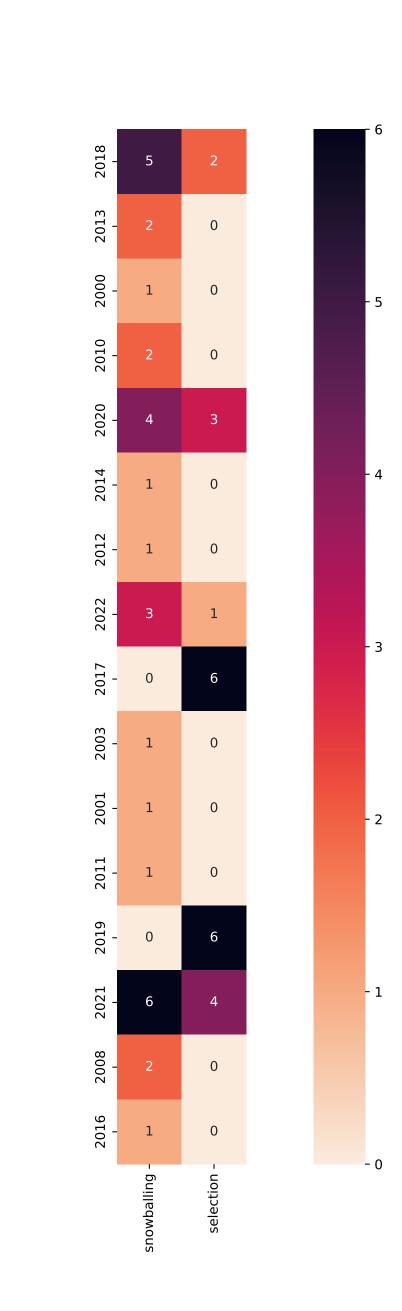


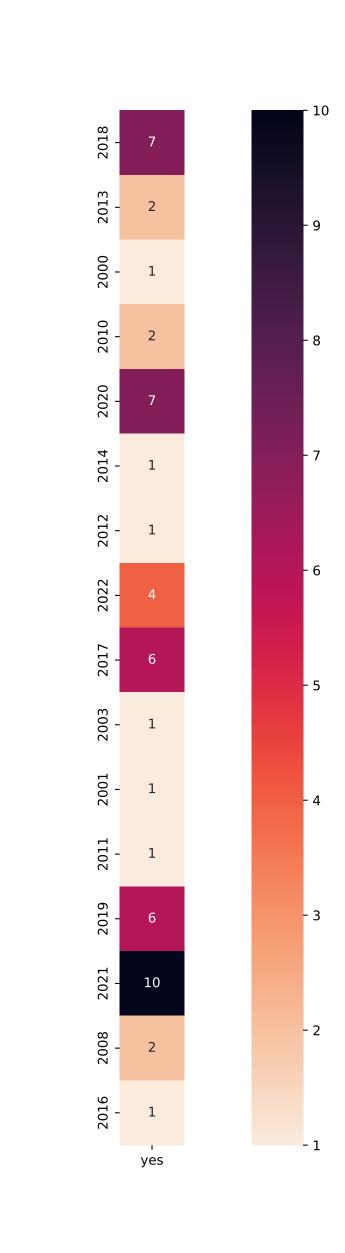
- 5

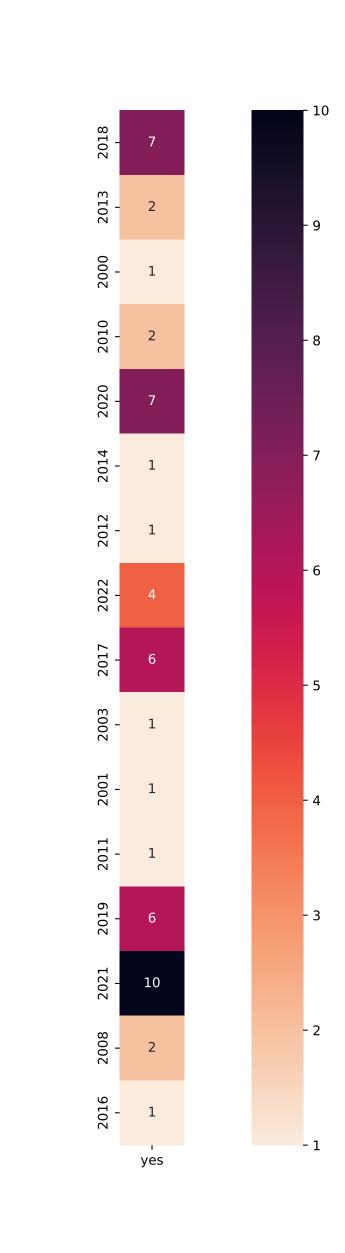
- 3

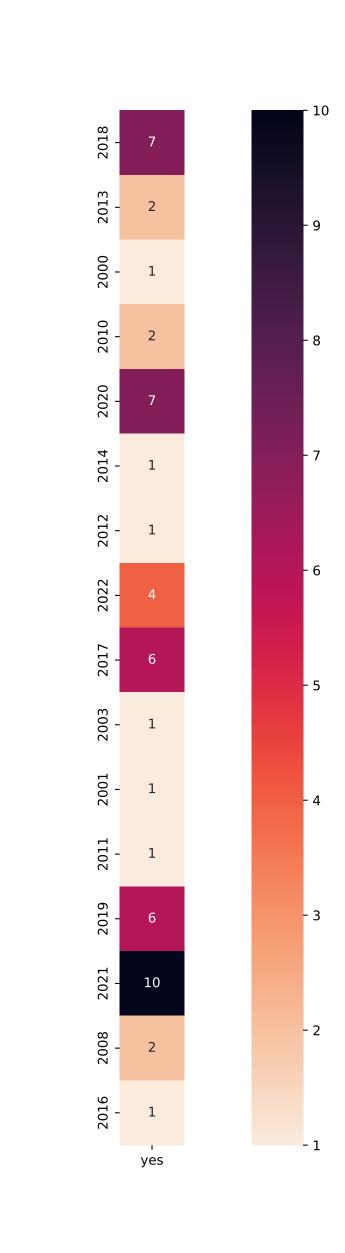
- 2

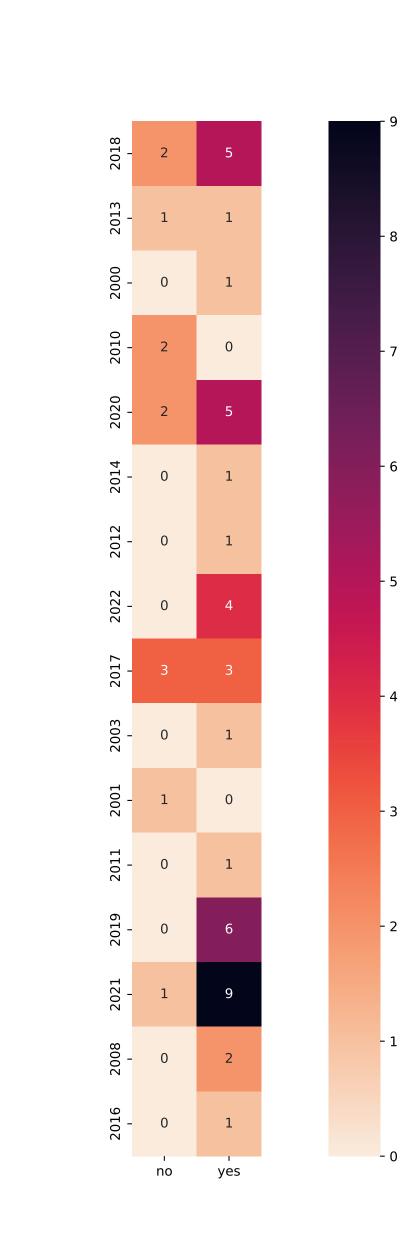
- 1











Genetic Algorithm

Gaussian probability

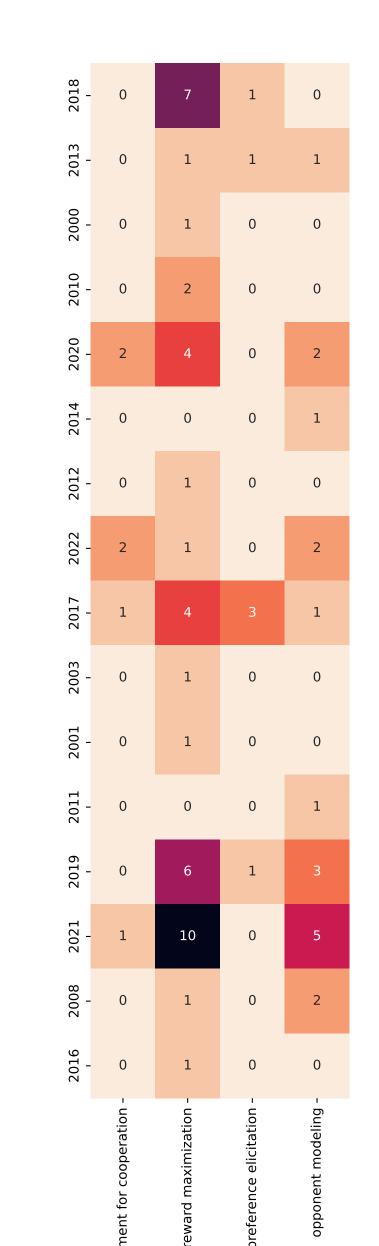
logistic regression

Fuzzy Logic System

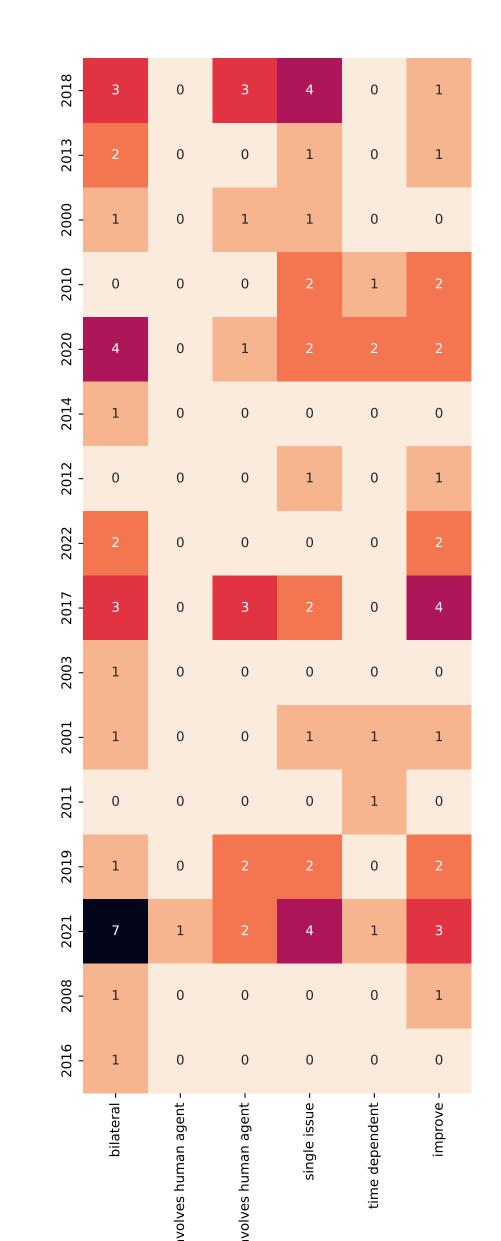
bipartite gradient descent search

- 3

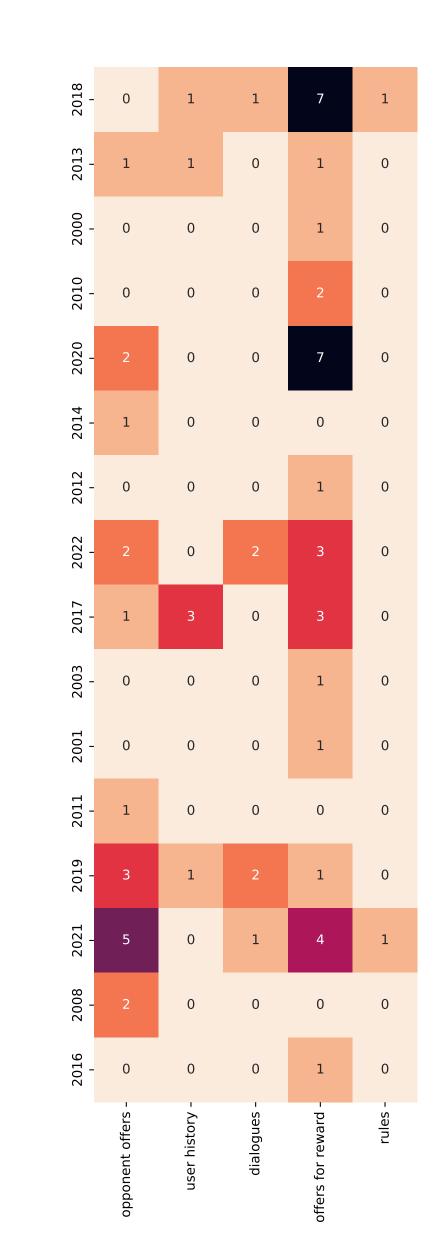
- 2



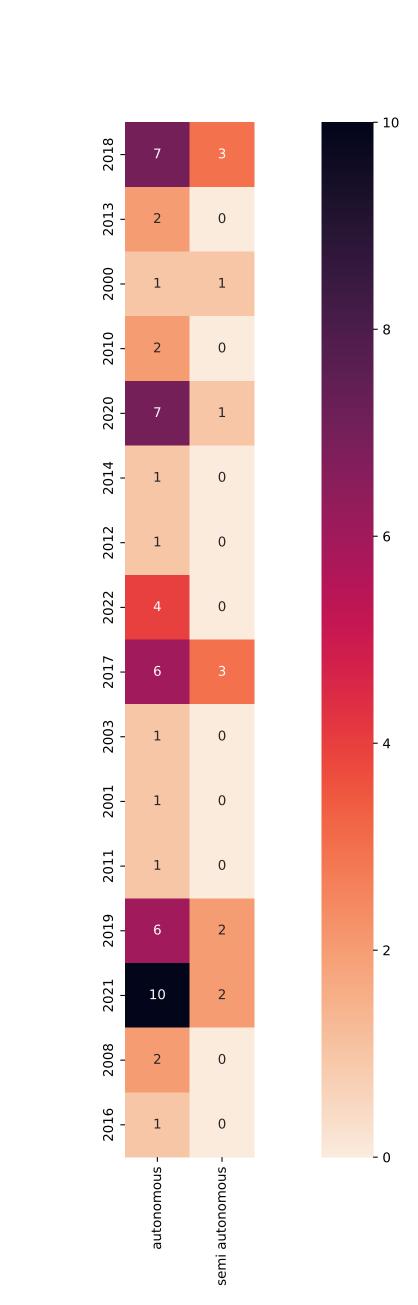
- 8 - 6 - 2 - 0

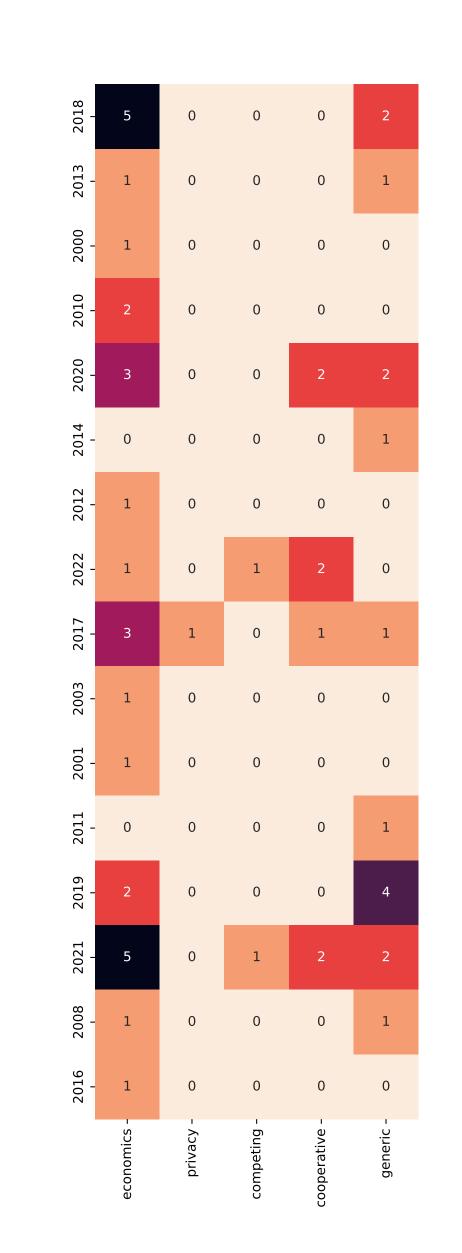


- 6 - 5 - 3 - 2 - 1 - 0



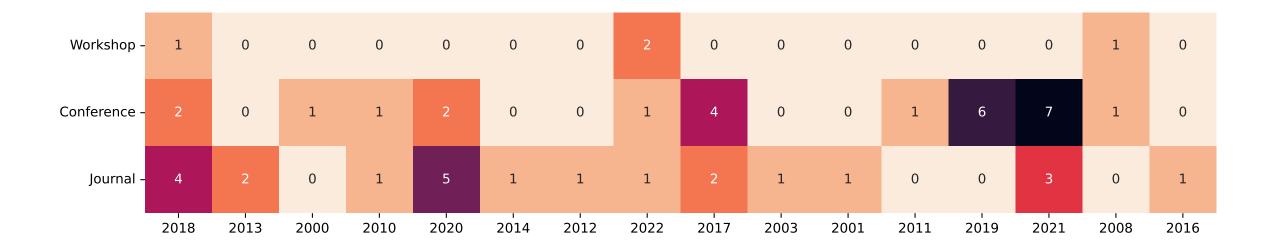
- 6 - 5 - 3 - 2 - 1





- 3

- 2



- 6

__

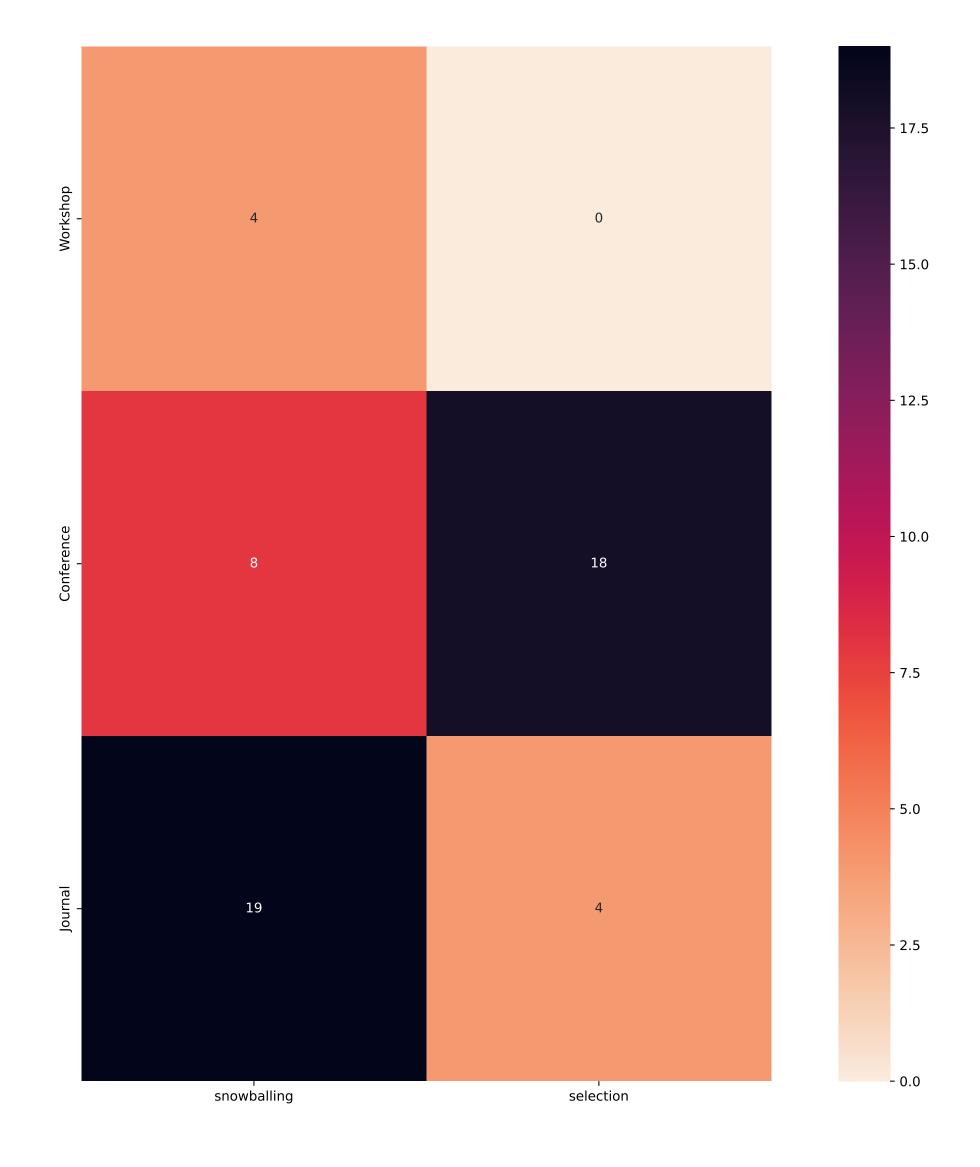
- 4

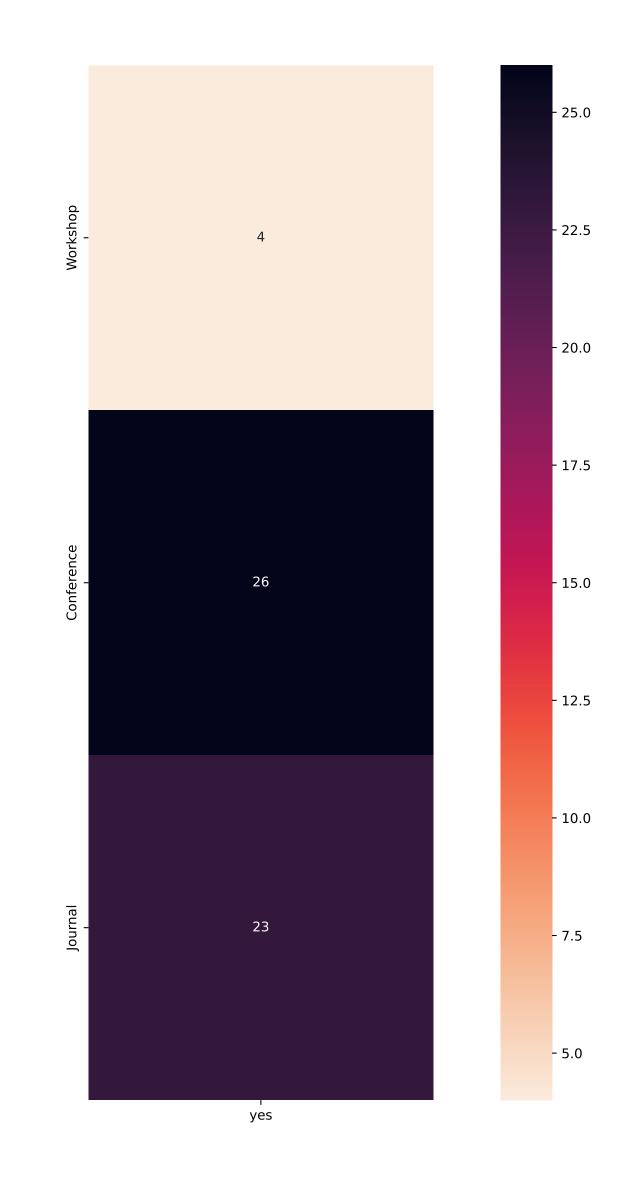
- 3

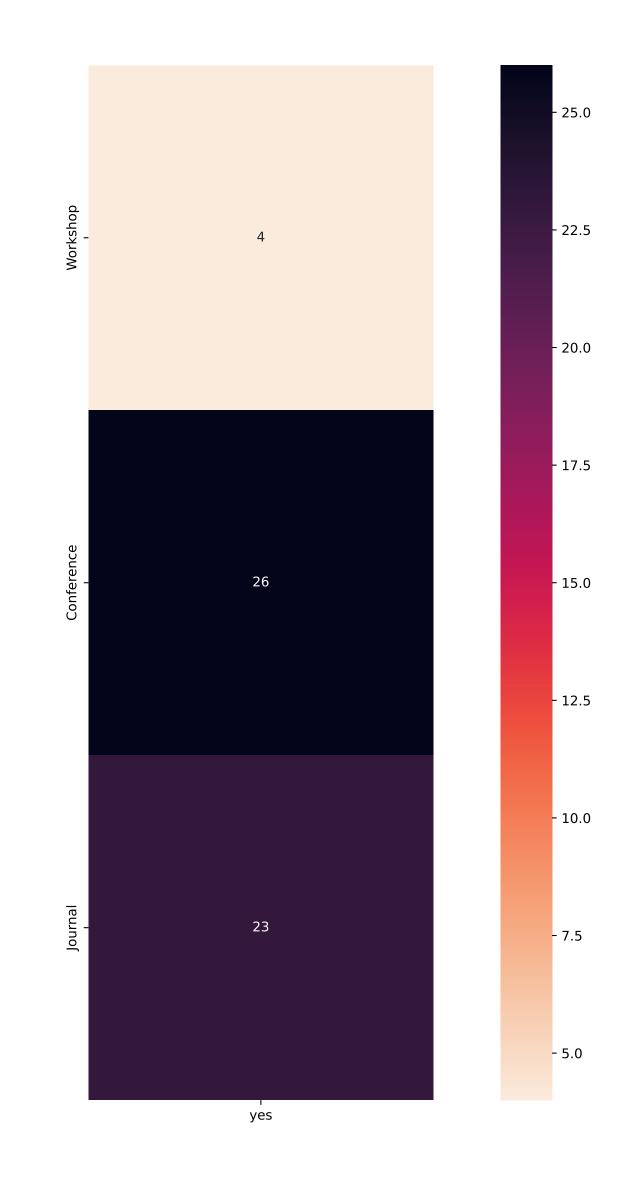
- 2

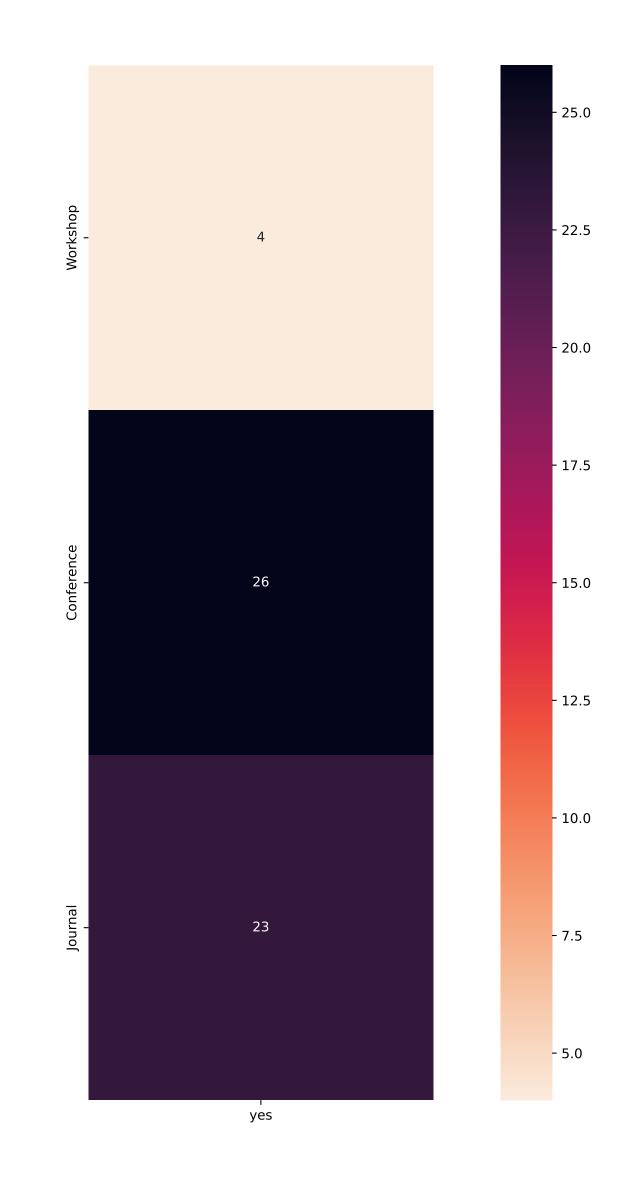
- 1

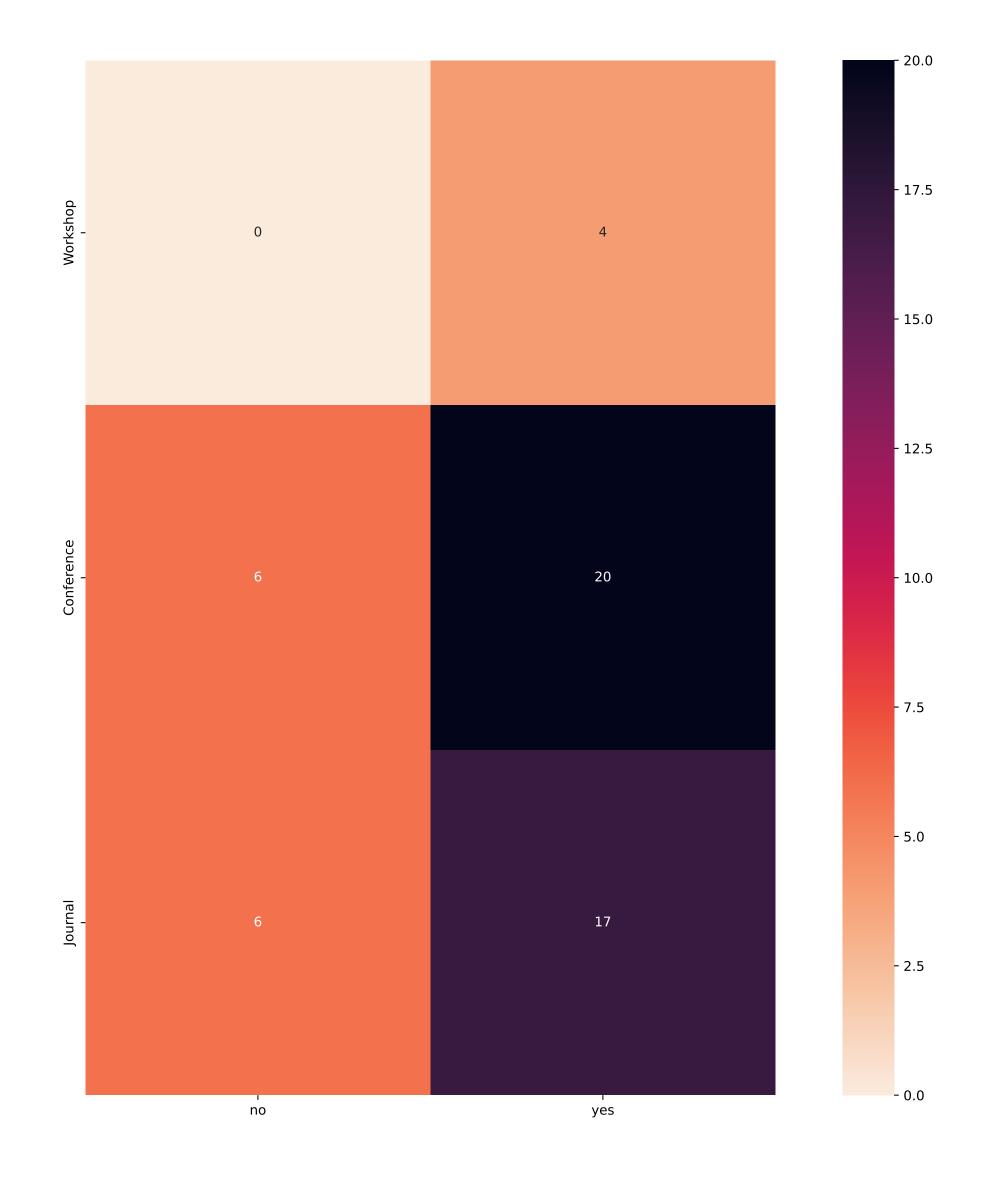
- n











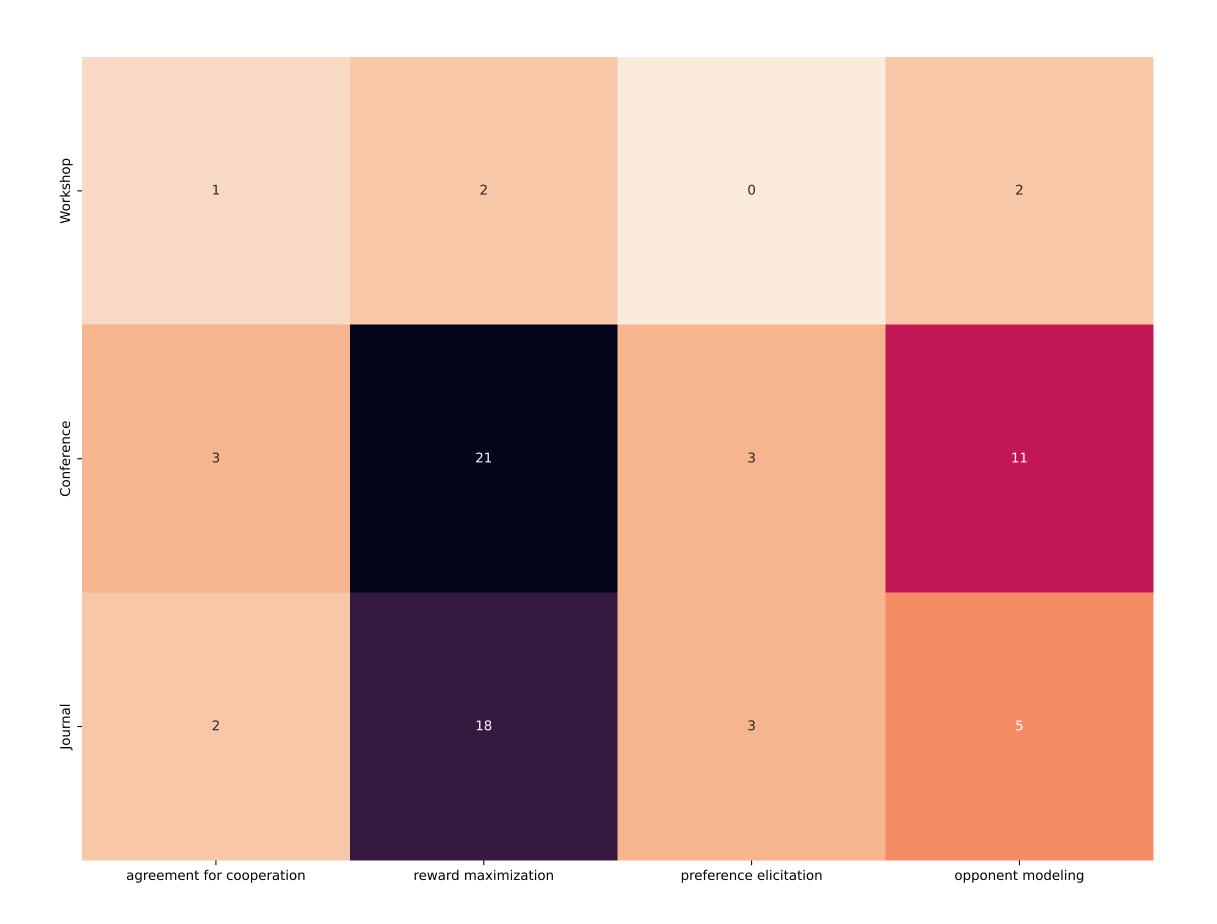
- 5

- 3

- 2

- 1

- n



- 20.0

- 17.5

- 15.0

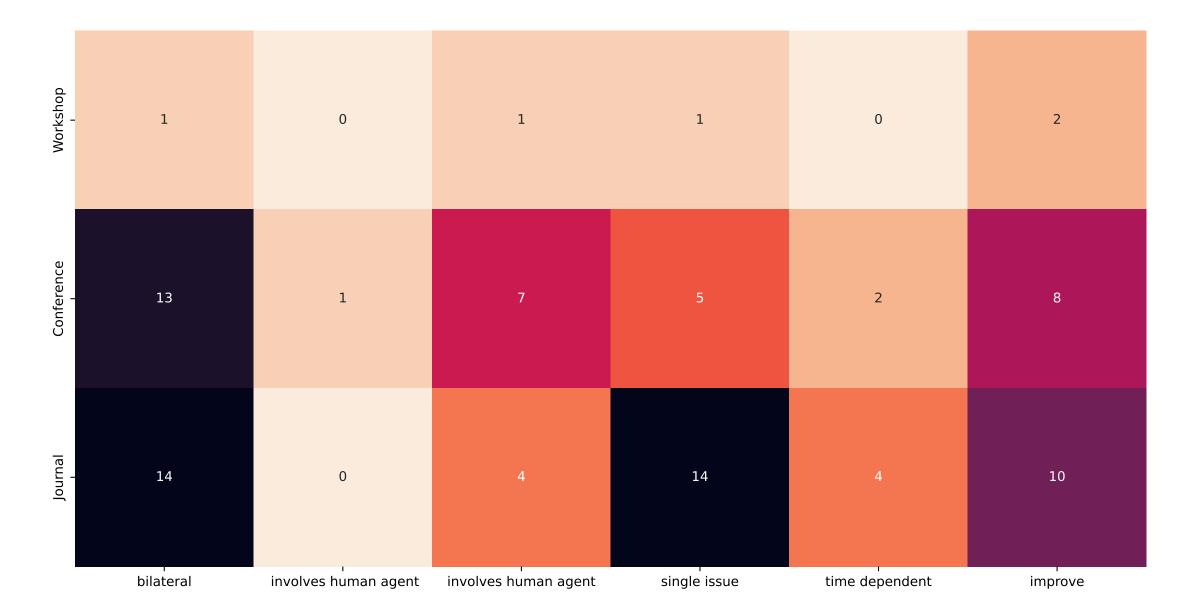
- 12.5

- 10.0

- 7.5

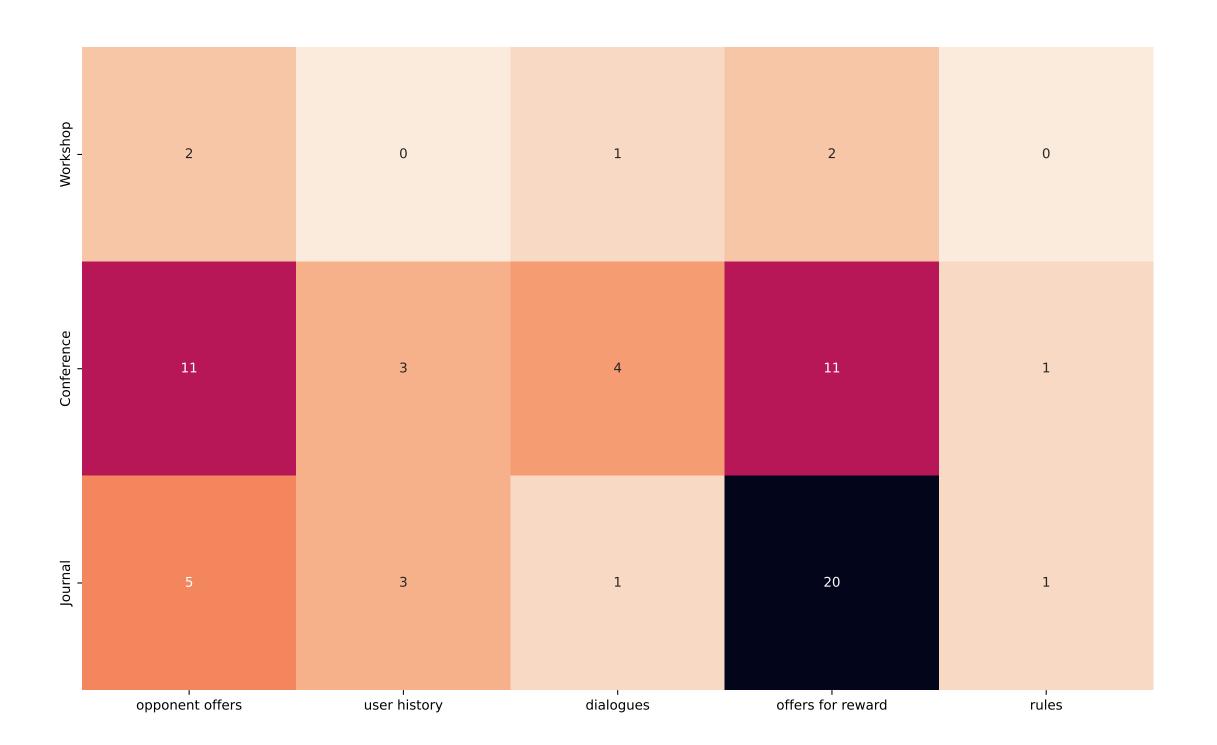
- 5.0

- 2.5



- 10

- 6



- 20.0

- 17.5

- 15.0

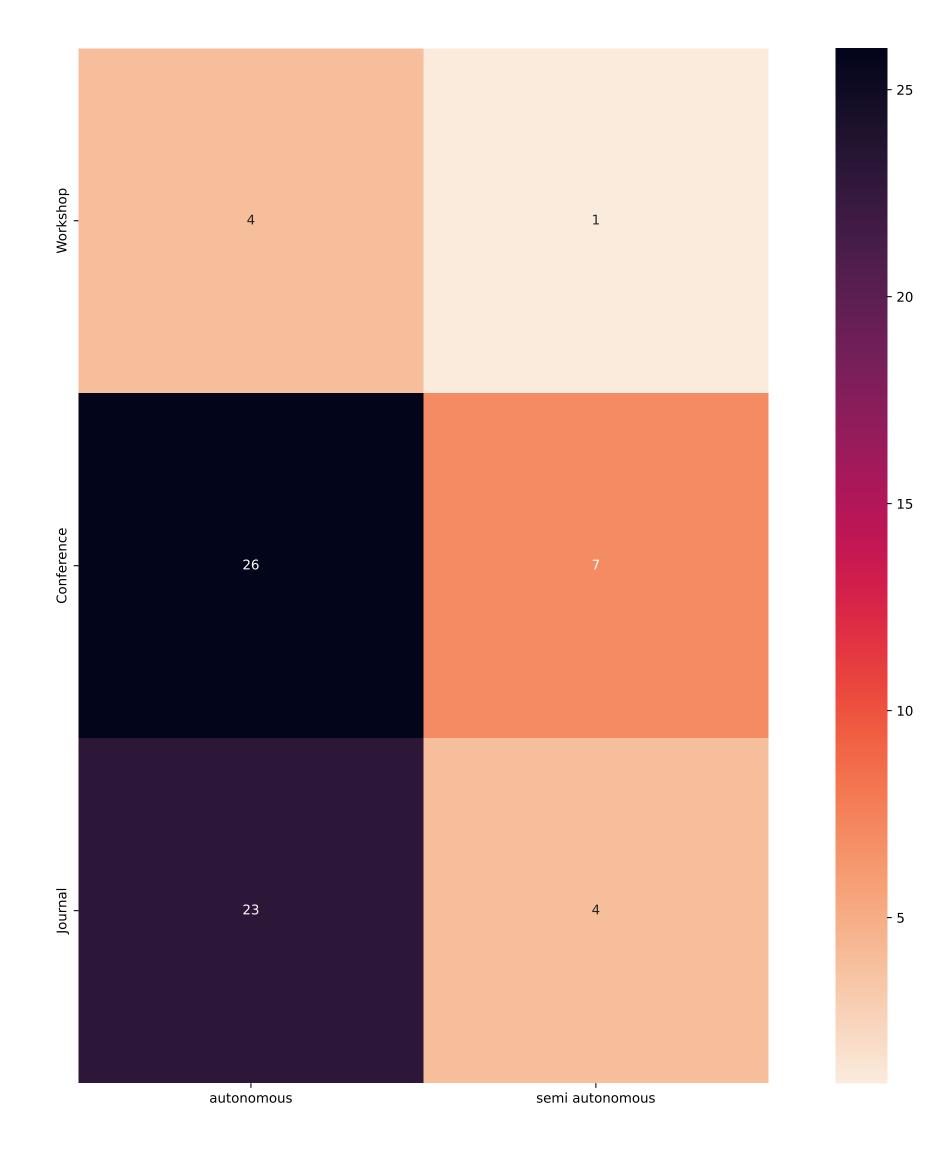
- 12.5

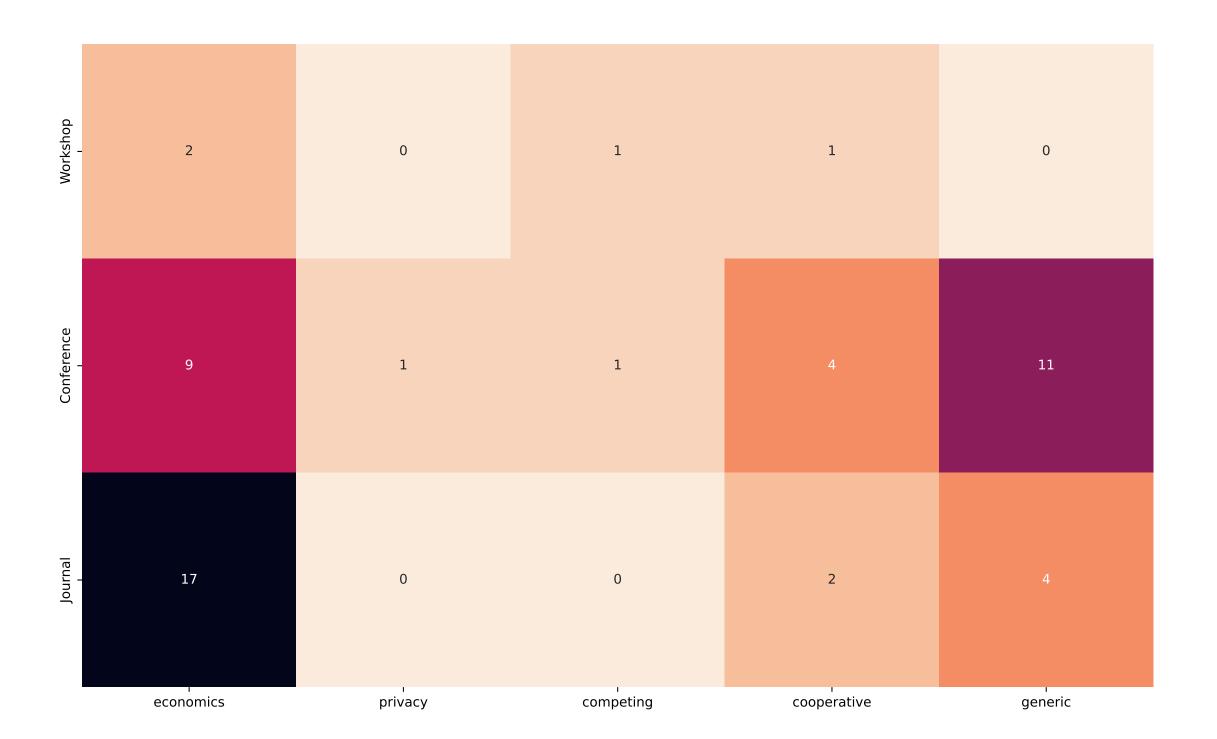
- 10.0

- 7.5

- 5.0

- 2.5





- 14

- 12

- 10

- 8

- 6

- 4



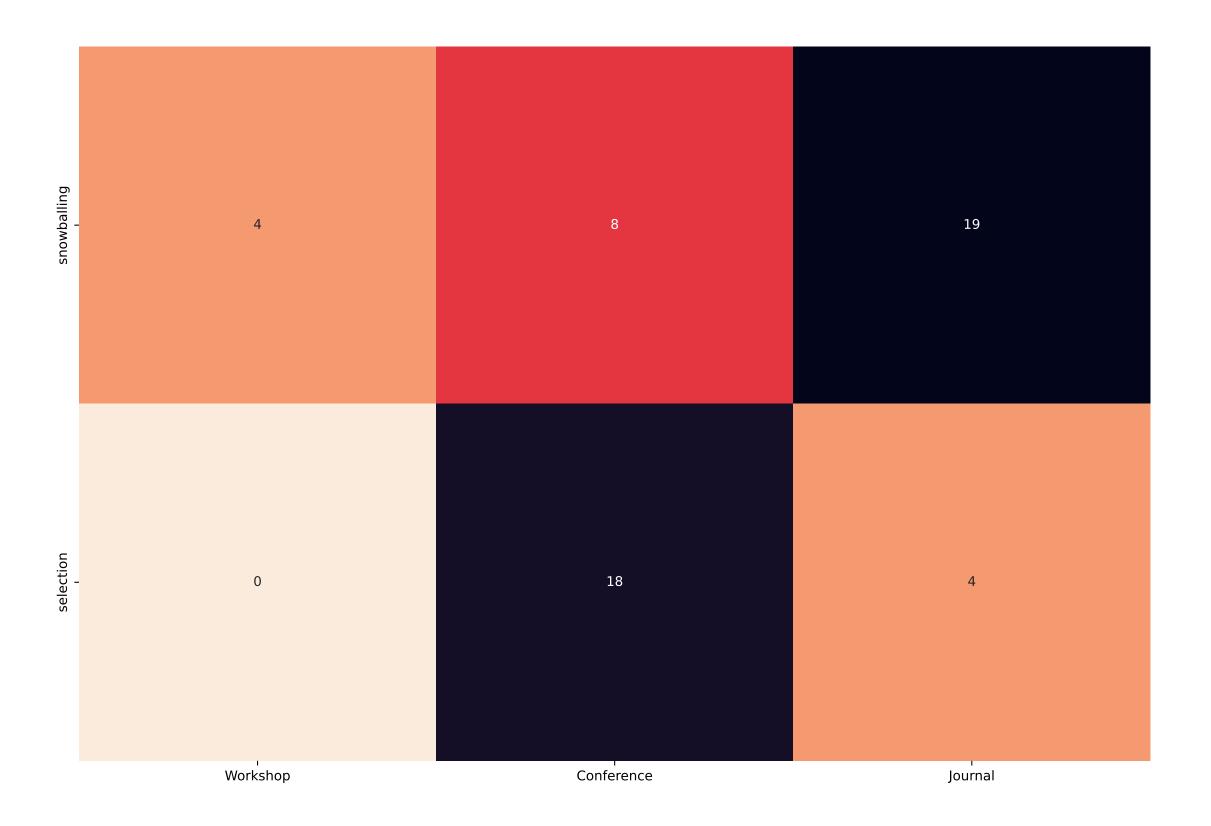
- 5

- 3

- 2

- 1

- n



- 17.5

- 15.0

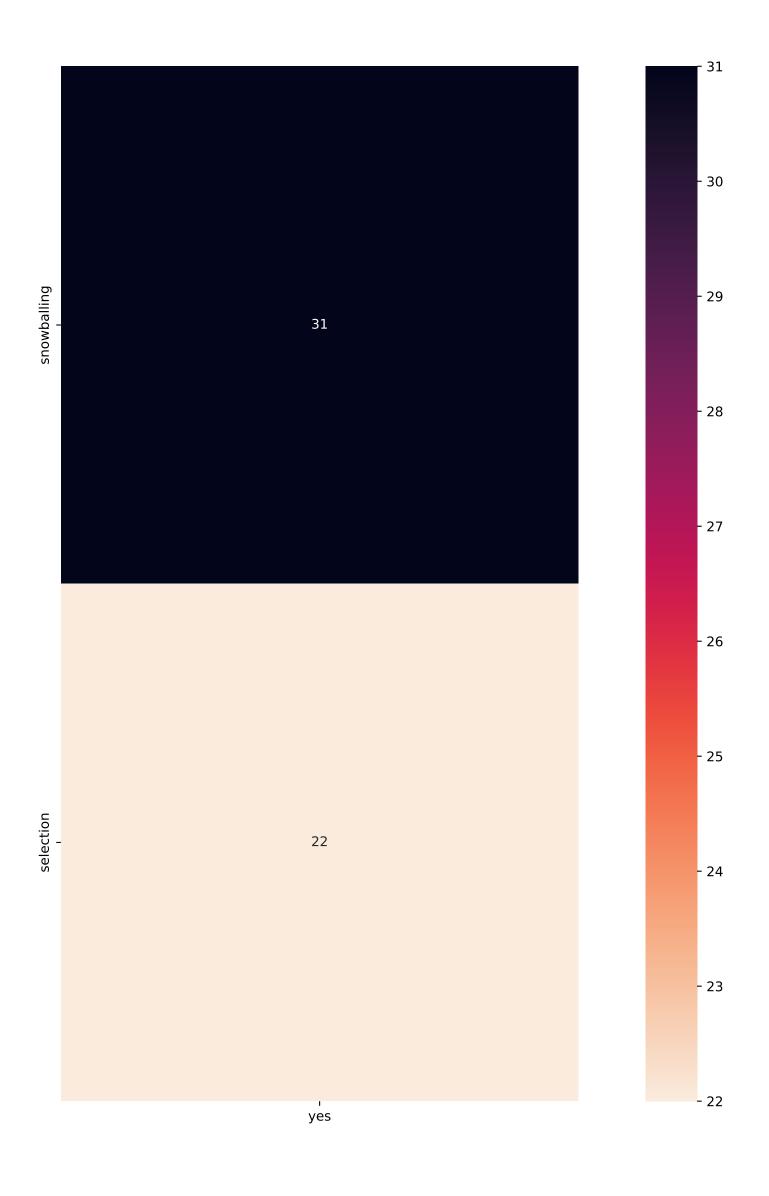
- 12.5

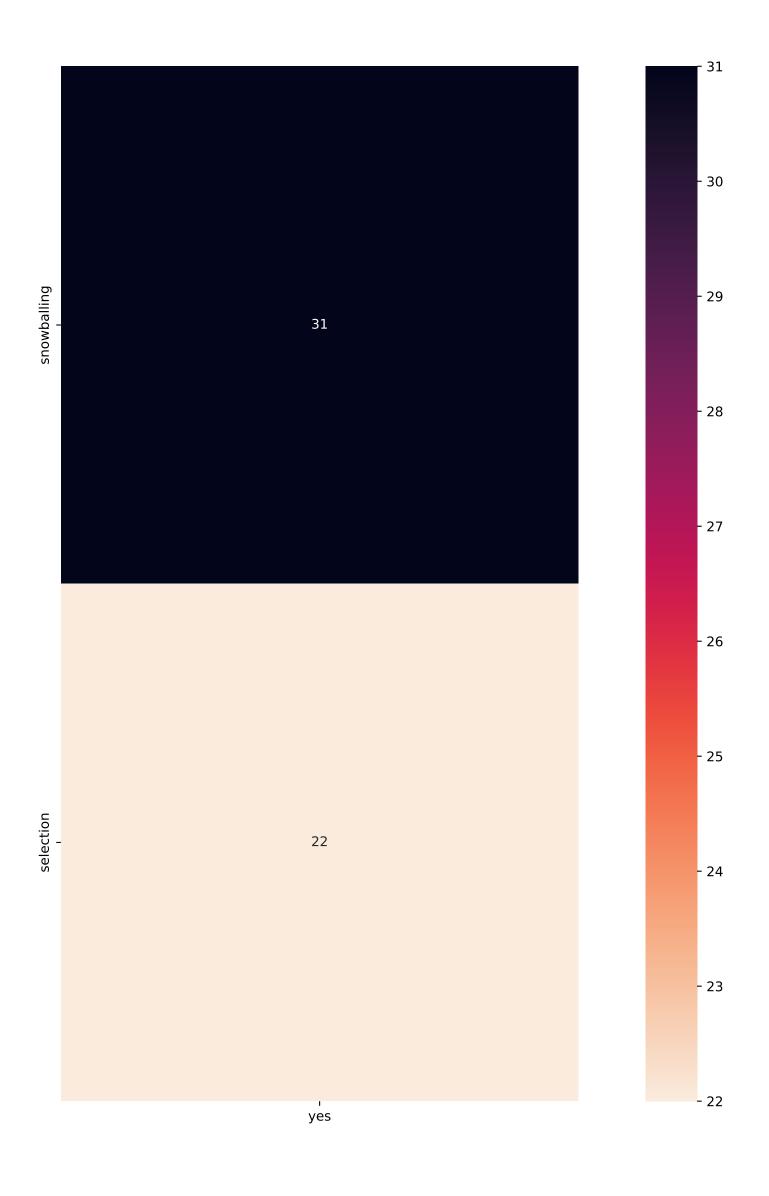
- 10.0

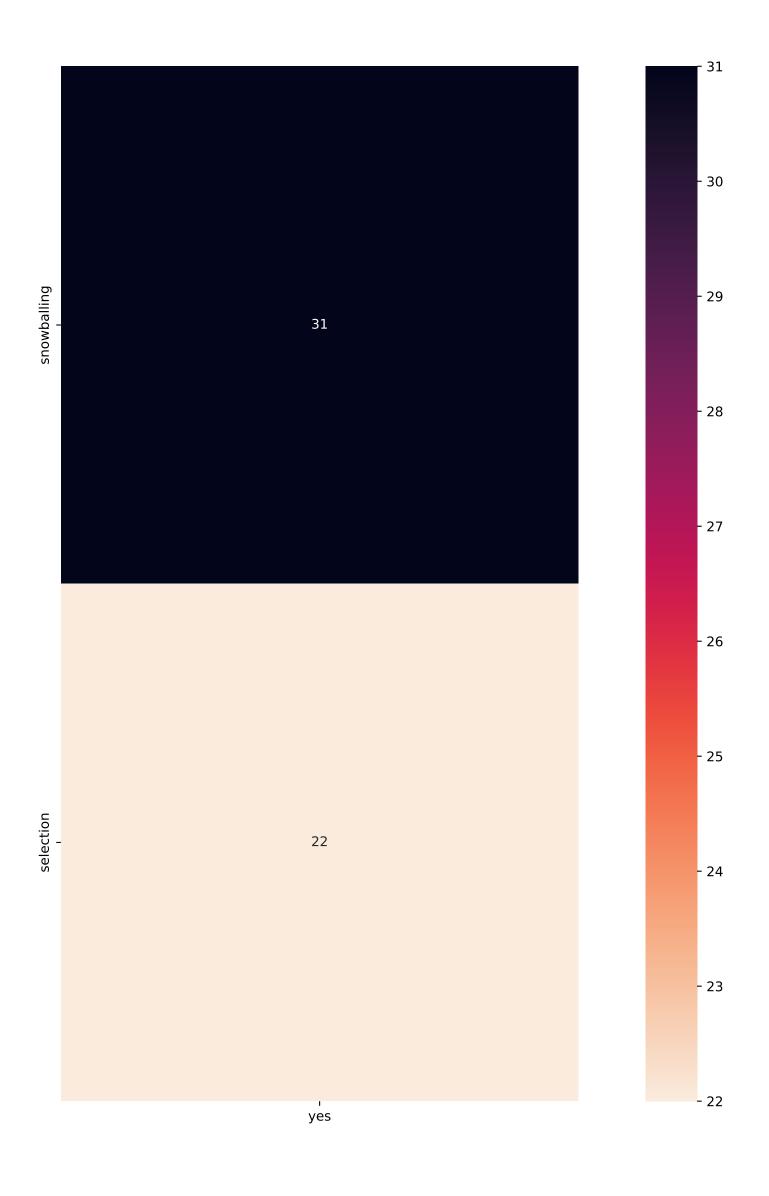
- 7.5

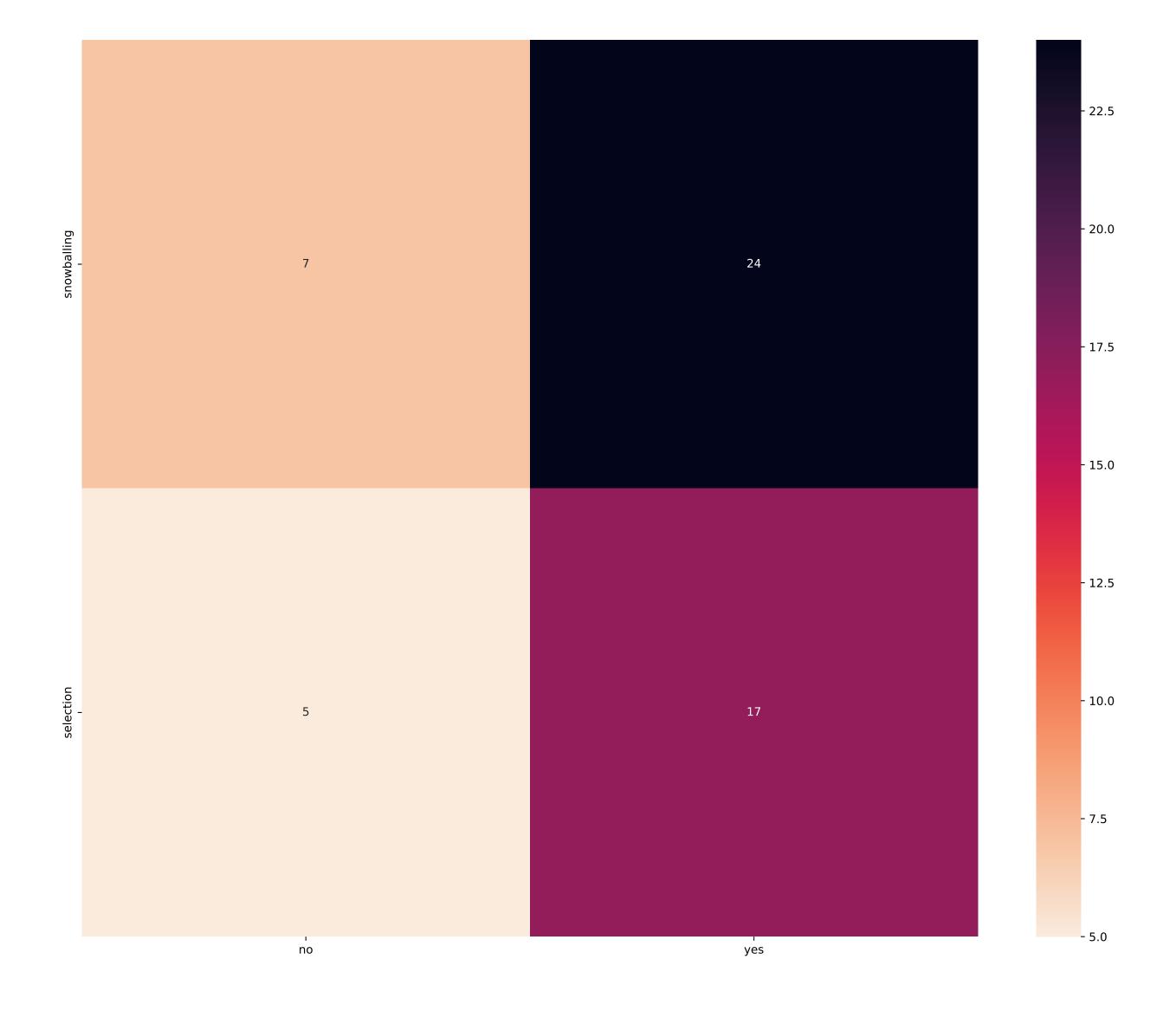
- 5.0

- 2.5









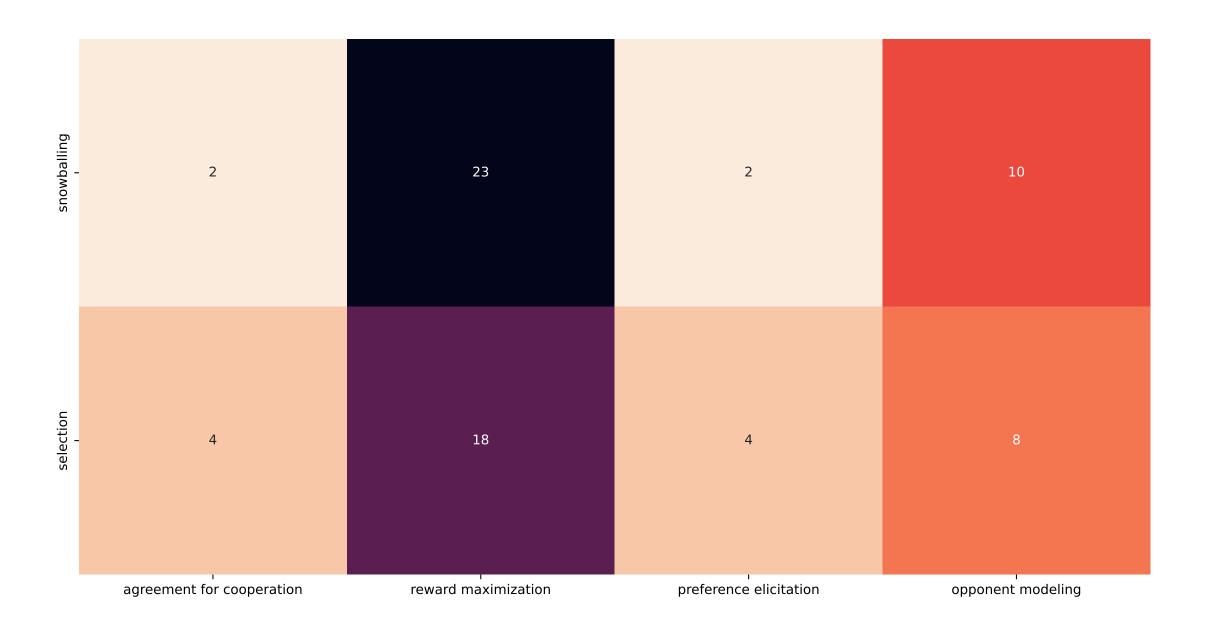
snowballing -	1	3	1	1	0	7	1	2	1	4	1	1	4	5	2	1	0	1	0	0
selection -	0	1	4	0	1	6	1	0	0	1	3	0	1	1	0	1	2	0	1	2
	logistic regression -	Fuzzy Logic System –	Gaussian probability -	Genetic Algorithm -	Multi bipartite gradient descent search –	Reinforcement learning -	Linear Regression –	- RSTM -	Angle based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

- 5

- 3

-

- 1



- 22.5

- 20.0

- 17.5

- 15.0

- 12.5

- 10.0

- 7.5

- 5.0

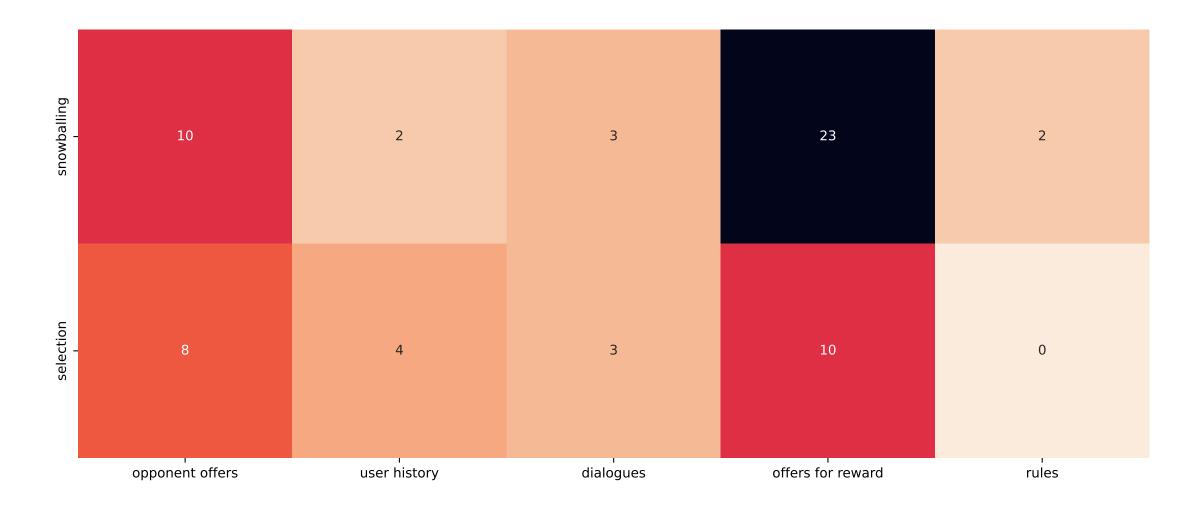
- 2.5



- 14

- 12

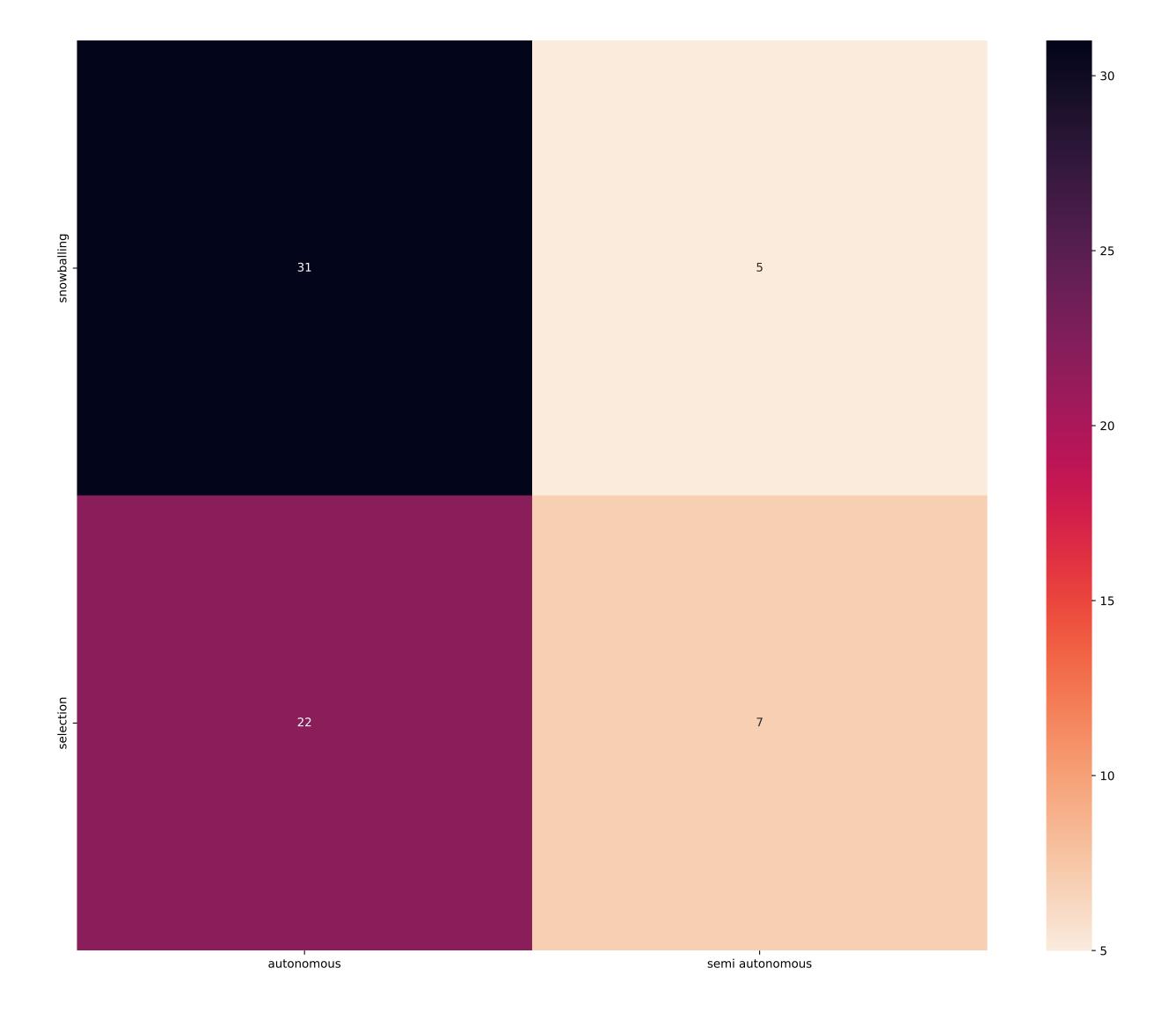
- 10

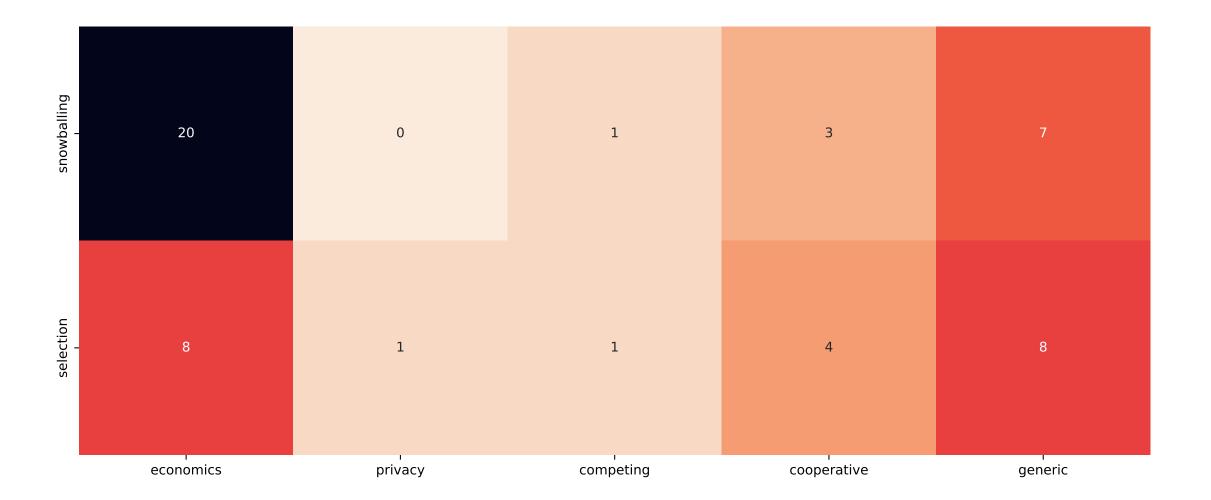


- 15

- 10

- 5





- 20.0

- 17.5

- 15.0

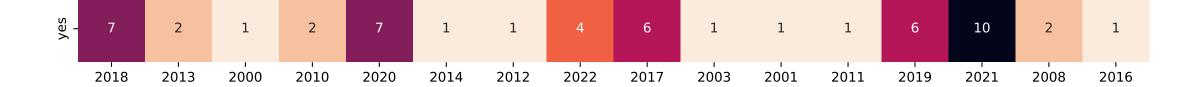
- 12.5

- 10.0

- 7.5

- 5.0

- 2.5



r 10

- 9

Lo

7

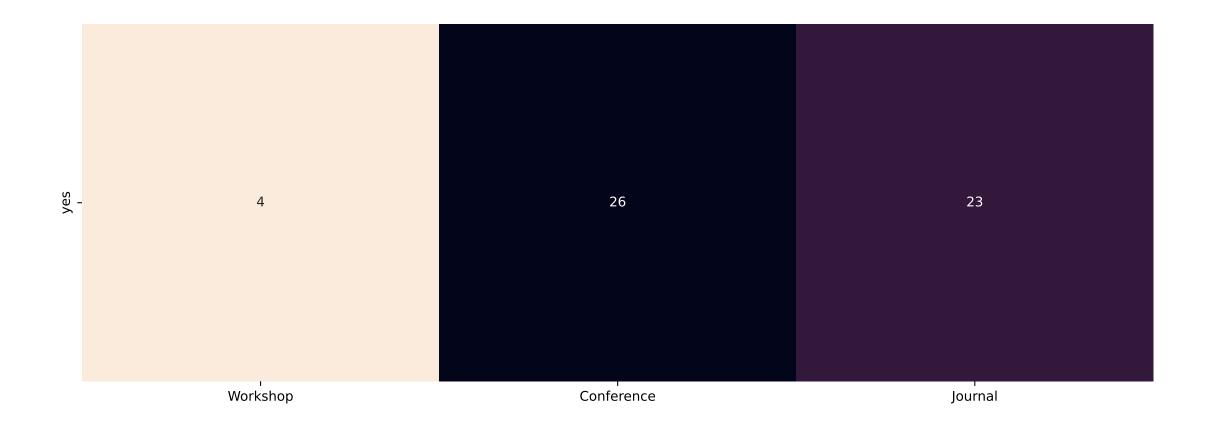
- 6

- 5

_ /

- 3

- 2



- 25.0

- 22.5

- 20.0

- 17.5

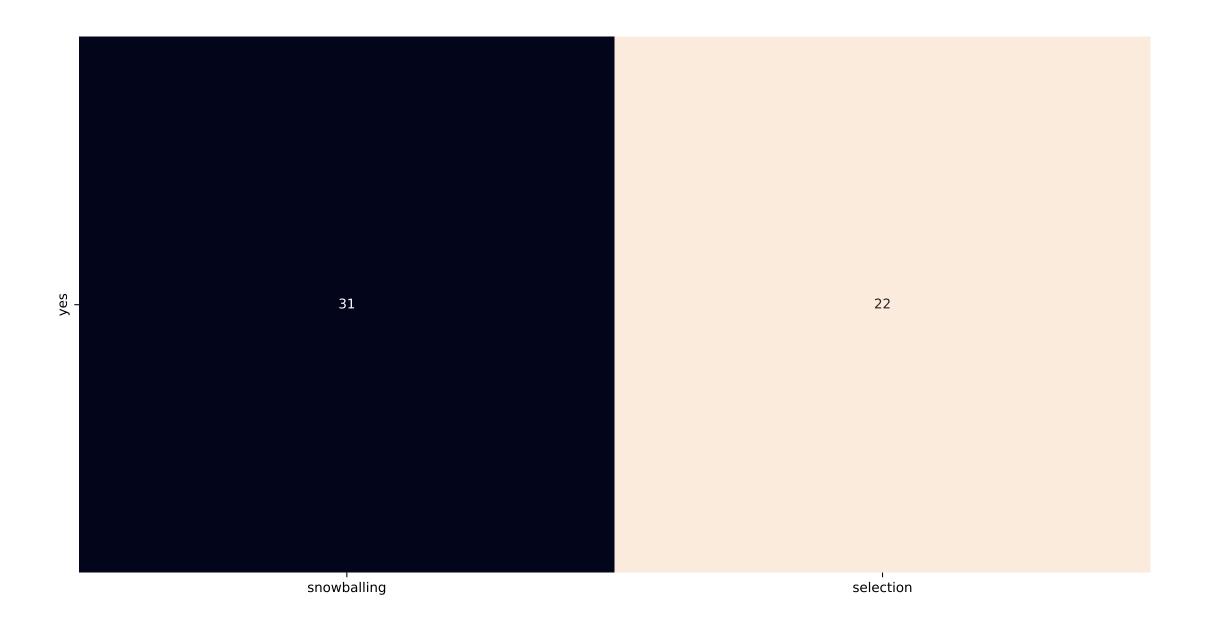
- 15.0

- 12.5

- 10.0

- 7.5

- 5.0



31

- 30

- 29

- 28

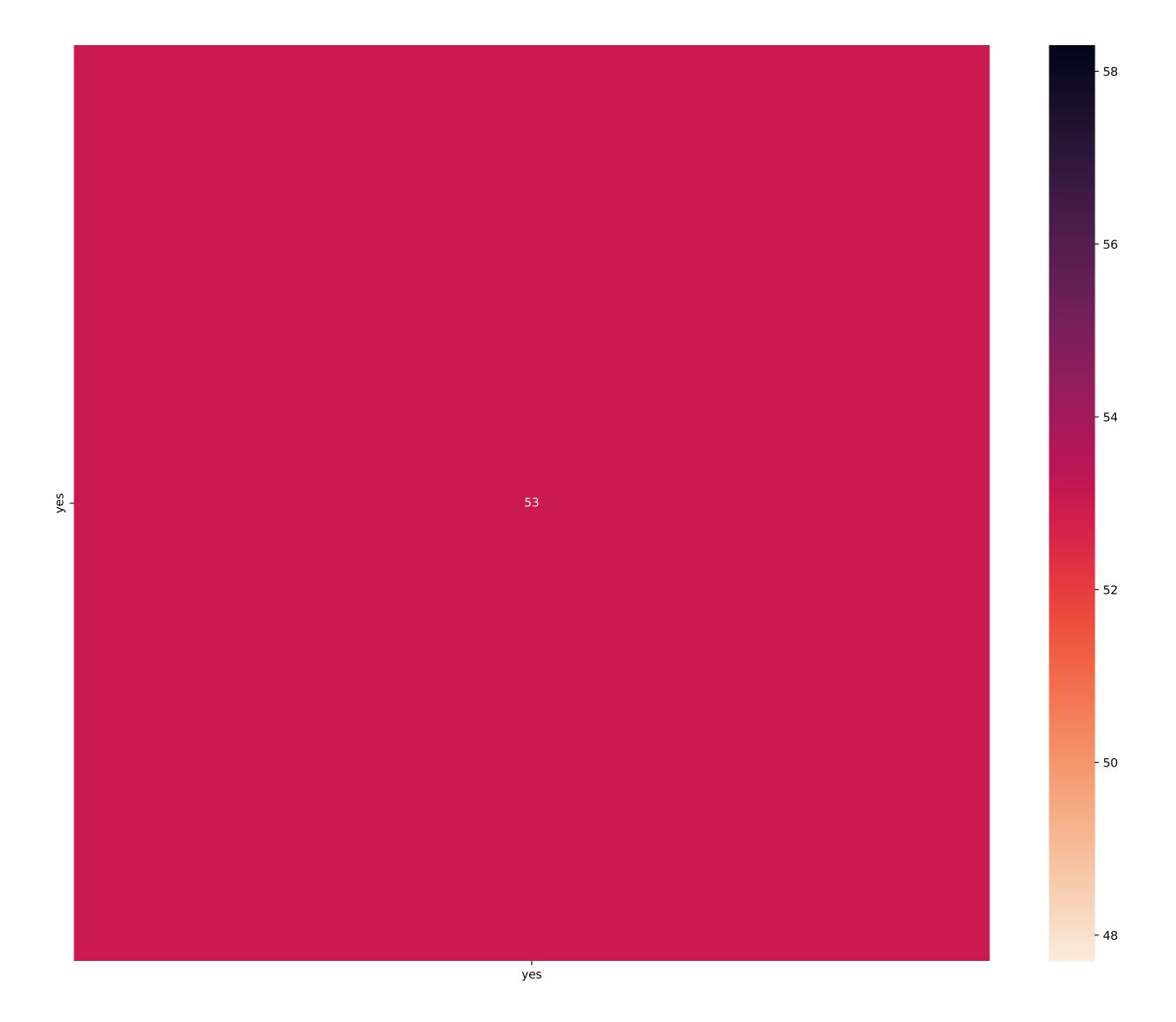
- 27

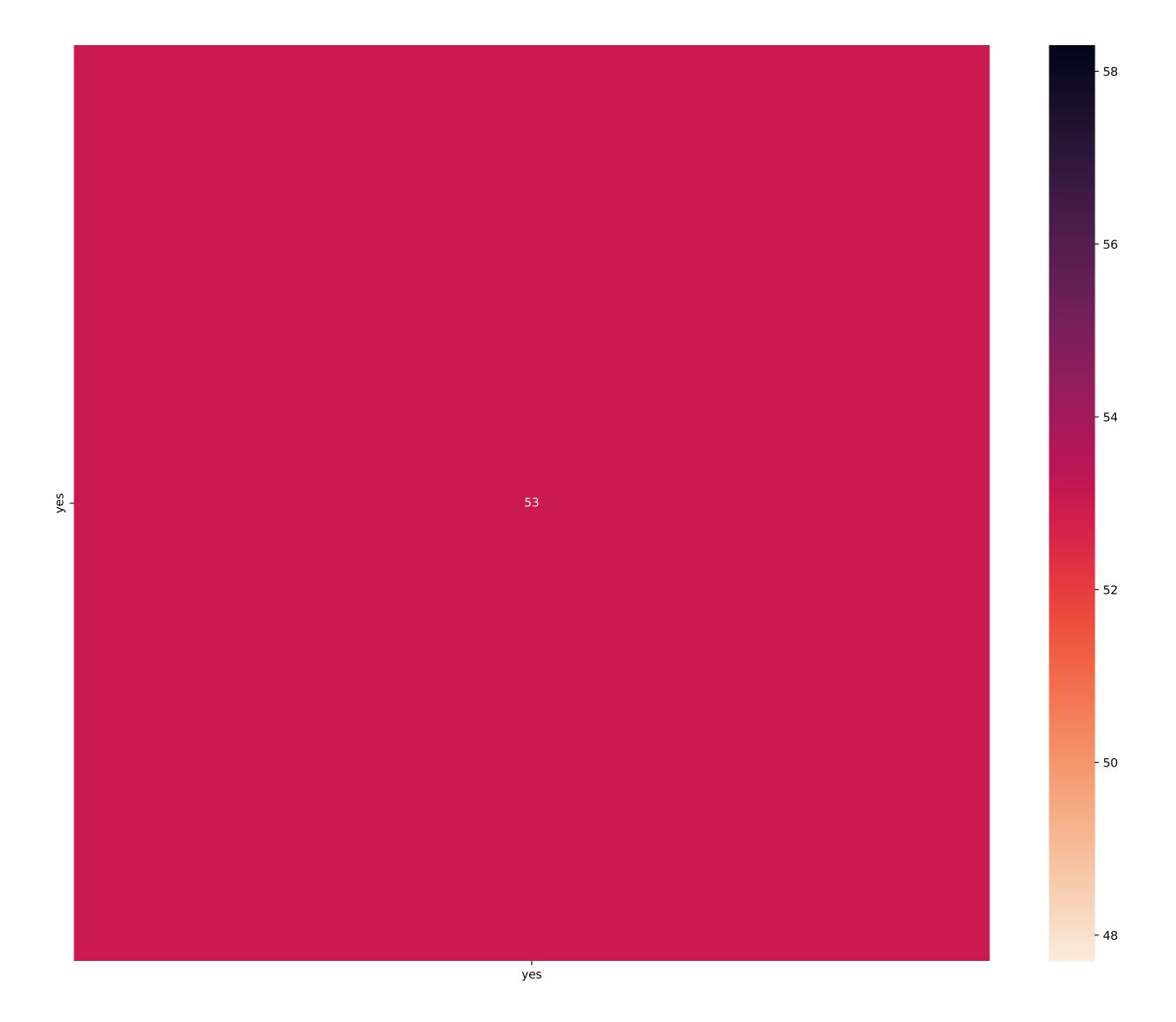
- 26

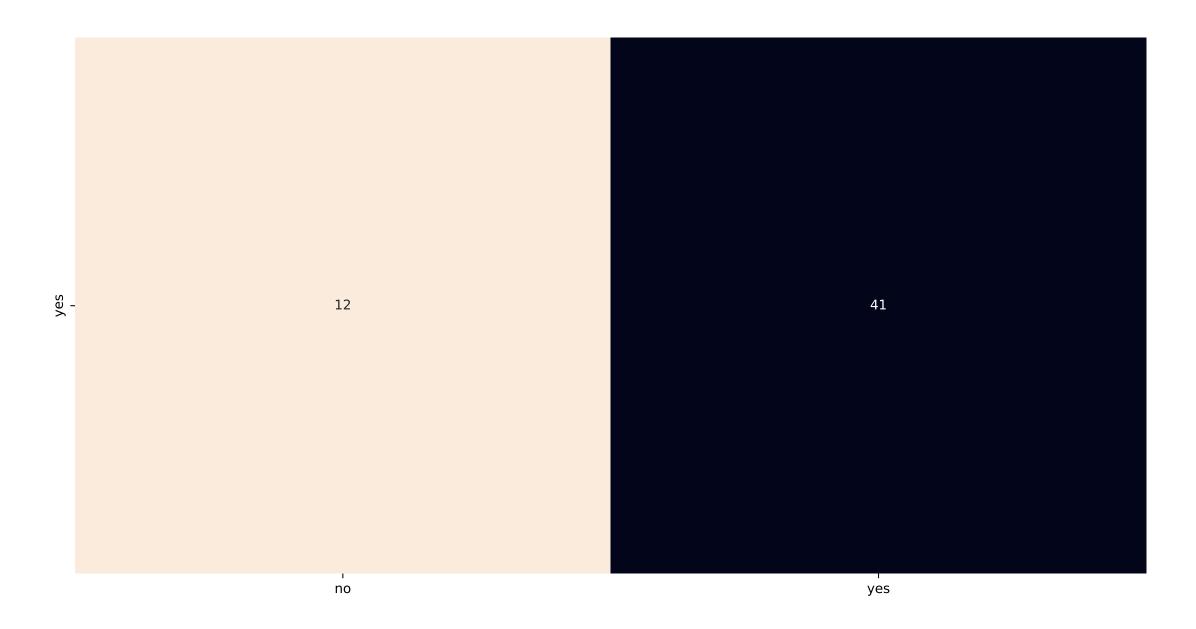
- 25

- 24

- 23







- 30

- 25

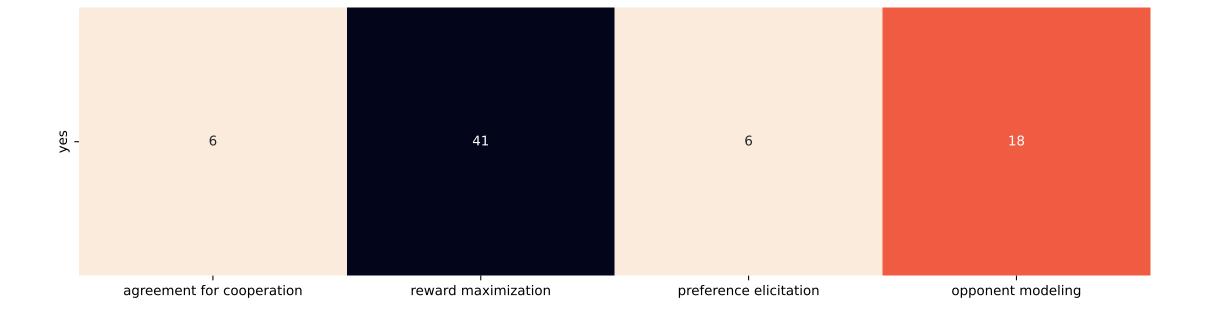
- 20

yes	1	4	5	1	1	13	2	2	1	5	4	1	5	6	2	2	2	1	1	2
	logistic regression -	Fuzzy Logic System –	Gaussian probability -	Genetic Algorithm -	Multi bipartite gradient descent search -	Reinforcement learning -	Linear Regression –	- ISTM -	Angle based Similarirty -	Optimization Approach –	Monte Carlo Tree search -	Temporal Logic -	Neural Network –	Bayesian Learning –	Heuristic Algorithm –	Linear Programming -	Equilibrium strategies –	Nonlinear Regression -	Markov Decision Process -	Argumentation –

- 10

- 8

- 6



- 35

- 30

- 25

- 20

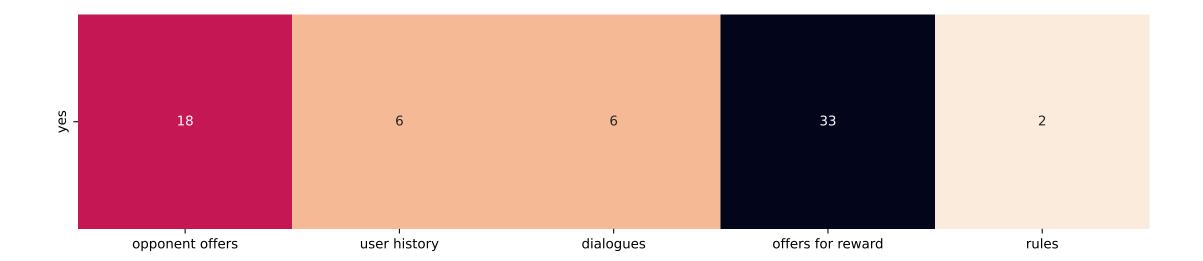
- 15



- 20

- 15

- 10

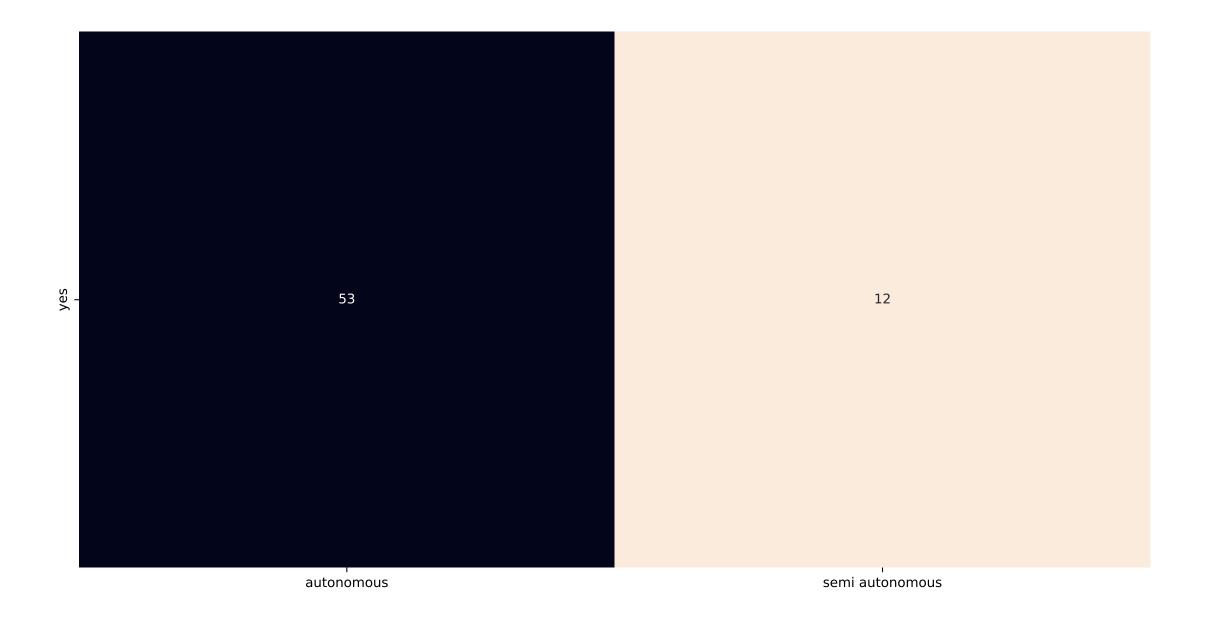


- 25

- 20

- 15

- 10



- 45

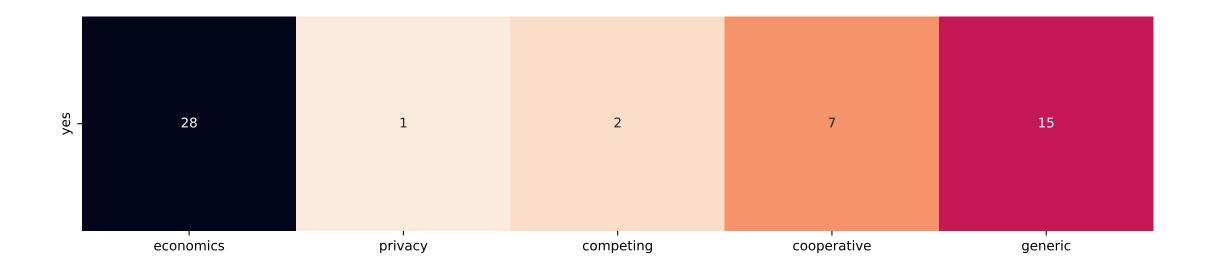
- 40

- 35

- 30

- 25

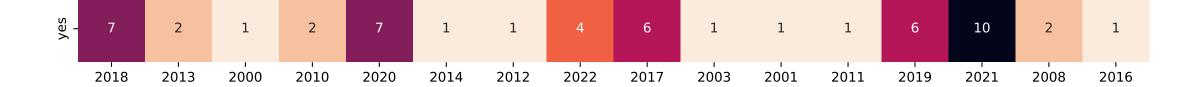
- 20



- 20

- 15

- 10



r 10

- 9

Lo

7

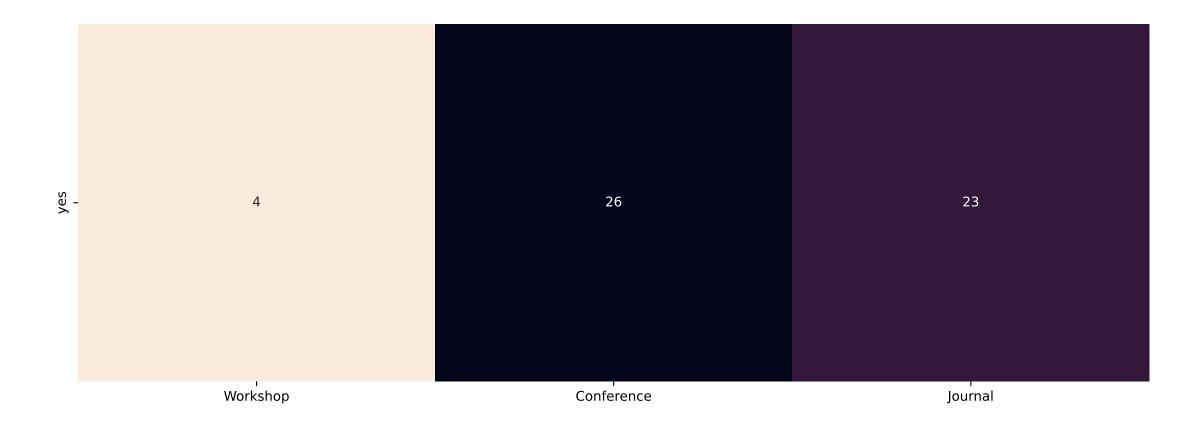
- 6

- 5

_ /

- 3

- 2



- 25.0

- 22.5

- 20.0

- 17.5

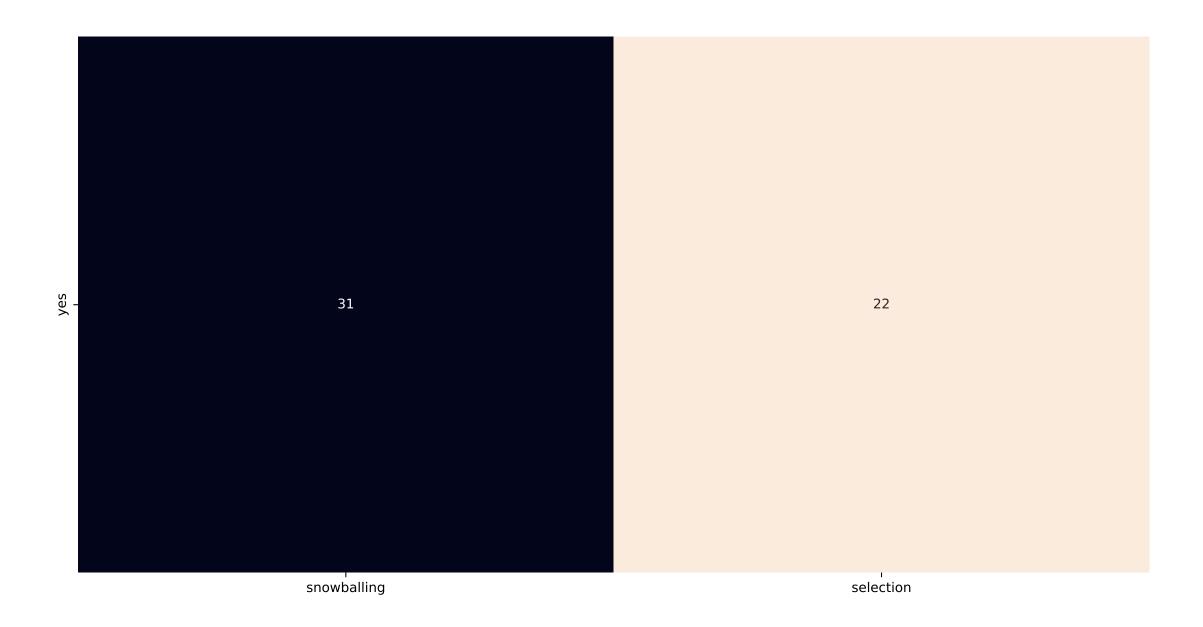
- 15.0

- 12.5

- 10.0

- 7.5

- 5.0



31

- 30

- 29

- 28

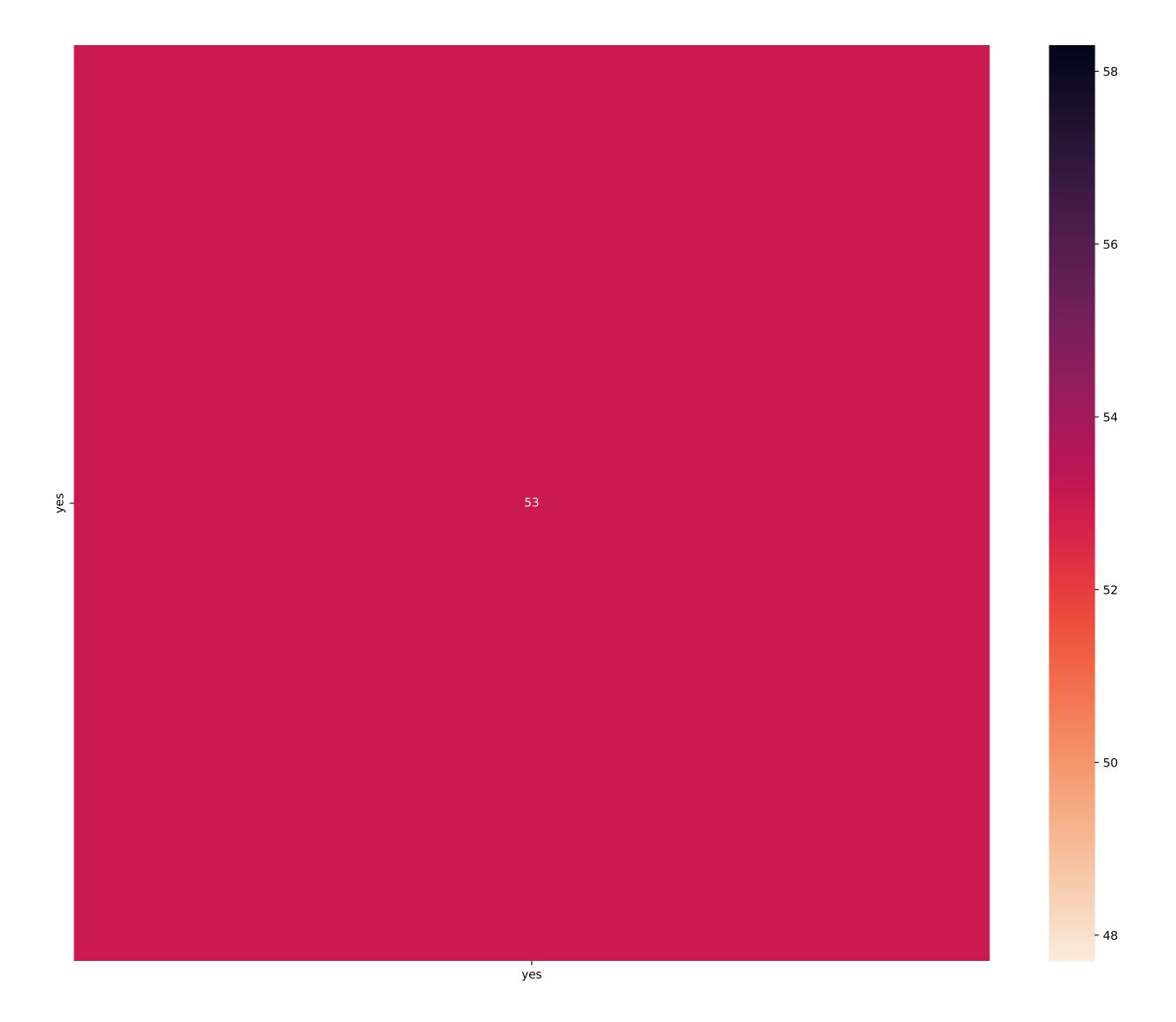
- 27

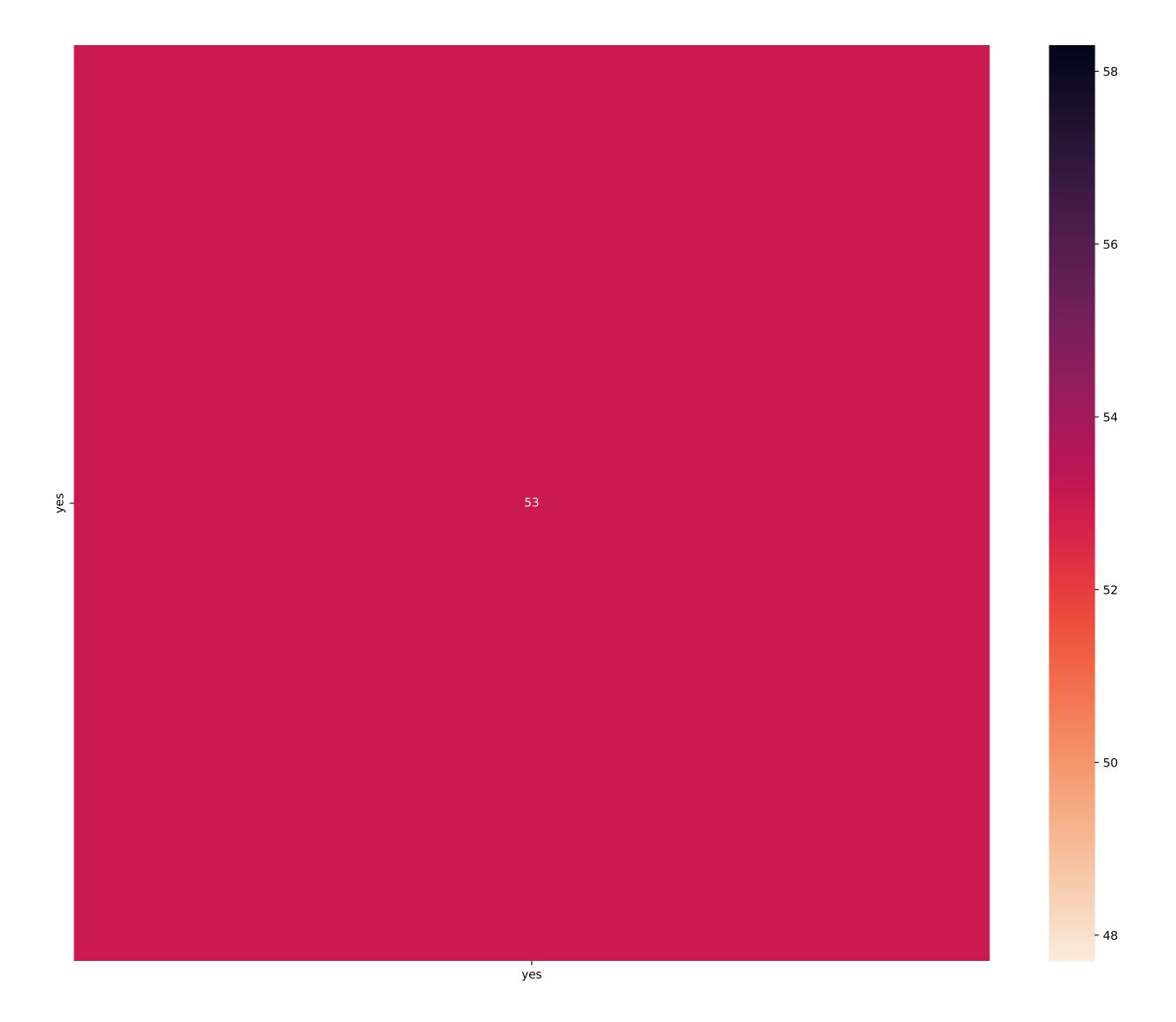
- 26

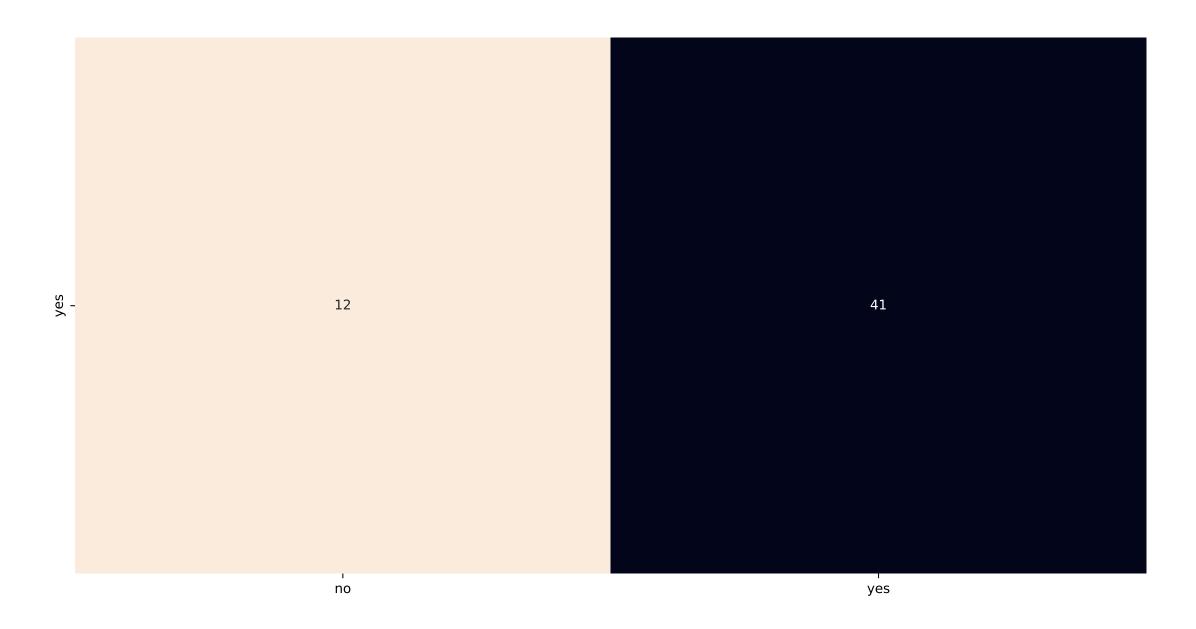
- 25

- 24

- 23







- 30

- 25

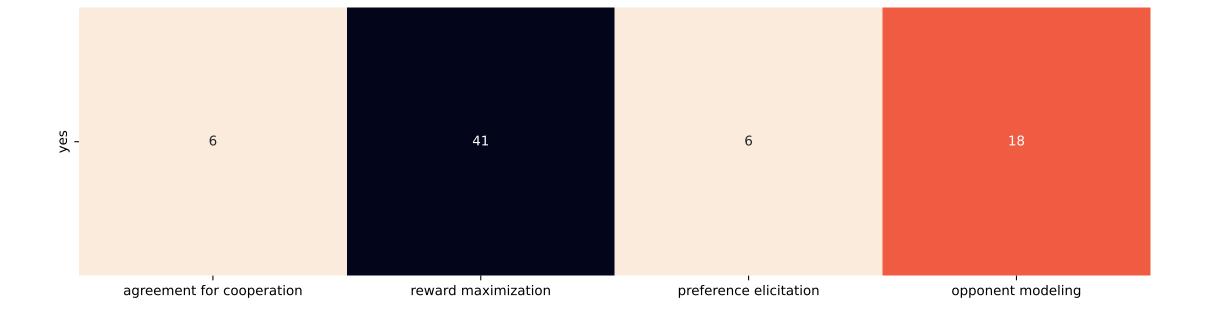
- 20

yes	1	4	5	1	1	13	2	2	1	5	4	1	5	6	2	2	2	1	1	2
	logistic regression -	Fuzzy Logic System –	Gaussian probability -	Genetic Algorithm -	Multi bipartite gradient descent search -	Reinforcement learning -	Linear Regression –	- ISTM -	Angle based Similarirty -	Optimization Approach –	Monte Carlo Tree search -	Temporal Logic -	Neural Network –	Bayesian Learning –	Heuristic Algorithm –	Linear Programming -	Equilibrium strategies –	Nonlinear Regression -	Markov Decision Process -	Argumentation –

- 10

- 8

- 6



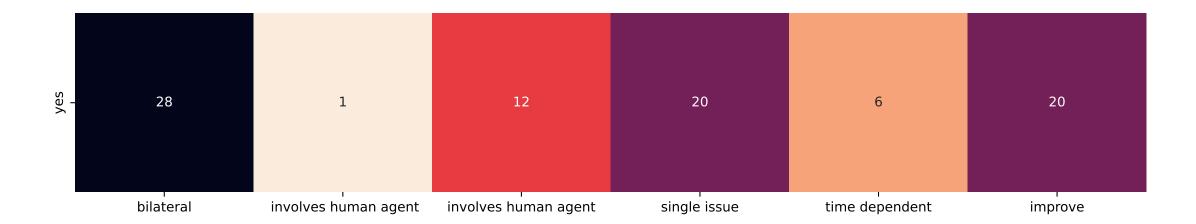
- 35

- 30

- 25

- 20

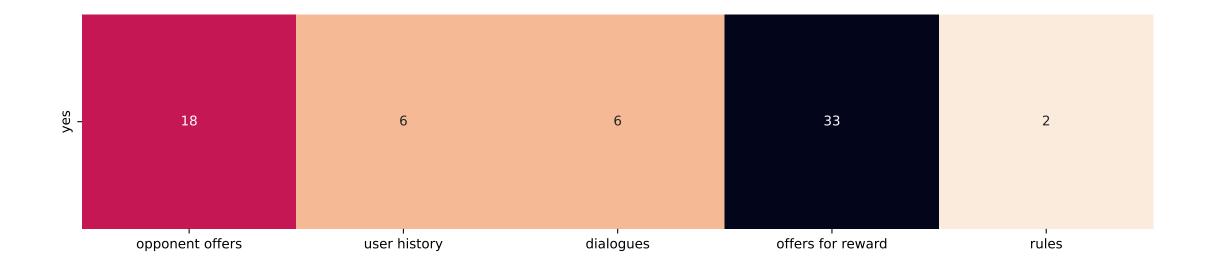
- 15



- 20

- 15

- 10

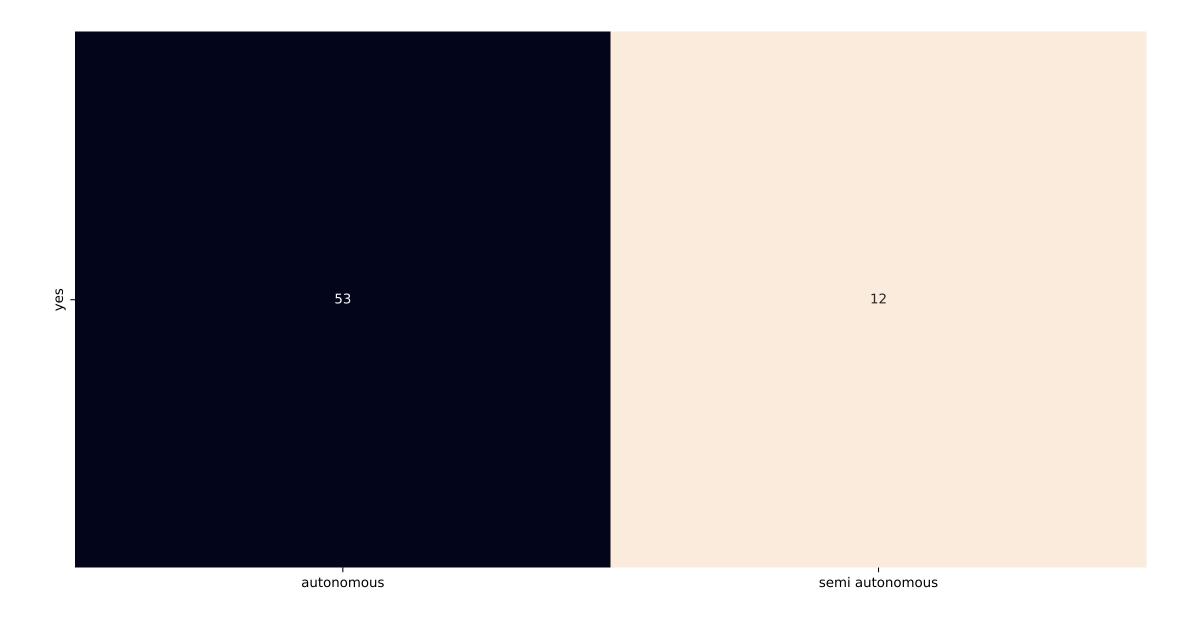


- 25

- 20

- 15

- 10



- 45

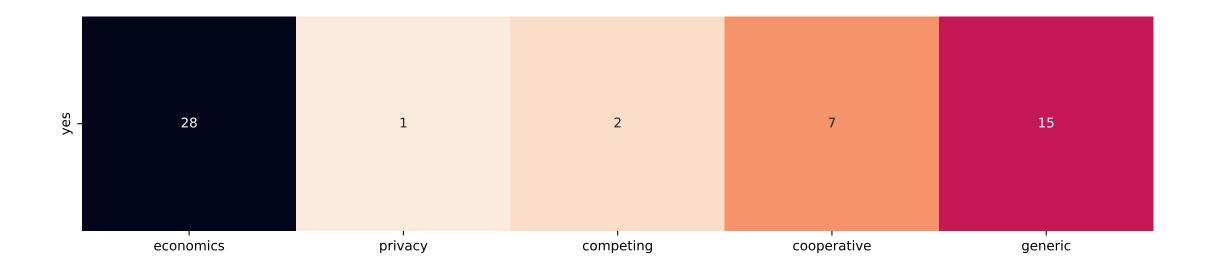
- 40

- 35

- 30

- 25

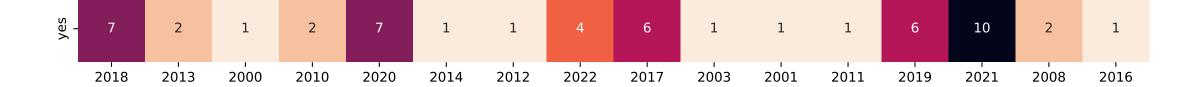
- 20



- 20

- 15

- 10



r 10

- 9

Lo

7

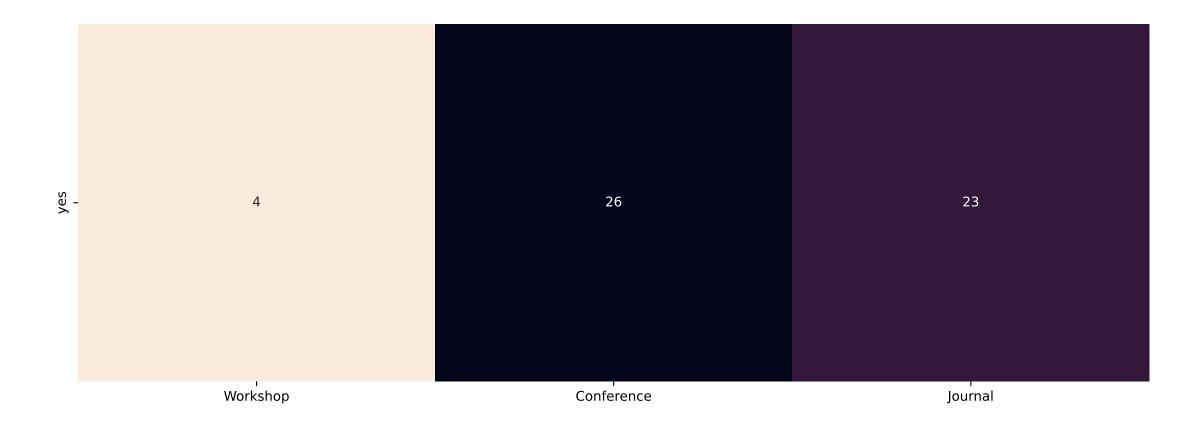
- 6

- 5

_ /

- 3

- 2



- 25.0

- 22.5

- 20.0

- 17.5

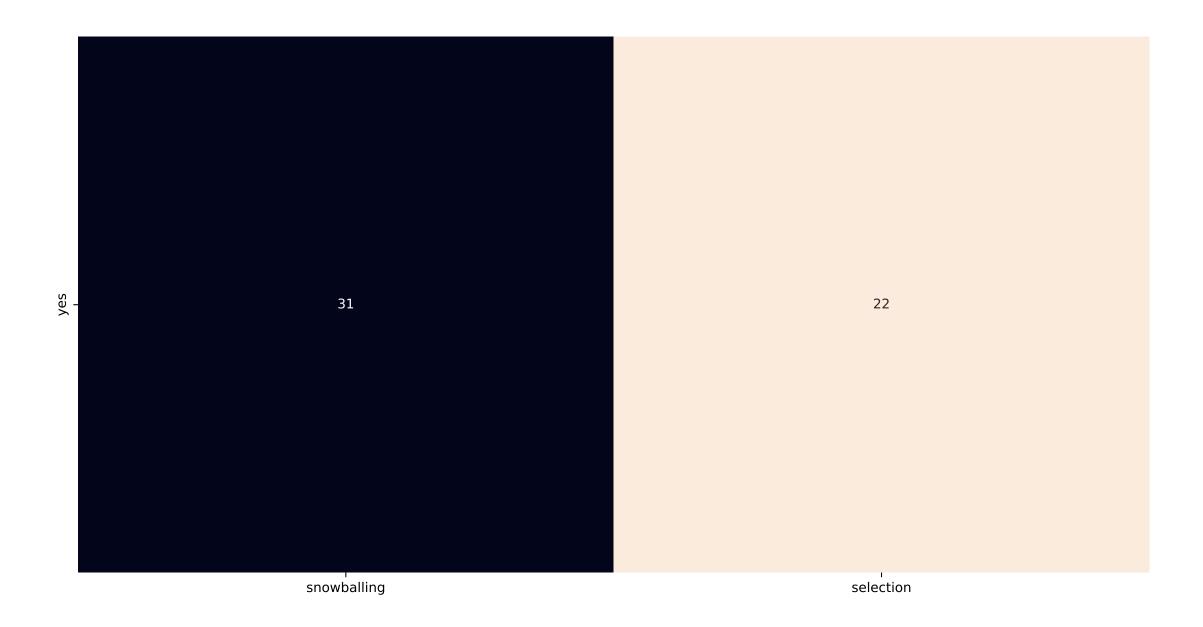
- 15.0

- 12.5

- 10.0

- 7.5

- 5.0



31

- 30

- 29

- 28

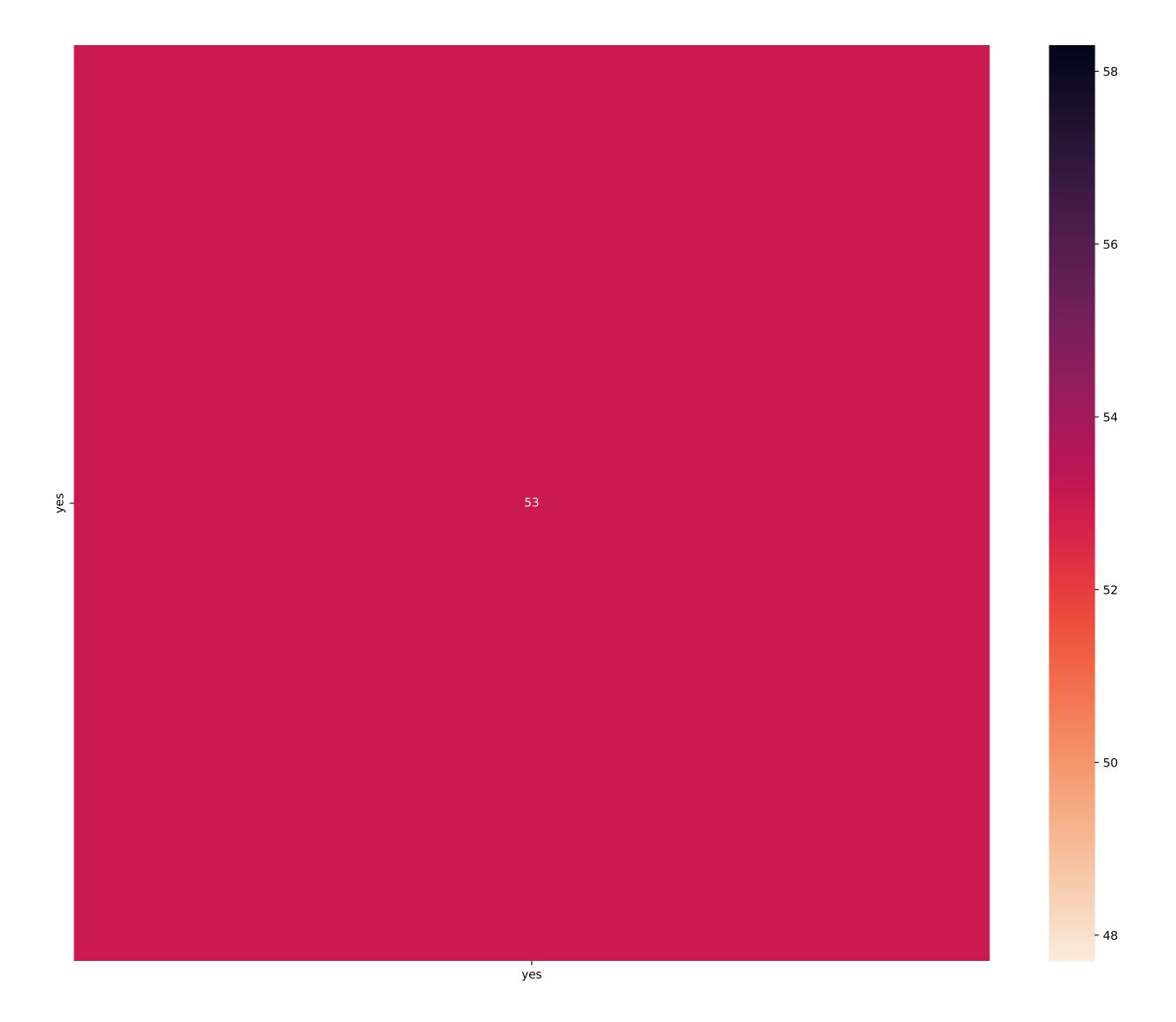
- 27

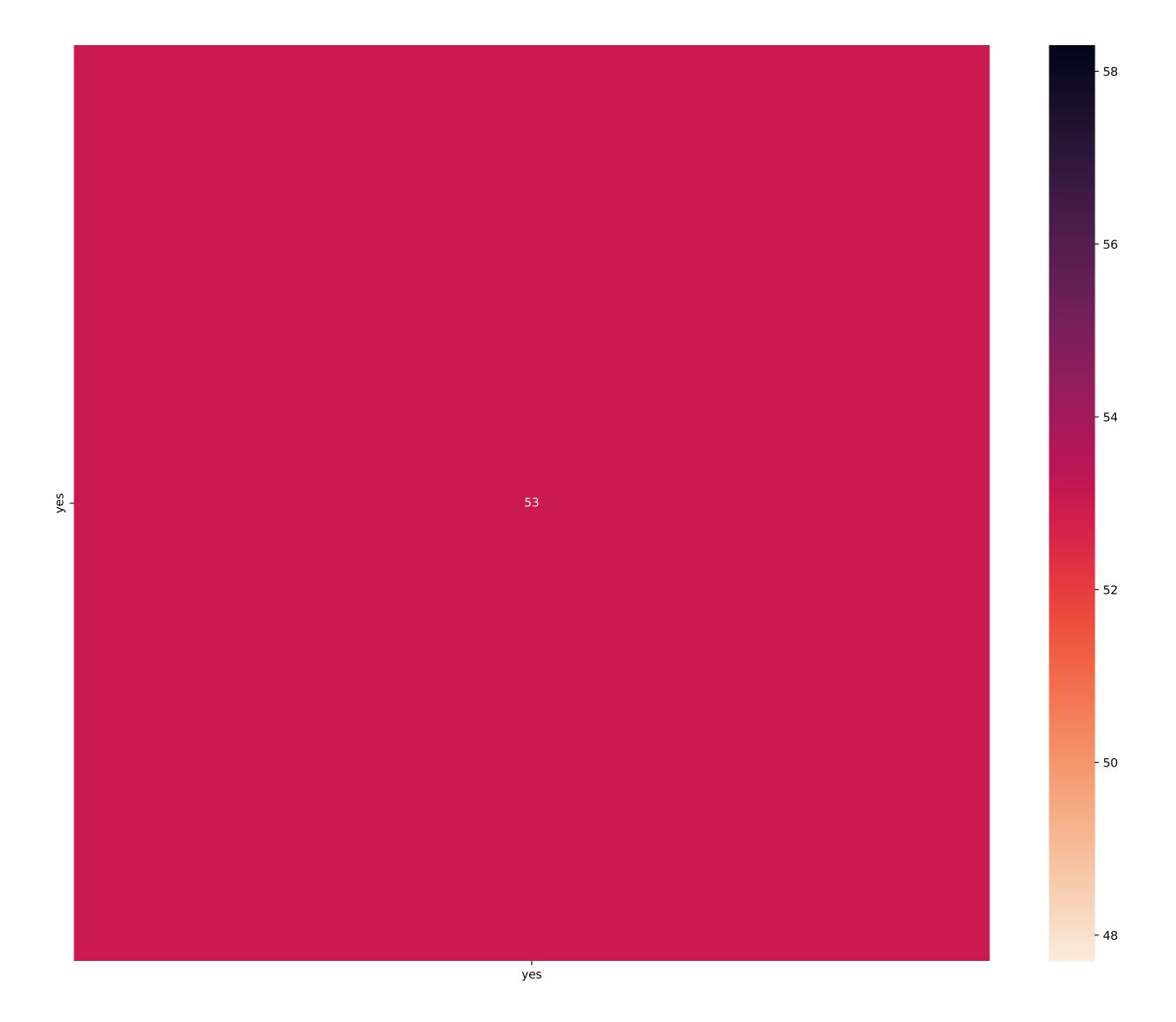
- 26

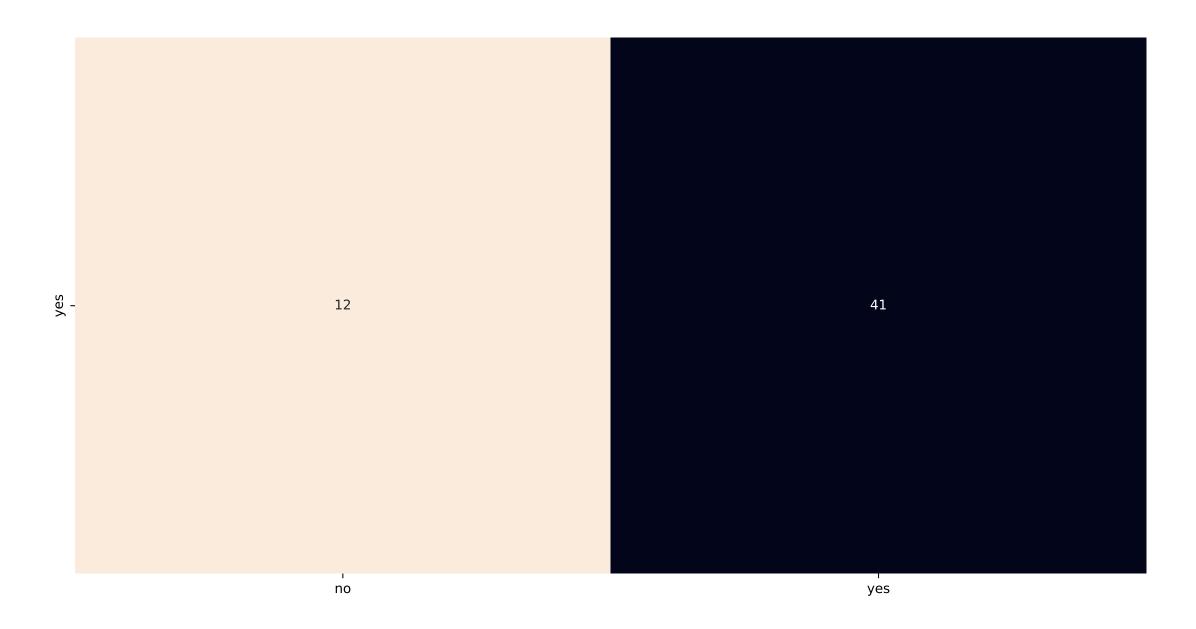
- 25

- 24

- 23







- 30

- 25

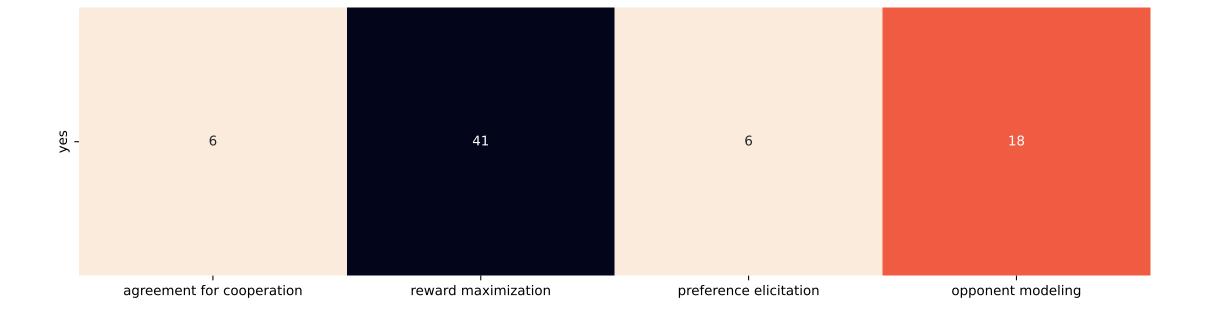
- 20

yes	1	4	5	1	1	13	2	2	1	5	4	1	5	6	2	2	2	1	1	2
	logistic regression -	Fuzzy Logic System –	Gaussian probability -	Genetic Algorithm -	Multi bipartite gradient descent search -	Reinforcement learning -	Linear Regression –	- ISTM -	Angle based Similarirty -	Optimization Approach –	Monte Carlo Tree search -	Temporal Logic -	Neural Network –	Bayesian Learning –	Heuristic Algorithm –	Linear Programming -	Equilibrium strategies –	Nonlinear Regression -	Markov Decision Process -	Argumentation –

- 10

- 8

- 6



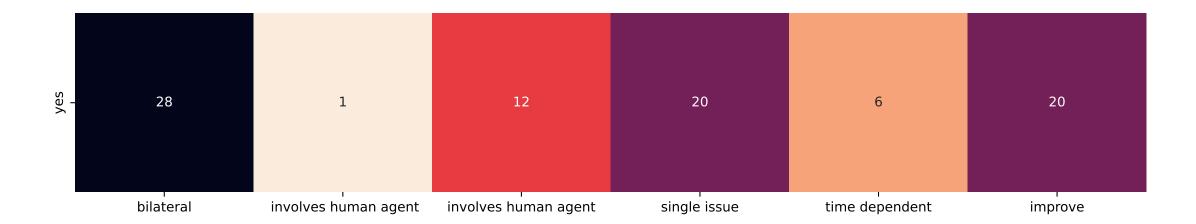
- 35

- 30

- 25

- 20

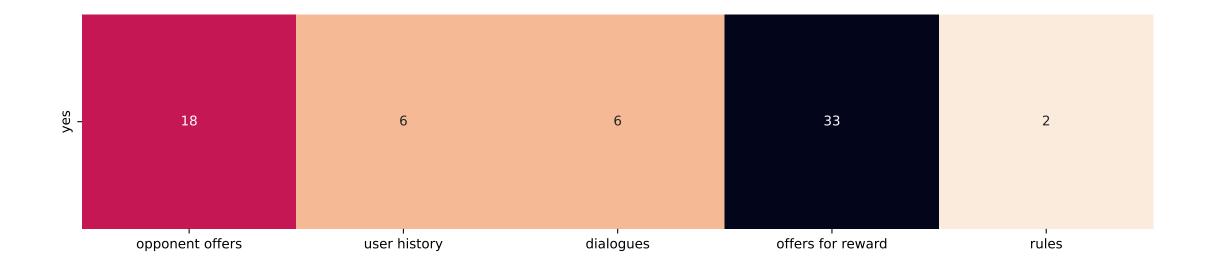
- 15



- 20

- 15

- 10

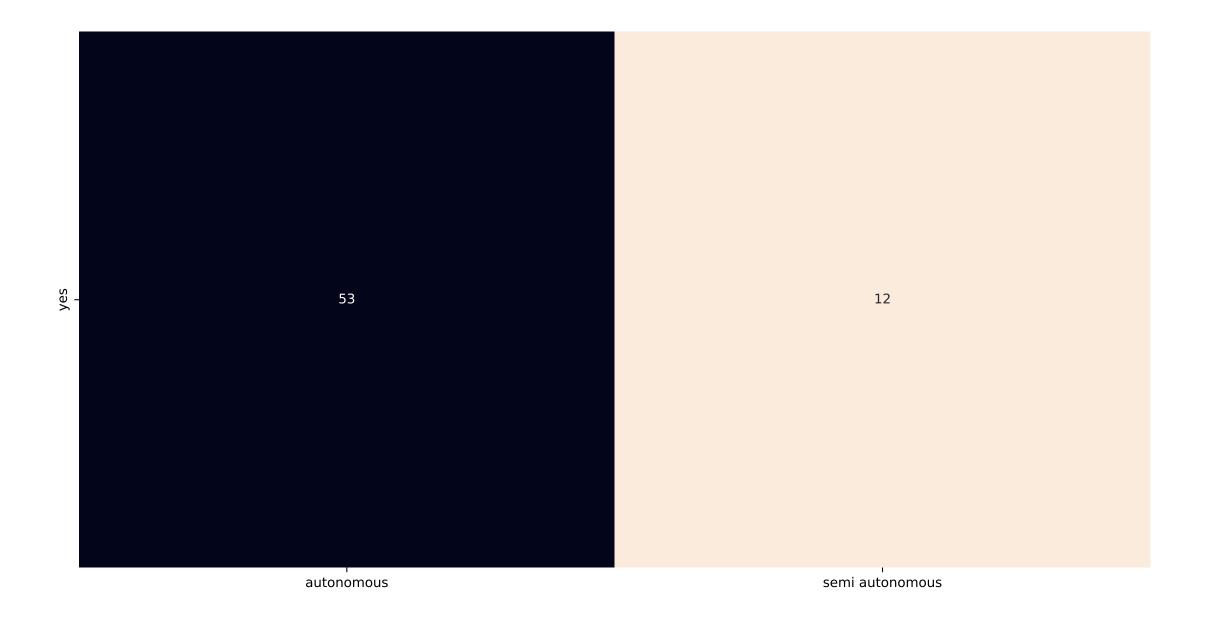


- 25

- 20

- 15

- 10



- 45

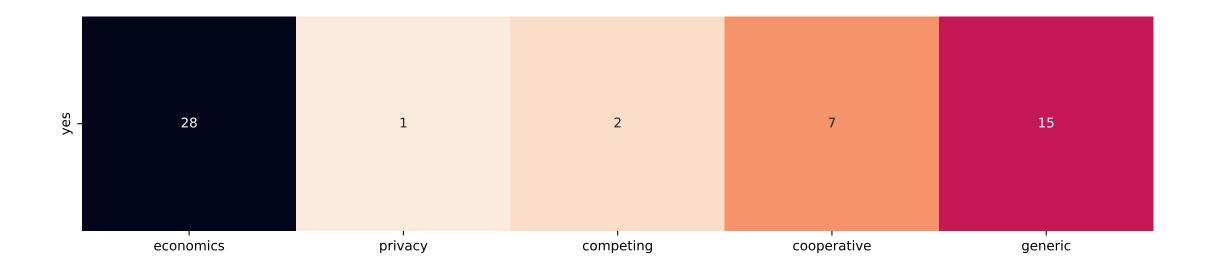
- 40

- 35

- 30

- 25

- 20



- 20

- 15

- 10



- 8

٦,

_

- 5

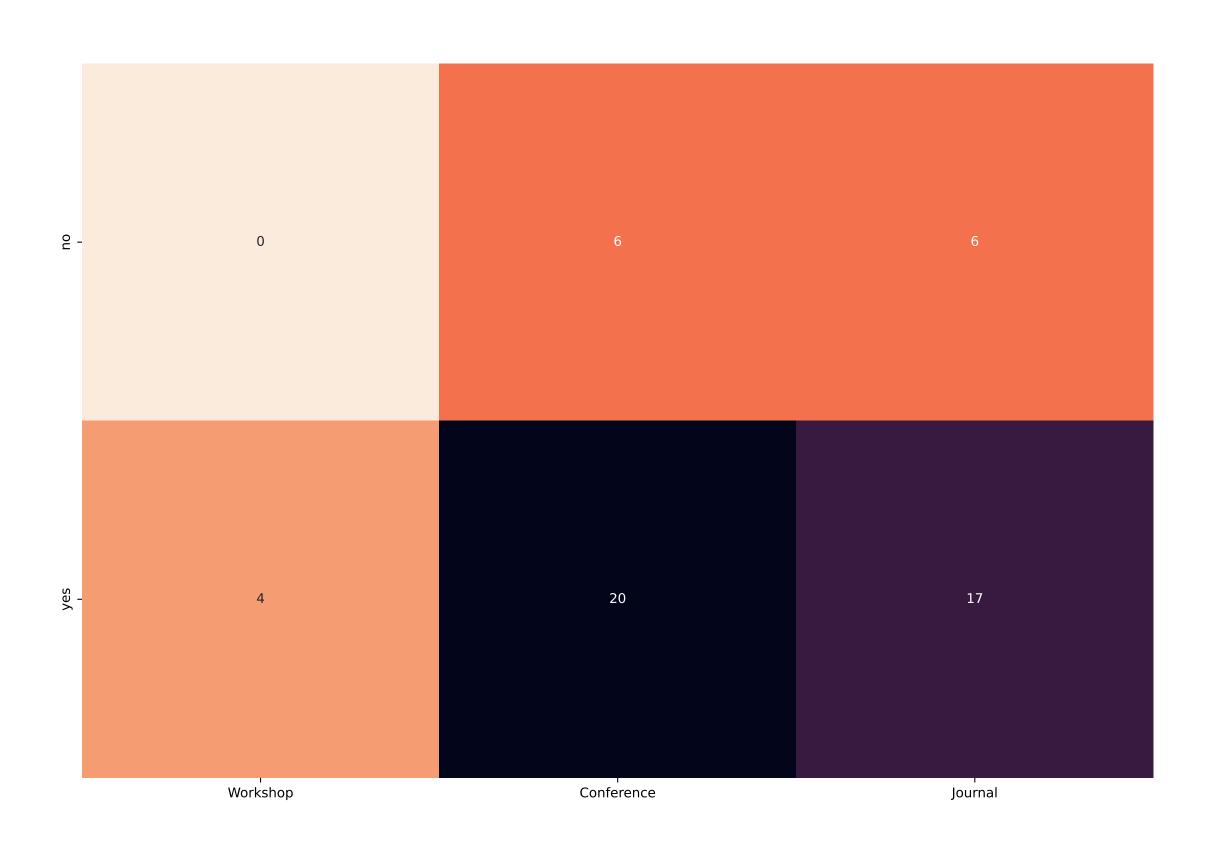
- 4

.

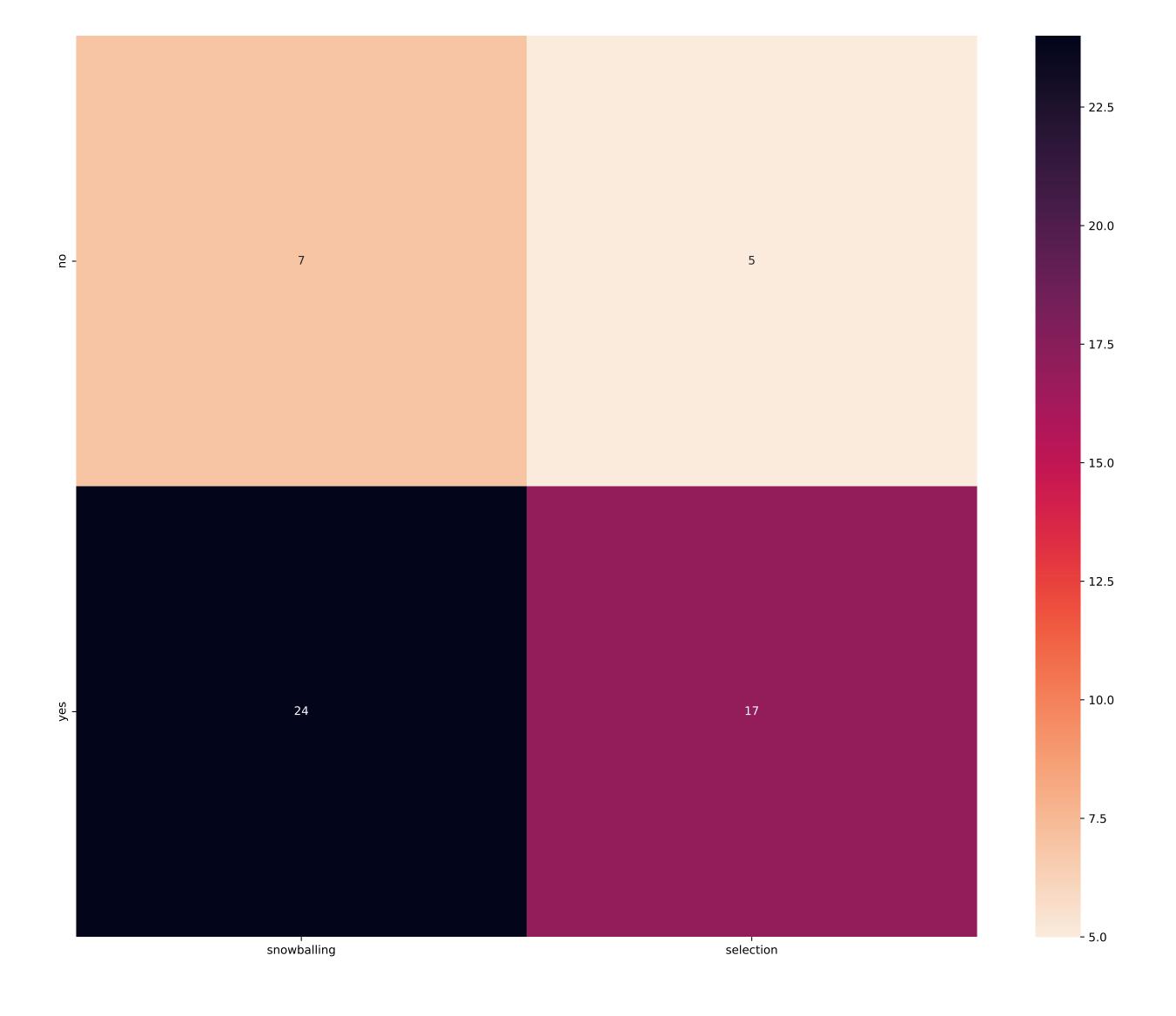
- 2

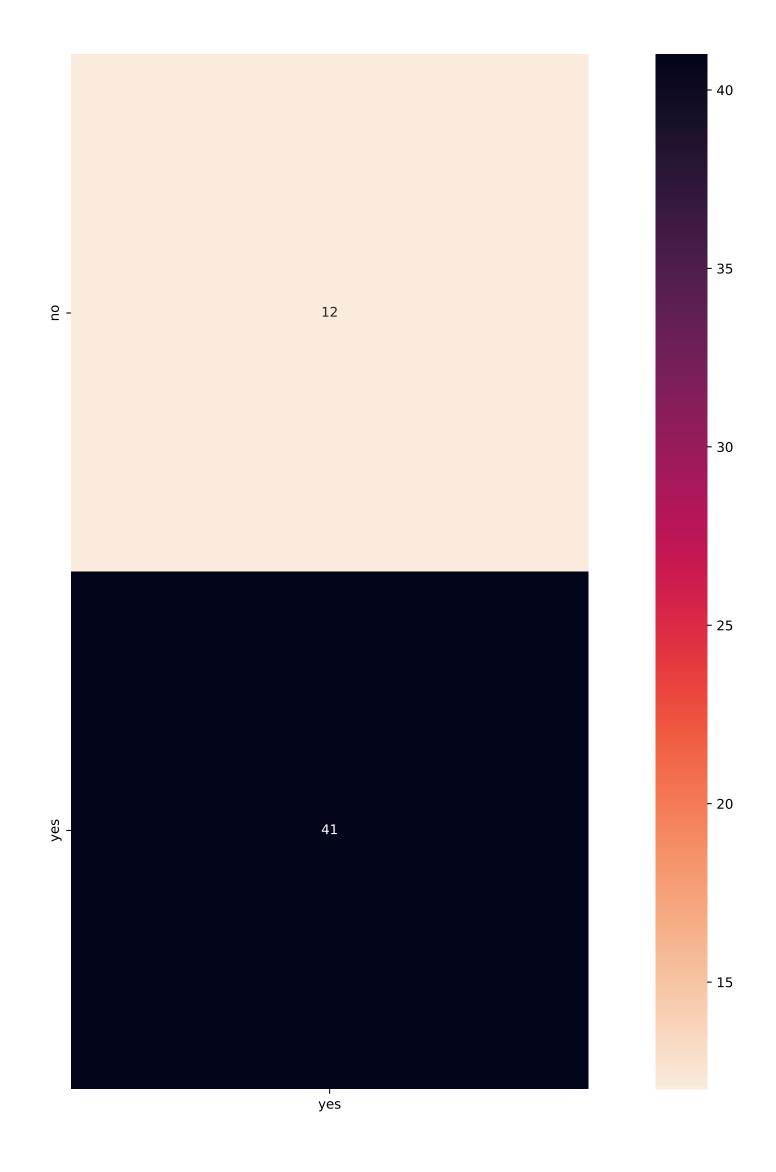
- 1

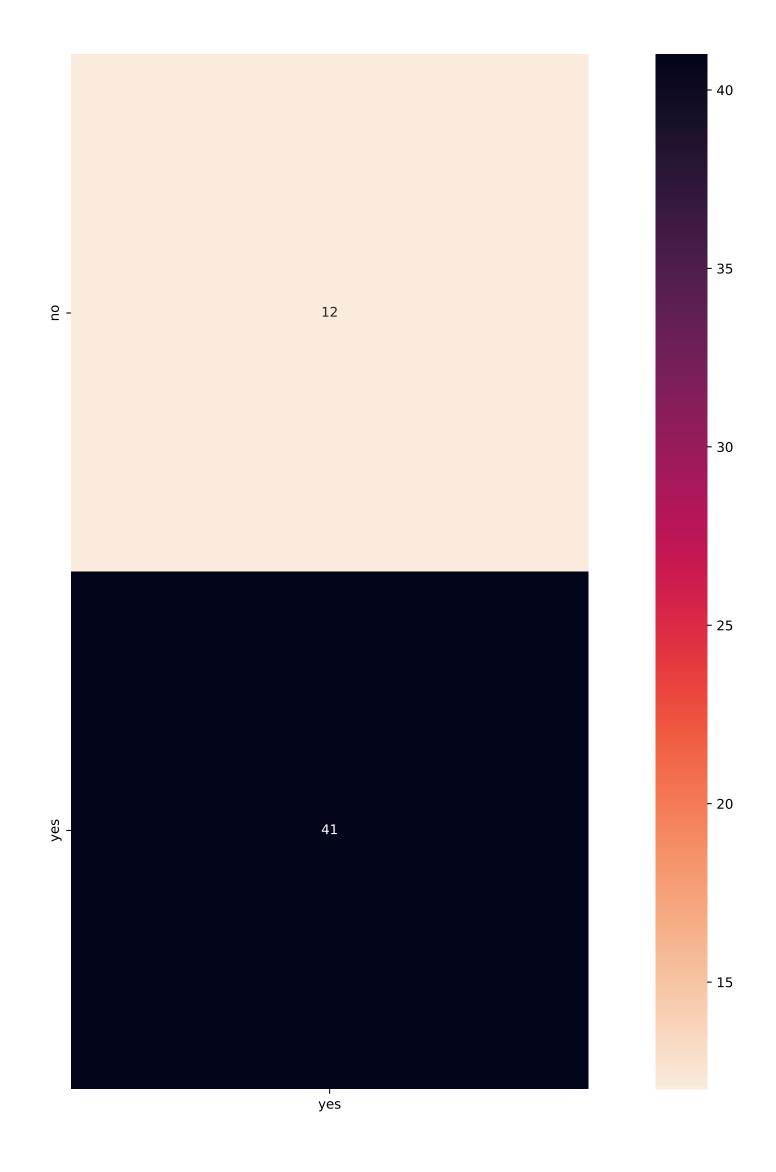
- n

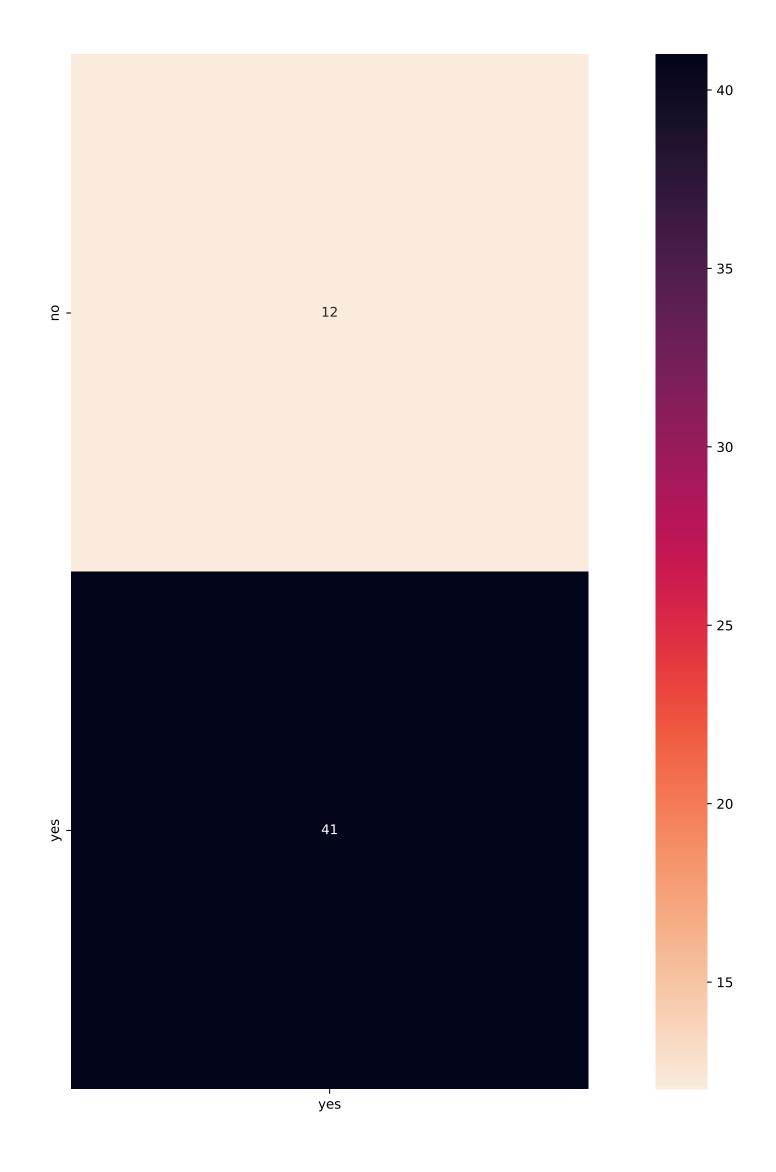


20.0 - 17.5 - 15.0 - 12.5 - 10.0 - 7.5 - 5.0 - 2.5









0 -	0	0	0	0	0	0	0	0	0	5	3	1	0	0	1	0	2	0	0	0
yes	1	4	5	1	1	13	2	2	1	0	1	0	5	6	1	2	0	1	1	2
	logistic regression -	Fuzzy Logic System -	Gaussian probability -	Genetic Algorithm –	Multi bipartite gradient descent search -	Reinforcement learning -	Linear Regression –	LSTM -	Angle based Similarirty -	Optimization Approach -	Monte Carlo Tree search -	Temporal Logic -	Neural Network -	Bayesian Learning -	Heuristic Algorithm -	Linear Programming -	Equilibrium strategies -	Nonlinear Regression –	Markov Decision Process -	Argumentation -

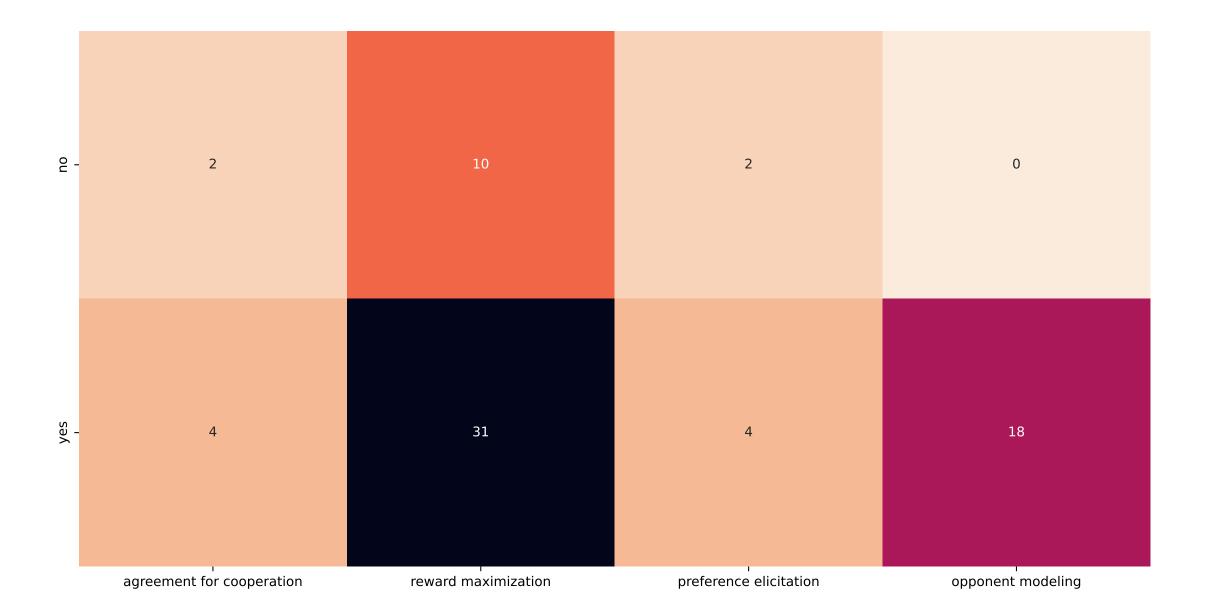
- 10

- 6

-

-

- n



- 25

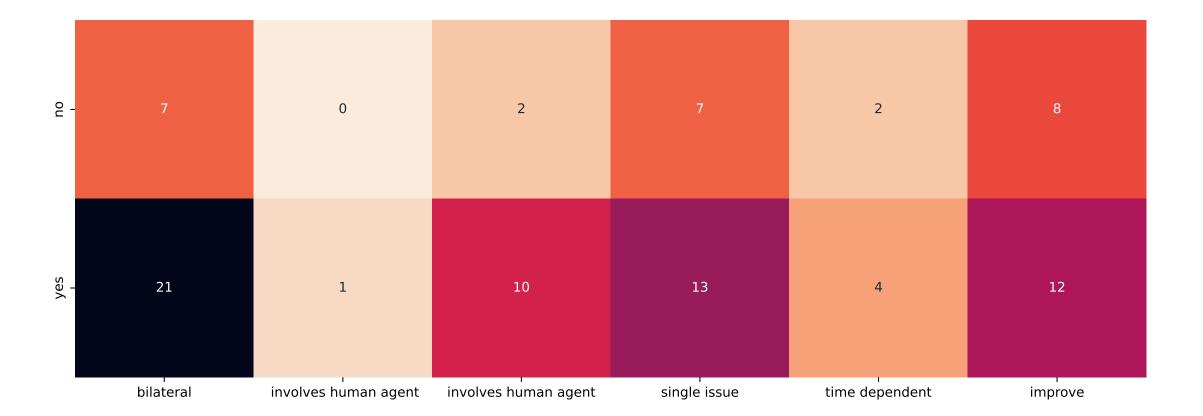
- 20

- 15

- 10

- 5

_



- 17.5

- 15.0

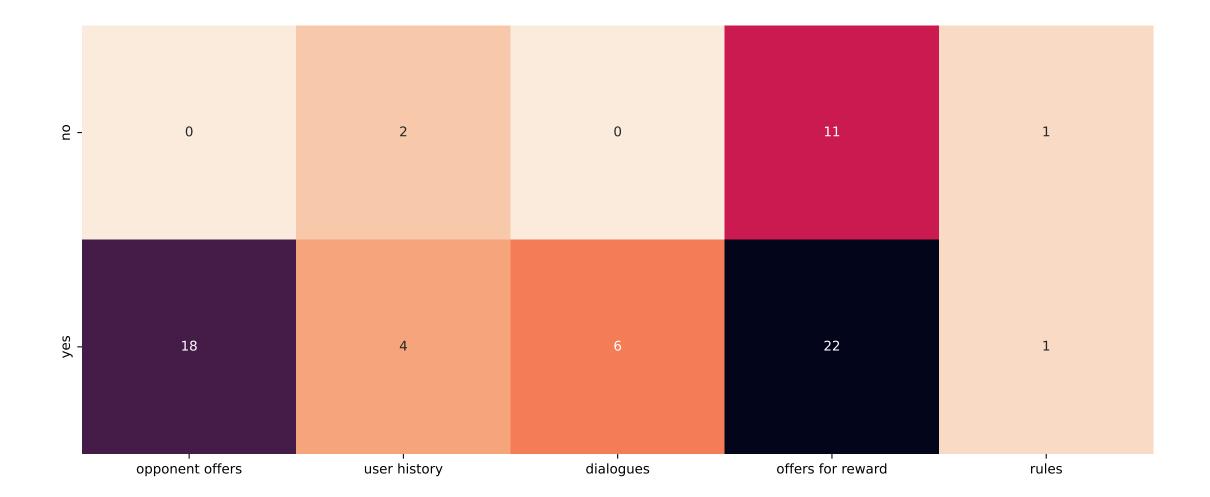
- 12.5

- 10.0

- 7.5

- 5.0

- 2.5



- 17.5

- 15.0

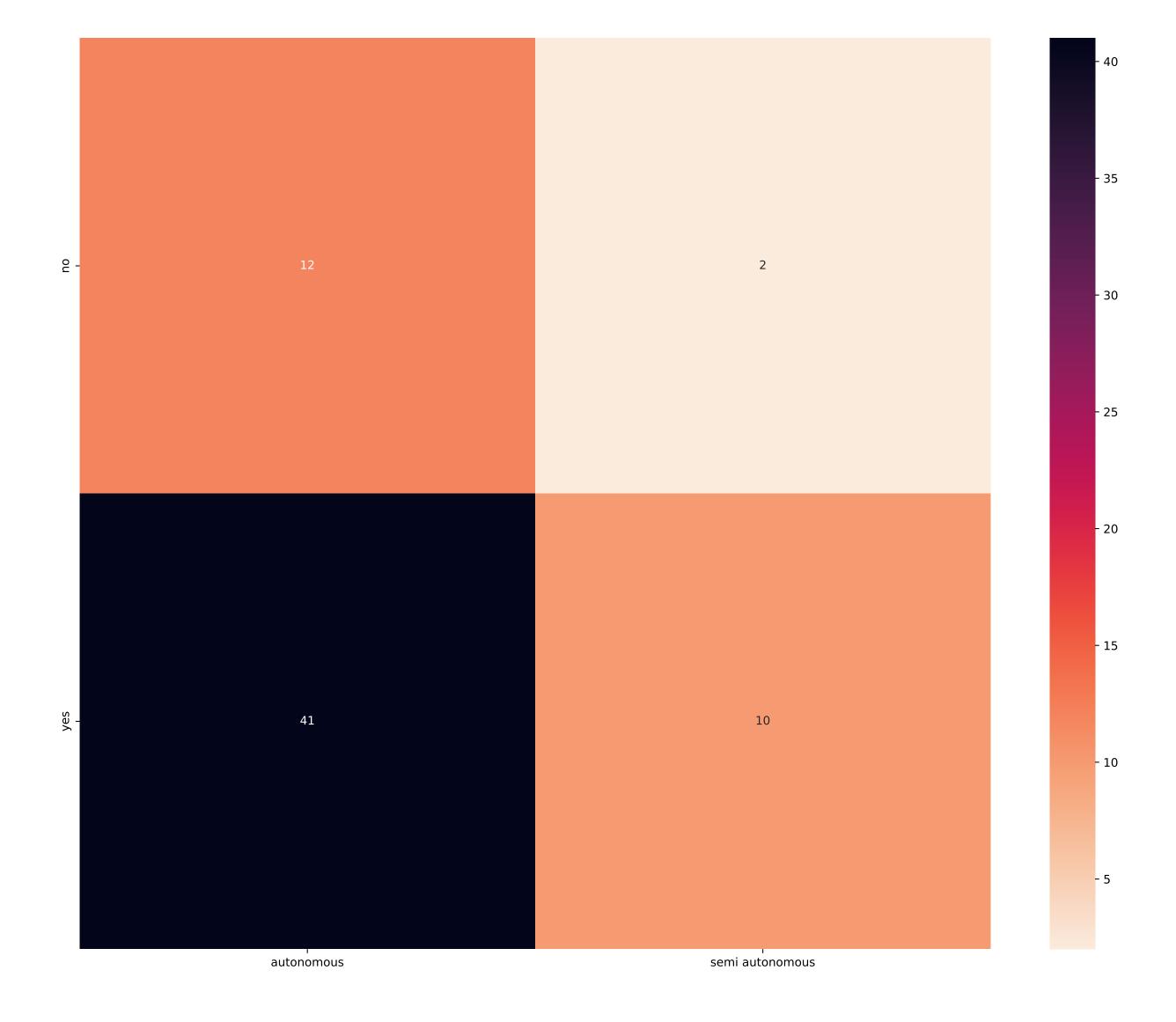
- 12.5

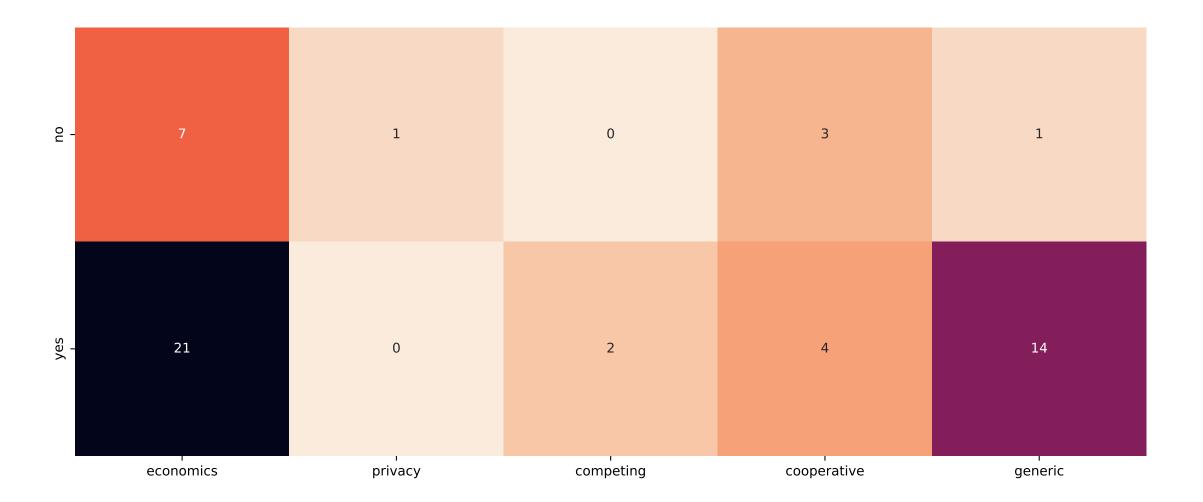
- 10.0

- 7.5

- 5.0

- 2.5





- 17.5

- 15.0

- 12.5

- 10.0

- 7.5

- 5.0

- 2.5

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

- 3 - 2 - 1

logistic regression -	0	0	1
Fuzzy Logic System -	0	1	3
Gaussian probability -	0	5	0
Genetic Algorithm -	0	0	1
Multi bipartite gradient descent search -	0	1	0
Reinforcement learning -	2	7	4
Linear Regression -	0	1	1
LSTM -	1	1	0
Angle based Similarirty -	0	0	1
Optimization Approach -	0	2	3
Monte Carlo Tree search -	0	4	0
Temporal Logic -	0	0	1
Neural Network -	1	1	3
Bayesian Learning -	1	2	3
Heuristic Algorithm -	1	0	1
Linear Programming -	0	0	2
Equilibrium strategies -	0	1	1
Nonlinear Regression -	0	0	1
Markov Decision Process -	0	1	0
Argumentation -	0	2	0
	Workshop -	Conference -	Journal -

- 1

logistic regression -0 Fuzzy Logic System -Gaussian probability -Genetic Algorithm - 1 0 Multi bipartite gradient descent search - 0 Reinforcement learning -Linear Regression - 1 LSTM -0 Angle based Similarirty - 1 0 Optimization Approach -Monte Carlo Tree search - 1 Temporal Logic - 1 0 Neural Network -Bayesian Learning -Heuristic Algorithm -0 Linear Programming - 1 Equilibrium strategies - 0 Nonlinear Regression - 1 Markov Decision Process - 0 Argumentation - 0 selection -

7

- 6

- 5

- 4

- 3

- 2

logistic regression - 1 Fuzzy Logic System -Gaussian probability -Genetic Algorithm - 1 Multi bipartite gradient descent search - 1 Reinforcement learning -13 Linear Regression - 2 LSTM - 2 Angle based Similarirty - 1 Optimization Approach -Monte Carlo Tree search -Temporal Logic - 1 Neural Network -Bayesian Learning -Heuristic Algorithm - 2 Linear Programming - 2 Equilibrium strategies - 2 Nonlinear Regression - 1 Markov Decision Process - 1 Argumentation - 2

yes

- 12 - 10 - 8

logistic regression - 1 Fuzzy Logic System -Gaussian probability -Genetic Algorithm - 1 Multi bipartite gradient descent search - 1 Reinforcement learning -13 Linear Regression - 2 LSTM - 2 Angle based Similarirty - 1 Optimization Approach -Monte Carlo Tree search -Temporal Logic - 1 Neural Network -Bayesian Learning -Heuristic Algorithm - 2 Linear Programming - 2 Equilibrium strategies - 2 Nonlinear Regression - 1 Markov Decision Process - 1 Argumentation - 2

yes

- 12 - 10 - 8

logistic regression - 1 Fuzzy Logic System -Gaussian probability -Genetic Algorithm - 1 Multi bipartite gradient descent search - 1 Reinforcement learning -13 Linear Regression - 2 LSTM - 2 Angle based Similarirty - 1 Optimization Approach -Monte Carlo Tree search -Temporal Logic - 1 Neural Network -Bayesian Learning -Heuristic Algorithm - 2 Linear Programming - 2 Equilibrium strategies - 2 Nonlinear Regression - 1 Markov Decision Process - 1 Argumentation - 2

yes

- 12 - 10 - 8

logistic regression - 0 Fuzzy Logic System - 0 Gaussian probability - 0 Genetic Algorithm - 0 Multi bipartite gradient descent search - 0 Reinforcement learning - 0 13 Linear Regression - 0 LSTM - 0 2 Angle based Similarirty - 0 Optimization Approach -0 Monte Carlo Tree search -1 Temporal Logic - 1 0 Neural Network - 0 Bayesian Learning - 0 Heuristic Algorithm - 1 Linear Programming - 0 2 Equilibrium strategies - 2 0 Nonlinear Regression - 0 Markov Decision Process - 0 Argumentation - 0 2 yes no

- 12 - 10 - 6 - 2

logistic regression - 0 Fuzzy Logic System - 0 Gaussian probability - 0 Genetic Algorithm - 0 0 Multi bipartite gradient descent search - 0 0 Reinforcement learning -Linear Regression - 0 LSTM - 1 0 0 Angle based Similarirty - 0 0 Optimization Approach - 0 0 Monte Carlo Tree search -0 Temporal Logic - 0 Neural Network - 0 Bayesian Learning - 0 Heuristic Algorithm - 0 0 Linear Programming - 0 Equilibrium strategies - 0 0 0 Nonlinear Regression - 0 1 0 Markov Decision Process - 0 0 Argumentation - 0 eward maximization opponent modeling reference elicitation

- 5 - 3 - 2 - 1

logistic regression - 1 0 Fuzzy Logic System -Gaussian probability - 1 Genetic Algorithm - 0 0 Multi bipartite gradient descent search -0 0 Reinforcement learning -1 Linear Regression - 0 LSTM - 0 0 0 0 0 Angle based Similarirty - 1 Optimization Approach -Monte Carlo Tree search -Temporal Logic - 1 0 Neural Network -0 1 Bayesian Learning -1 Heuristic Algorithm - 1 0 0 Linear Programming - 1 Equilibrium strategies - 1 0 0 Nonlinear Regression - 0 1 Markov Decision Process - 0 0 0 Argumentation - 0 single issue volves human agent time dependent

- 5 - 3 - 2 - 1

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

г 7

- 6

- 4

- 3

- 2

- 1

logistic regression - 1 0 Fuzzy Logic System -Gaussian probability -Genetic Algorithm - 1 Multi bipartite gradient descent search -0 Reinforcement learning -13 1 Linear Regression - 2 1 LSTM - 2 0 Angle based Similarirty - 1 0 Optimization Approach -1 Monte Carlo Tree search -0 Temporal Logic - 1 0 Neural Network -0 Bayesian Learning -0 Heuristic Algorithm - 2 1 Linear Programming - 2 1 Equilibrium strategies - 2 1 Nonlinear Regression - 1 Markov Decision Process - 1 Argumentation - 2 1 semi autonomous -

- 12

- 10

- 6

- 4

- 2

logistic regression -Fuzzy Logic System -Gaussian probability -Genetic Algorithm - 1 0 Multi bipartite gradient descent search - 0 0 Reinforcement learning -Linear Regression - 1 LSTM - 1 0 0 1 0 Angle based Similarirty - 1 0 Optimization Approach -0 Monte Carlo Tree search - 0 Temporal Logic -0 0 Neural Network -0 Bayesian Learning -Heuristic Algorithm -0 Linear Programming -Equilibrium strategies - 1 0 0 Nonlinear Regression - 1 Markov Decision Process - 0 0 0 Argumentation generic cooperative competing -

5

- 4

- 3

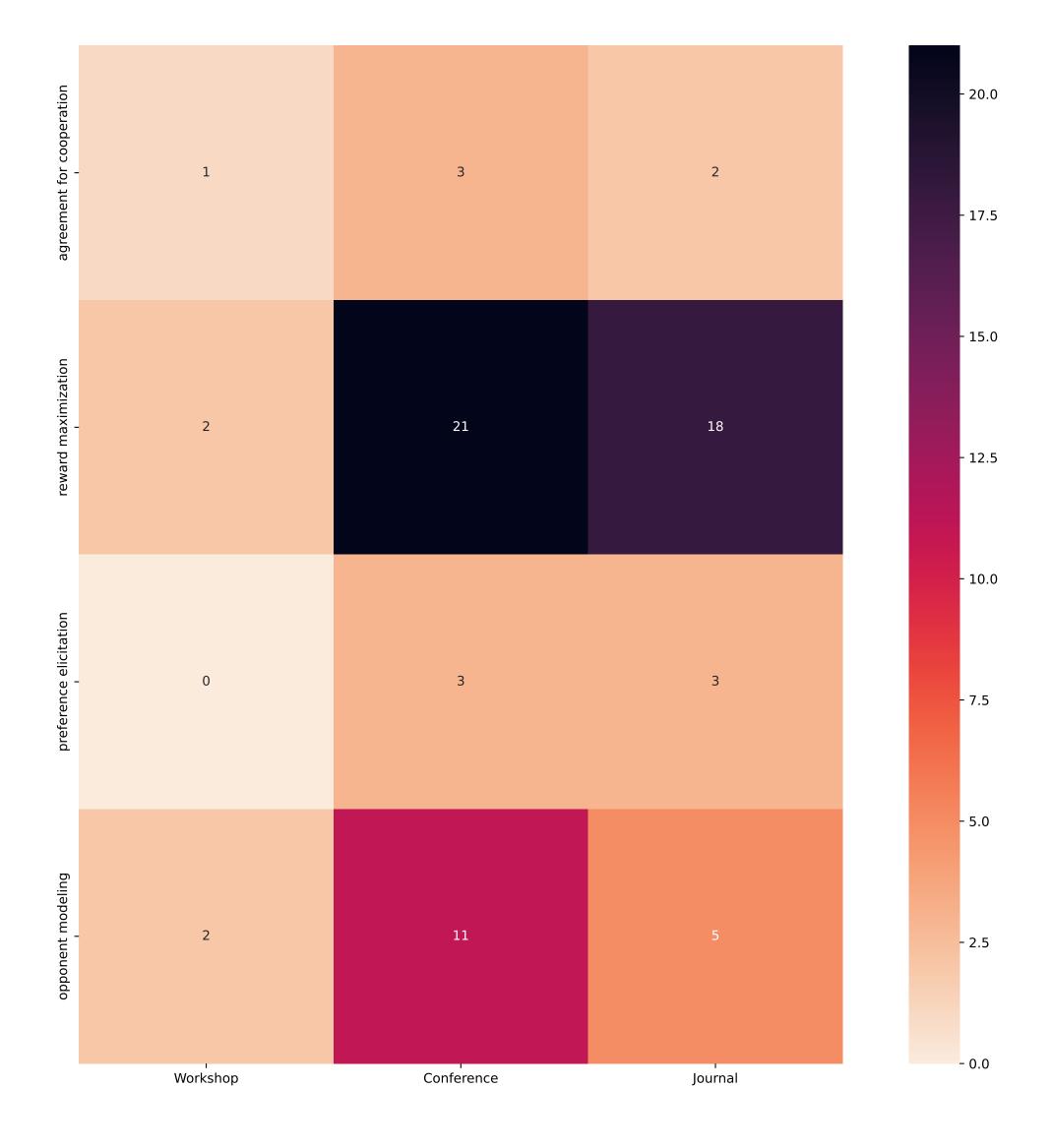
- 2

- 6

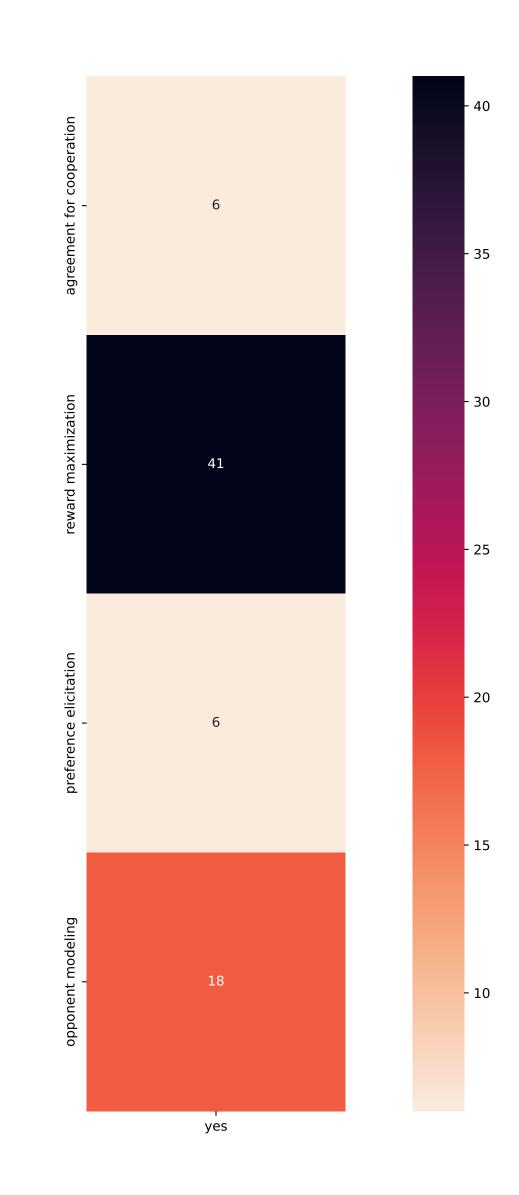
- 4

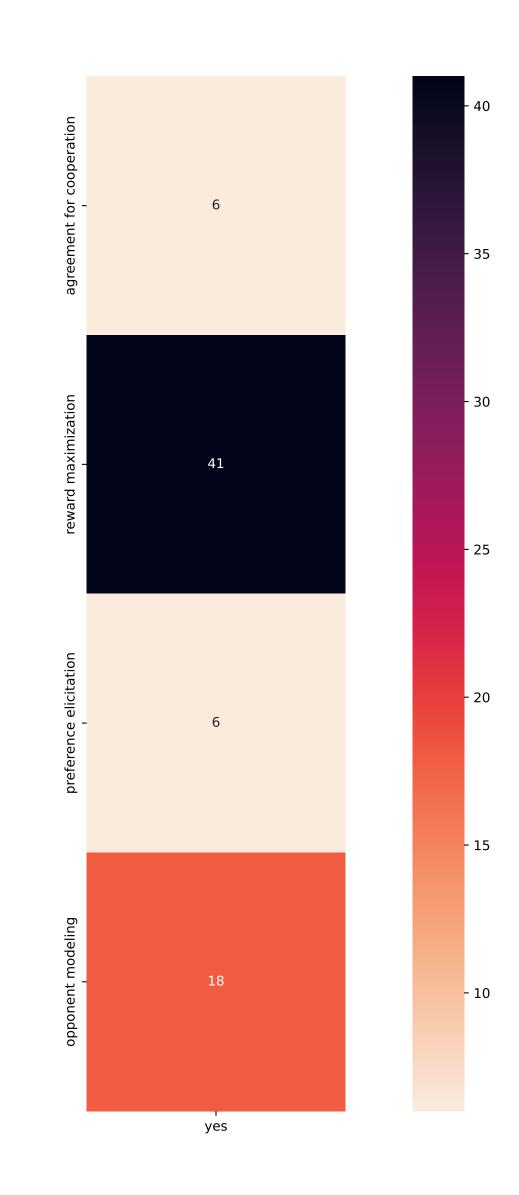
- 2

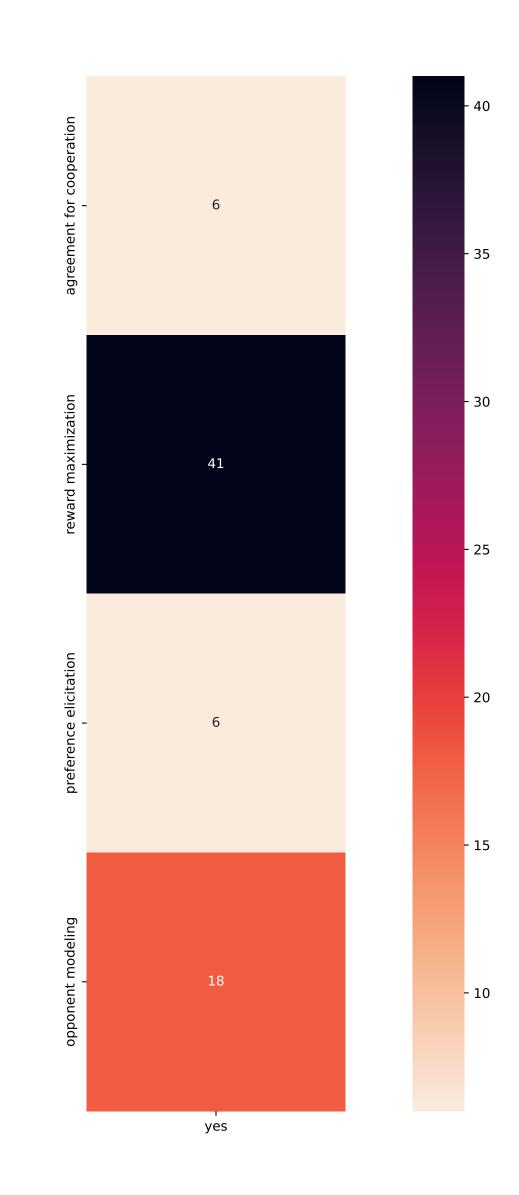
- n

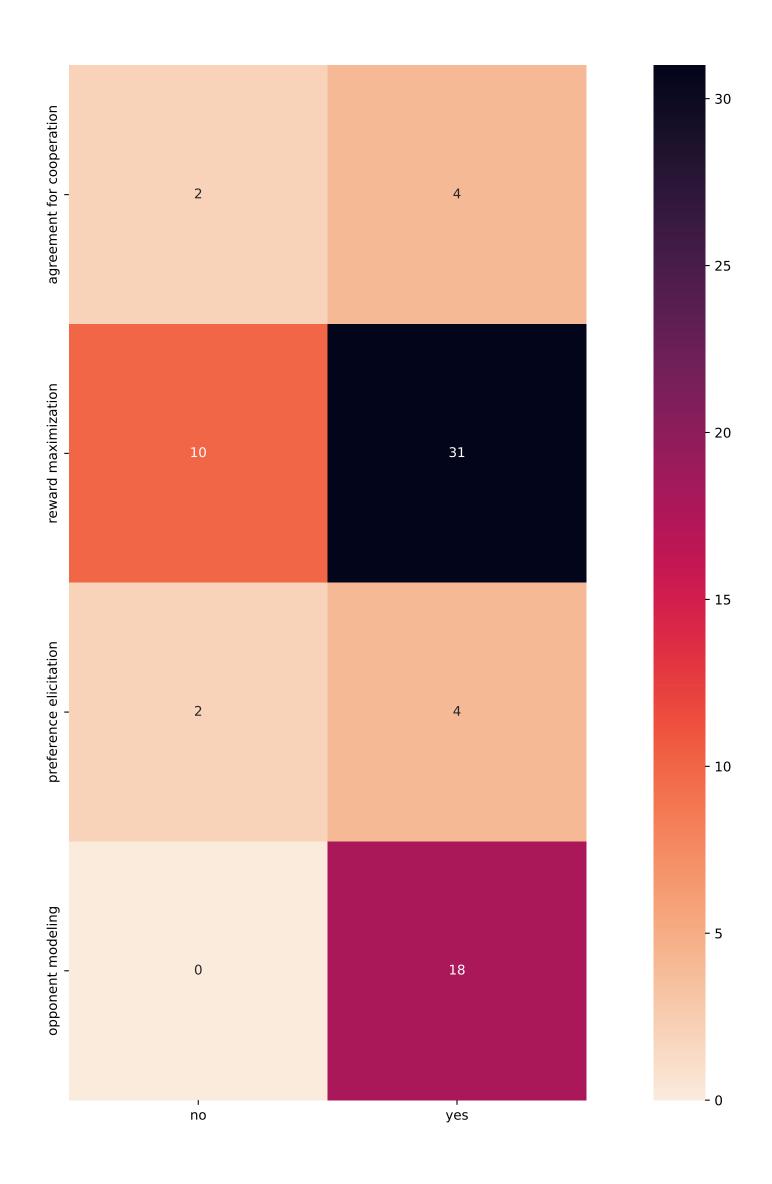












T 8

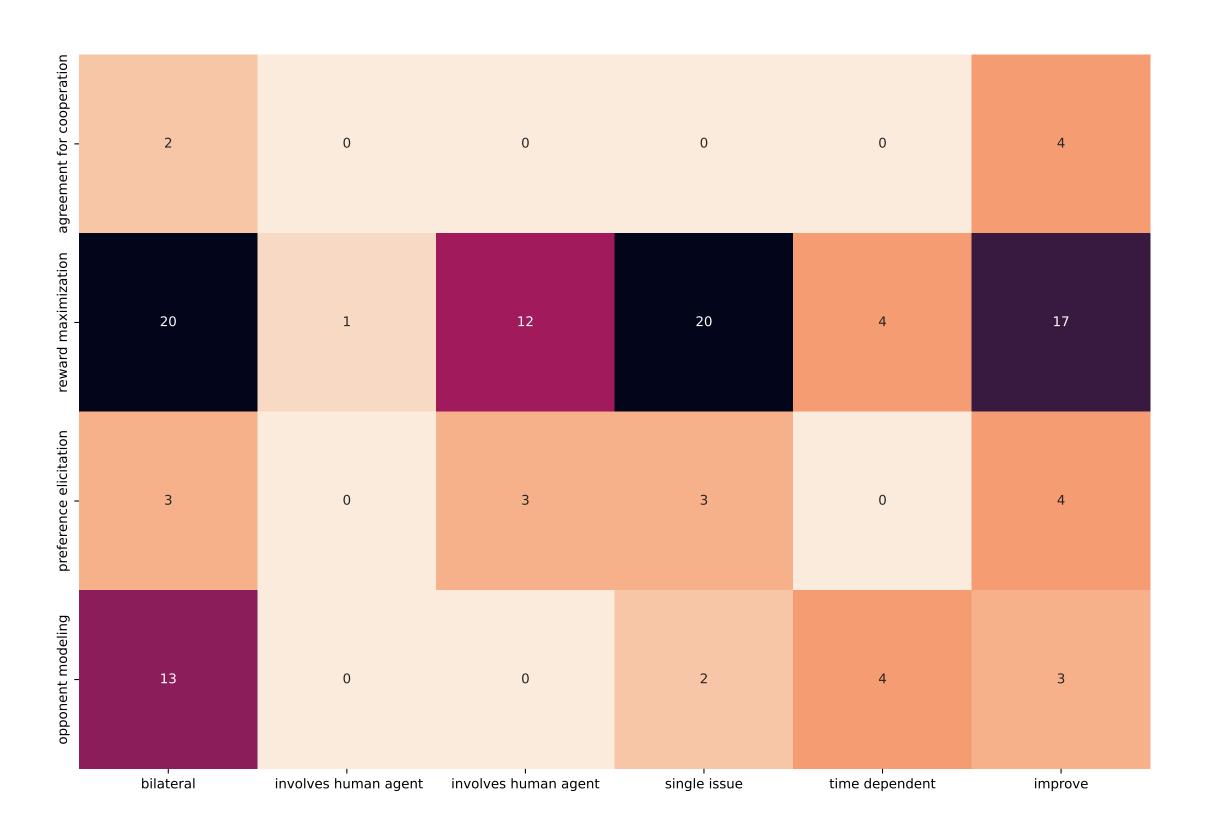
- 7

- 5

- 3

- 2

- 1



- 17.5

- 15.0

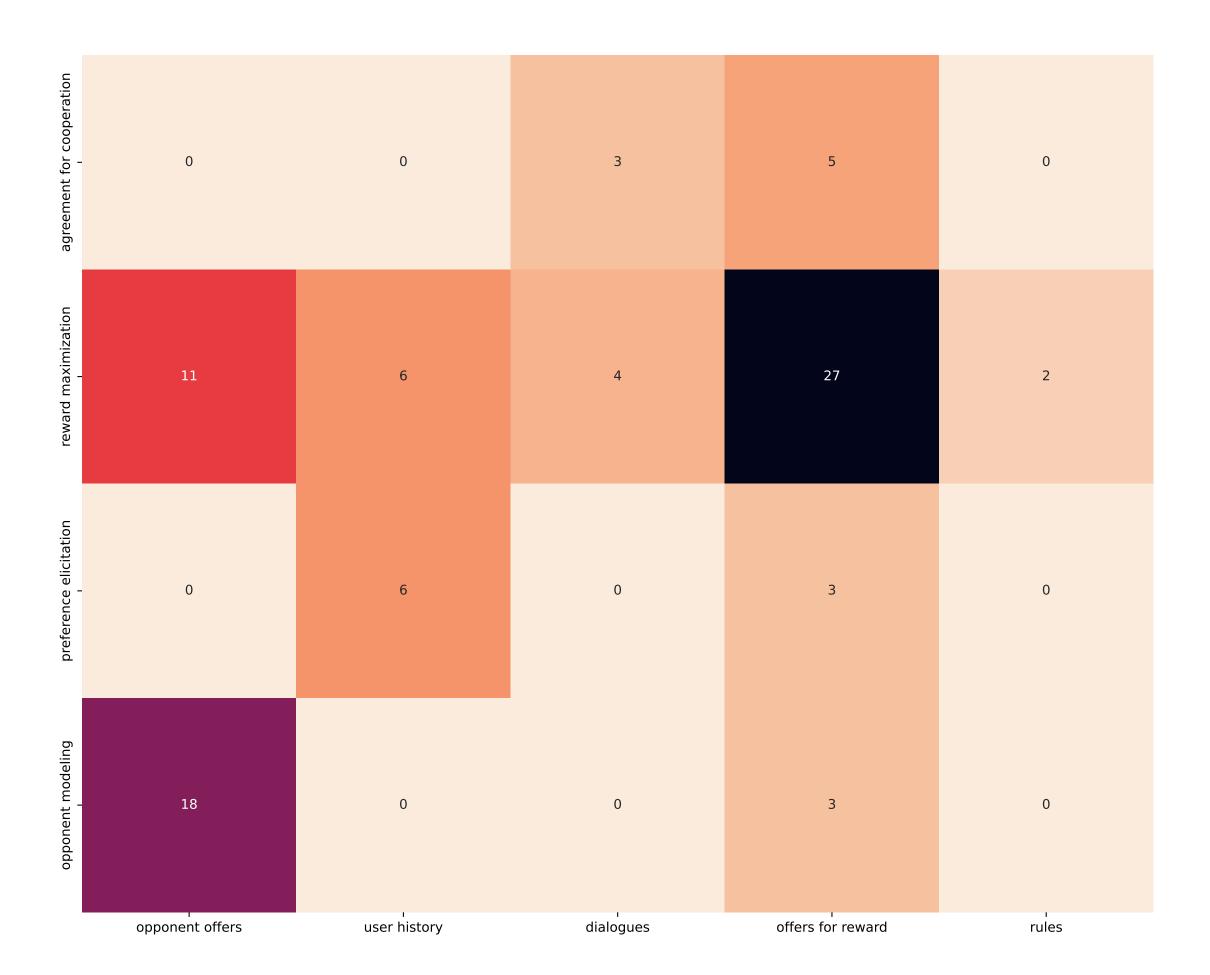
- 12.5

- 10.0

- 7.5

- 5.0

- 2.5

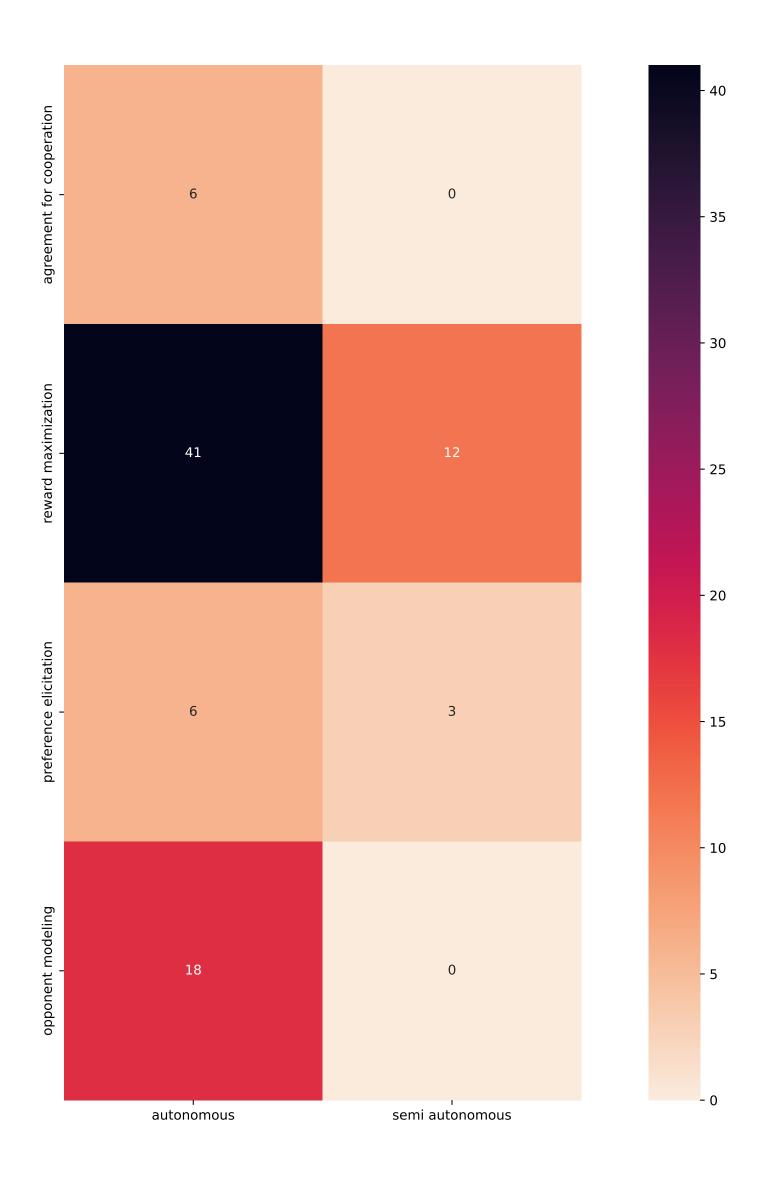


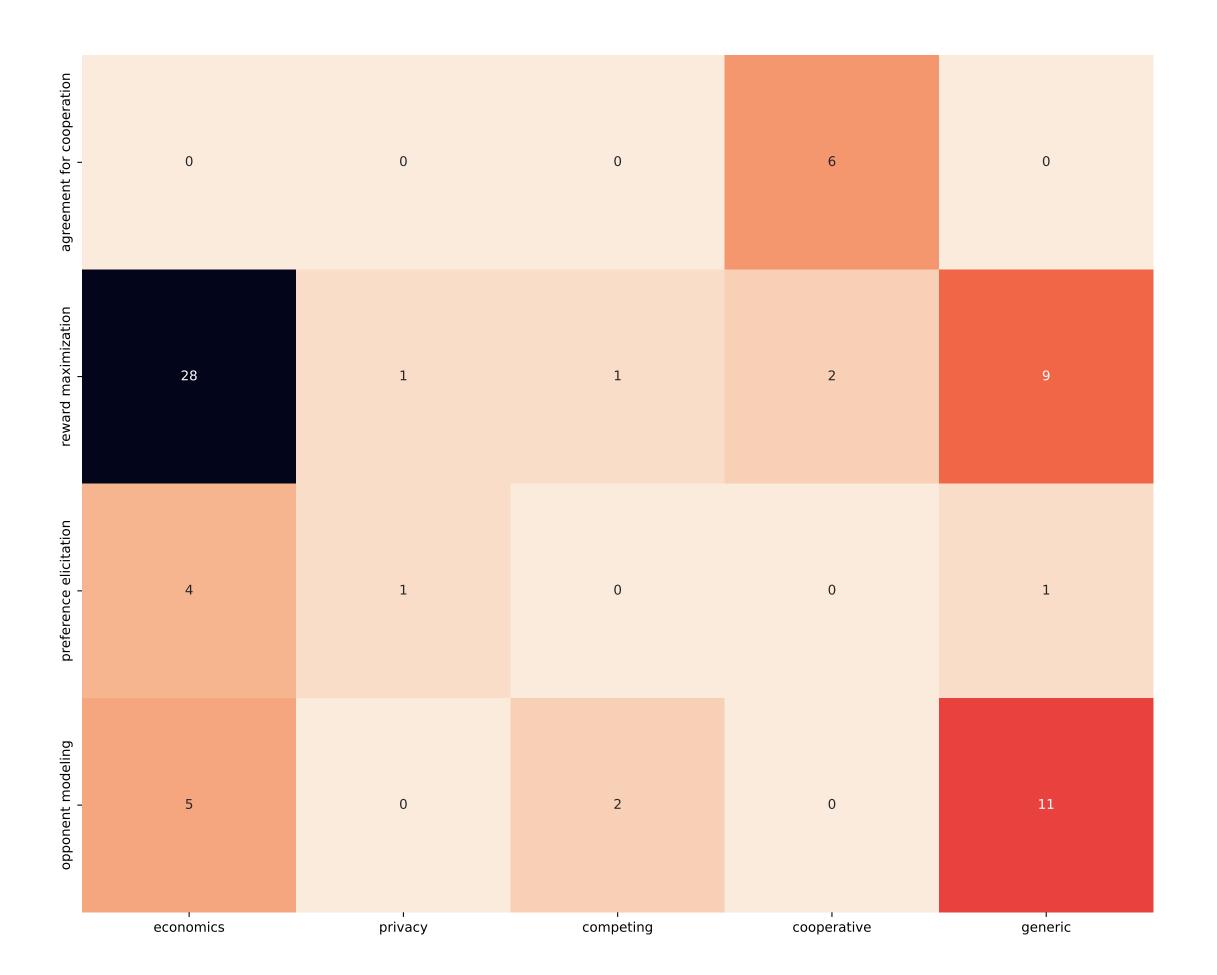
- 20

- 15

- 10

- 5





- 20

- 15

- 10

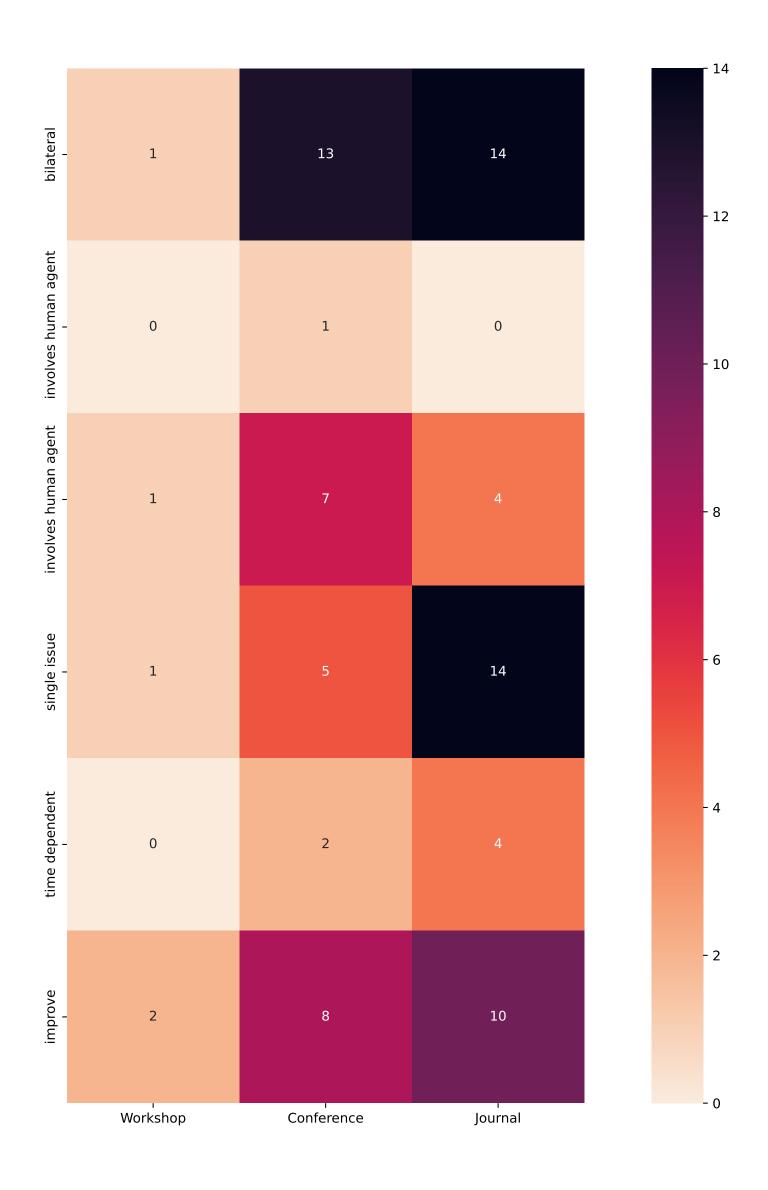
_

- 4

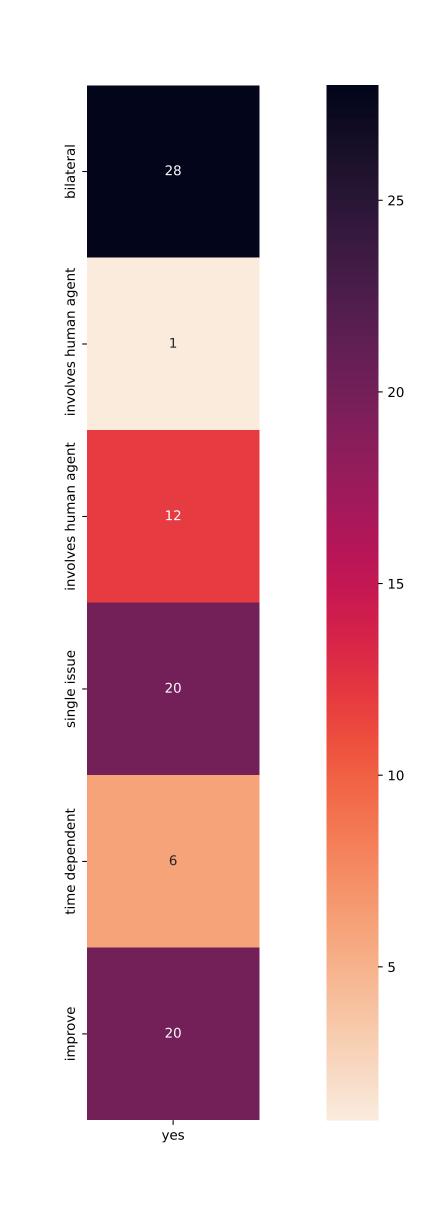
- 3

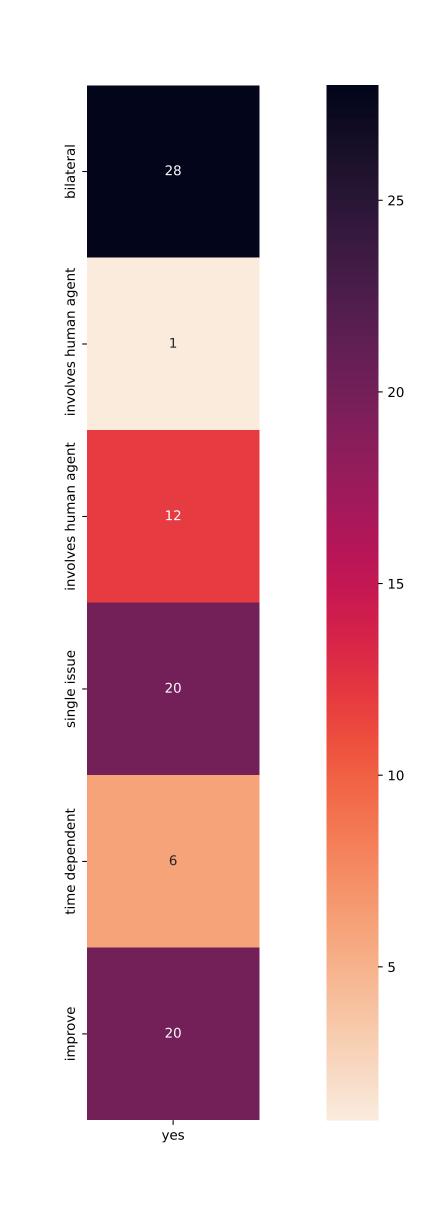
- 2

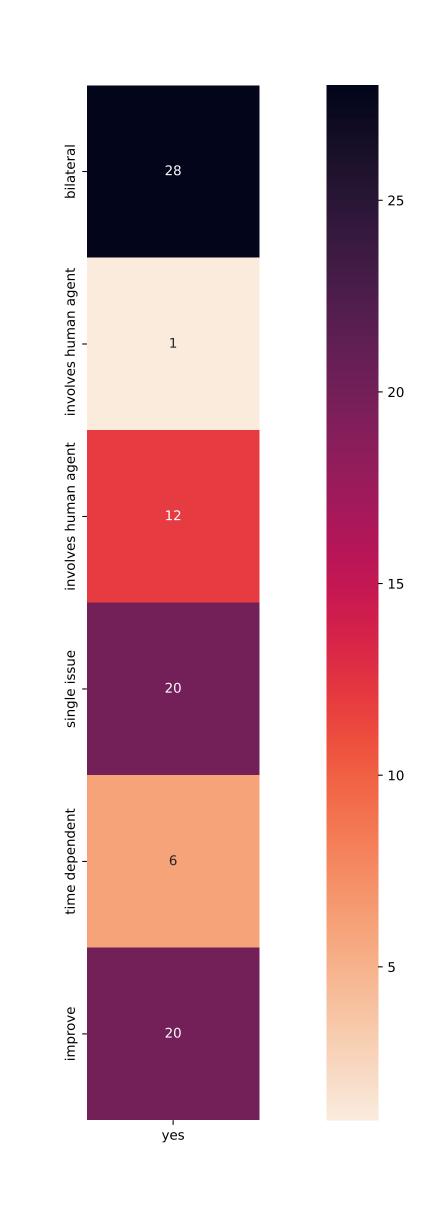
- 1

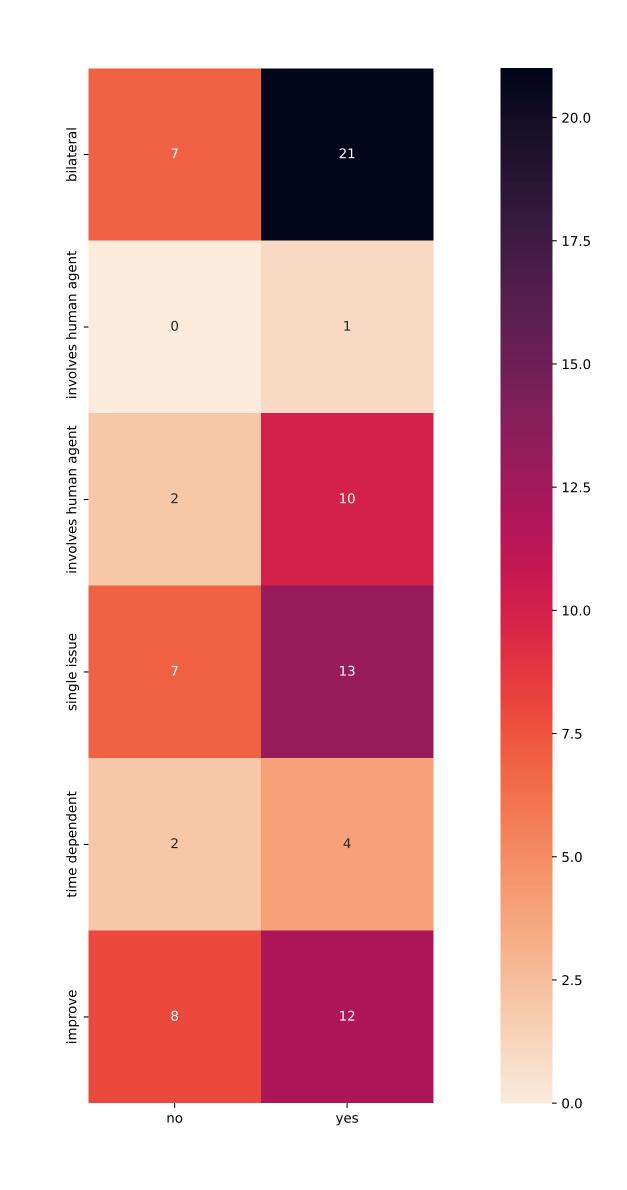


bilateral	18	10	- 16
involves human agent	1	0	- 14
involves human agent	5	7	- 12 - 10
single issue	14	6	- 8
time dependent	5	1	- 6 - 4
improve '	12	8	- 2
	snowballing	selection	- 0









- 7

- 6

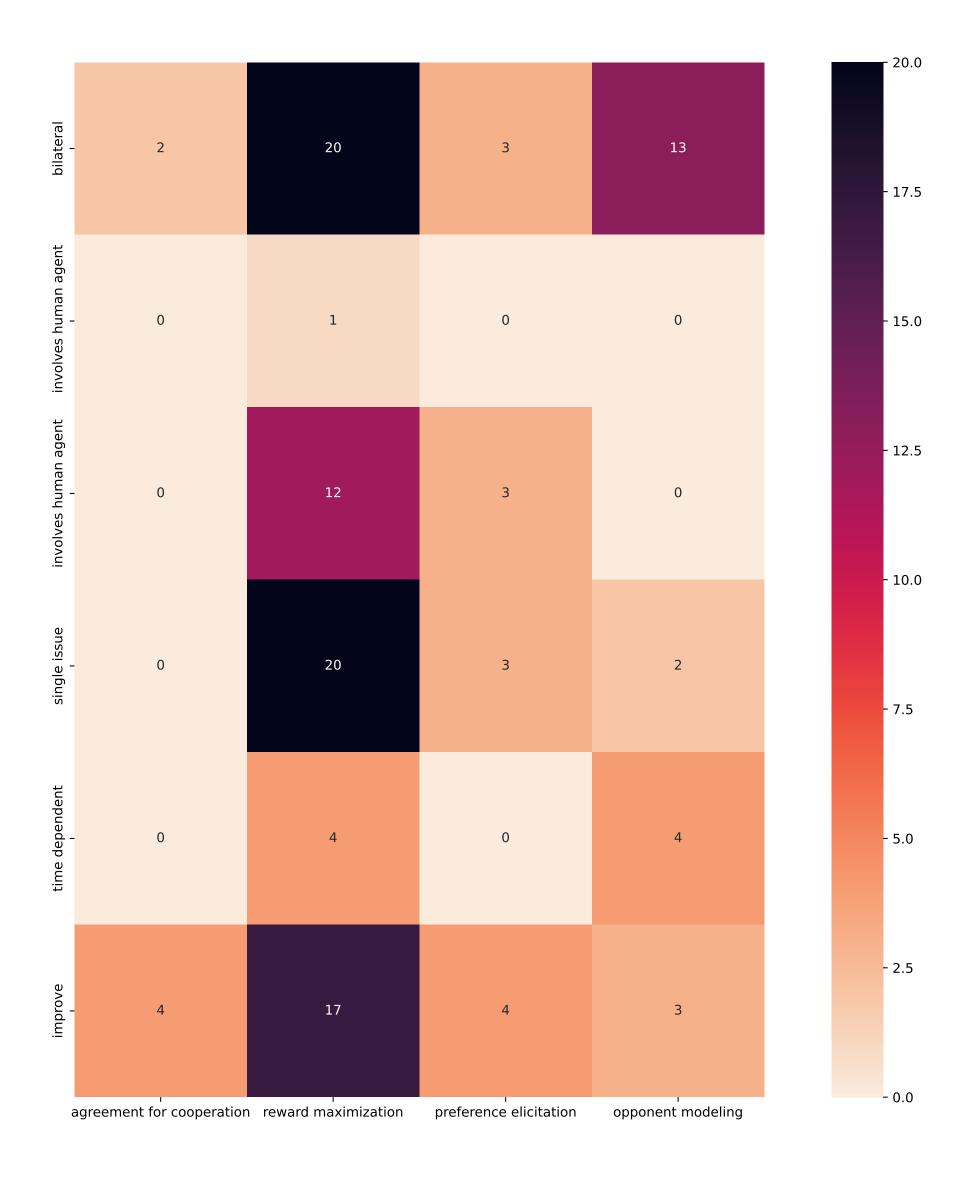
- 5

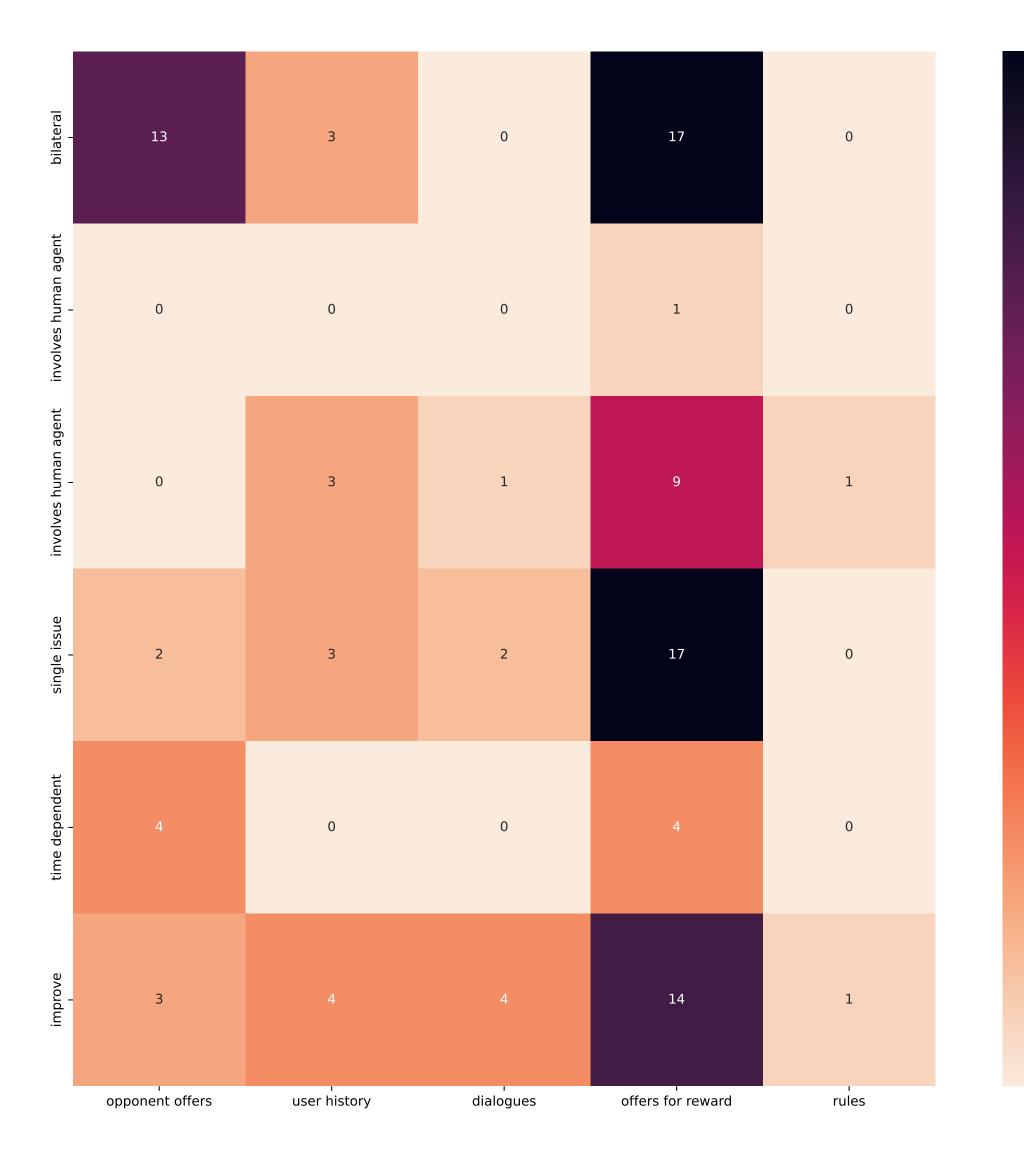
- 4

- 3

- 2

- 1





- 14

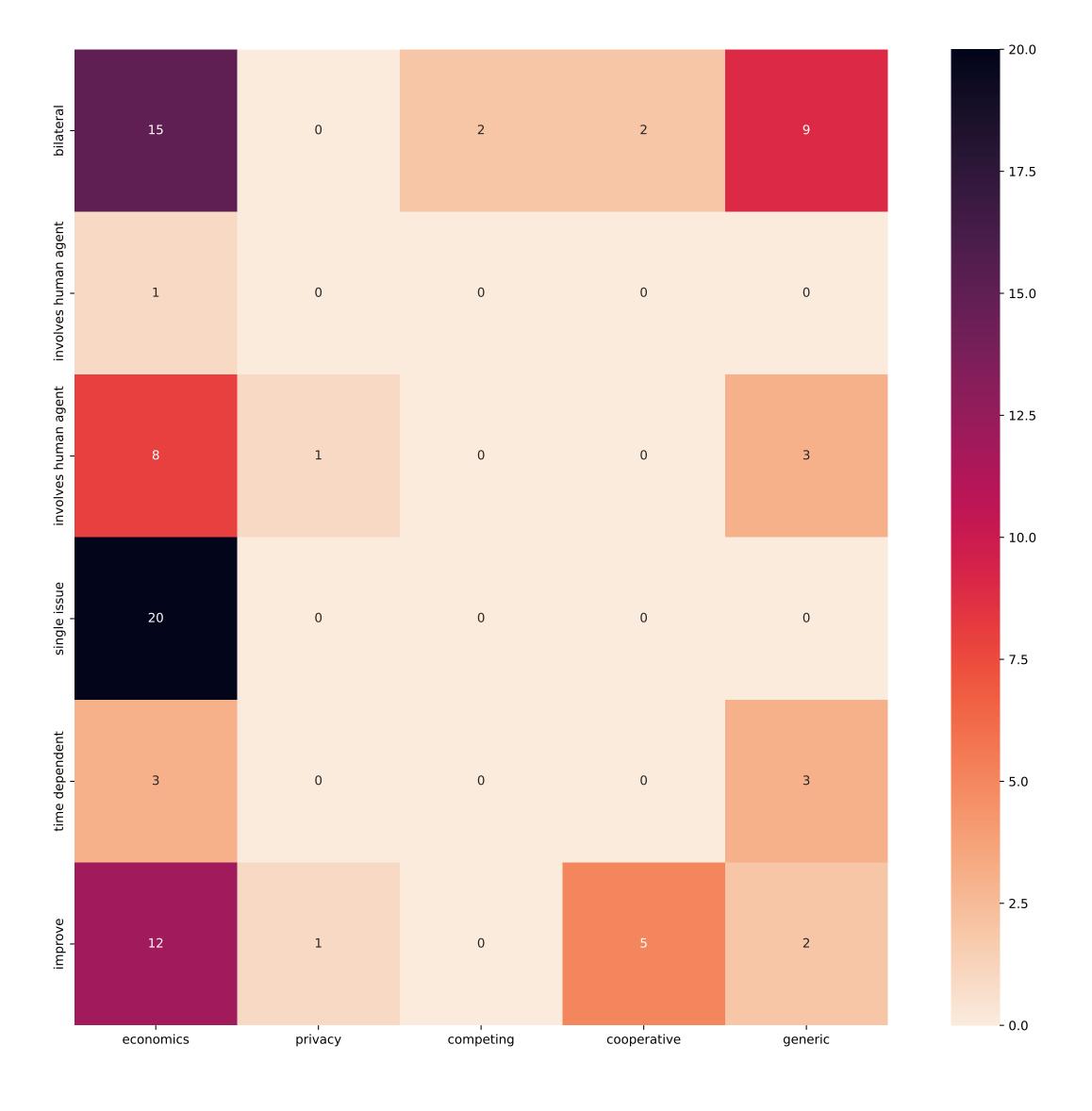
- 12

- 10

- 8

- 6

bilateral	28	2	- 25
involves human agent	1	1	- 20
involves human agent	- 12	12	- 15
single issue	20	6	- 10
time dependent	-	0	- 5
improve	- 20	3	
	autonomous	semi autonomous	- 0



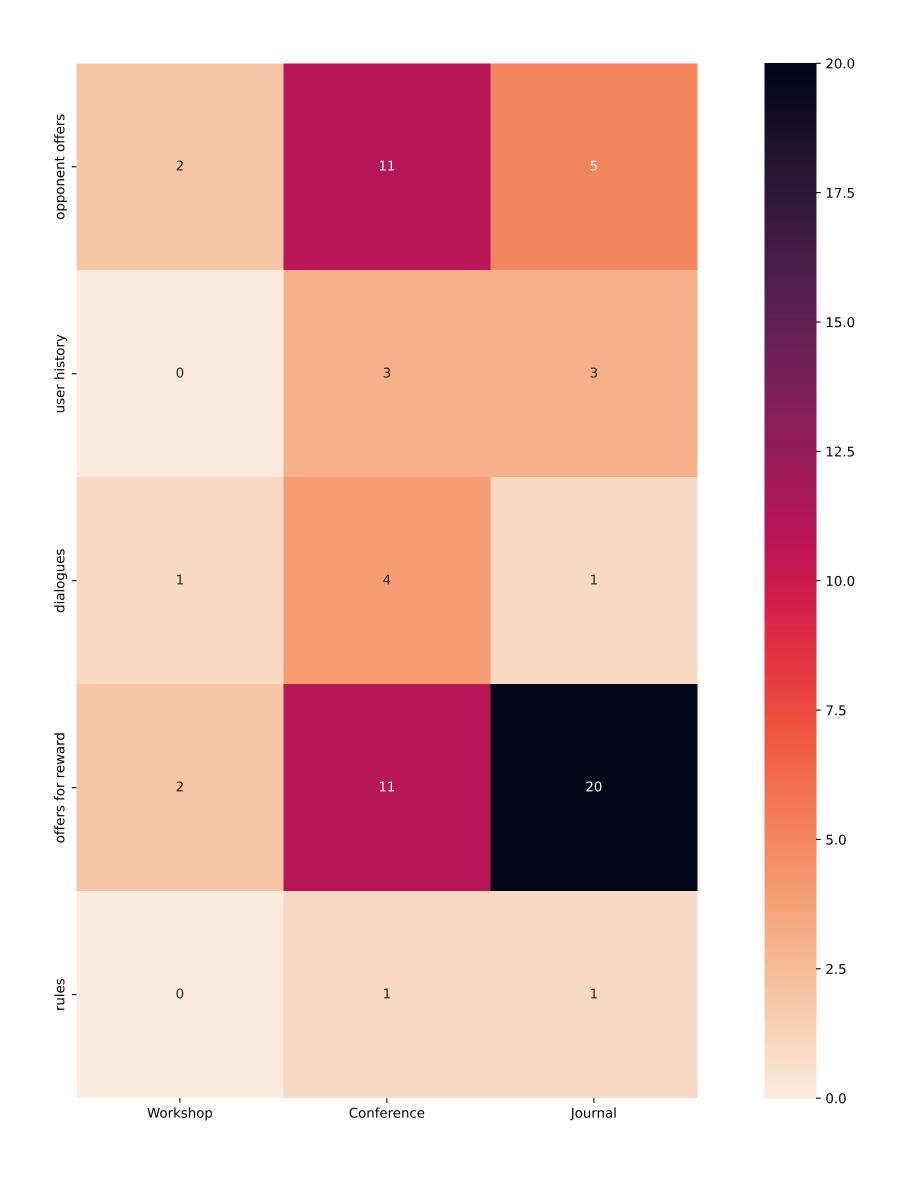
- 6

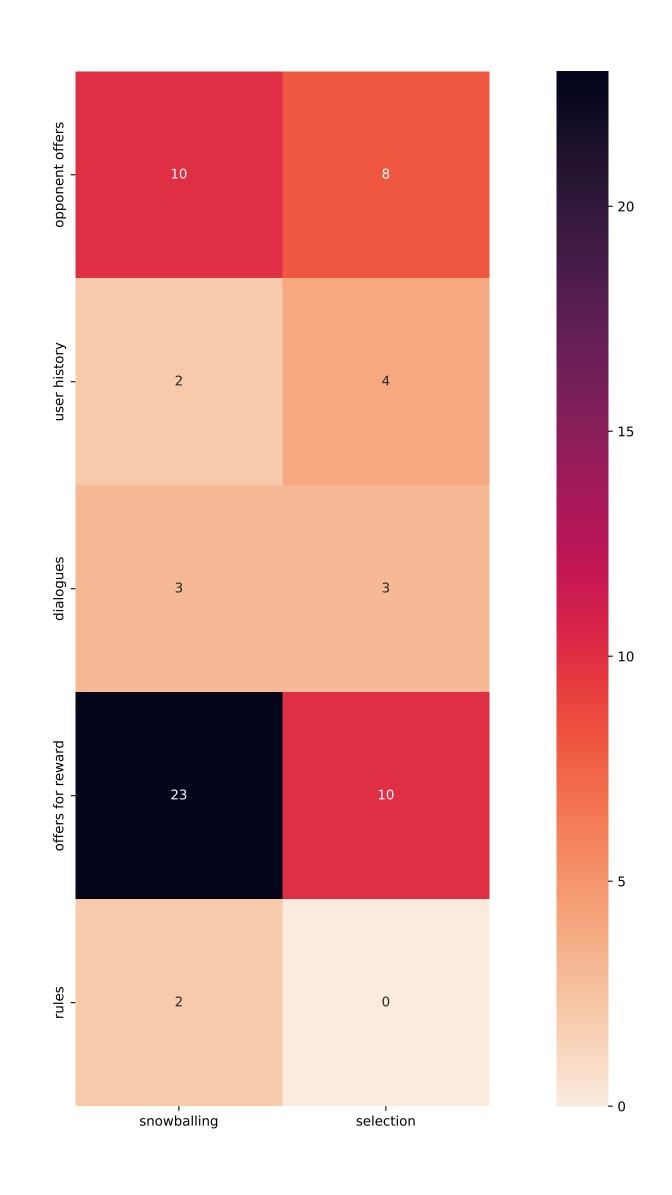
L 5

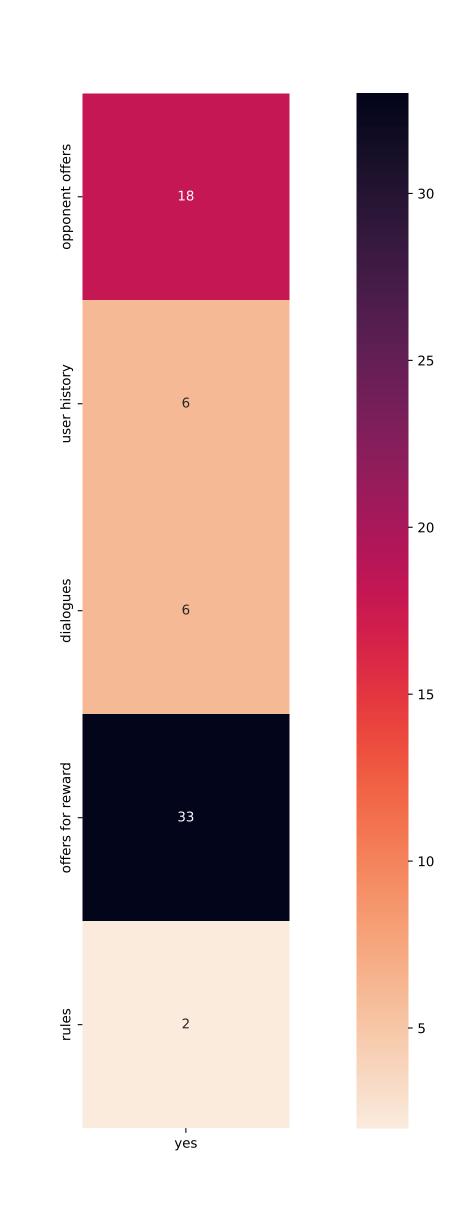
- 3

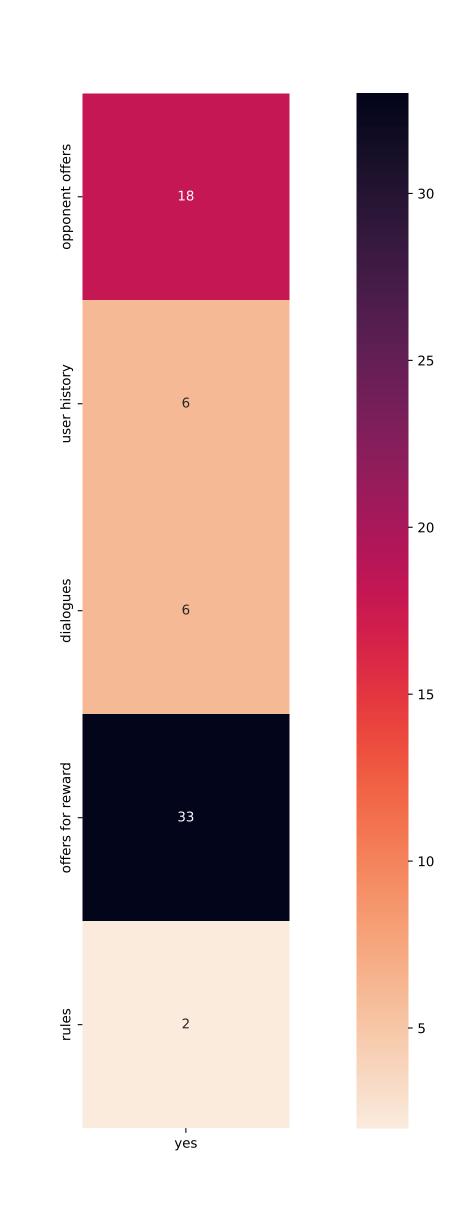
- 2

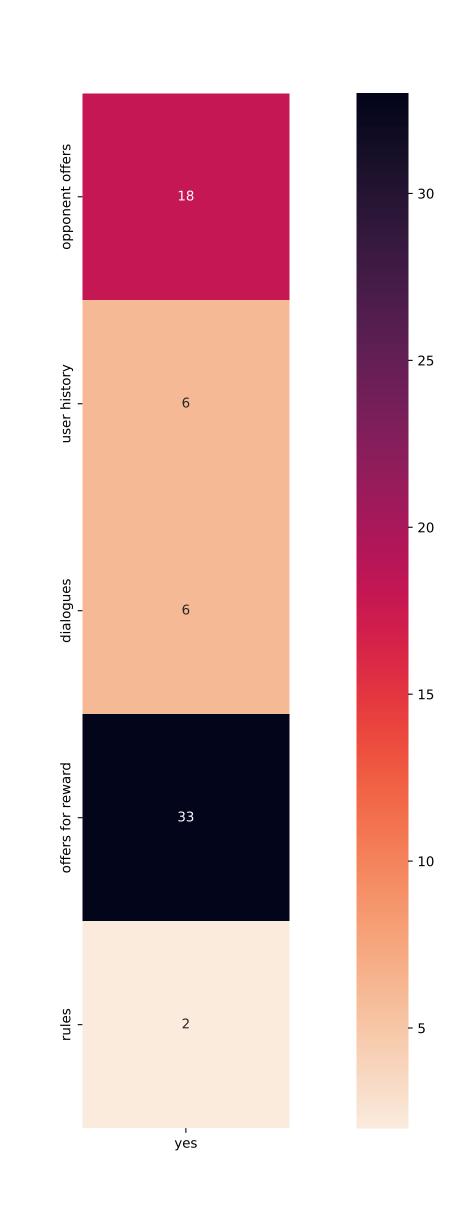
- 1

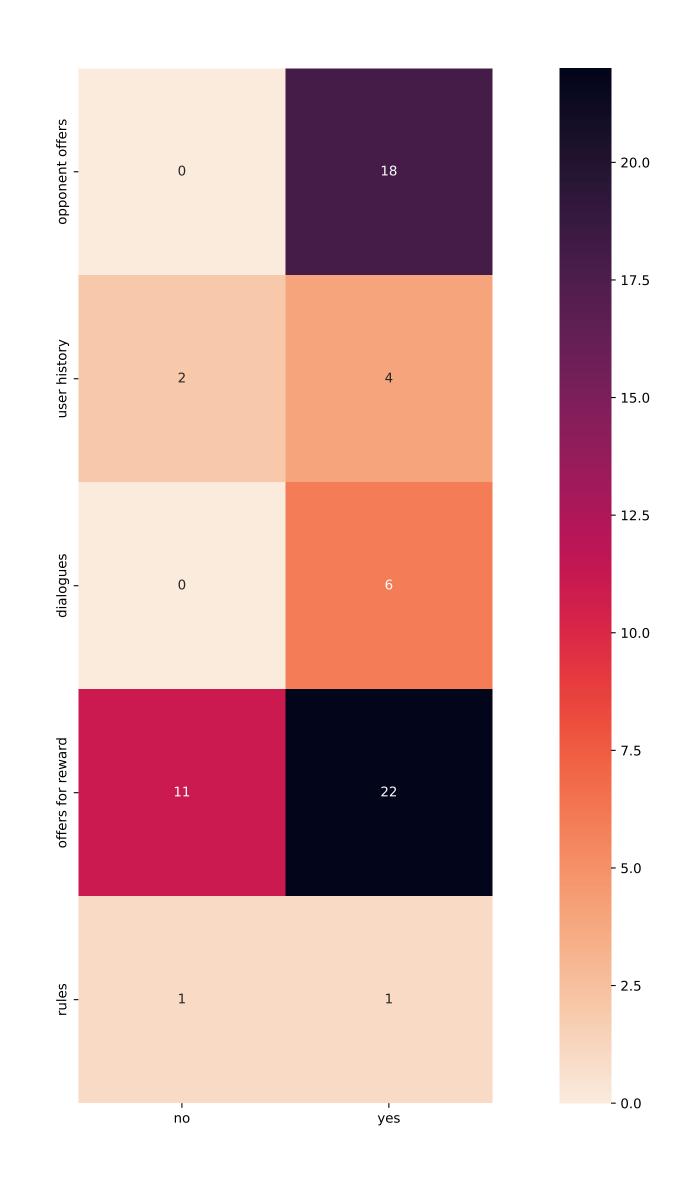












,

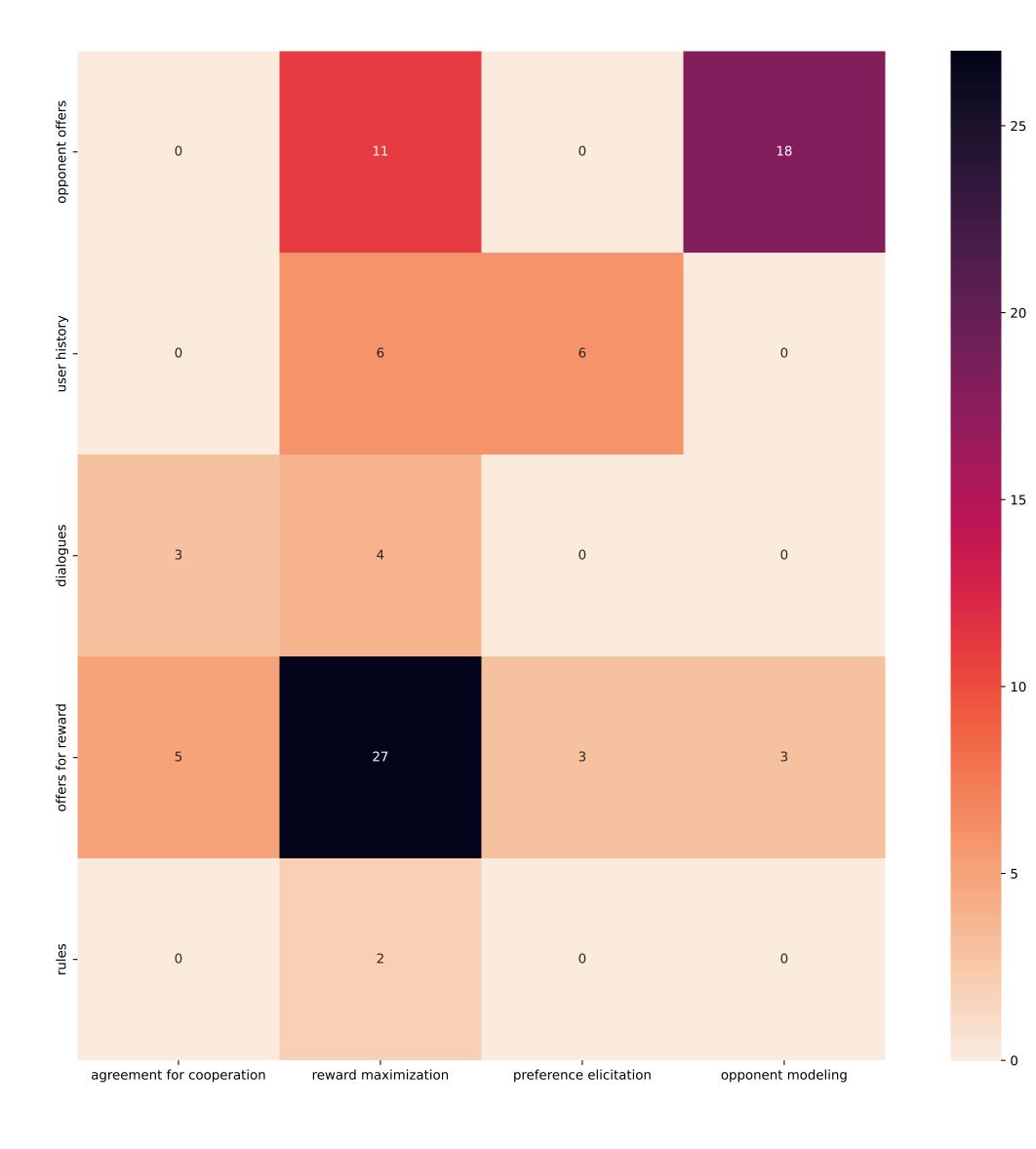
- 6

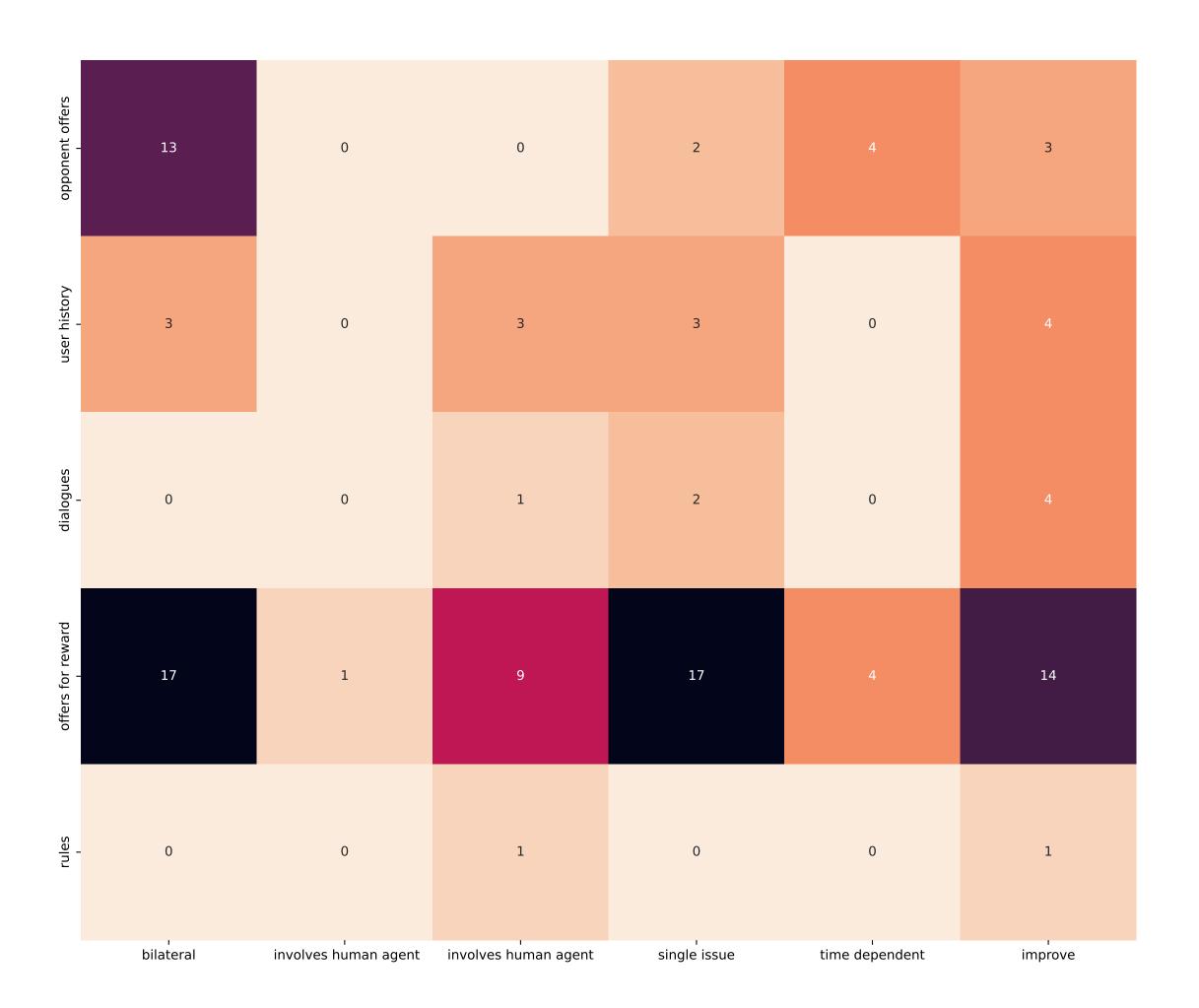
- 5

- 3

- 2

- 1





- 14

- 12

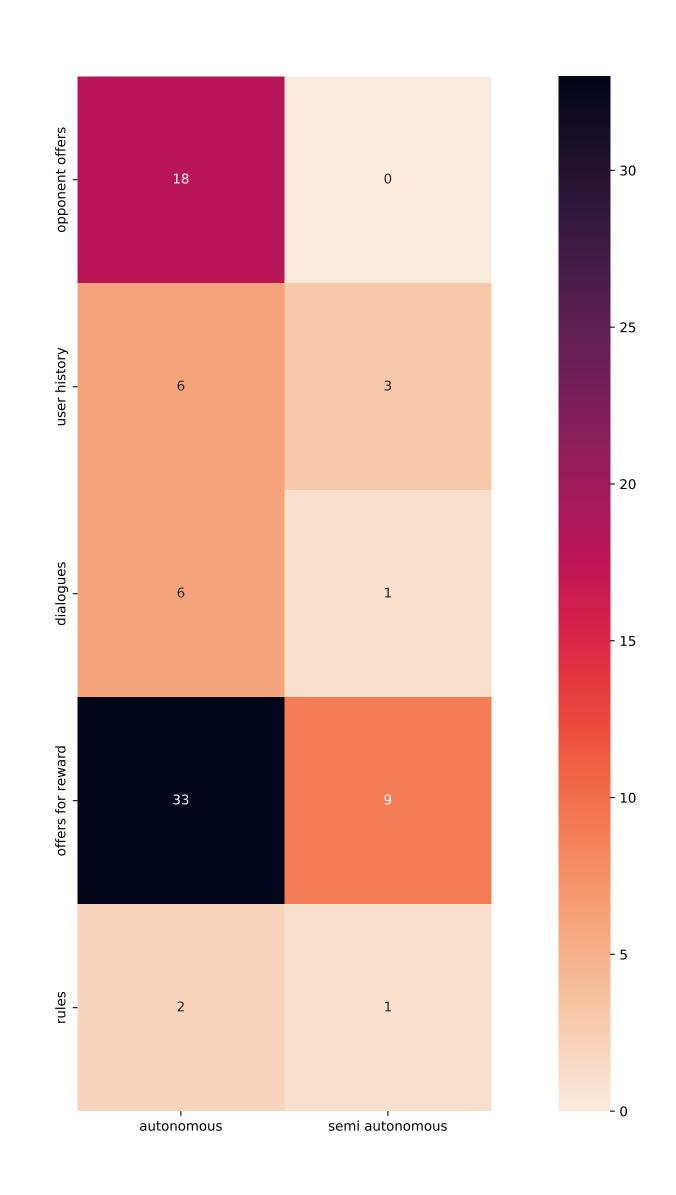
- 10

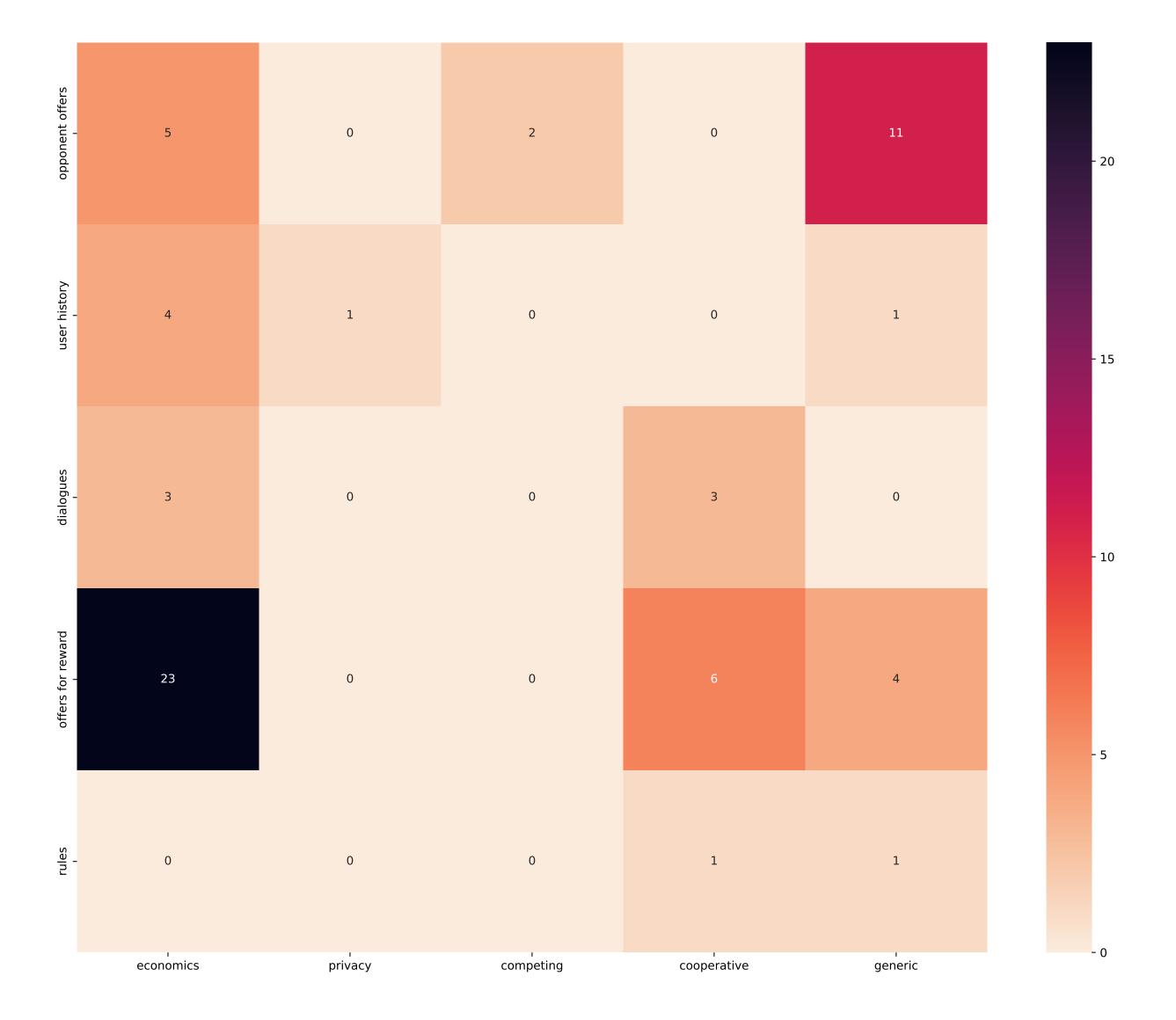
- 8

- 6

- 4

- 2





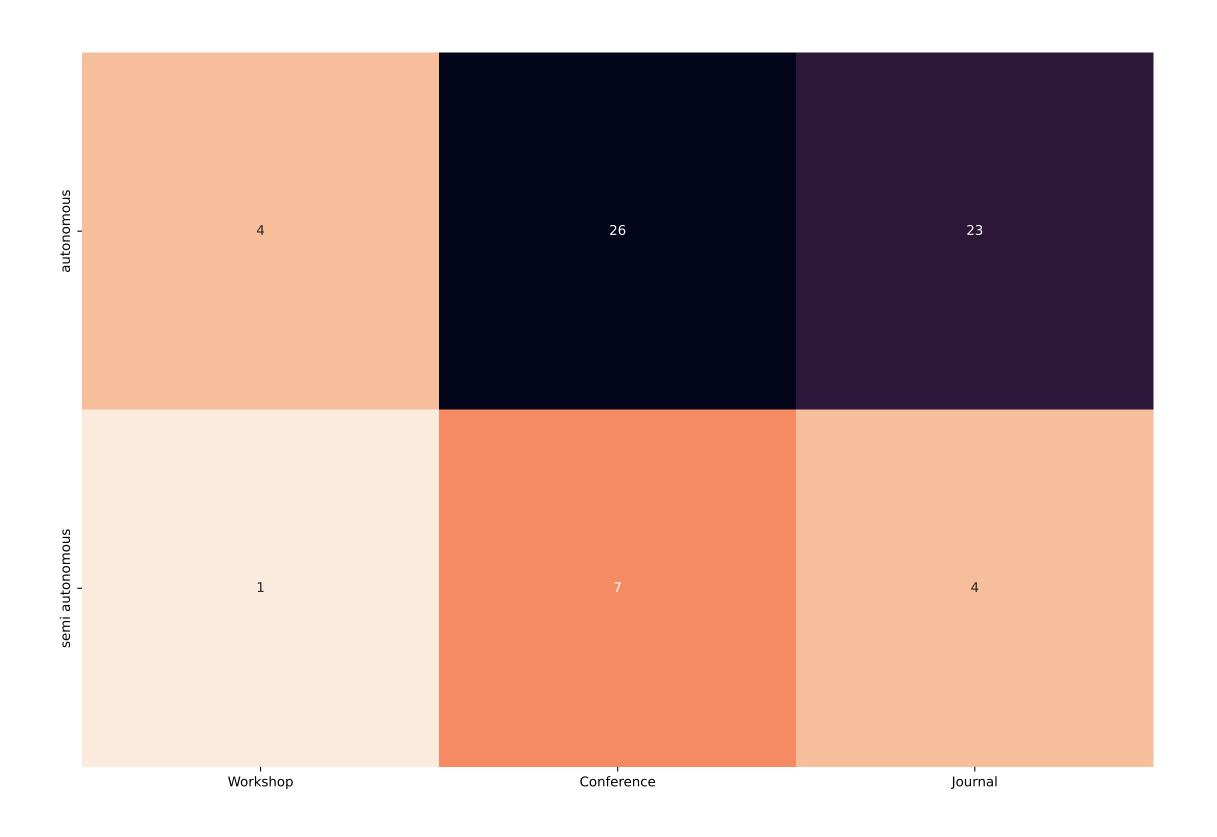
- 8

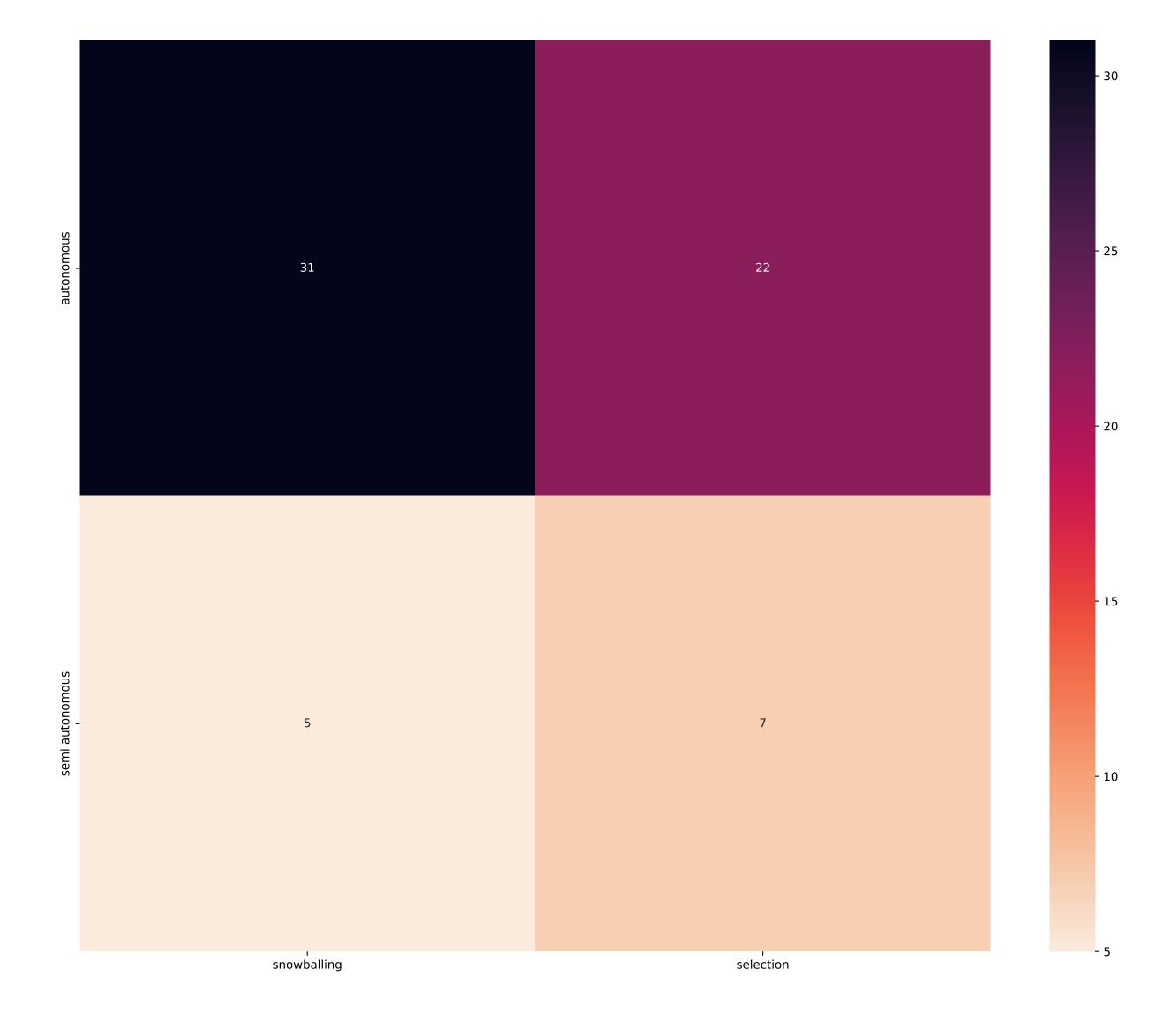
- 6

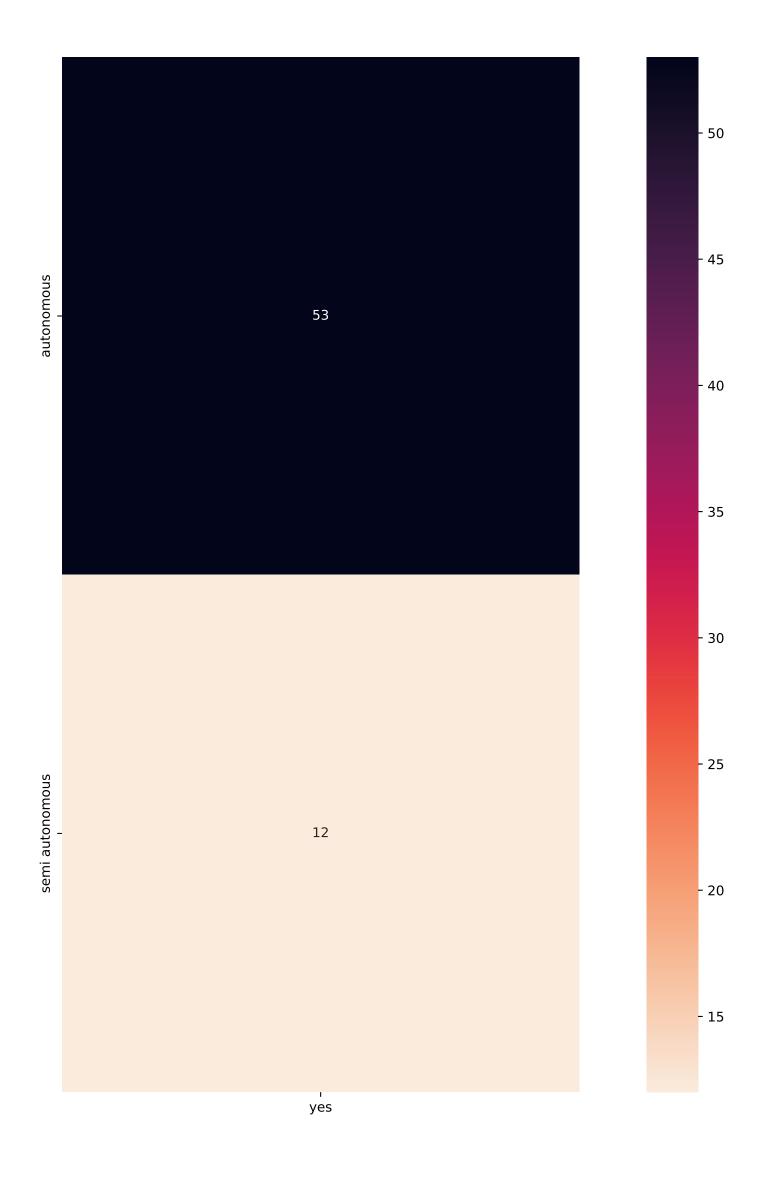
- 4

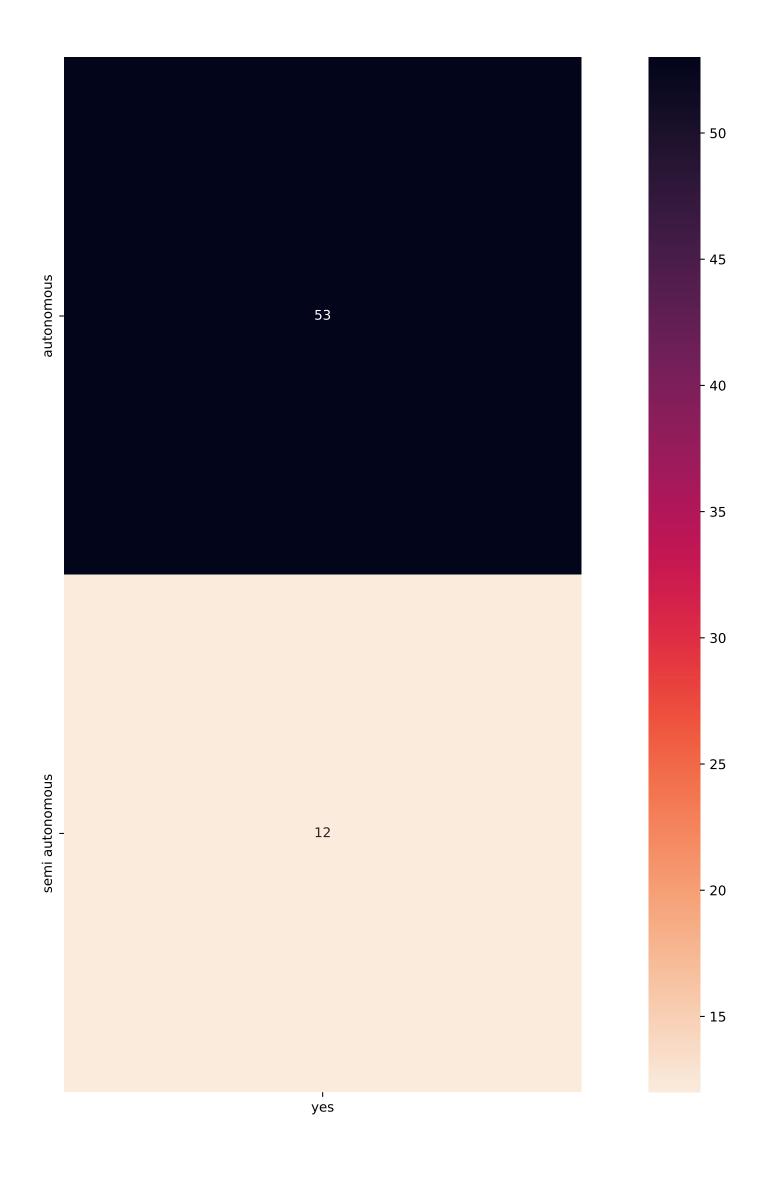
- 2

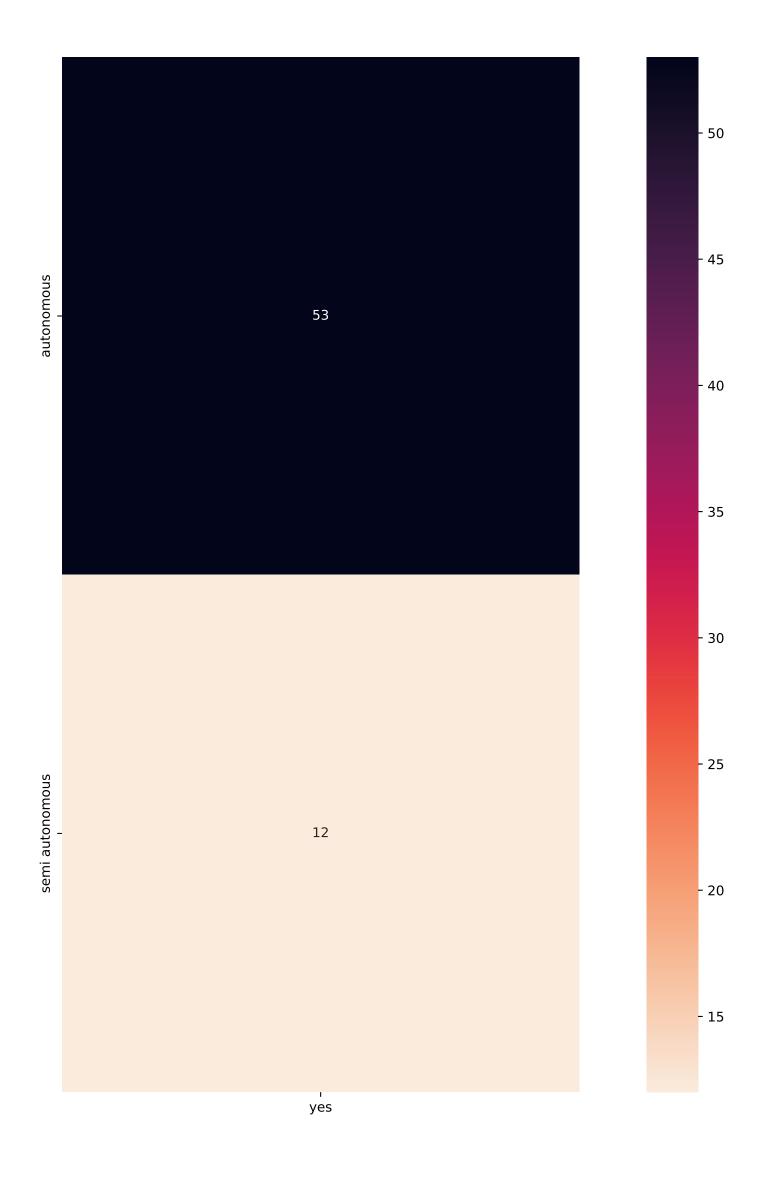
- 15

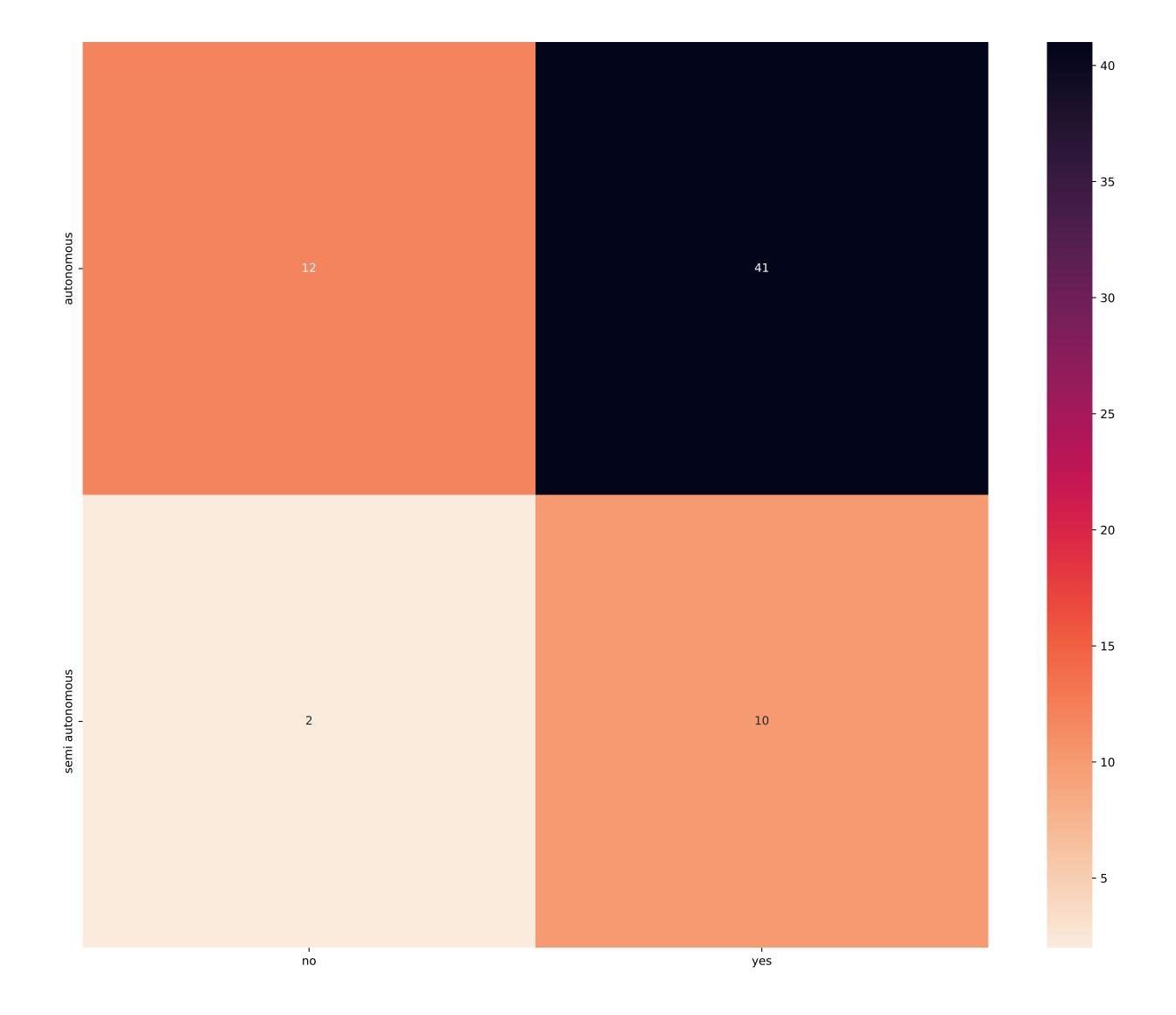












autonomous -	1	4	5	1	1	13	2	2	1	5	4	1	5	6	2	2	2	1	1	2
semi autonomous -	0	2	2	1	0	1	1	0	0	1	0	0	0	0	1	1	1	0	1	1
	logistic regression -	Fuzzy Logic System –	Gaussian probability –	Genetic Algorithm –	Multi bipartite gradient descent search –	Reinforcement learning –	Linear Regression –	- RSTM -	Angle based Similarirty –	Optimization Approach –	Monte Carlo Tree search -	Temporal Logic –	Neural Network –	Bayesian Learning –	Heuristic Algorithm –	Linear Programming –	Equilibrium strategies –	Nonlinear Regression –	Markov Decision Process -	Argumentation -

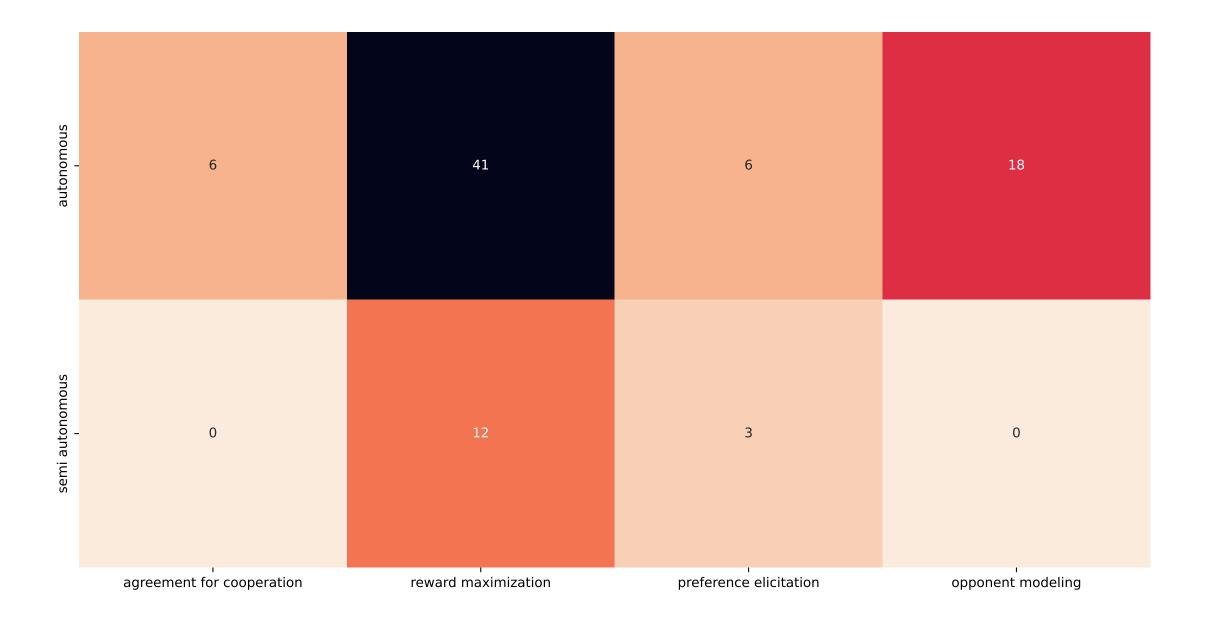
- 10

- 8

- 6

-

-



- 35

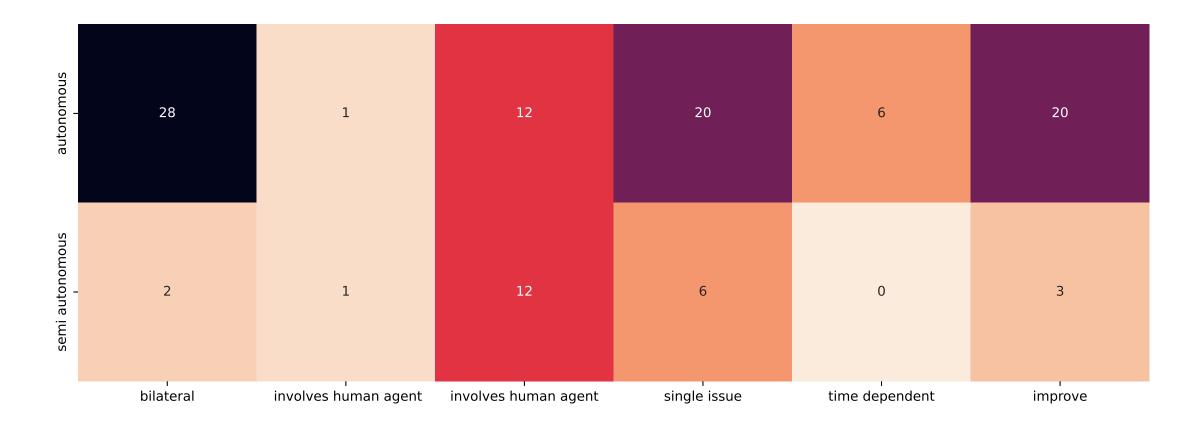
- 30

- 25

- 20

- 15

- 10

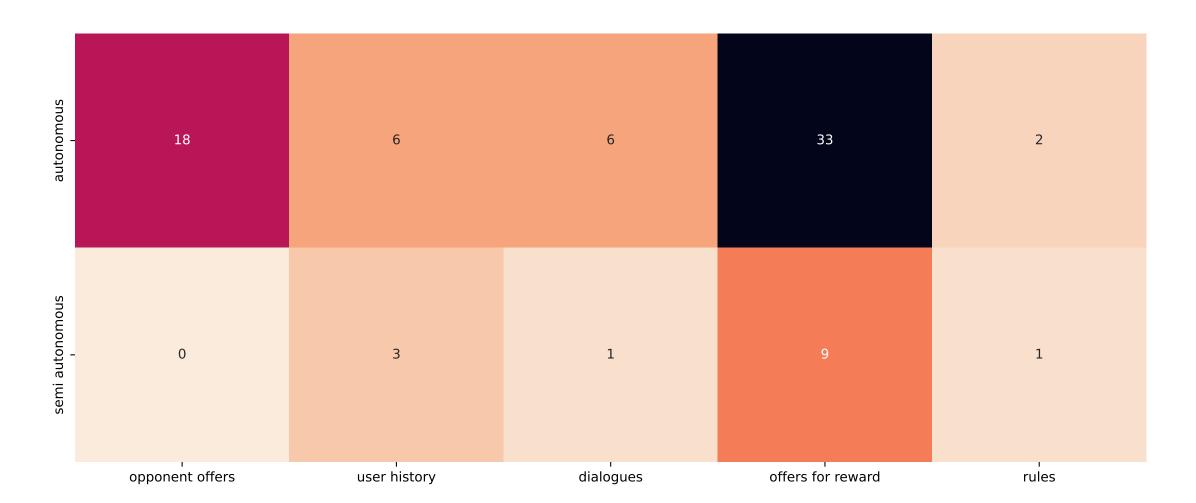


- 20

- 15

- 10

- 5



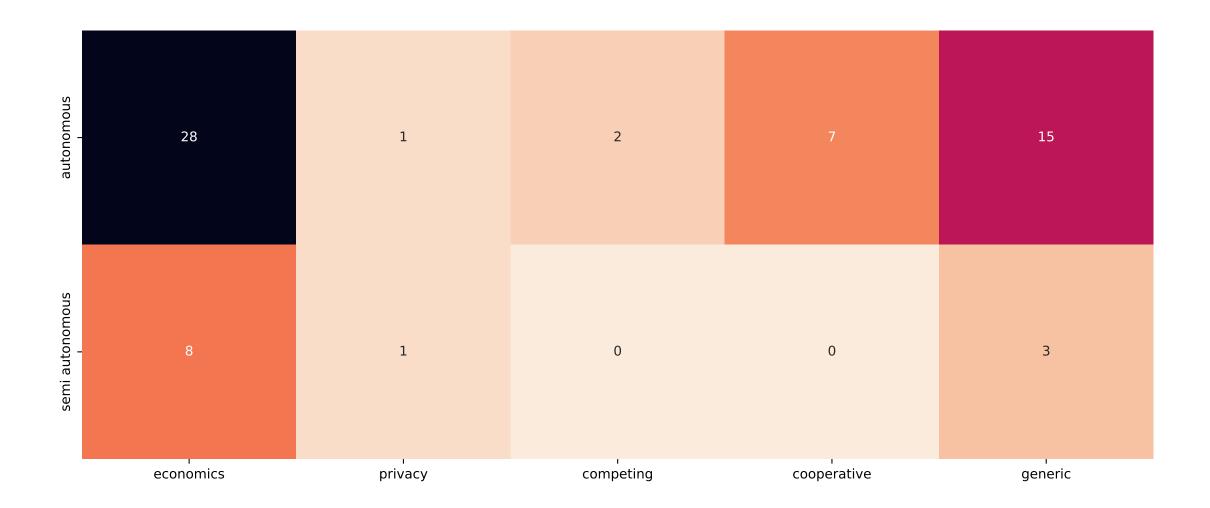
- 25

- 20

- 15

- 10

- 5



- 20

- 15

- 10

- 5

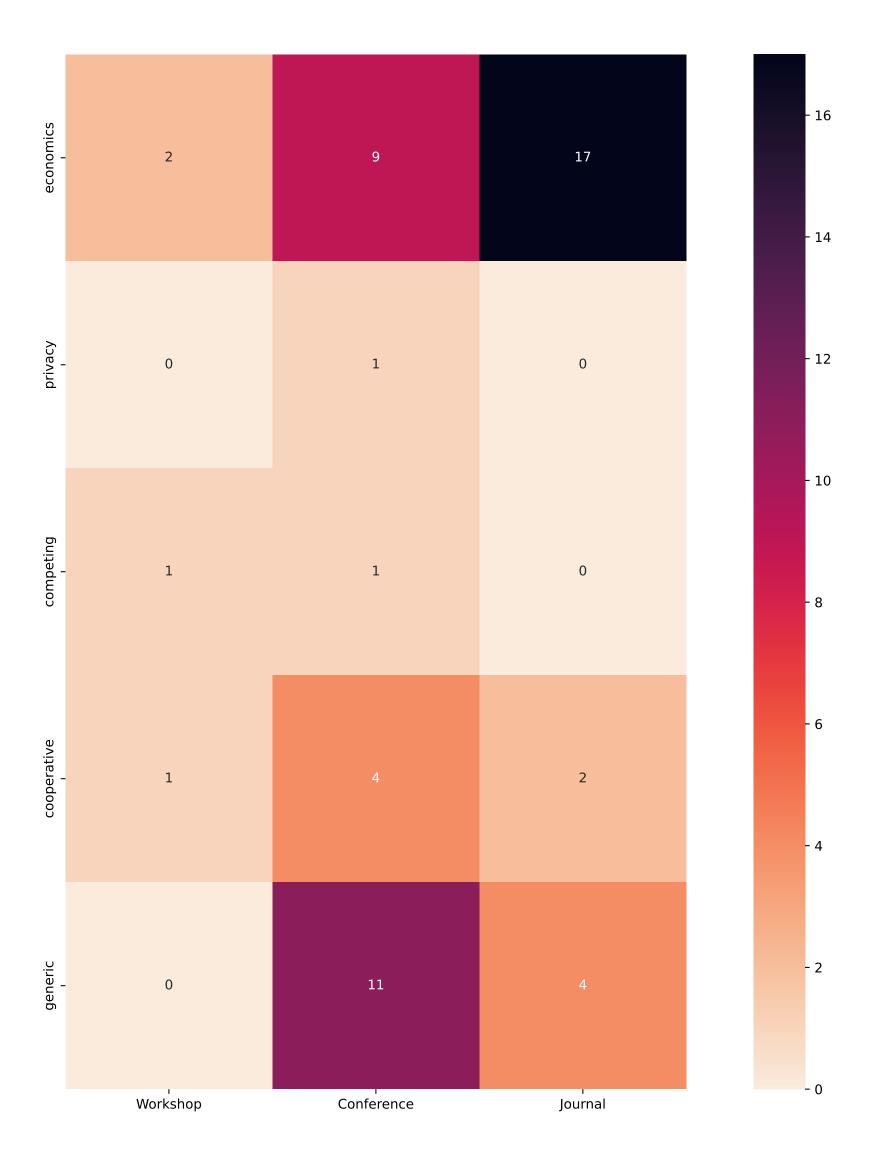
- 4

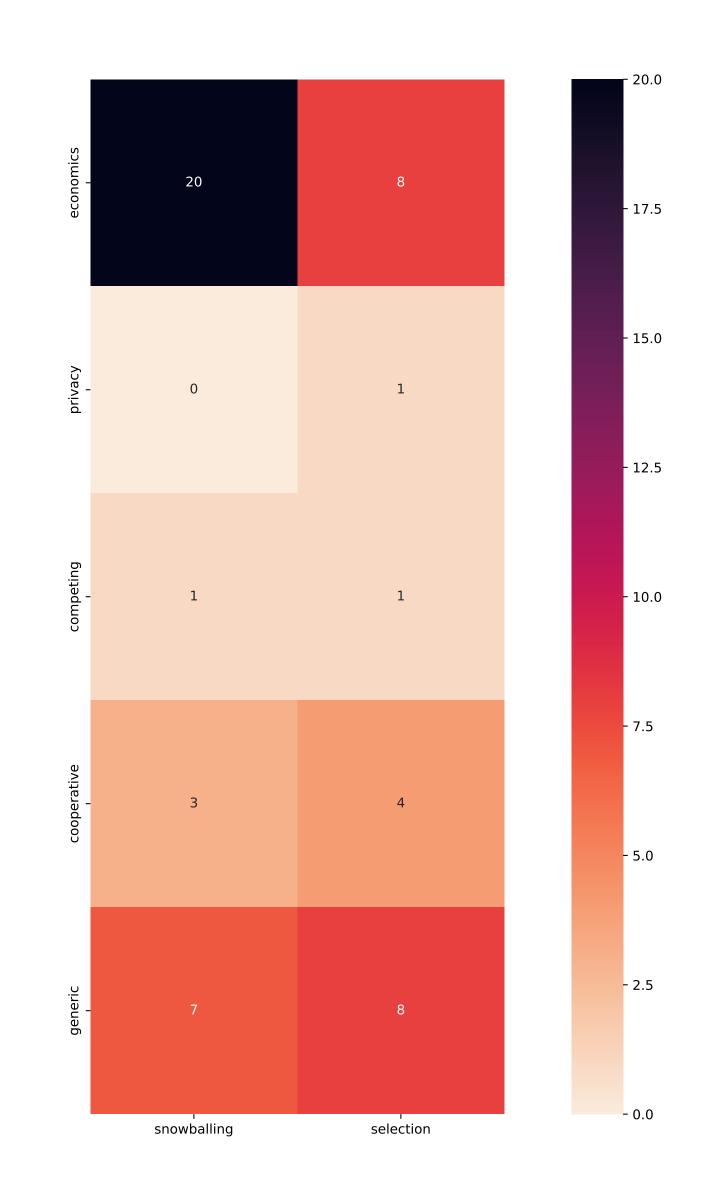
- 3

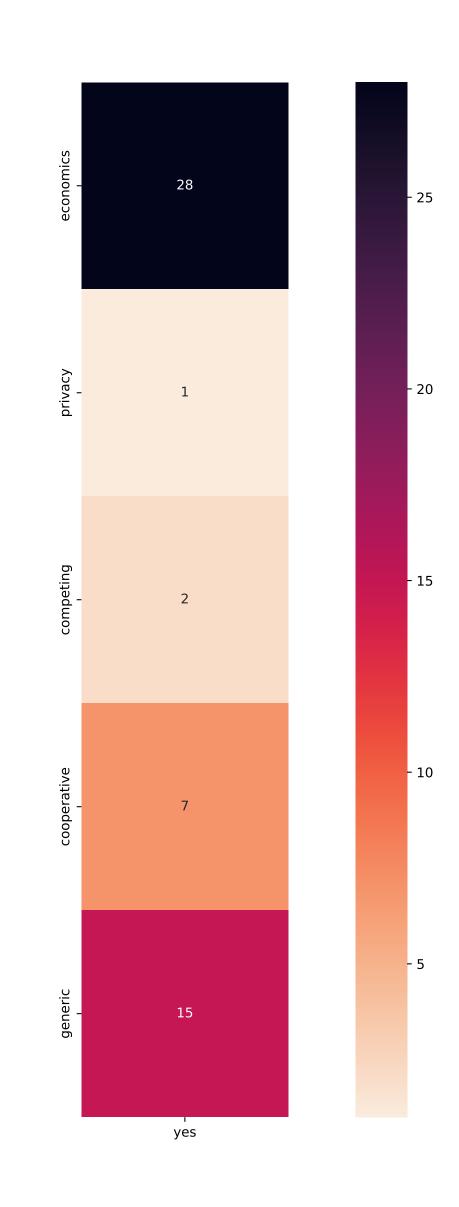
- 2

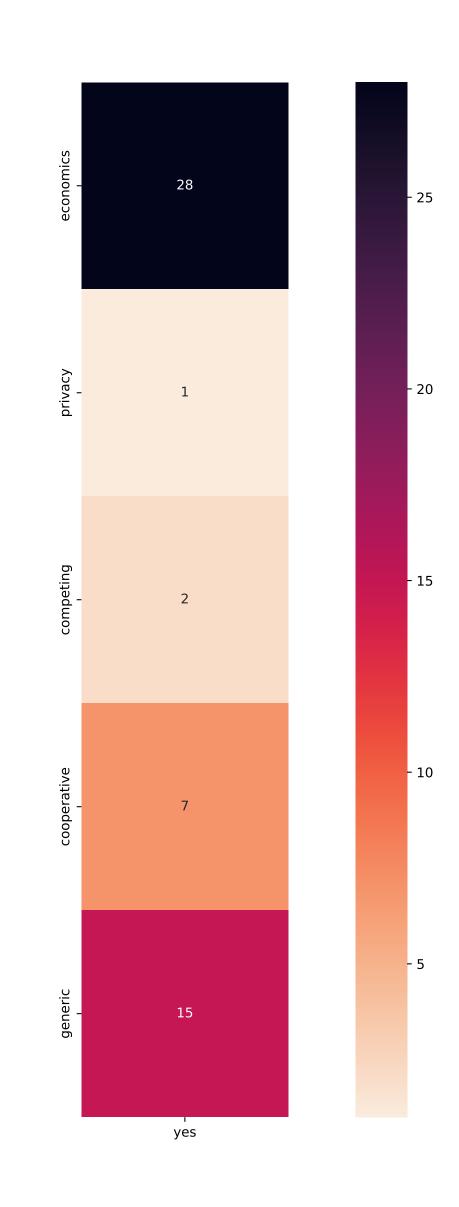
- 1

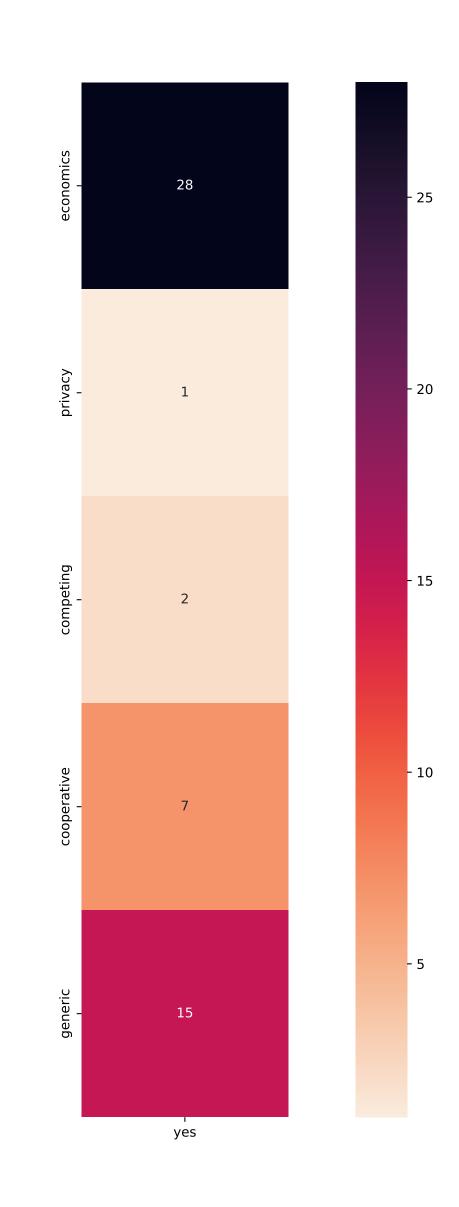
- n

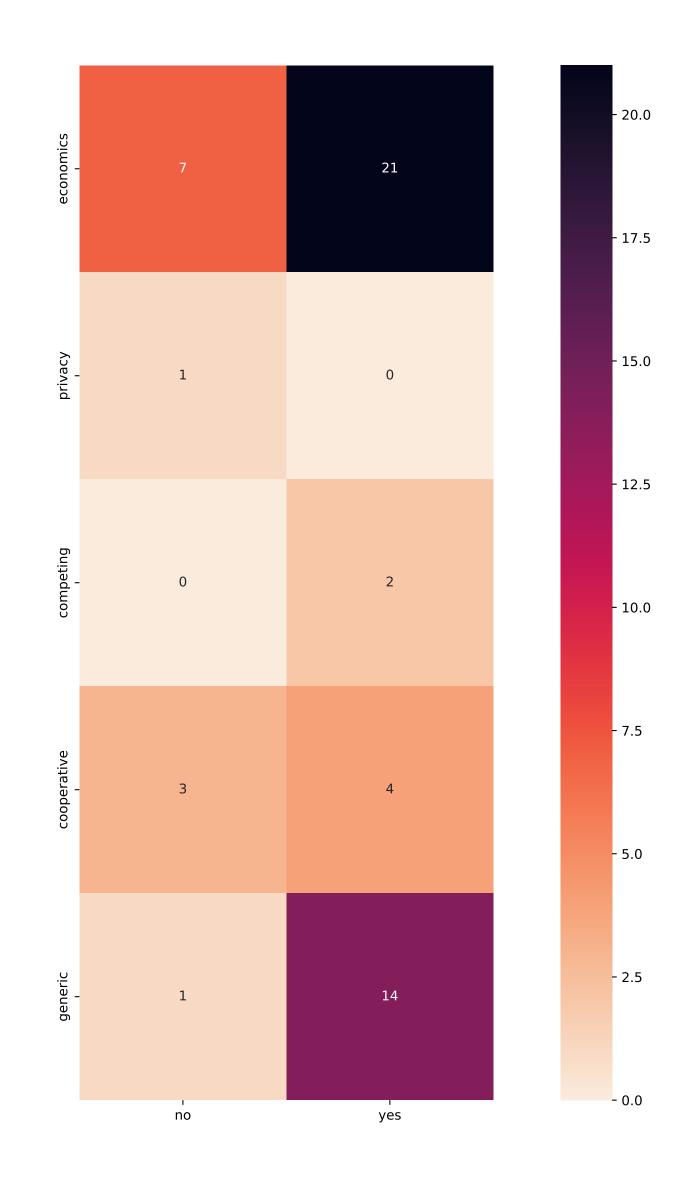












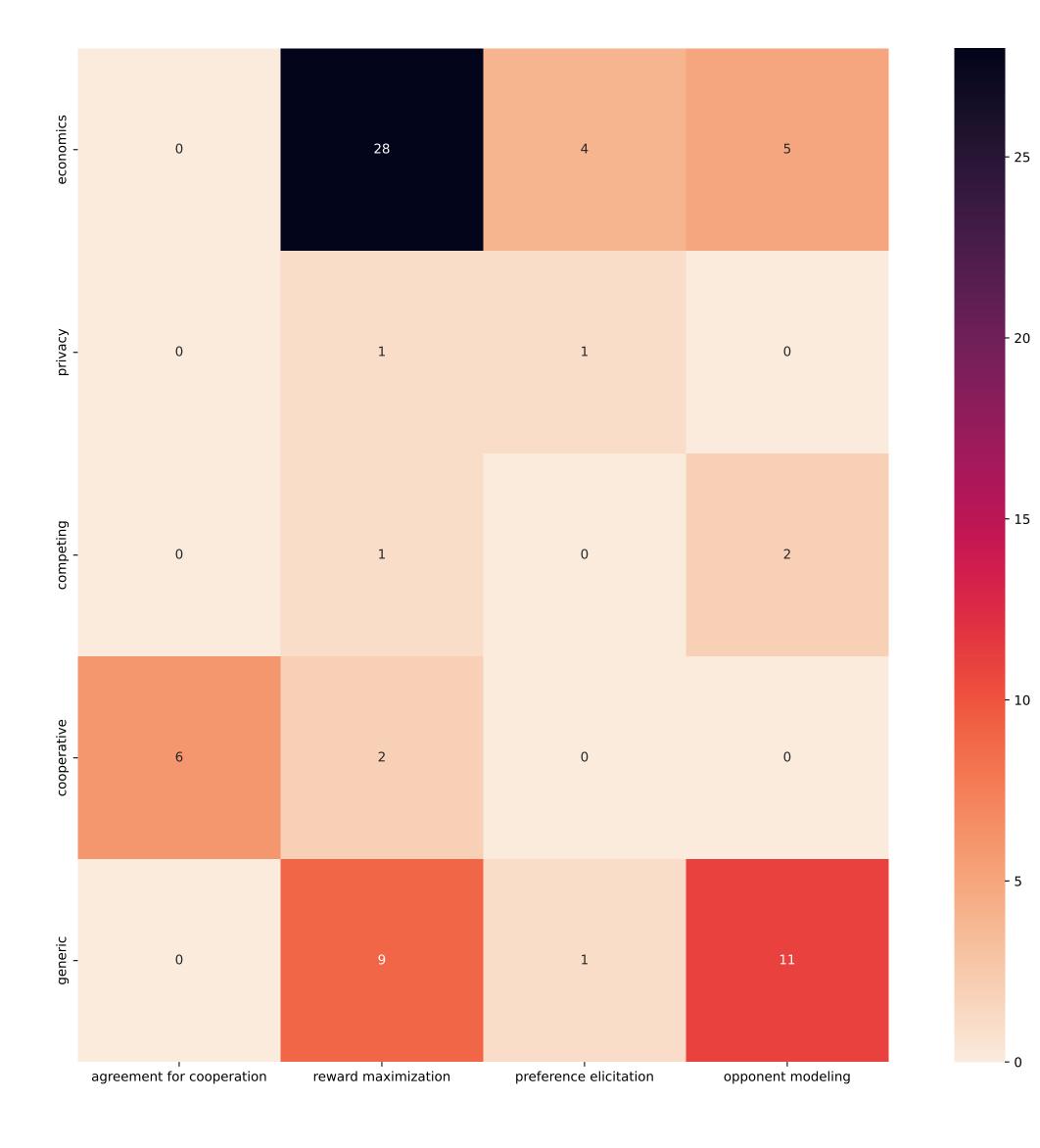
- 4

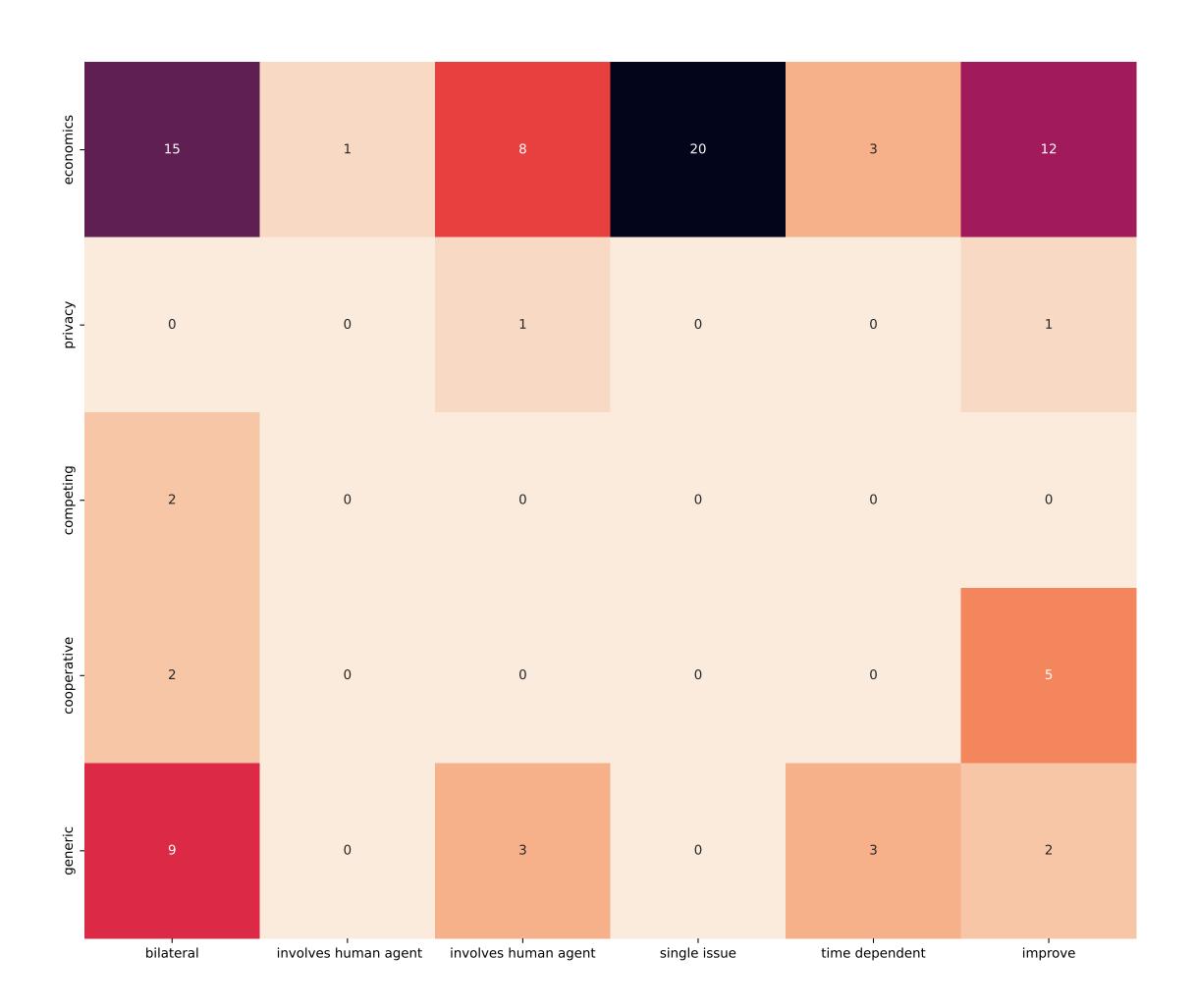
- 3

- 2

- 1

- n





ر 20.0

- 17.5

- 15.0

- 12.5

- 10.0

- 7.5

- 5.0

- 2.5

- 0.0

