

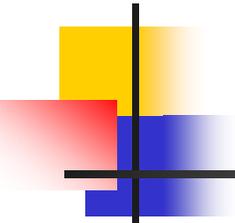
Sanctioning Strategies and Internalization

a Game-Theoretic Approach

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Rational Choice Sociology: Theory and Empirical Applications
Venice International University, November 30 till December 4, 2009



Sanctioning Strategies and Internalization

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
($T > R > P > S$)

Structure of an Internalization Game

(step 1)

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DD unconditionally defecting

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(step 2)

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

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BN	blaming observed and not reacting to unobserved behavior	$-(1-p)(B+G^-)$
NP	not reacting to observed and praising unobserved behavior	pG^+
NB	not reacting to observed and blaming unobserved behavior	$-pG^-$
NN	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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- (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 (α), (β) and (γ) 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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- 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.