

Simula development

COMPREHENSIVE OBJECT-ORIENTED LEARNING

Both Simula languages
were developed at the

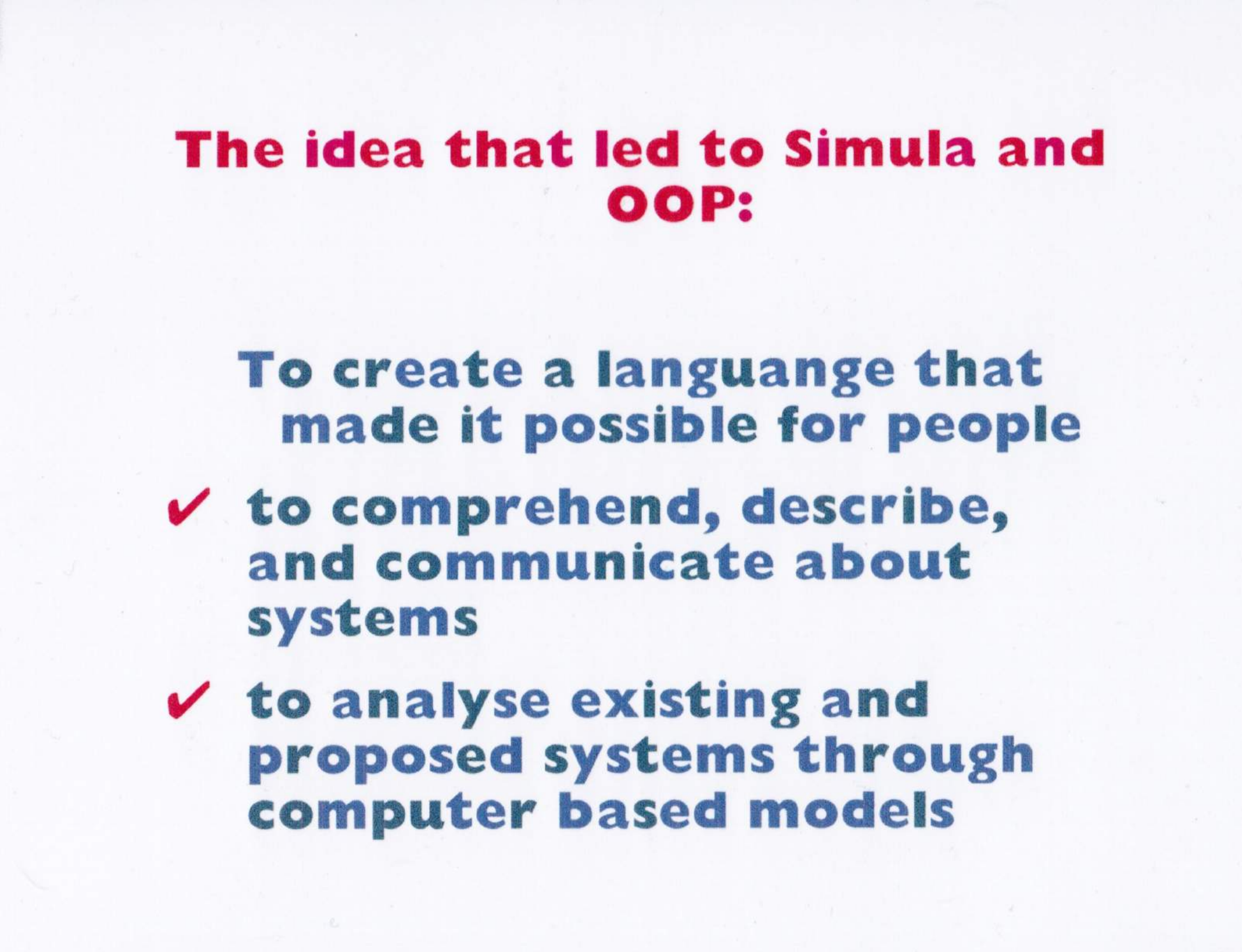
NOR

Norwegian Computing Center

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Simula developed at NCC

COMPREHENSIVE OBJECT-ORIENTED LEARNING



COMPREHENSIVE OBJECT-ORIENTED LEARNING

The idea that led to Simula and OOP:

To create a language that made it possible for people

- ✓ **to comprehend, describe, and communicate about systems**
- ✓ **to analyse existing and proposed systems through computer based models**

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Referent system

**SIMULA I development
Stage I:**

Active:
stations (clerks) and

Passive:
customers (clients,
passengers, etc.)

Model system

Letters and money

Parcels

Outside world

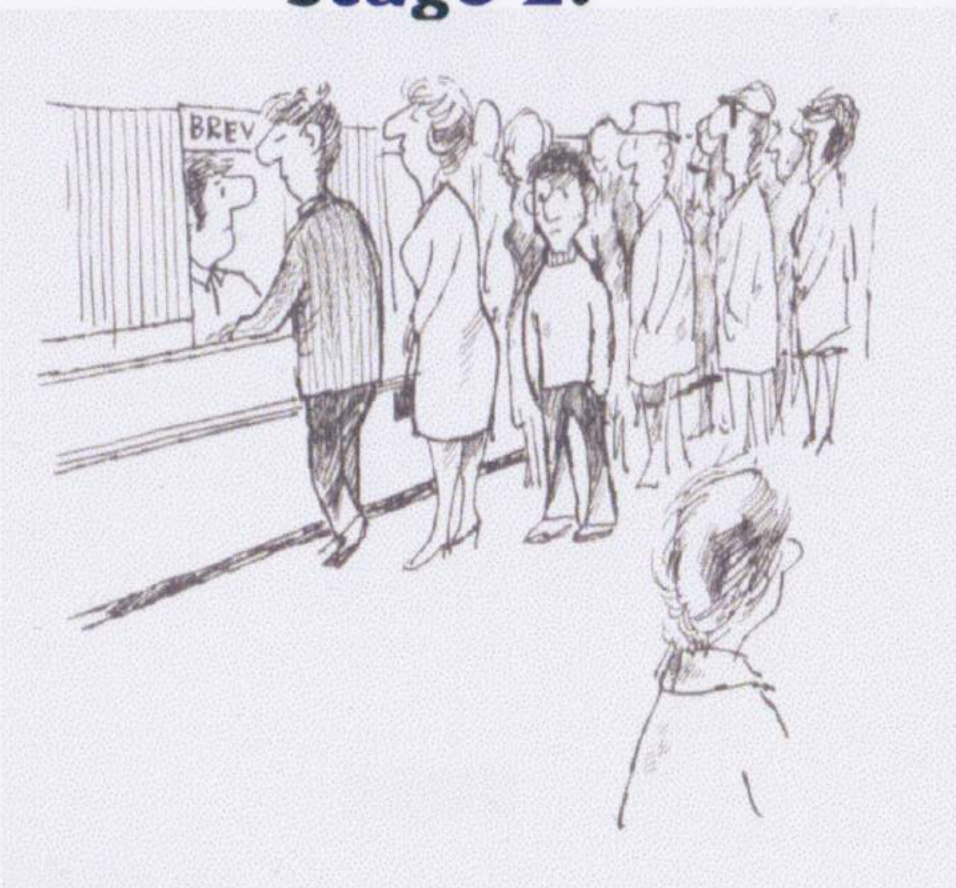
● Passive clients

● Active clerks

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Referent system

**SIMULA I development
Stage 2:**

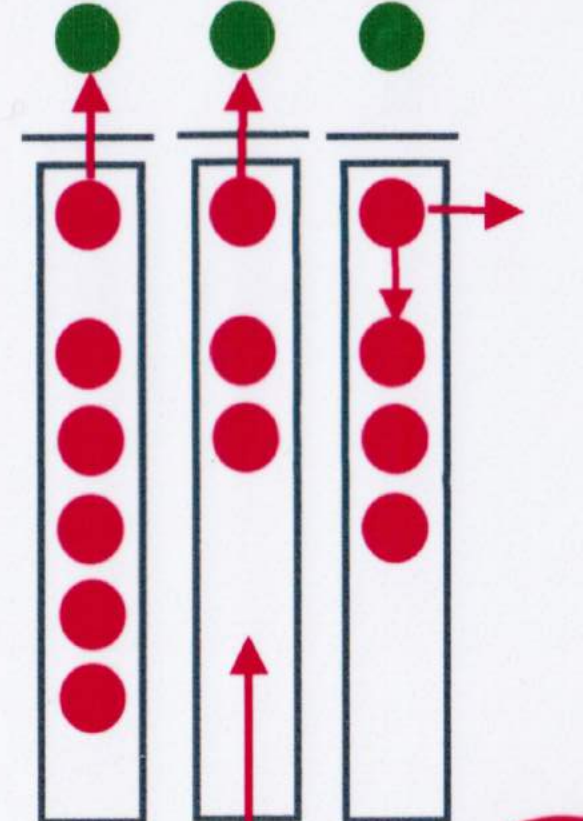


Active:
stations (**clients**) and

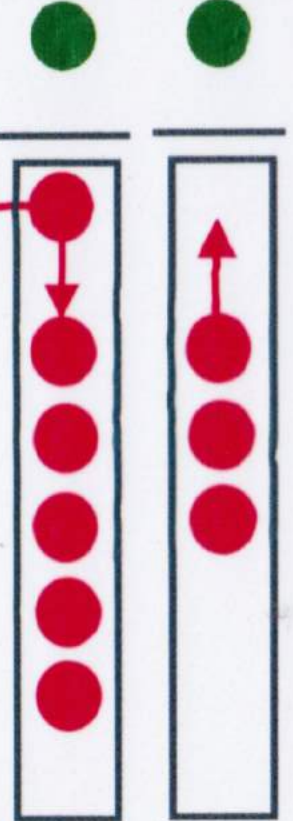
Passive:
customers (**clerks**)

Model system

Letters and money



Parcels





● Passive clerks

● Active clients

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SIMULA Development

Referent system

**SIMULA I development
Final stage:**

Active:
objects (clients and clerks)

Passive:
objects (clients and clerks)

Model system

Letters and money

Parcels

Outside world

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SIMULA Development, Final stage

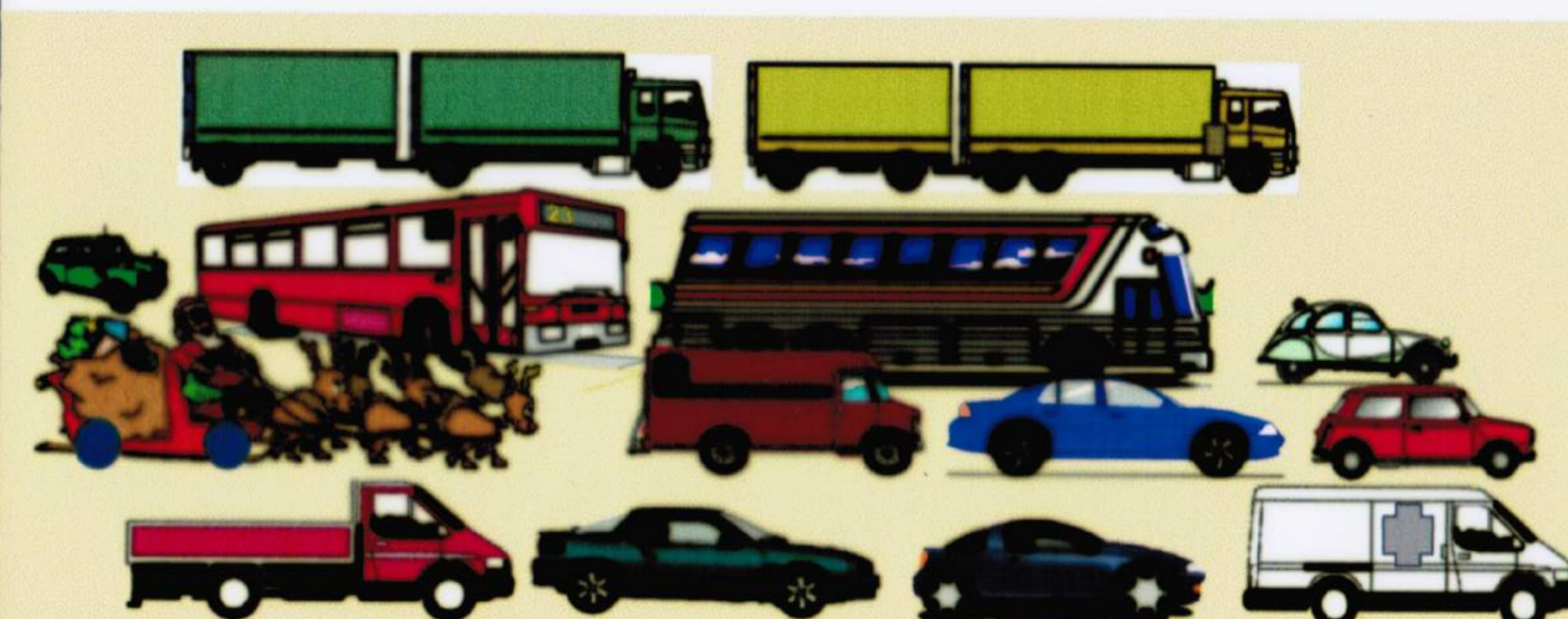
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COMPREHENSIVE OBJECT-ORIENTED LEARNING

**SIMULA 67 was triggered off by
the invention of inheritance in January 1967**

Waiting for the ferry



Solution ?

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Waiting for the ferry



```

graph TD
    V1["Vehicle  
Attributes, Actions"] --> V2["Vehicle  
Attributes, Actions  
Bus"]
    V1 --> V3["Vehicle  
Attributes, Actions  
Truck"]
    V1 --> V4["Vehicle  
Attributes, Actions  
Car"]
    V4 --> V5["Vehicle  
Attributes, Actions  
Car  
Ambulance"]
  
```

The diagram illustrates the concept of inheritance in object-oriented programming. At the top is a box labeled "Vehicle" with "Attributes, Actions" below it. Three arrows point down from this box to three separate boxes, each labeled "Vehicle" with "Attributes, Actions" below it. These three boxes are labeled "Bus", "Truck", and "Car" respectively. Below the "Car" box is another box labeled "Vehicle" with "Attributes, Actions" below it, which is further labeled "Car" and "Ambulance".