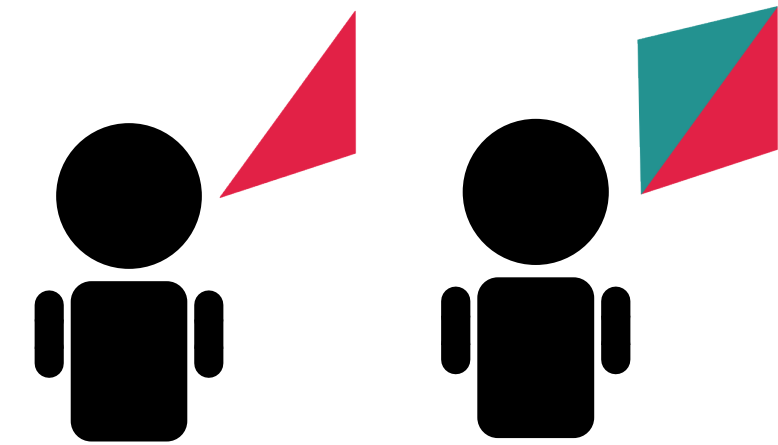**A** reactive-1 vs memory-1

Player 1 — reactive-1
$p_C = 0.8$
$p_D = 0.5$

Player 2 — memory-1
$m_{CC} = 0.1$
$m_{CD} = 0.6$
$m_{DC} = 0.2$
$m_{DD} = 0.3$

Realized Repeated Game
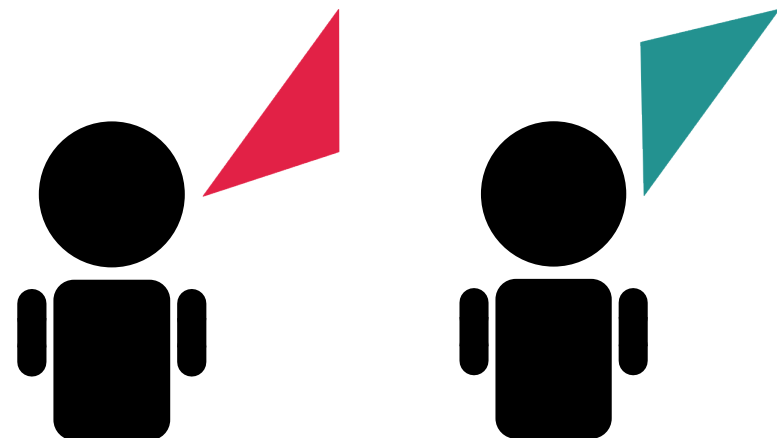
Player 1 $C\ C\ C\ D\ D$ ...
Player 2 $D\ D\ C\ D\ D$ ...

Outcome distribution

$C\ C$	$C\ D$
15%	44%
$D\ C$	$D\ D$
1%	30%

B reactive-1 vs equivalent self-reactive-1

Player 1 — reactive-1
$p_C = 0.8$
$p_D = 0.5$

Player 2 — self-reactive-1
$\tilde{p}_C = 0.3$
$\tilde{p}_D = 0.24$

Realized Repeated Game
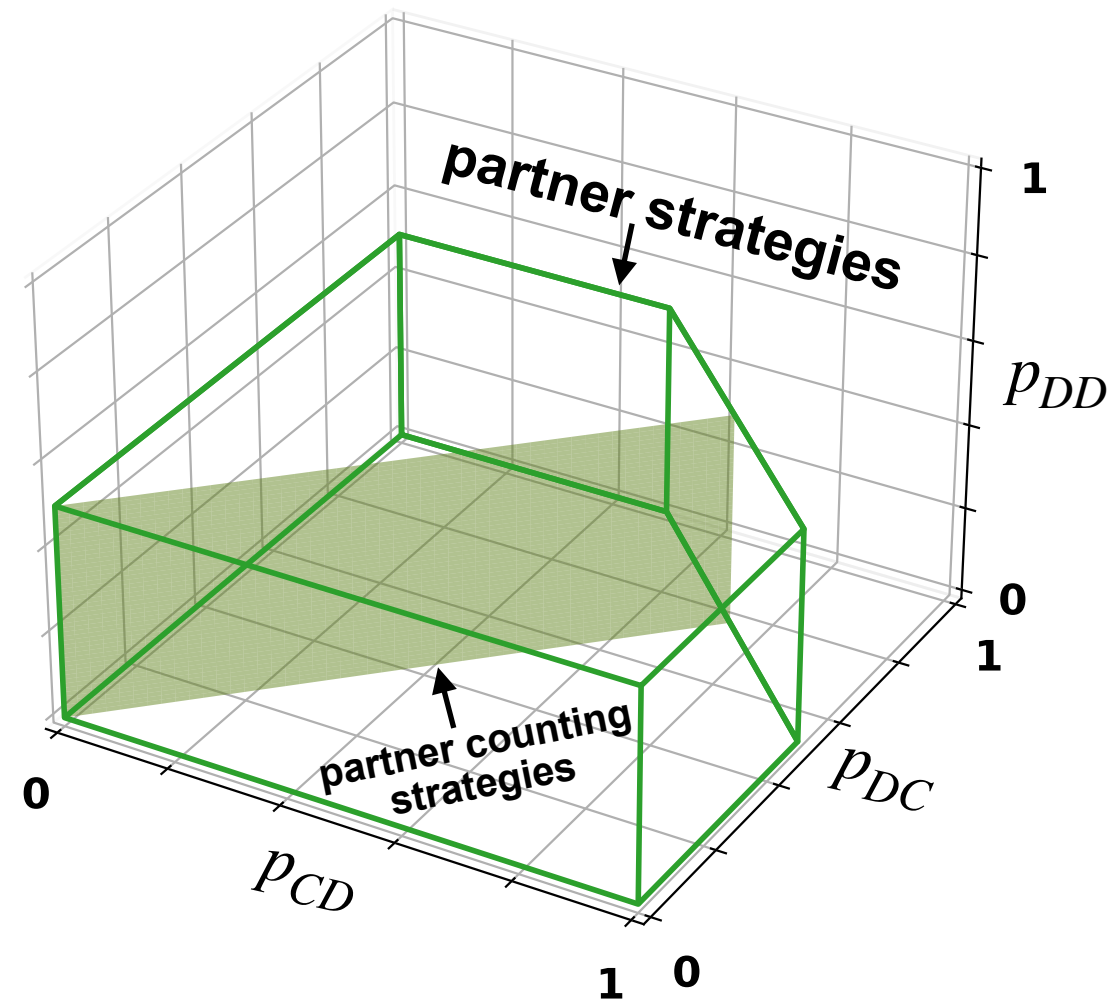
Player 1 $C\ C\ C\ D\ D$ ...
Player 2 $D\ D\ C\ D\ D$ ...

Outcome distribution

$C\ C$	$C\ D$
15%	44%
$D\ C$	$D\ D$
1%	30%

C Partners among the reactive-2 strategies

Donation Game ($b/c = 2$)

partner strategies

partner counting strategies

p_{DD} p_{DC} p_{CD}

D Axelrod's Prisoner's Dilemma

partner strategies

p_{DD} p_{DC} p_{CD}