A synchronous communication happens when the sender is ready to send and the receiver(s) is(are) ready to receive. Those that are ready must wait for those that are not.

(a) Design a theory of synchronous communication. For each channel, you will need only one cursor, but two (or more) time scripts. An output, as well as an input, increases the time to the maximum of the time scripts for the current message.

(b) Show how it works in some examples, including a deadlock example.

(c) Show an example that is not a deadlock with asynchronous communication, but becomes a deadlock with synchronous communication.