7. Further UML Diagrams
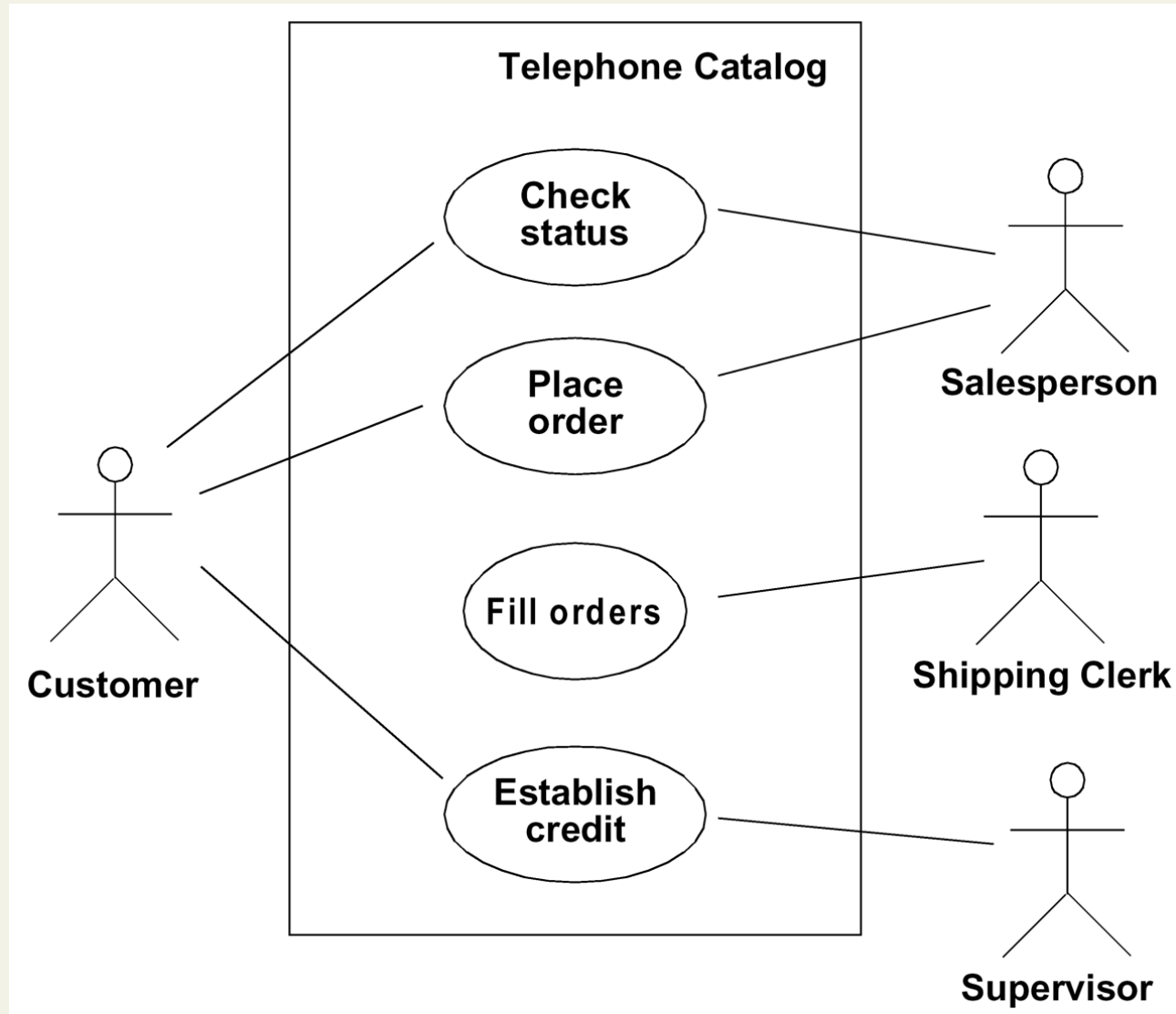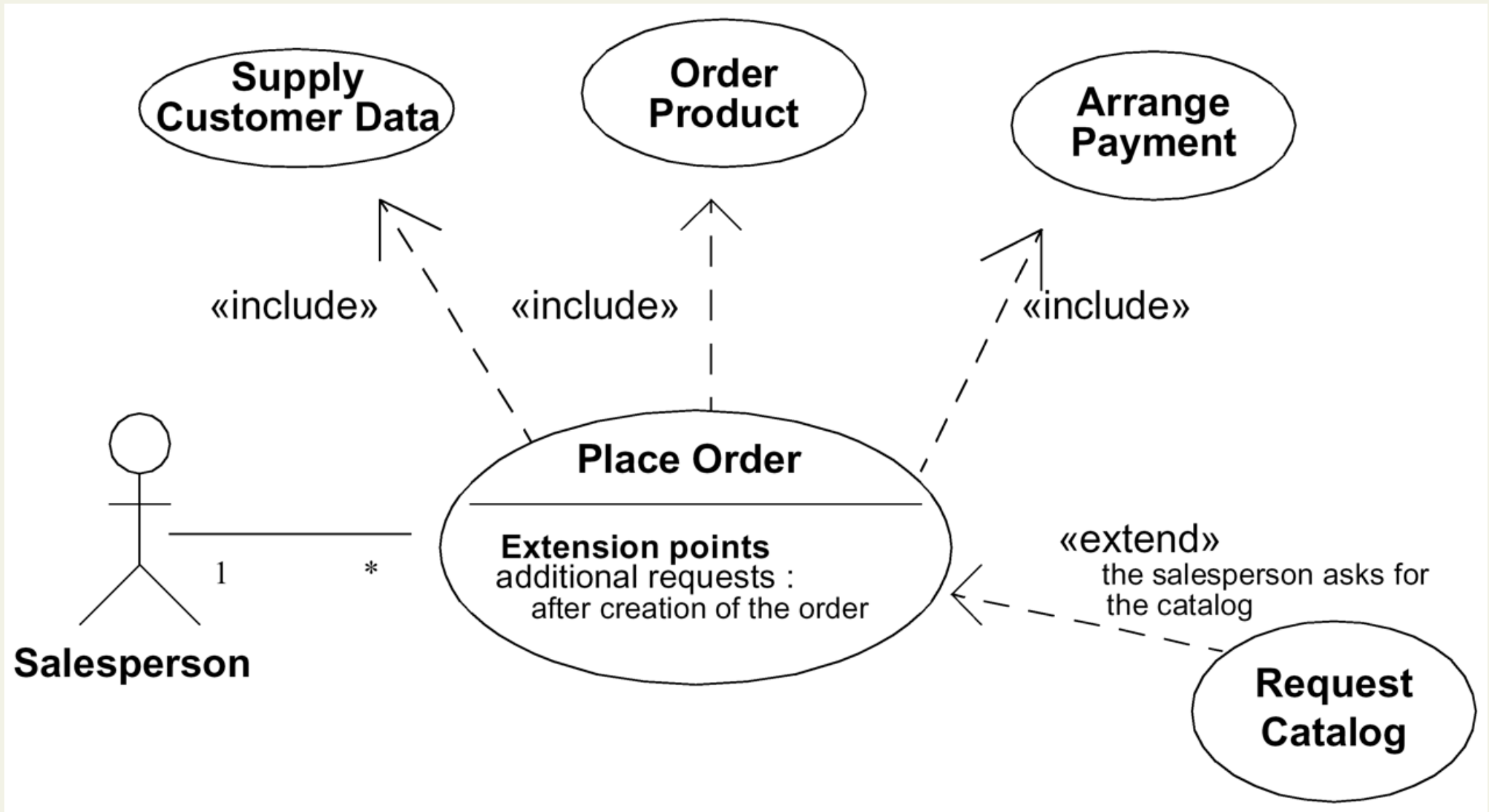
7.1 Use Case Diagrams
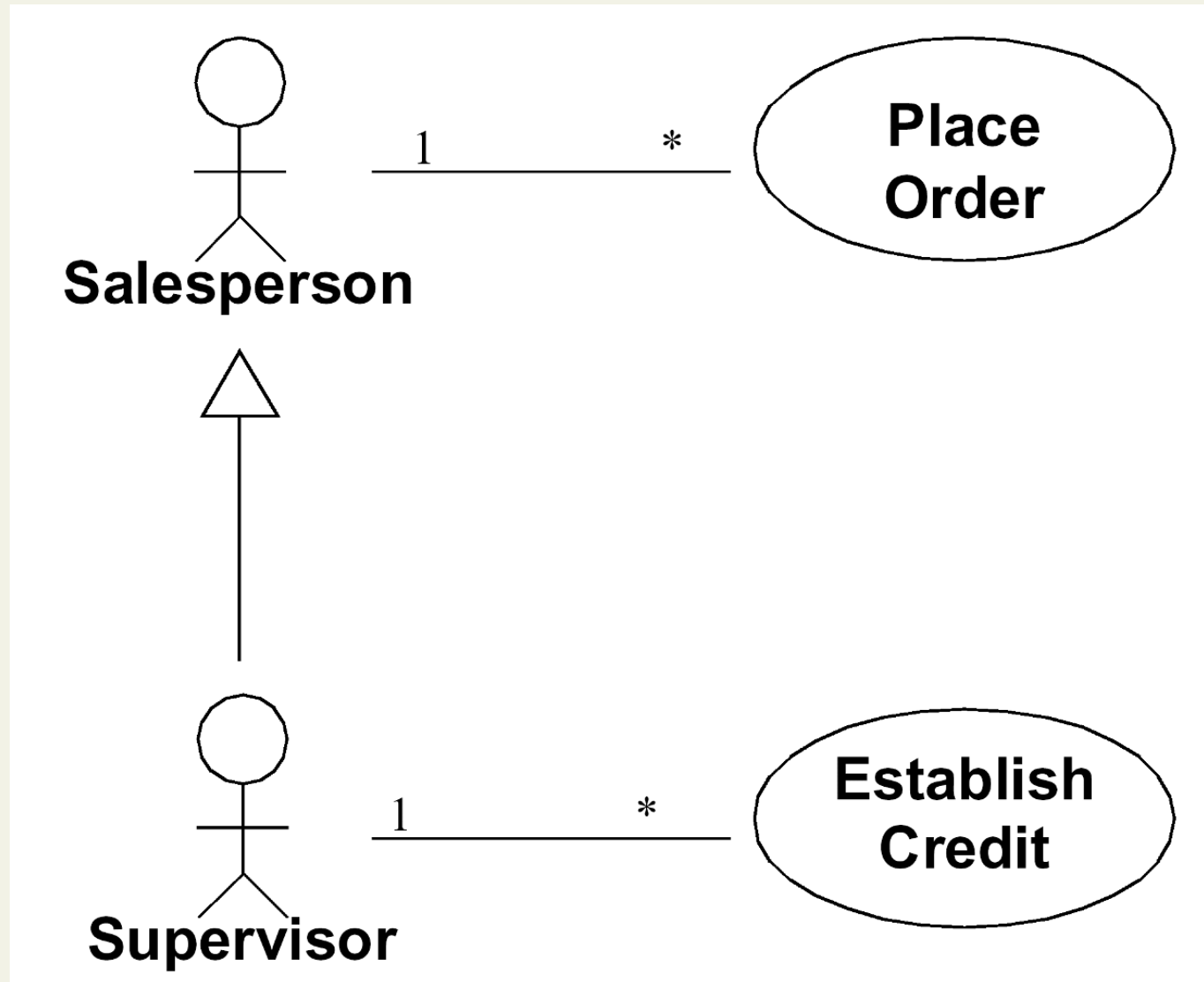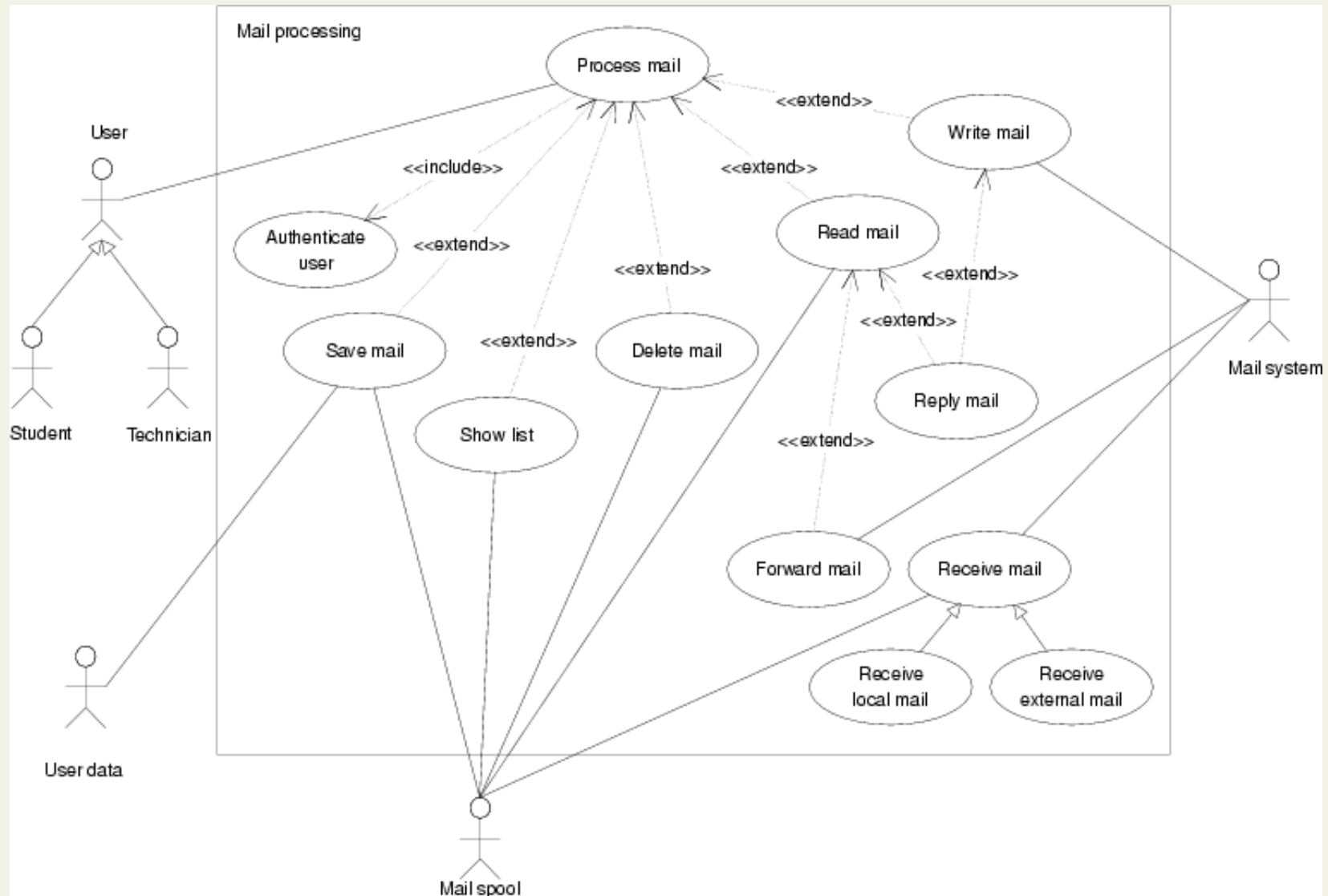
Use Case Diagram (3-52)

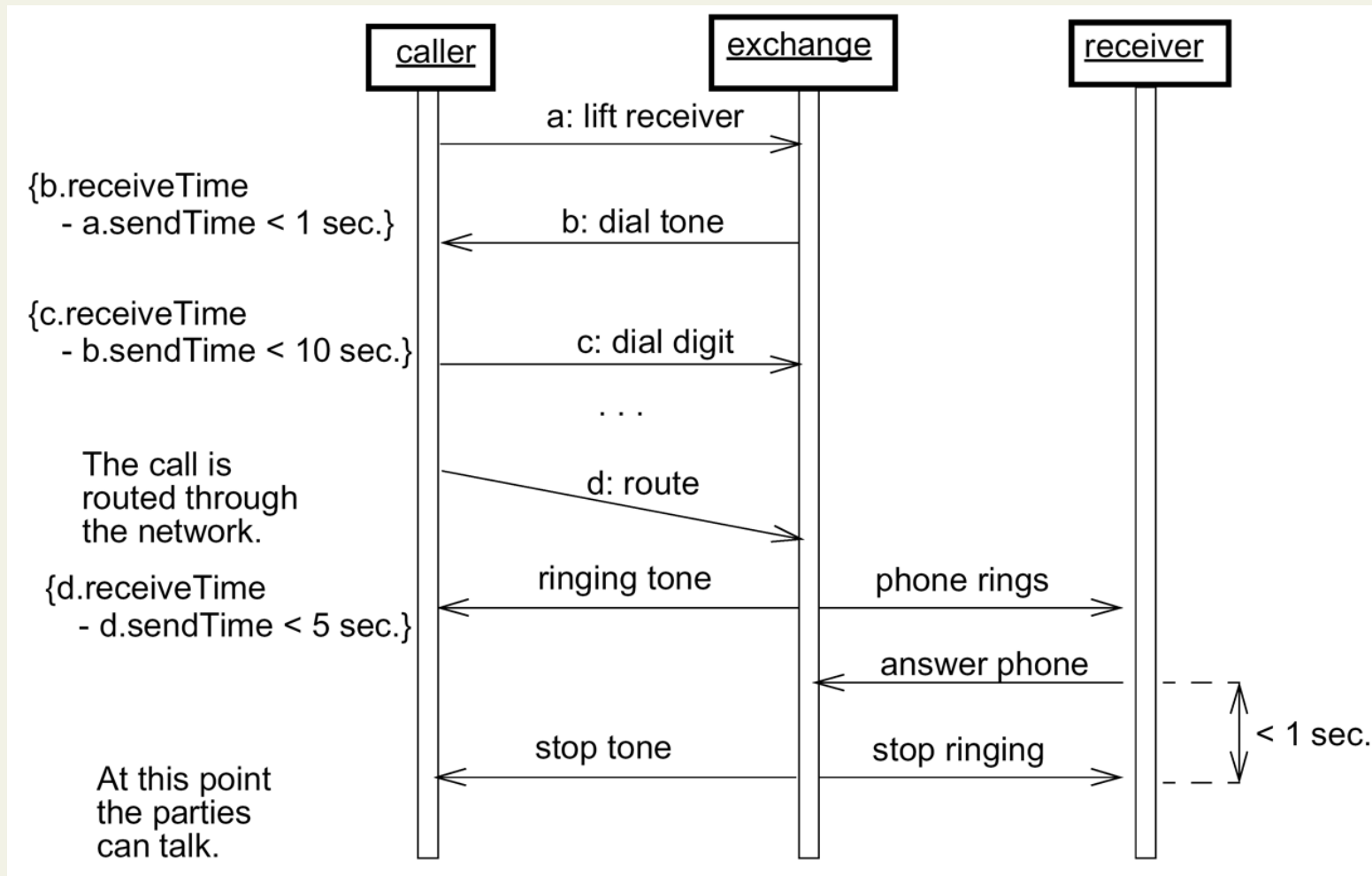# Use Case Relationships (3-53)

Actor Relationships (3-54)

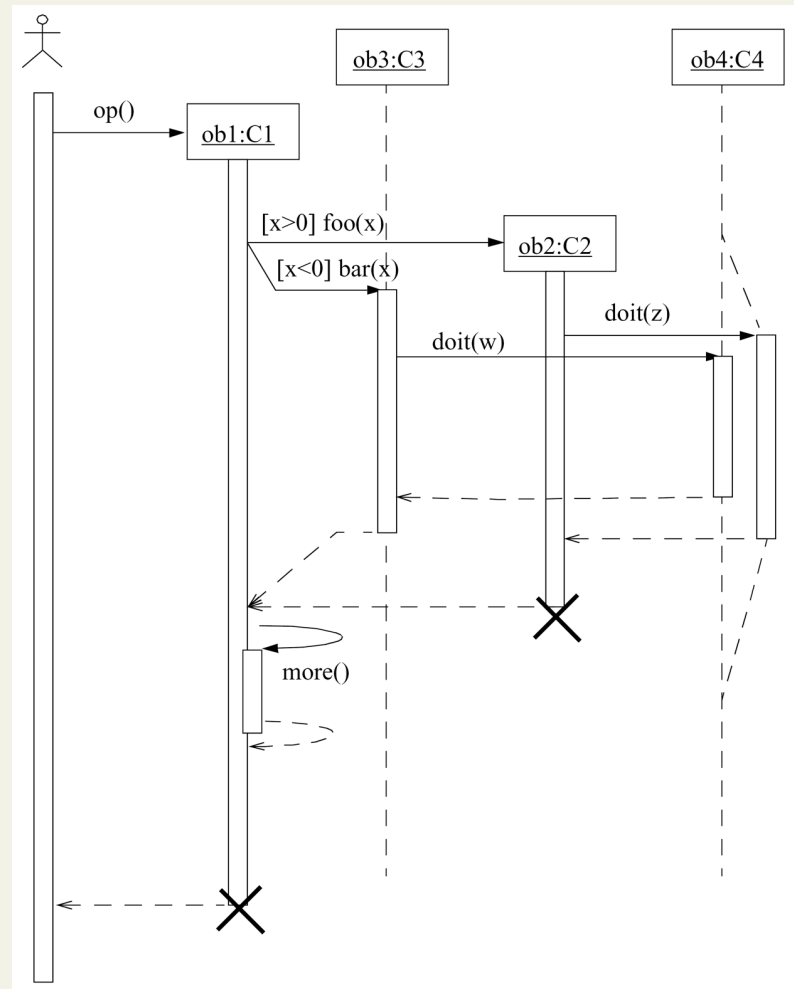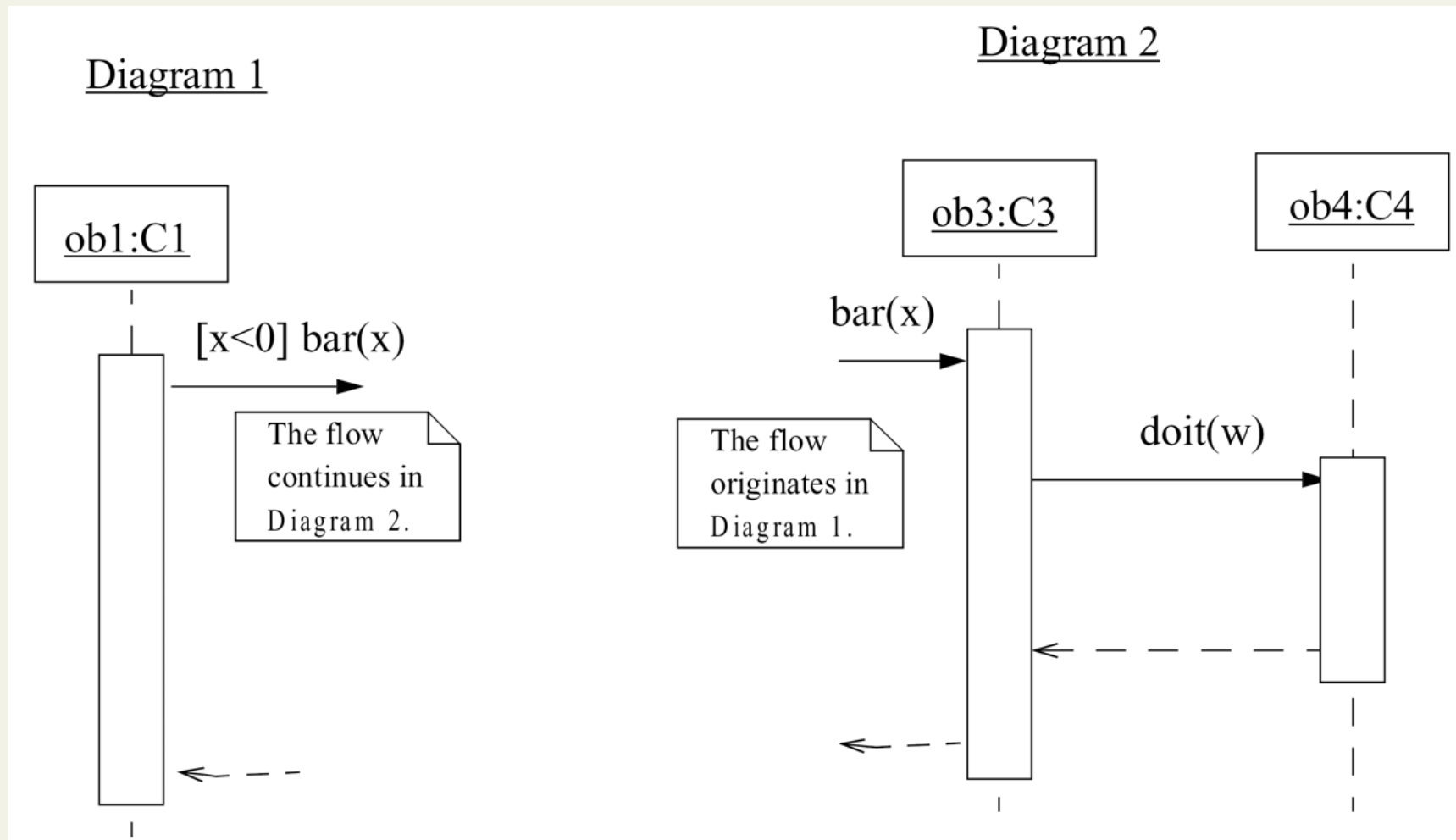# Use Case Diagram for Mail System

7.2 Sequence Diagrams

Simple Sequence Diagram with Concurrent Objects (denoted by boxes with thick borders) (3-55)

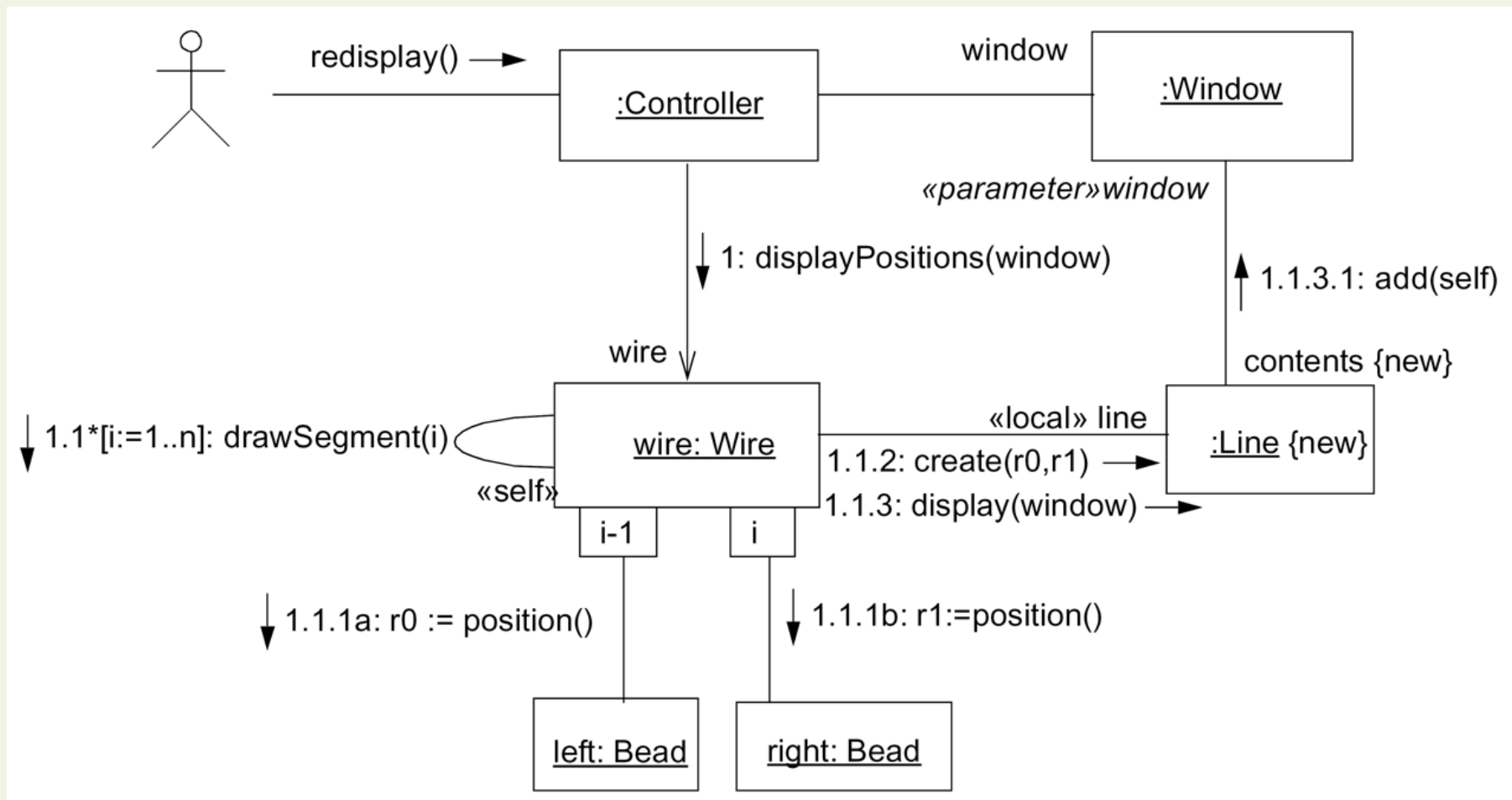# Sequence Diagram with Focus of Control, Conditional, Recursion, Creation, and Destruction (3-56)

The flow shown in the sequence diagram to the left continues in the diagram to the right (3-58)
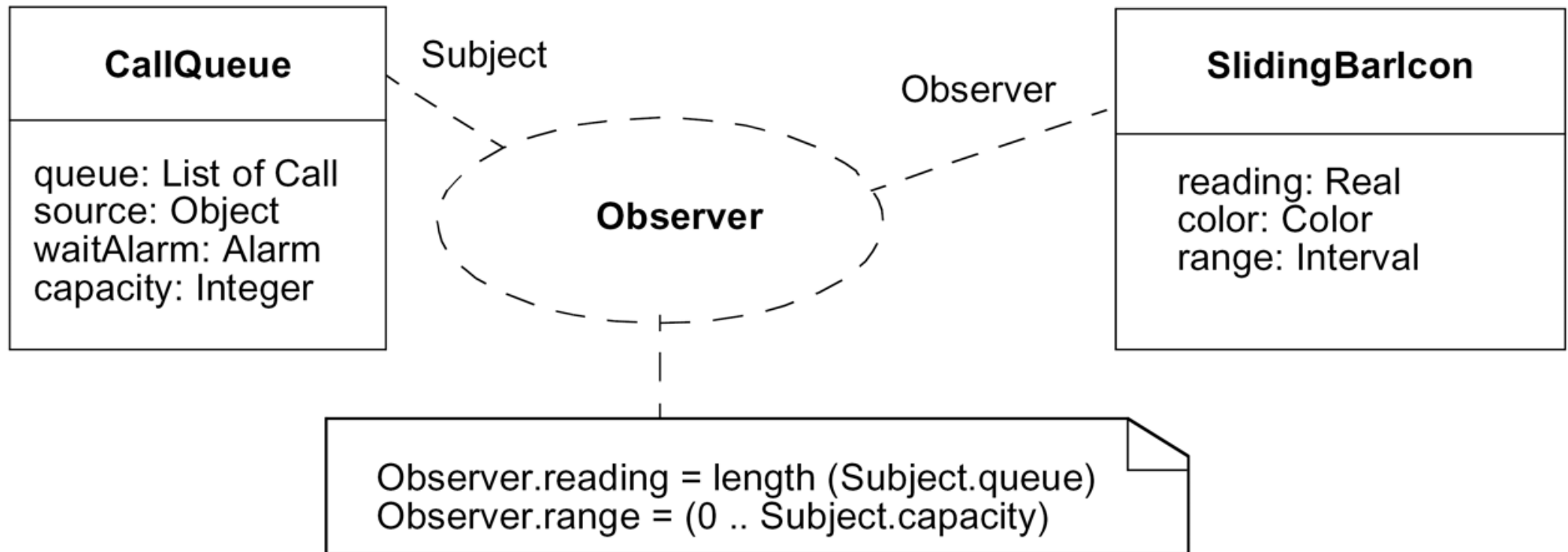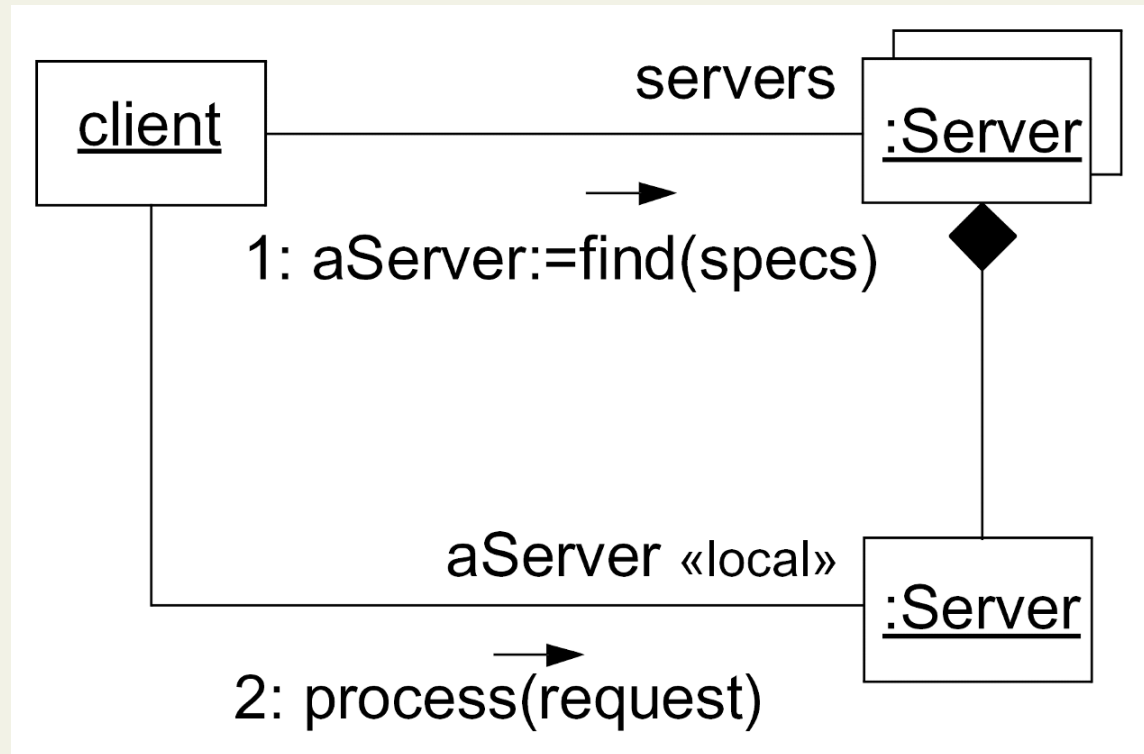
7.3 Collaboration Diagrams

Collaboration Diagram at instance level, presenting Objects, Links, and Stimuli referenced by a CollaborationInstanceSet and its InteractionInstanceSet (3-59)
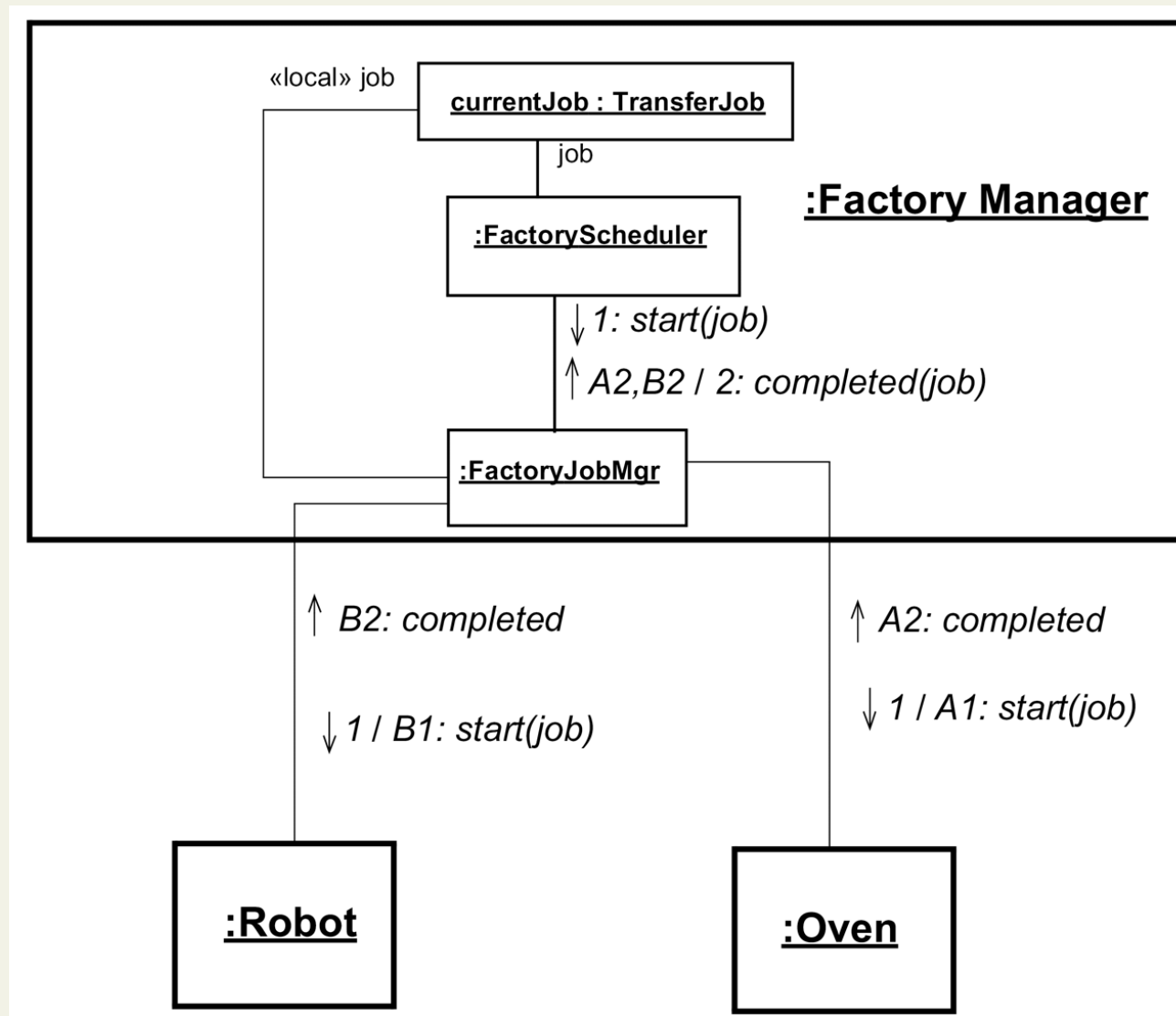
Use of a Collaboration (3-62)

CallQueue
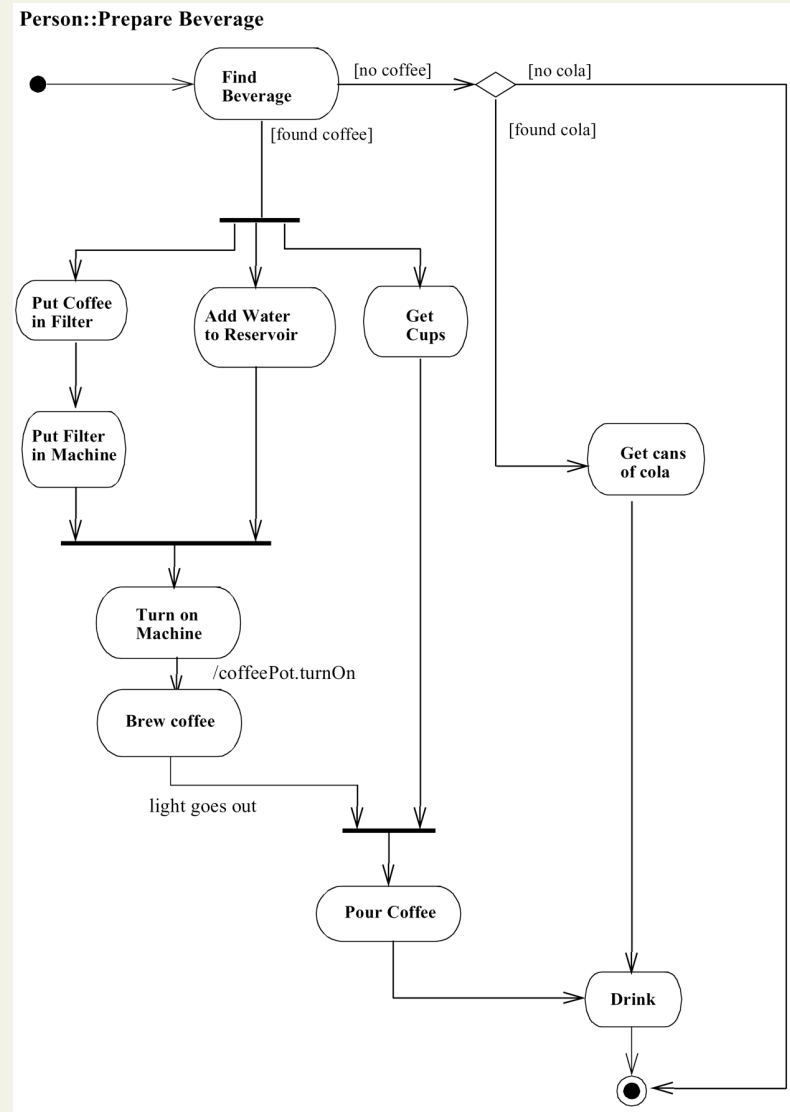
queue: List of Call
source: Object
waitAlarm: Alarm
capacity: Integer

Subject

Observer

Observer

SlidingBarIcon

reading: Real
color: Color
range: Interval

Observer.reading = length (Subject.queue)
Observer.range = (0 .. Subject.capacity)

Multiobject (3-69)

servers

client

:Server

1: aServer:=find(specs)

aServer «local»

:Server

2: process(request)

Composite Active Object (3-70)

7.4 Activity Diagrams

Activity Diagram (3-84)
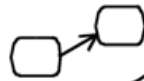
Person::Prepare Beverage
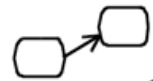
Action States (3-85) Subactivity States
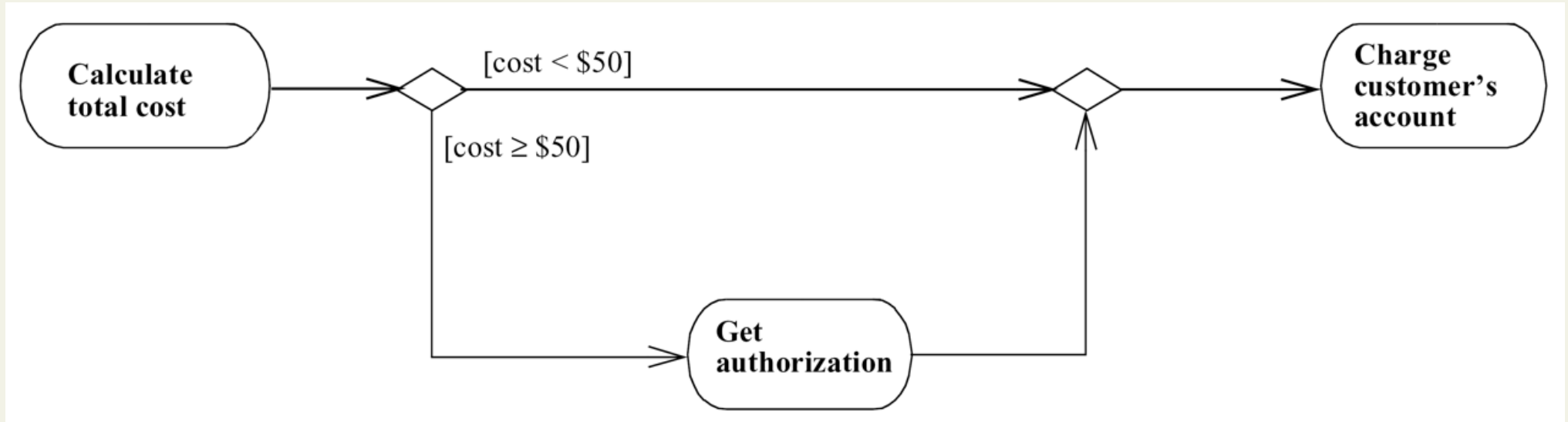
matrix.invert (tolerance:Real)

drive to work

Build Product

Fill Order

Decision and merge (3-87)

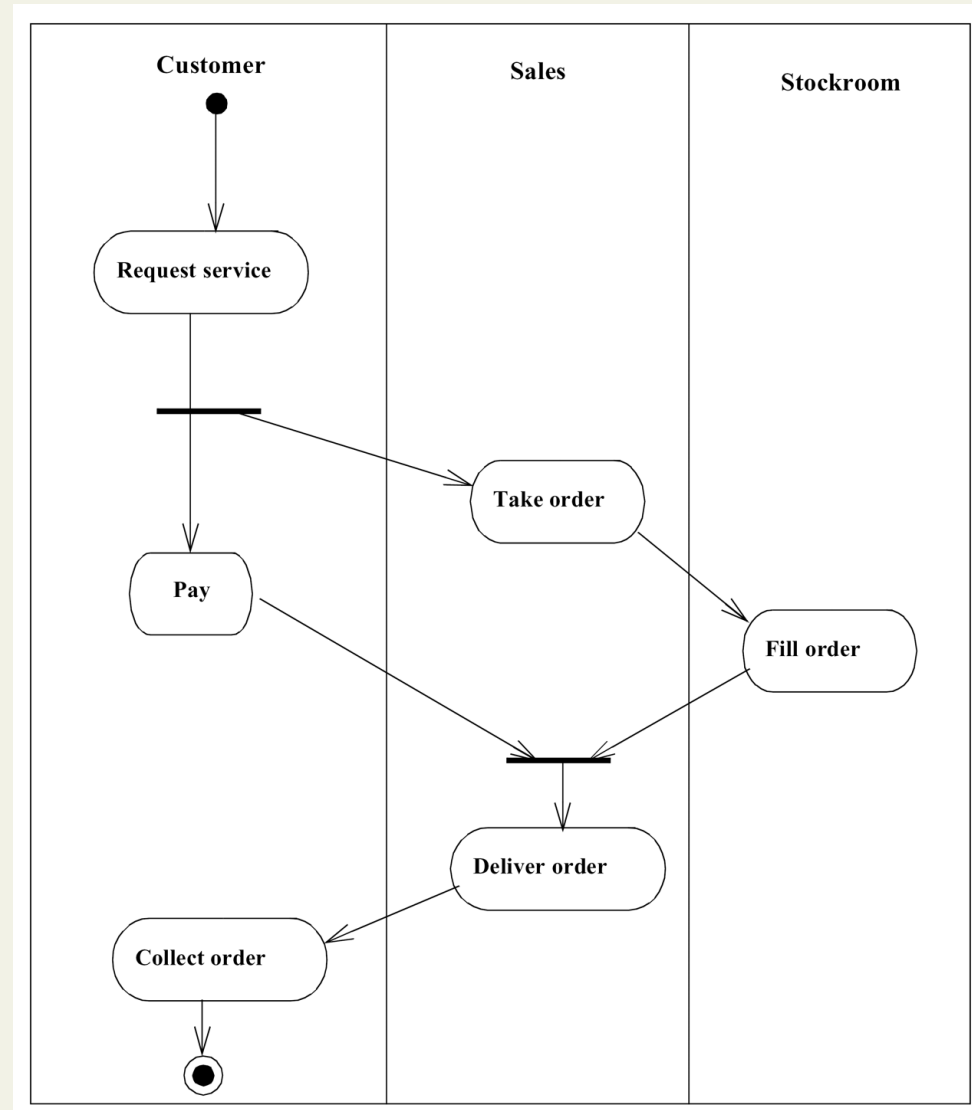# Call states and the operations they invoke (3-88)

Invert
(Matrix)

Drive
(Person)

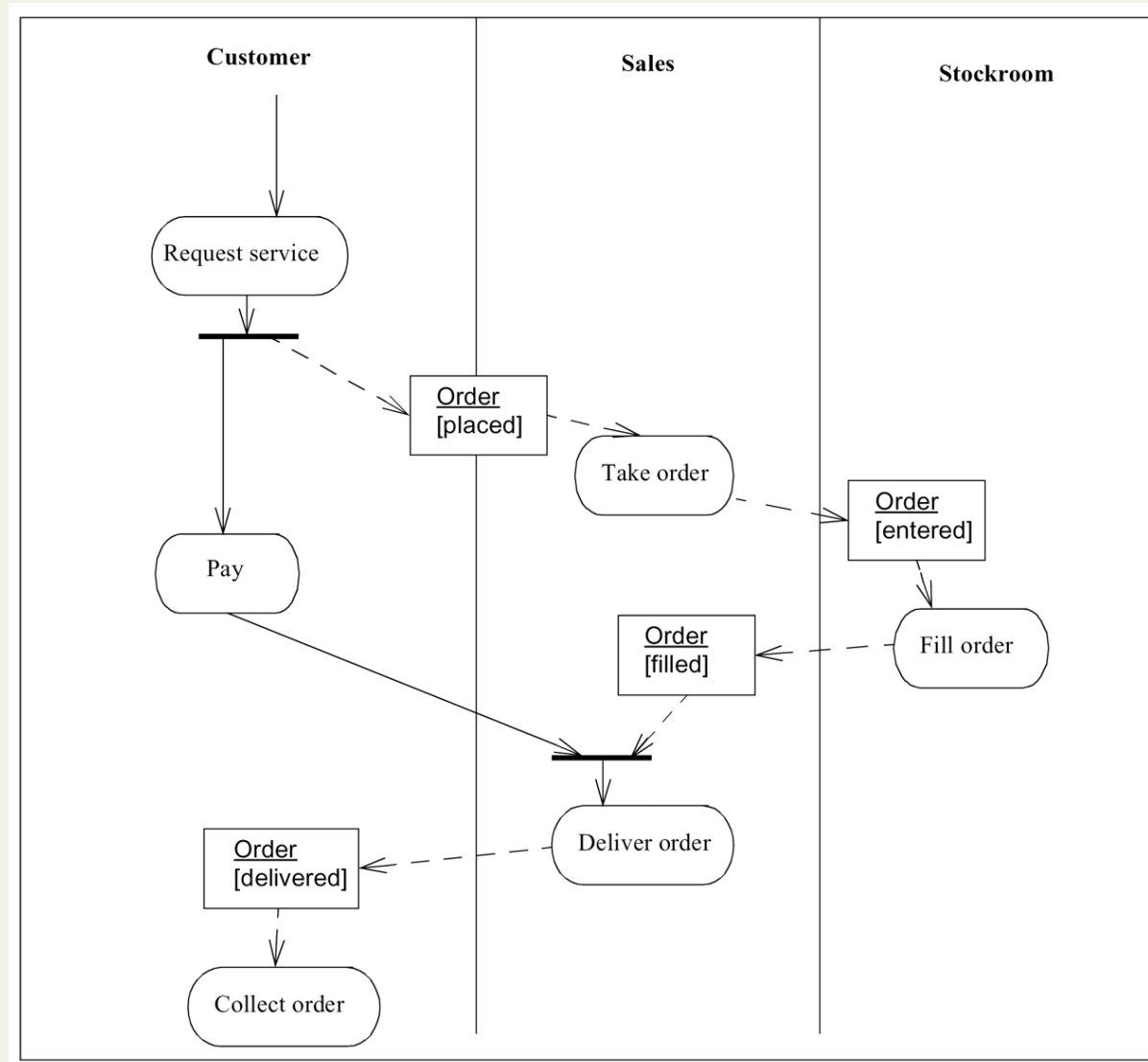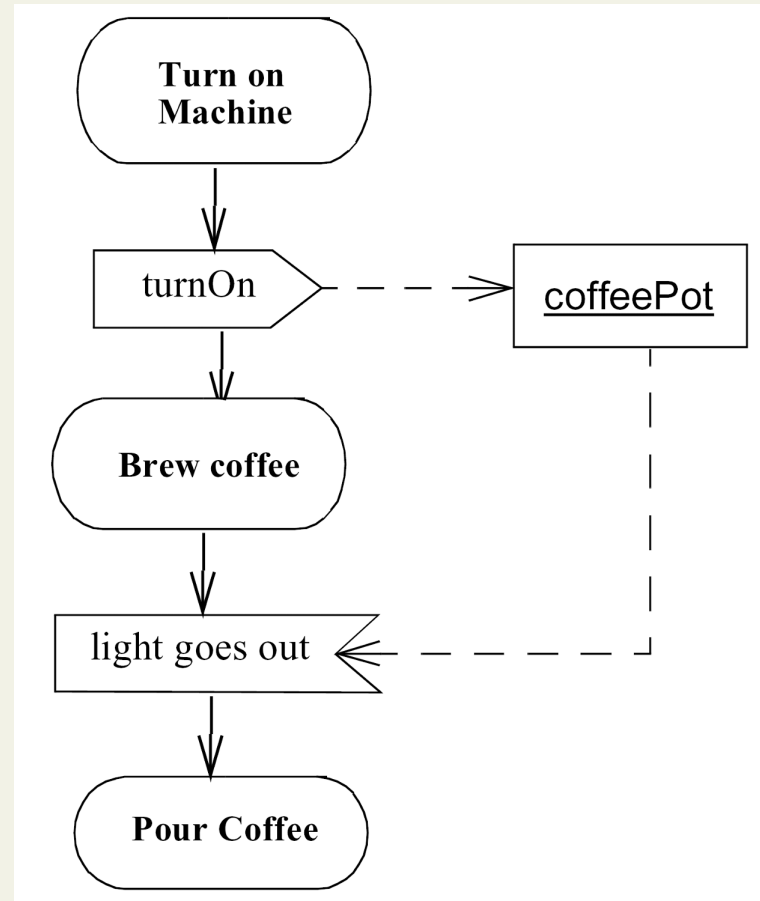| Matrix |
| --- |
| Invert() |

Person
Drive(to : Place)

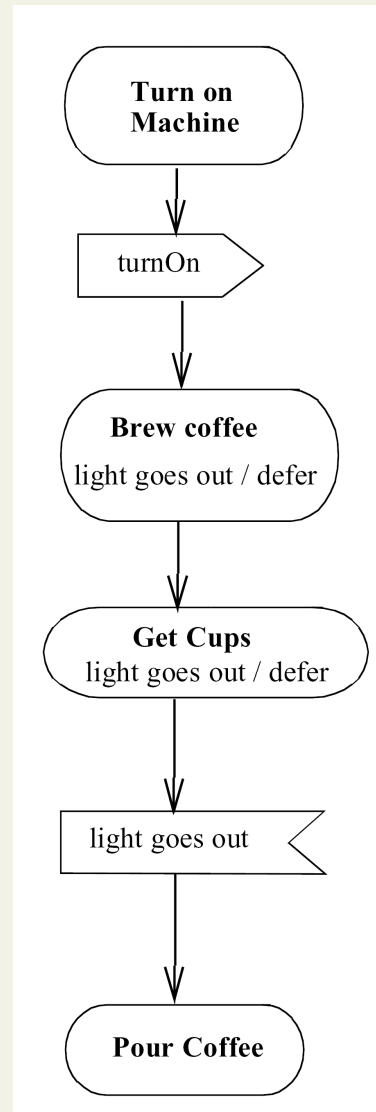# Swimlanes in Activity Diagram (3-89)

Actions and Object Flow (3-90)

Symbols for Signal Receipt and Sending (3-91)

Deferred Event (3-92)

Synchronizing parallel activities (3-93)