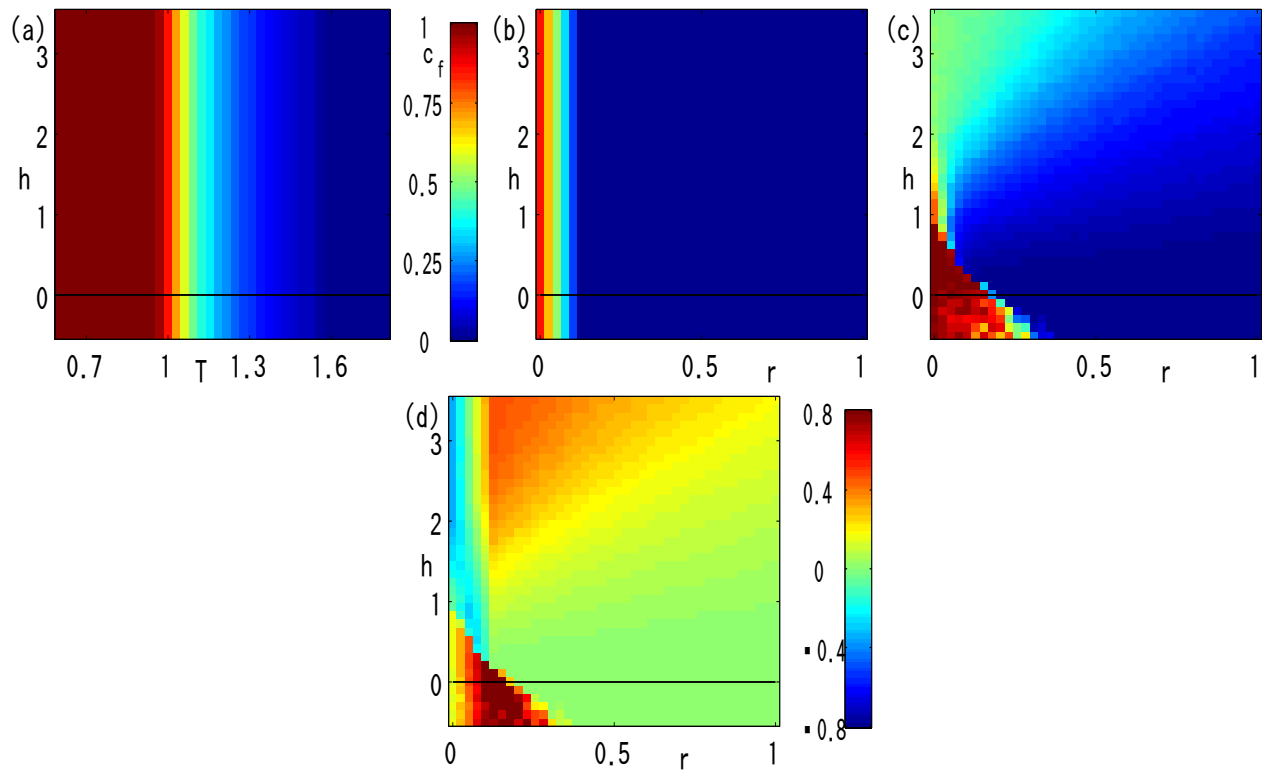
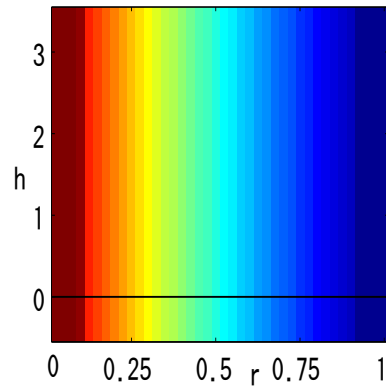


Supplementary figures for “Participation costs dismiss the  
advantage of heterogeneous networks in evolution of  
cooperation”

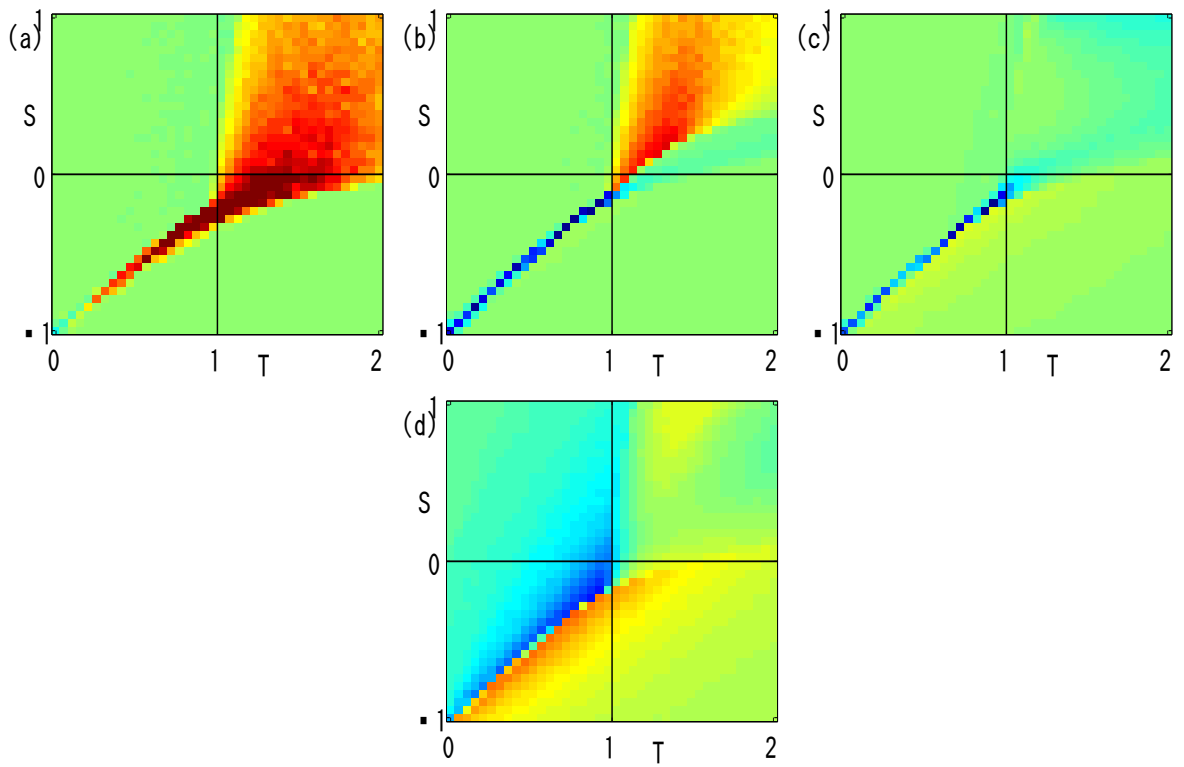
Naoki Masuda



Supplementary figure 1: (a) The final fraction of cooperators  $c_f$  in the Prisoner's Dilemma on the regular random graph. The payoff matrix is represented by Eq. (2). The results for the payoff matrix Eq. (4) are shown in (b-d). (b)  $c_f$  for the regular random graph, (c)  $c_f$  for the scale-free networks, and (d)  $c_f$  for the scale-free networks minus  $c_f$  for the regular random graph.



Supplementary figure 2:  $c_f$  for the snowdrift game on the regular random graph.



Supplementary figure 3:  $c_f$  for the scale-free networks (Fig. 4(b-e)) minus  $c_f$  for the regular random graph (Fig. 4(a)) in the  $T$ - $S$  space. (a)  $h = 0$ , (b)  $h = 0.5$ , (c)  $h = 1$ , and (d)  $h = 2$ .