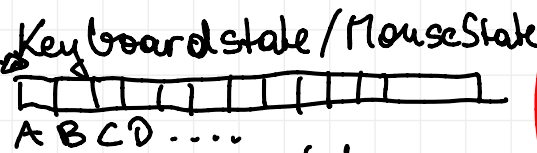


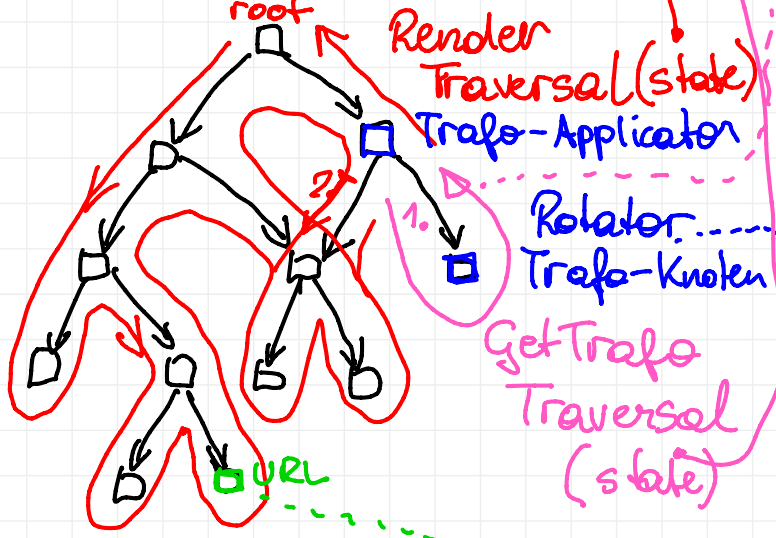
# ENVIRONMENT (-Map)

Mouse -events  
Keyboard ..... Push

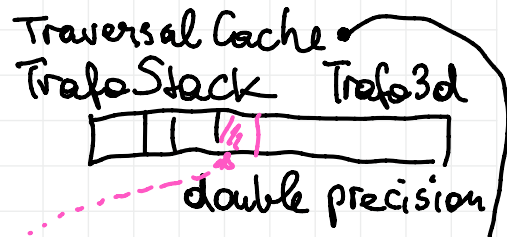


Simulations  
Programs .....  
Modules .....  
Windsimulation ..... PUSH

# SEMANTIC SCENE GRAPH



# TRAVERSAL STATE



SYNCHRONIZED  
COMMAND QUEUE  
(Heap, Time-sorted)

# Render Command

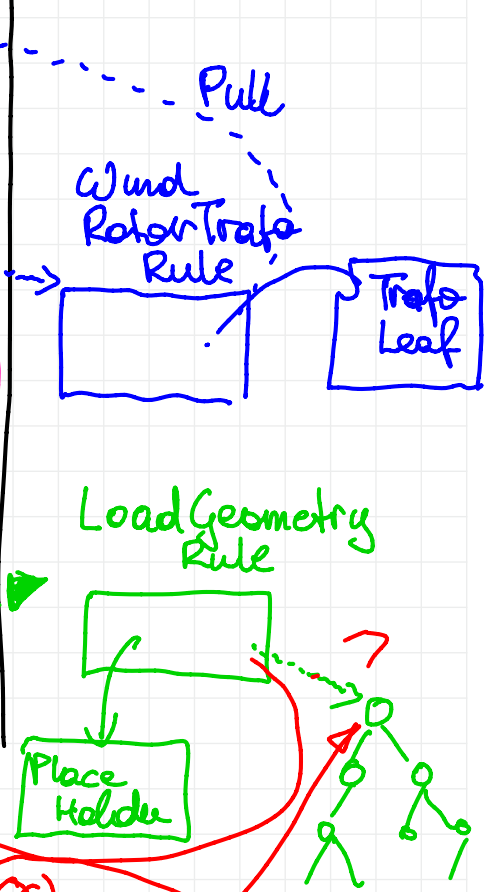
```
{  
  root.RenderTraversal(  
    state);  
  PostCommand(  
    Render Command);  
}
```

Render Thread  
(optional)

# TASK (on a Thread)

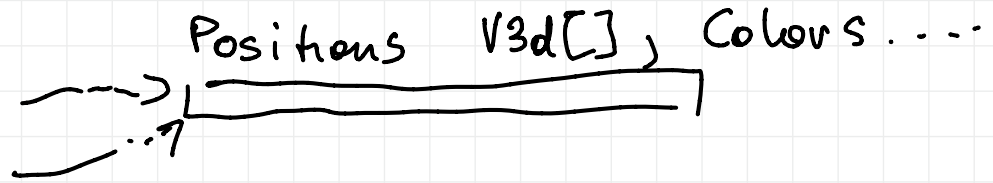
Load Geometry  
Process Geometry  
Post Command  
(Insert New Render Sph)

# TRAVERSAL CACHE

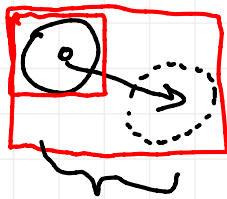


# SIMULATIONS

Particle Simulations  
Character Simulation  
Actor Movement  
Players, Vehicles, ...

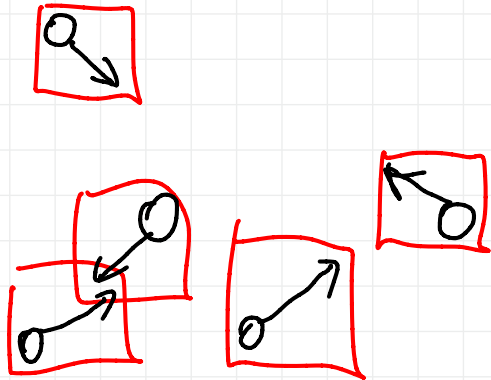


Dead Reckoning (aufgrund physikal. Einschränkungen)

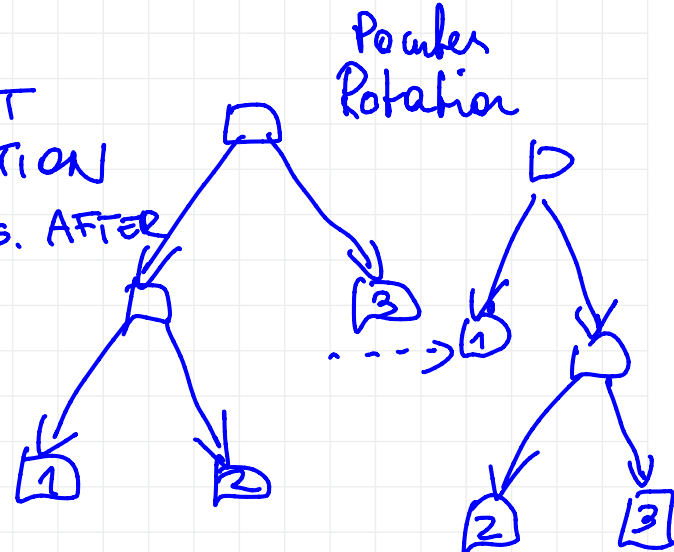
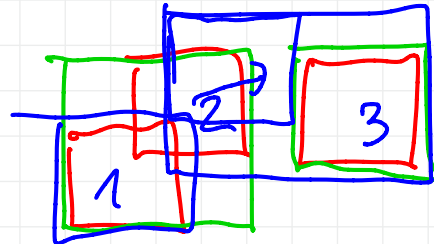


dt ..... einstellbar 1s .... 60fps ... f

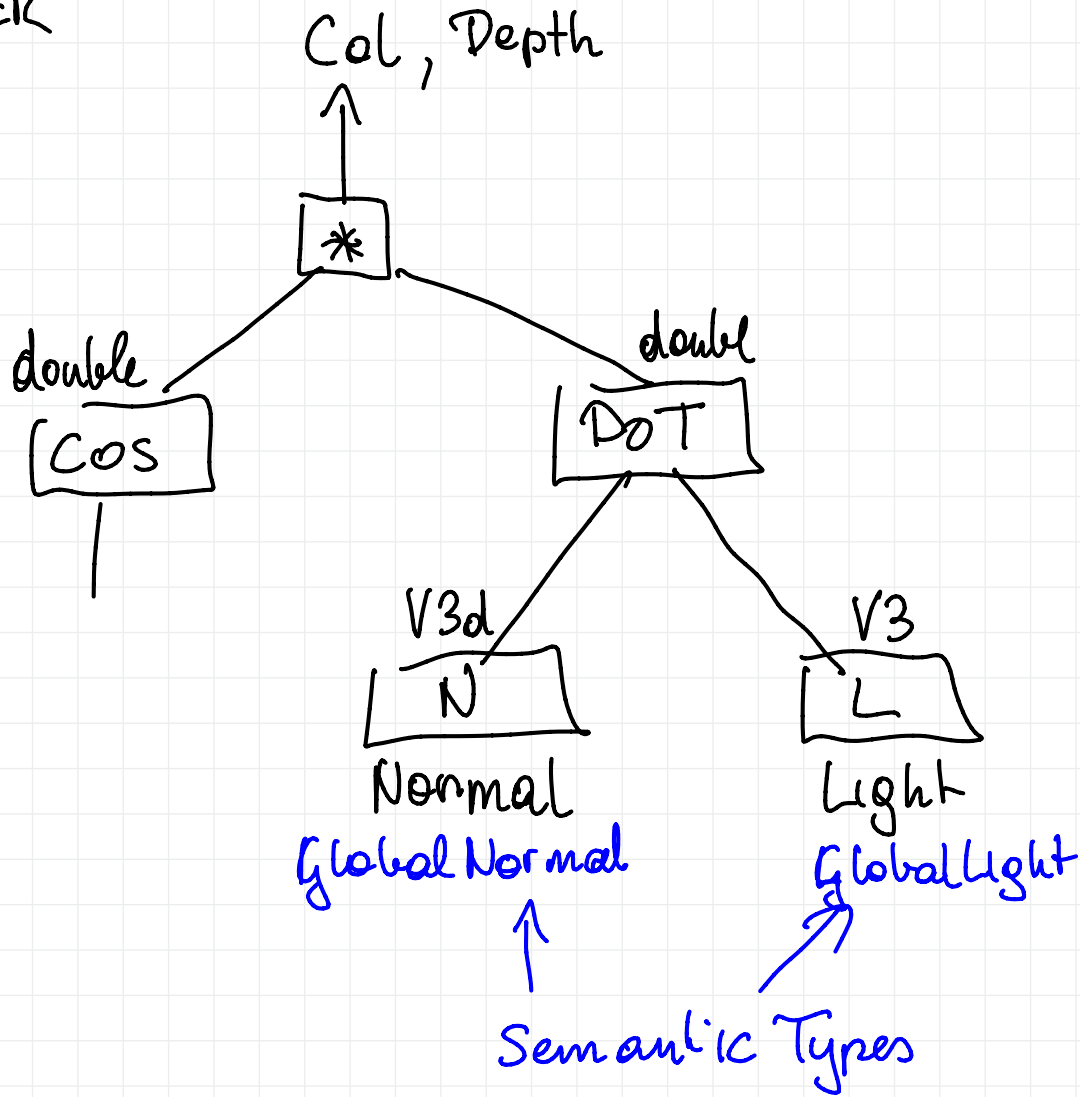
## BBOX-HIERARCHY

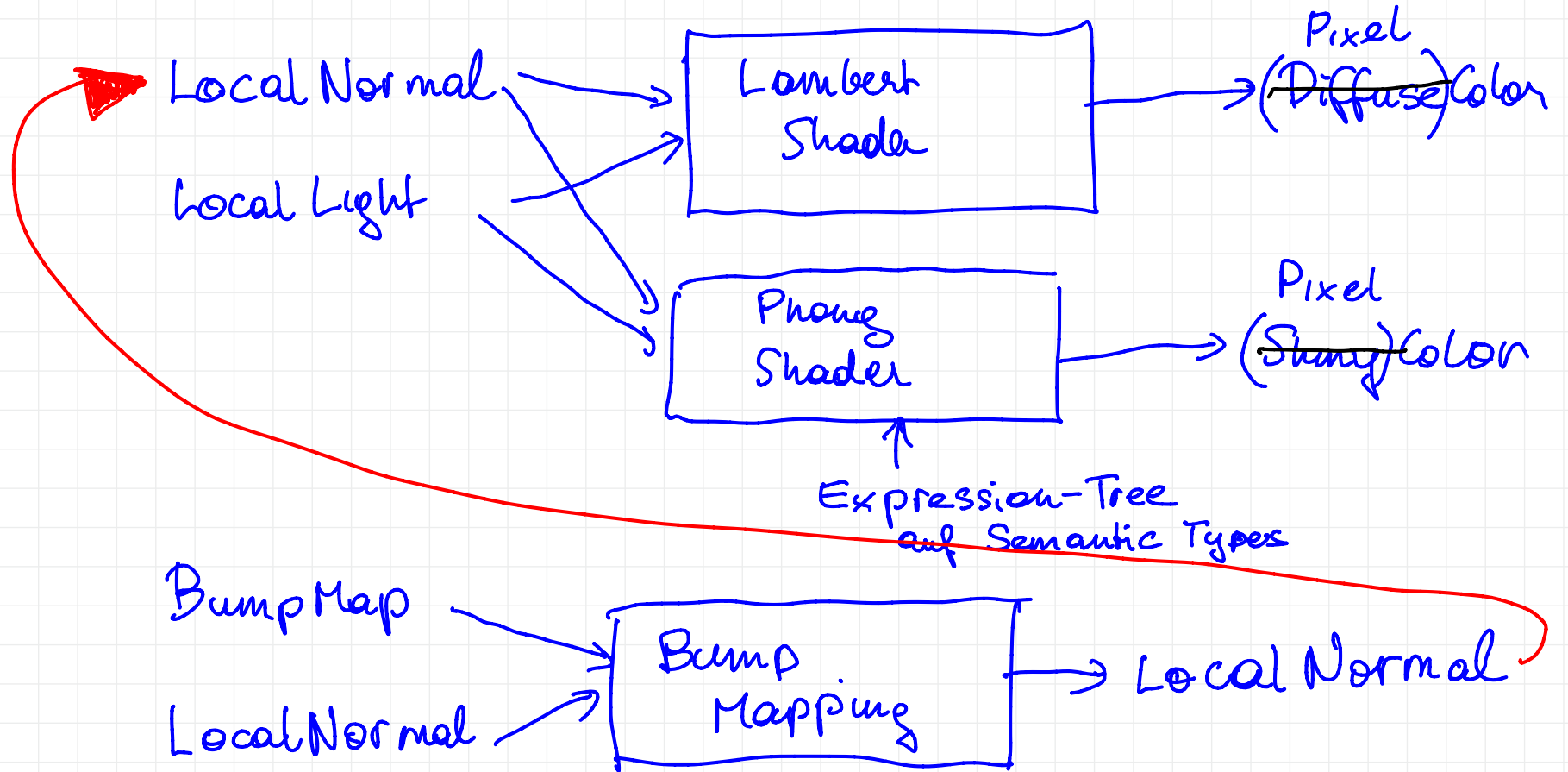


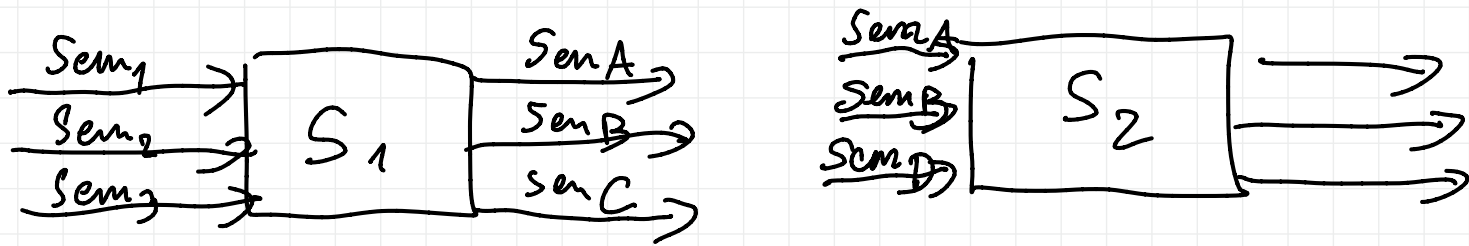
COST FUNCTION  
BEFORE VS. AFTER



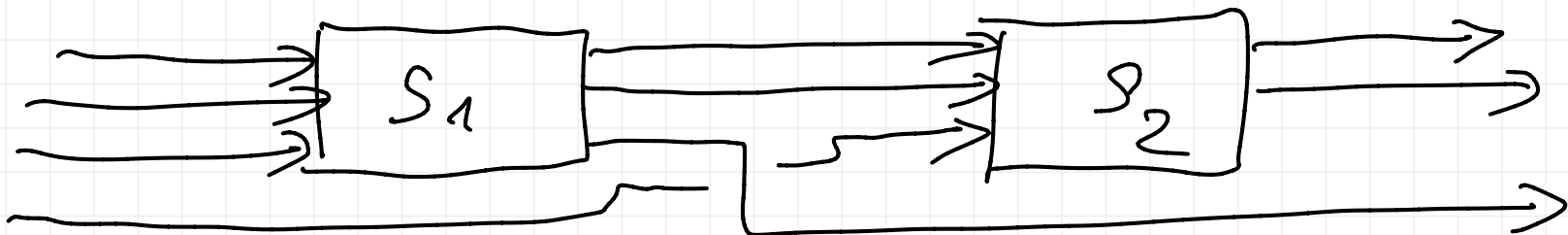
# SHADER







Sequence ( $S_1, S_2$ )



Combine ( $S_1, S_2, \text{operator}_{SemA}$ )  
 z.B.  $\oplus$

