Figure 1: Payoffs to Self and Other

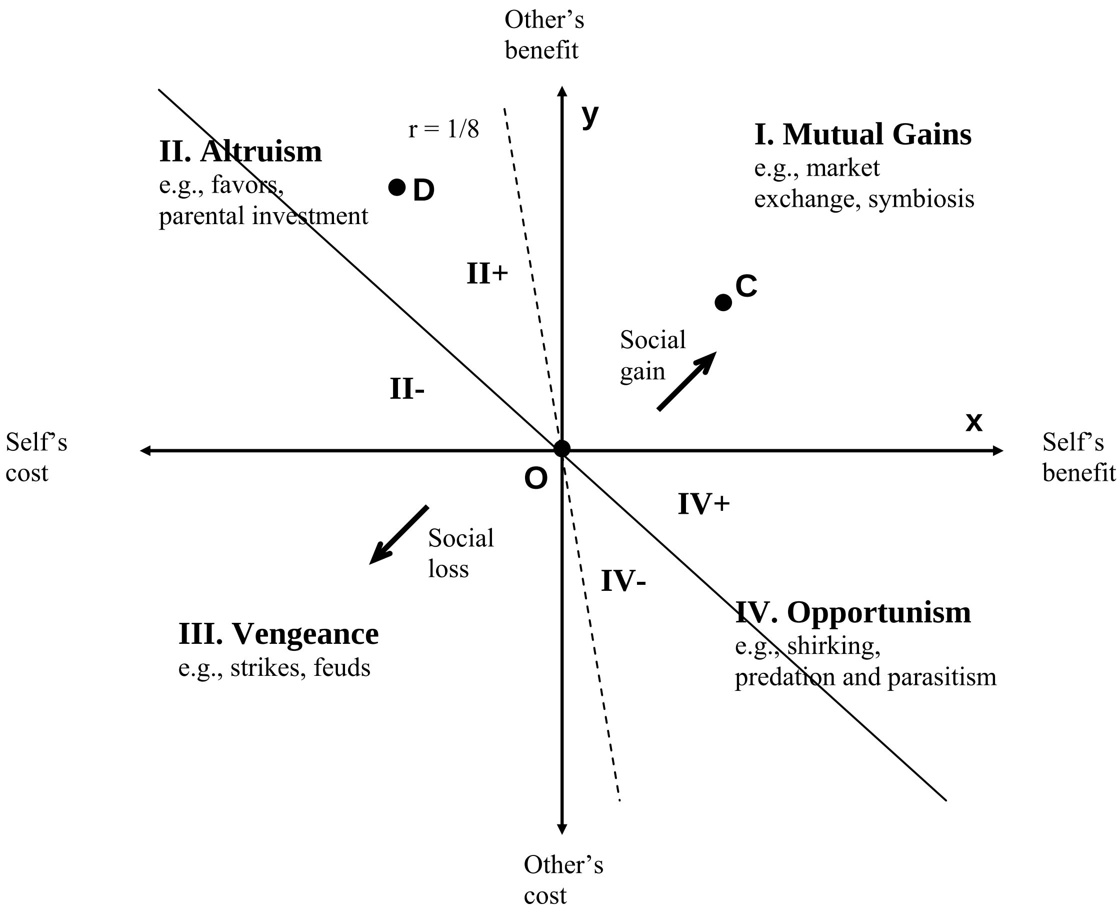
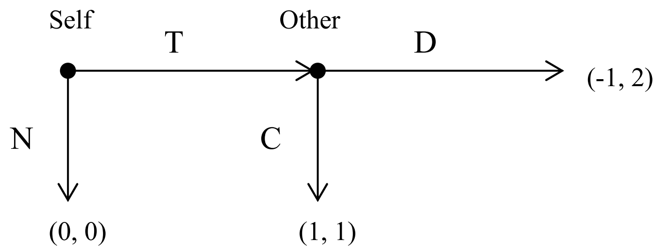
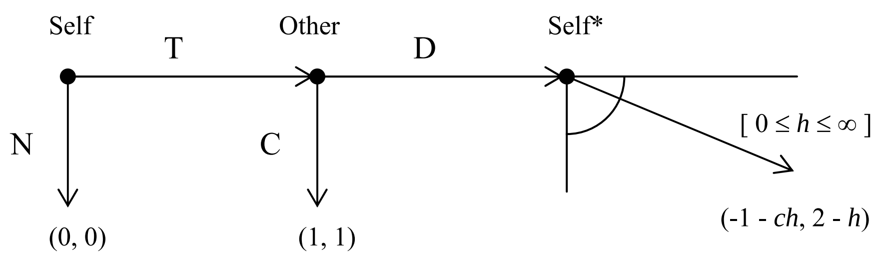


Figure 2: Fitness Payoffs

A. Basic Trust Game



B. Extended Trust Game



*Utility payoff to Self is $-1 - ch + \ln h$

C. Reduced Trust with a vengeance

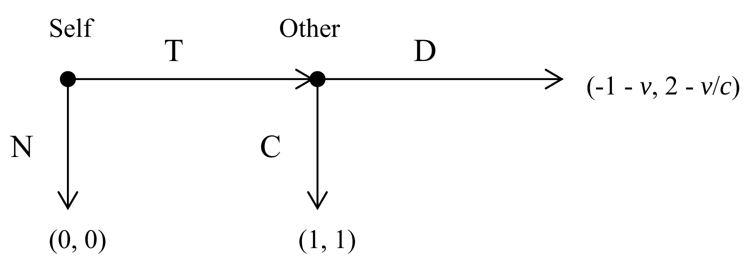


Figure 3: Self's Fitness *w* as a Function of Vengefulness *v*

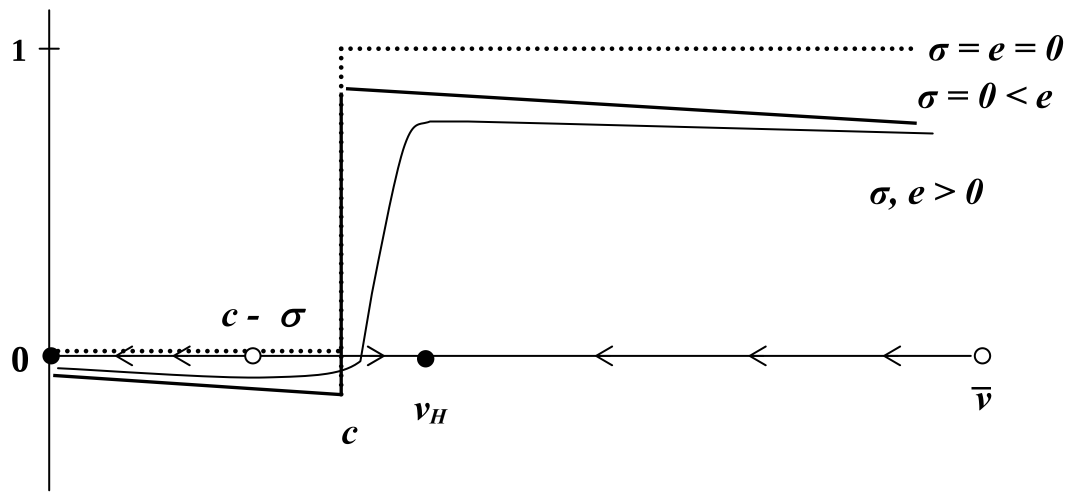
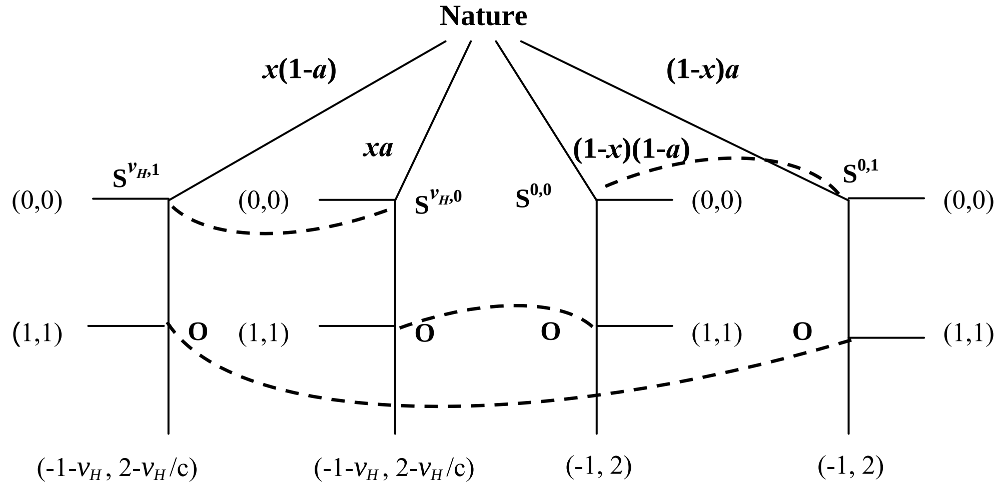


Figure 4: Game Tree



Note: O denotes Other; S^{ij} denotes Self with vengeance level *i* and perception *j*, as determined by Nature's move. The four branch labels are Nature's move probabilities.

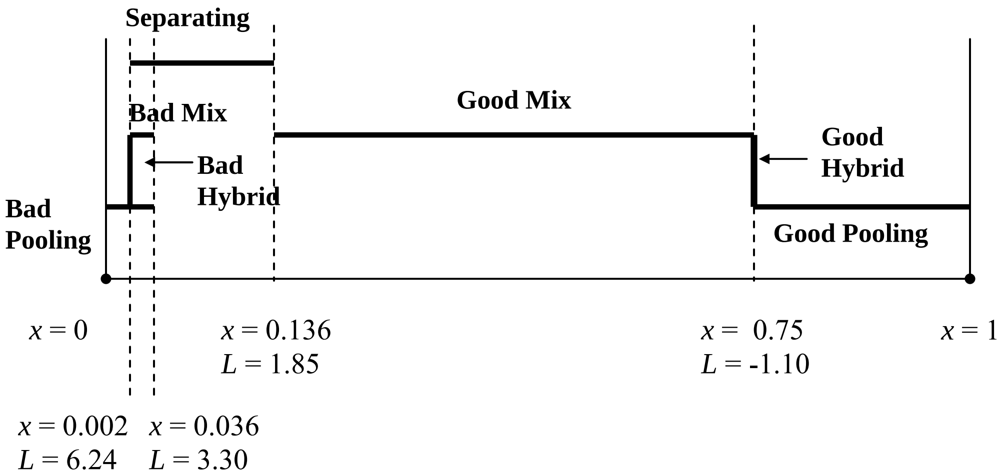
Table 1: PBE Probabilities

		Fitness Payoff	Equilibrium Probability		
	Choice	**Self, Other**	**(NT, DC)** **Separating**	**(TT, DC)** **Good Pooling**	**(NN, DD)** **Bad Pooling**
$v = v_H$	(N, .) (T, C) (T, D)	0, 0 1, 1 -(1+v), 2-v/c	e $(1 - e)(1 - \alpha)$ $(1 - e)\alpha$	e $(1 - e)^2$ $(1 - e)e$	$1 - e$ e^2 $e(1 - e)$
$v = 0$	(N, .) (T, C) (T, D)	0, 0 1, 1 -1, 2	$1 - e$ $e\alpha$ $e(1 - \alpha)$	e $(1 - e)^2$ $(1 - e)e$	$1 - e$ e^2 $e(1 - e)$

Note: Other observes s = 1 with probability a in (0, ½) when $v = 0$, and observes s = 0 with probability a when $v = v_H$. Other chooses his less preferred action with probability $\alpha = a(1 - e) + e(1 - a) = e + a - 2ae$.

Figure 5: PBE Example

Parameter Values: $a = 0.1$, $e = 0.05$, $c = 0.5$, $v_H = 2$



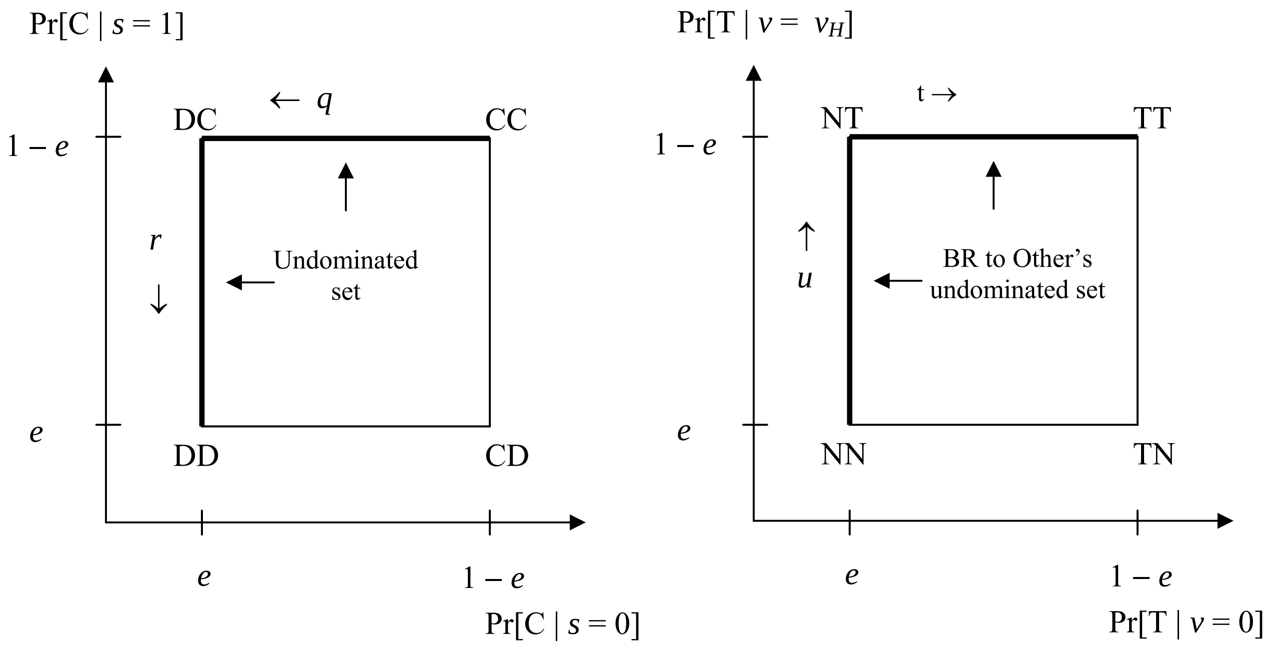
Note: The vertical axis conflates *q* and *r* and so has no meaningful scale, but the vertical segments reflect the fact that the GH equilibrium coincides with GP at q=0 and with GM at q=q*, while the BH equilibrium coincides with BP at r=1 and with BM at r=r***.**

Table 2: PBE Calculations

	Fitness function		Value in example	
	Non-vengeful type **$v = 0$**	**Vengeful type** **$v = v_H$**	**Non-vengeful type** **$v = 0$**	**Vengeful type** **$v = v_H$**
Separating	$e(2\alpha - 1)$	$(1 - e)(1 - (2 + v_H)\ \alpha)$	- 0.036	0.418
Good Pooling	$(1 - e)(1 - 2e)$	$(1 - e)(1 - (2 + v_H)\ e)$	0.855	0.760
Bad Pooling	$- e(1 - 2e)$	$- e(1 + v_H\ - (2 + v_H)\ e)$	- 0.045	-0.140
Good Mix	$(1 - e)[1- 2e - 2q(1- e-\alpha)]$	$(1 - e)[1- (2 + v_H)e - q\alpha\ (2 + v_H)\ (1- 2e)]$	0	0.608
Bad Mix	$e[- (1 - 2e)+2(1- r)(1- \alpha- e)]$	$(1 - e)[1- (2 + v_H)\ \alpha\ - r((2 + v_H)\ (1- \alpha- 2e) + 2e)]$	-0.646	-2.242

Notes: Example parameter values are $a = 0.1$, $e = 0.05$, $c = 0.5$, $v_H = 2$. The hybrid equilibria will involve the fitness functions indicated for the corresponding mixed equilibria, with q and r varying within their ranges rather than fixed at particular numerical values.

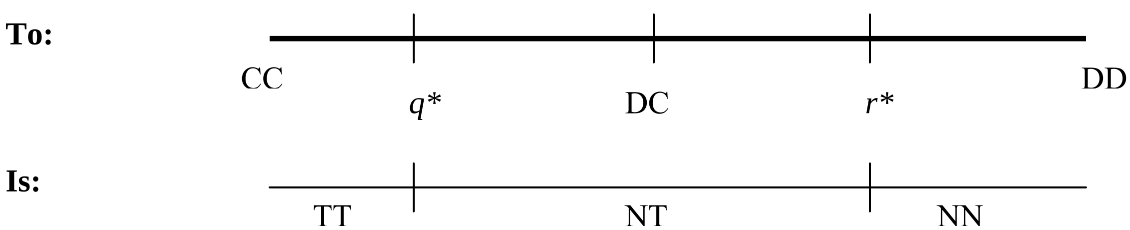
Figure 6: Best Responses and PBE



A. Other's undominated strategies are on the NW frontier

B. Self's BR to Other's undominated strategies are also on the NW frontier

C. Self's Best Response



D. Other's Best Response depends on *L(x)*