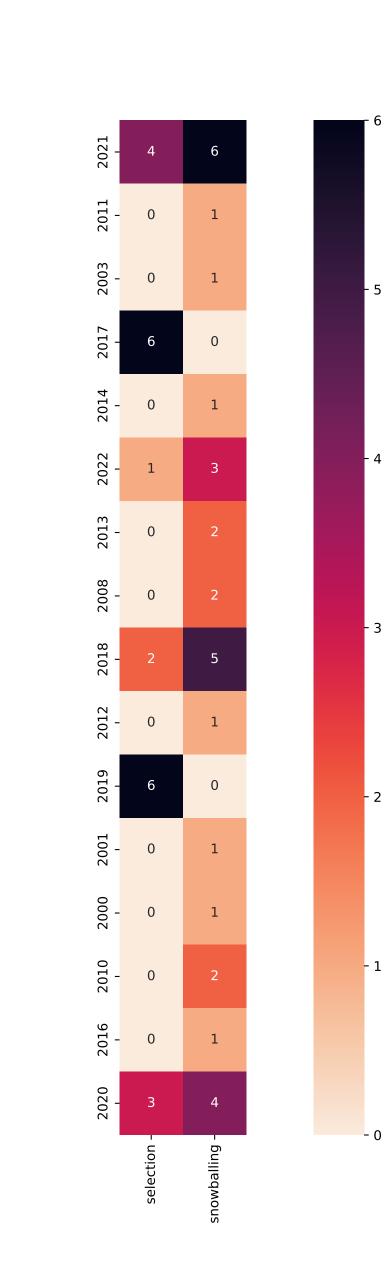
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2003		1	0		- 6
2017		2	4		
2014	- 0	1	0		- 5
2022	2	1	1		
2013	- 0	2	0		- 4
2008	- 1	0	1		·
2018	. 1	4	2		
2012	- 0	1	0		- 3
2019	- 0	0	6		
2001	- 0	1	0		- 2
2000	- 0	0	1		
2010	- 0	1	1		- 1
2016	- 0	1	0		
2020	- 0	5	2		
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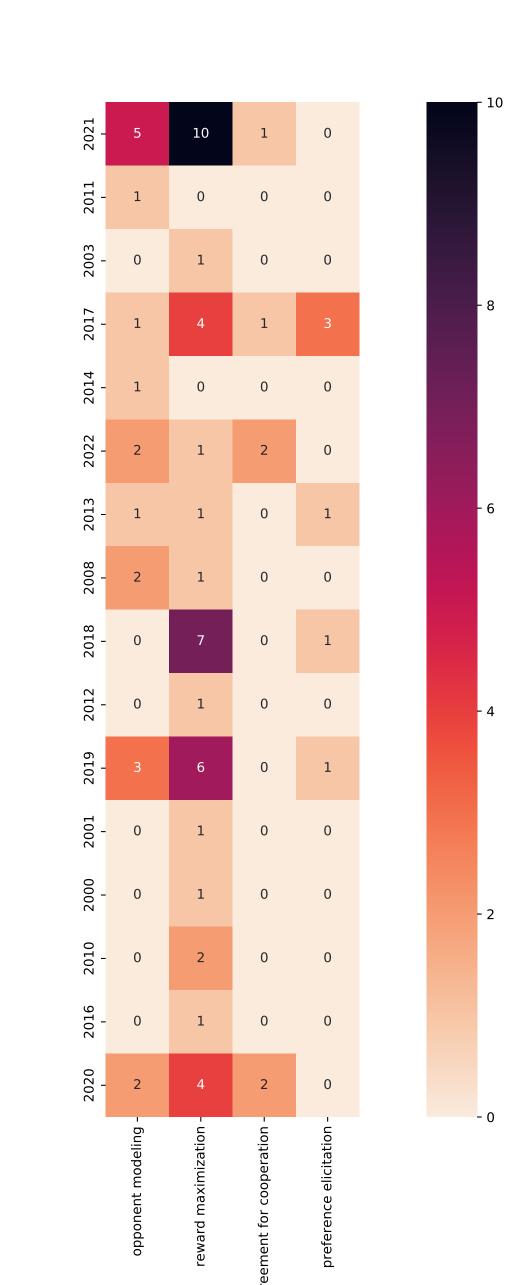
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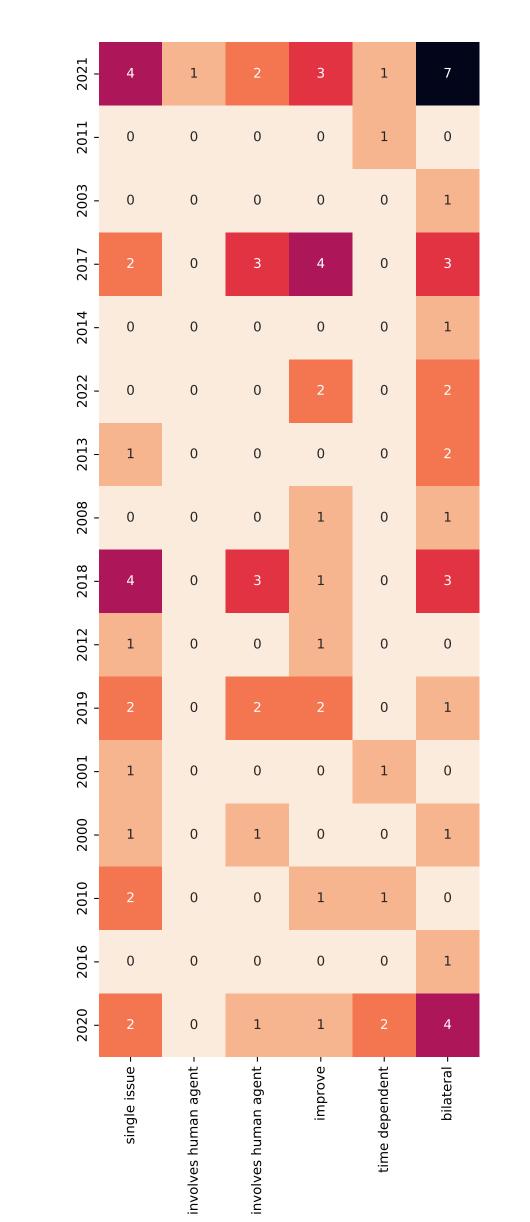
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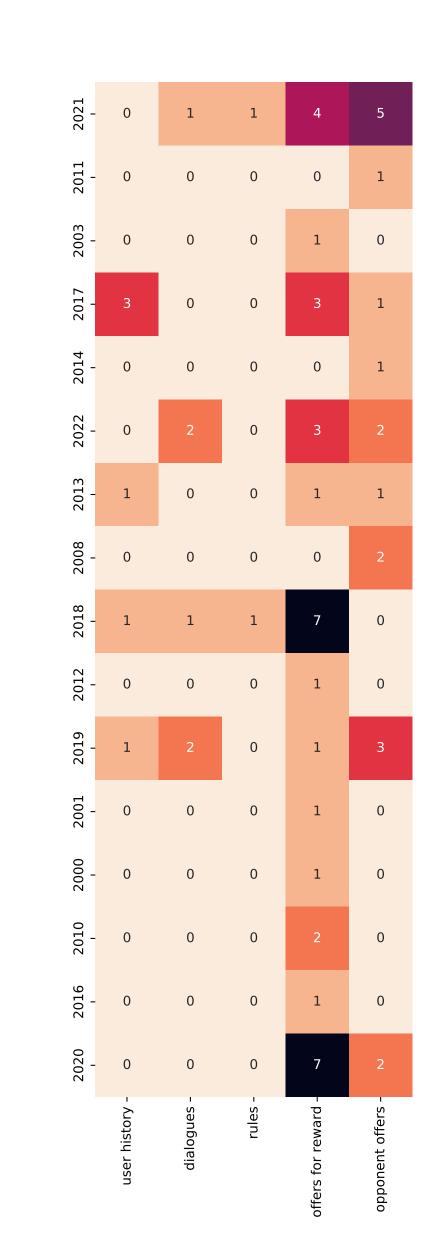
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2020	7		
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2021	0	2	4	0	1	0	0	0	0	5	0	0	0	0	1	0	0	0	1
2011	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
2003	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
2017	0	0	2	0	1	0	1	0	0	0	0	0	0	0	0	1	0	1	1
2014	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2022	1	0	2	0	0	0	0	0	0	4	0	0	0	1	0	0	0	0	0
2013	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2008	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2018	0	0	3	2	0	1	0	0	0	0	0	0	0	1	0	1	0	0	0
2012	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
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2016	0	1	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
2020	1	1	3	0	1	0	0	0	1	2	1	0	0	0	0	0	1	0	0
	Bayesian Learning -	Neural Network -	Alternative offer protocol –	Linear Programming -	Monte Carlo Tree search -	Heuristic algorithm -	Equilibrium strategies -	Argumentation -	Linear Regression –	Reinforcement learning -	Nonlinear Regression -	logistic regression -	Markov Decision Process -	LSTM -	Genetic Algorithm -	Fuzzy Logic System -	Angle based Similarirty -	ipartite gradient descent search -	Gaussian probability -

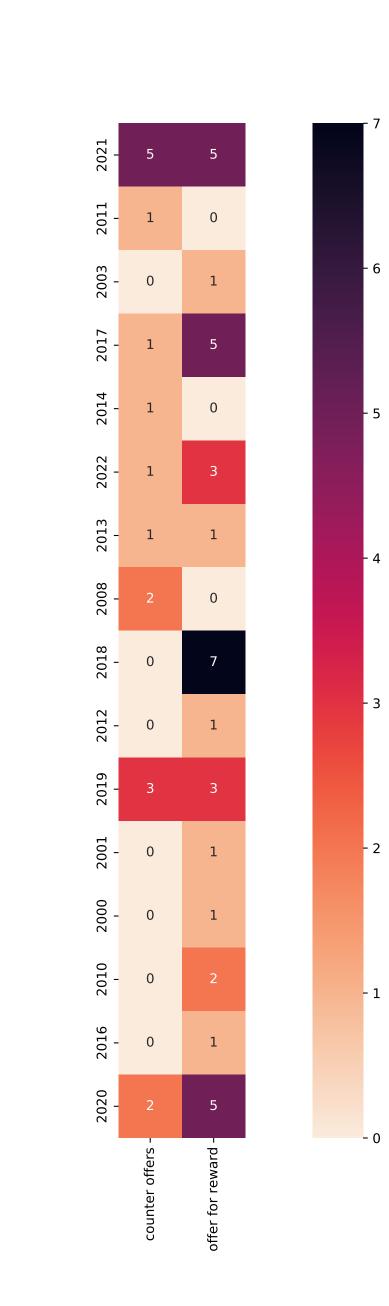




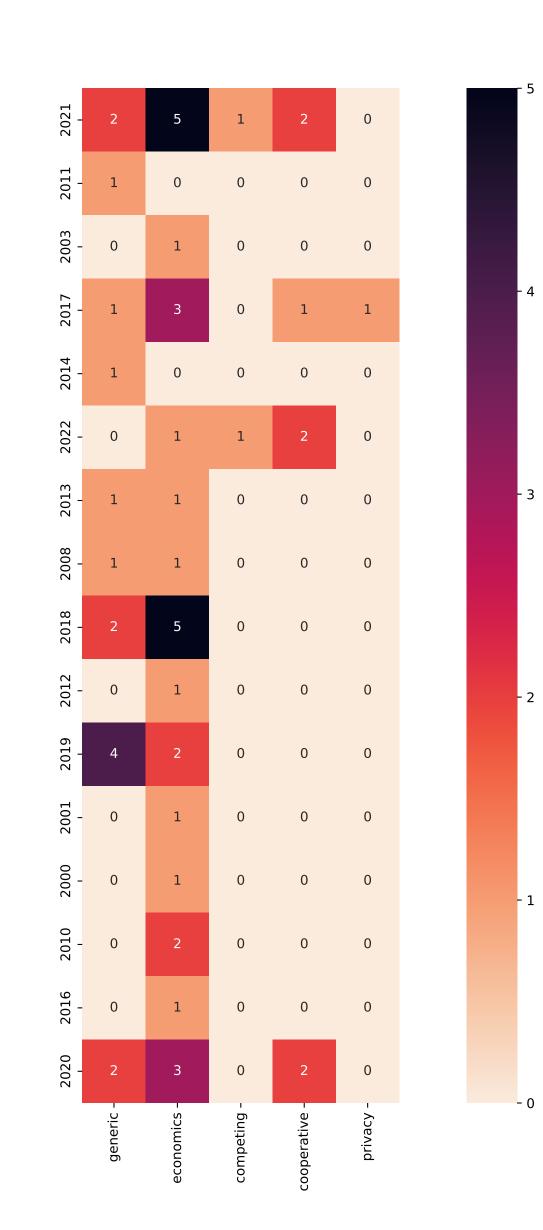


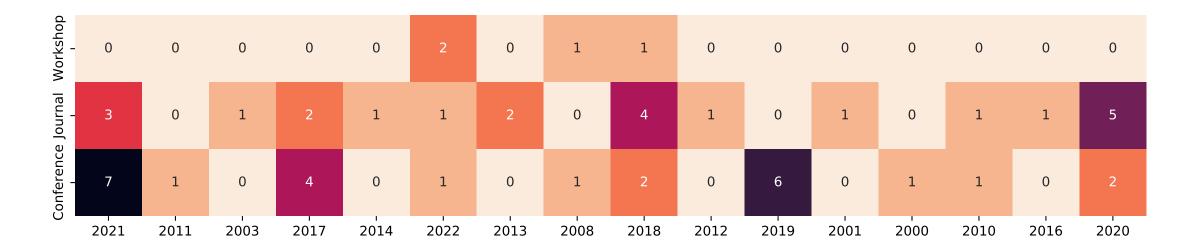


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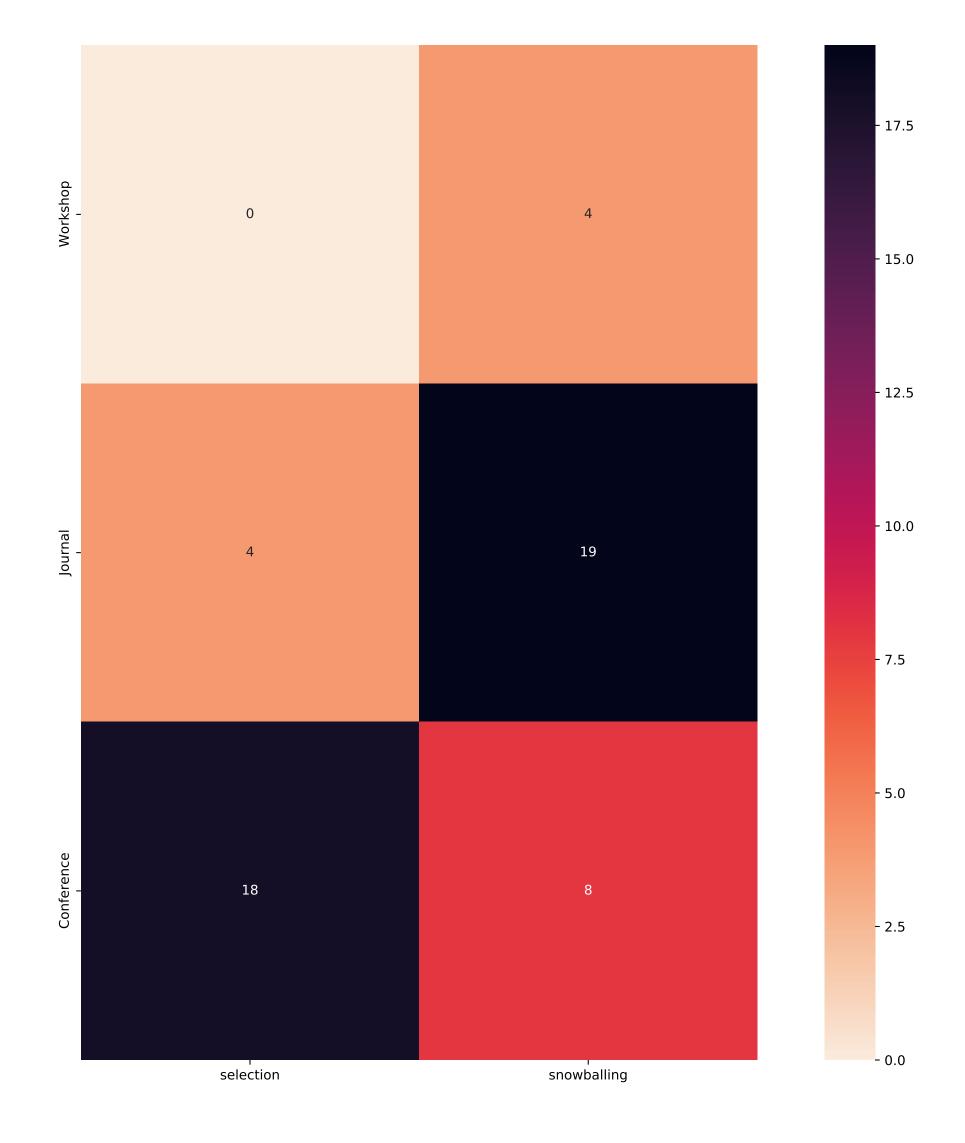


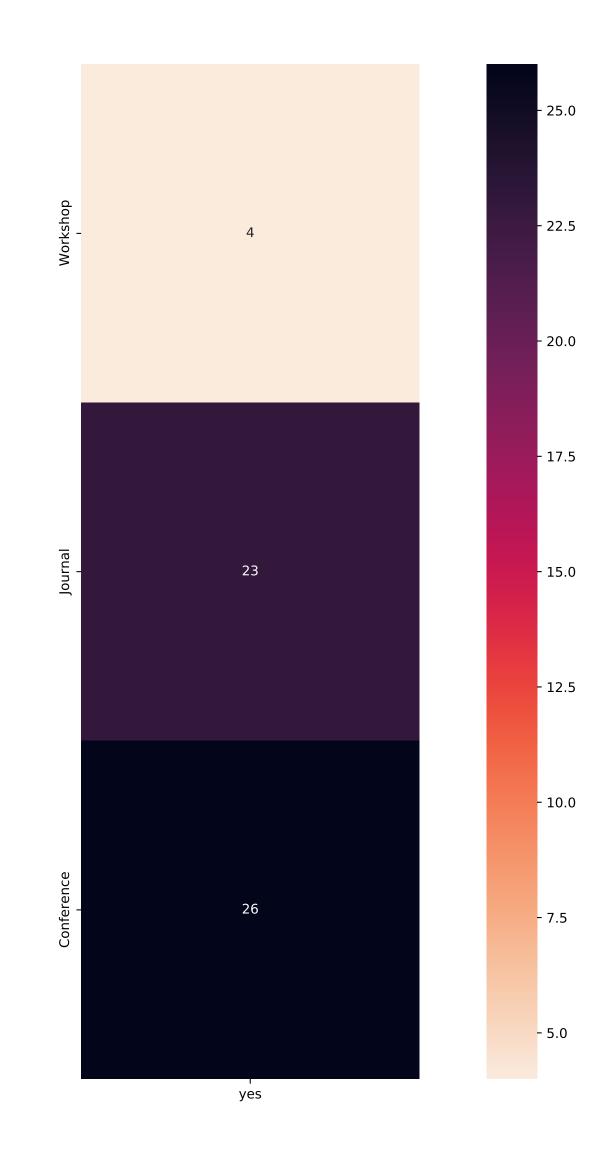


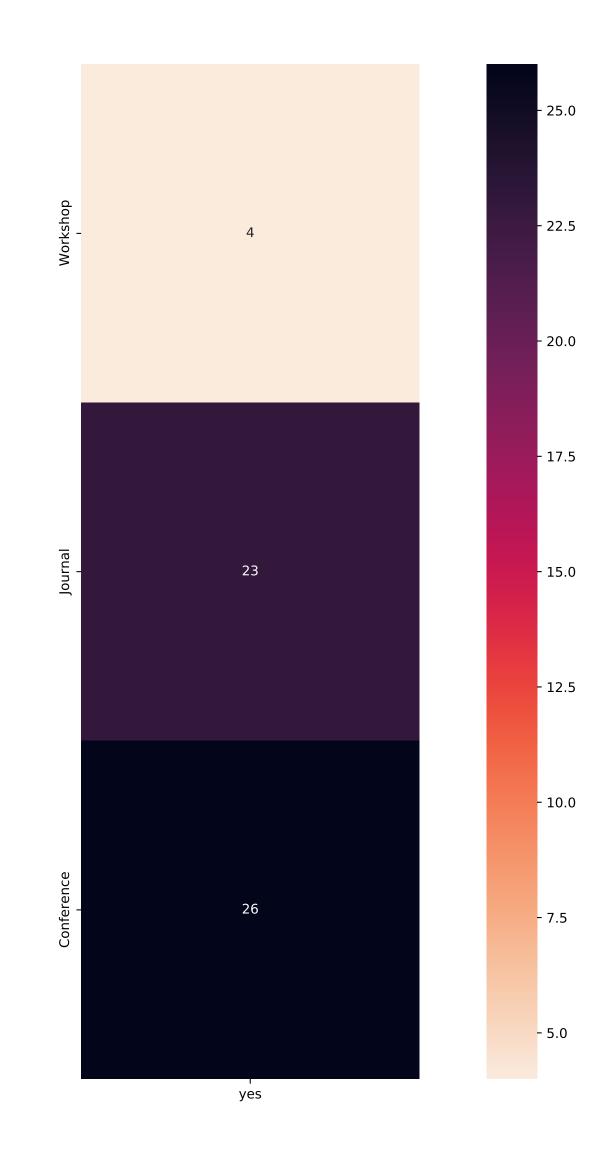
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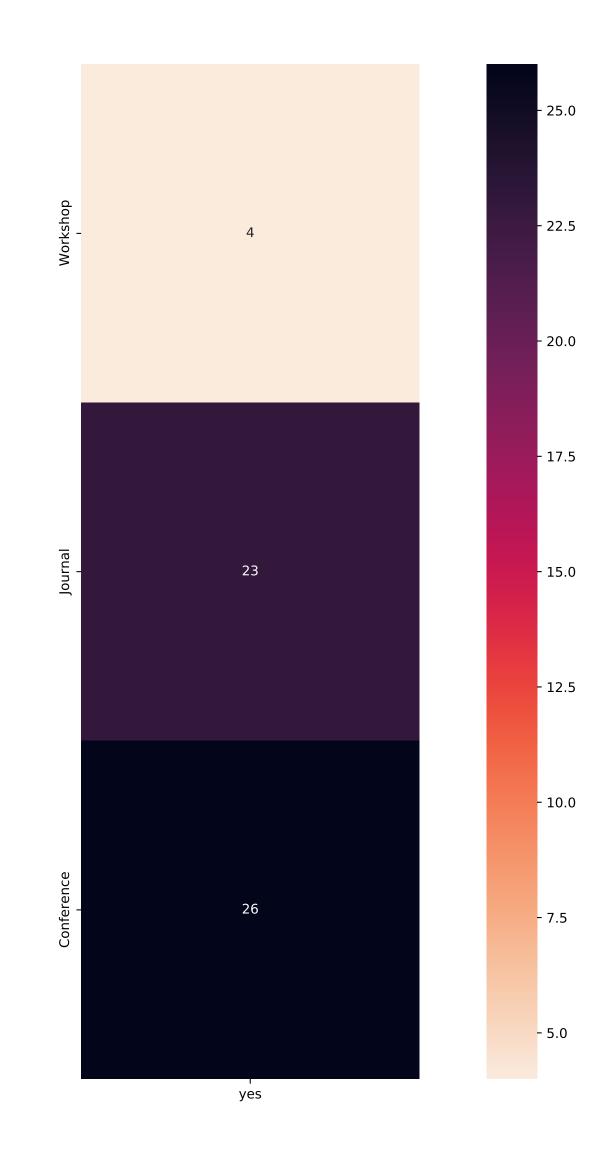
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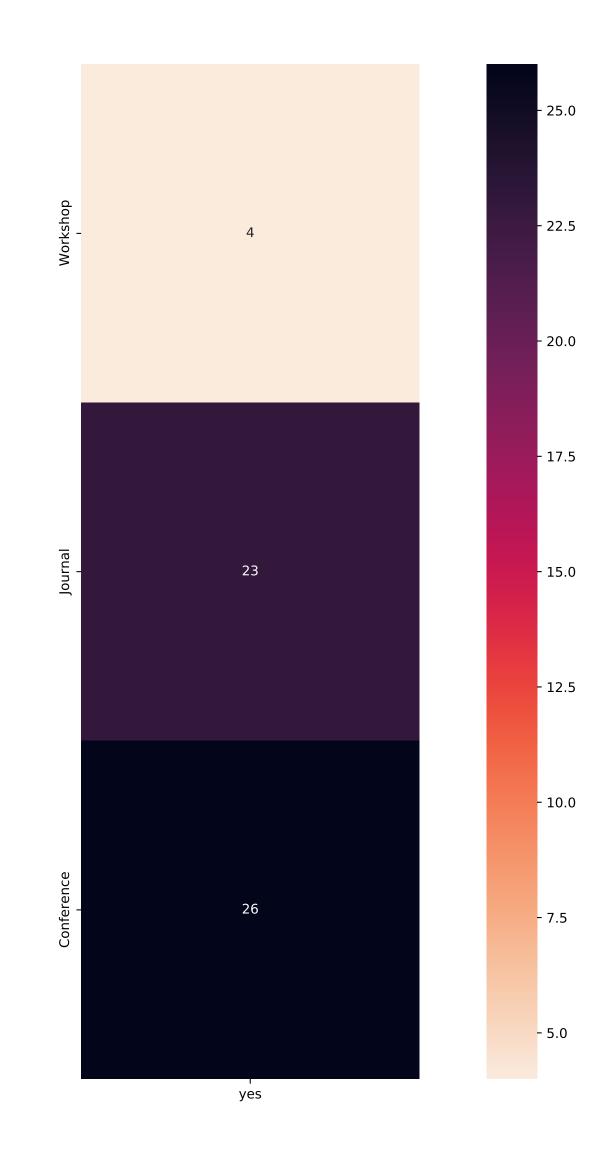
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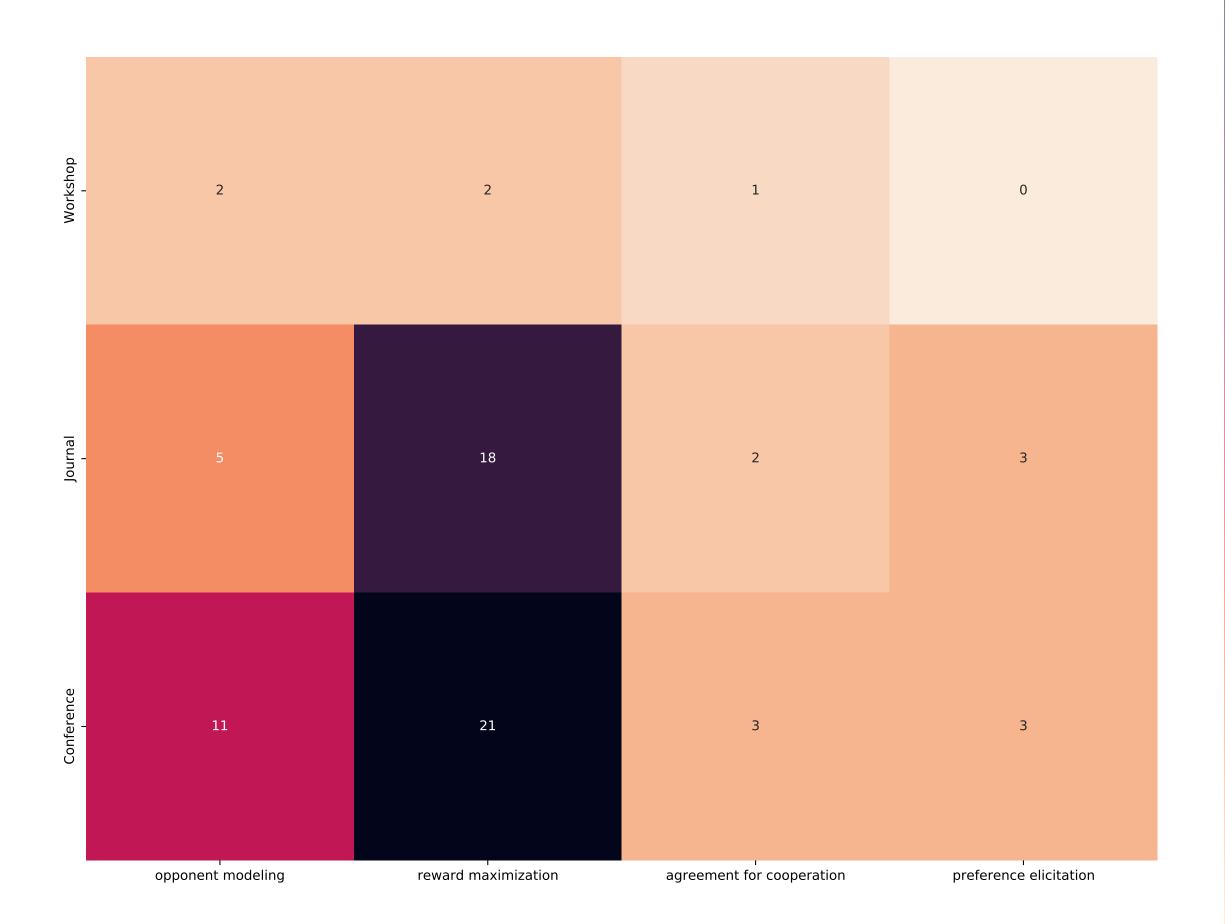
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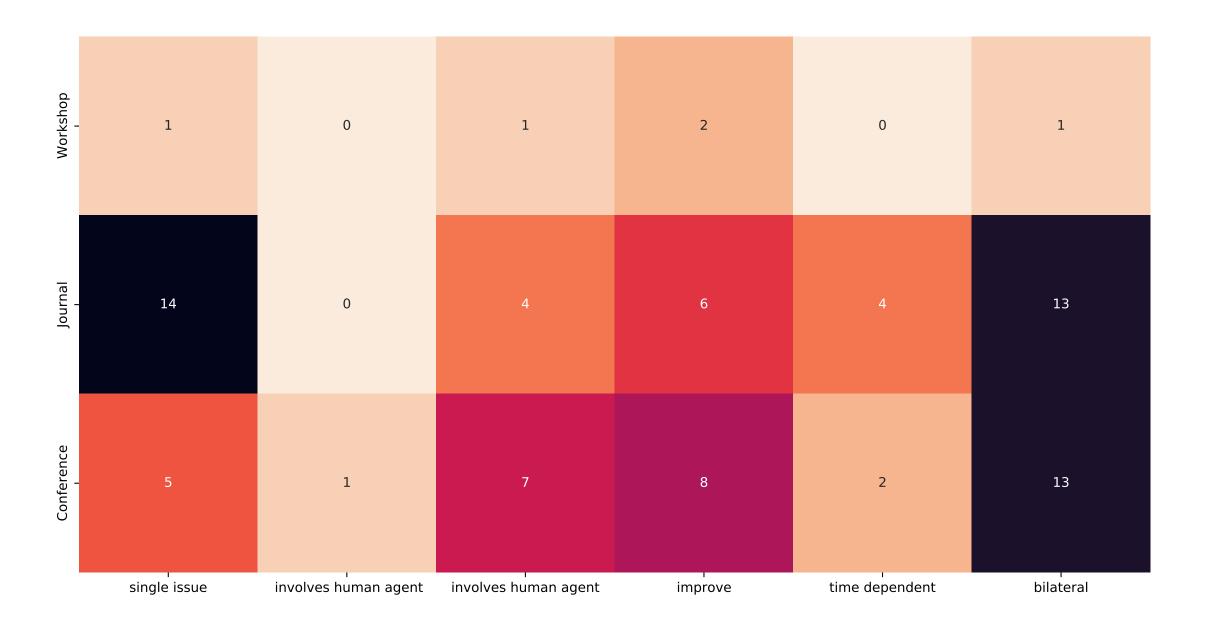
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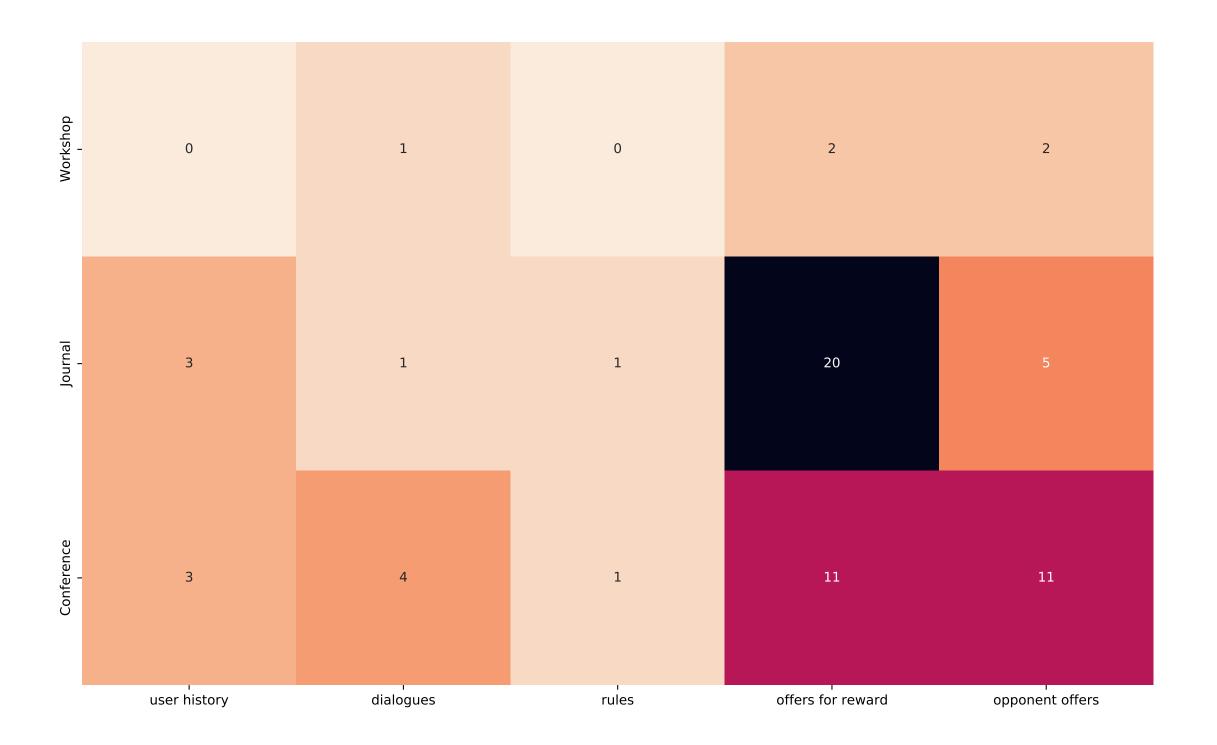
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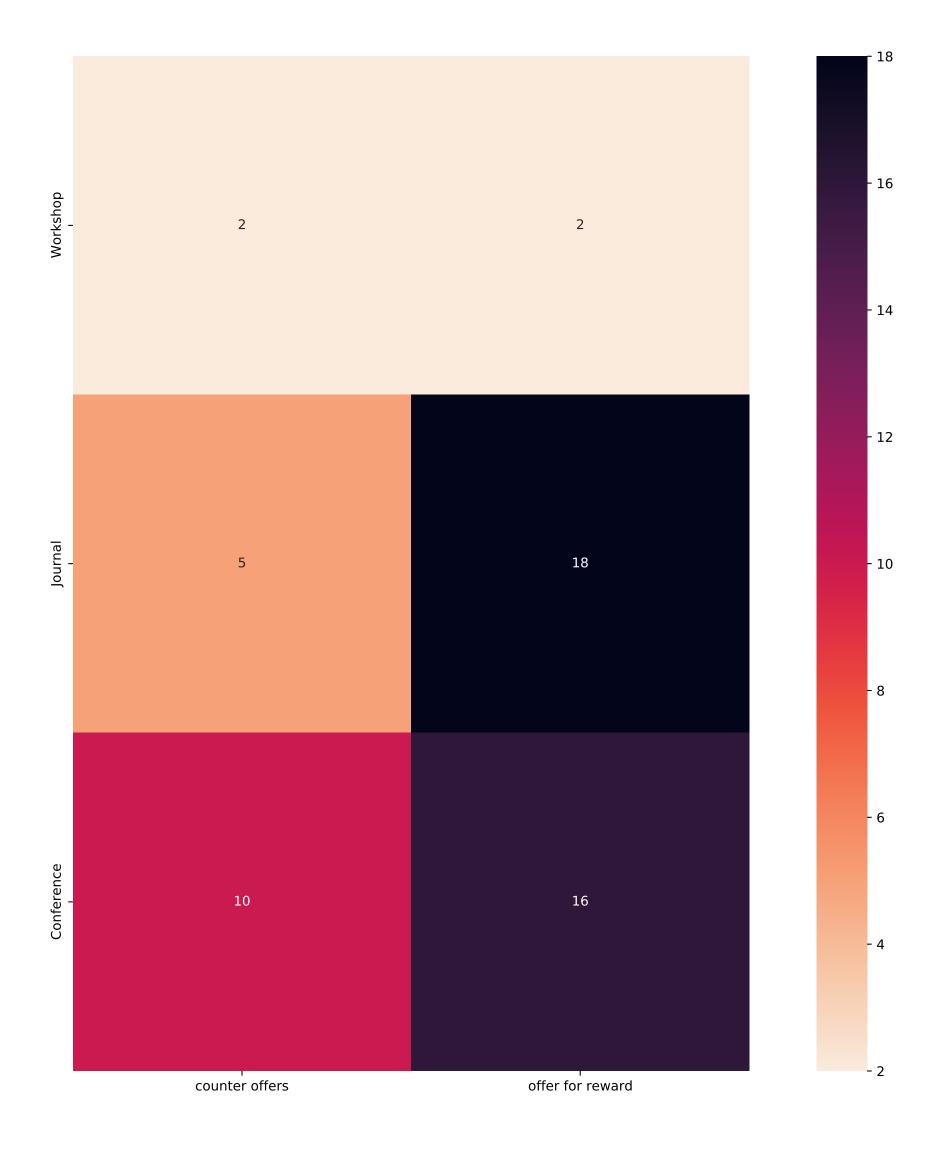


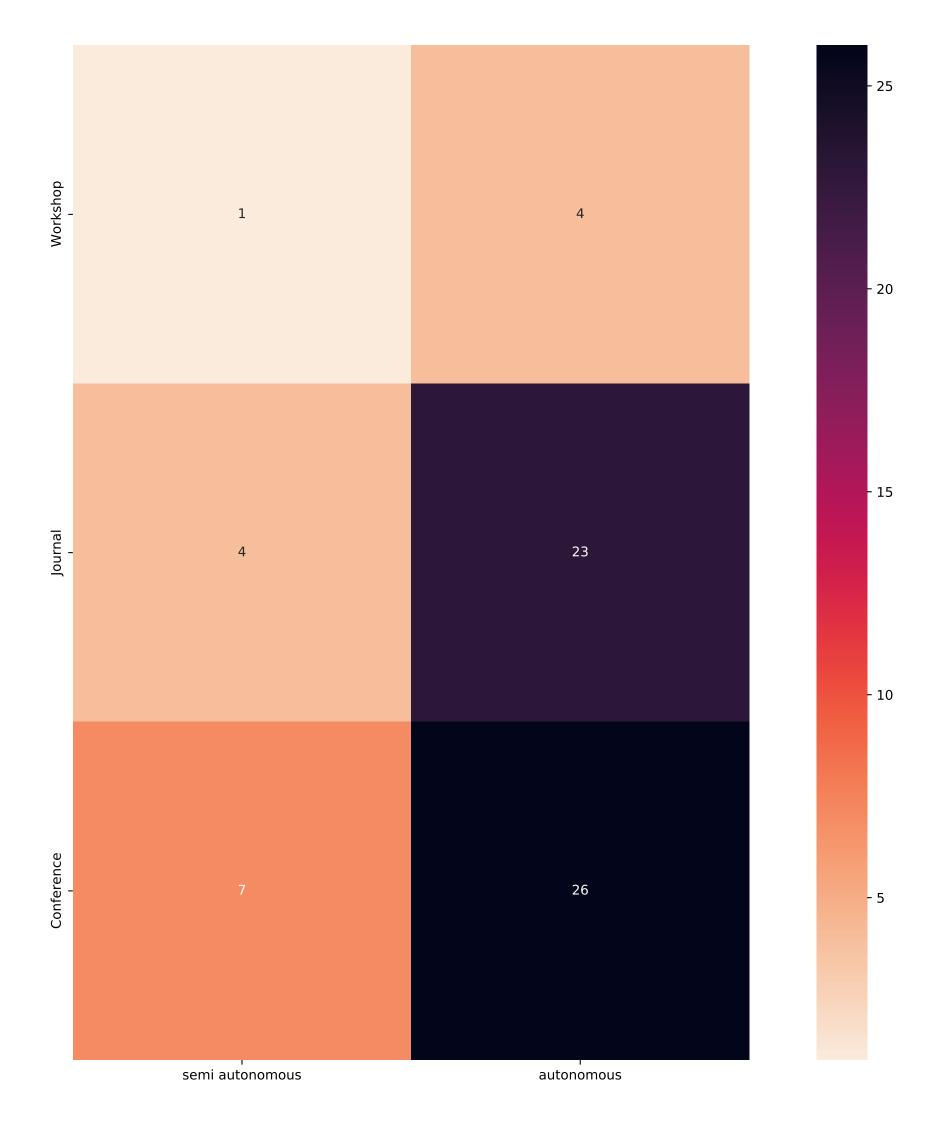
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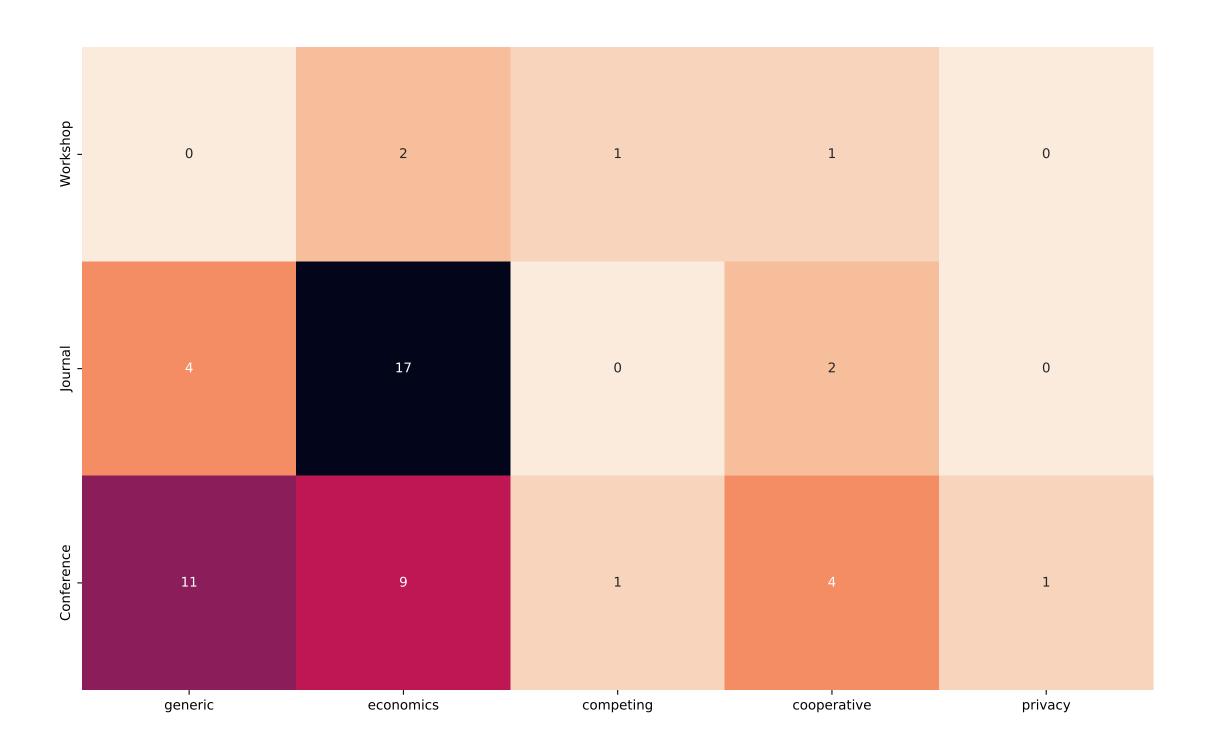
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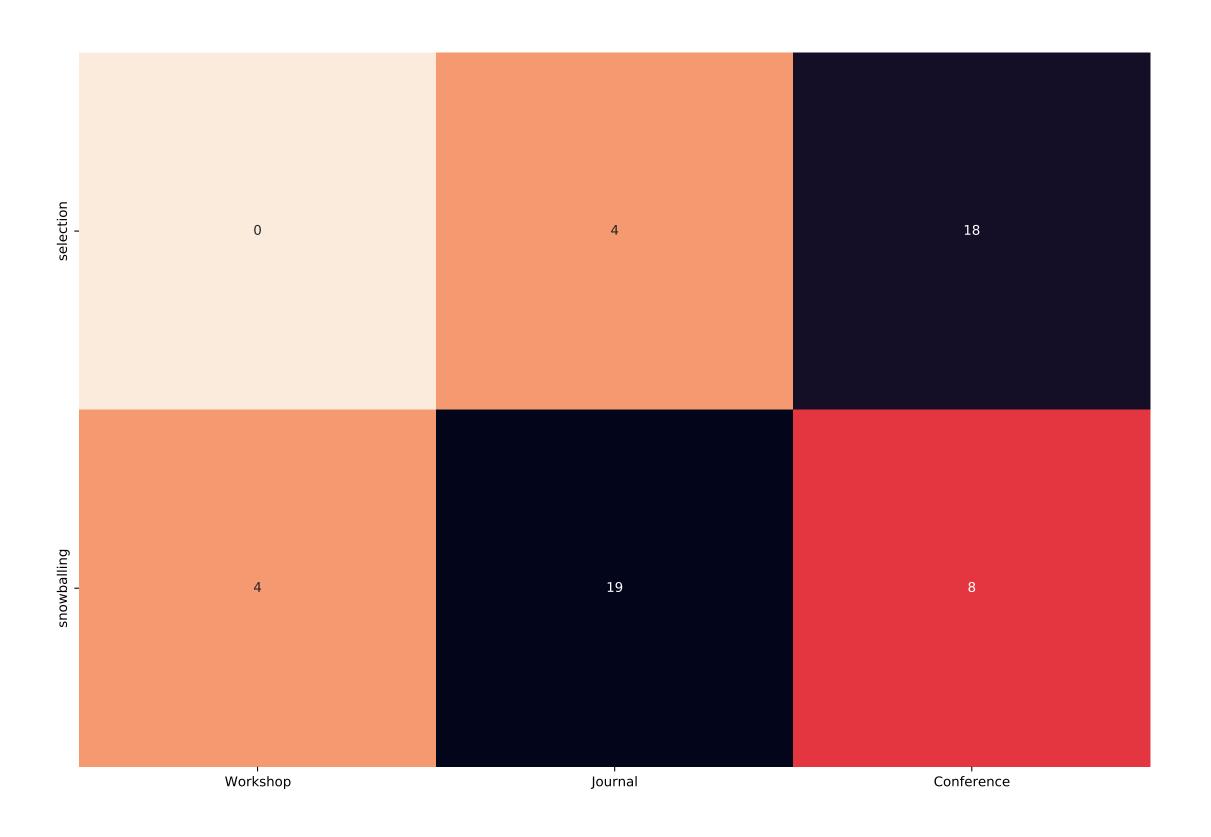
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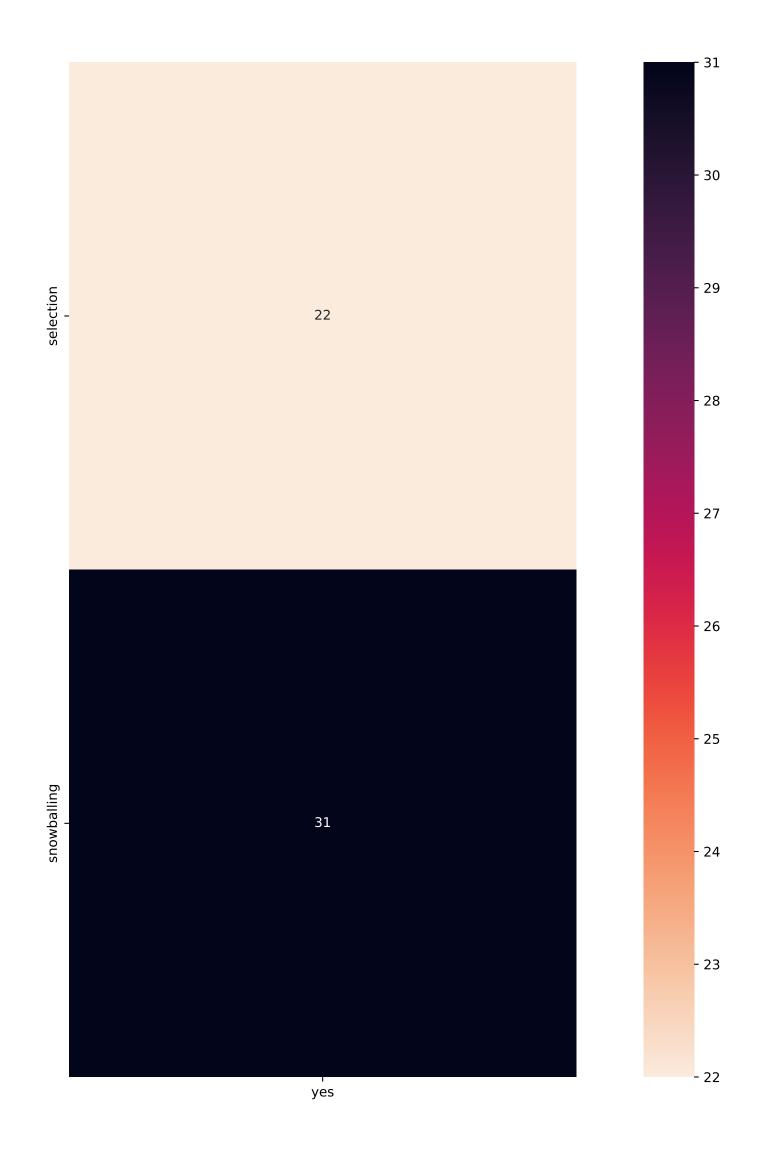
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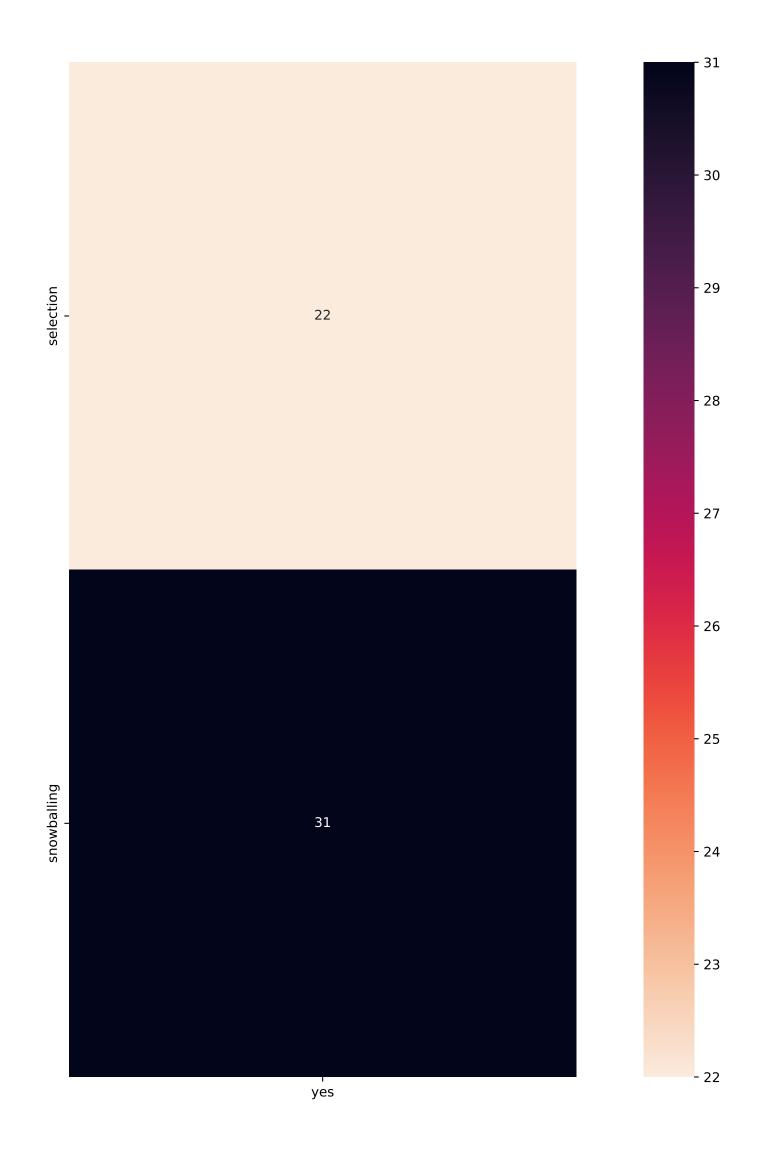
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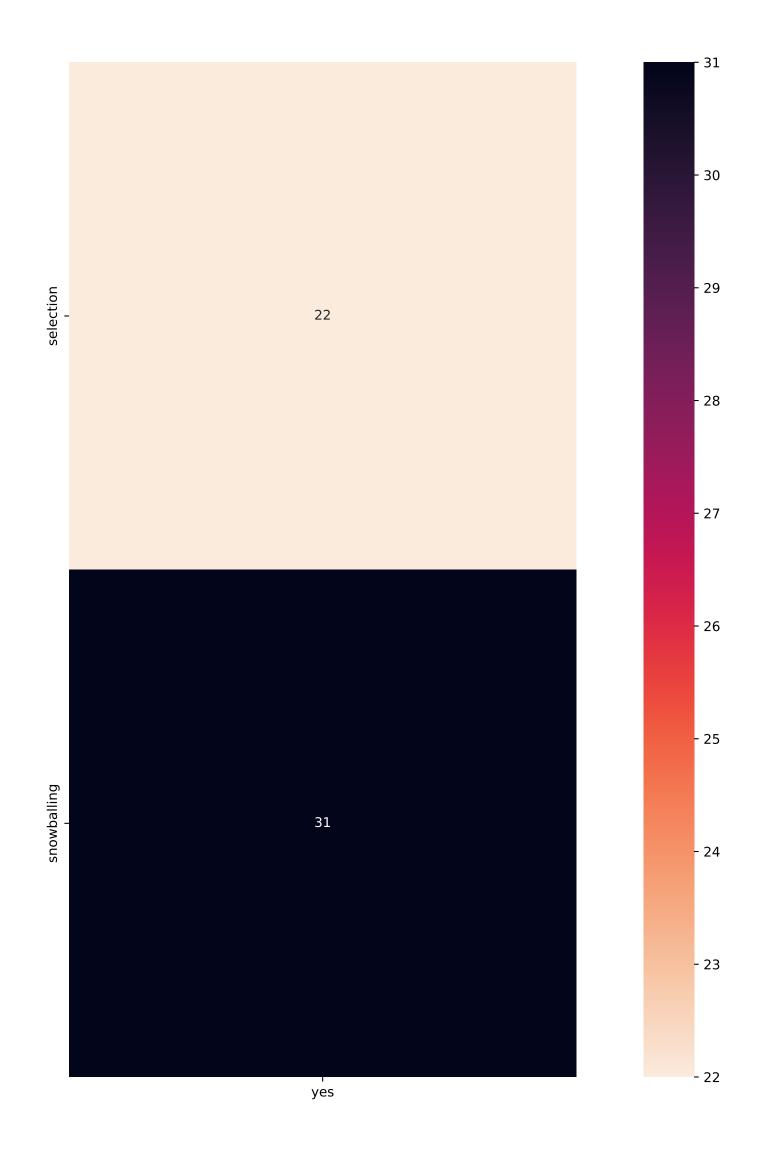
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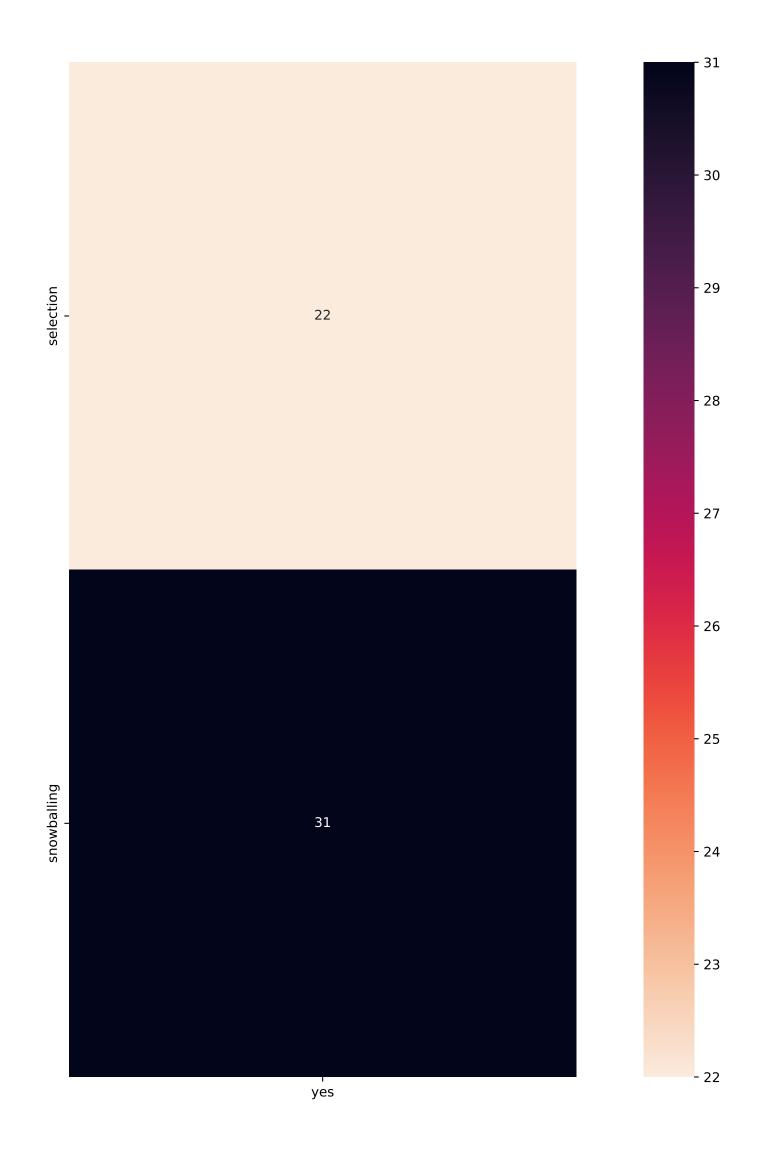
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selection -	1	1	6	1	3	0	1	2	1	6	0	0	1	0	0	1	0	1	4
snowballing -	5	4	18	1	1	1	0	0	1	7	1	1	0	2	1	3	1	0	1
	Bayesian Learning –	Neural Network -	Alternative offer protocol –	Linear Programming -	Monte Carlo Tree search -	Heuristic algorithm -	Equilibrium strategies -	Argumentation -	Linear Regression -	Reinforcement learning -	Nonlinear Regression -	logistic regression -	Markov Decision Process -	- LSTM -	Genetic Algorithm -	Fuzzy Logic System –	Angle based Similarirty -	Multi bipartite gradient descent search -	Gaussian probability -

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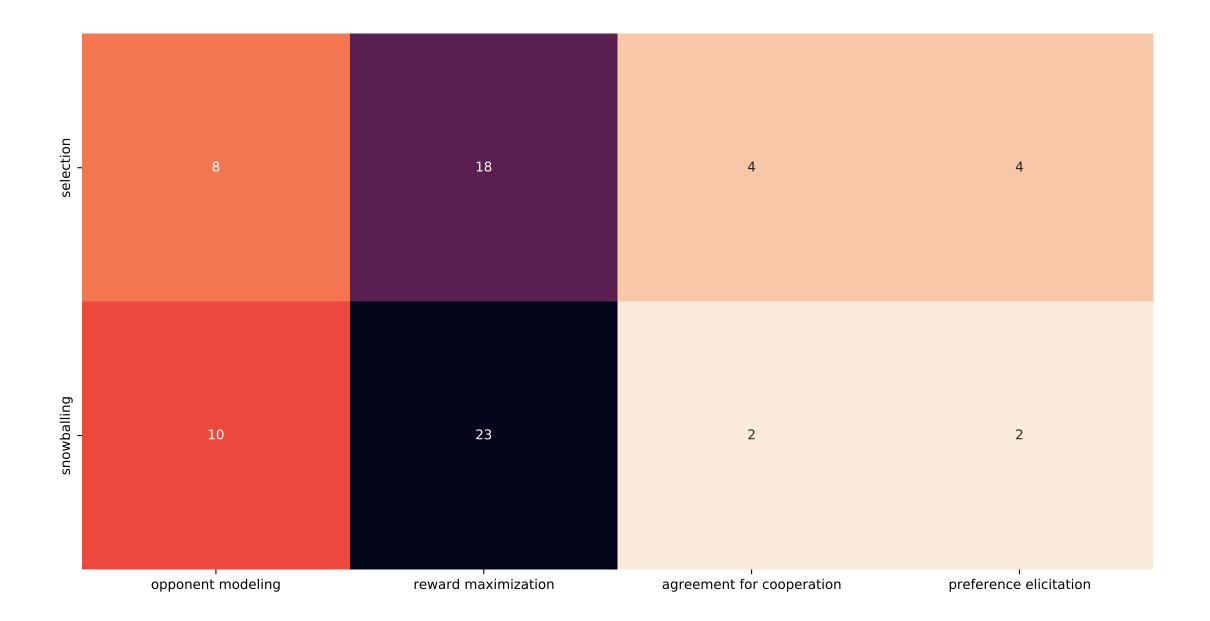
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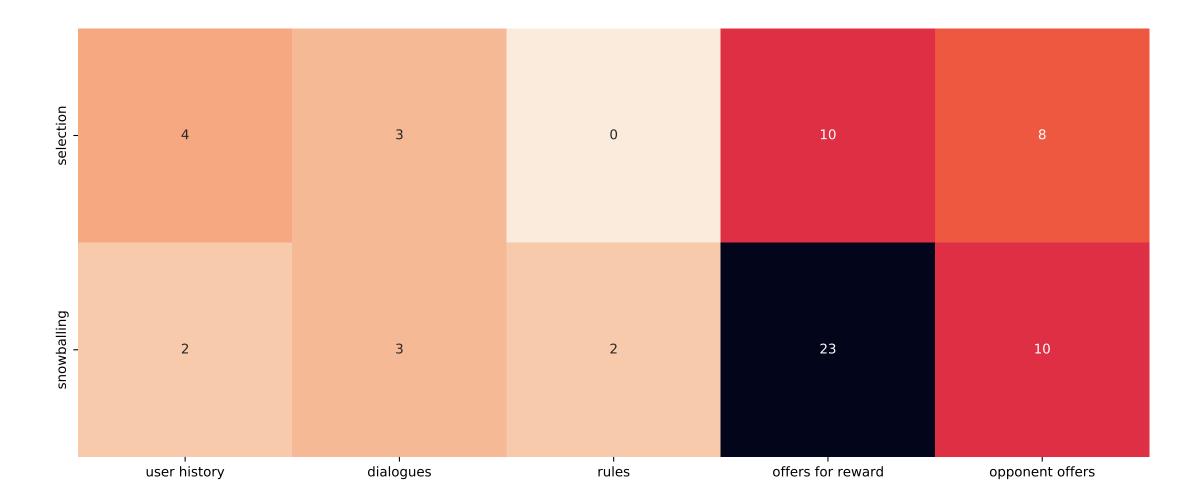
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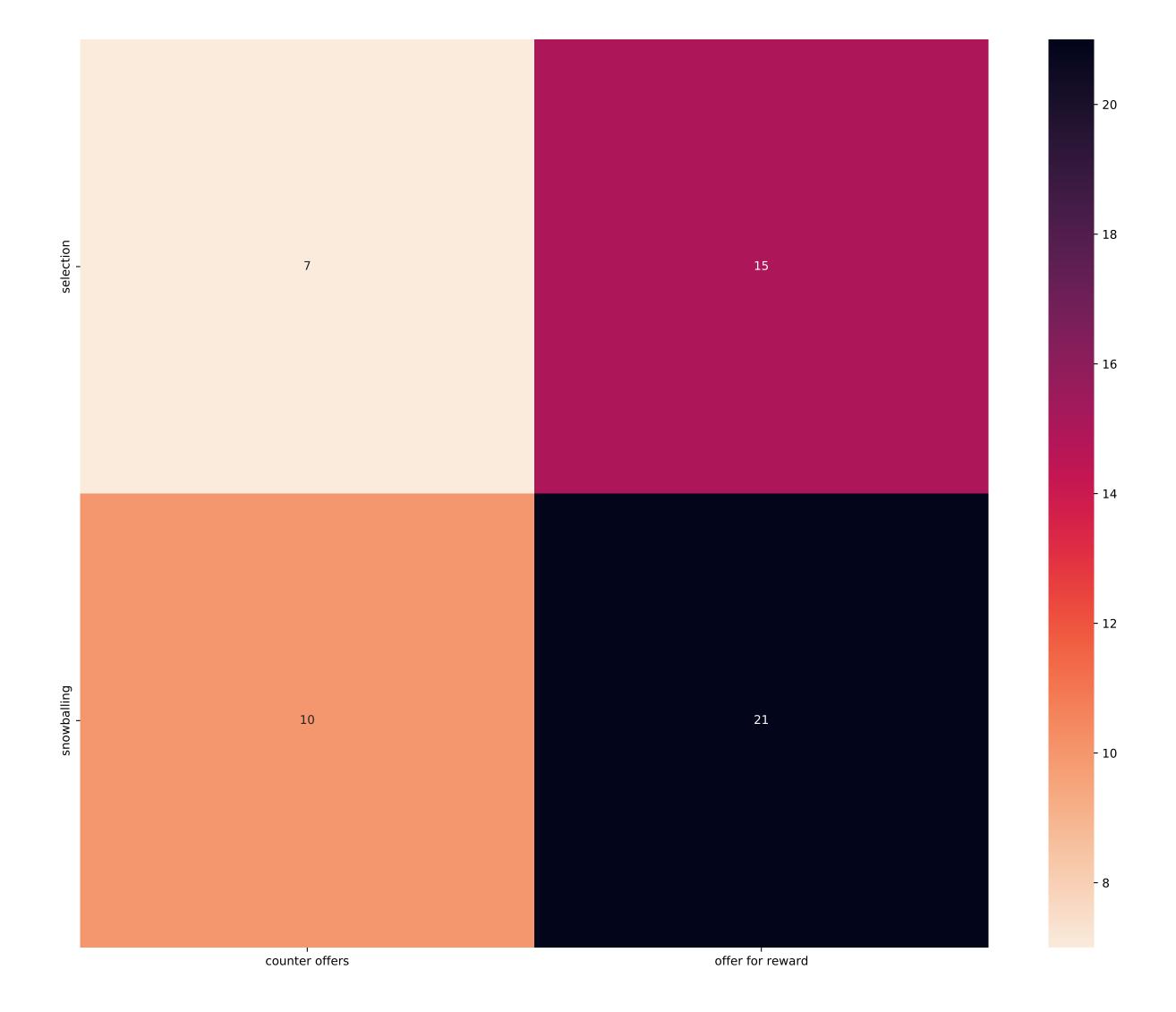
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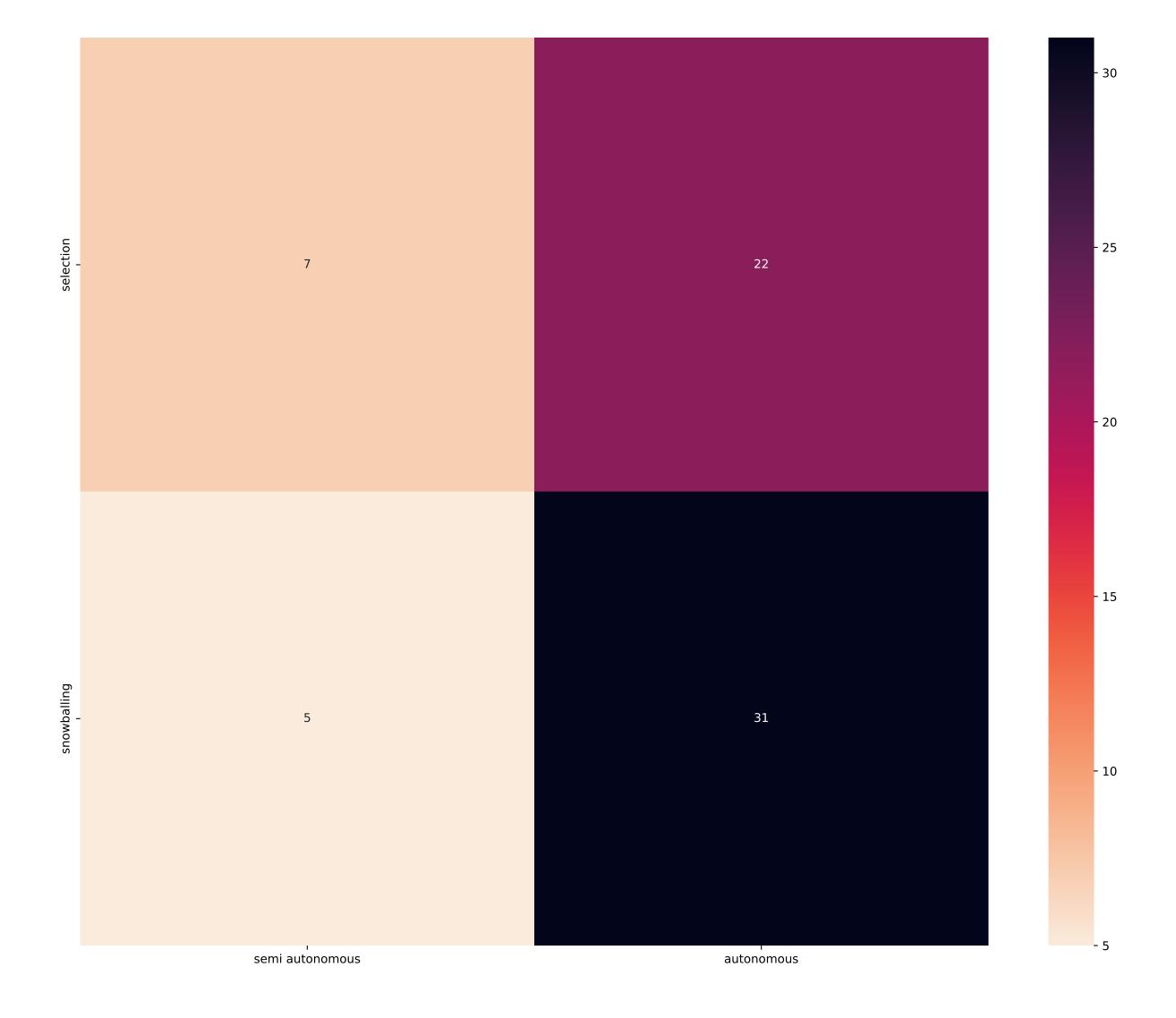


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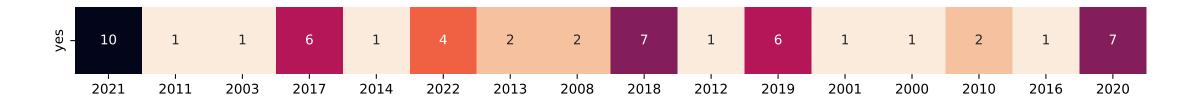
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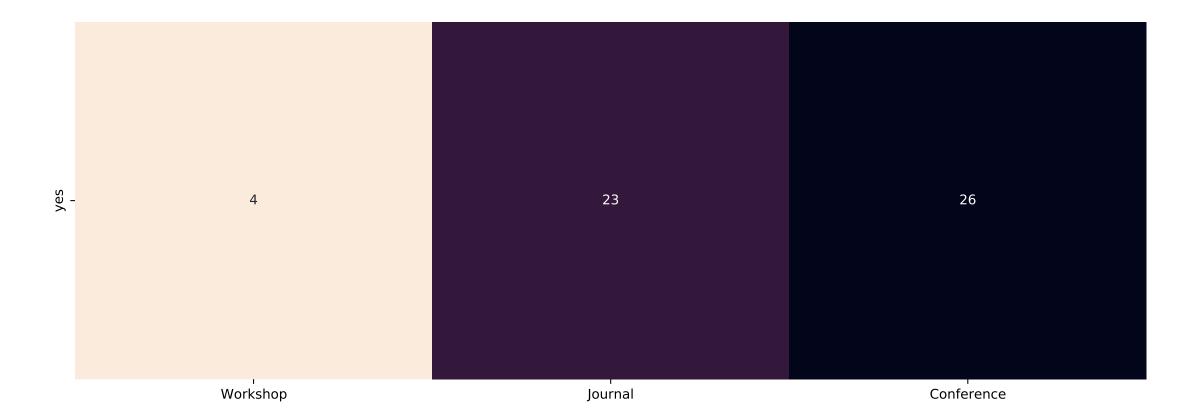
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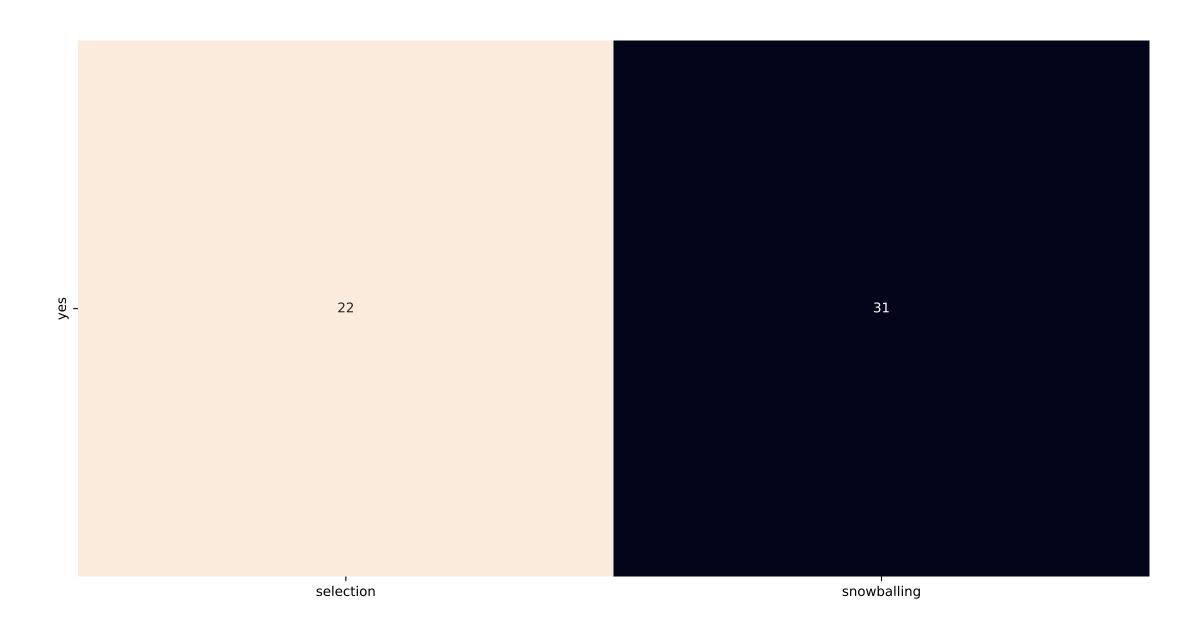
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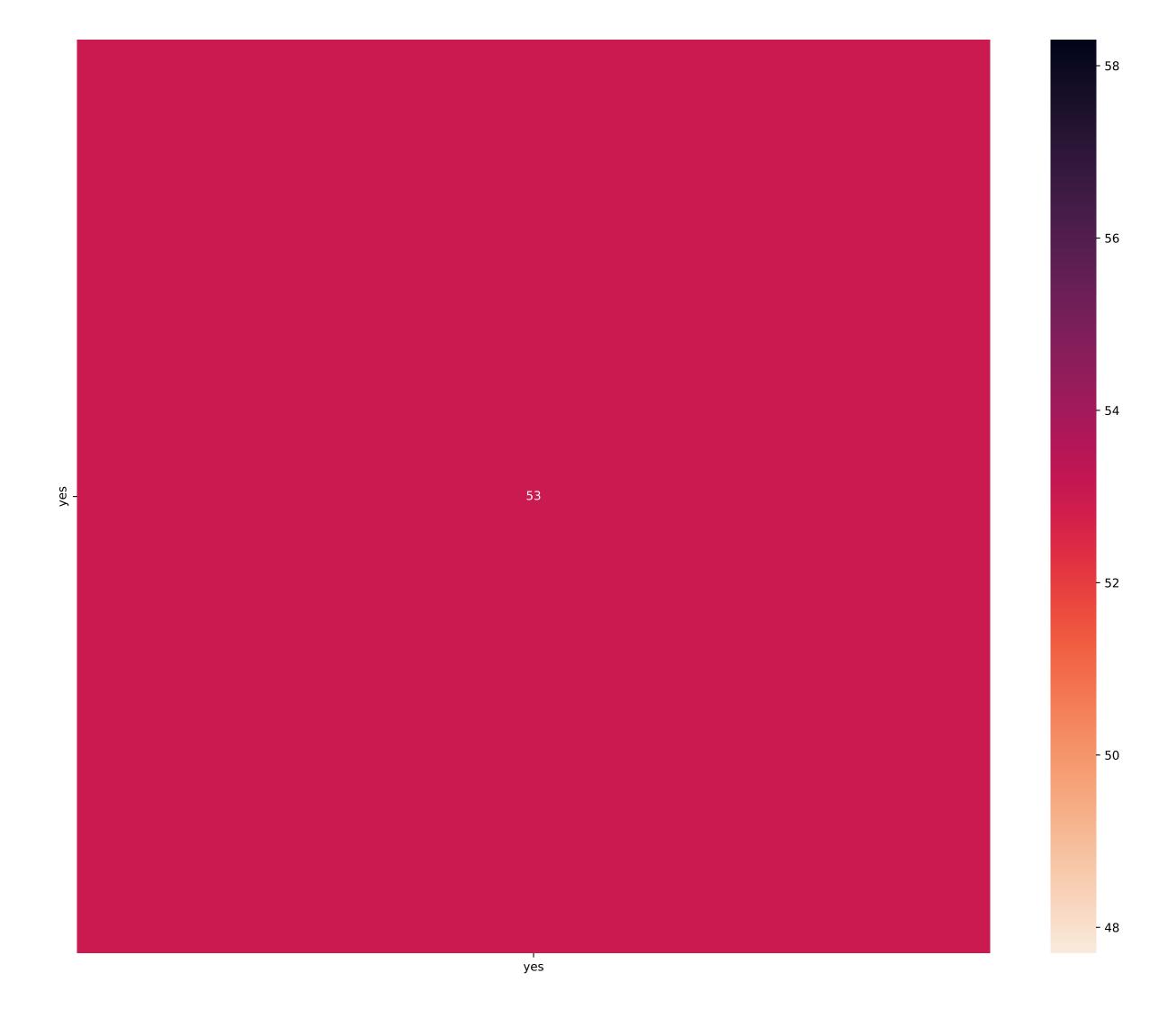
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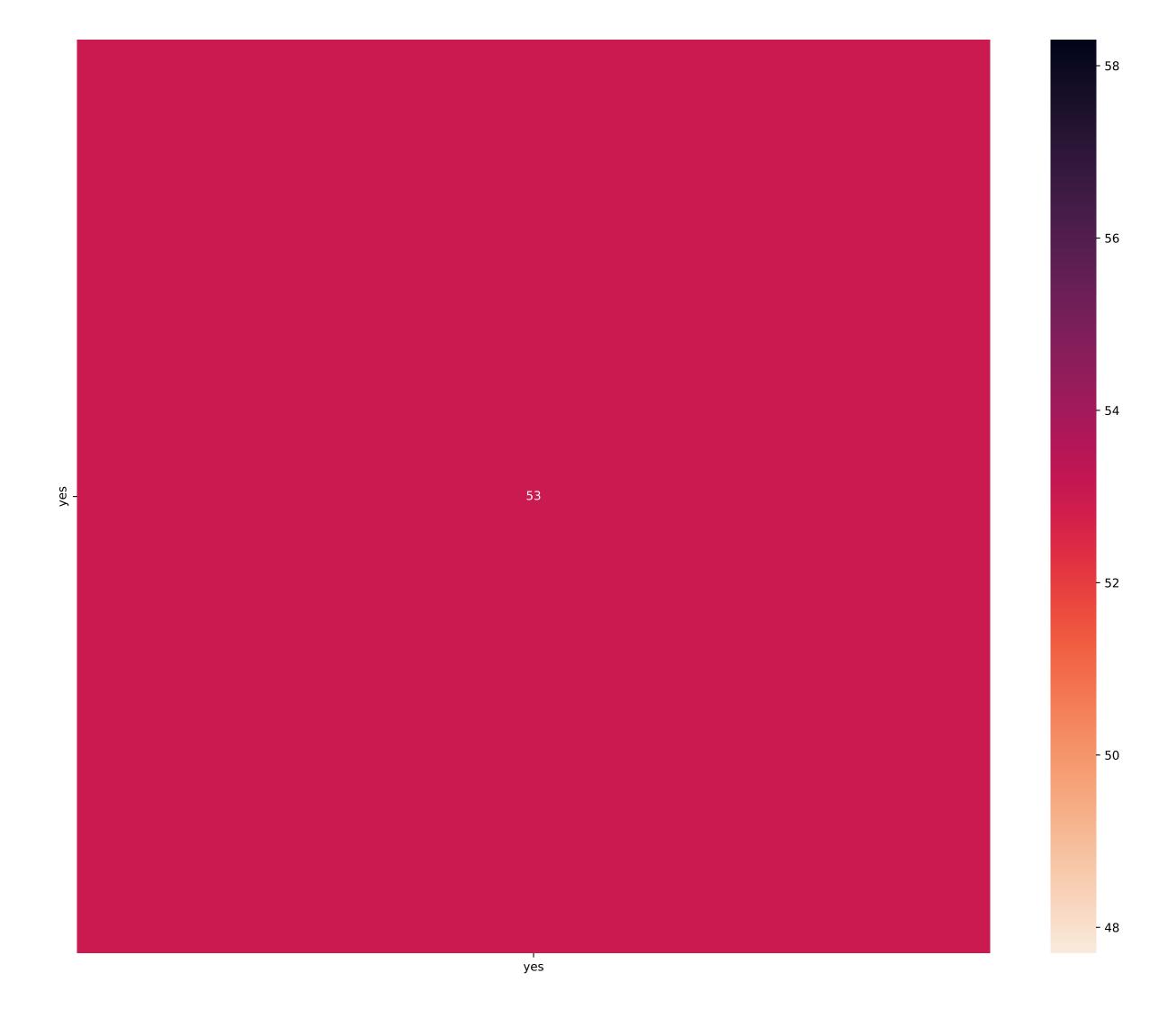
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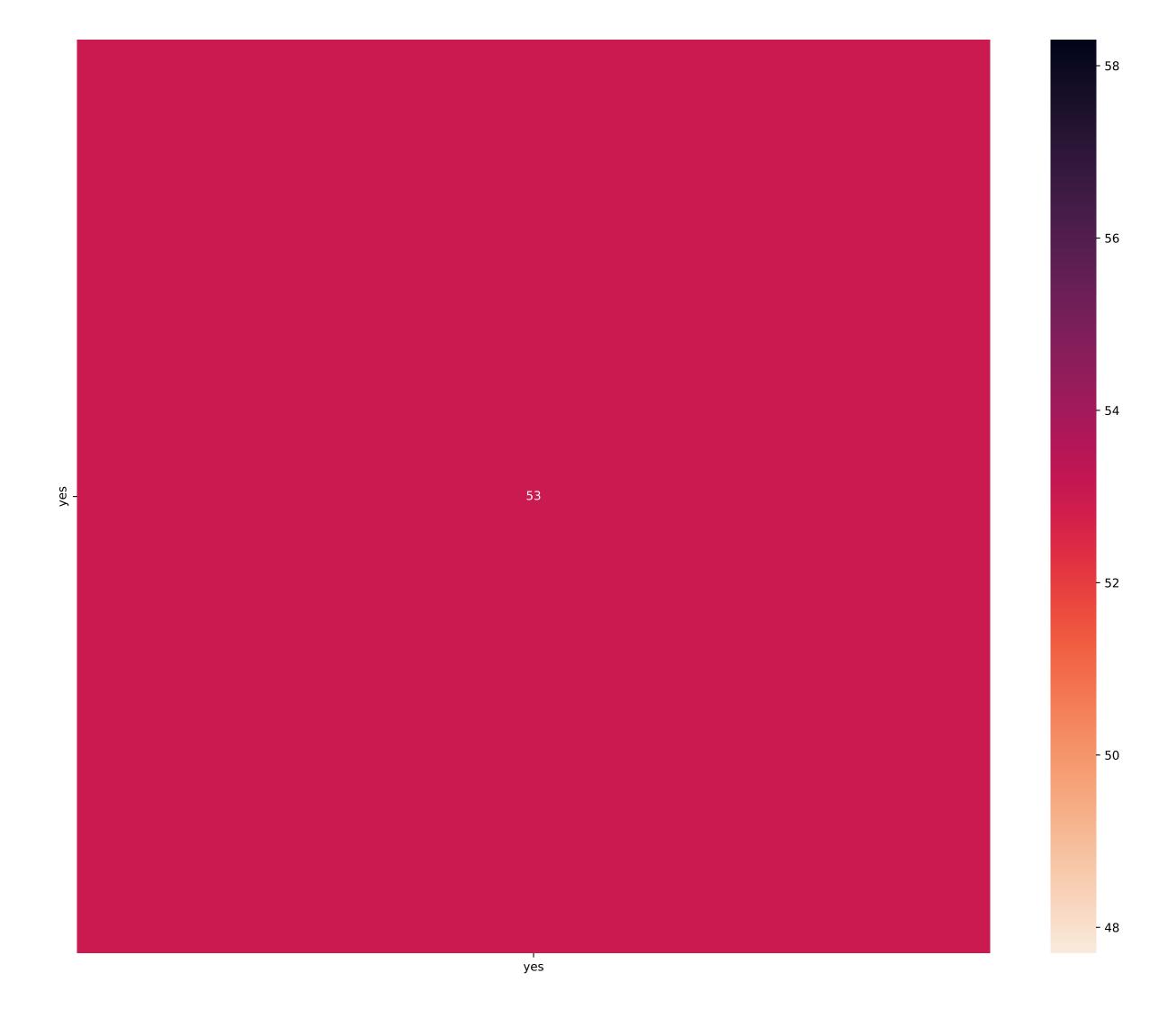
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yes -	6	5	24	2	4	1	1	2	2	13	1	1	1	2
•	Bayesian Learning –	Neural Network -	Alternative offer protocol –	Linear Programming -	Monte Carlo Tree search -	Heuristic algorithm -	Equilibrium strategies -	Argumentation -	Linear Regression -	Reinforcement learning -	Nonlinear Regression -	logistic regression -	Markov Decision Process -	- LSTM -

Multi bipartite gradient descent search – L

Angle based Similarirty -

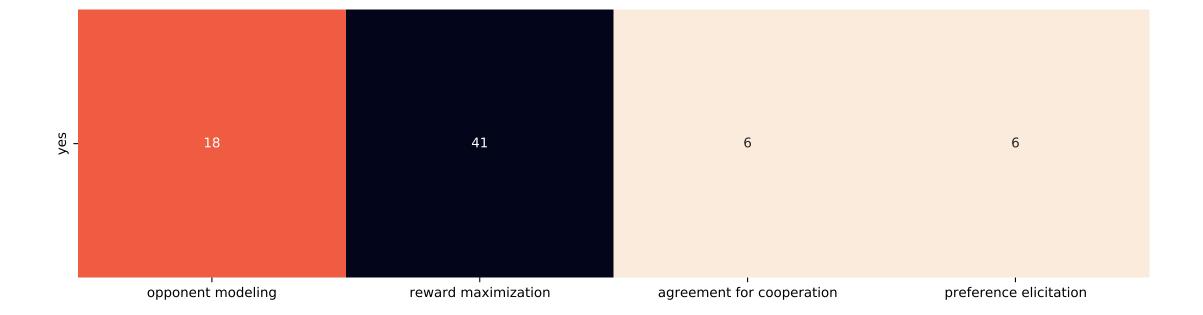
Fuzzy Logic System -

Genetic Algorithm -

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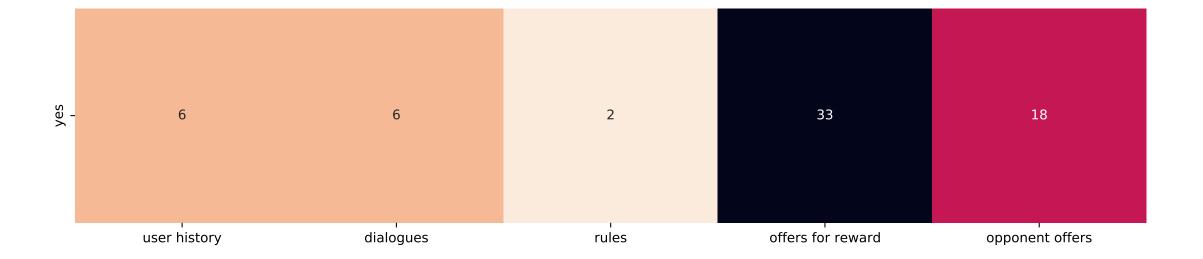
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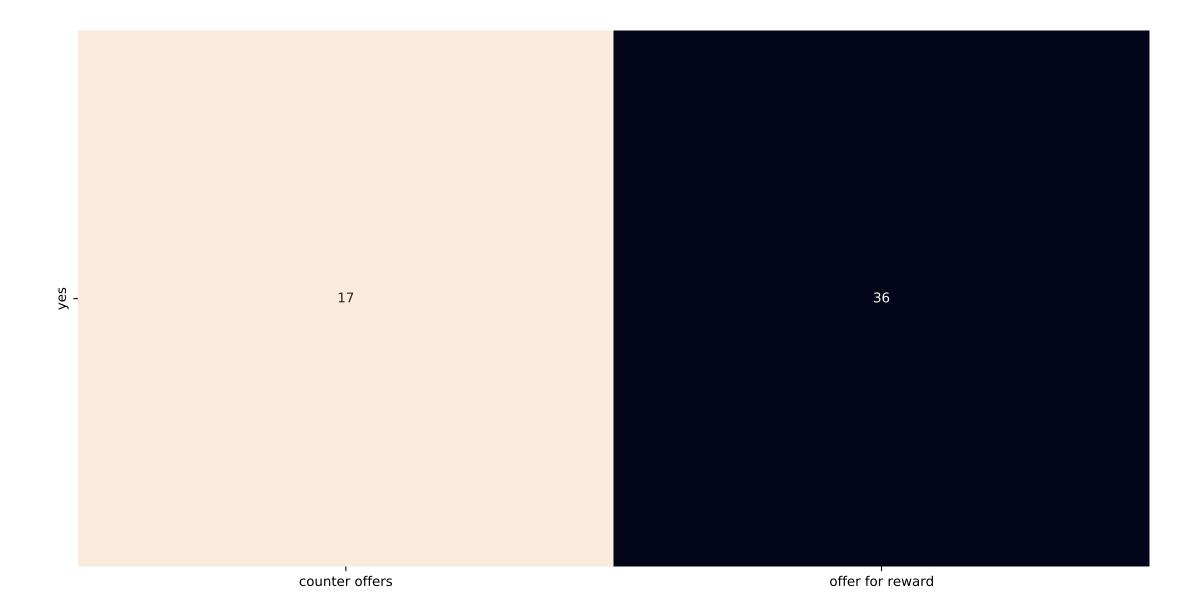


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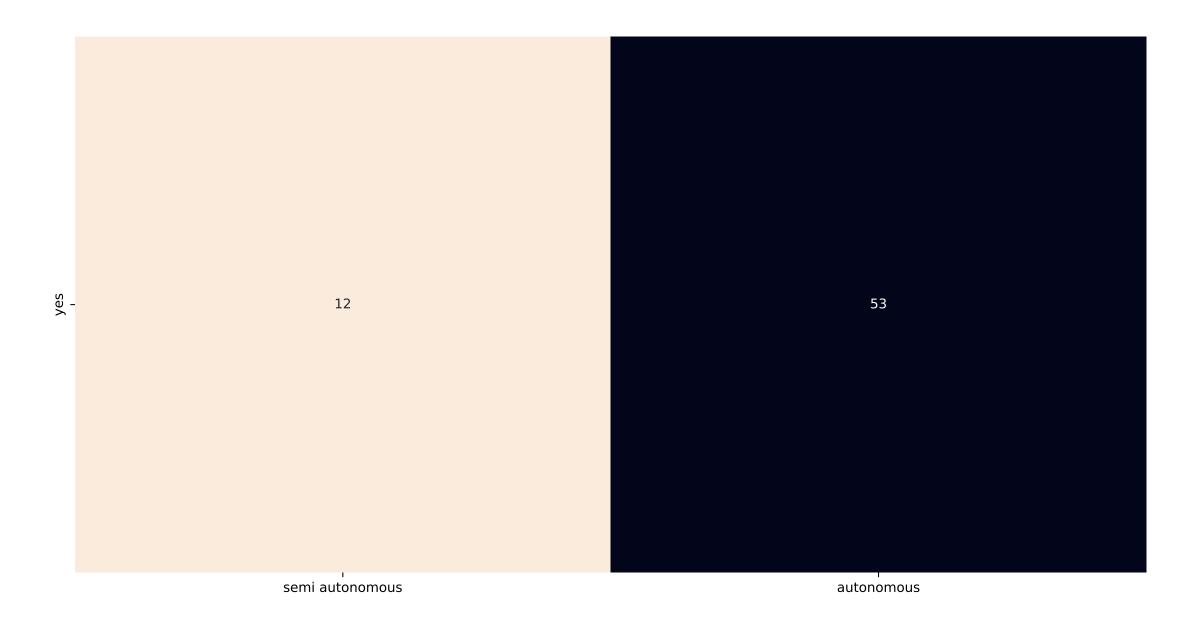
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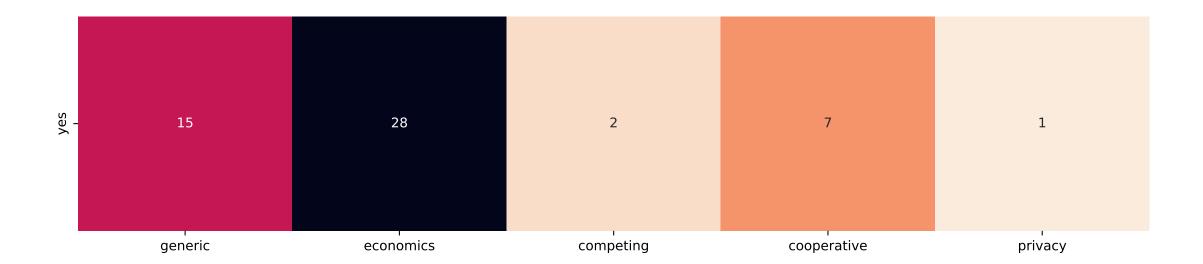
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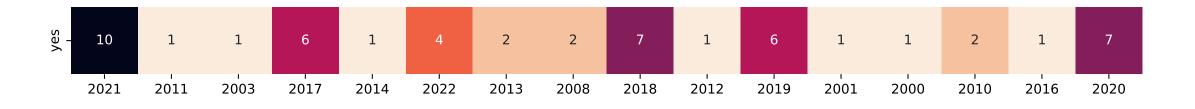
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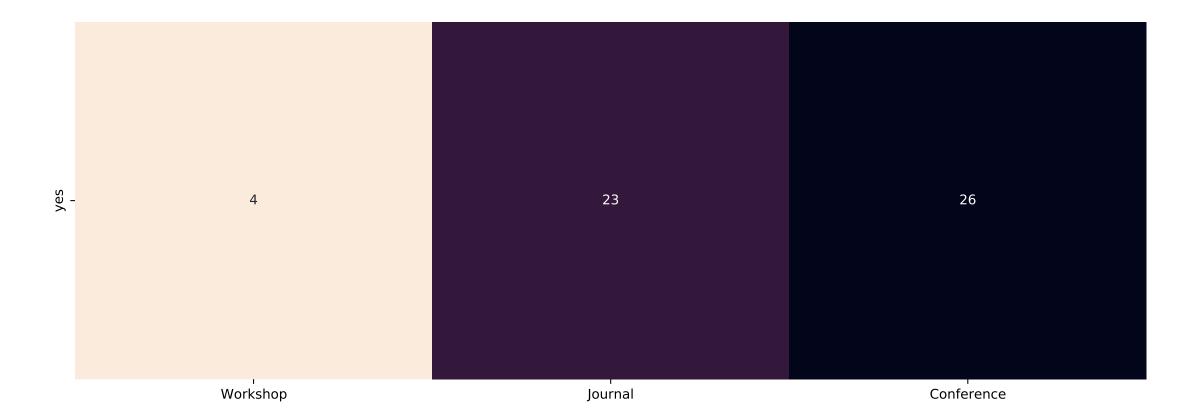
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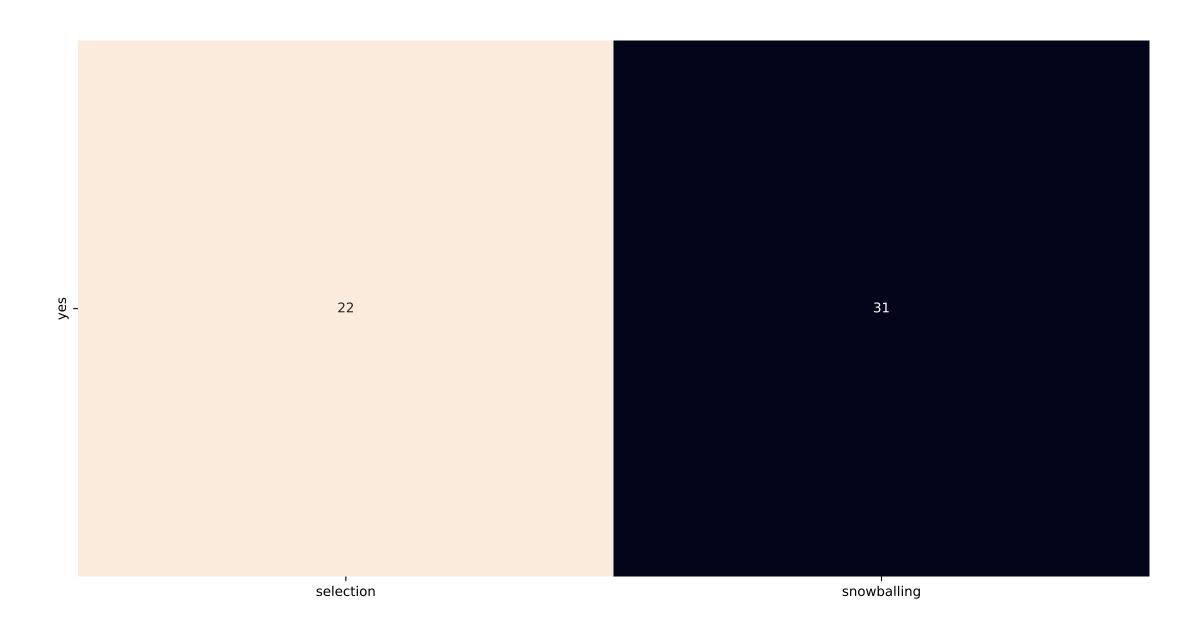
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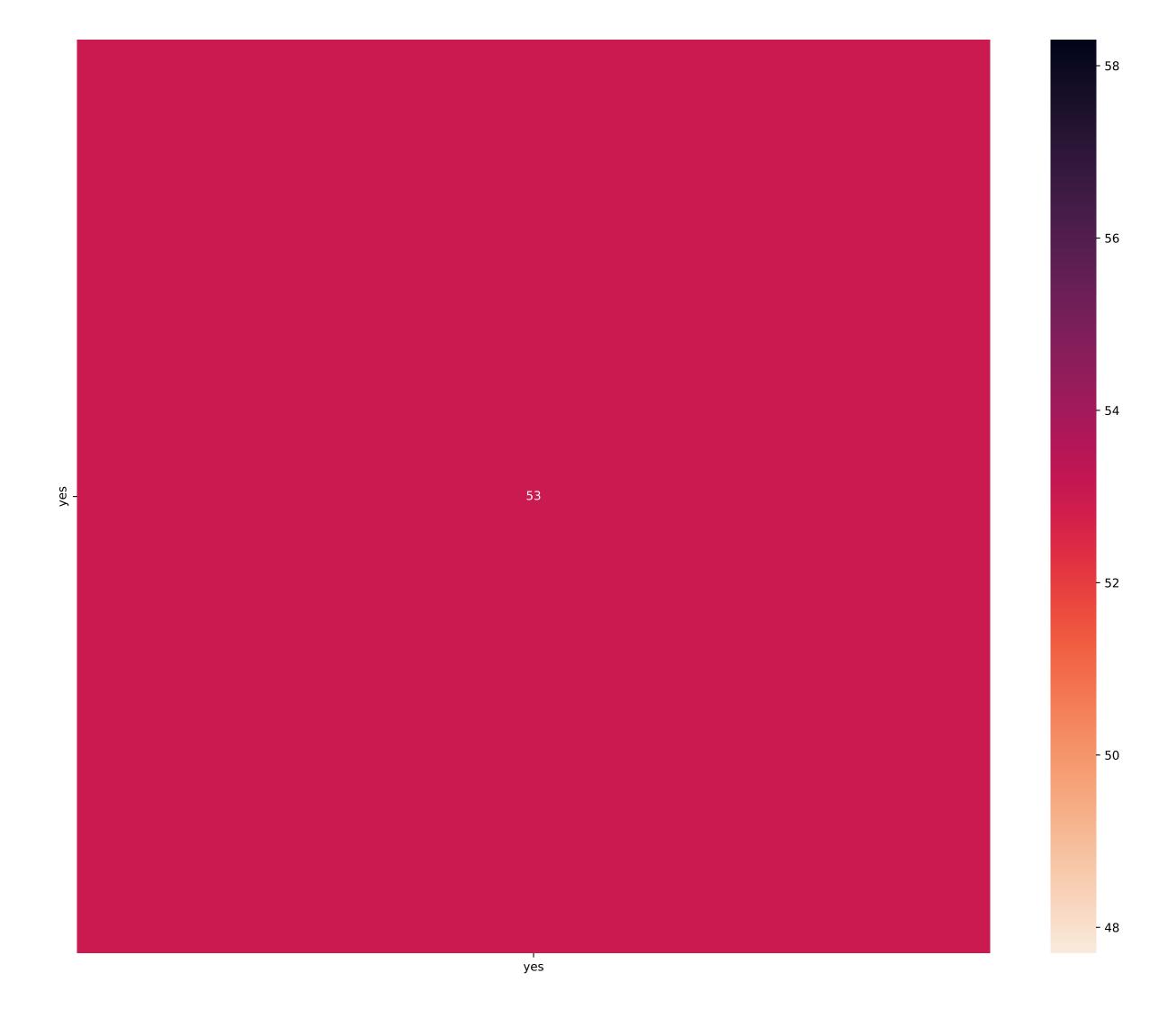
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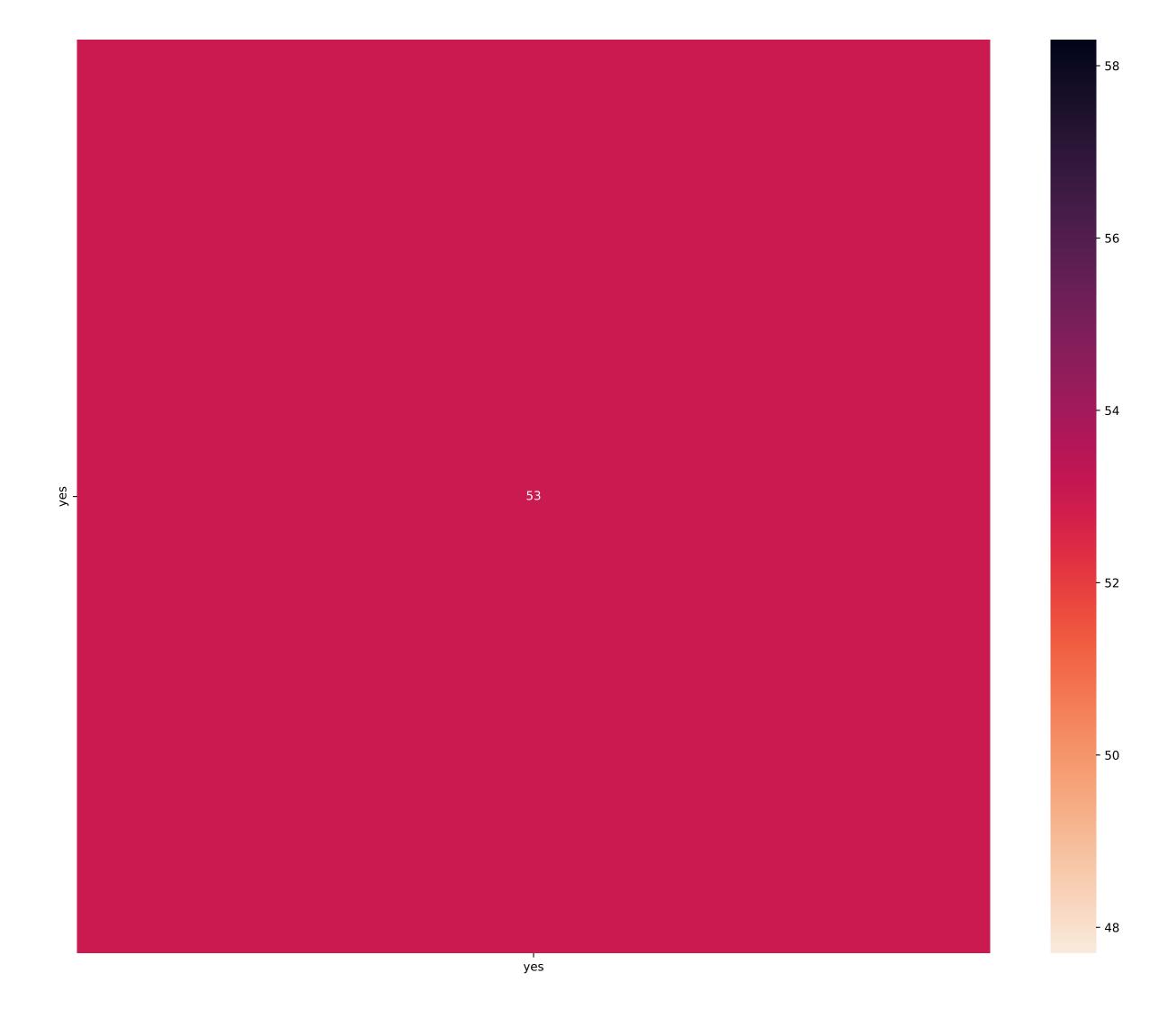
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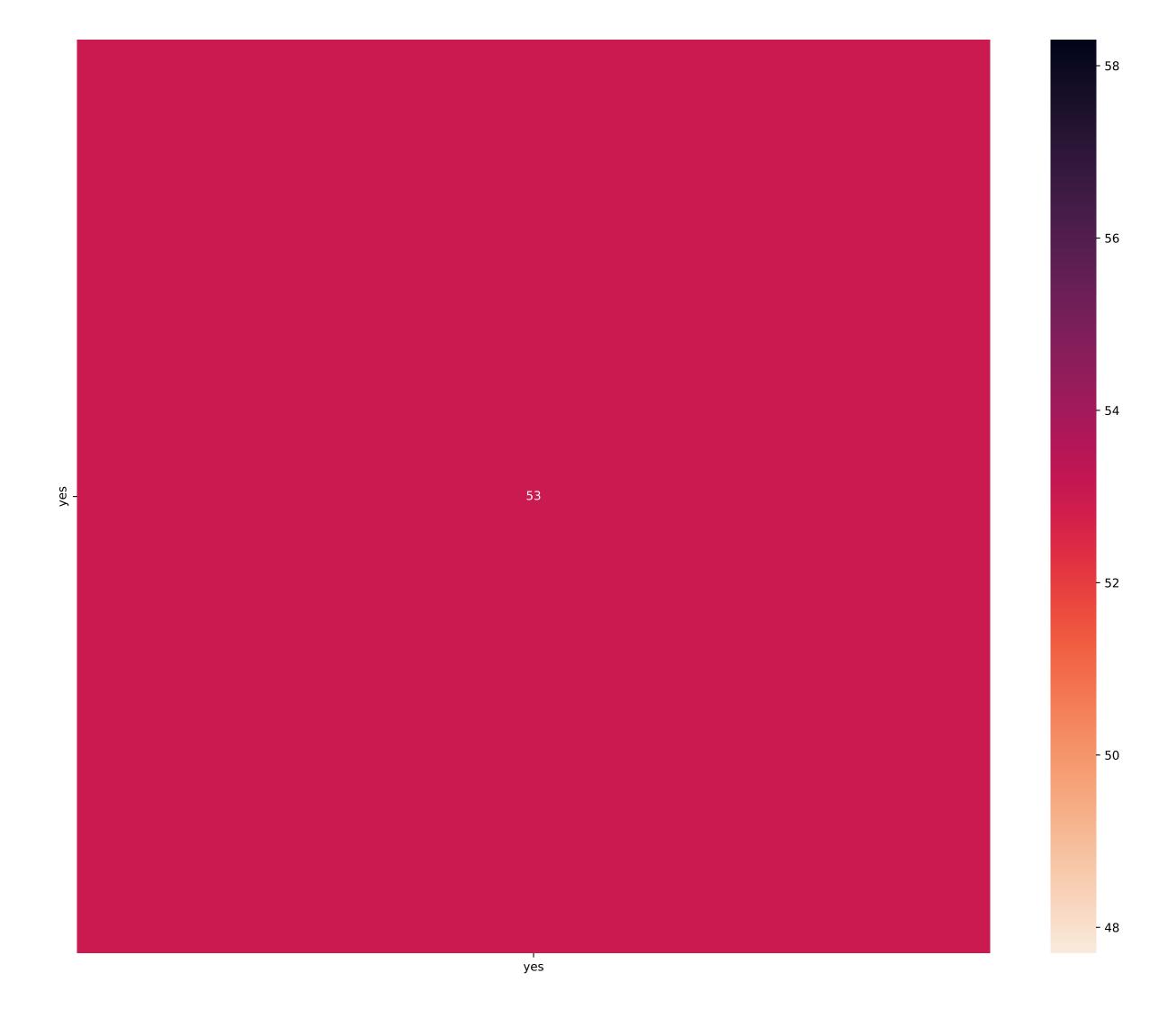
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yes -	6	5	24	2	4	1	1	2	2	13	1	1	1	2
•	Bayesian Learning –	Neural Network -	Alternative offer protocol –	Linear Programming -	Monte Carlo Tree search -	Heuristic algorithm -	Equilibrium strategies -	Argumentation -	Linear Regression -	Reinforcement learning -	Nonlinear Regression -	logistic regression -	Markov Decision Process -	- LSTM -

Multi bipartite gradient descent search – L

Angle based Similarirty -

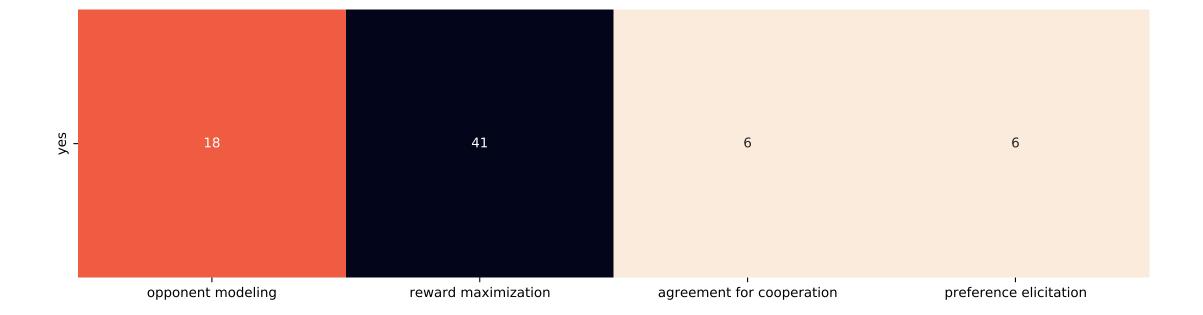
Fuzzy Logic System -

Genetic Algorithm -

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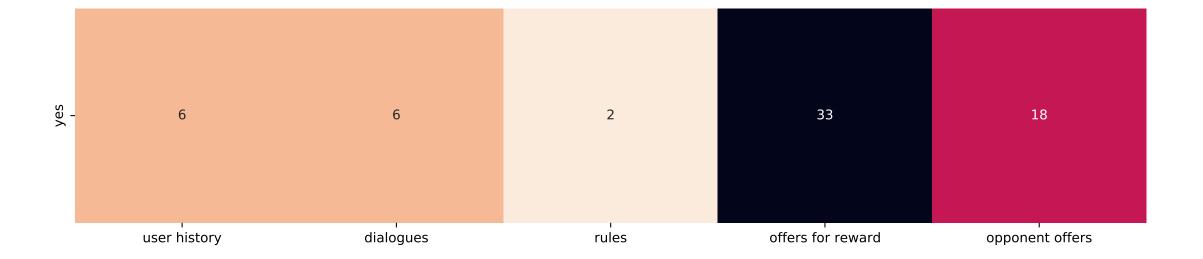
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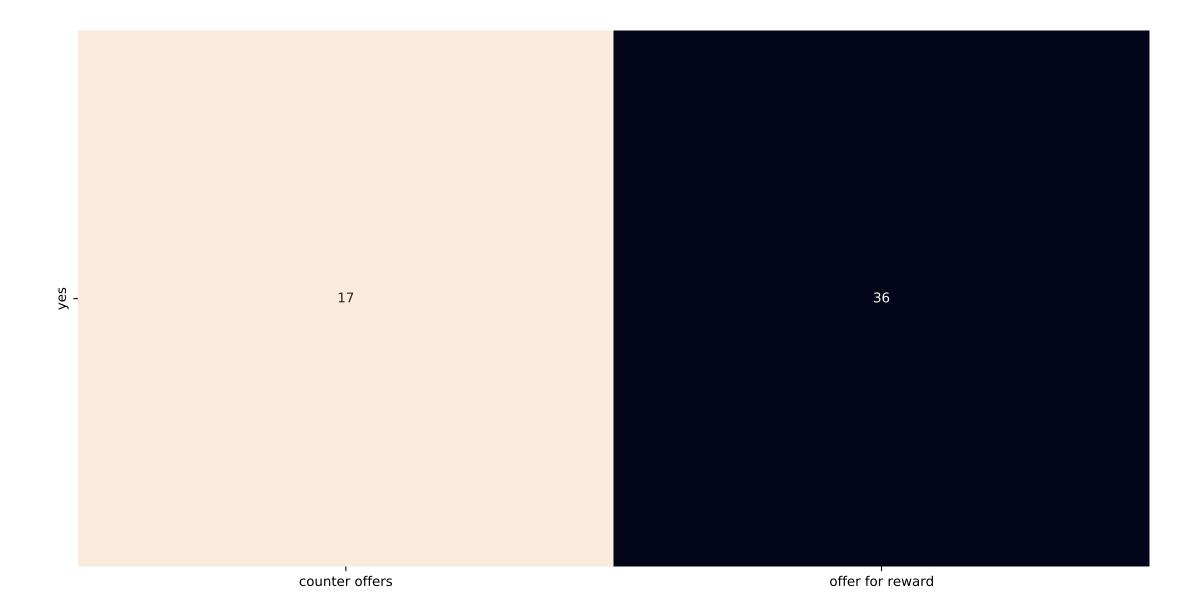


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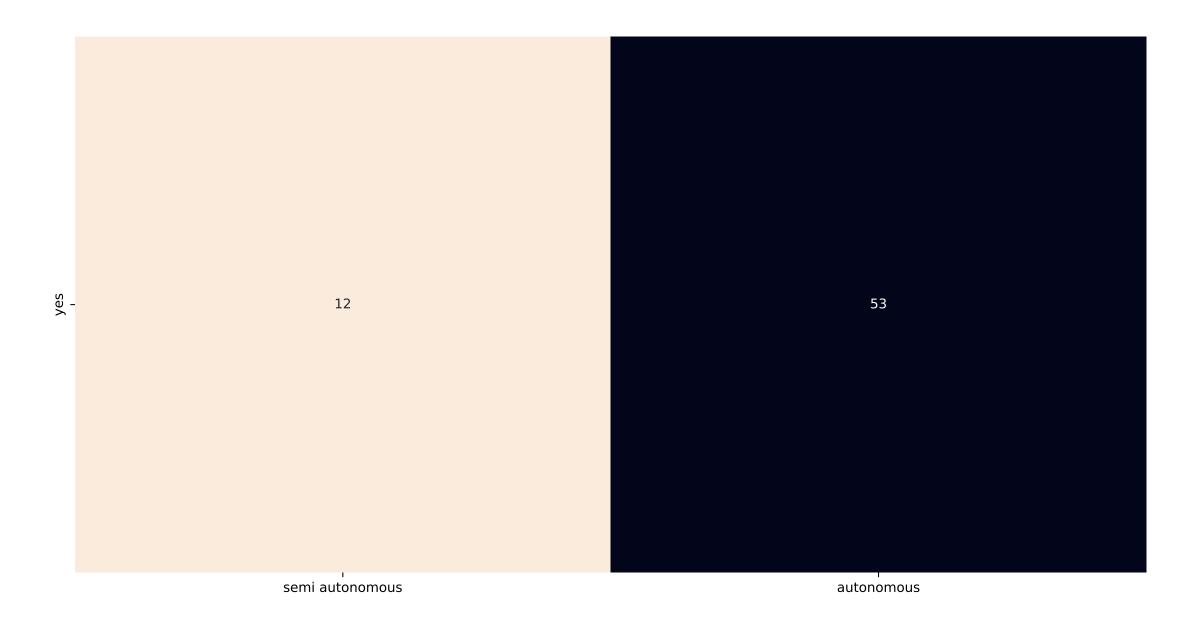
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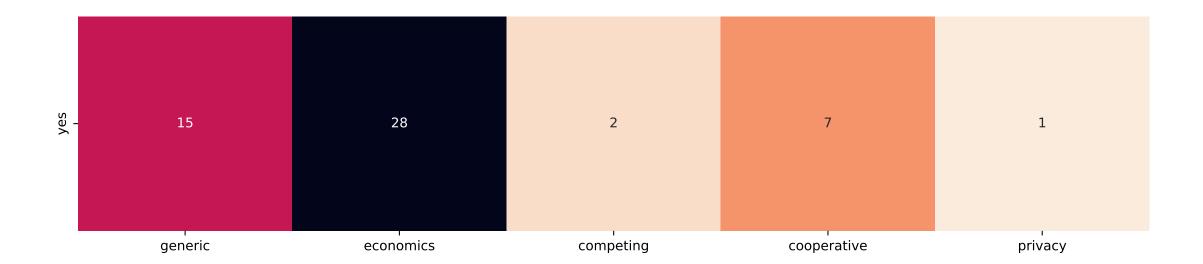
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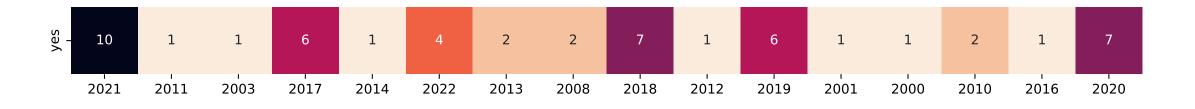
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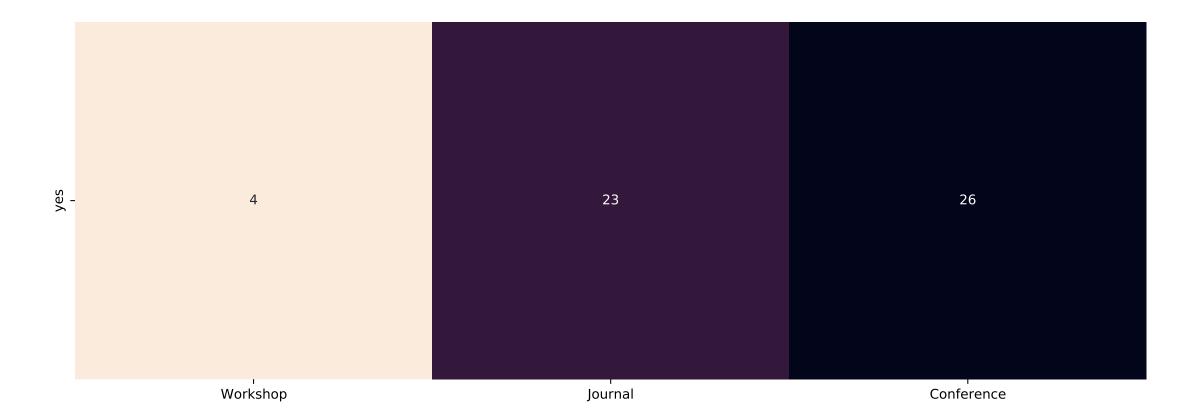
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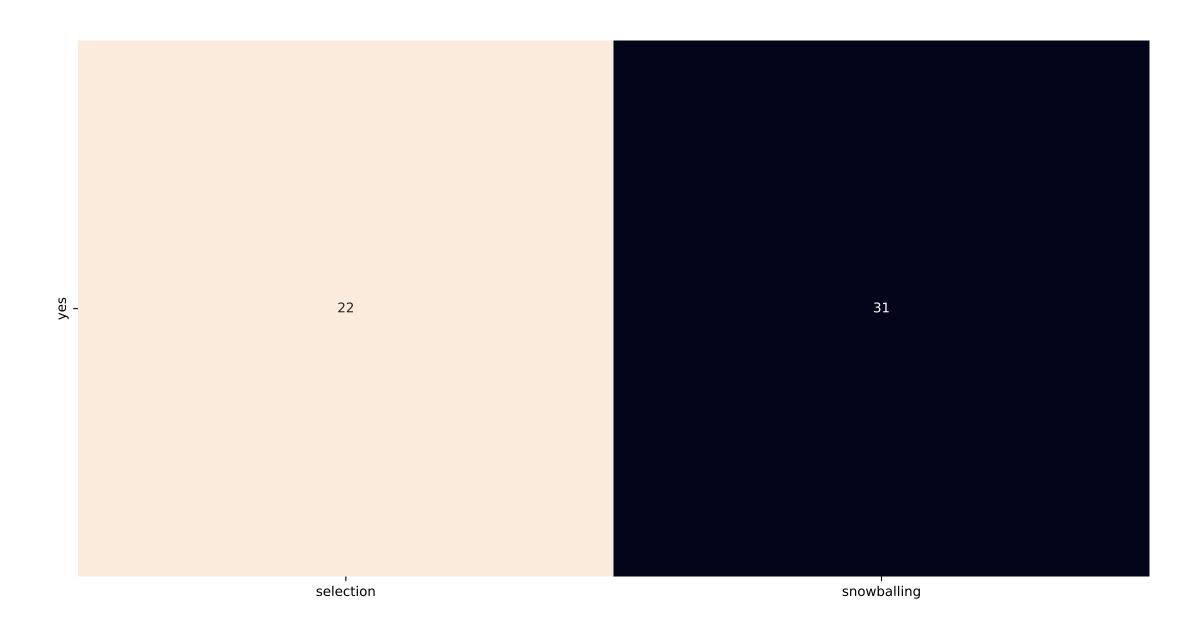
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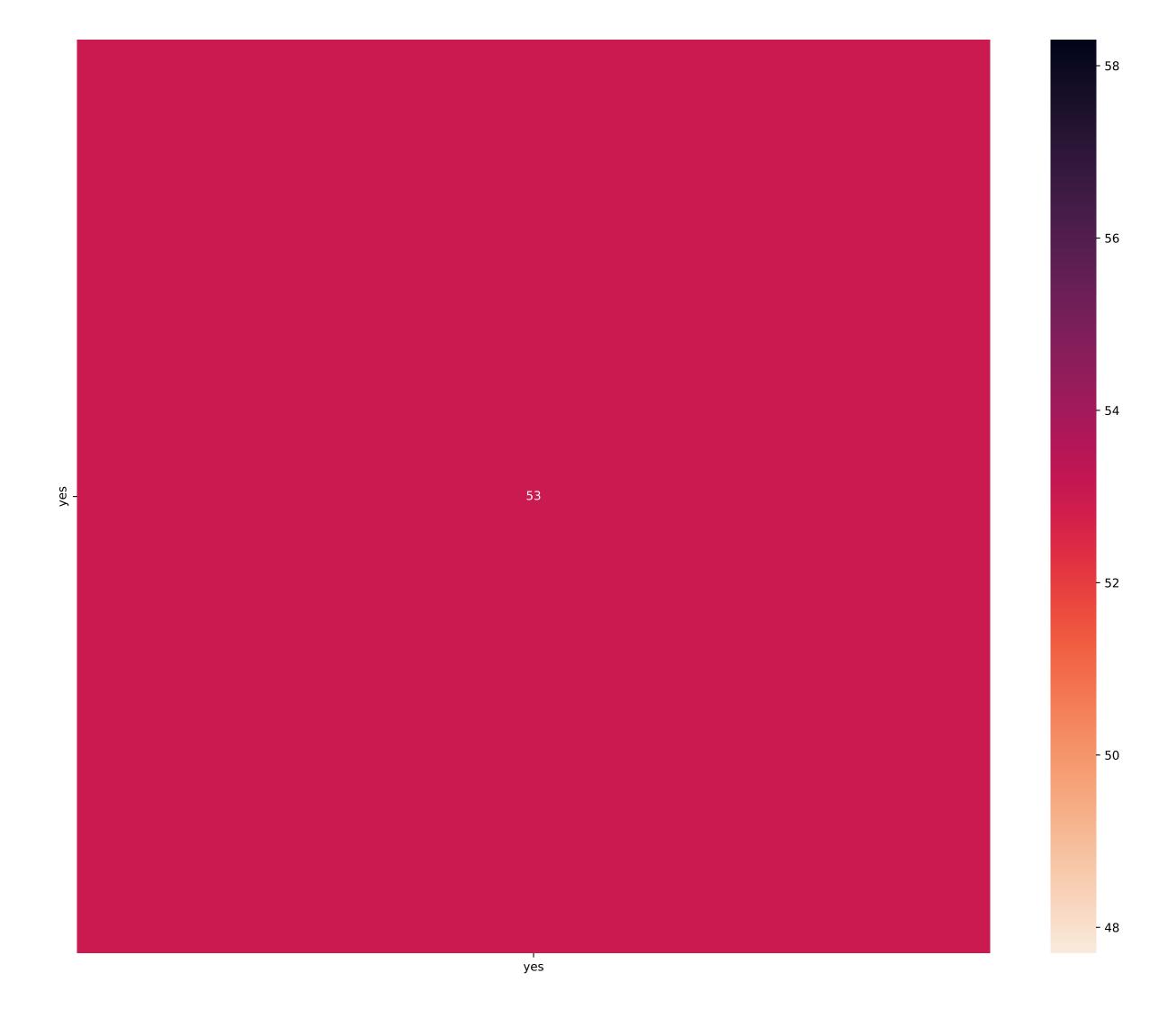
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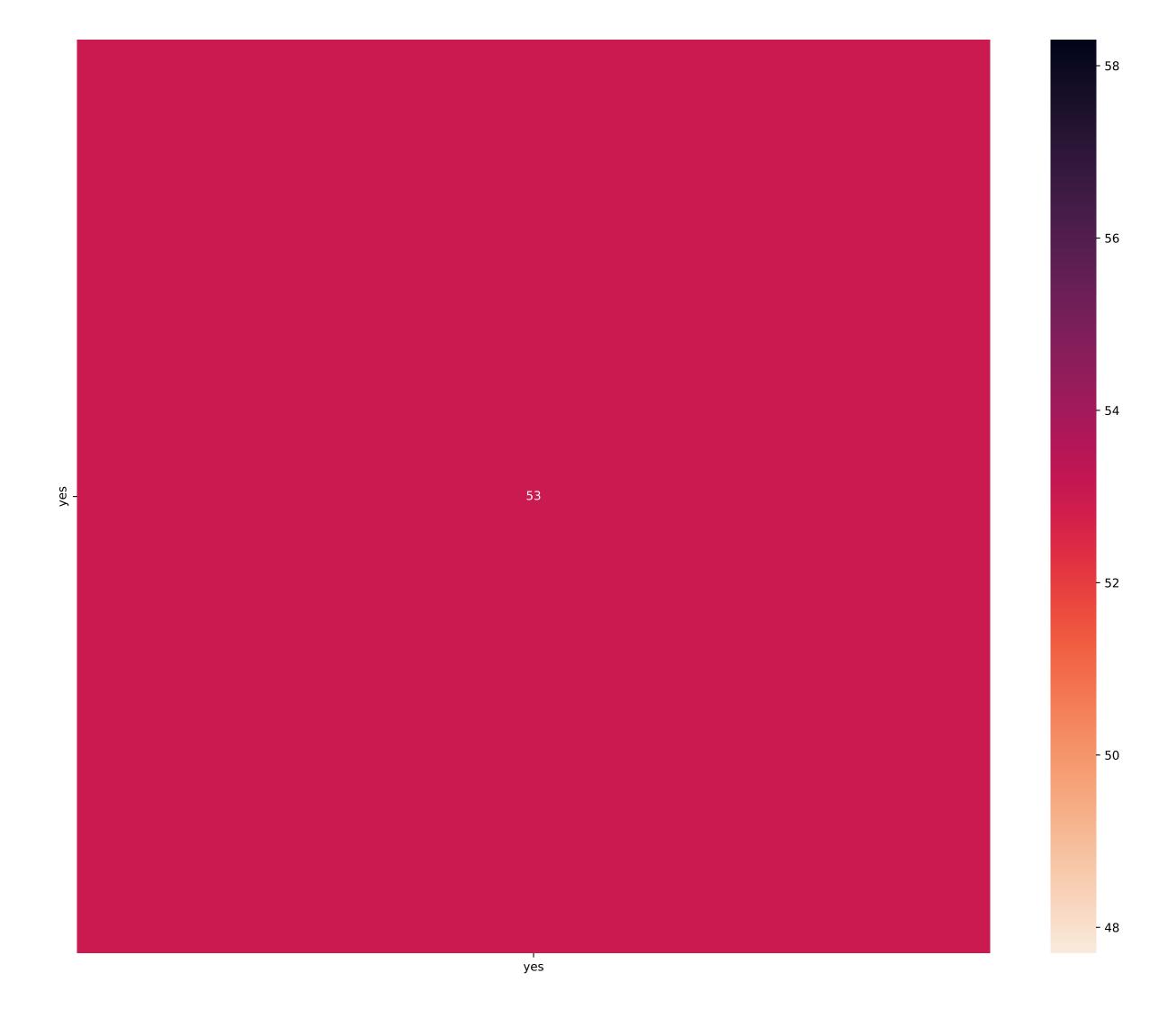
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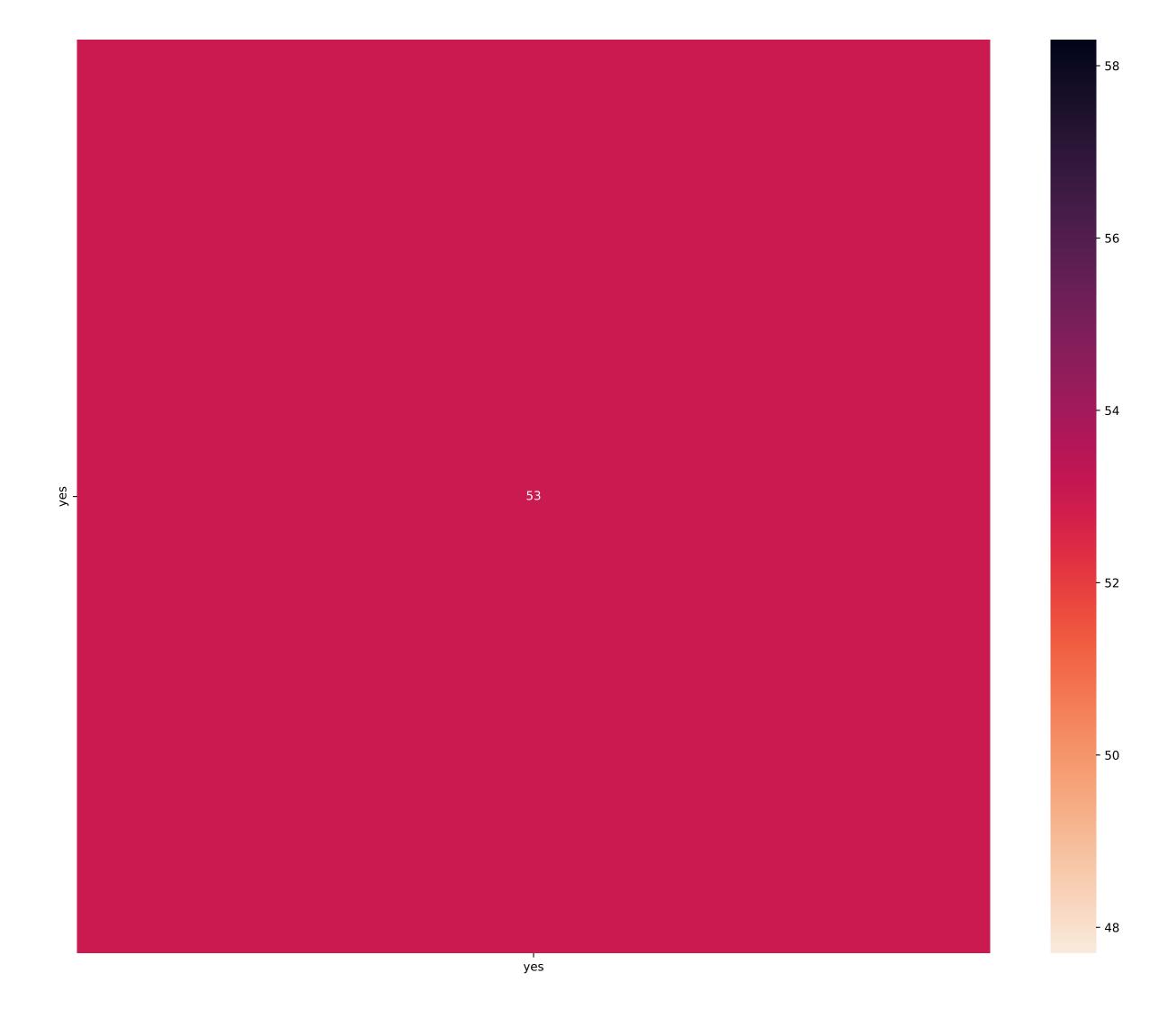
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yes -	6	5	24	2	4	1	1	2	2	13	1	1	1	2
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Multi bipartite gradient descent search – L

Angle based Similarirty -

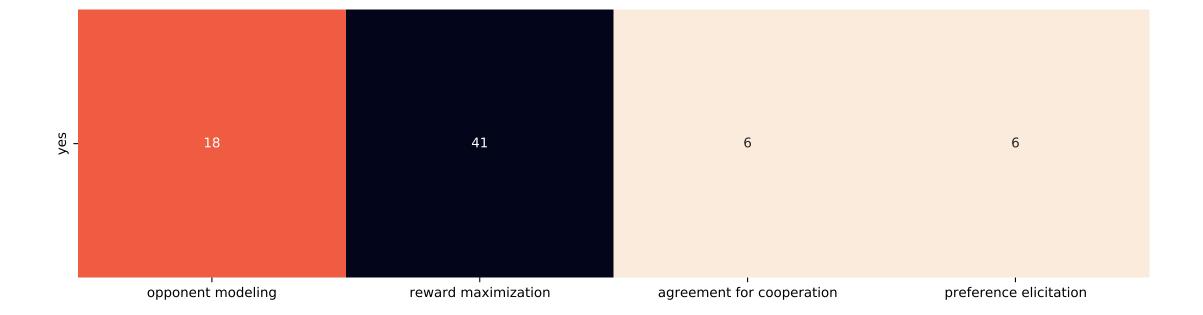
Fuzzy Logic System -

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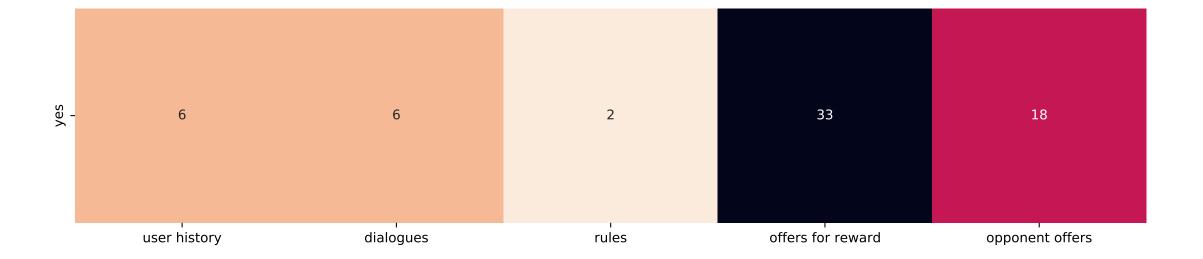
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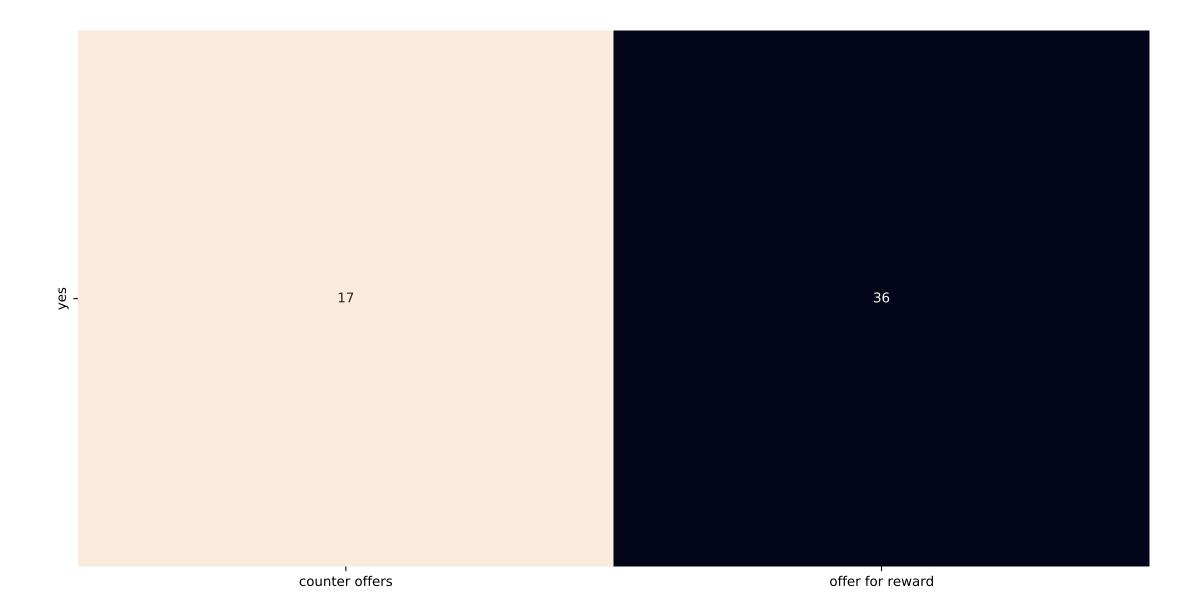


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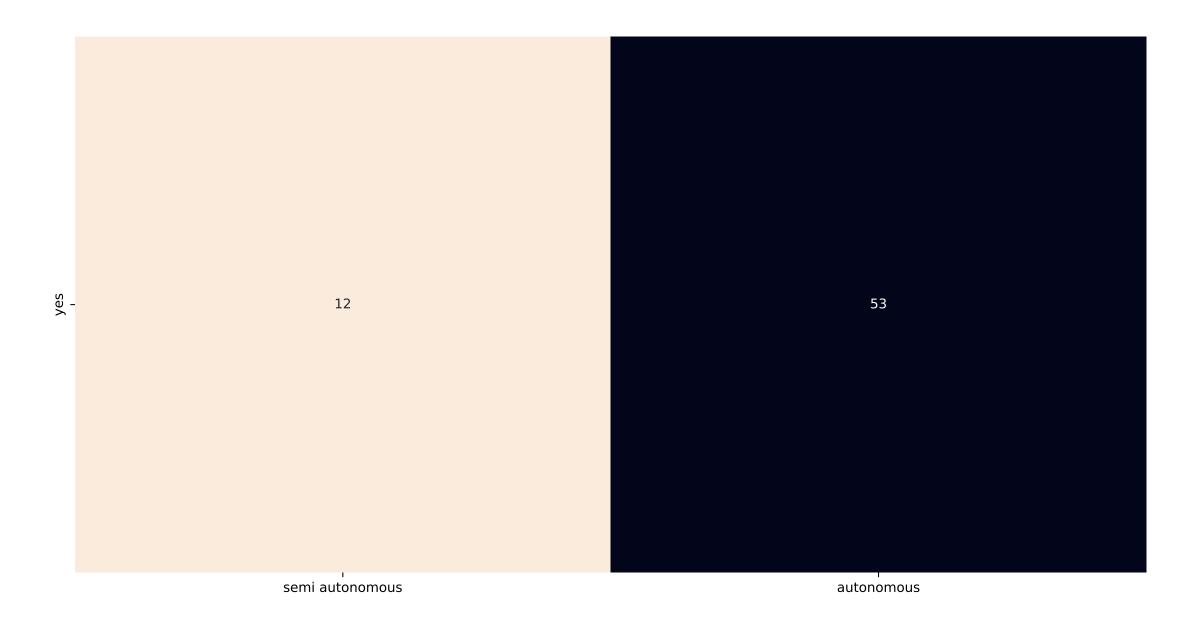
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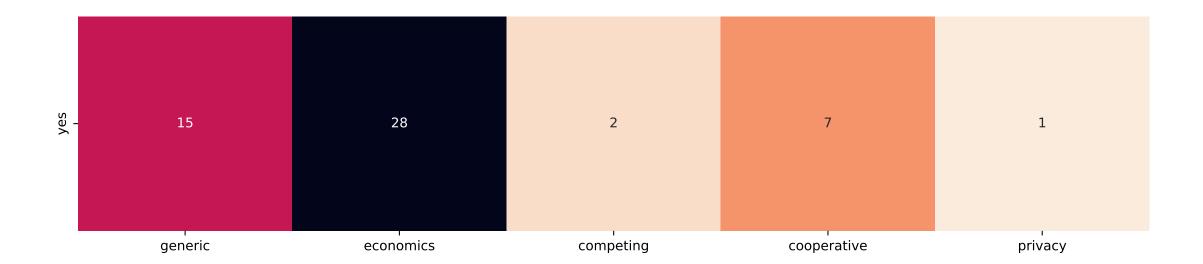
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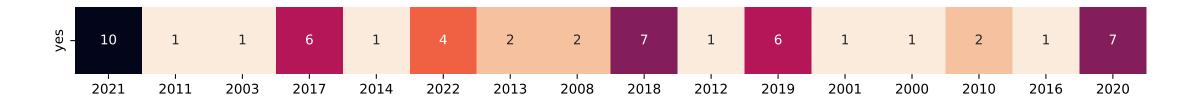
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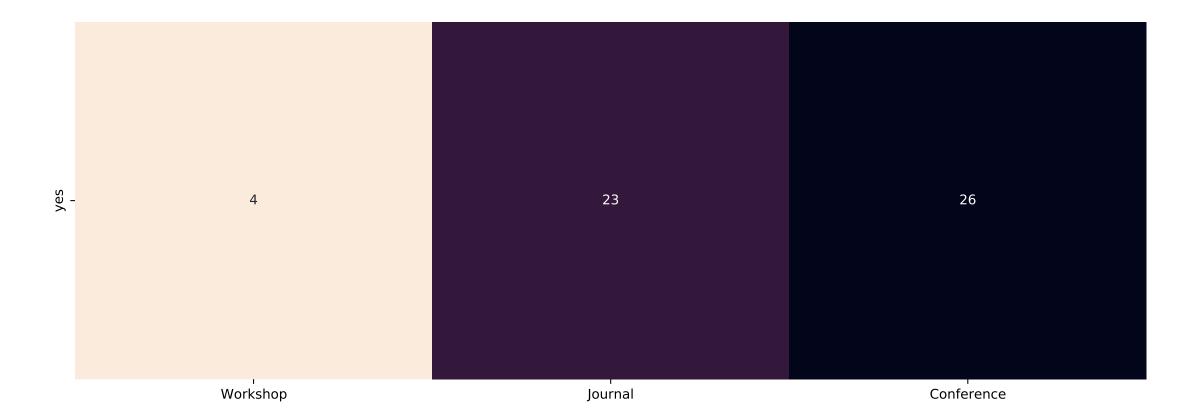
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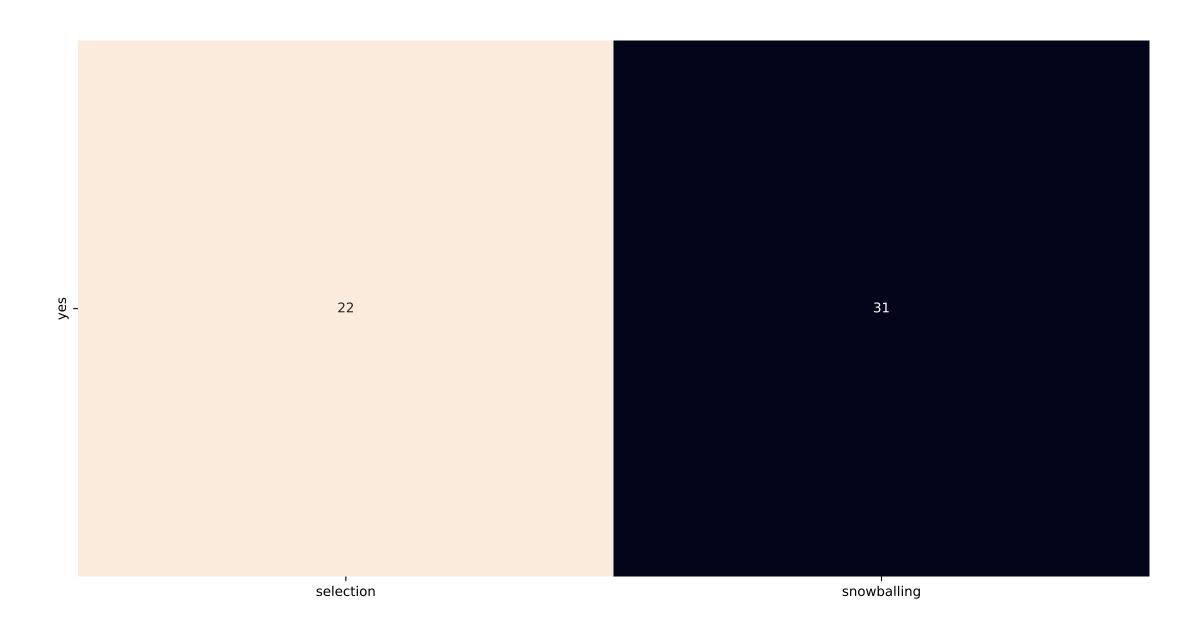
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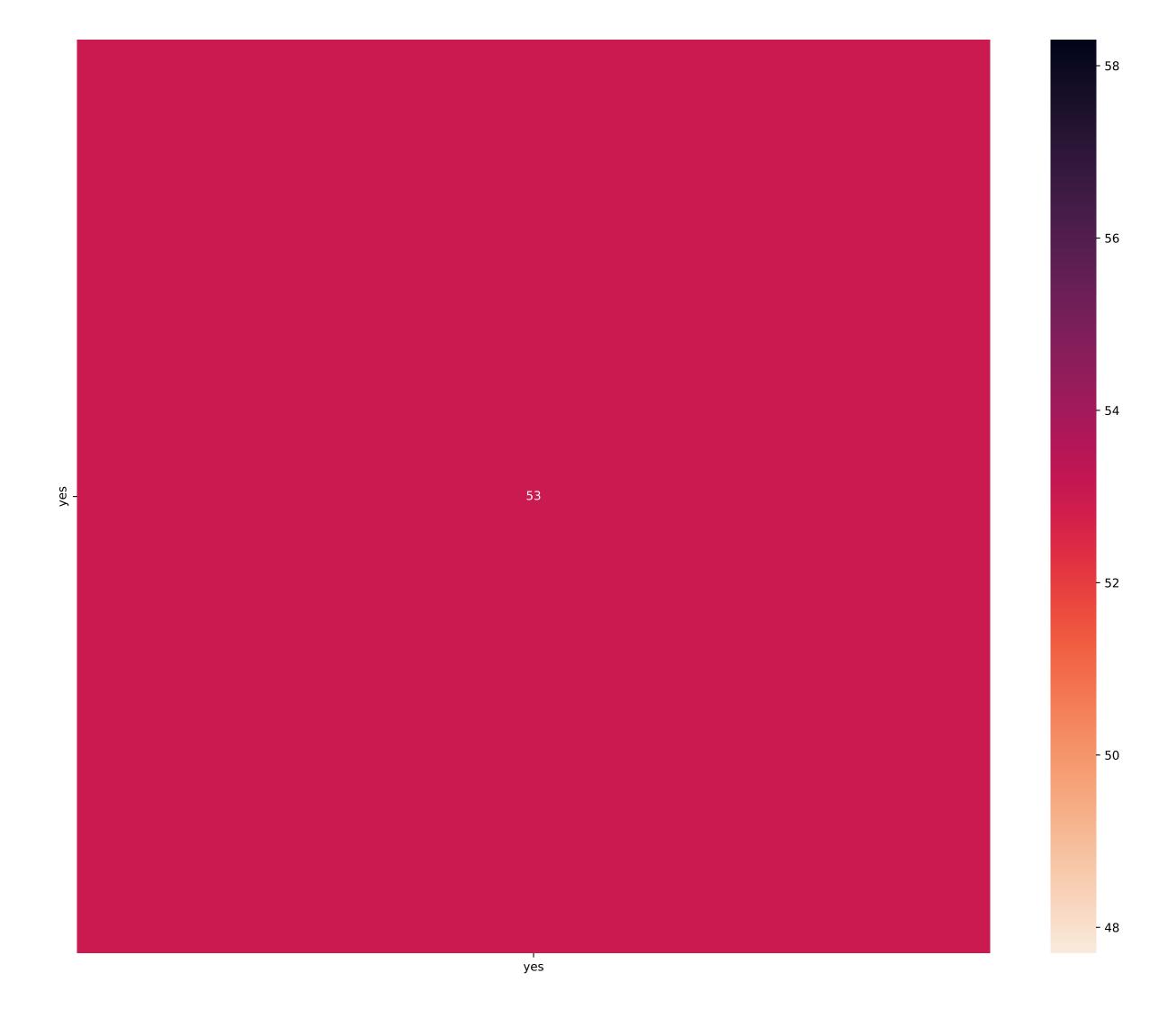
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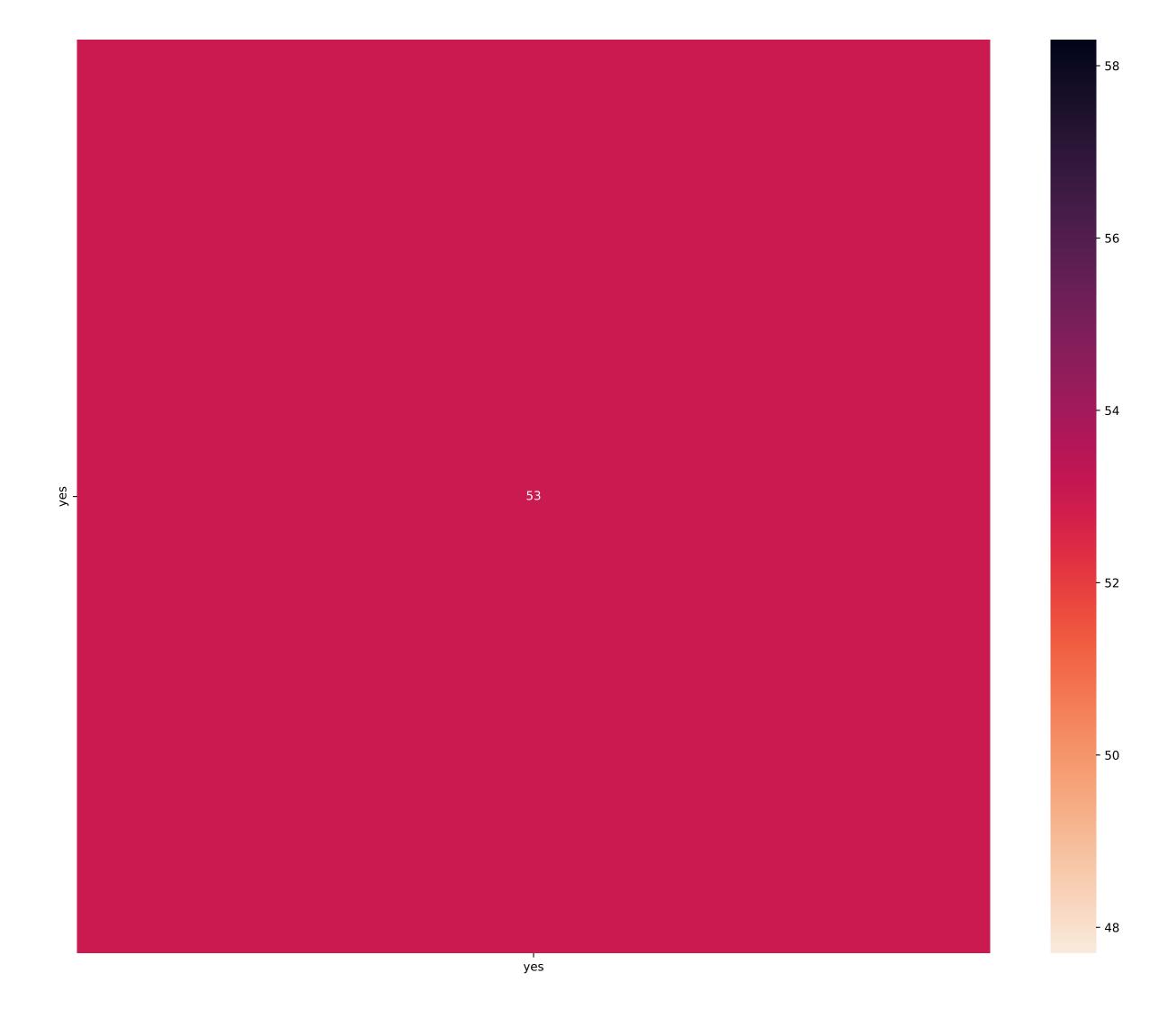
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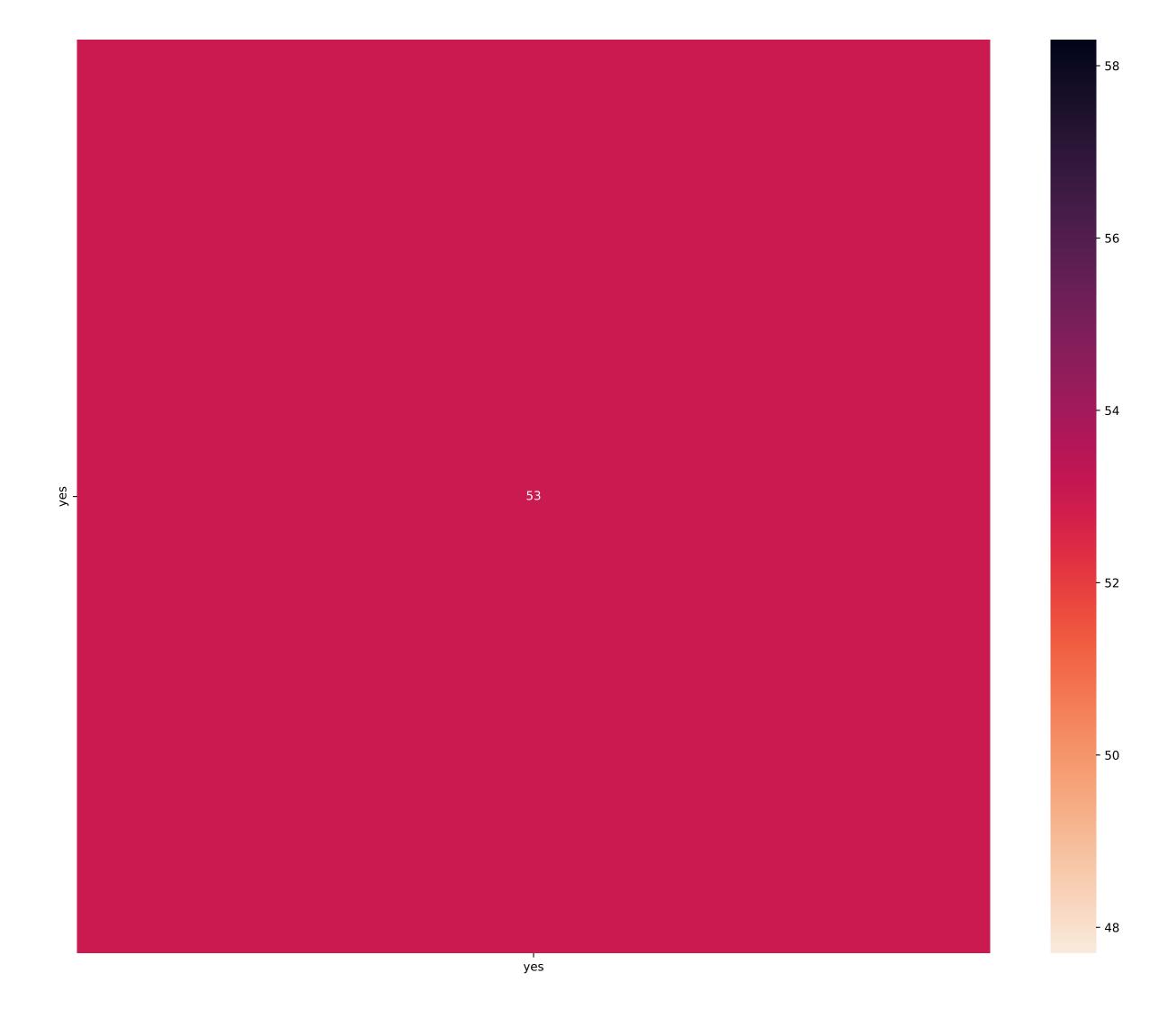
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yes -	6	5	24	2	4	1	1	2	2	13	1	1	1	2
•	Bayesian Learning –	Neural Network -	Alternative offer protocol –	Linear Programming -	Monte Carlo Tree search -	Heuristic algorithm -	Equilibrium strategies -	Argumentation -	Linear Regression -	Reinforcement learning -	Nonlinear Regression -	logistic regression -	Markov Decision Process -	- LSTM -

Multi bipartite gradient descent search – L

Angle based Similarirty -

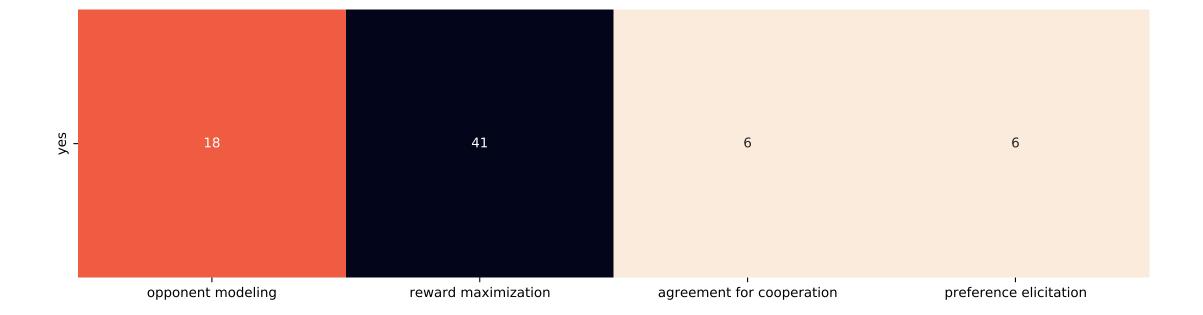
Fuzzy Logic System -

Genetic Algorithm -

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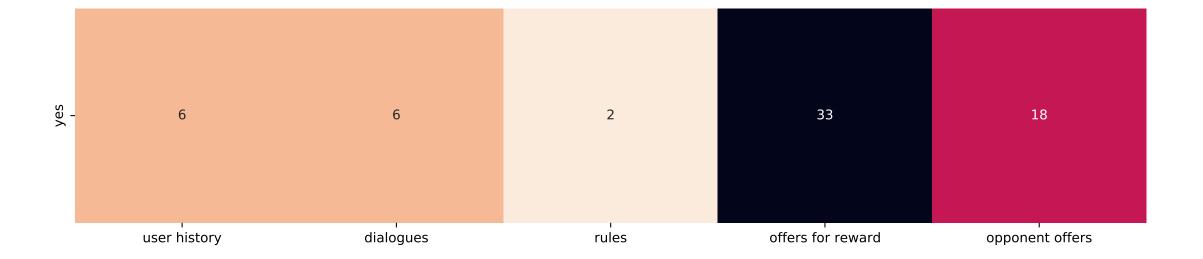
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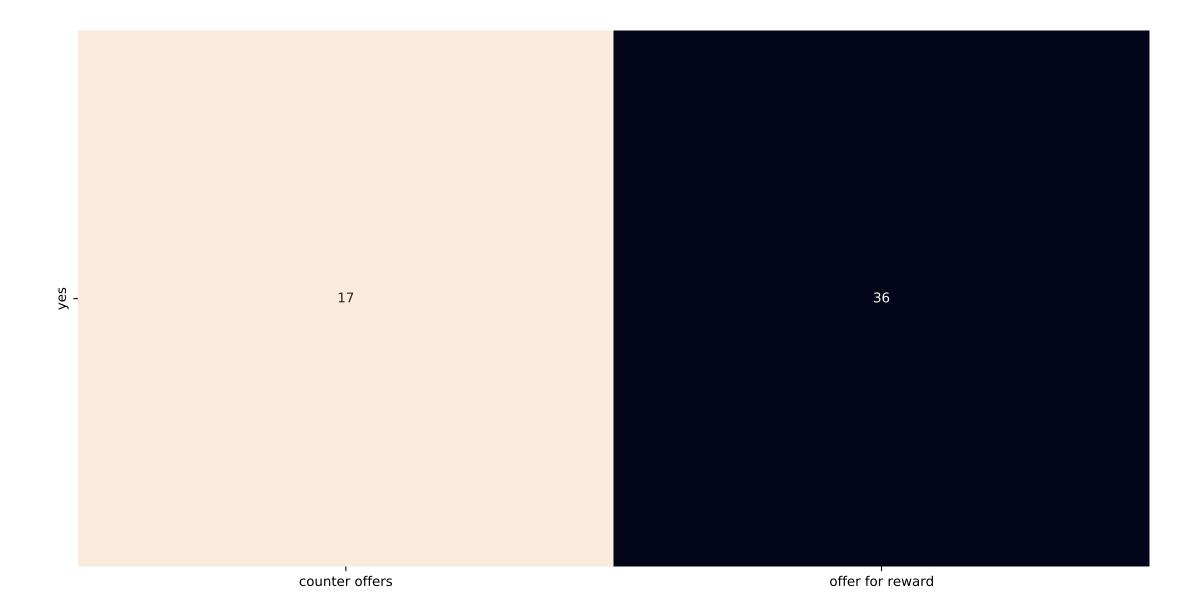


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- 35.0

- 32.5

- 30.0

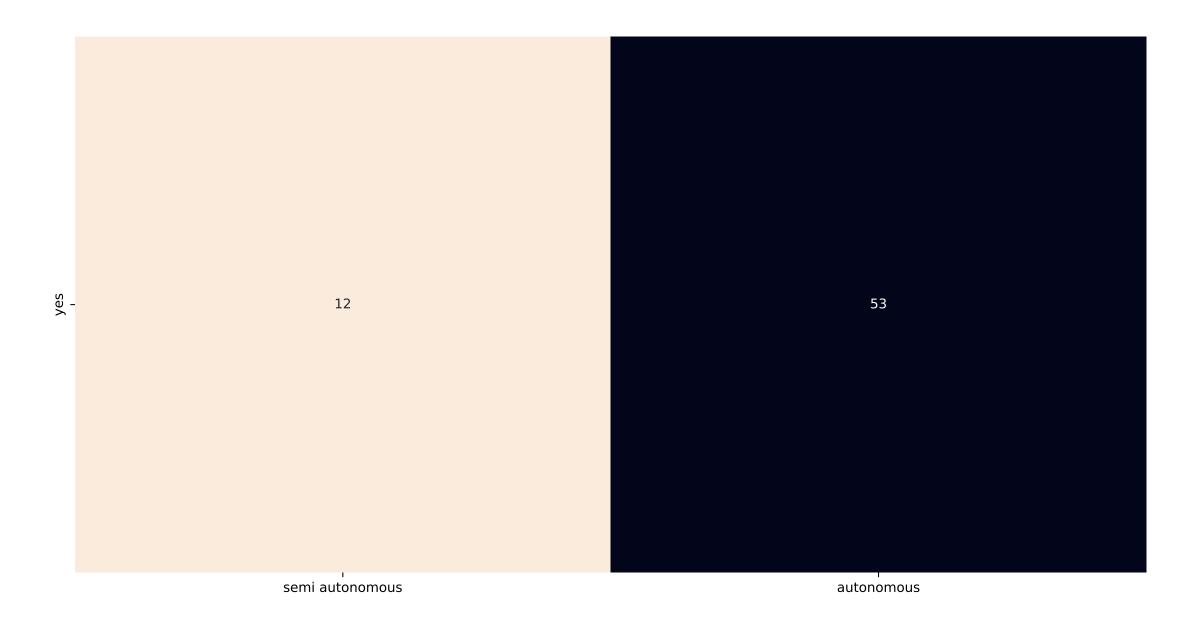
- 27.5

- 25.0

- 22.5

- 20.0

- 17.5



- 45

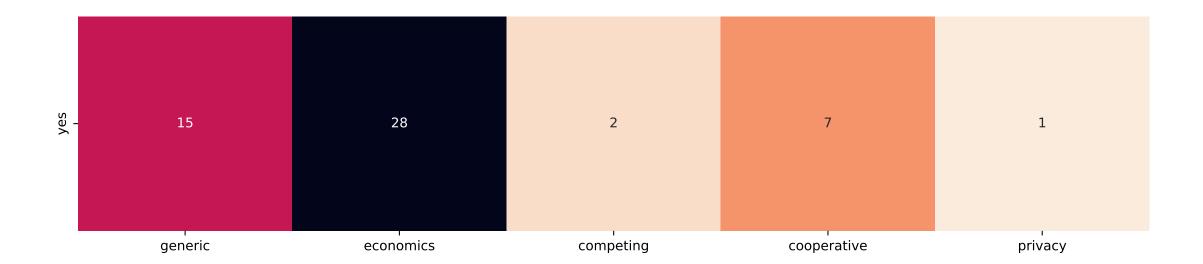
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2021 2011 2003 2017 2014 2022 2013 2008 2018 2012 2019 2001 2000 2010 2016 2020

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					<b>-</b> 14
Bayesian Learning -	1	3	2		14
Neural Network -	1	3	1		
Alternative offer protocol -	1	14	9		- 12
Linear Programming -	0	2	0		
Monte Carlo Tree search -	0	0	4		
Heuristic algorithm -	1	0	0		- 10
Equilibrium strategies -	0	1	0		
Argumentation -	0	0	2		
Linear Regression -	0	1	1		- 8
Reinforcement learning -	2	4	7		
Nonlinear Regression -	0	1	0		- 6
logistic regression -	0	1	0		
Markov Decision Process -	0	0	1		
LSTM -	1	0	1		- 4
Genetic Algorithm -	0	1	0		
Fuzzy Logic System -	0	3	1		
Angle based Similarirty -	0	1	0		- 2
Multi bipartite gradient descent search -	0	0	1		
Gaussian probability -	0	0	5		- 0
	Workshop -	Journal -	Conference -		- 0

Bayesian Learning	- 1	5
Neural Network	- 1	4
Alternative offer protocol	- 6	18
Linear Programming	- 1	1
Monte Carlo Tree search	- 3	1
Heuristic algorithm	- 0	1
Equilibrium strategies	- 1	0
Argumentation	- 2	0
Linear Regression	- 1	1
Reinforcement learning	- 6	7
Nonlinear Regression	- 0	1
logistic regression	- 0	1
Markov Decision Process	- 1	0
LSTM	- 0	2
Genetic Algorithm	- 0	1
Fuzzy Logic System	- 1	3
Angle based Similarirty	- 0	1
Multi bipartite gradient descent search	- 1	0
Gaussian probability		1
	selection .	snowballing .

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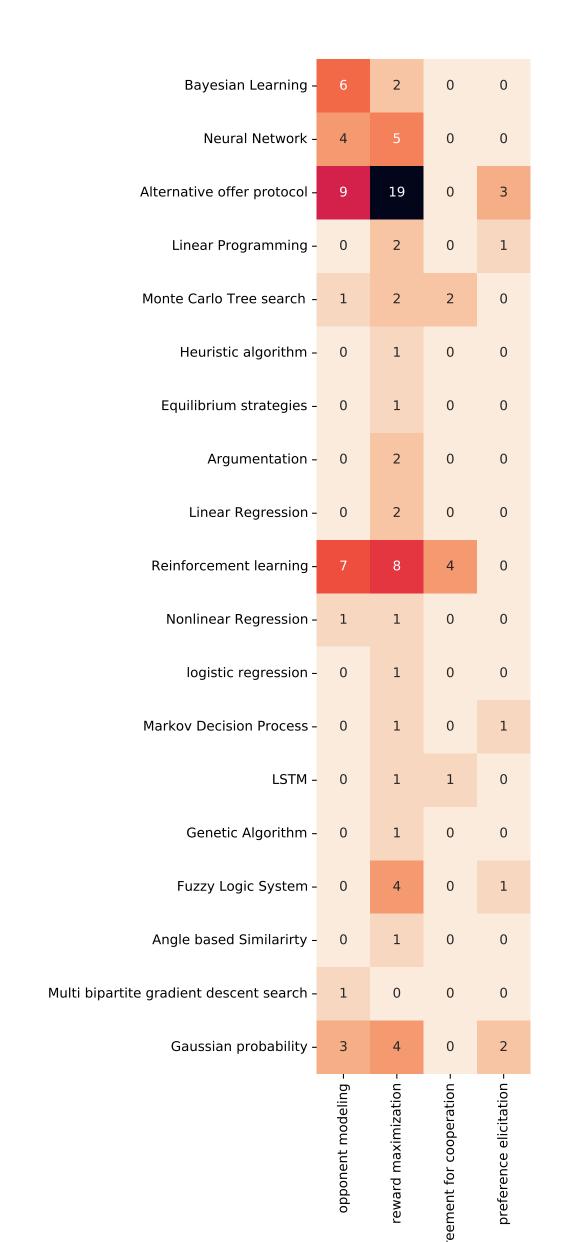
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- 17.5

- 15.0

- 12.5

- 10.0

- 7.5

- 5.0

- 2.5

- 0.0

Bayesian Learning -	0	0	0	1	1	4
Neural Network -	2	0	0	1	1	3
Alternative offer protocol -	10	1	2	4	4	19
Linear Programming -	2	0	1	0	0	1
Monte Carlo Tree search -	0	0	0	2	0	2
Heuristic algorithm -	1	0	1	0	0	0
Equilibrium strategies -	1	0	1	1	0	0
Argumentation -	2	0	1	0	0	0
Linear Regression -	1	0	1	1	0	0
Reinforcement learning -	1	1	1	6	2	8
Nonlinear Regression -	0	0	0	0	1	0
logistic regression -	0	0	0	0	0	1
Markov Decision Process -	0	0	1	0	0	0
LSTM -	0	0	0	2	0	0
Genetic Algorithm -	1	0	1	0	0	0
Fuzzy Logic System -	2	0	2	1	0	3
Angle based Similarirty -	1	0	0	0	0	1
Multi bipartite gradient descent search -	0	0	0	0	0	1
Gaussian probability -	0	0	2	2	1	1
	single issue -	involves human agent -	involves human agent -	improve -	time dependent -	bilateral –

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- 15.0

- 12.5

- 10.0

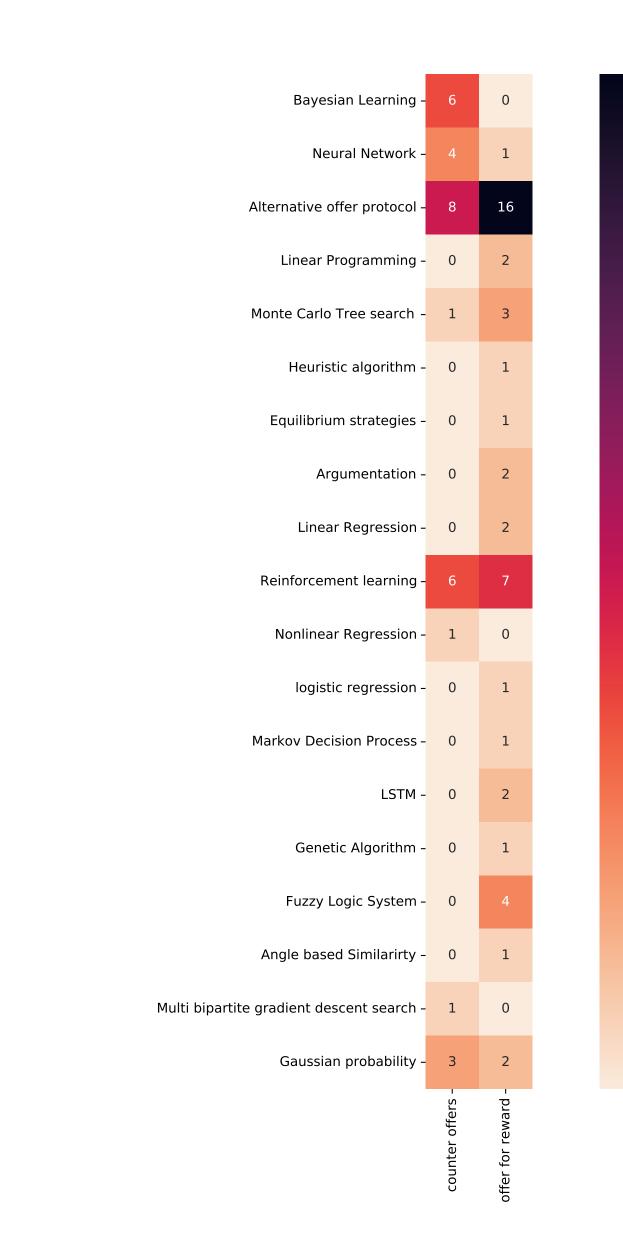
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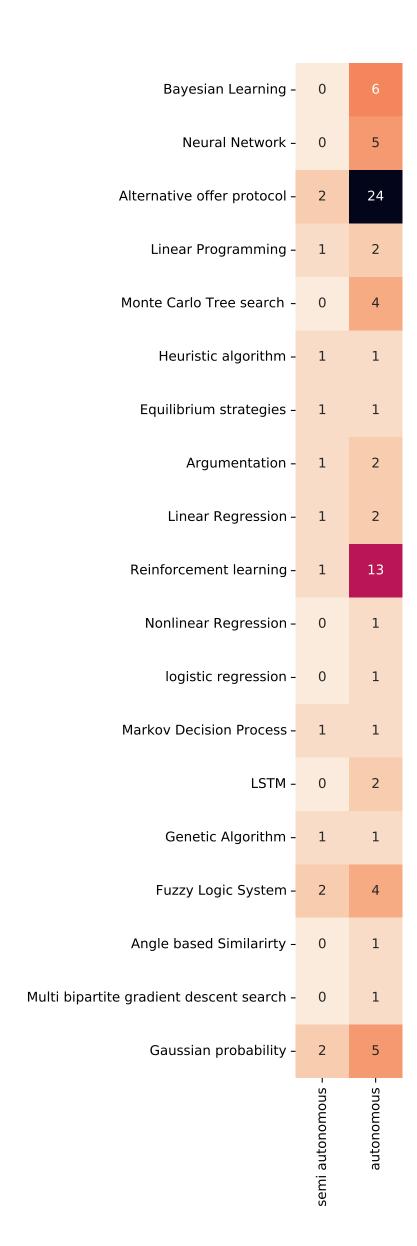
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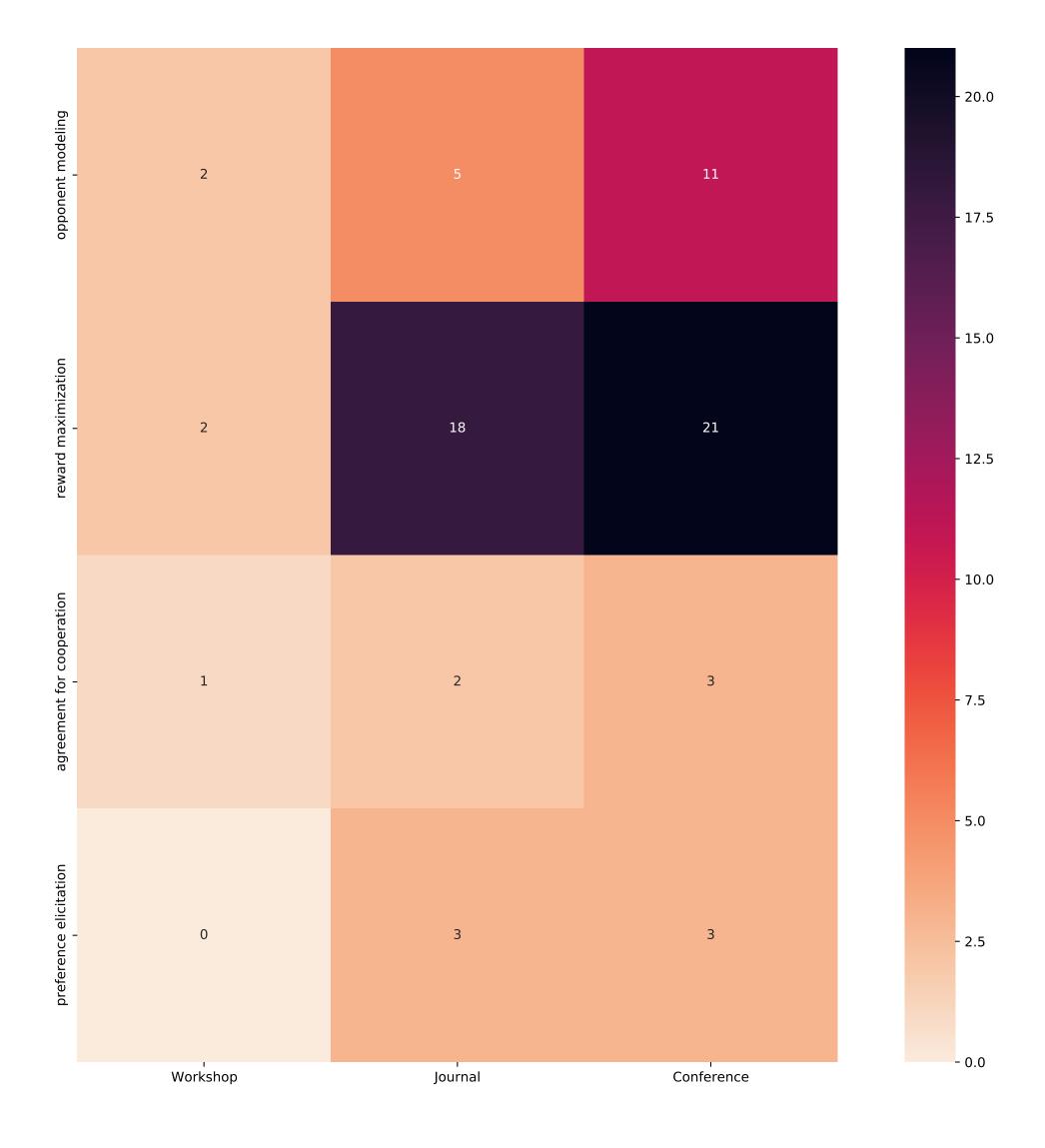
Bayesian Learning -	4	1	1	0	0	
Neural Network -	0	5	0	0	0	
Alternative offer protocol -	8	14	1	0	1	
Linear Programming -	0	2	0	0	0	
Monte Carlo Tree search -	1	0	0	3	0	
Heuristic algorithm -	0	1	0	0	0	
Equilibrium strategies -	0	1	0	0	0	
Argumentation -	0	2	0	0	0	
Linear Regression -	1	1	0	0	0	
Reinforcement learning -	5	3	1	4	0	
Nonlinear Regression -	0	1	0	0	0	
logistic regression -	0	1	0	0	0	
Markov Decision Process -	1	0	0	0	0	
LSTM -	0	1	0	1	0	
Genetic Algorithm -	0	1	0	0	0	
Fuzzy Logic System -	1	3	0	0	0	
Angle based Similarirty -	0	1	0	0	0	
Multi bipartite gradient descent search -	1	0	0	0	0	
Gaussian probability -	3	1	1	0	0	
	generic -	economics -	competing -	cooperative -	privacy -	

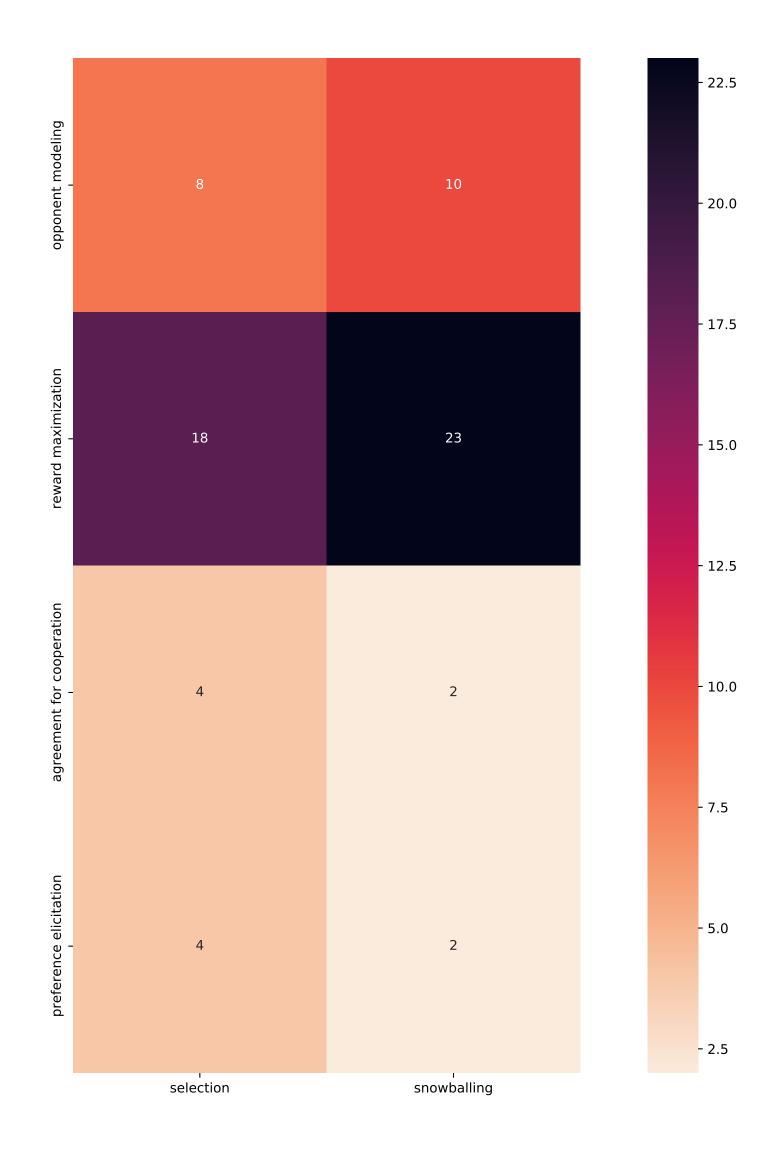
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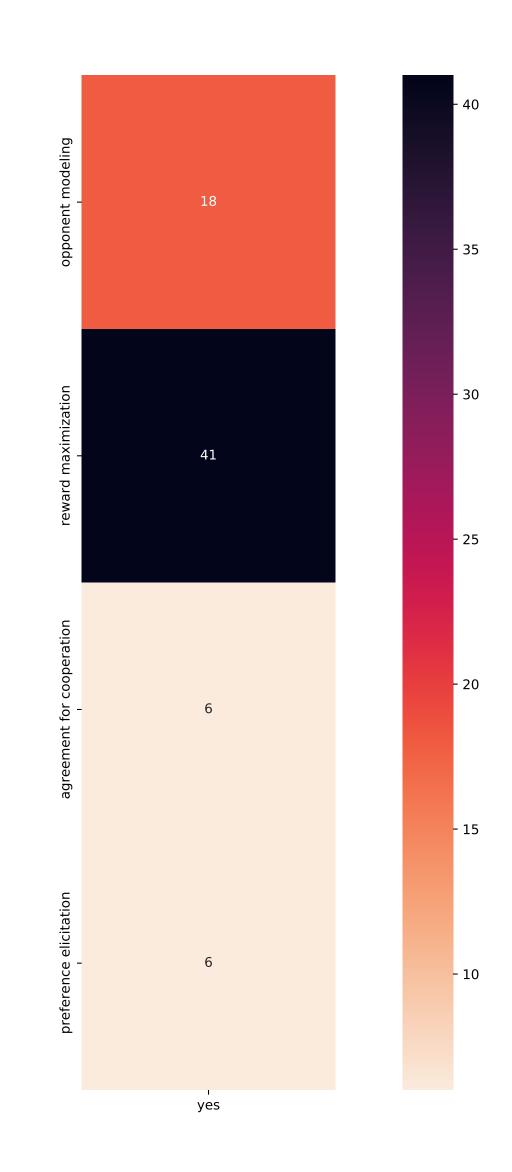
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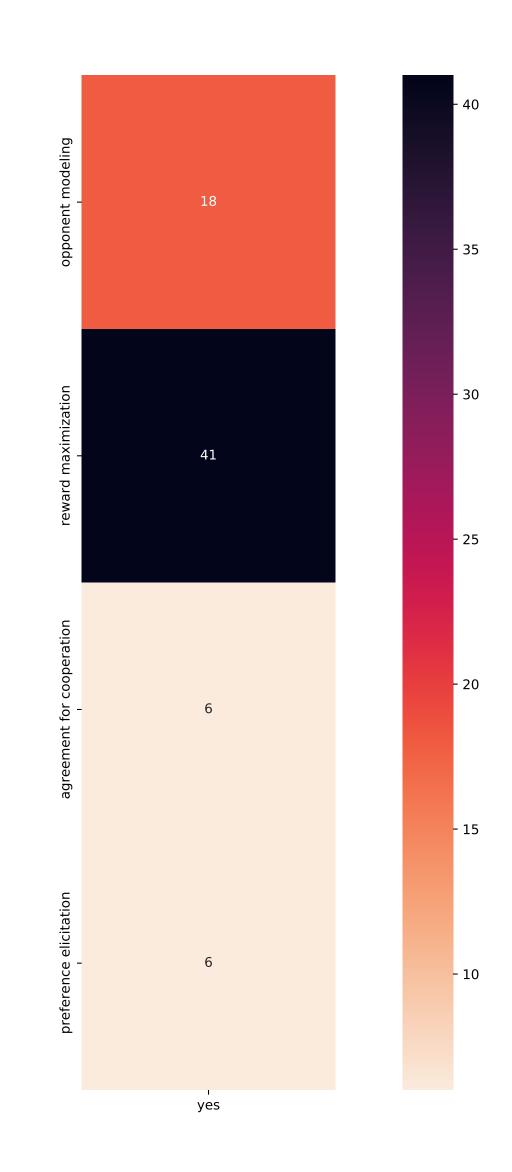
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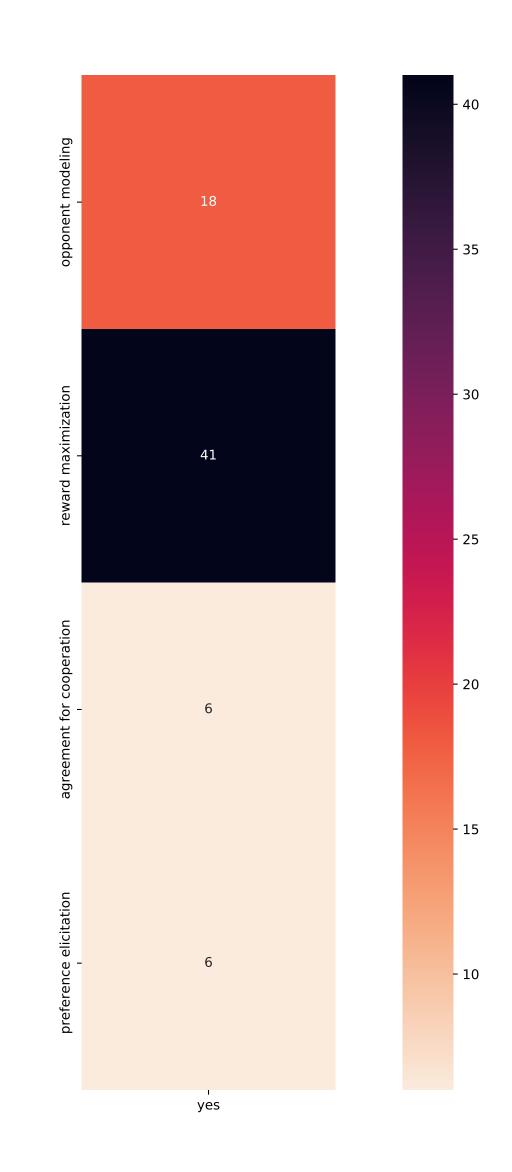
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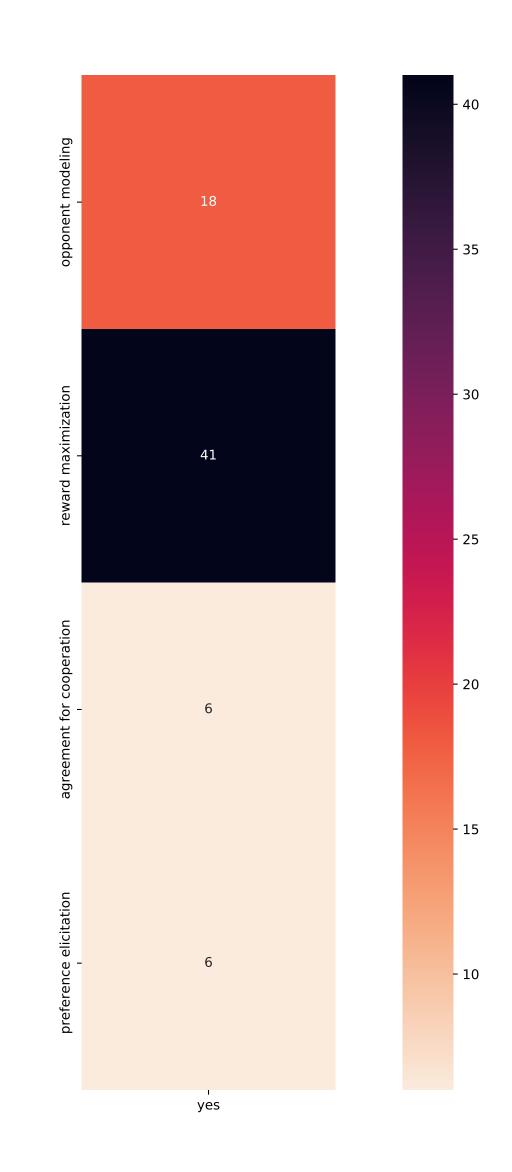












opponent modeling -	6	4	9	0	1	0	0	0	0	7	1	0	0	0	0	0	0	1	3
reward maximization -	2	5	19	2	2	1	1	2	2	8	1	1	1	1	1	4	1	0	4
agreement for cooperation -	0	0	0	0	2	0	0	0	0	4	0	0	0	1	0	0	0	0	0
preference elicitation -	0	0	3	1	0	0	0	0	0	0	0	0	1	0	0	1	0	0	2
	Bayesian Learning -	Neural Network -	Alternative offer protocol -	Linear Programming -	Monte Carlo Tree search -	Heuristic algorithm -	Equilibrium strategies -	Argumentation -	Linear Regression -	Reinforcement learning -	Nonlinear Regression -	logistic regression -	Markov Decision Process -	- ISTM -	Genetic Algorithm -	Fuzzy Logic System -	Angle based Similarirty -	Multi bipartite gradient descent search -	Gaussian probability -

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- 15.0

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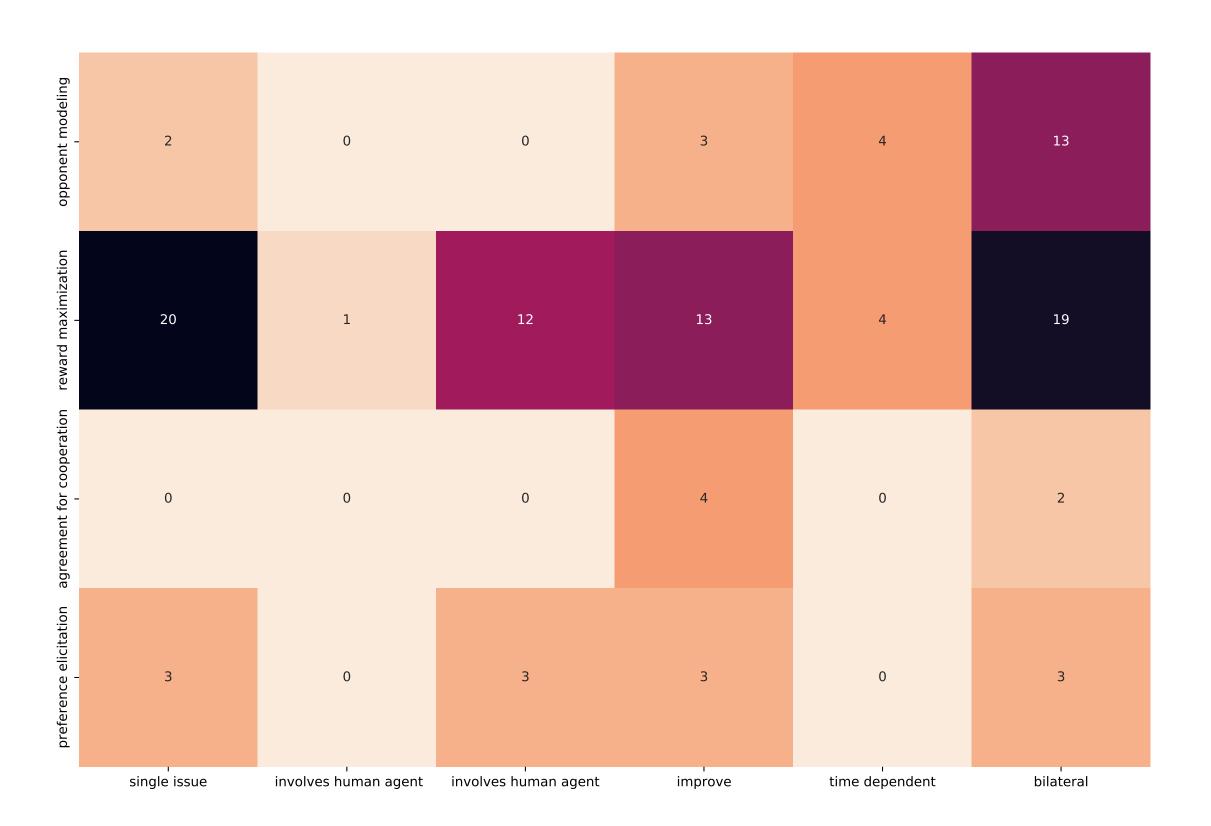
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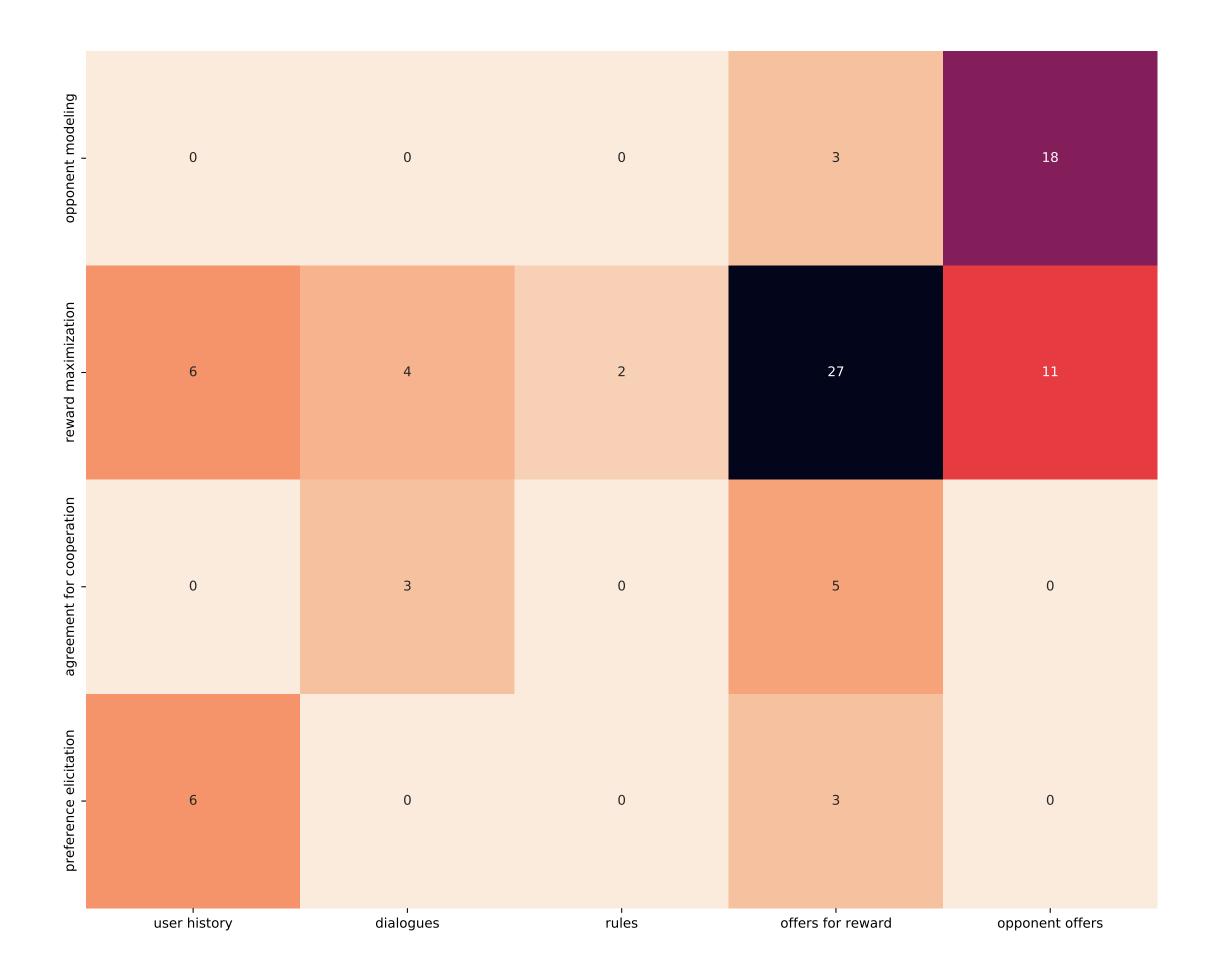
- 2.5

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20.0 - 17.5 - 15.0 - 12.5 - 10.0 - 7.5 - 5.0 - 2.5

- 0.0

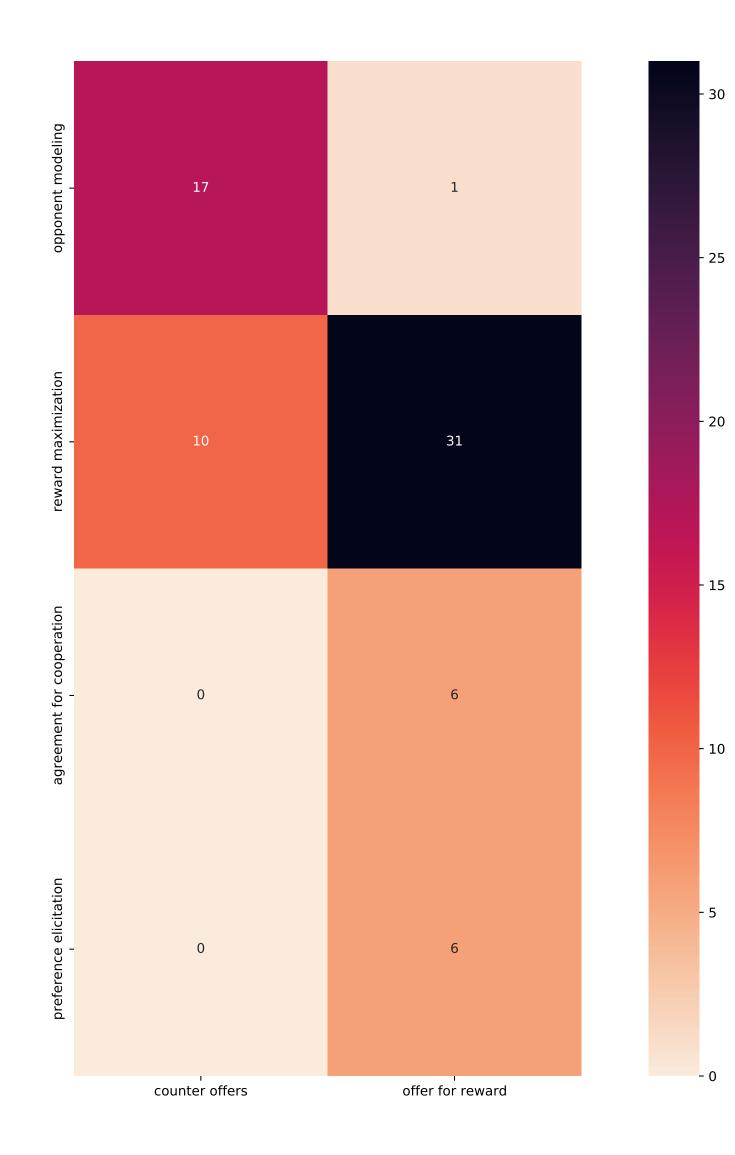


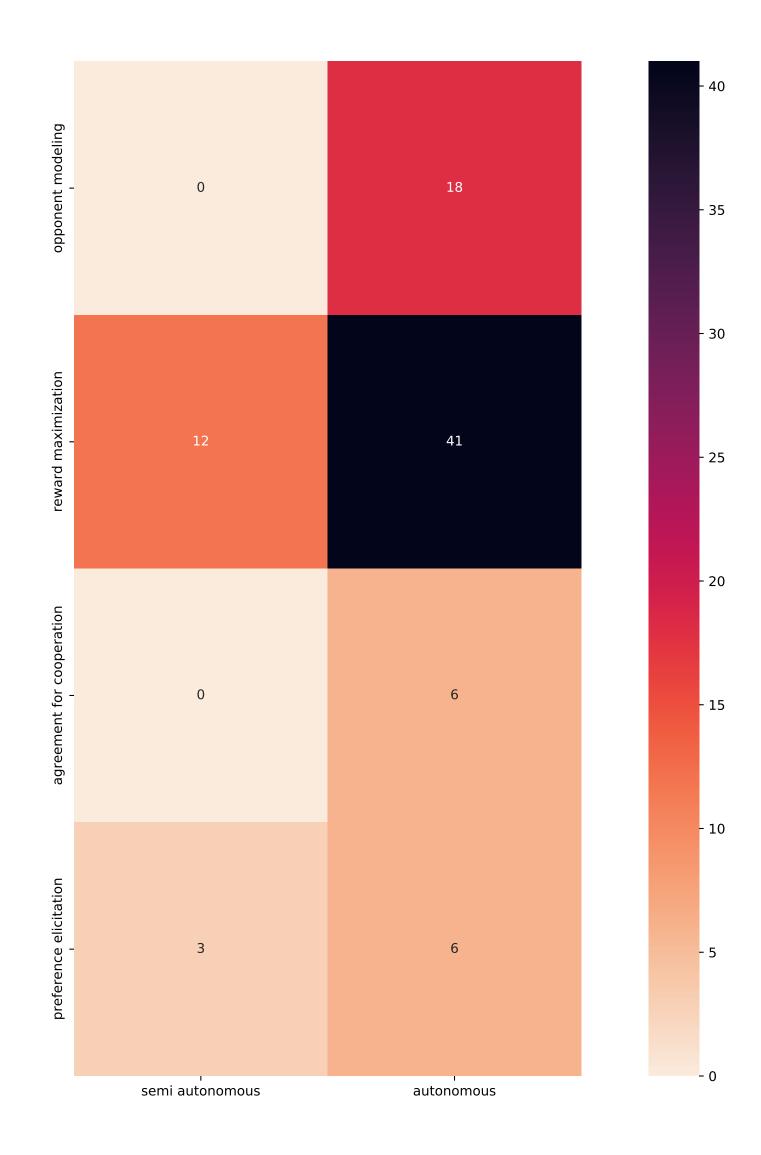
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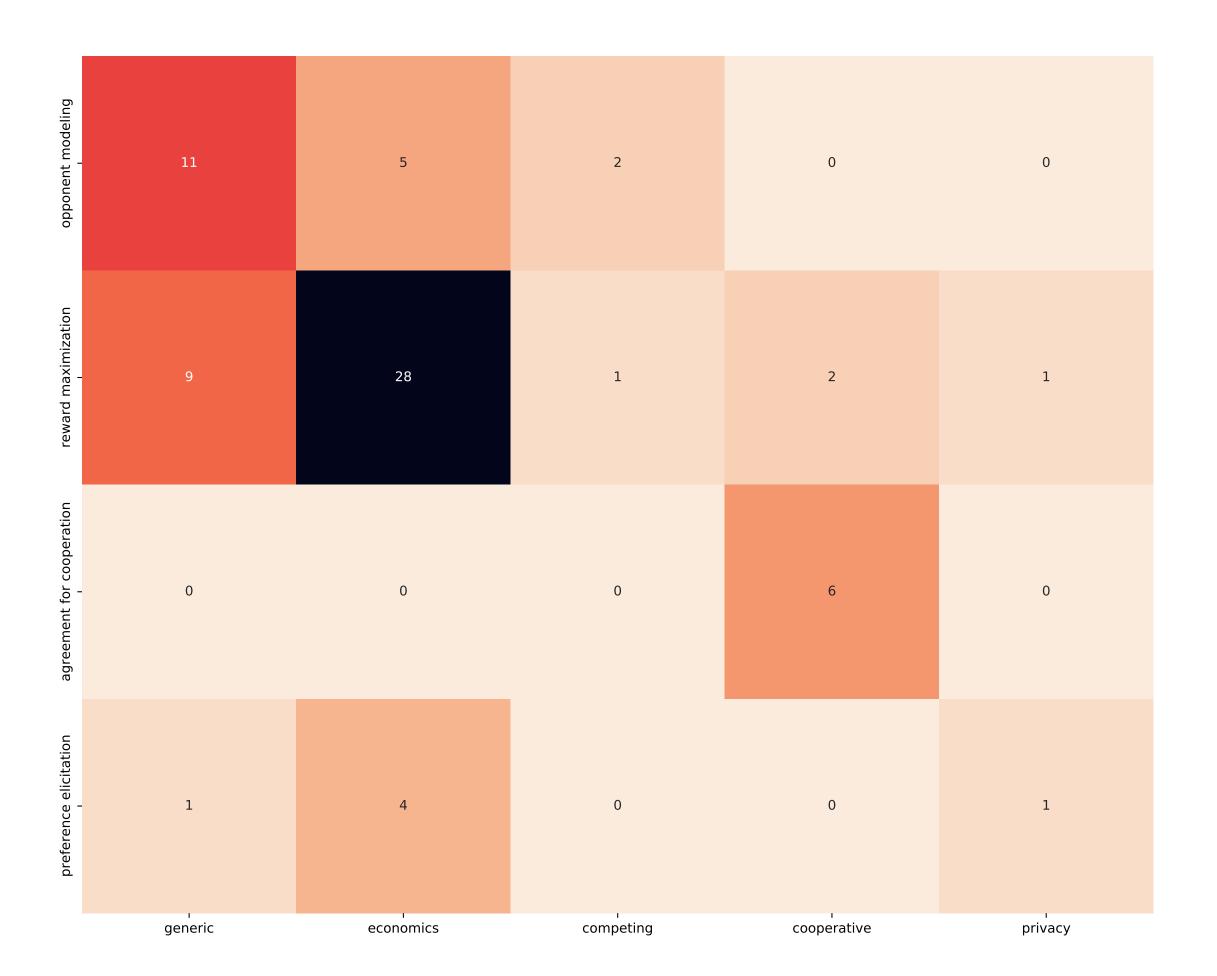
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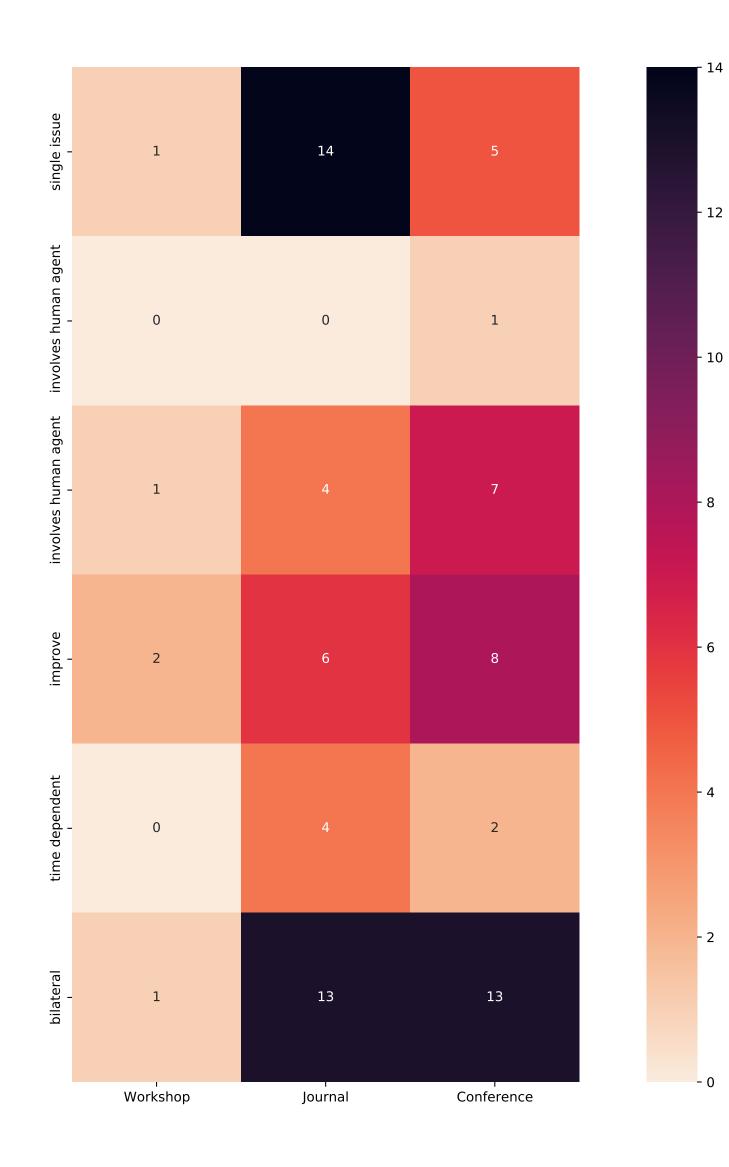
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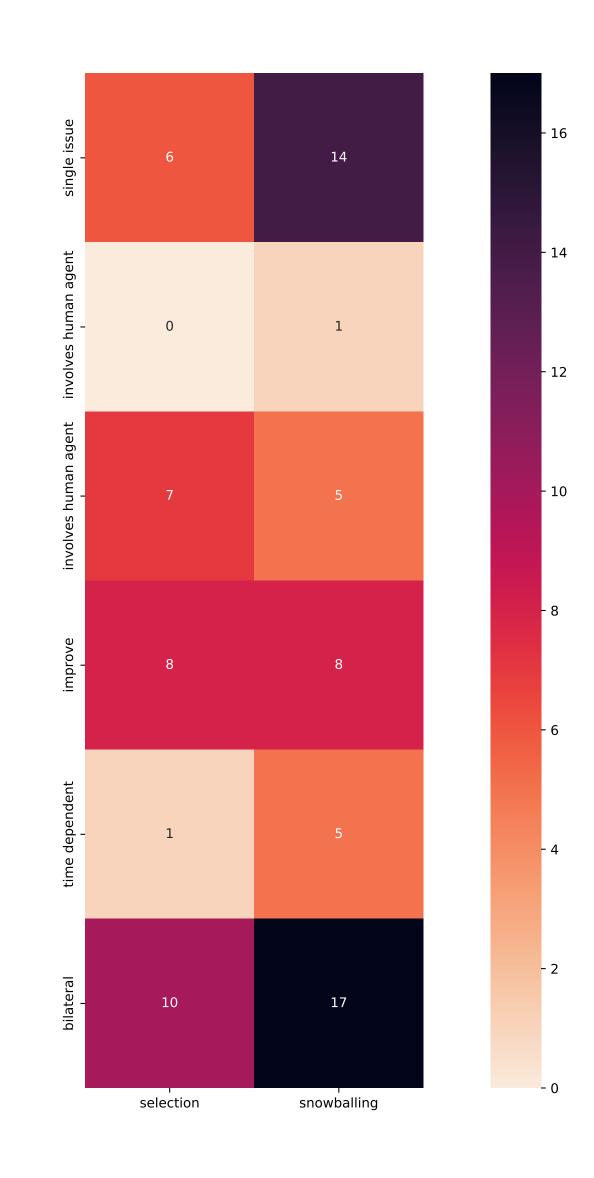
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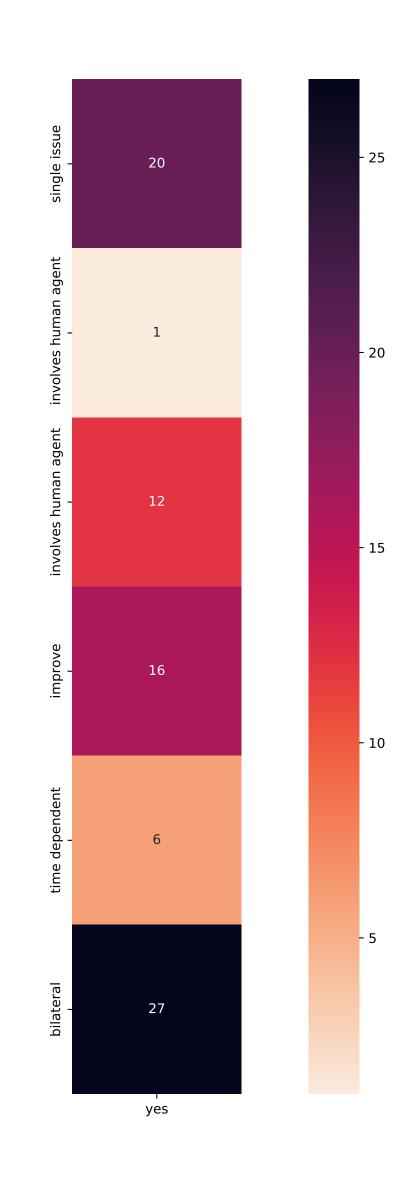
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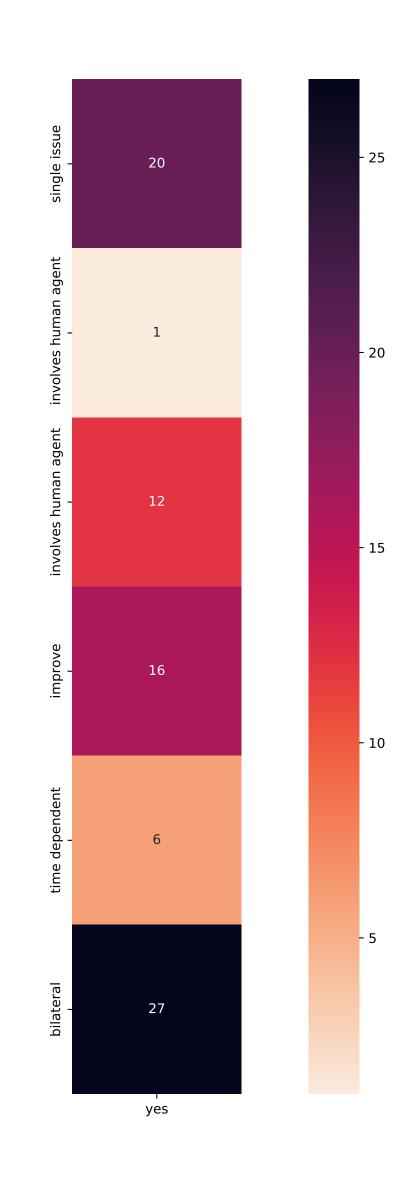
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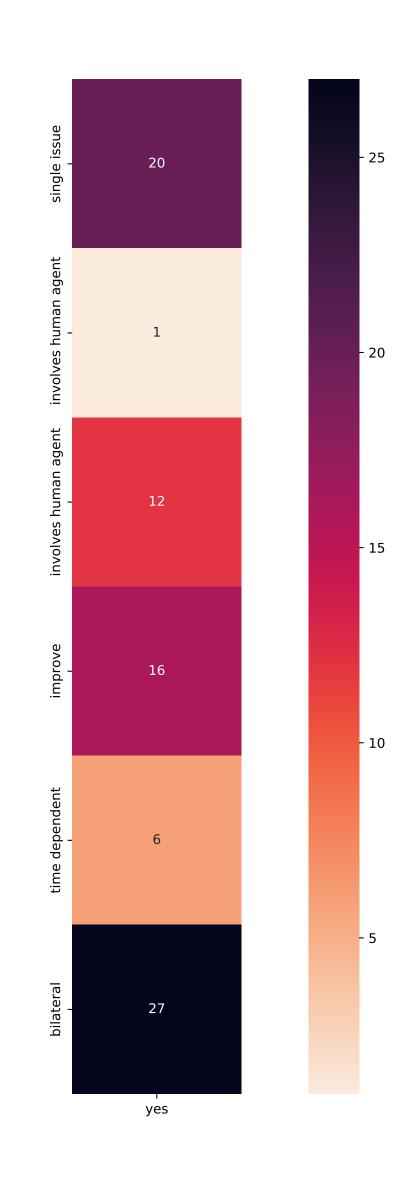


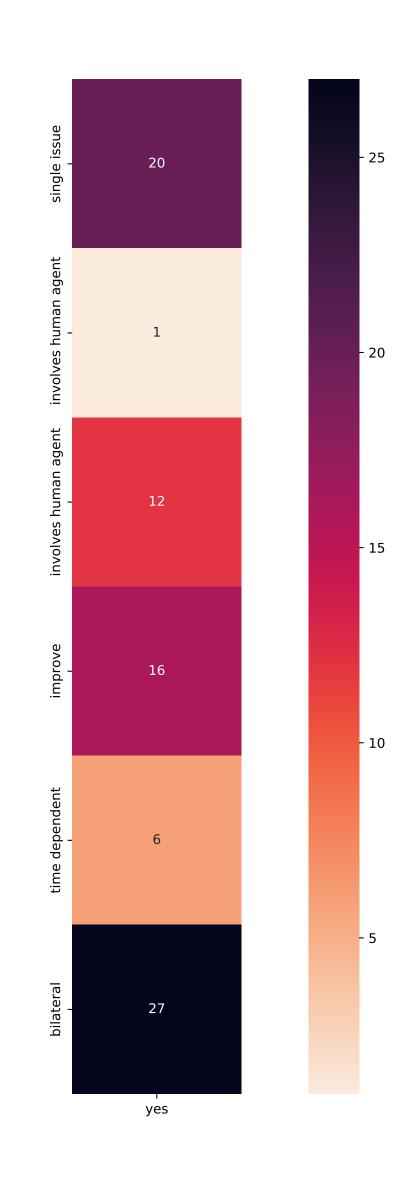
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- 17.5

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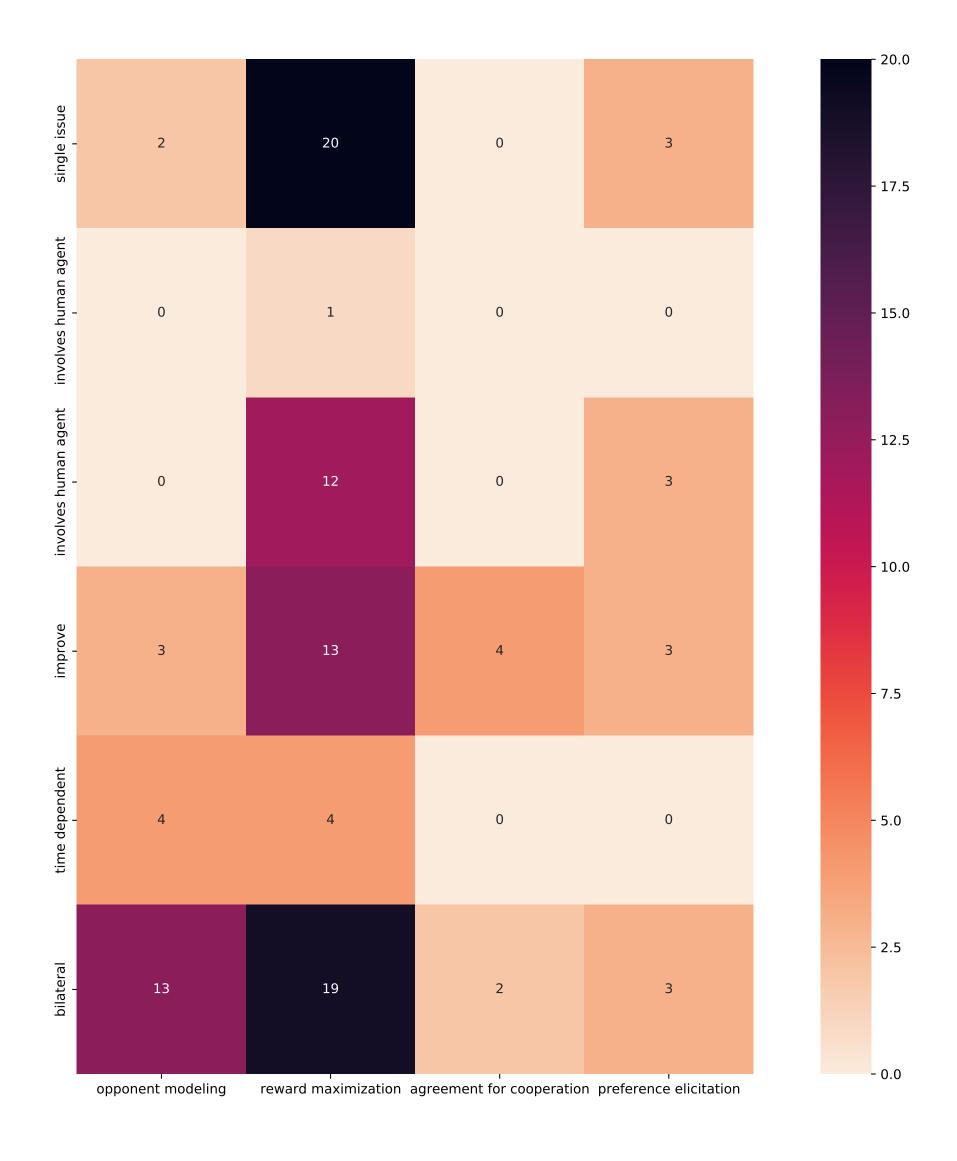
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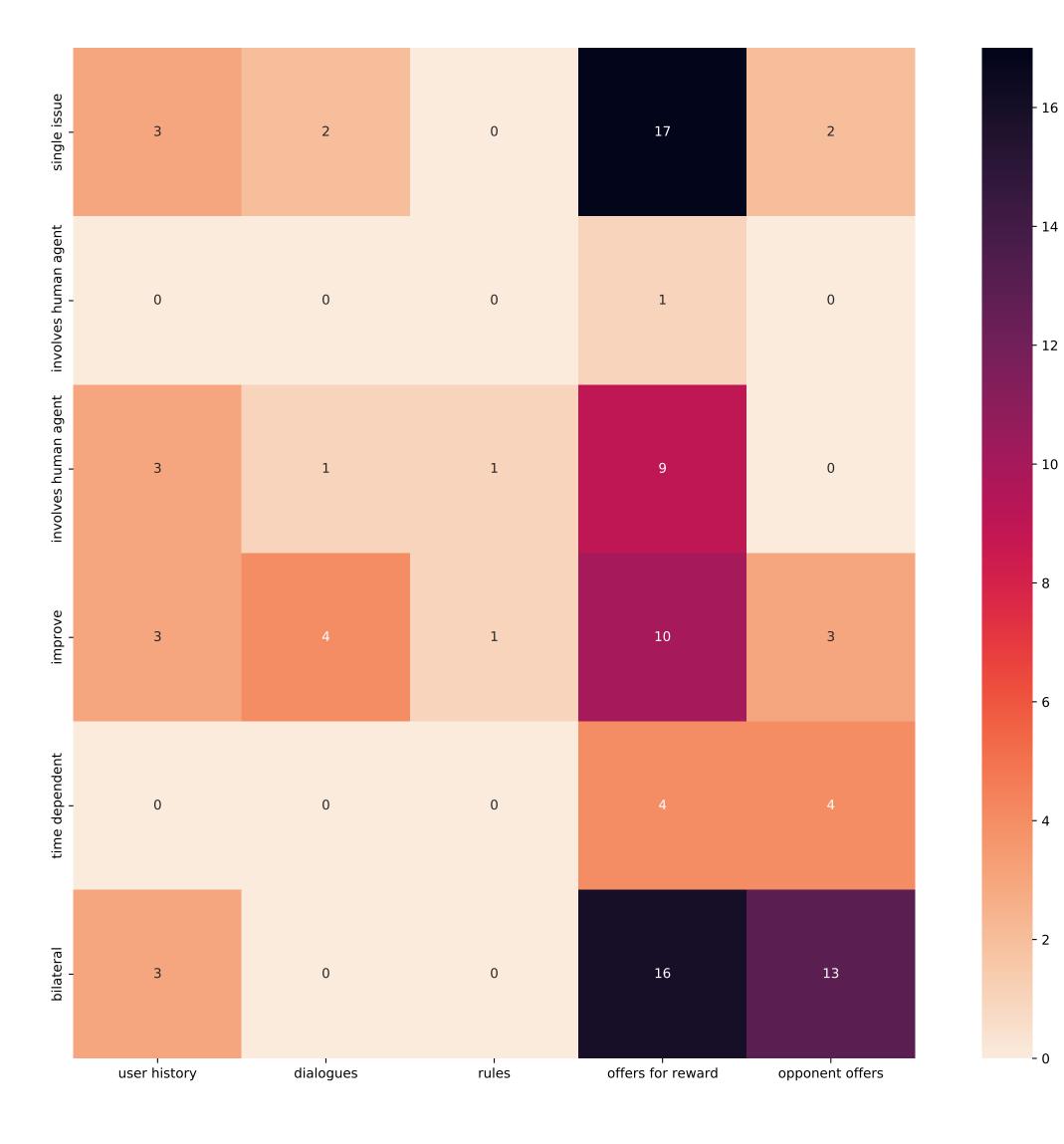
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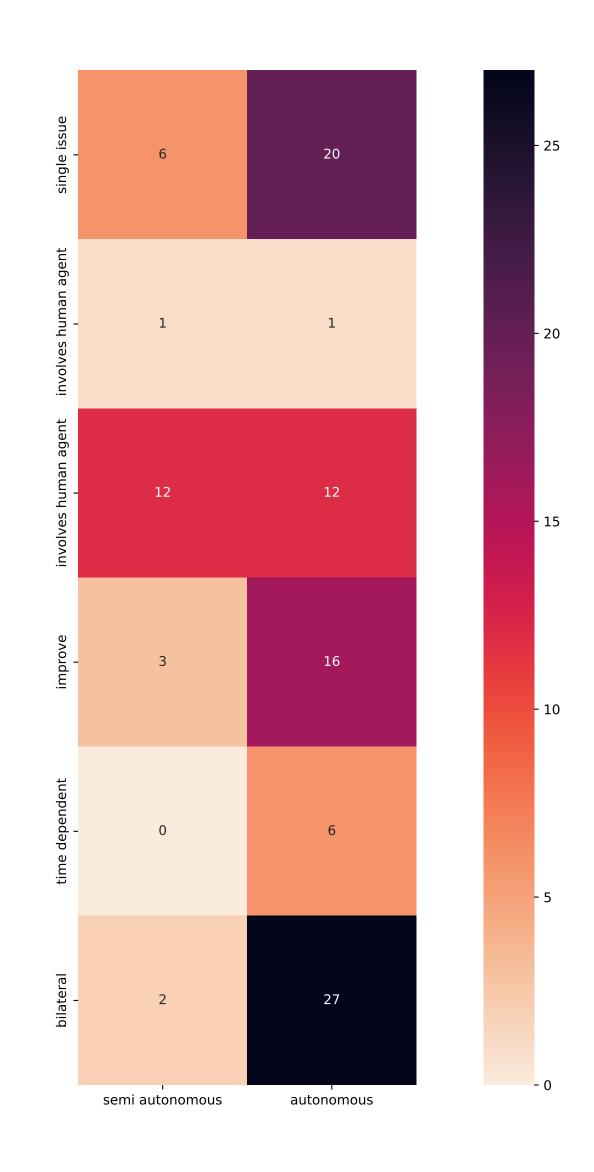
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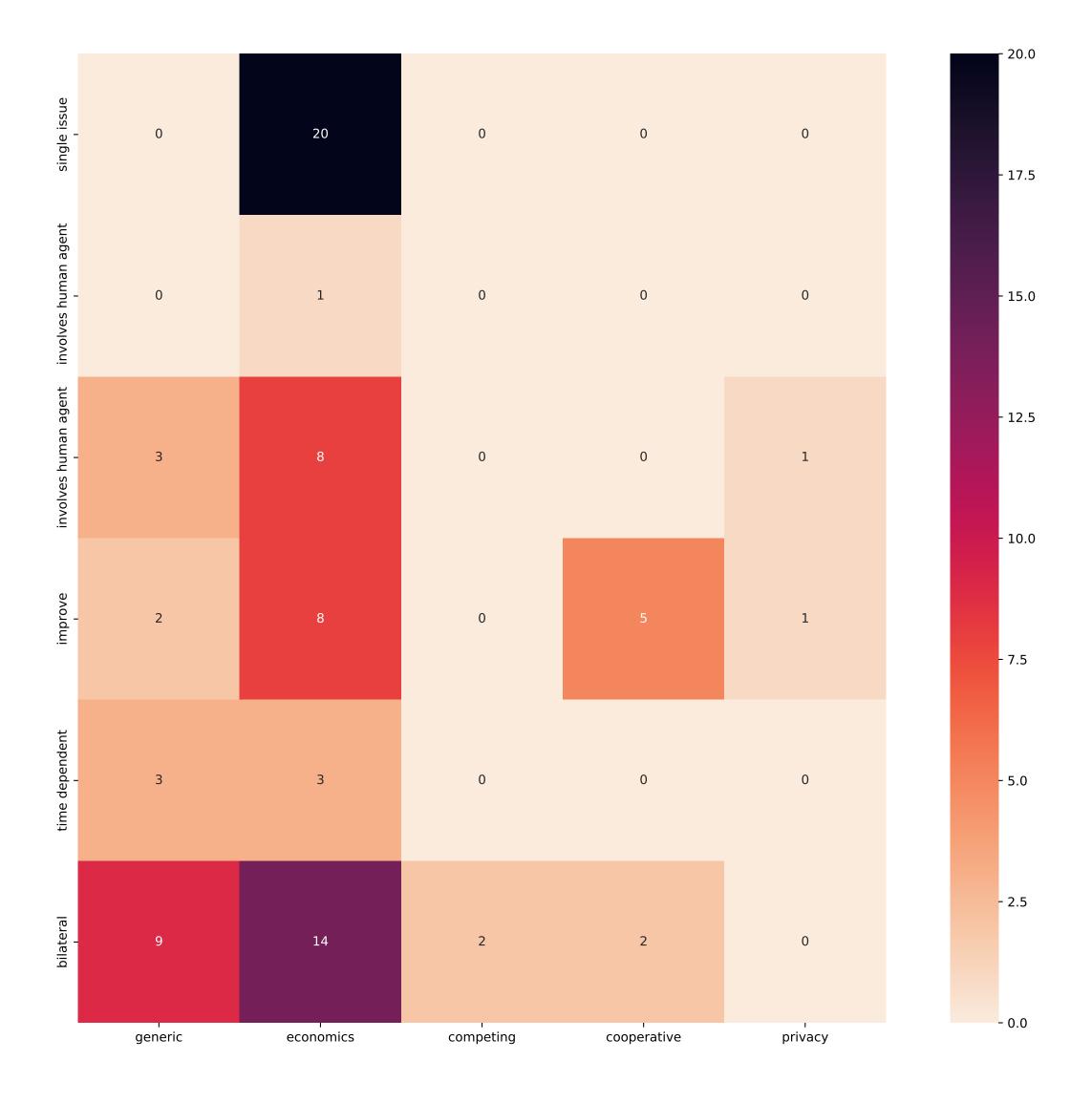




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			18
single issue	2	18	- 16
involves human agent	0	1	- 14
involves human agent	0	12	- 12 - 10
improve	3	13	- 8
time dependent	4	2	- 6 - 4
bilateral '	12	15	- 2
	counter offers	offer for reward	- 0





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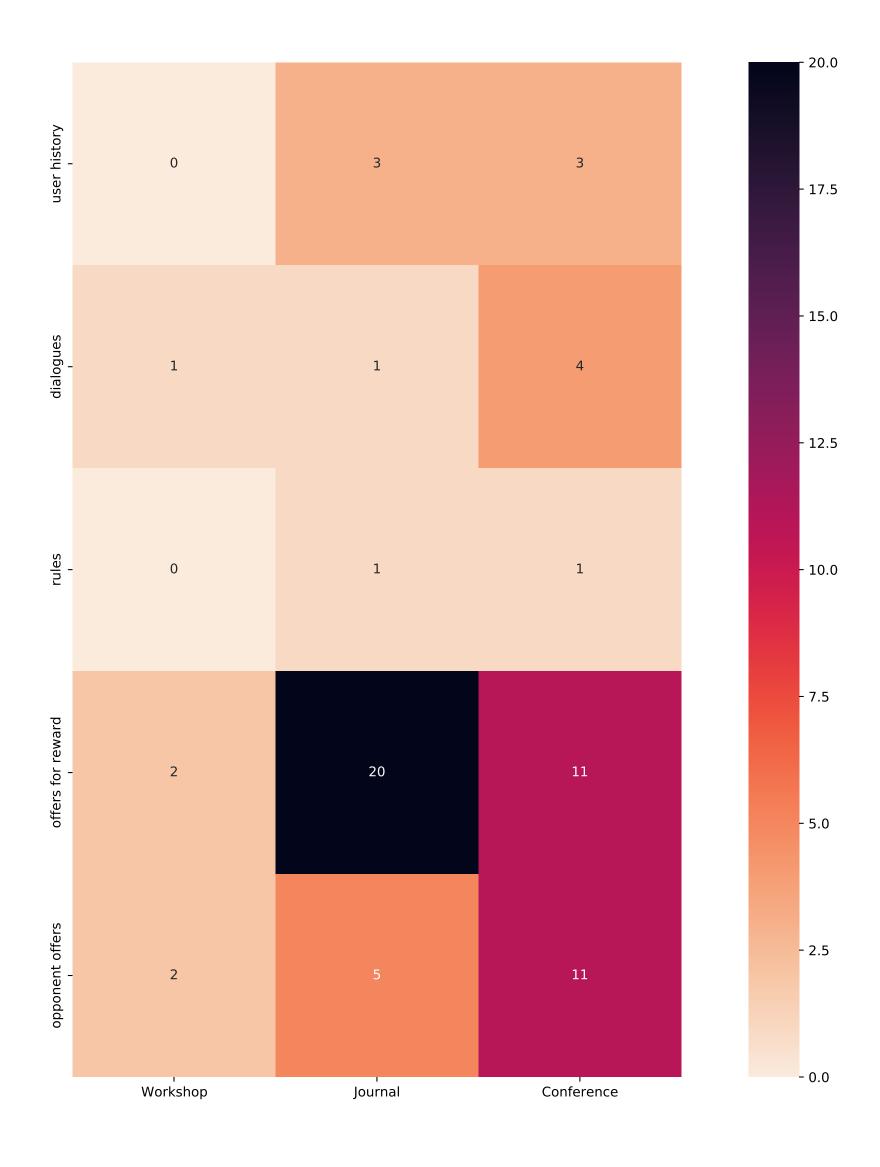
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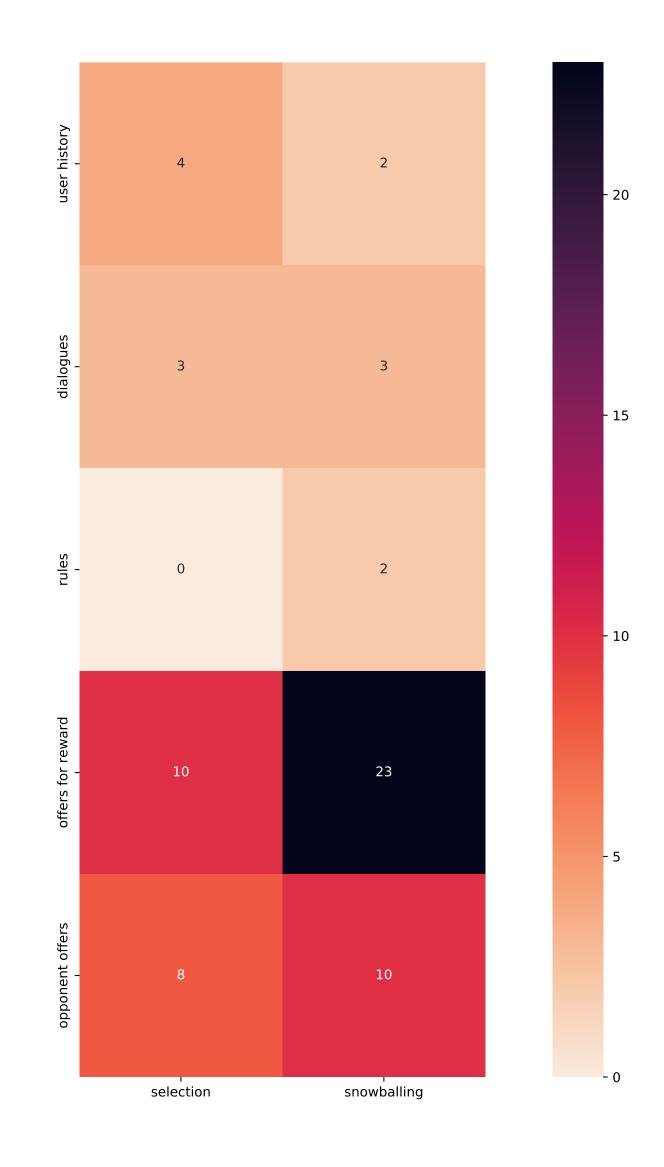
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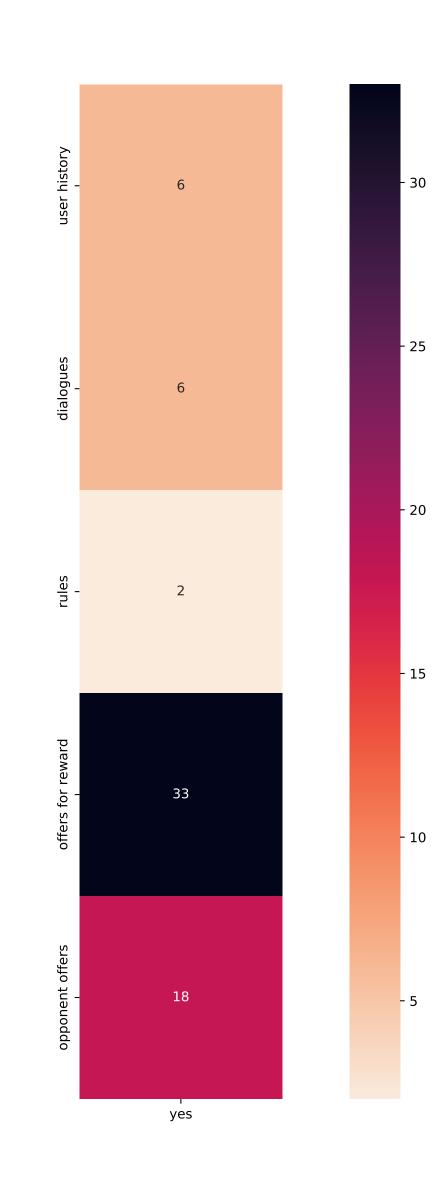
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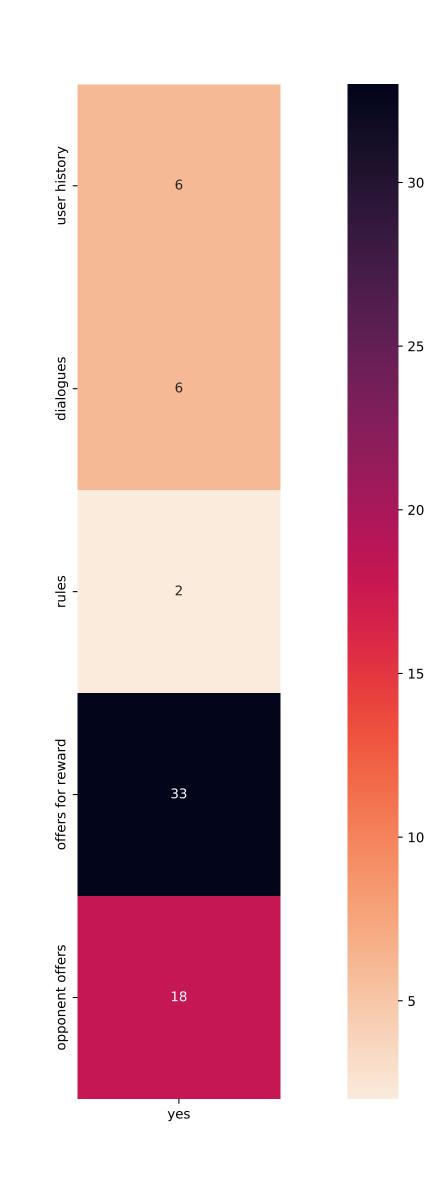
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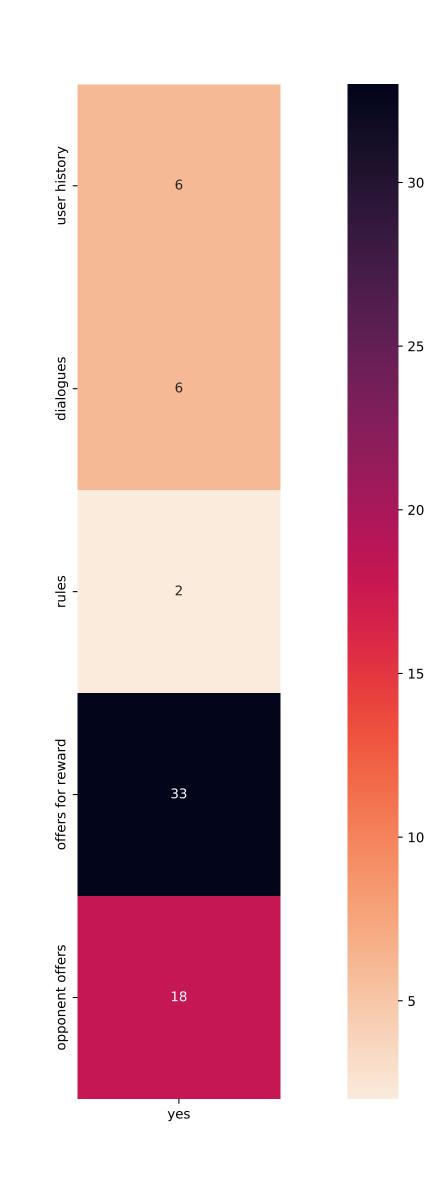
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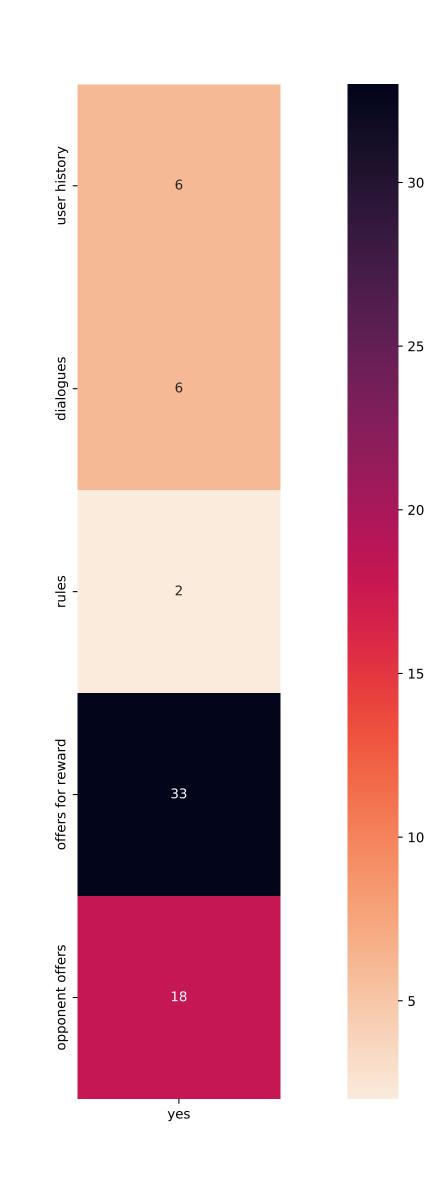




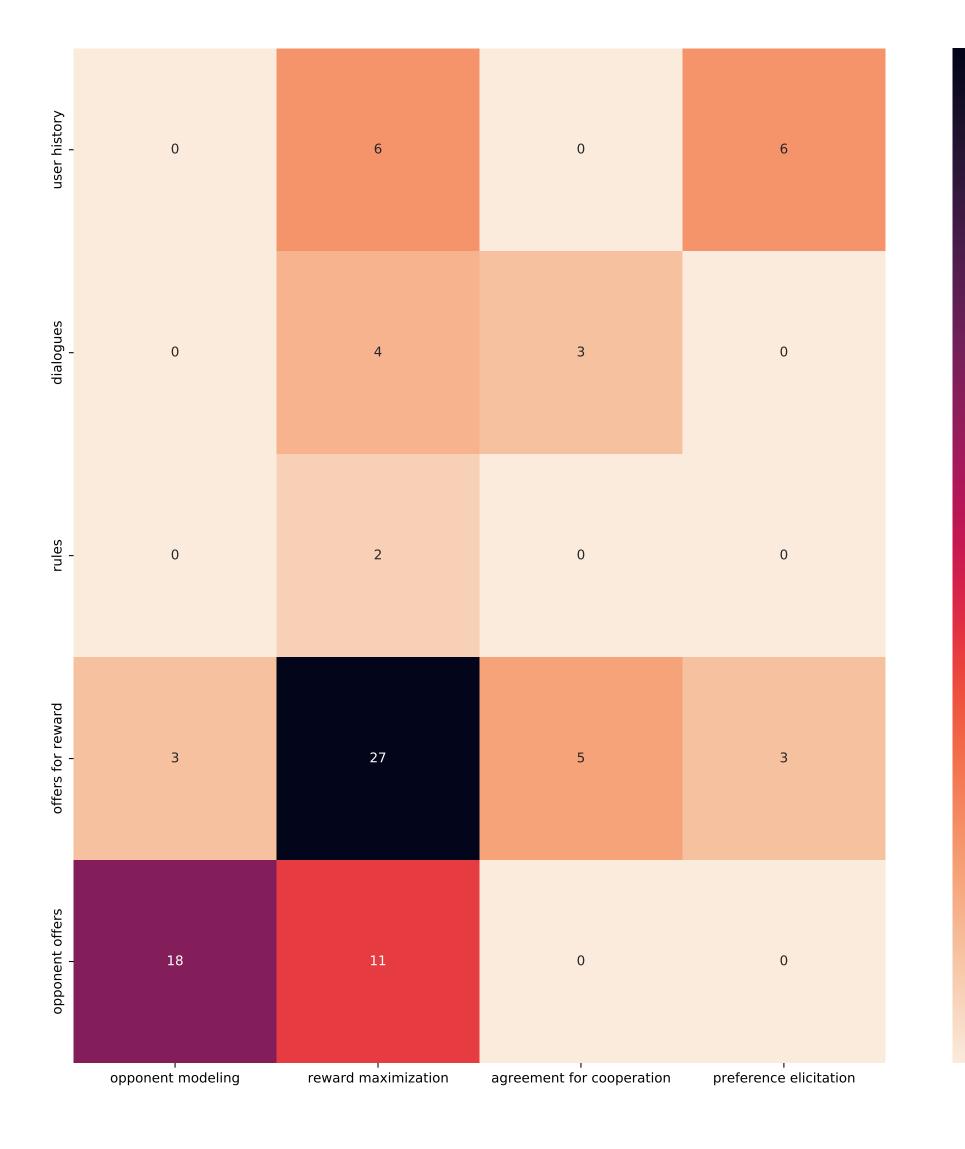








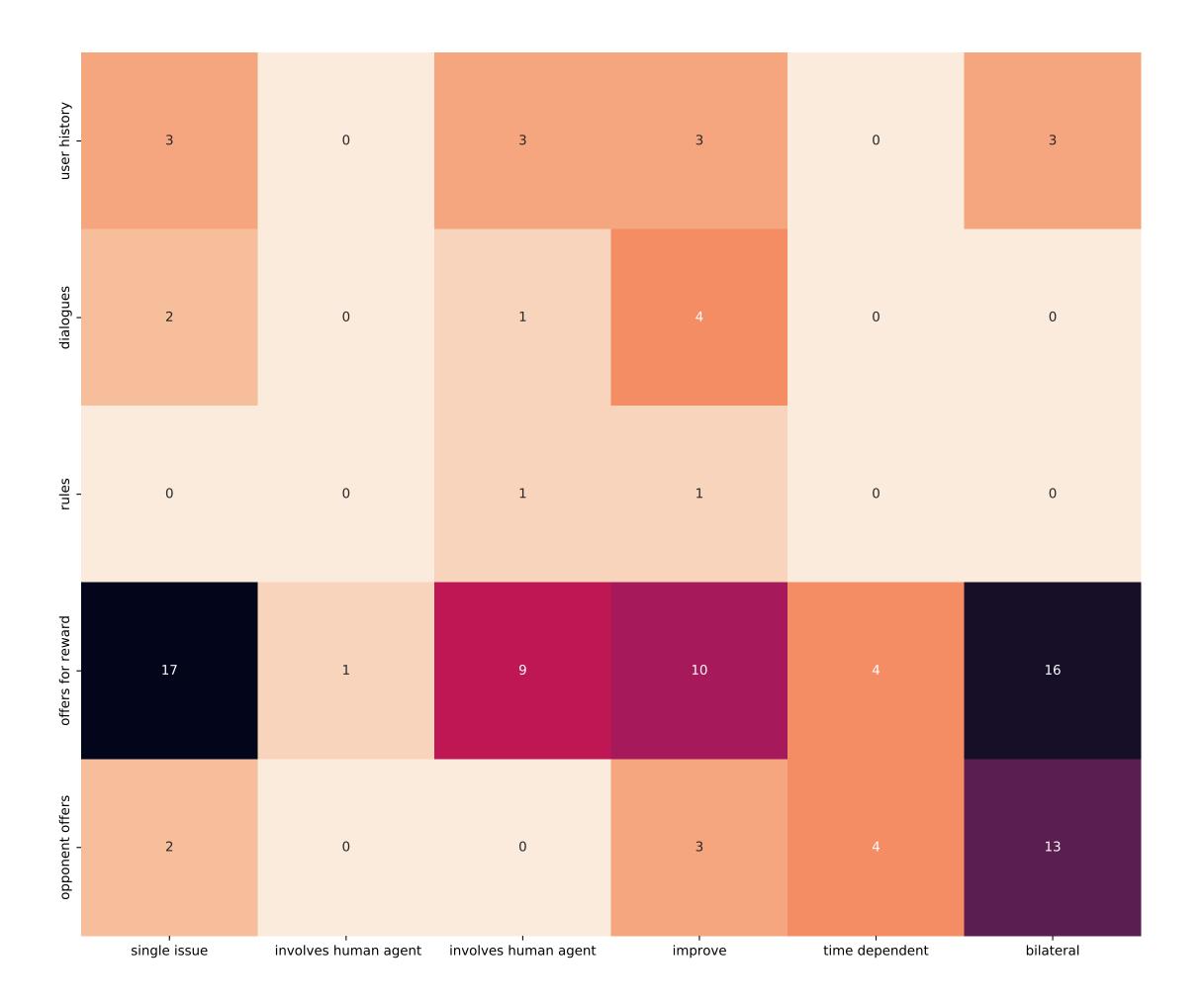
user history -dialogues -rules - 0 offers for reward - 1 opponent offers -LSTM -Heuristic algorithm -Fuzzy Logic System -Linear Programming -Genetic Algorithm -Bayesian Learning -Reinforcement learning -Linear Regression -Gaussian probability -Alternative offer protocol Neural Network Equilibrium strategies Argumentation Nonlinear Regression Markov Decision Process Angle based Similarirty Monte Carlo Tree search logistic regression Multi bipartite gradient descent search



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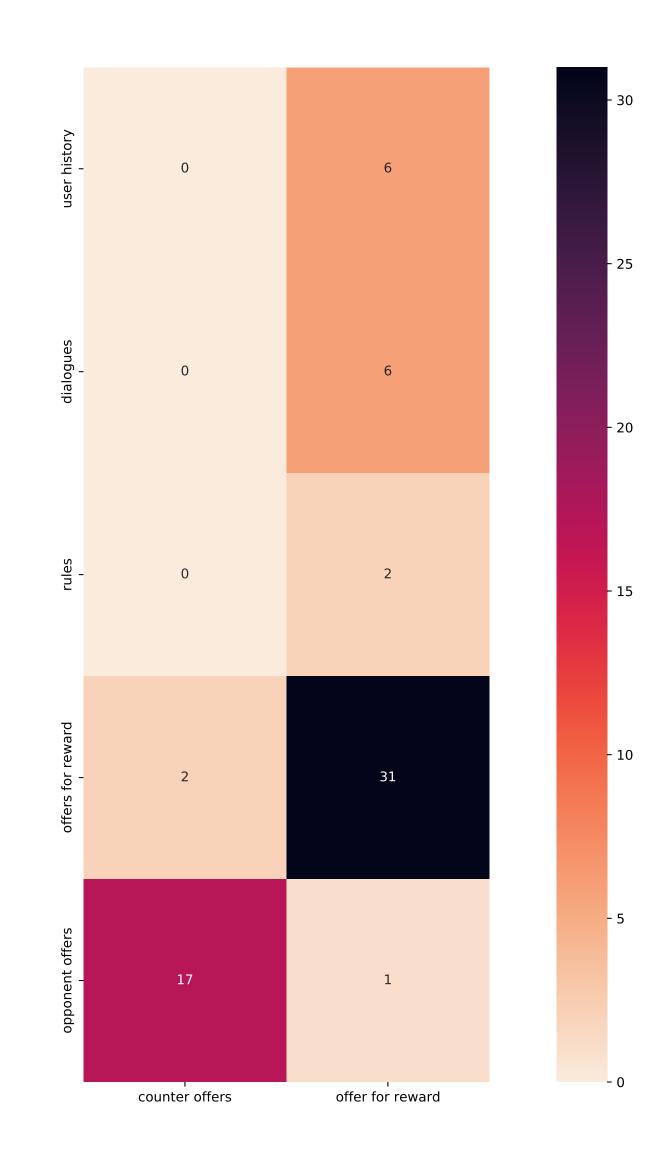
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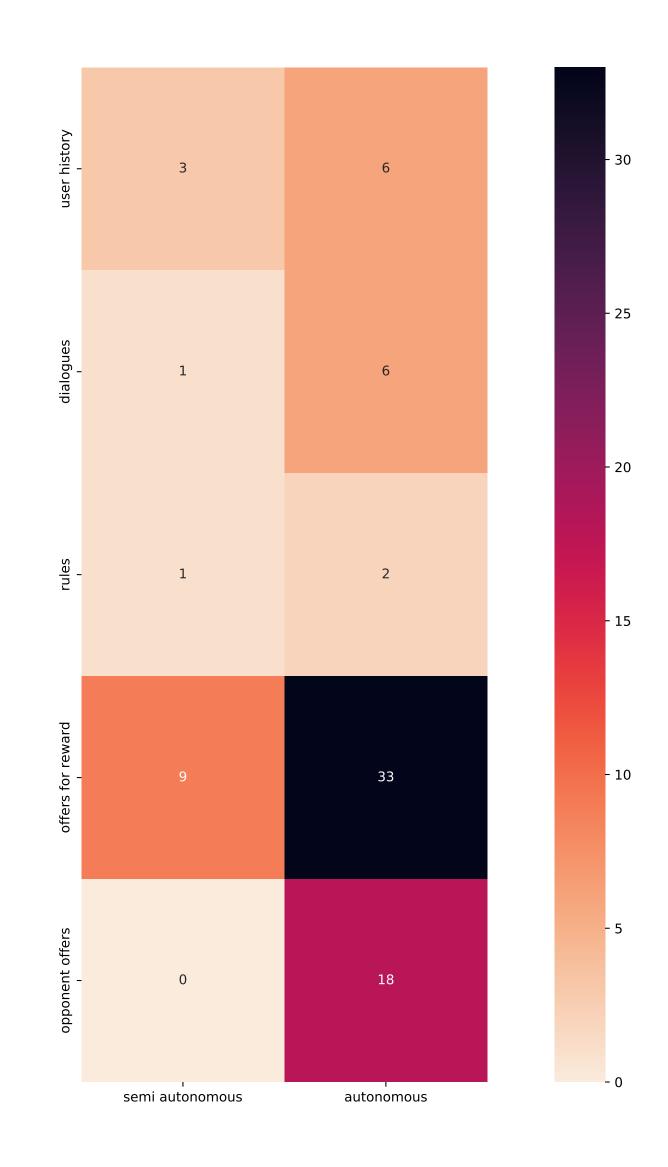
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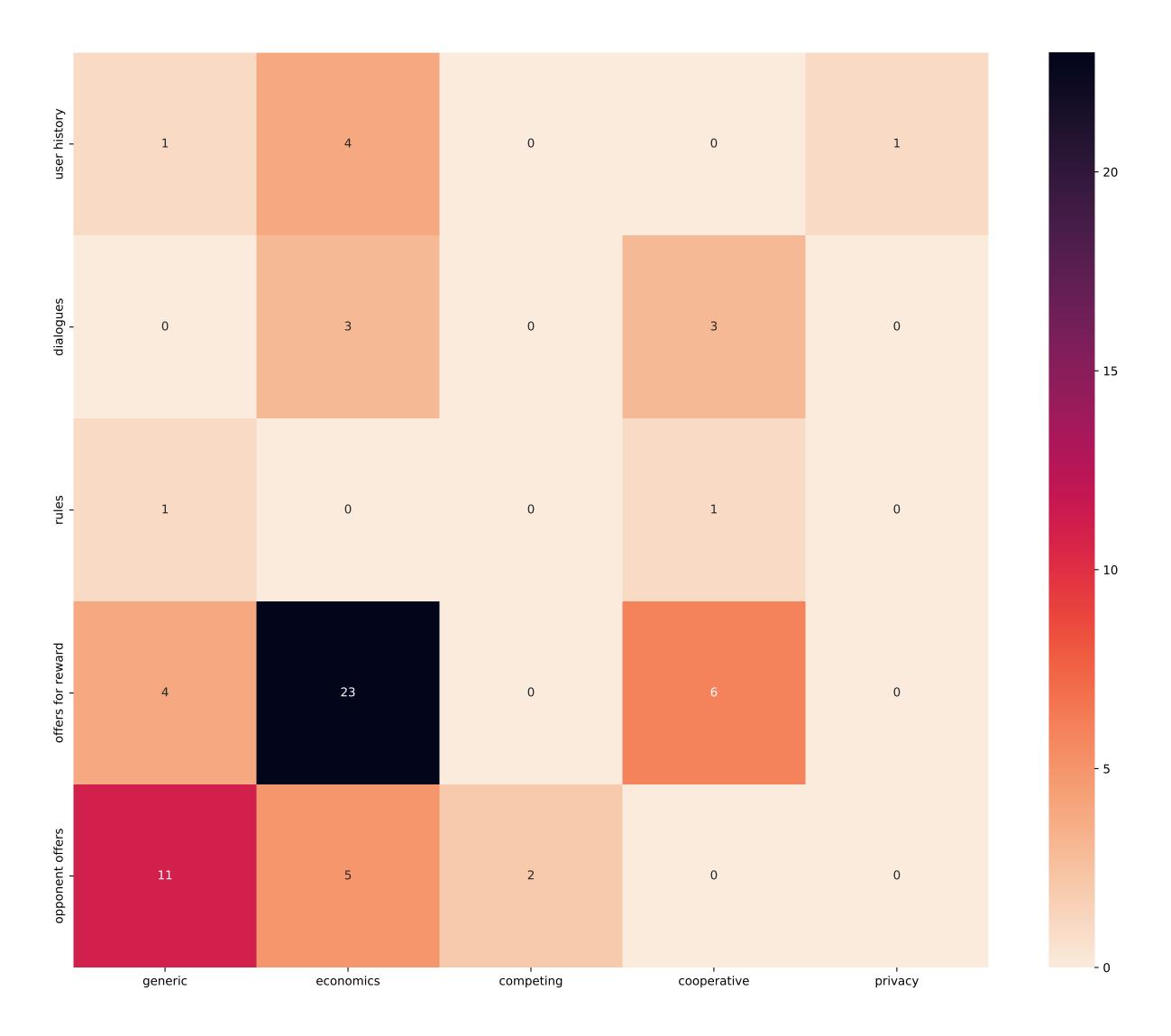
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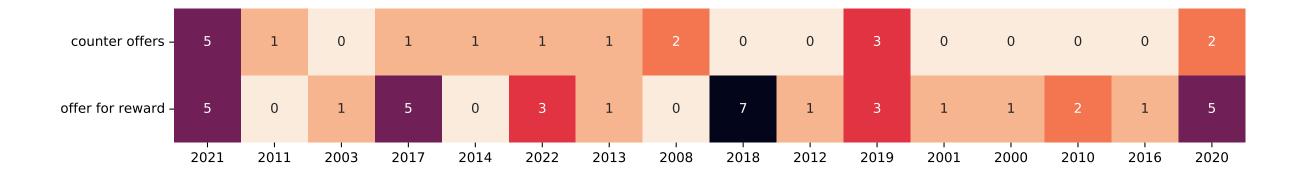
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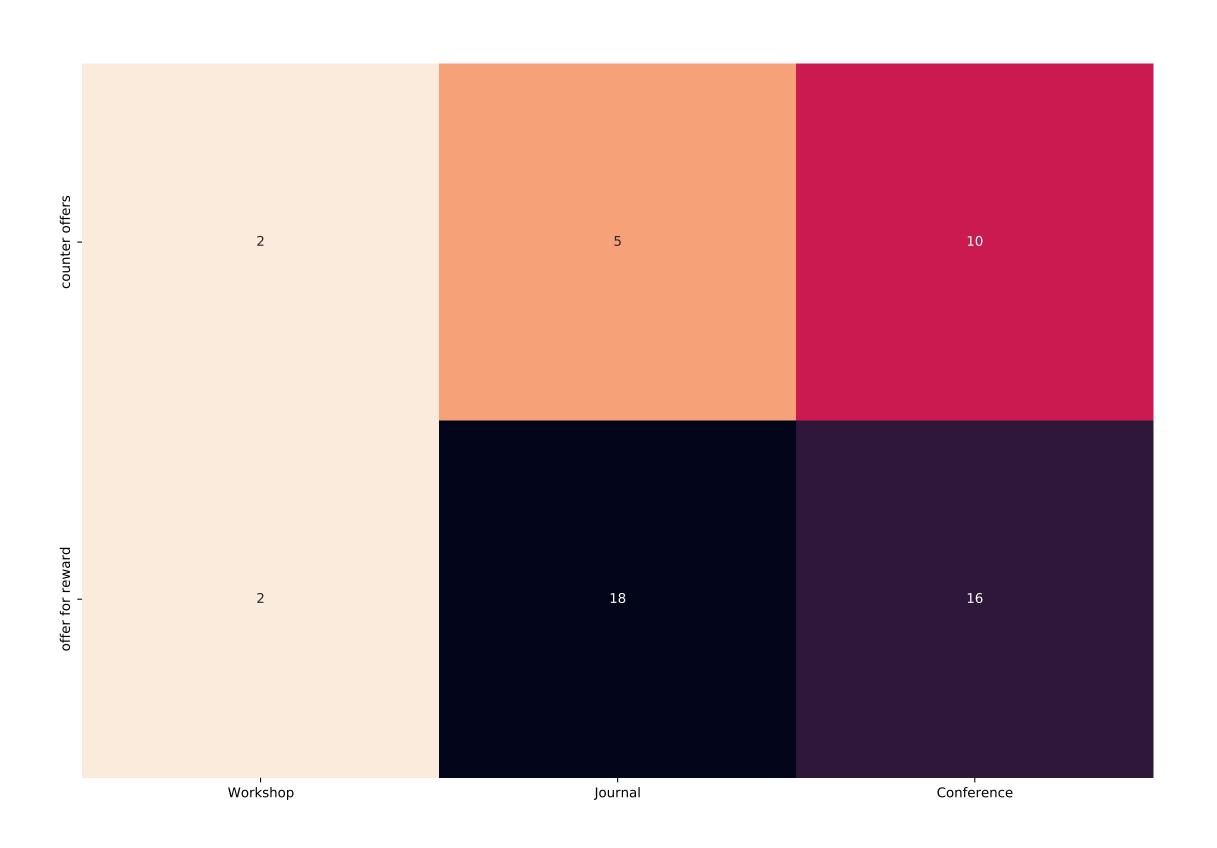
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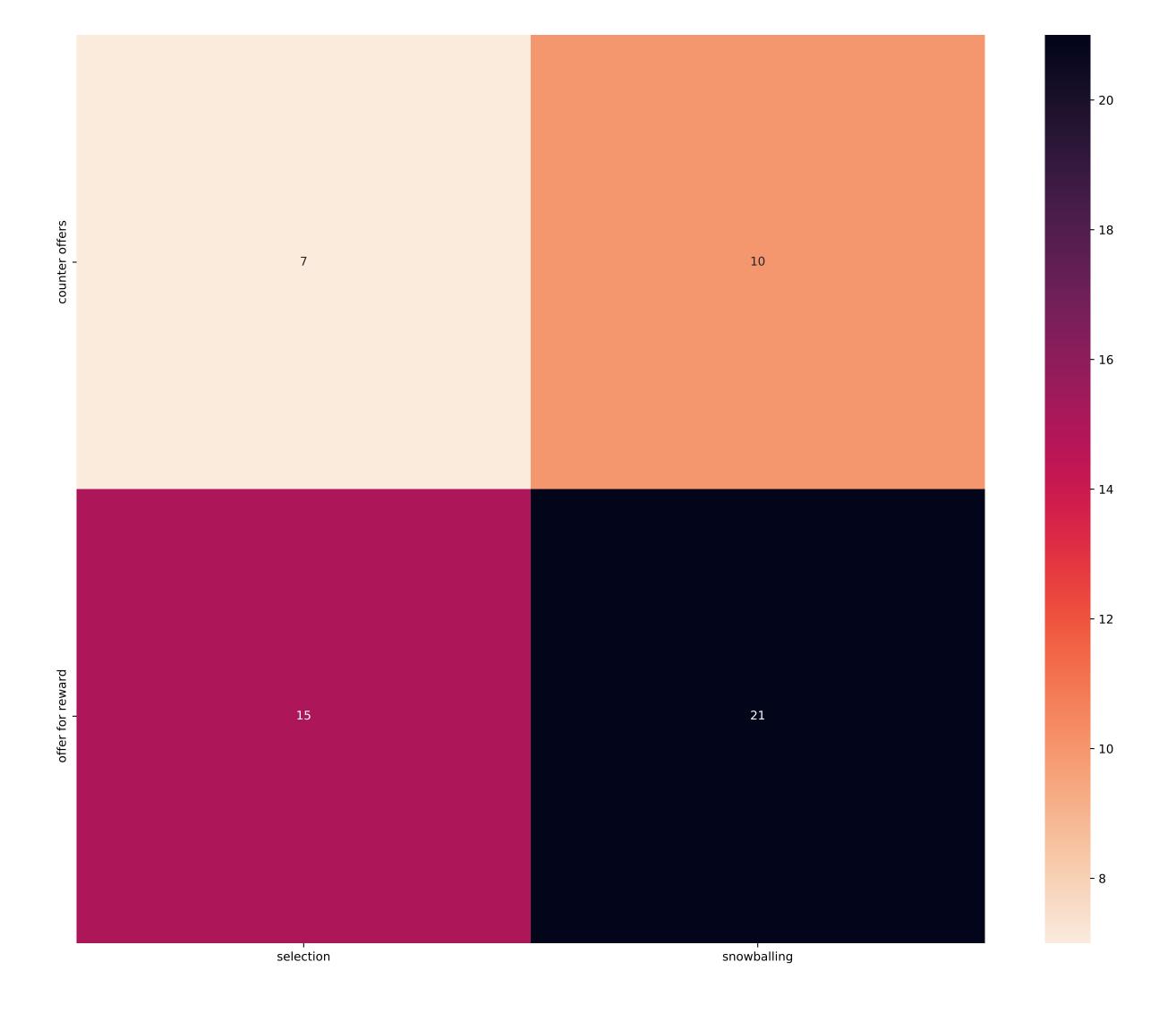


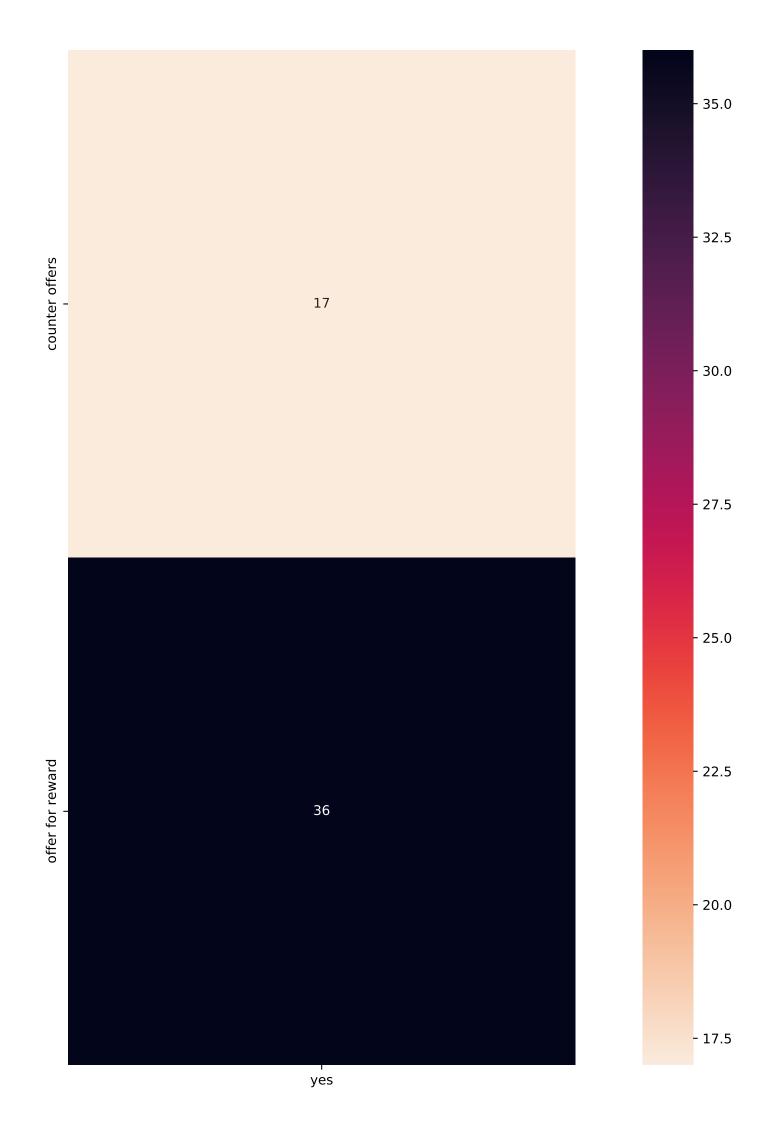
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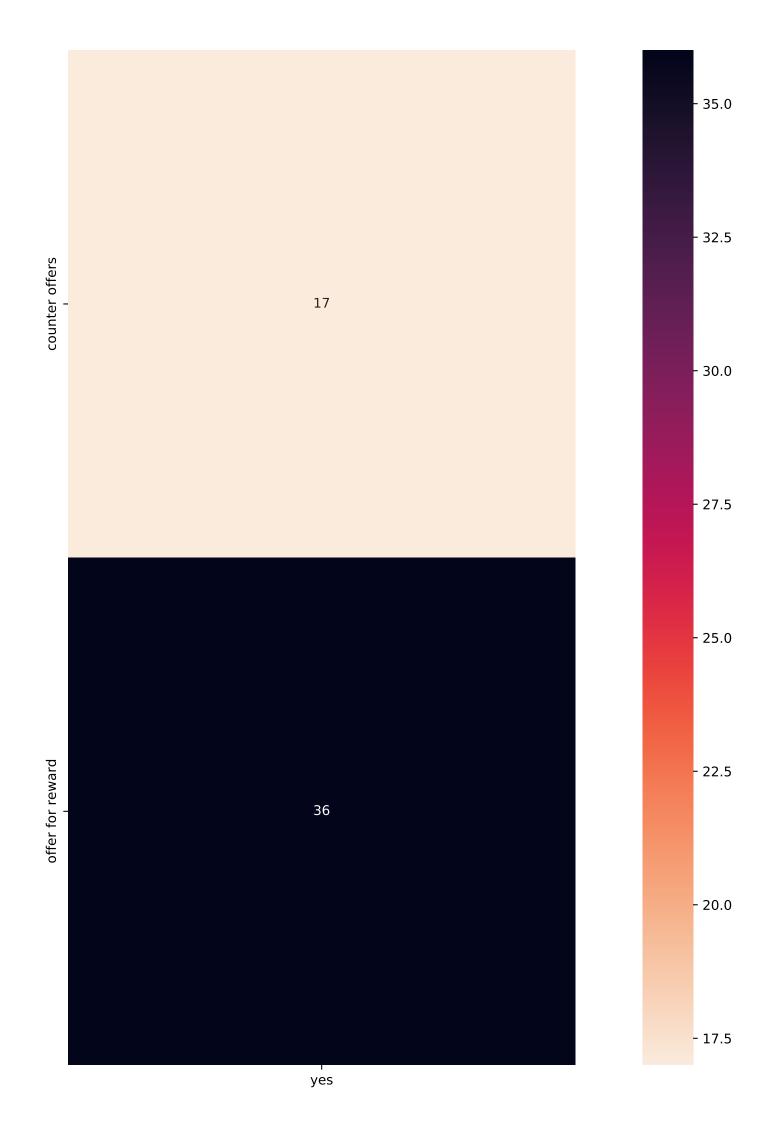
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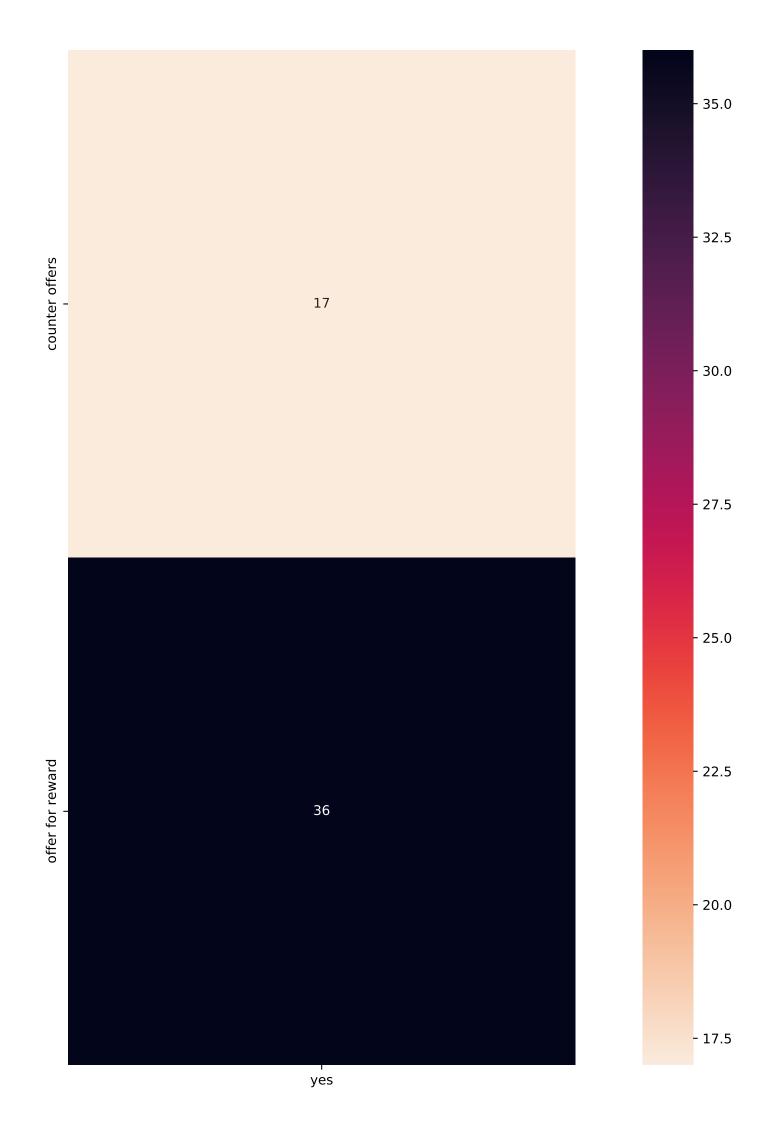
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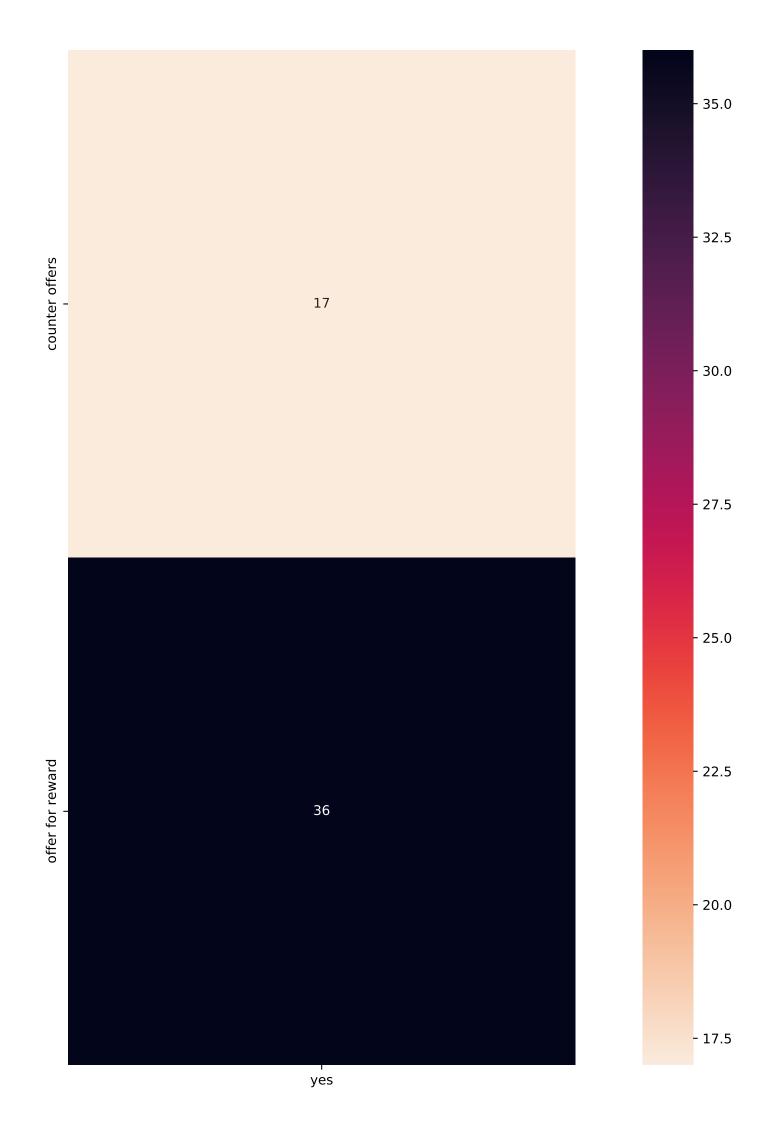
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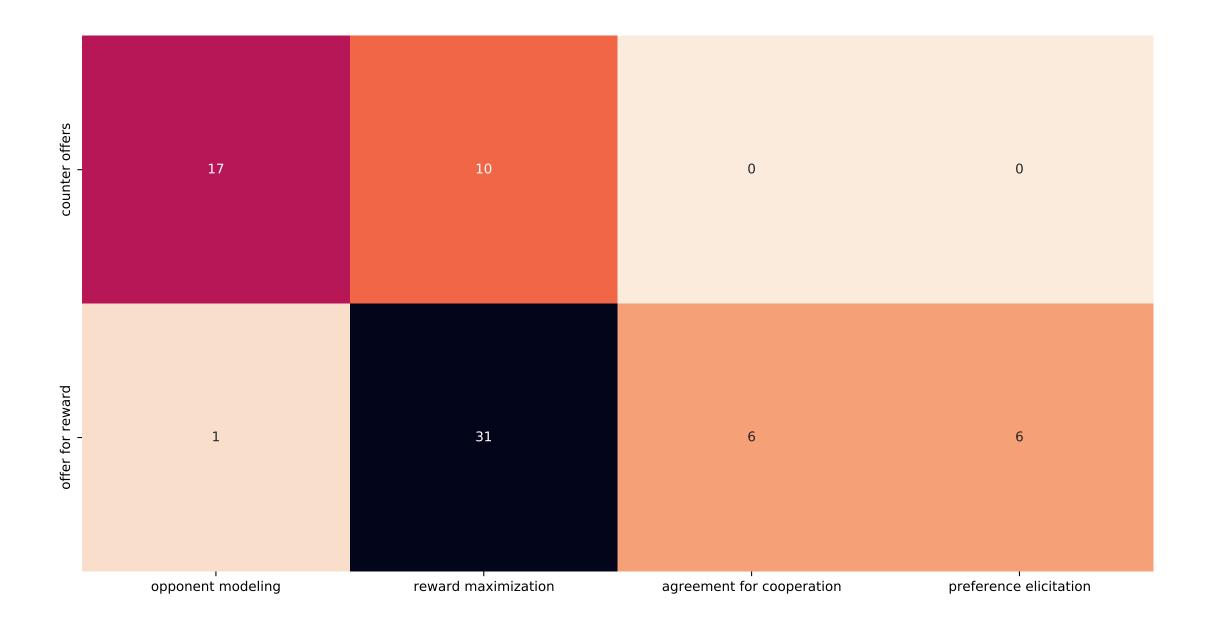
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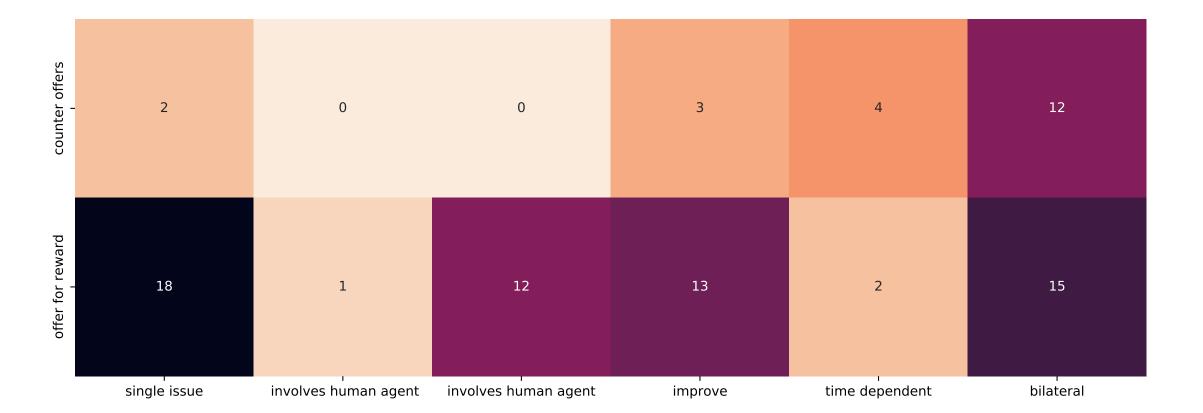
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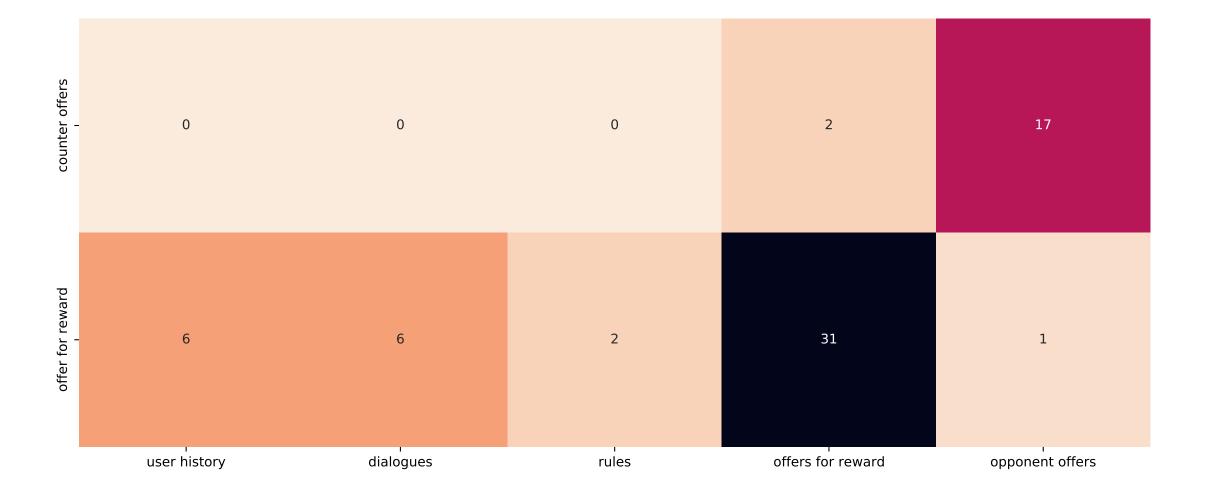


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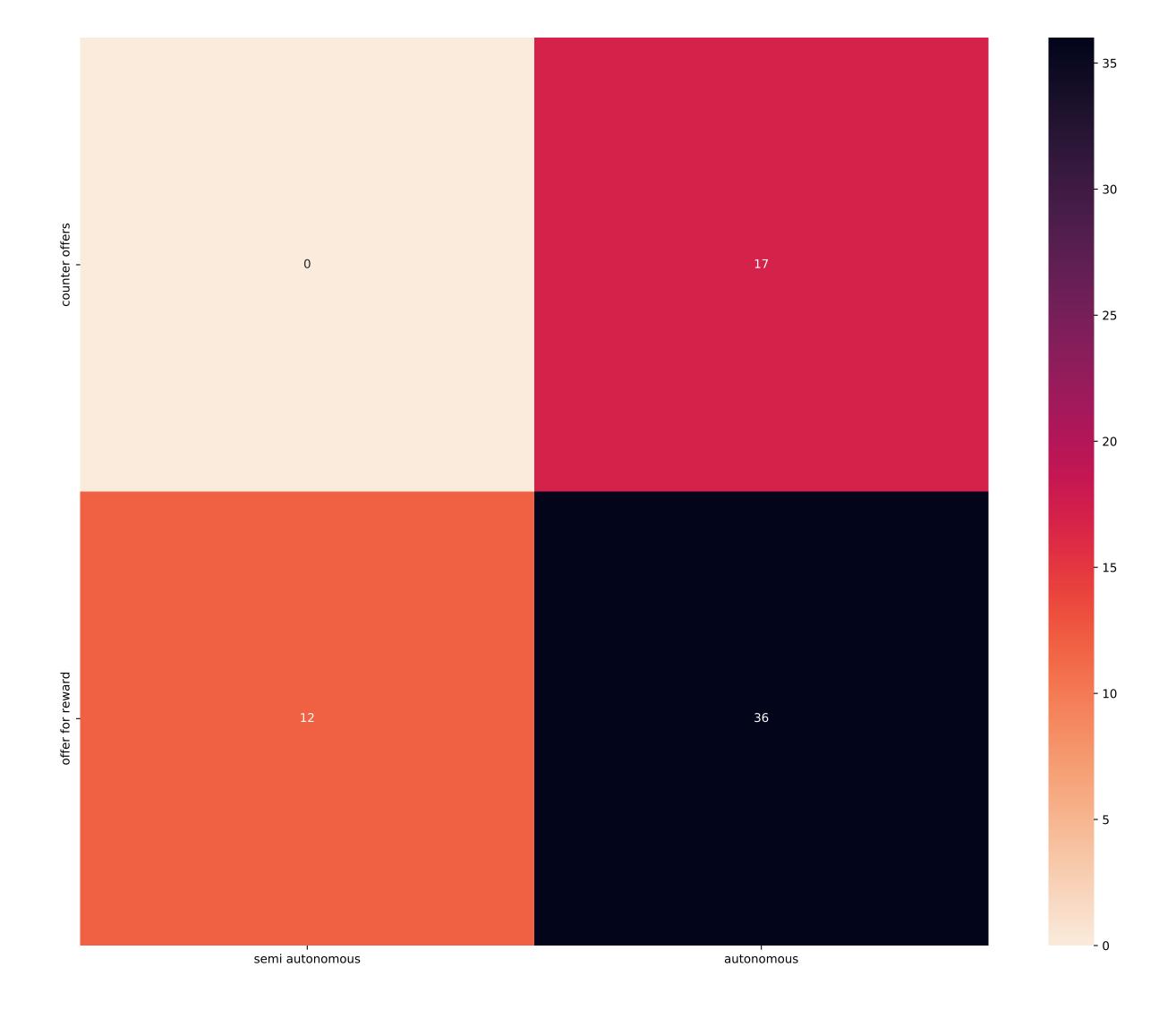


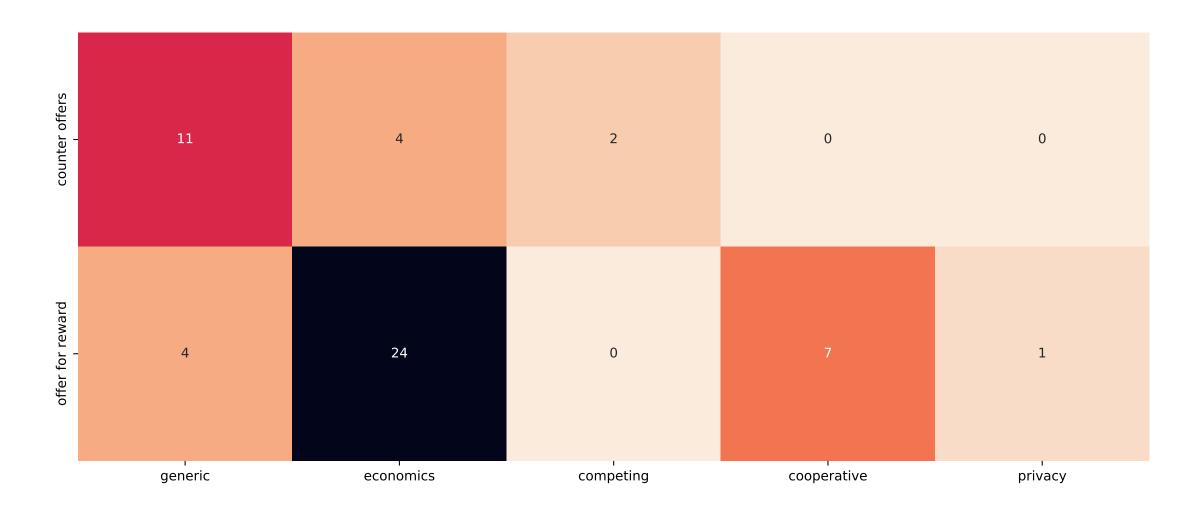
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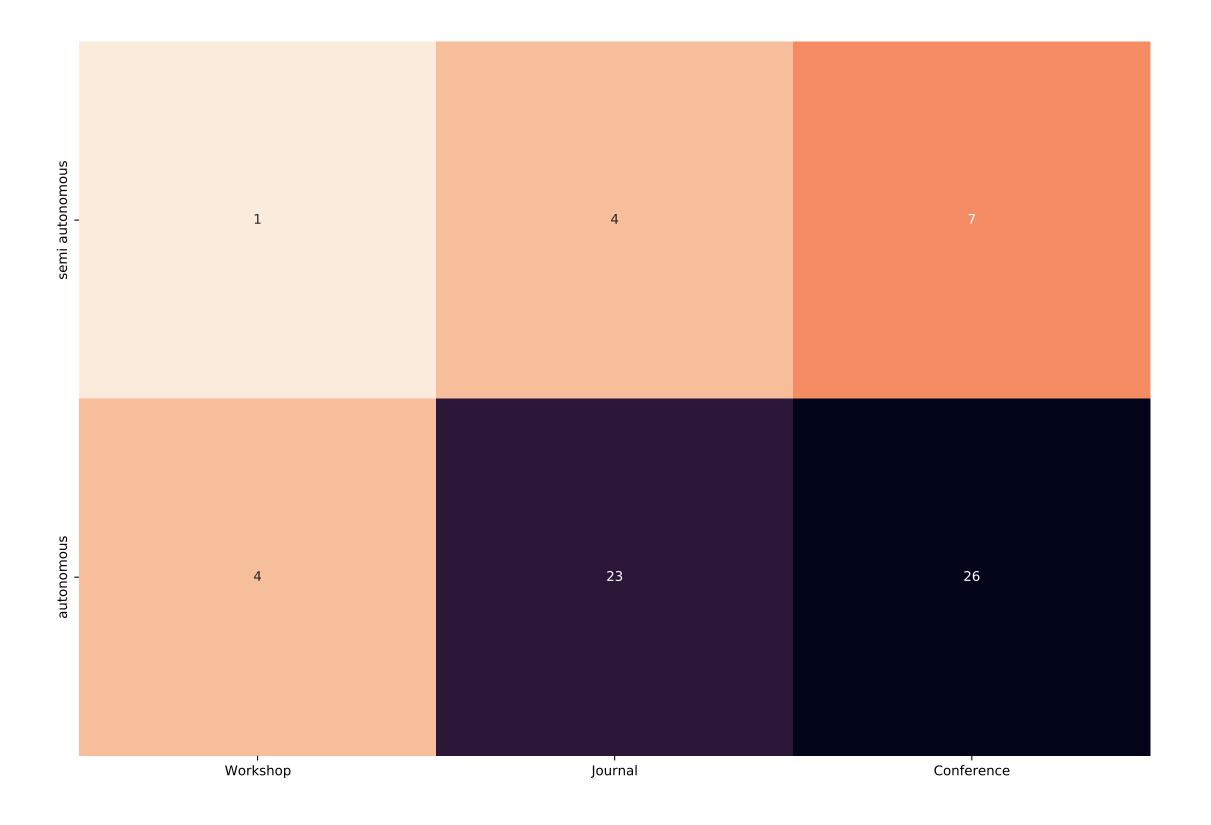
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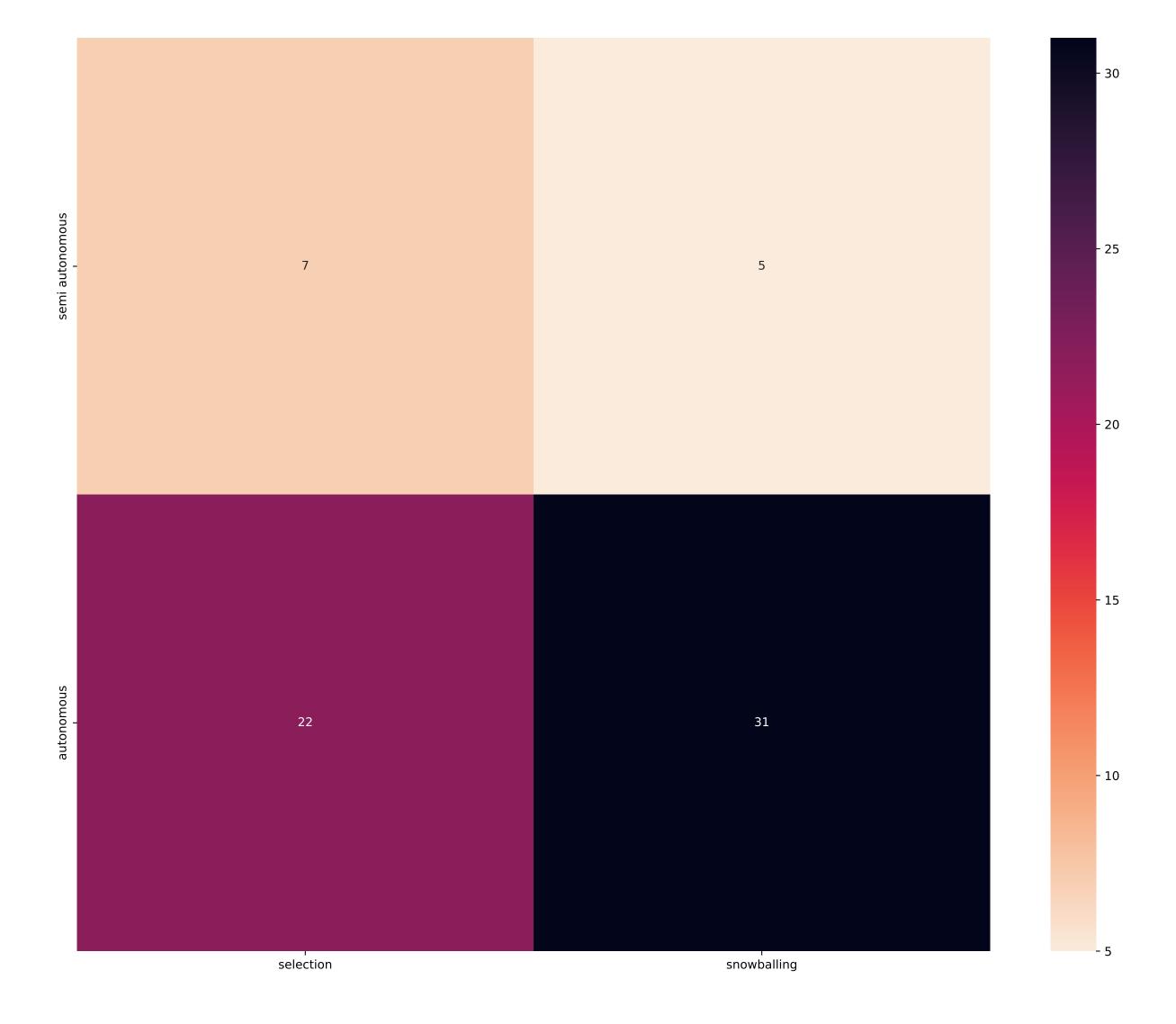
semi autonomous -	2	0	0	3	0	0	0	0	3	0	2	0	1	0	0	1
autonomous -	10	1	1	6	1	4	2	2	7	1	6	1	1	2	1	7
	2021	2011	2003	2017	2014	2022	2013	2008	2018	2012	2019	2001	2000	2010	2016	2020

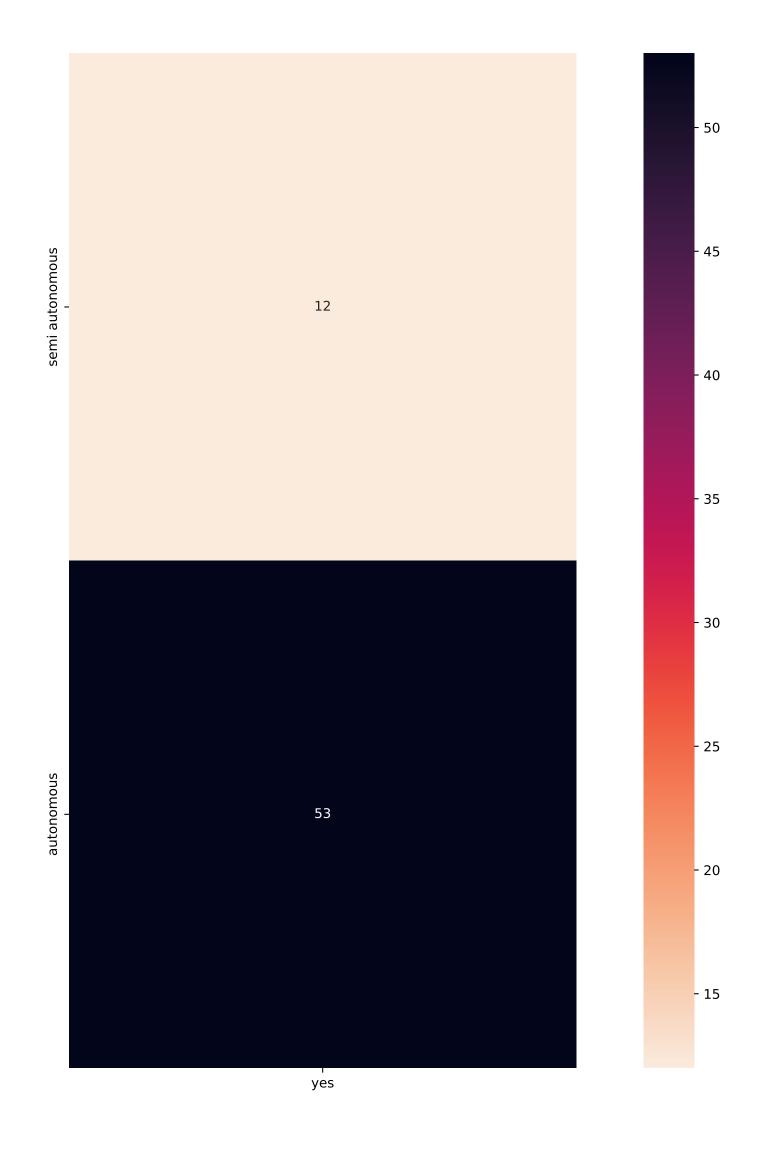
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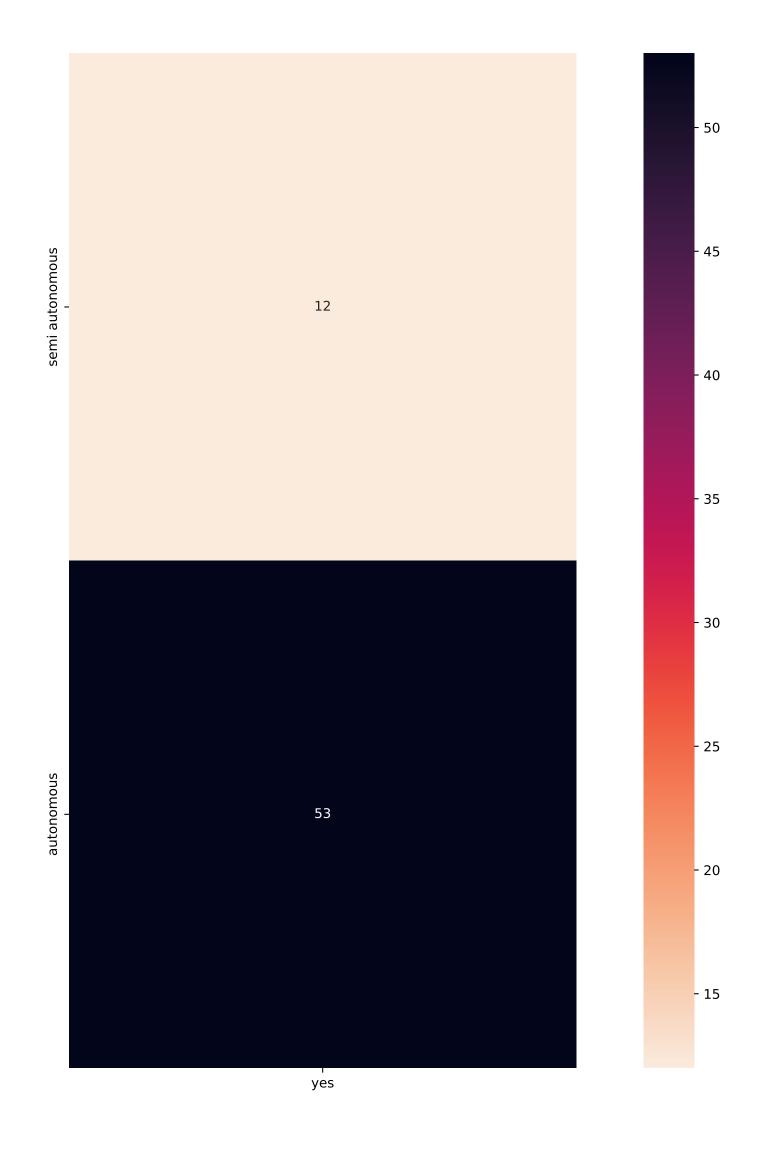
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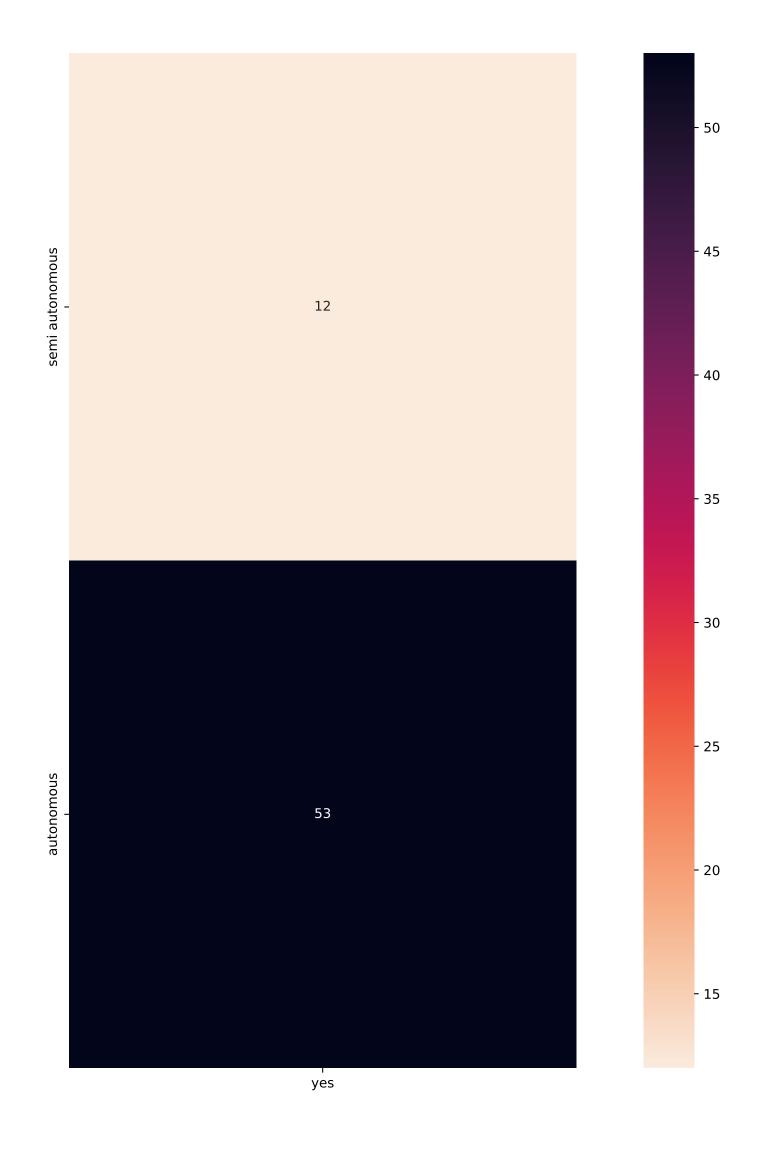
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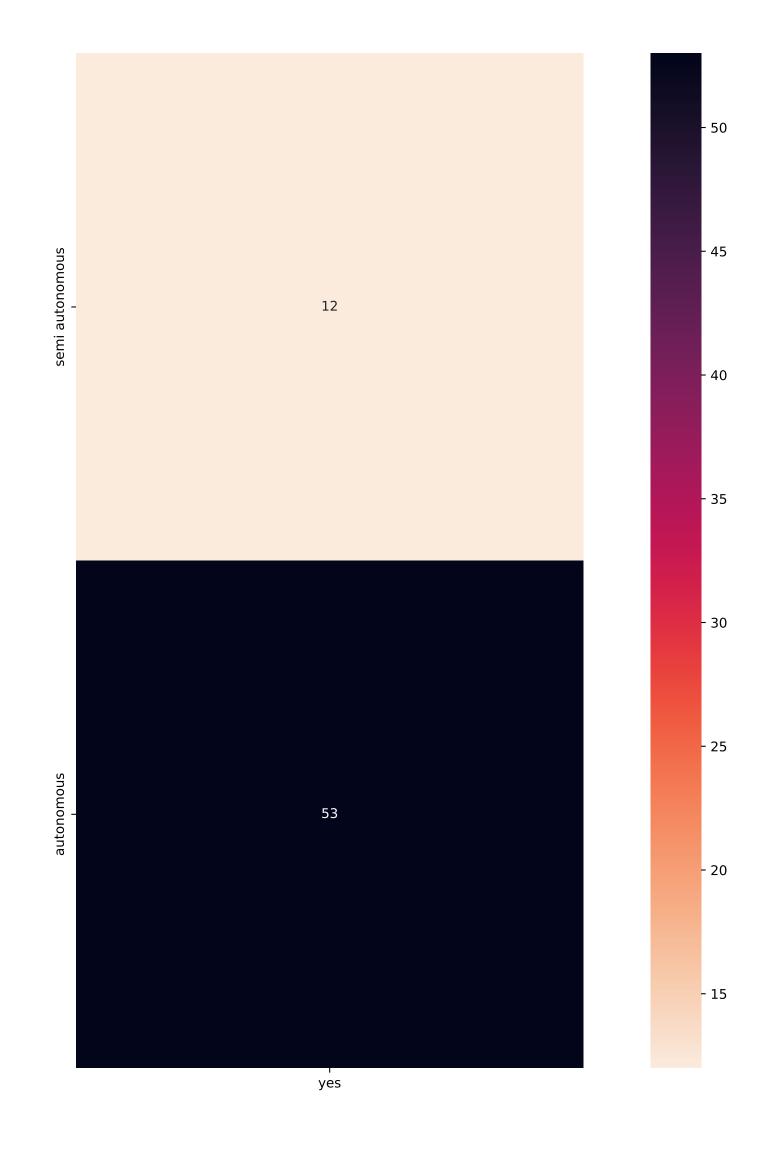








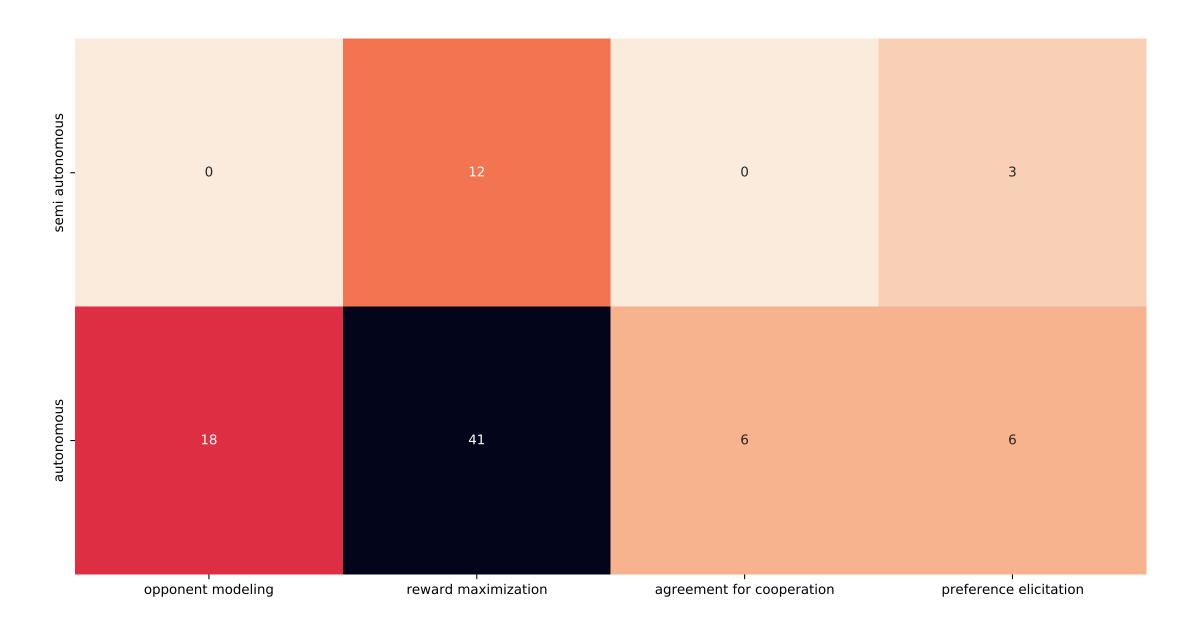




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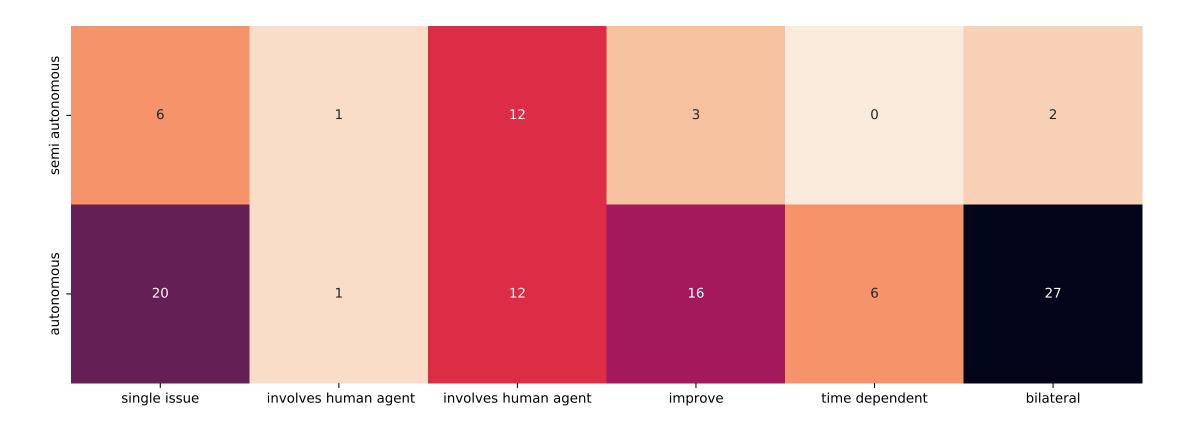
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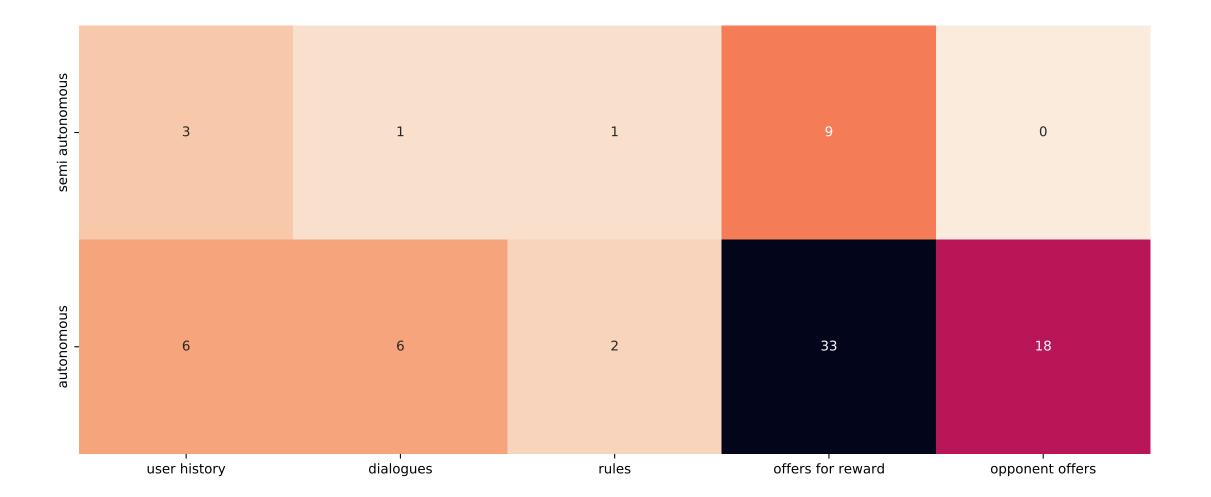


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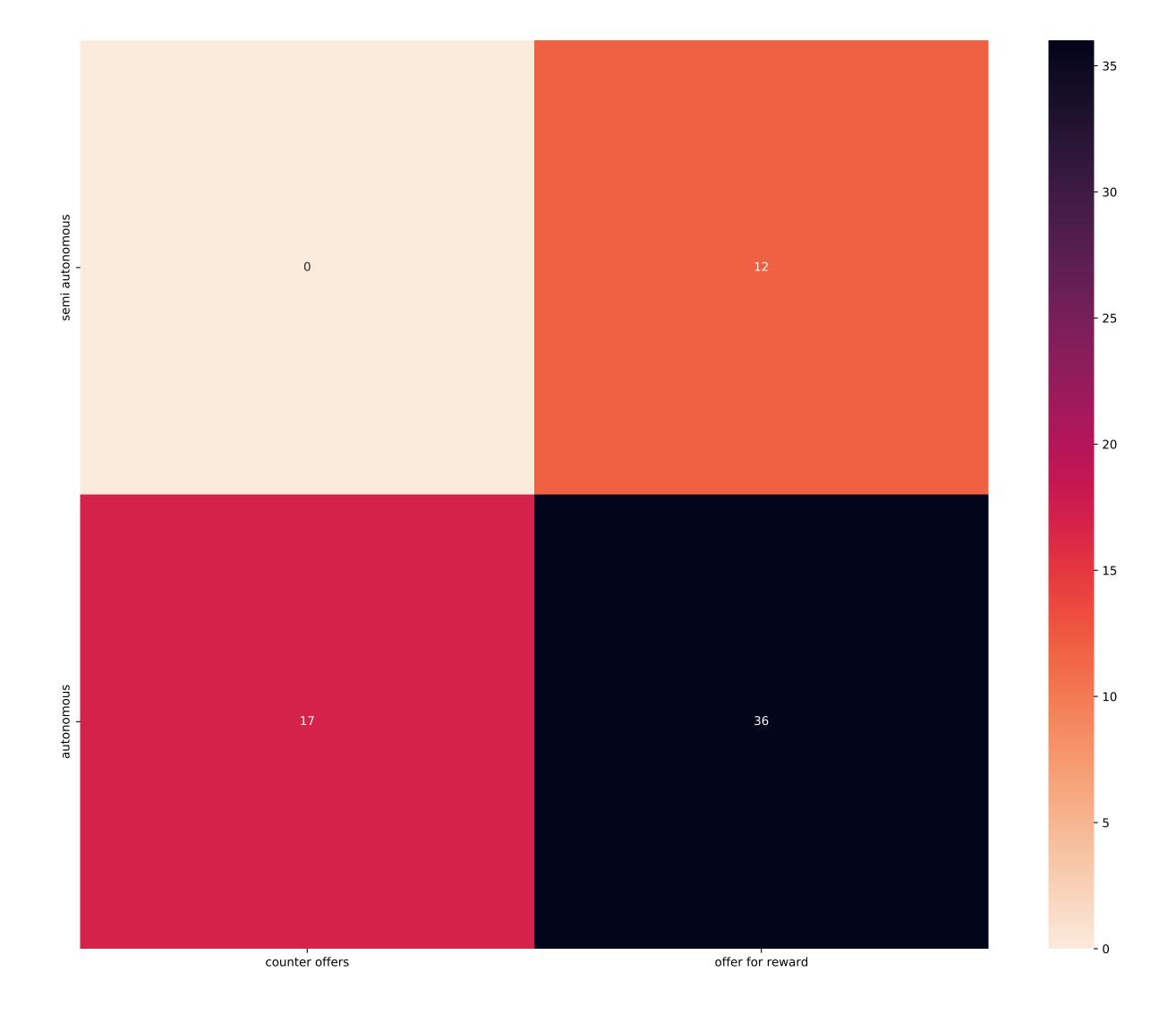
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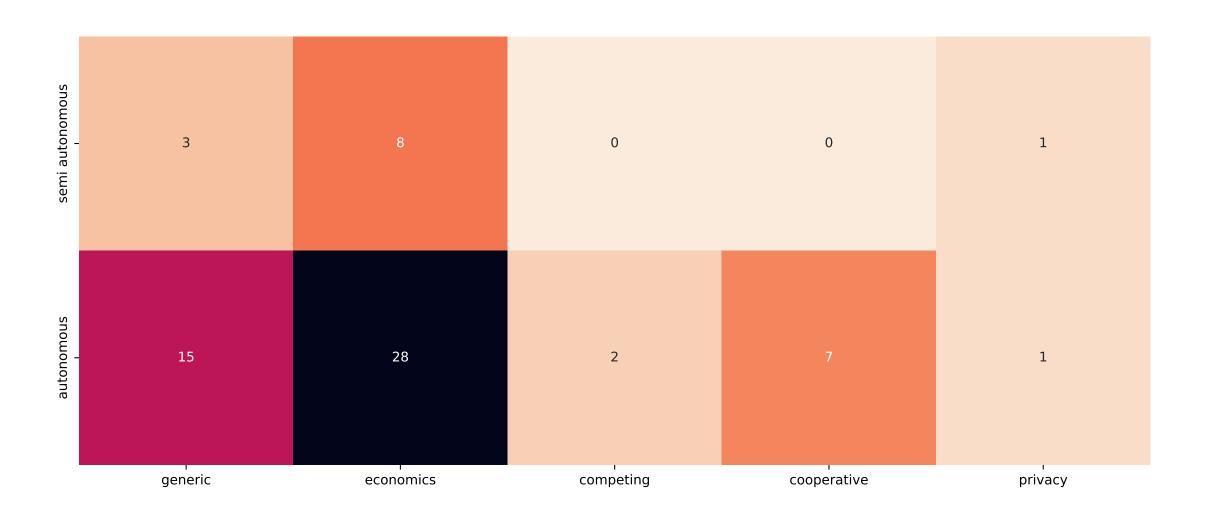
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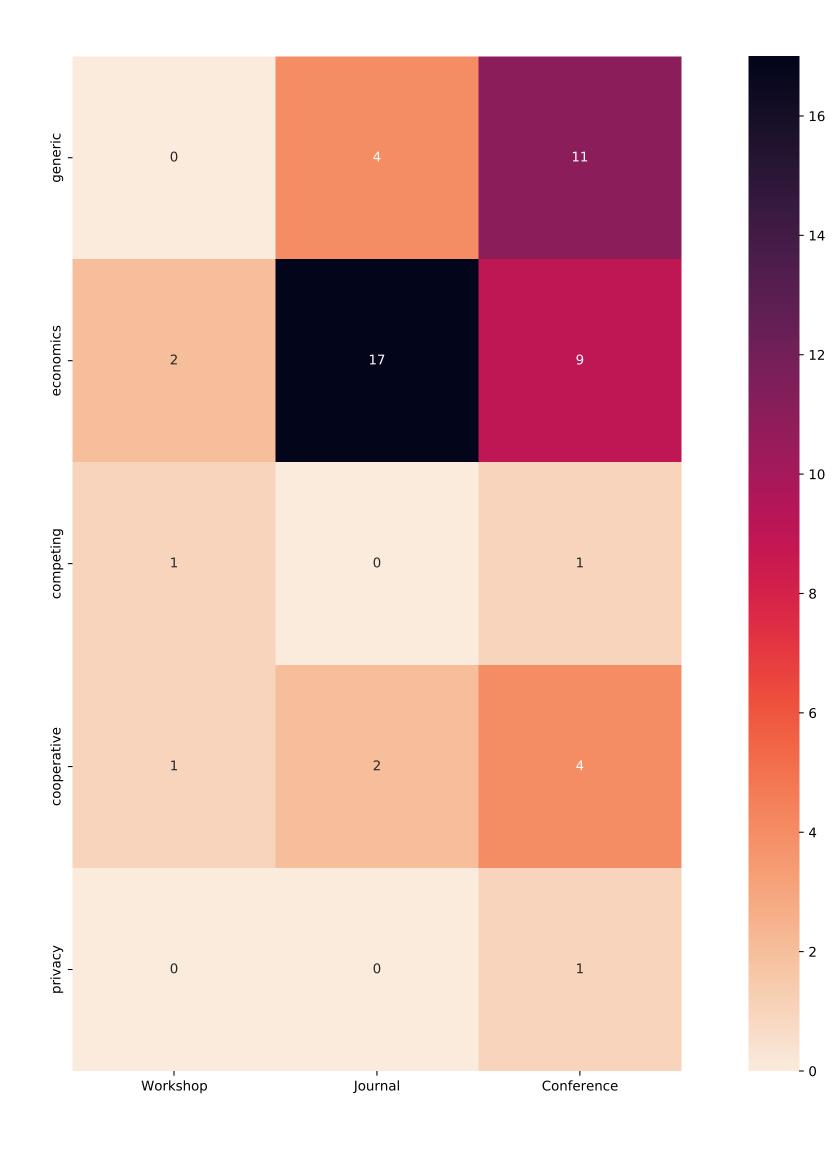


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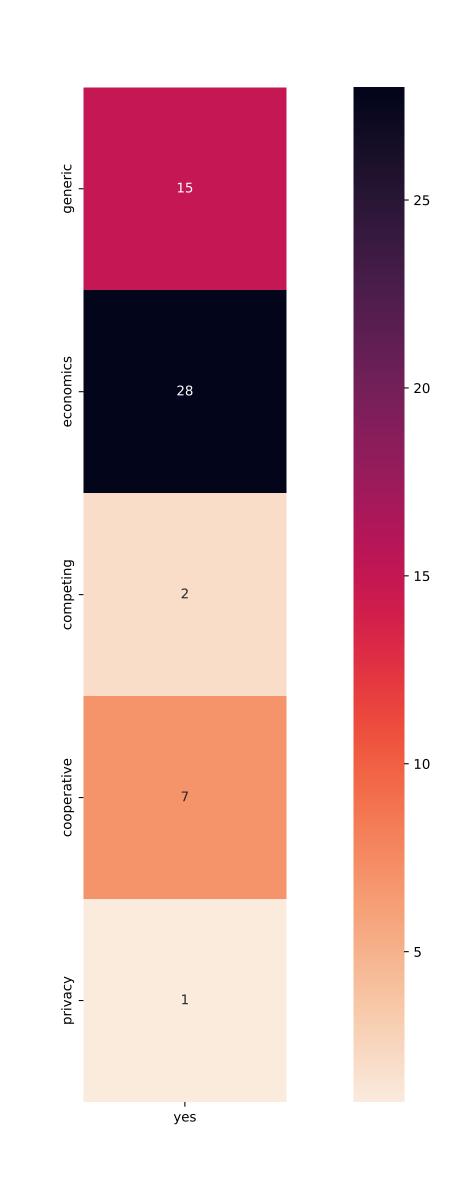
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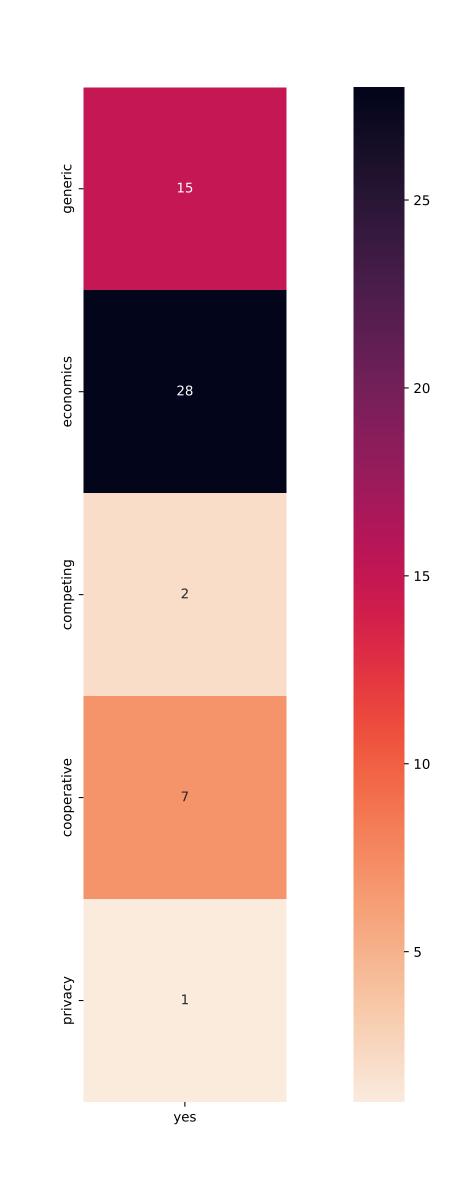
generic -	2	1	0	1	1	0	1	1	2	0	4	0	0	0	0	2
economics -	5	0	1	3	0	1	1	1	5	1	2	1	1	2	1	3
competing -	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
cooperative -	2	0	0	1	0	2	0	0	0	0	0	0	0	0	0	2
privacy -	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
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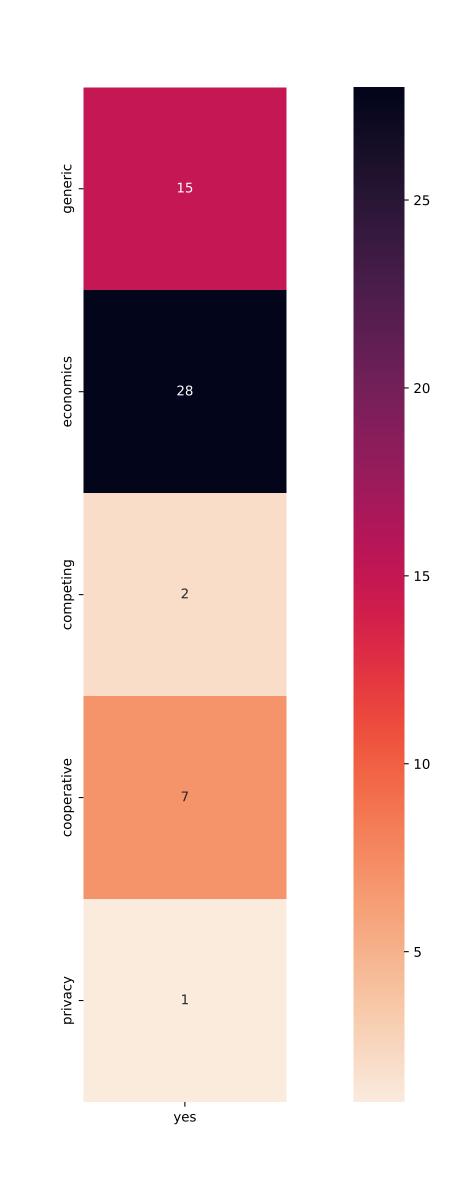
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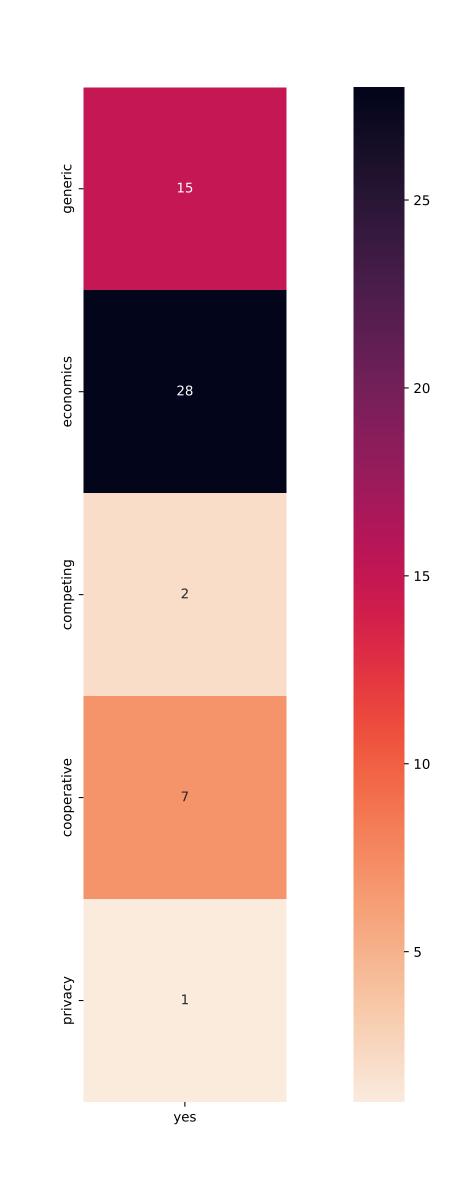


generic	8	7	- 17.5
economics	8	20	- 15.0 - 12.5
competing	- 1	1	- 10.0
cooperative	- 4	3	- 7.5 - 5.0
privacy	1	0	- 2.5
	selection	snowballing	- 0.0









Gaussian probability -

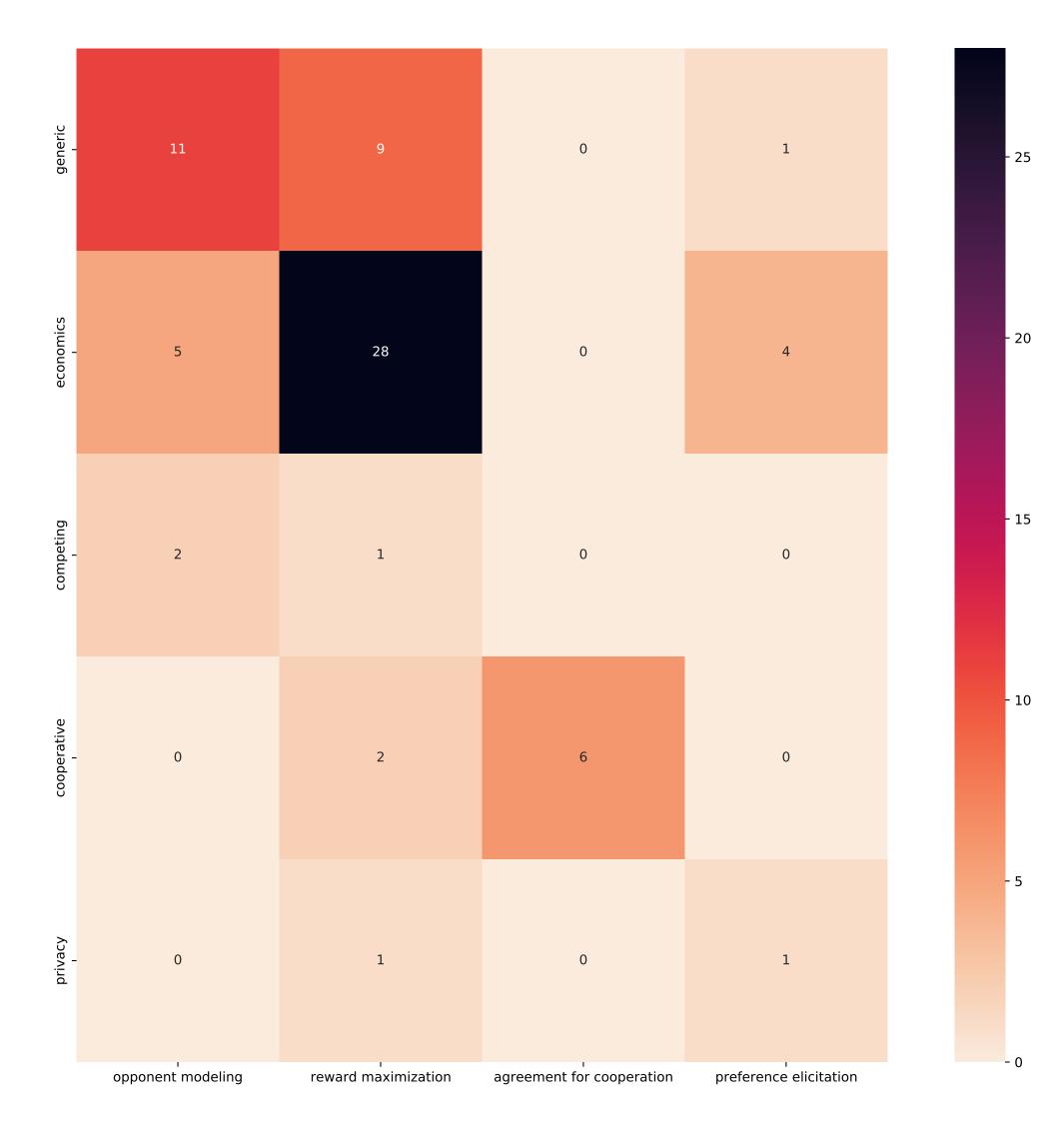
- 6

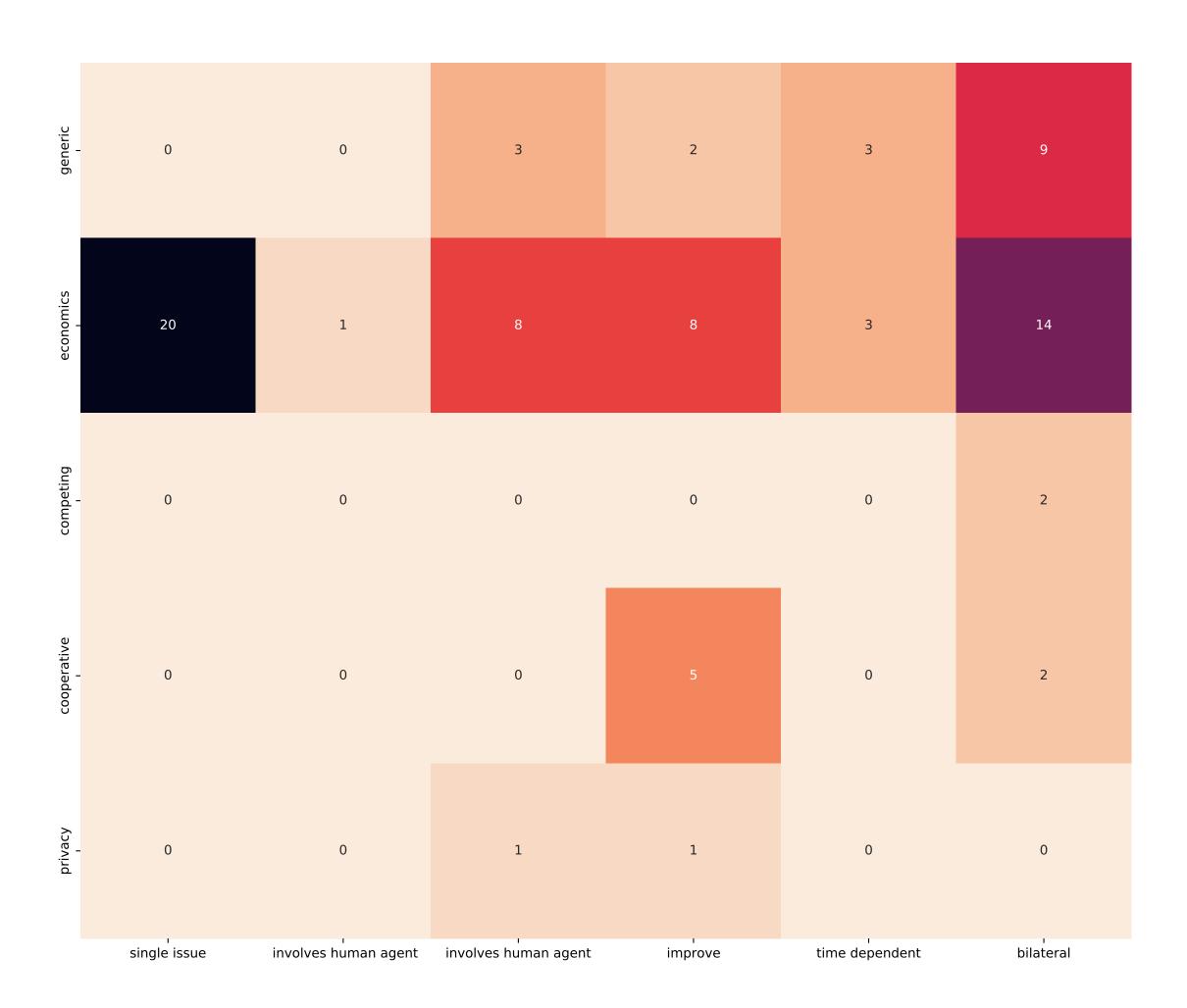
- 4

- 2

- ^

generic -economics - 1 competing - 1 cooperative - 0 privacy - 0 LSTM -Bayesian Learning -Heuristic algorithm -Reinforcement learning -Genetic Algorithm -Fuzzy Logic System -Nonlinear Regression -Linear Regression -Multi bipartite gradient descent search Alternative offer protocol Linear Programming Equilibrium strategies Argumentation Markov Decision Process Angle based Similarirty Neural Network Monte Carlo Tree search logistic regression





20.0

- 17.5

- 15.0

- 12.5

- 10.0

- 7.5

- 5.0

- 2.5

- 0.0

