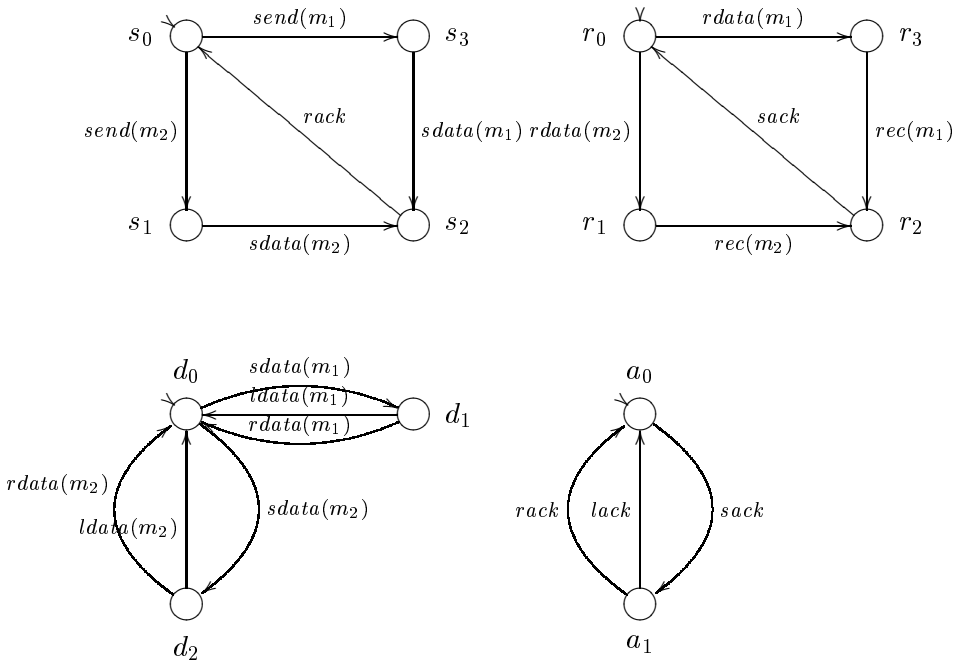
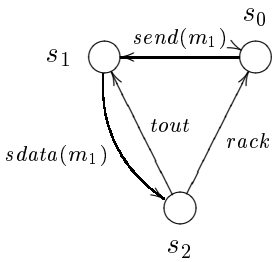
1. Let us consider the following simple protocol given as a labelled transition system:



   (a) Write a place/transition net which is semantically equivalent with the above LTS.
   (b) Write the reachability graph of the P/T Net.
   (c) Find the system errors from the reachability graph.
   (d) How can the model be simplified?

2. Let us replace the protocol sender with the following LTS:



   Additionally, the states and transitions related with the message m_2 are deleted from the receiver and data channel.

   (a) Write a place/transition net which is semantically equivalent with the above LTS.
   (b) Does the protocol now work correctly?