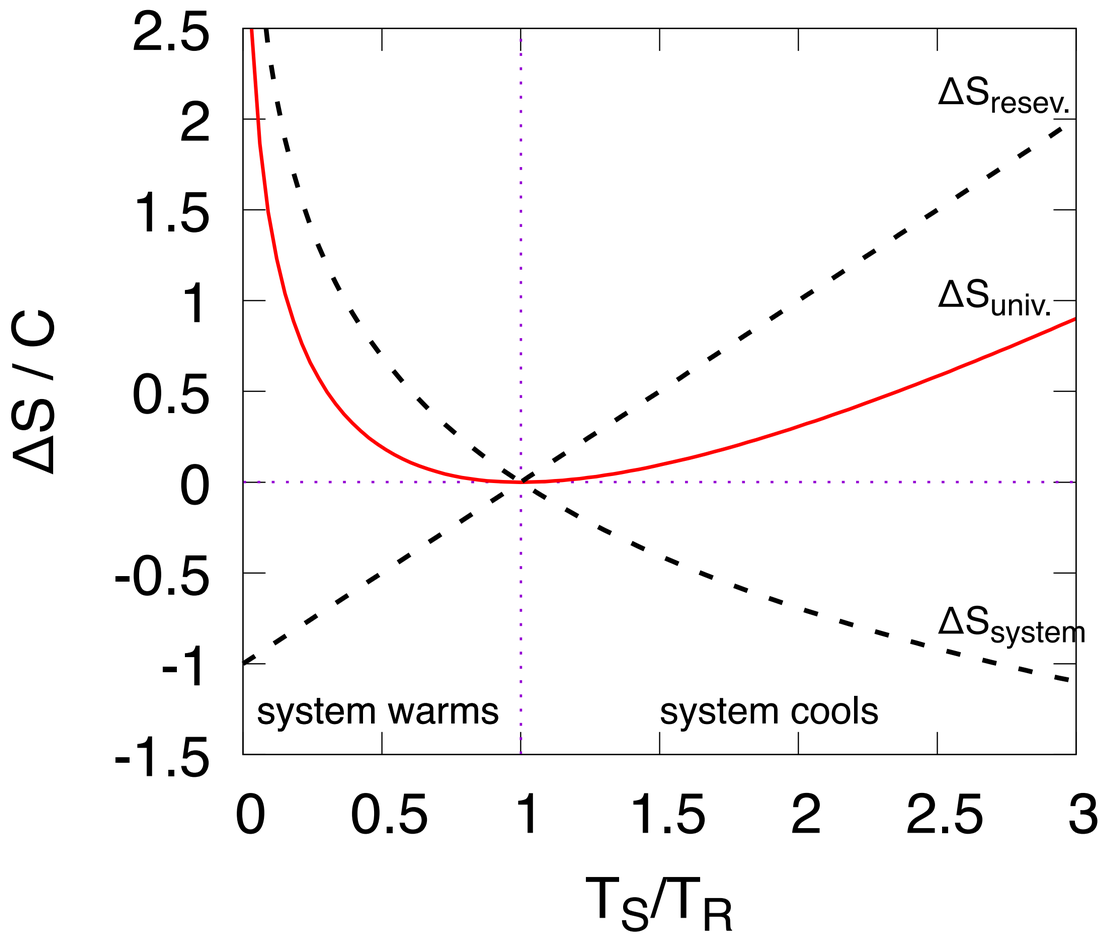
Change in Entropy Ball in Lake: Blundell Example 14.1



System = Ball

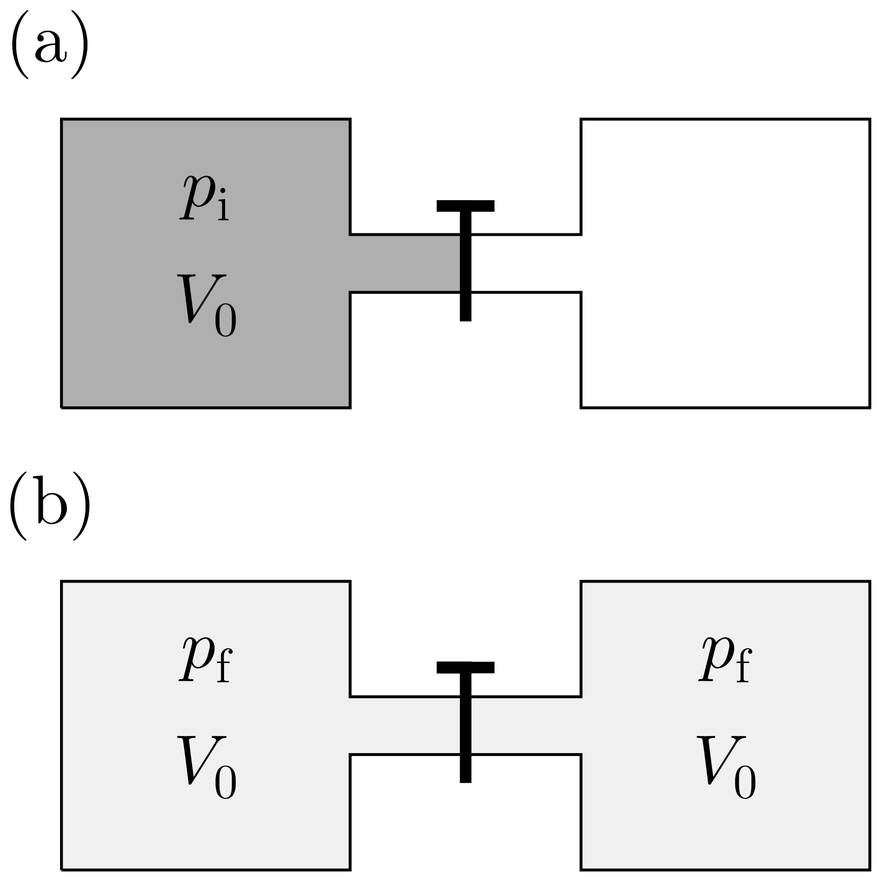
The ball has (initial) temperature T_S

Reservoir = Lake

The reservoir has constant temperature T_R

Universe is the ball and lake

Joule Expansion



The expansion
is a highly non-equilibrium process.

During the expansion no heat
enters the system. Thus the
energy initial equals the final energy