

# Sanctioning Strategies and Internalization

## a Game-Theoretic Approach

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Basic question:

**What kind of symbolic sanctioning strategies – praise and blame – will lead to internalization, i.e. conformity even under imperfect surveillance?**

		Eve	
		$C_E$	$D_E$
Adam	$C_A$	R R	S T
	$D_A$	T S	P=0 P=0

Figure 1: Basic Prisoner's Dilemma Game  
( $T > R > P > S$ )

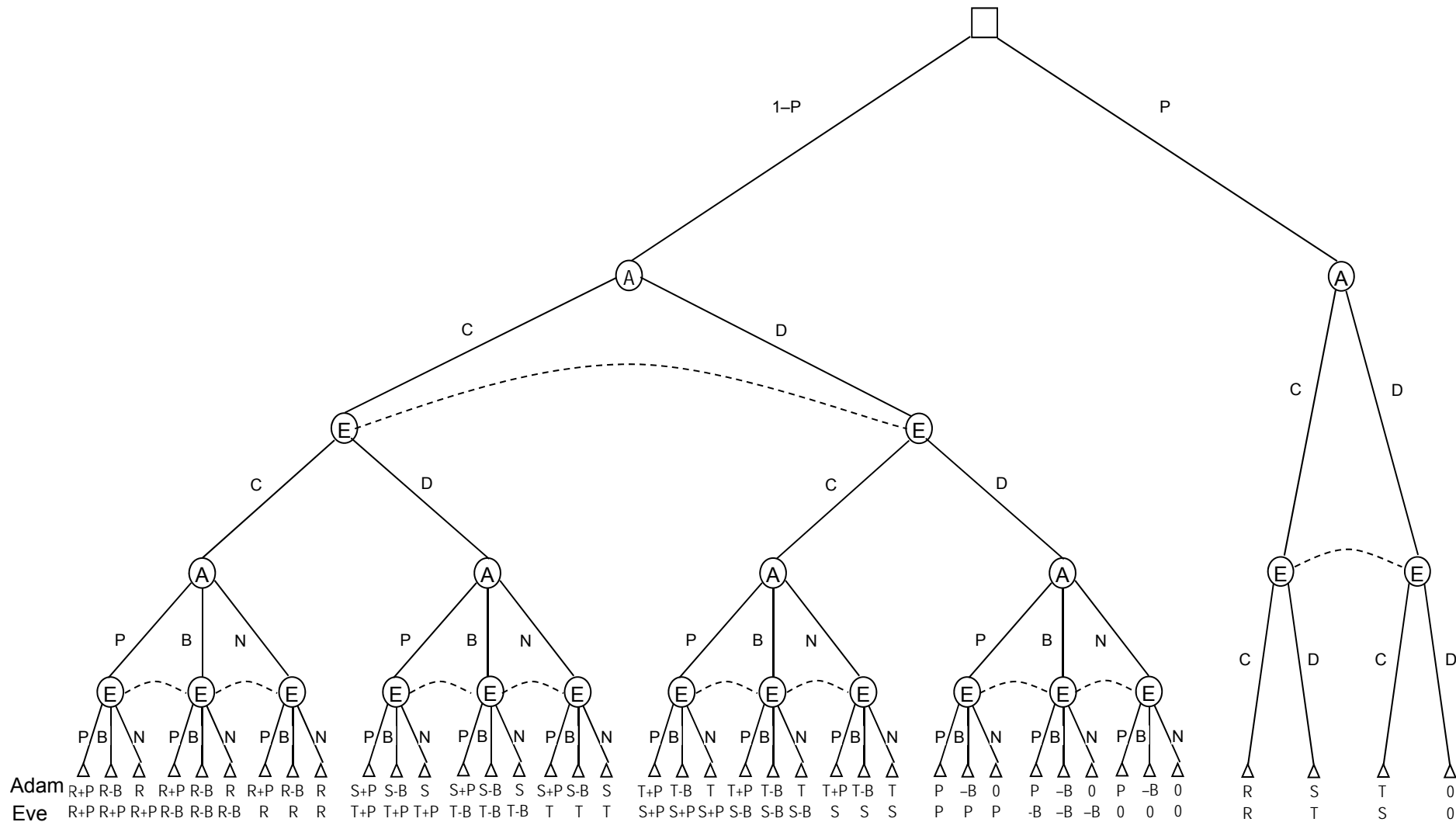


Figure 2: Norm game with symbolic sanctions and imperfect surveillance

C = conform; D = deviate; P = praise; B = blame; N = no reaction

$T > R > 0 > S$

$P > 0$

$B > 0$

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*DD* unconditionally defecting





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## *(step 2)*

Symbolic sanctioning strategies		Symbolic payoff
<b>PP</b>	praising both observed and unobserved behavior	$(1-p)P+G^+$
<b>PB</b>	praising observed and blaming unobserved behavior	$(1-p)(P+G^+)-pG^-$
<b>PN</b>	praising observed and not reacting to unobserved behavior	$(1-p)(P+G^+)$
<b>BP</b>	blaming observed and praising unobserved behavior	$-(1-p)(B+G^-)+pG^+$
<b>BB</b>	blaming both observed and unobserved behavior	$-(1-p)B-G^-$
<b>BN</b>	blaming observed and not reacting to unobserved behavior	$-(1-p)(B+G^-)$

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<b>BN</b>	blaming observed and not reacting to unobserved behavior	$-(1-p)(B+G^-)$
<b>NP</b>	not reacting to observed and praising unobserved behavior	$pG^+$
<b>NB</b>	not reacting to observed and blaming unobserved behavior	$-pG^-$
<b>NN</b>	not reacting to neither observed nor unobserved behavior	0

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**will the actors always be unconditional conformists?**

- (1) Let us remember: In the basic game the combination (CC,CC) gives both actors the Pareto-optimal outcome R. To make the **total** payoff of an unconditional conformist CC maximal, his sanctioning payoff  $y_{CC}$  should be maximal. This will be the case if his partner chooses the sanctioning strategy PP.

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- (2) Then the following inequalities must be satisfied for all  $0 \leq p \leq 1$ :
- (i)  $(1-p)P+G^+ \geq p(T-R) + y_{CD}$
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- (3) Even if  $p=1$ , condition (iii) may be fulfilled, if  $y_{DD}$  is minimal. This will be the case if the partner chooses sanctioning strategy BB and  $G^++G^- \geq T-R$ .

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 If ALTER chooses DC: BP, BN, NP or NN
- (5) Given these restrictions the minimal elements in equations (i) and (ii) are:  
 $m_{CD} = NB$  with  $y_{CD} = -pG^-$  and  
 $m_{DC} = BN$  with  $y_{DC} = -(1-p)(B+G^-)$

The sanctioning mode therefore is  $M = (PP, NB, BN, BB)$ , i.e. deviant behavior is always blamed whether observed or not; however conforming behavior is only praised if the actor is an unconditional conformist. In the literature this mode of sanctioning is called “**sanctioning of sentiment**” (**Gesinnungssanktionierung**). It fulfils all three conditions ( $\alpha$ ), ( $\beta$ ) and ( $\gamma$ ) as long as  $G^+ + G^- \geq T - R$ , i.e. the strength of conscience outweighs the incentive to deviate.

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- $M = (NN, NB, BN, BB)$  “**only blame**” is used as a symbolic sanction
- $M = (NN, NN, NN, NN)$  “**laissez faire**”: behavior is never sanctioned

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- However, if the incentive to deviate is smaller than the sum of symbolic sanctions but larger than conscience alone ( $P + B + G^+ + G^- > T - R > G^+ + G^-$ ), "*behavior sanctioning*" will not promote internalization, but "*sentiment sanctioning*" does, as long as the probability of not being detected is sufficiently low.

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- Of course, as one would expect, if the incentive to deviate is larger than the sum of all symbolic sanctions –  $(T - R) > (P + B + G^+ + G^-)$  – **none of the modes of sanctioning will bring about internalization.**

## Two Conjectures:

- If in the medium run respect and self-respect would become equally strong the conclusion stated above could be strengthened: If social approval alone is stronger than the incentive to deviate ( $P+B > T-R$ ) then both players unconditionally conforming will always be a Nash equilibrium.

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- If internalization is successful players will accept punishment without retaliation. This „function” of internalization – accepting sanctions even if one has the capacity to „retaliate” or even repenting and paying restitution – is one of the important prerequisites of the stability of norms besides „secondary norms” where third persons disapprove a lack of sanctioning and applaud the application of sanctions.