Keep your enemies closer and be loud about it

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Intro

1. We can model **rational** behaviour using Iterated **Prisoner's Dilemma** game: T > R > P > S, 2R > T+S [1]

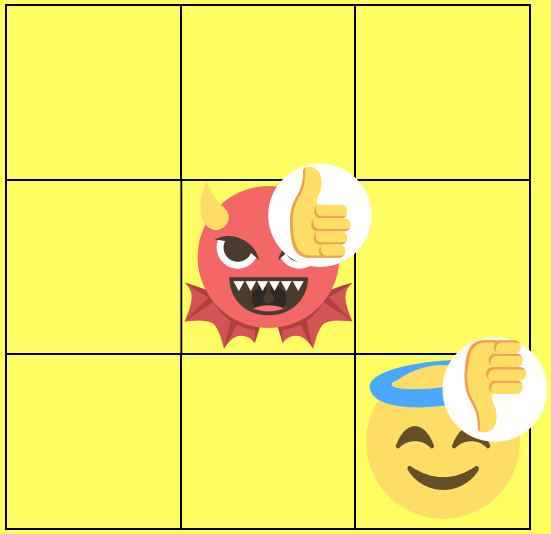
		Opponent's move: Cooperate	Opponent's move: Defect
Player's move	Cooperate	Player: R, Opponent: R	Player: S, Opponent: T
	Defect	Player: T, Opponent: S	Player: P, Opponent: P

2. **Global reputation systems** promote cooperation well [2, 3] (e.g. Ebay's seller rating)

3. What about **local reputation**? (no external system, only communication)

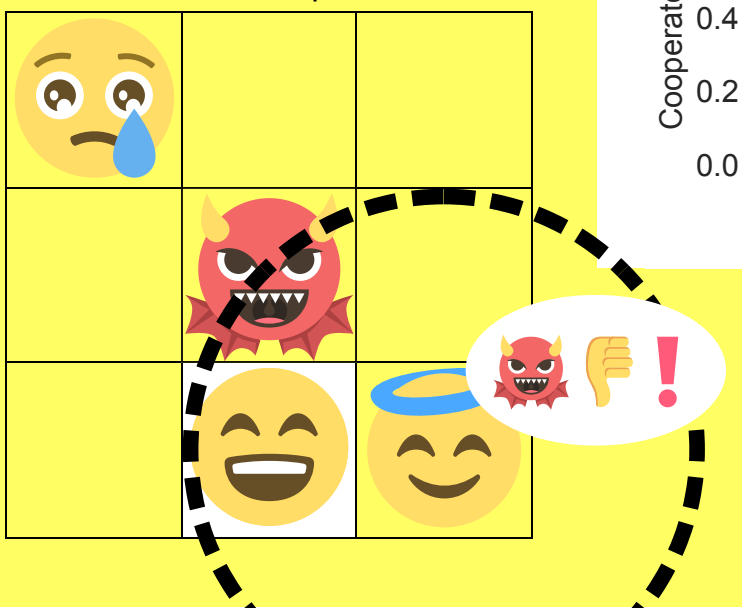
Question

Can local reputation in Spatial Prisoner's Dilemma enforce cooperation?

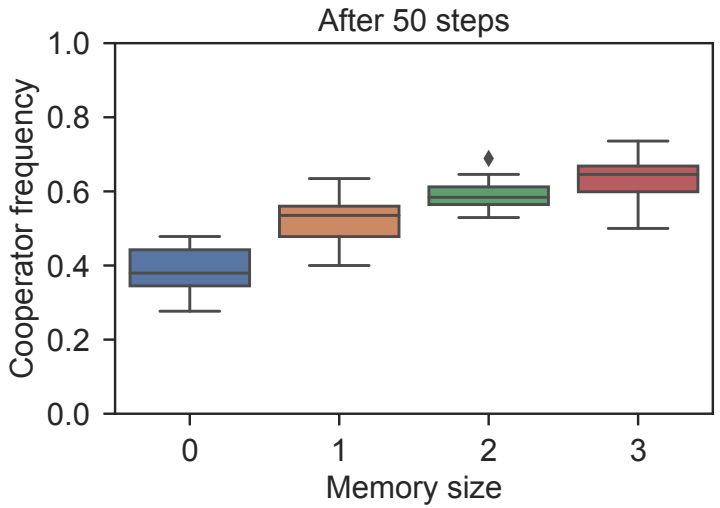


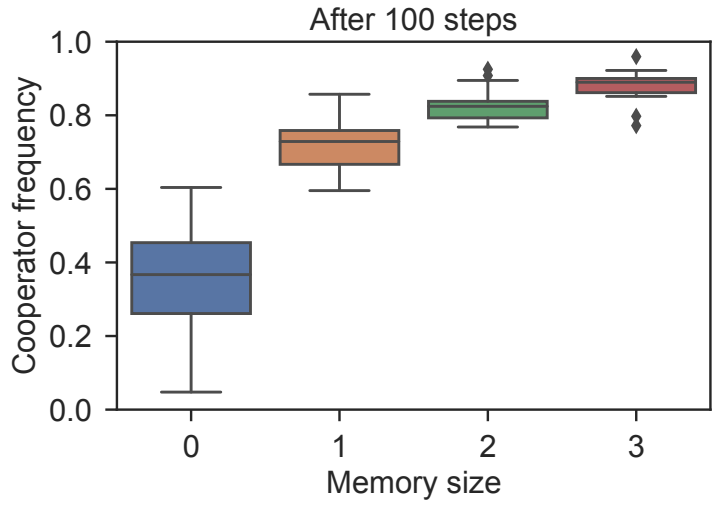
without reputation

with local reputation



Results





References

[1] Axelrod, R. (1984).The Evolution of Cooperation. Basic, New York.
[2] Camera, G. and Casari, M. (2009). Cooperation among strangers under the shadow ofthe future.American Economic Review, 99:979–1005.
[3] Stahl, D. O. (2013). An experimental test of the efficacy of a simple reputation mechanism to solve social dilemmas. Journal of Economic Behavior & Organization, 94:116–124.