Why Contexts?

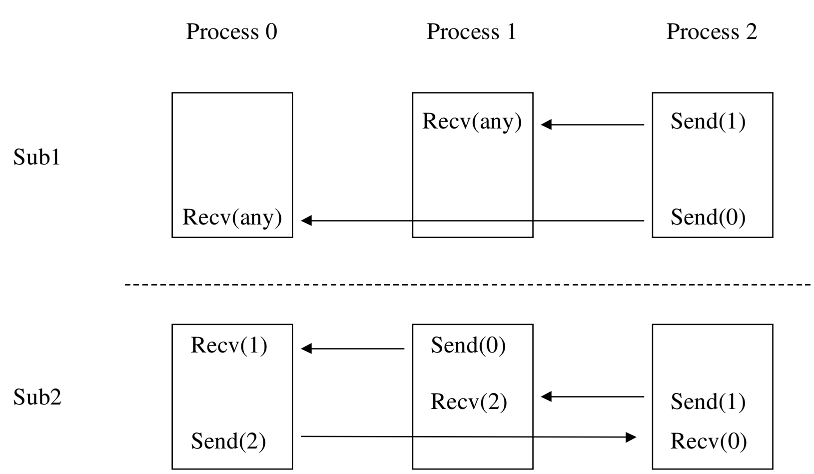
- Parallel libraries require isolation of messages from one another and from the user that cannot be adequately handled by tags.
- The following examples are due to Marc Snir.
  - » Sub1 and Sub2 are from different libraries

```
Sub1();
Sub2();
```

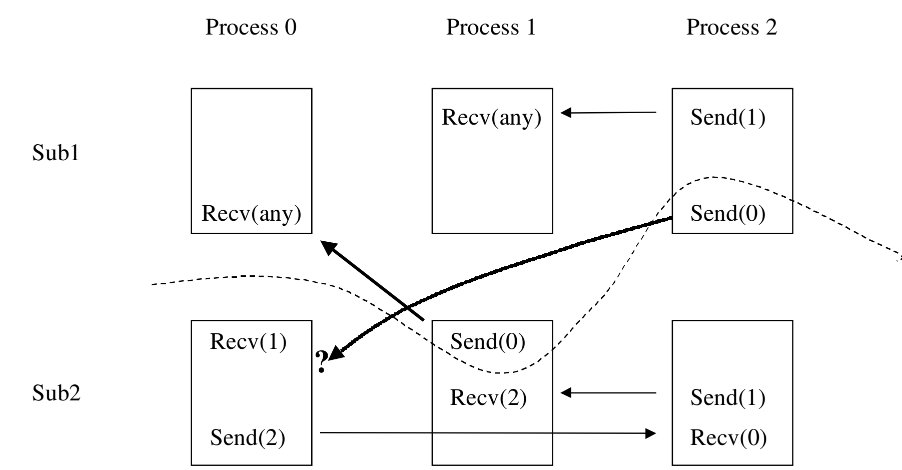
  - » Sub1a and Sub1b are from the same library

```
Sub1a();
Sub2();
Sub1b();
```


Correct Execution of Library Calls

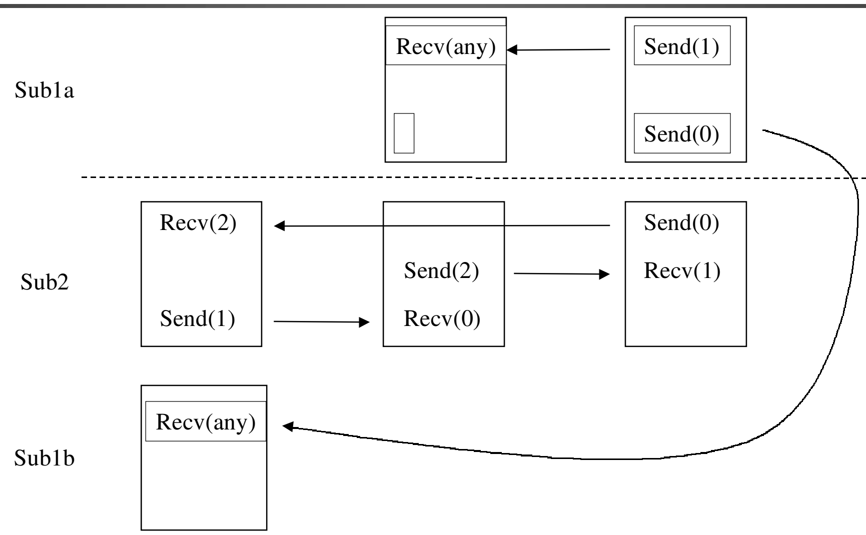


Incorrect Execution of Library Calls

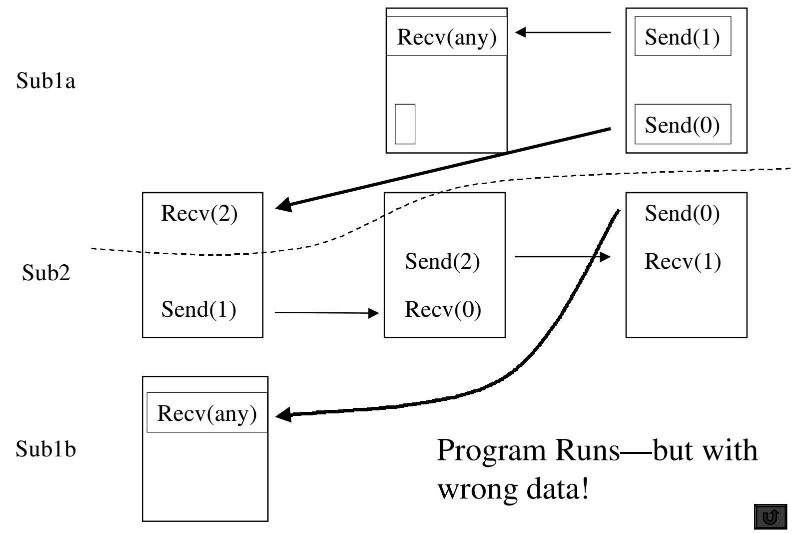


Program hangs (Recv(1) never satisfied)

Correct Execution of Library Calls with Pending Communication



Incorrect Execution of Library Calls with Pending Communication



Program Runs—but with wrong data!