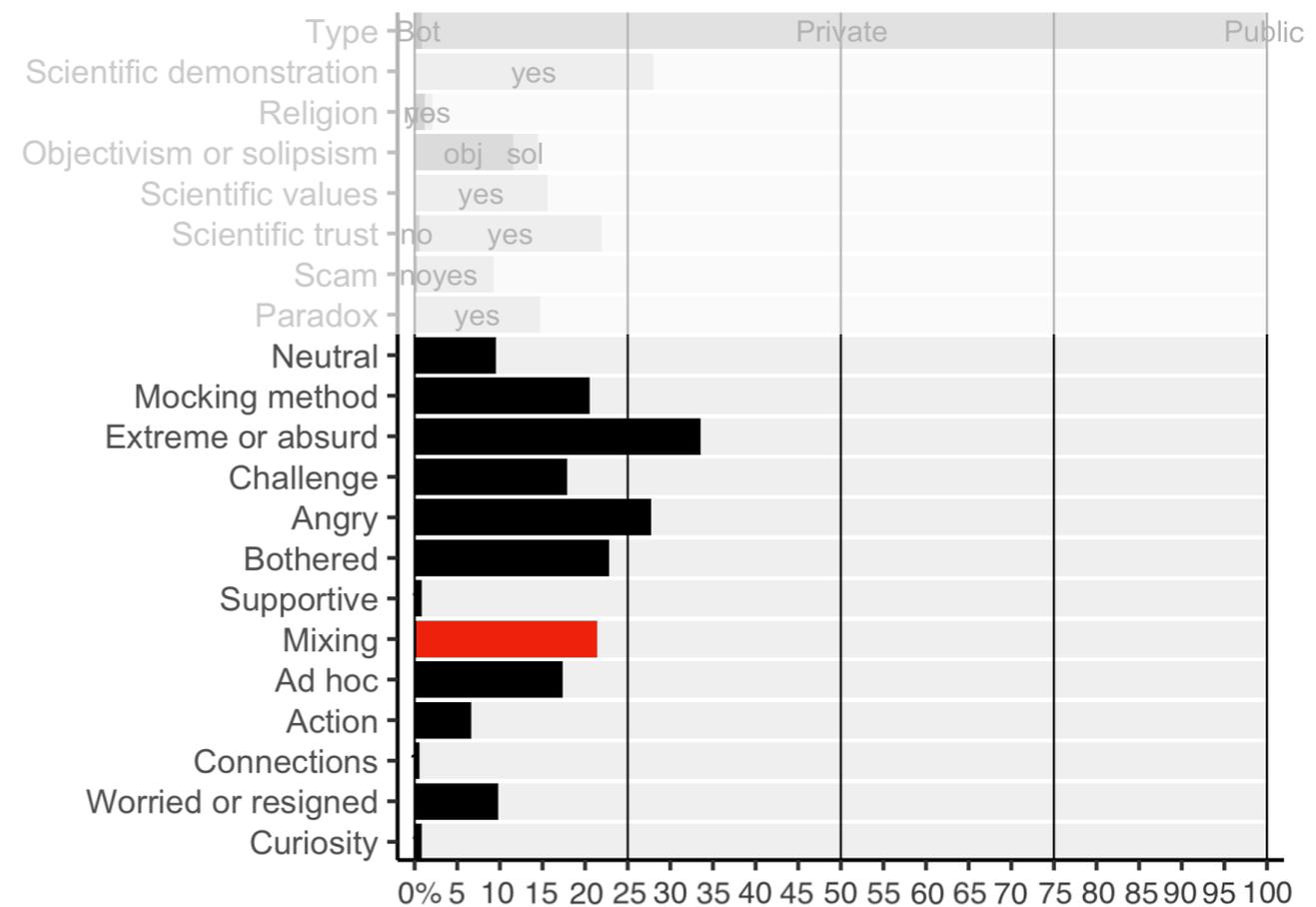
Social boundary: outgroup

Normative boundary: educate or ignore

Supporters of FES (N = 148)



Adversaries of FES (N = 346)



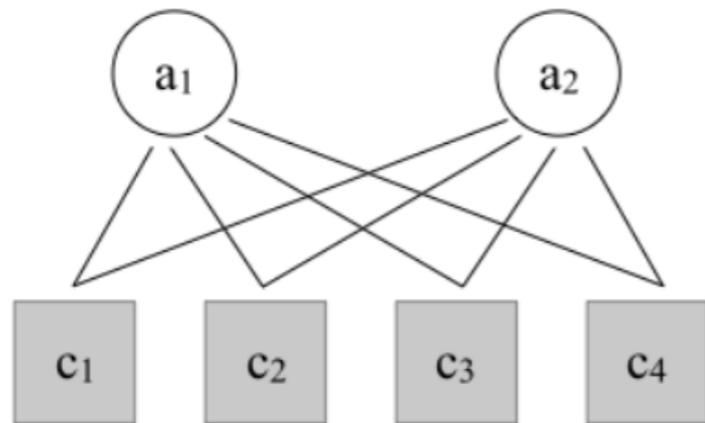
Social boundary: ingroup

More active in framing strategies

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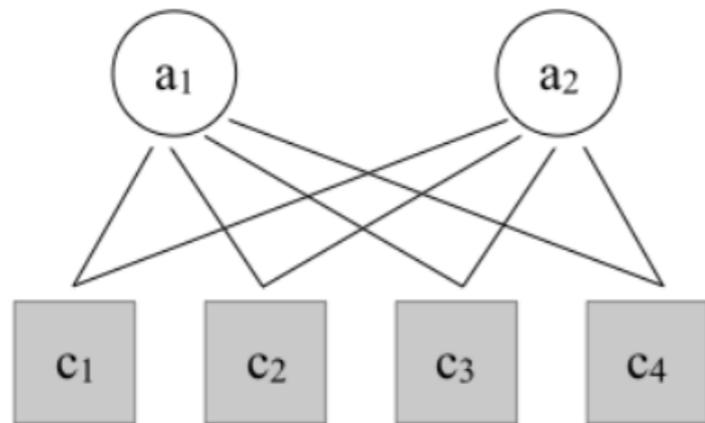
Actor-congruence



Measures of network clusterization

		Actor-Congruence	
Supporters	Modularity	0.33	+
	Edge density	0.17	-
Adversaries	Modularity	0.20	-
	Edge density	0.34	+

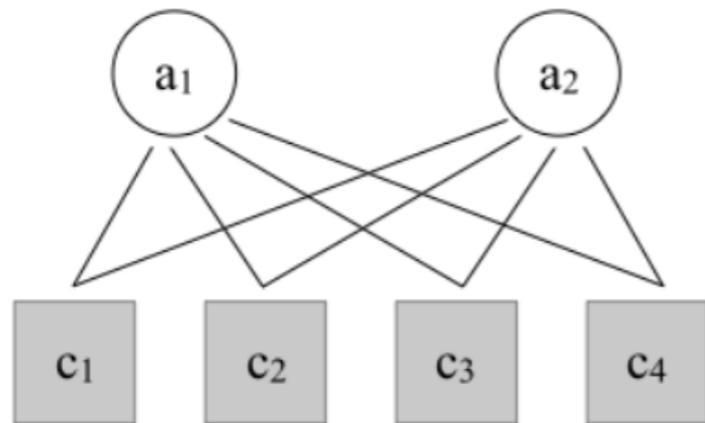
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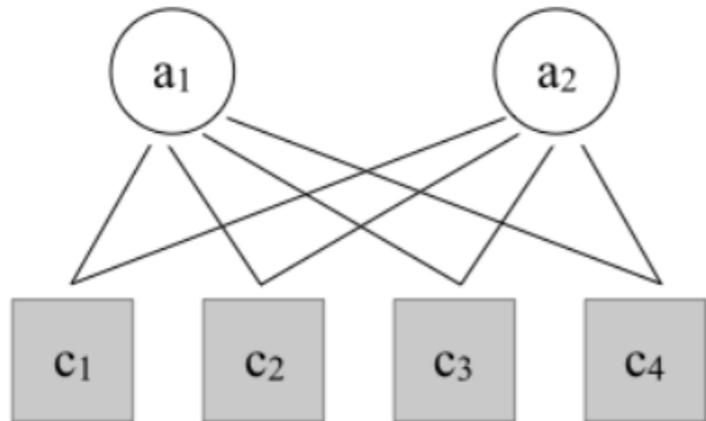
Actor-congruence



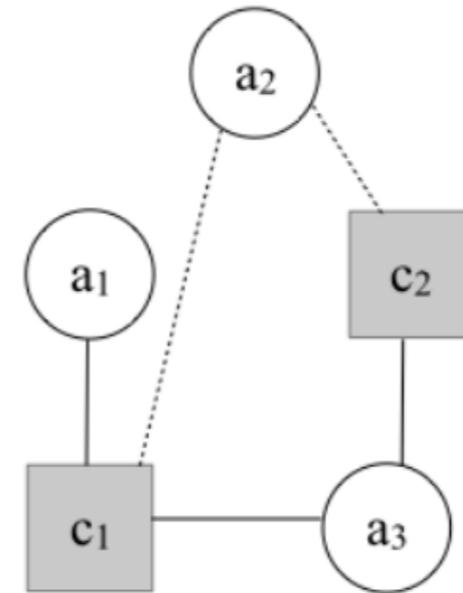
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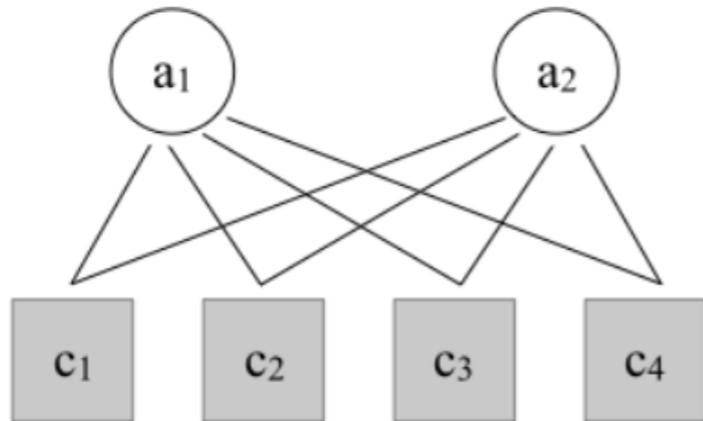
Conflict



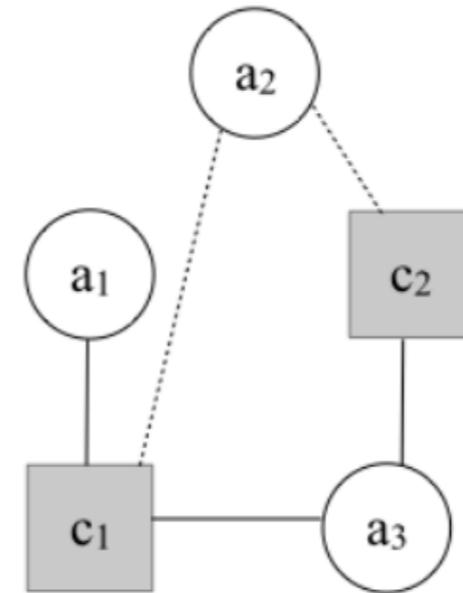
Measures of network clusterization

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Supporters	Modularity	0.33	+ 0.18
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	Edge density	0.34	+ 0.19

Actor-congruence



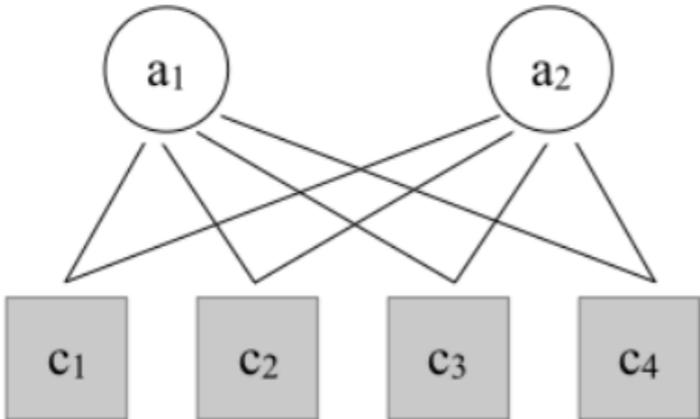
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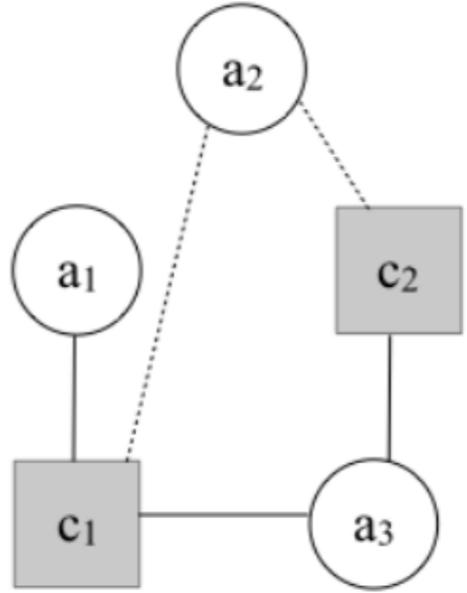
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Actor-congruence



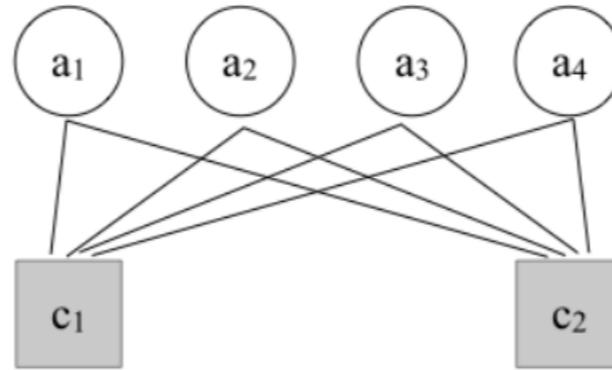
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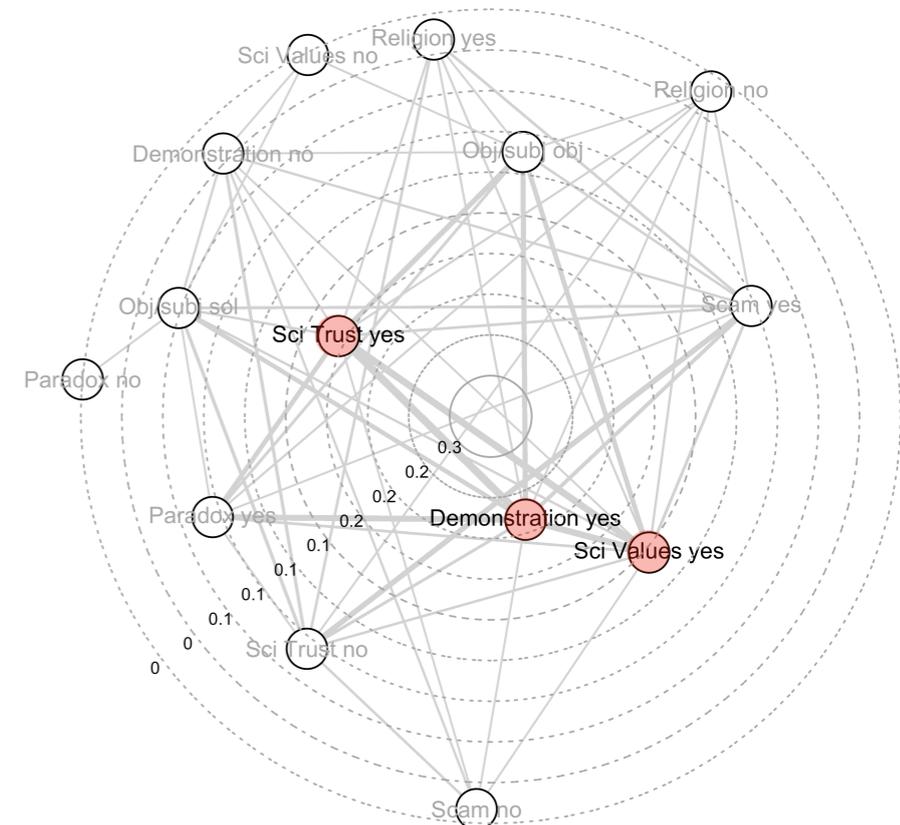
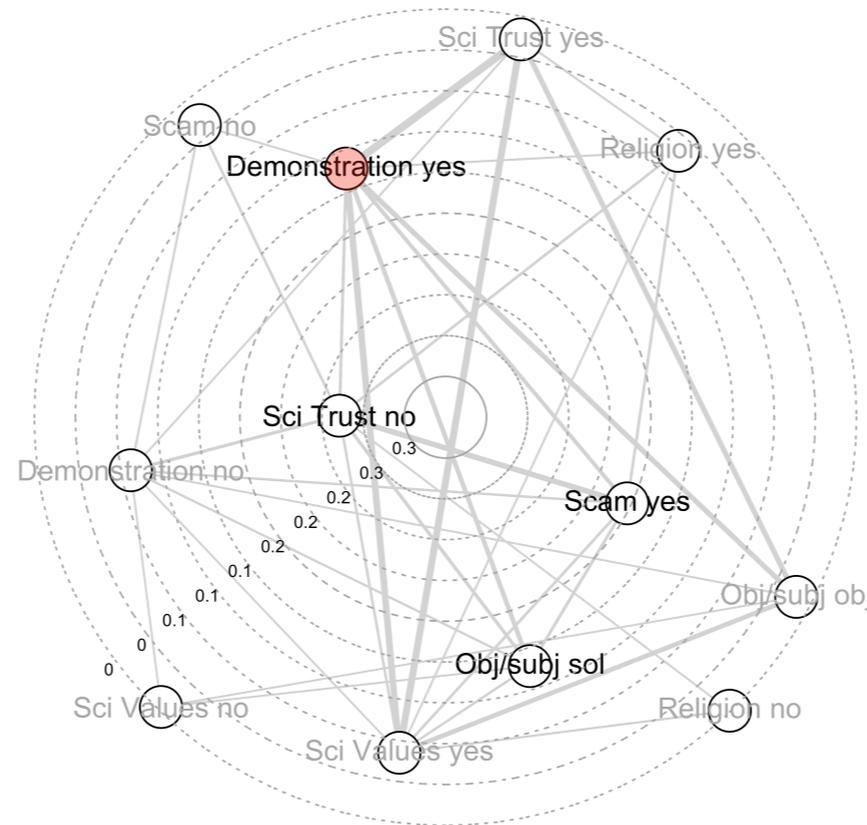
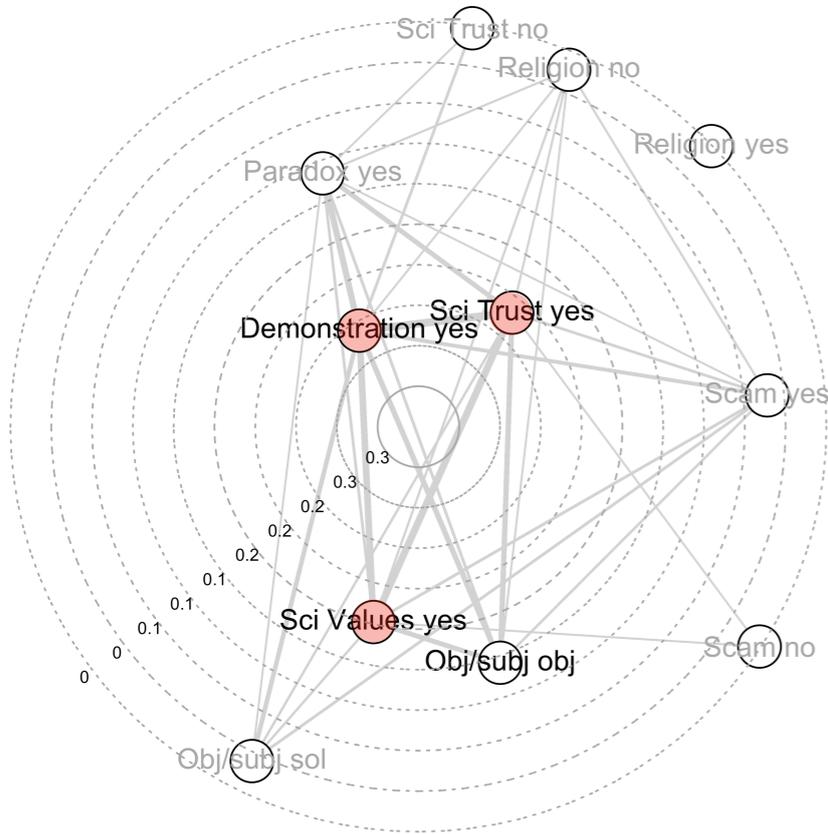
Concept-congruence



Adversaries

Supporters

Total



1. Heterogeneity of positions

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2. Social and normative boundaries

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2. Social and normative boundaries
3. Entities:
 - supporters as pseudo-scientists
 - adversaries as gatekeepers

1. How is the process of agenda-setting established?

Periphery → Core

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Periphery → Core

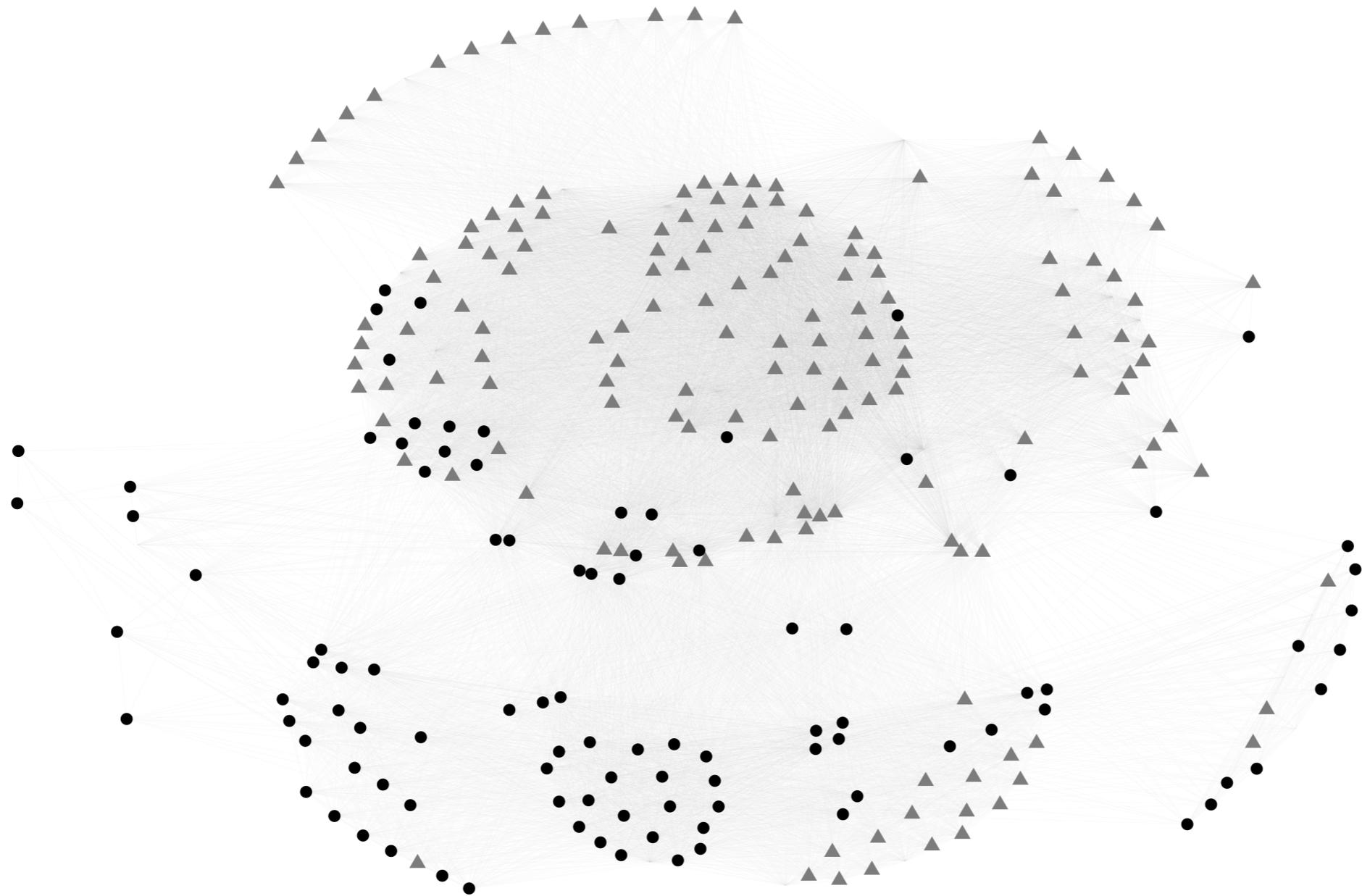
2. Importance of the field: surveys contextualized

Thank you!

email: luca.carbone@kuleuven.be

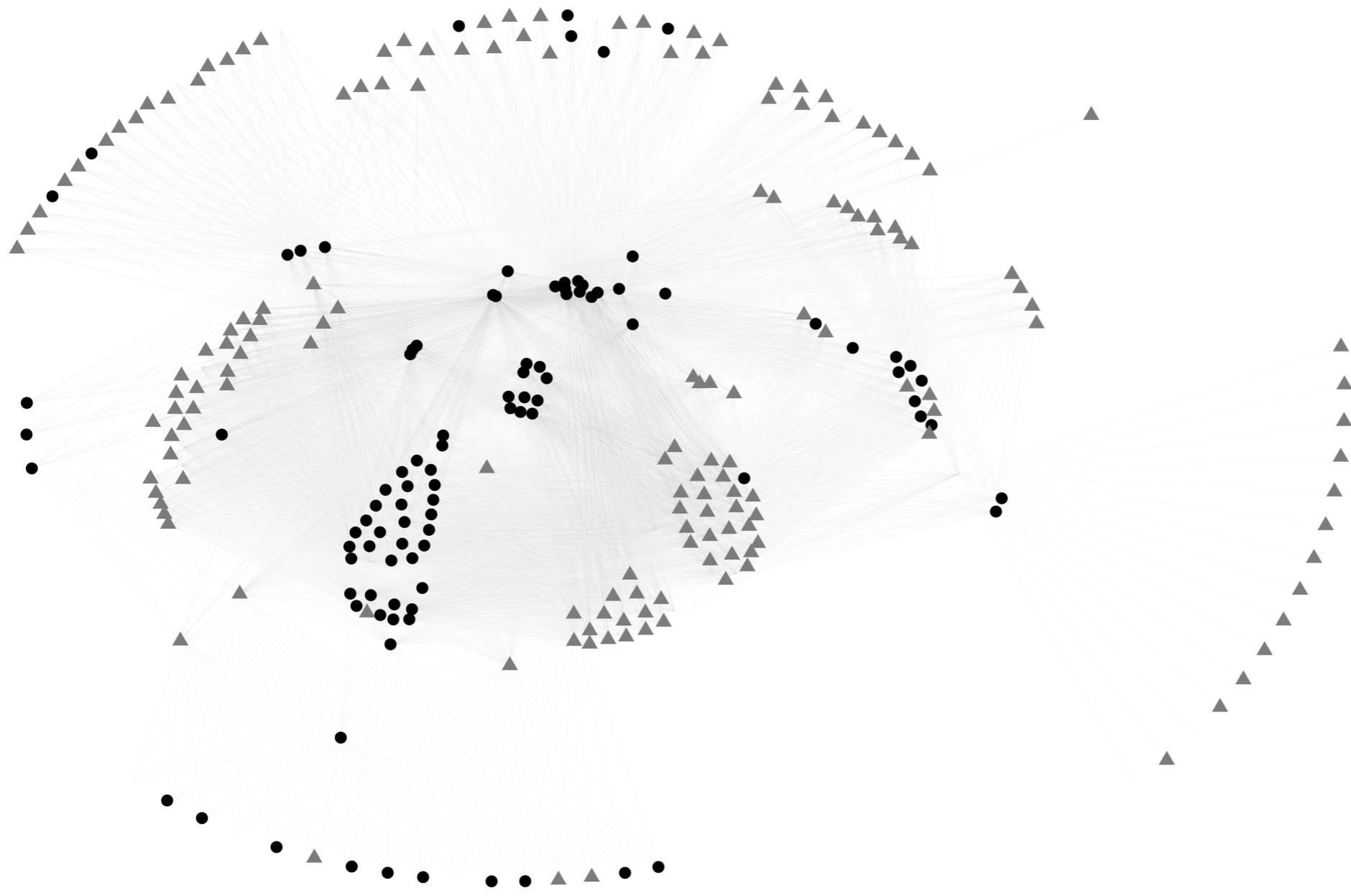
Twitter: @lucacarbonate__lc

syntax and data: https://osf.io/xwtdc/?view_only=daa2a0893e7546ba87d0103929bc893a



Tendency

- Supporters
- ▲ Adversaries



Tendency

- Supporters
- ▲ Adversaries