

**Master in International Cooperation and Development  
(MIC&D)**

***Thinking strategically:  
Conflict and Cooperation***

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Second theme:

Which solution? The community

# Which solution? The community

*Deliberation*

Unplanned order

Planned order

*Ontology*

Spontaneous  
order

Market  
(state of nature)

Contract  
(constitution)

Contingent  
order

**Community**  
(**tradition**)

Hierarchy  
(state)

- Deliberation: Do people forge a solution?
- Ontology: Are only individuals involved?

# Which solution? The community

- *Overcoming self-interest* :
- With the right maximands or, equivalently, with the right **moral rules**, the Cooperator's Dilemma can be always solved.
- People can have different maximands:
  - Positive (**and/or** negative) altruism
    - If I am an altruistic player, then my utility function is:  $U_i = a_i p_i + b_j p_j$  (where  $i, j = 1, 2$ ;  $i$  different than  $j$ )
    - When  $b_j = 0$  and  $a_i > 0$ , then I am a **pure egoistic player**; when  $a_i > 0$  and  $b_j > 0$ , I am a **positive altruist**; when  $a_i > 0$  and  $b_j < 0$ , I am a **negative altruist**; when  $a_i = 0$  and  $b_j > \underline{\text{or}} < 0$ , I am a **pure (positive or negative) altruist player**; when  $a_i < 0$  the player's behavior might be called "**masochistic**"

# Which solution? The community

		Player 2	
		Cooperate	Defect
Player 1	Cooperate	3,3	1,4
	Defect	4,1	2,2

Let's suppose that the starting game is a PD, that is,  $(D,C) > (C,C) > (D,D) > (C,D)$ . Does the existence of altruistic players affect the final NE?

# Which solution? The community

Player 2

Cooperate

Defect

Cooperate

$(a+b)3, (a+b)3$

$a1+b4, a4+b1$

Player 1

Defect

$a4+b1, a1+b4$

$(a+b)2, (a+b)2$

Let's assume for sake of simplicity that  $a=1$  and that our players are **positive altruists**. Then our utility function can be written like that:  $U_i = p_i + b_j p_j$  (where  $i, j=1, 2$ ; and  $0 < b_j < 1$ ). How much should be  $b$  to produce a NE of mutual cooperation?

# Which solution? The community

Player 2

Cooperate

Defect

Cooperate

$$(a+b)3, (a+b)3$$

$$a1+b4, a4+b1$$

Player 1

Defect

$$a4+b1, a1+b4$$

$$(a+b)2, (a+b)2$$

**$b > 1/2$ .** That is, the utility of the other player should weigh more than the half of one's own utility

# Which solution? The community

- (right) Moral rules can therefore solve the Cooperator's Dilemma
- **However...**



# Which solution? The community

- ...an evaluation of the community solution: the risk of **tautology**

- *“To assume altruism would prevent the construction of theory about how persons come to act on behalf of others or on behalf of a collectivity when it goes against their private interests”* (Coleman 1990): the *Founding Fathers* lesson

# Which solution? The community

- ...an evaluation of the community solution: the risk of **practical irrelevance**

- If you are enough lucky to live in a community with «right» moral rules, you have solved your CA problems. But what if you aren't that lucky?

- Moral rules can be (eventually...) changed just in the medium-short period. In the meantime, what to do in the short-period?

- This is why we will talk here mainly about Market, Hierarchy and Contract assuming that players have a value of  $b$  very low (basically 0)