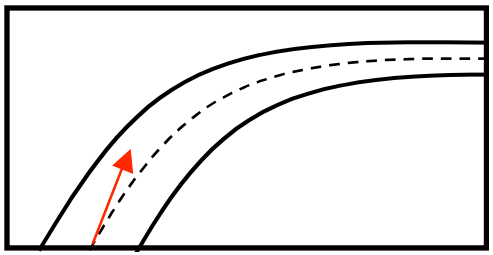
Figure 1: End of Previous Iteration



LH-Spatial

$\texttt{state}_{t-1}$: θ_{near}, θ_{far}

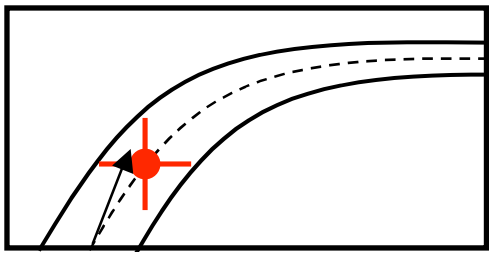
RH-Spatial

LH-Executive

RH-Executive

```
task-goal:drive
goal:control-perceive
```

Figure 2: (1) Attend Near Point



LH-Spatial

RH-Spatial

$\texttt{state}_{t-1}$: θ_{near}, θ_{far}
$\texttt{state}_{t}$: θ_{near}

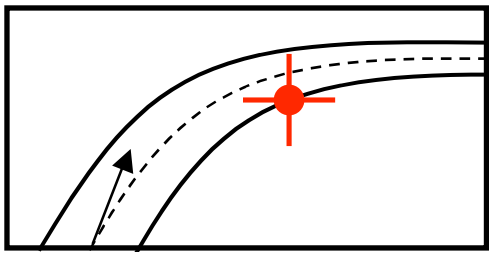
operator:attend-near-point

LH-Executive

RH-Executive

task-goal:drive
goal:control-perceive

Figure 3: (1) Attend Far Point



LH-Spatial

RH-Spatial

$\texttt{state}_{t-1}$: θ_{near}, θ_{far}
$\texttt{state}_{t}$: θ_{near} , θ_{far}

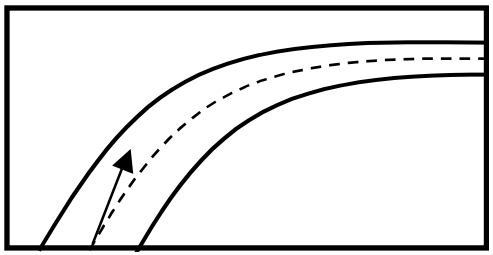
operator:attend-far-point

LH-Executive

RH-Executive

task-goal:drive
goal:control-perceive

Figure 4: (2) Compute Delta Angles



LH-Spatial

$\texttt{state}_{t-1}$: θ_{near}, θ_{far}
$\texttt{state}_{t}$: θ_{near} , θ_{far}, $\Delta\,\theta_{near}$, $\Delta\,\theta_{far}$

RH-Spatial

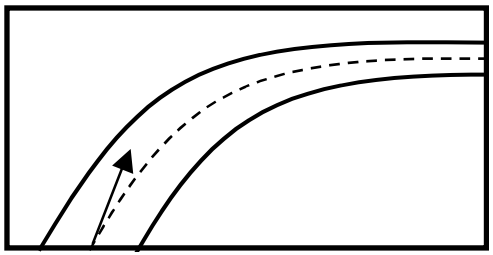
operator:compute-angles

LH-Executive

RH-Executive

task-goal:drive
goal:control-perceive

Figure 5: Change Goal



LH-Spatial

$\texttt{state}_{t-1}$: θ_{near}, θ_{far}
$\texttt{state}_{t}$: θ_{near} , θ_{far}, $\Delta\,\theta_{near}$, $\Delta\,\theta_{far}$

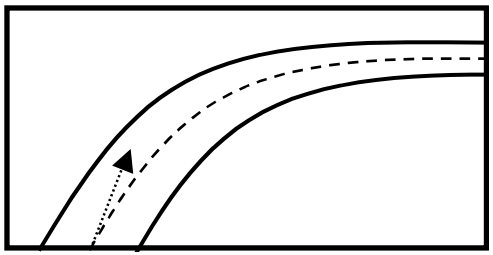
RH-Spatial

LH-Executive

RH-Executive

```
task-goal:drive
goal:control-steer
```

Figure 6: (3) Compute Delta Steering Angle



LH-Spatial

$state_{t-1}$: θ_{near}, θ_{far}
$state_t$: θ_{near} , θ_{far}, $\Delta\theta_{near}$, $\Delta\theta_{far}$

RH-Spatial

operator:compute-delta-steer ($\Delta\theta_{steer}$)

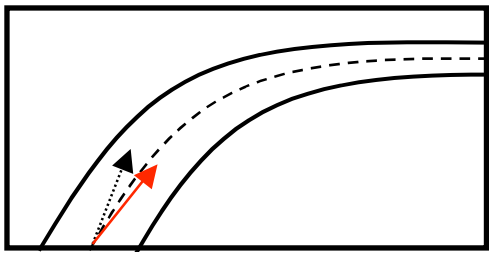
LH-Executive

operator:compute-delta-steer ($\Delta\theta_{steer}$)

RH-Executive

task-goal:drive
goal:control-steer

Figure 7: (4) Steer



LH-Spatial

$\texttt{state}_{t-1}$: θ_{near}, θ_{far}
$\texttt{state}_{t}$: θ_{near} , θ_{far}, $\Delta\,\theta_{near}$, $\Delta\,\theta_{far}$

RH-Spatial

operator:compute-delta-steer ($\Delta\,\theta_{steer}$)

LH-Executive

operator:compute-delta-steer ($\Delta\,\theta_{steer}$)

RH-Executive

task-goal:drive
goal:control-steer

motor-command:steer ($\Delta\,\theta_{steer}$)

Figure 8

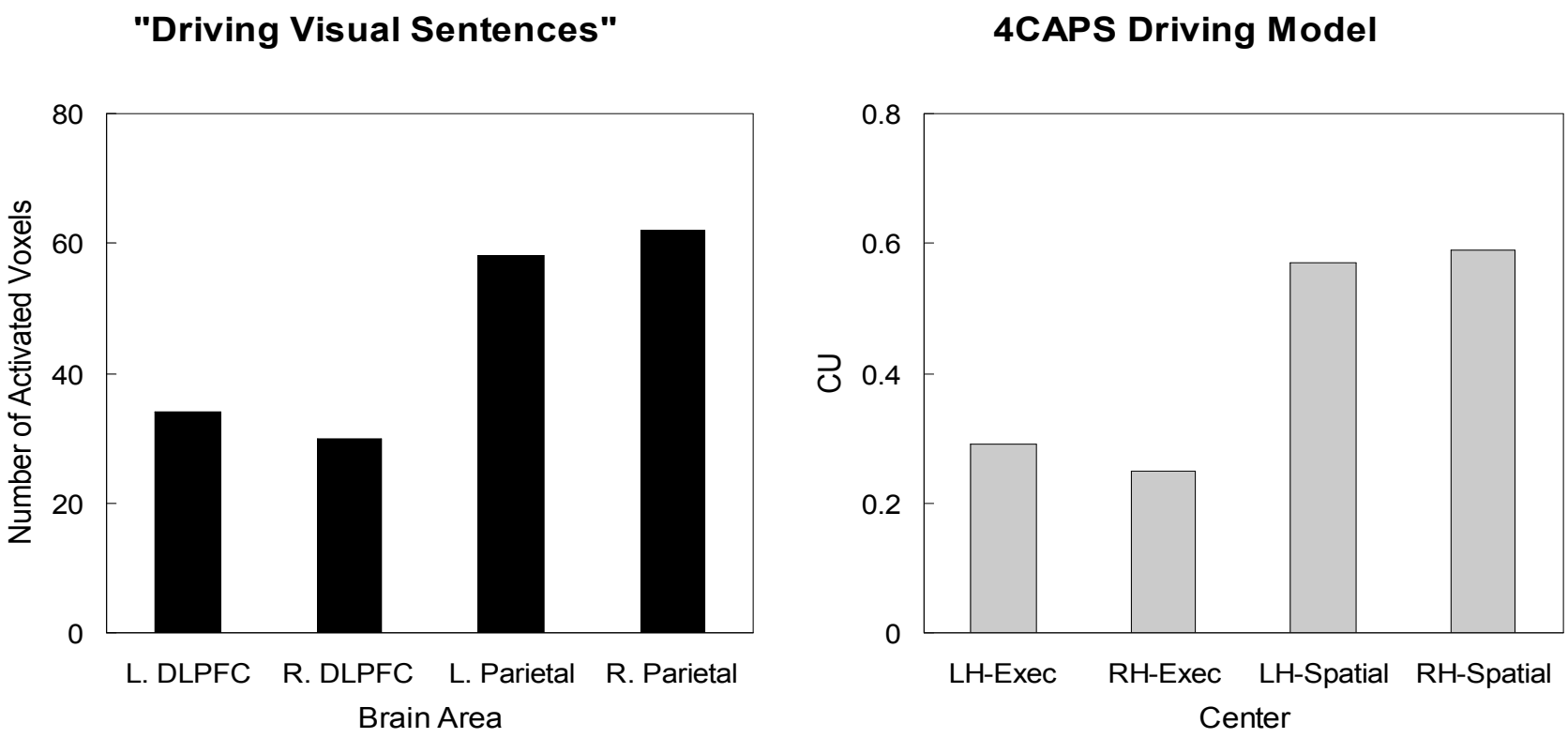
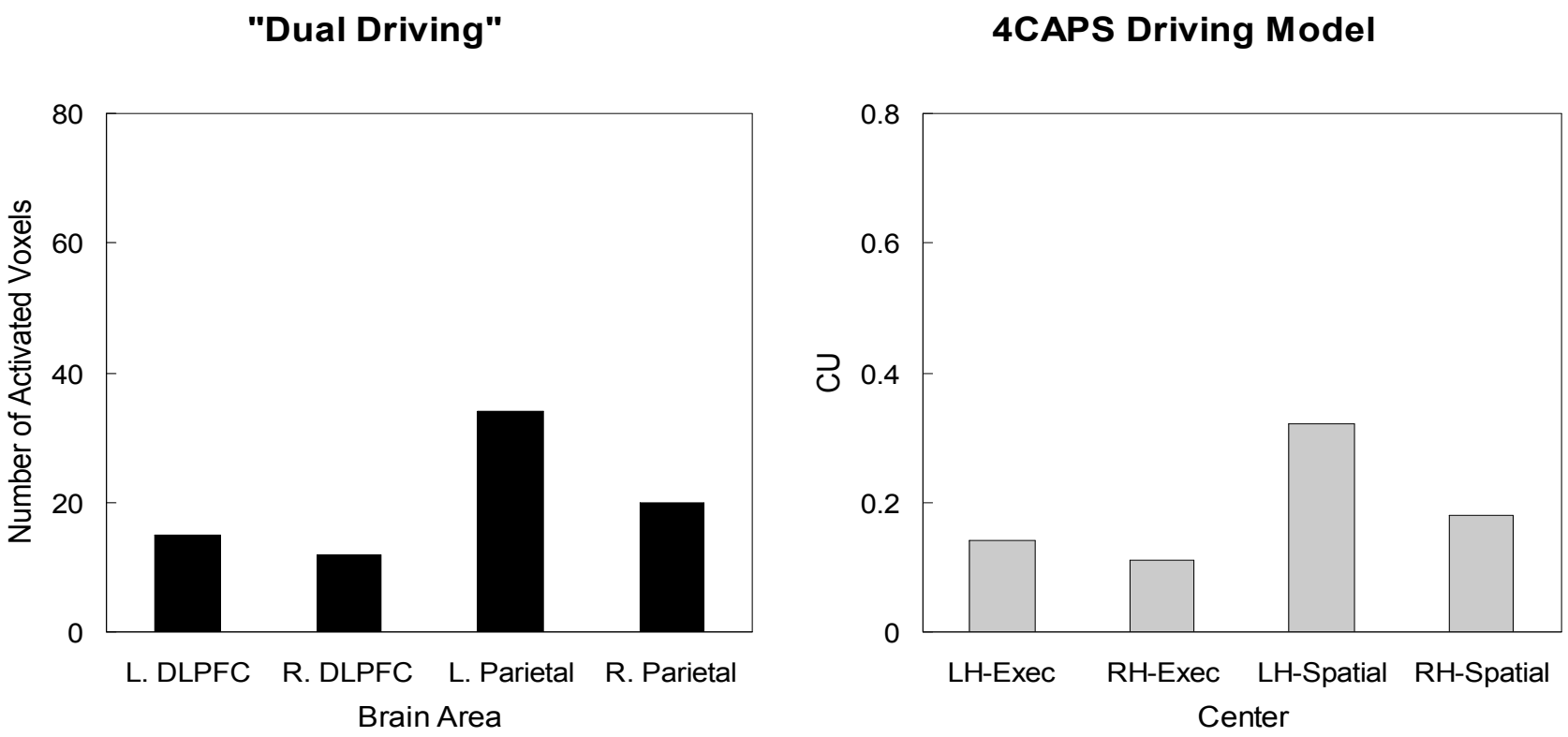

"Driving Visual Sentences"
Number of Activated Voxels
80
60
40
20
0
L. DLPFC
R. DLPFC
L. Parietal
R. Parietal
Brain Area
4CAPS Driving Model
CU
0.8
0.6
0.4
0.2
0
LH-Exec
RH-Exec
LH-Spatial
RH-Spatial
Center

Figure 9


"Dual Driving"
Number of Activated Voxels
80
60
40
20
0
L. DLPFC
R. DLPFC
L. Parietal
R. Parietal
Brain Area
4CAPS Driving Model
CU
0.8
0.6
0.4
0.2
0
LH-Exec
RH-Exec
LH-Spatial
RH-Spatial
Center