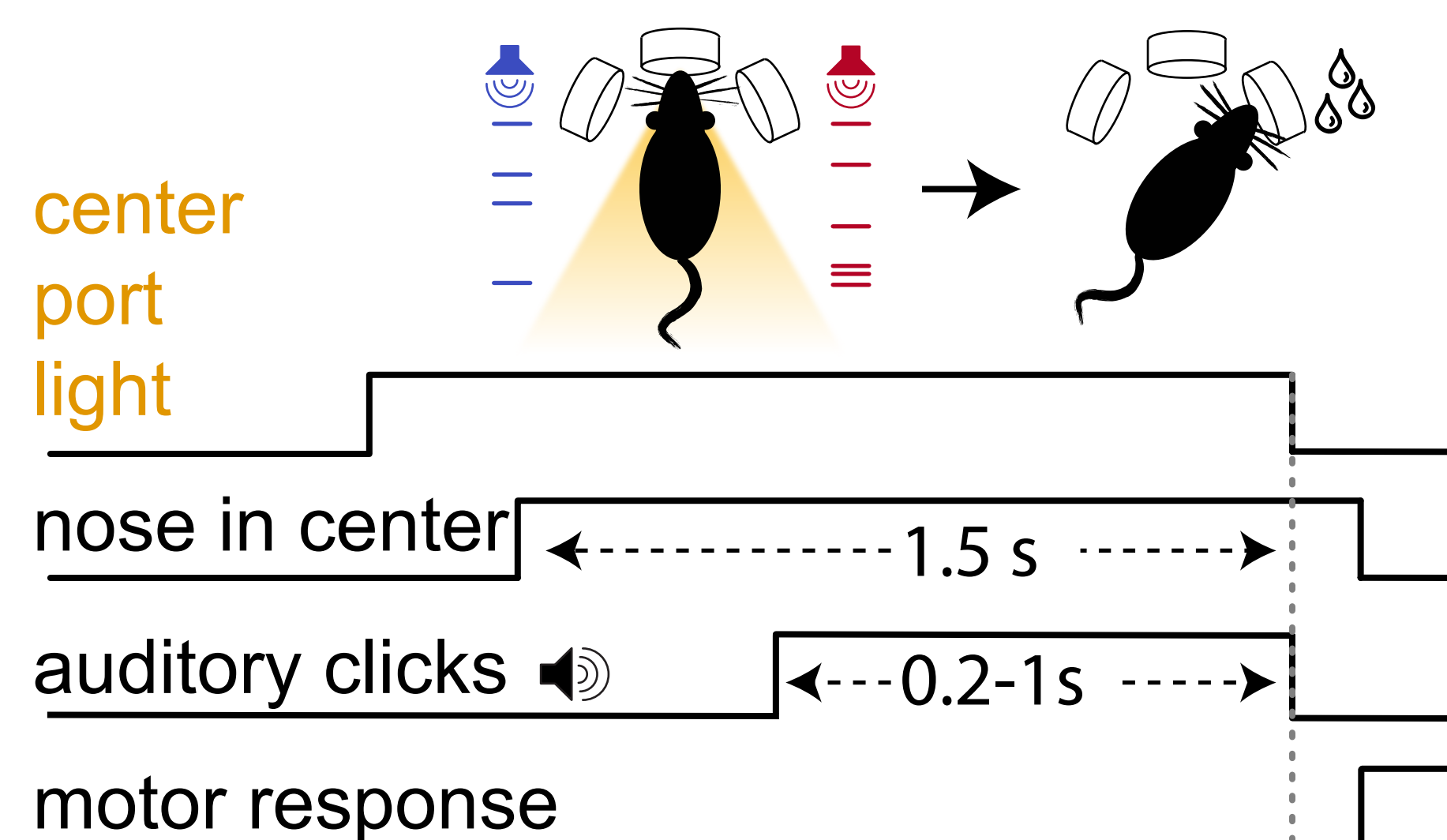
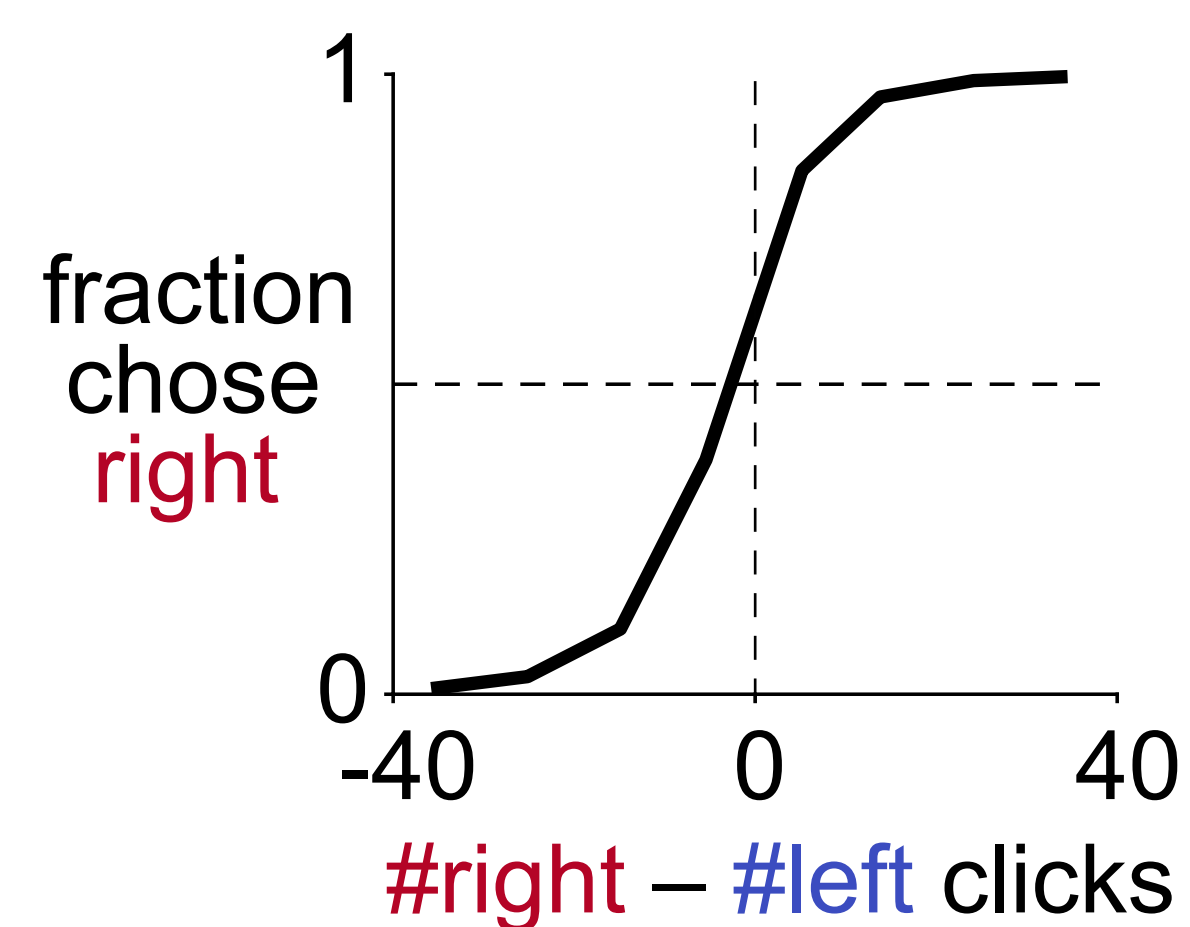
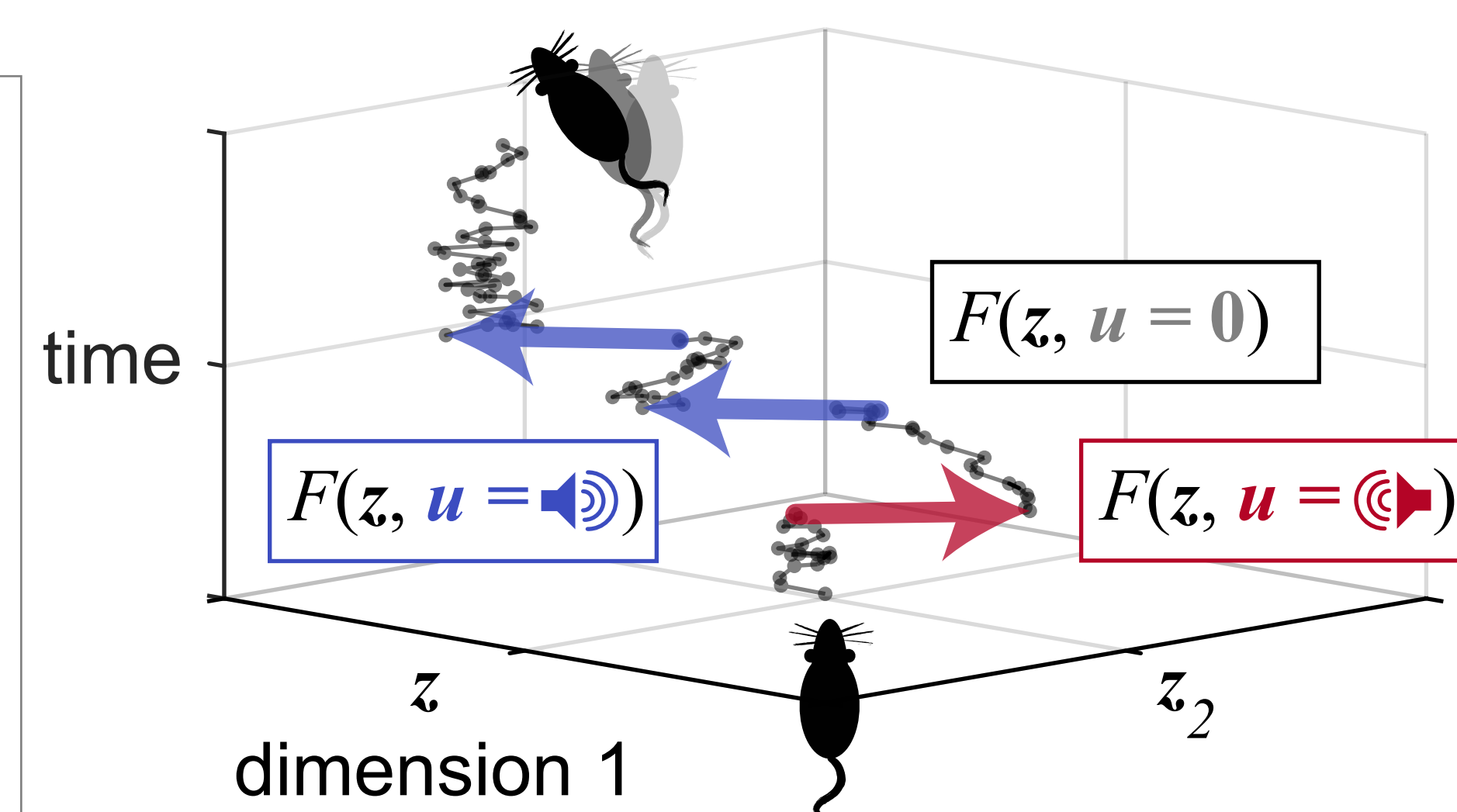
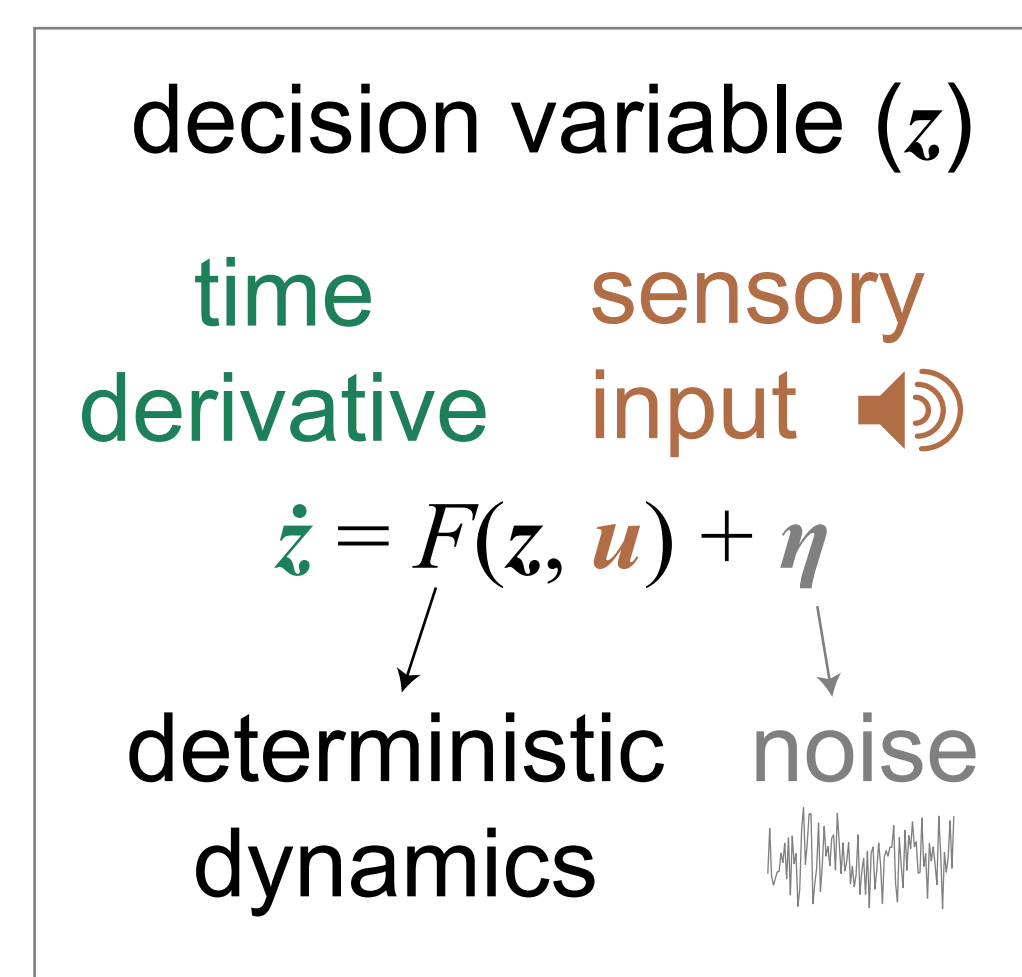


a

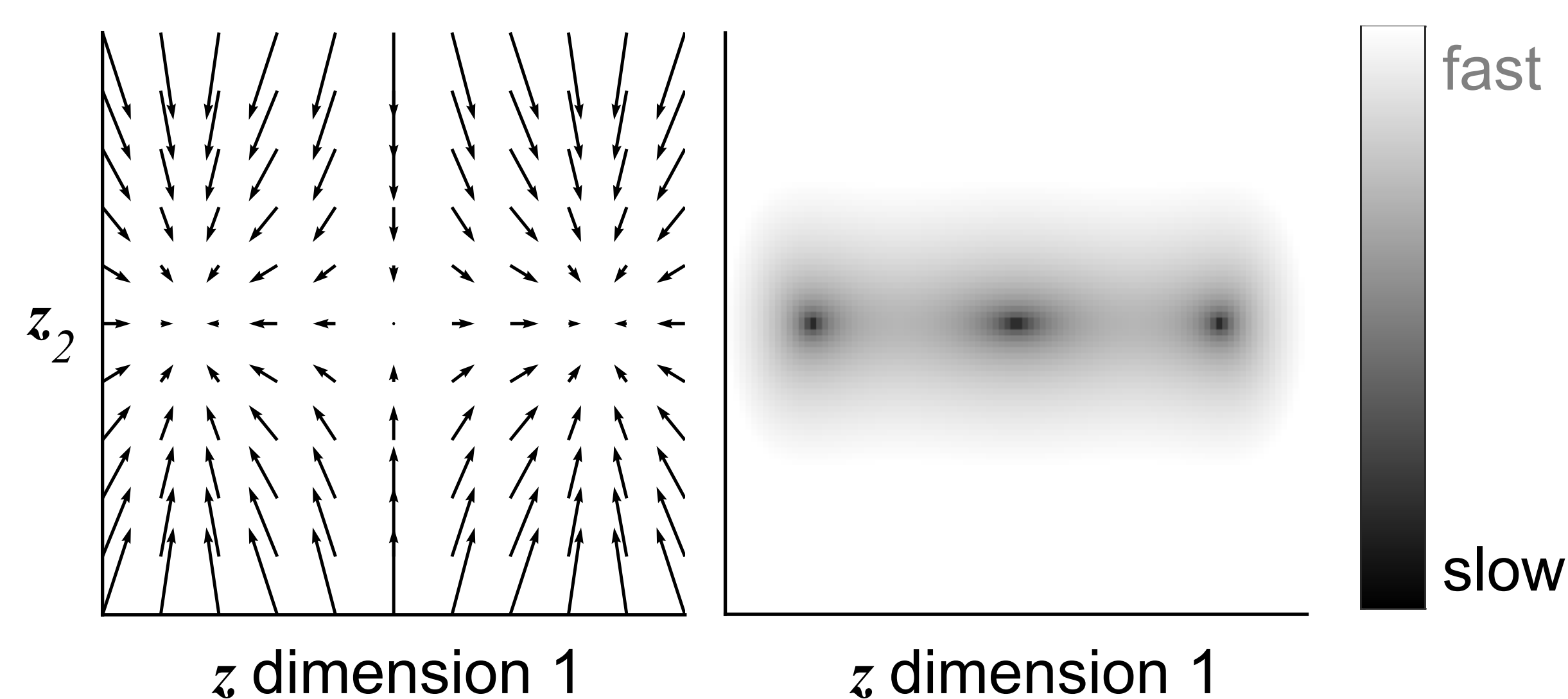
#R > #L clicks? yes → go R: no → go L

**b****c****d**

example: bistable attractors

autonomous dynamics
 $F(z, 0)$

autonomous speed
 $\|F(z, 0)\|$

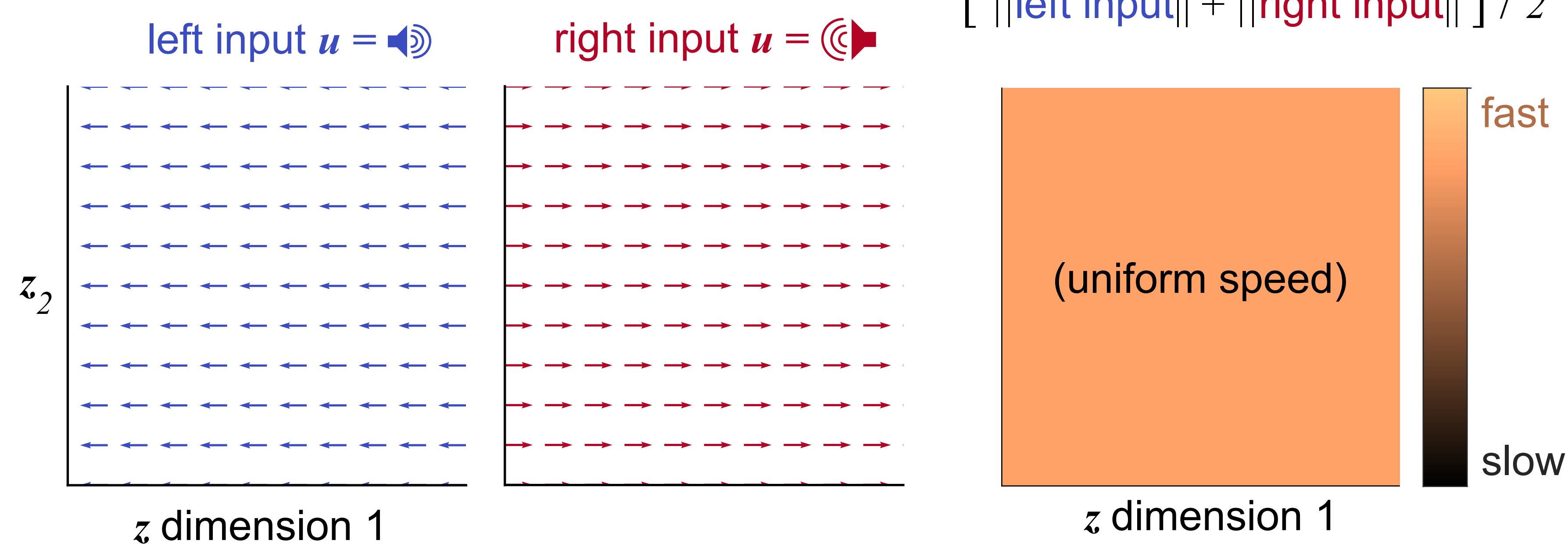
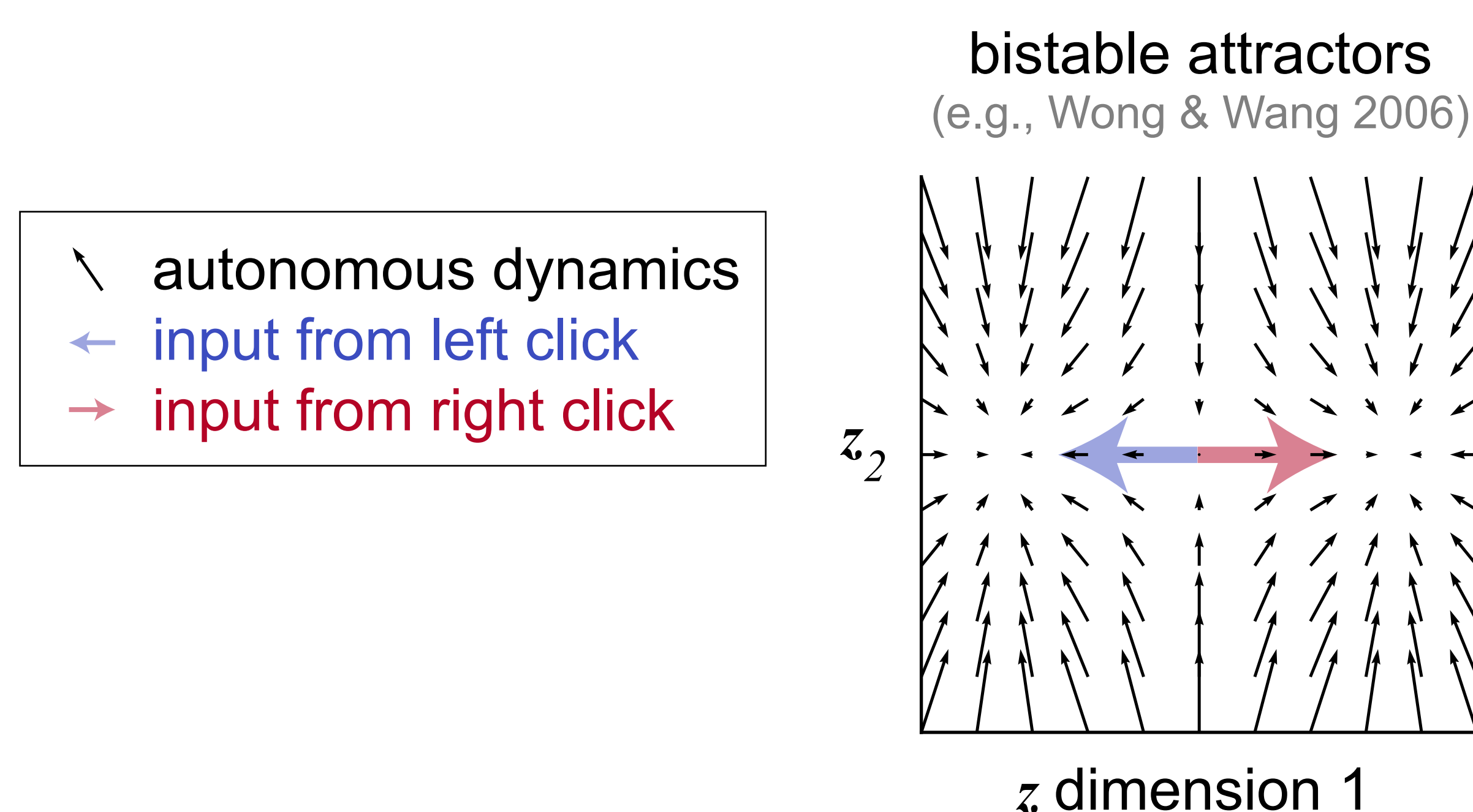
**e**

example: bistable attractors

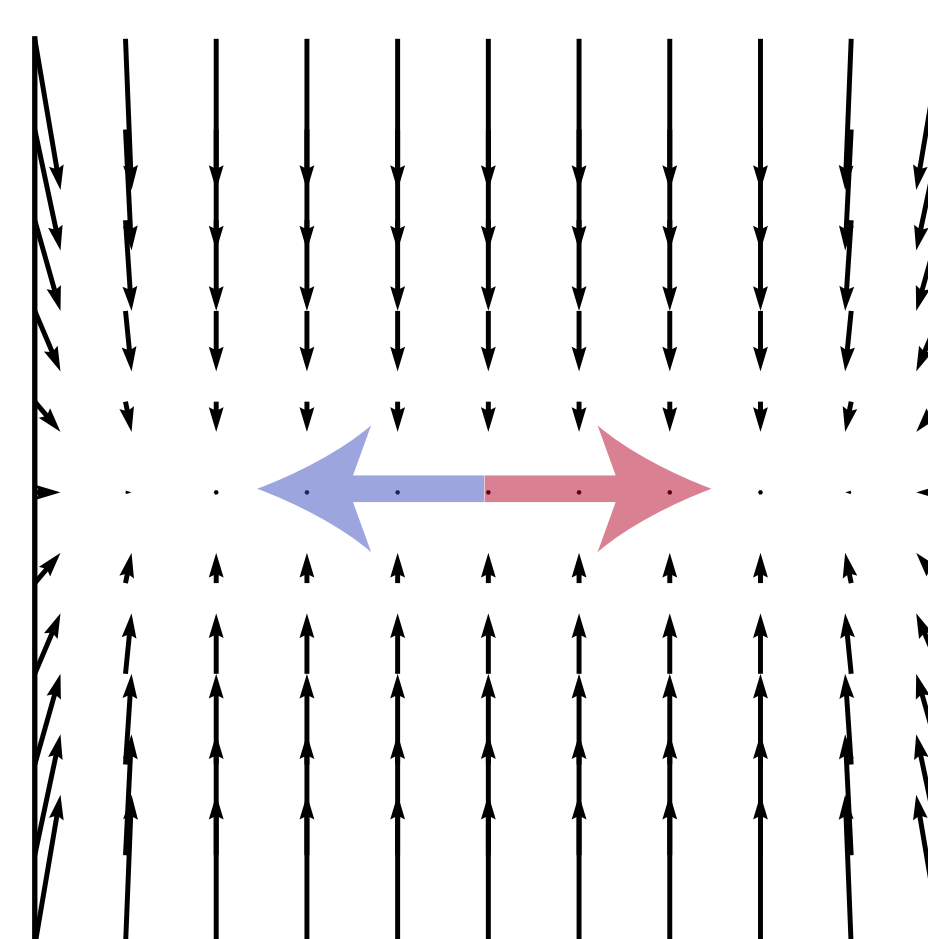
input dynamics $F(z, u) - F(z, 0)$

input speed

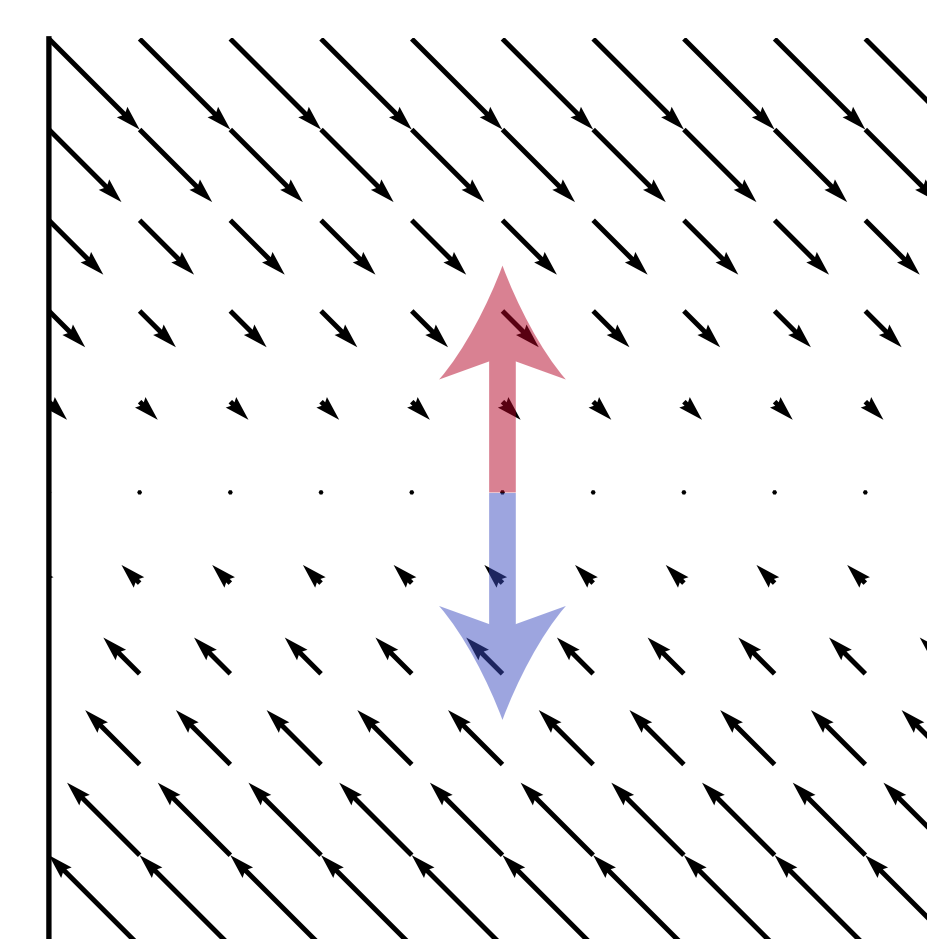
$[\| \text{left input} \| + \| \text{right input} \|] / 2$

**f****g**

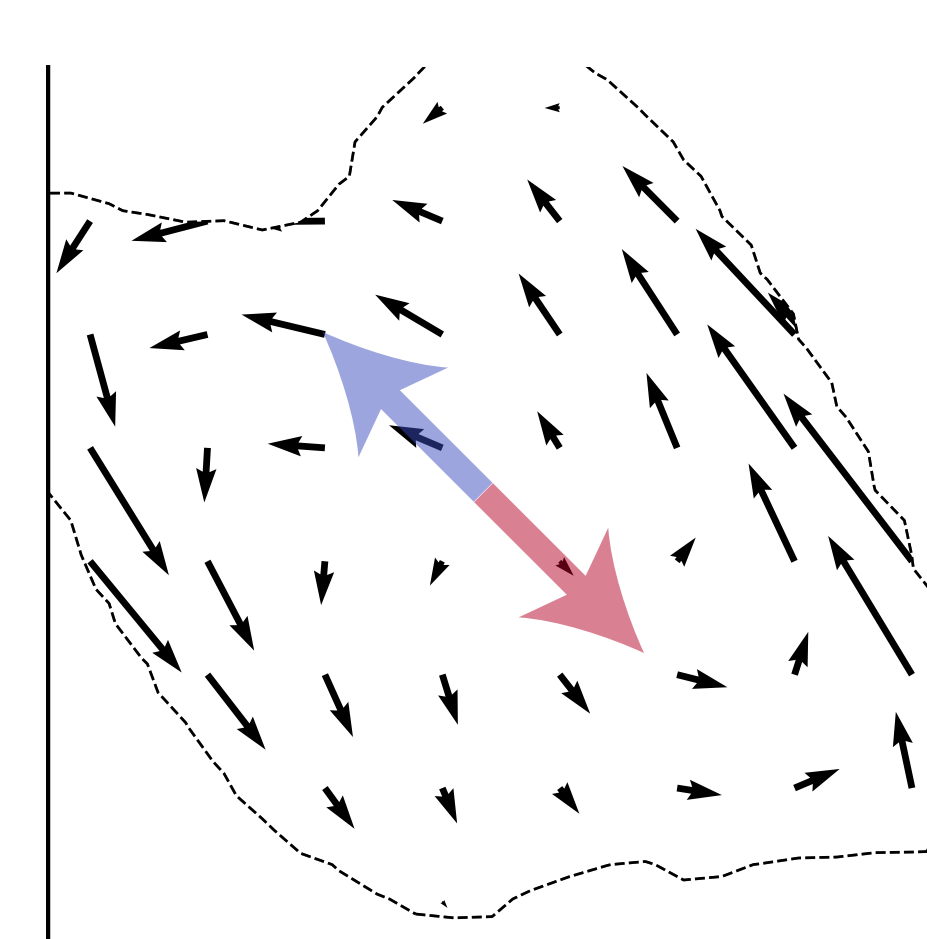
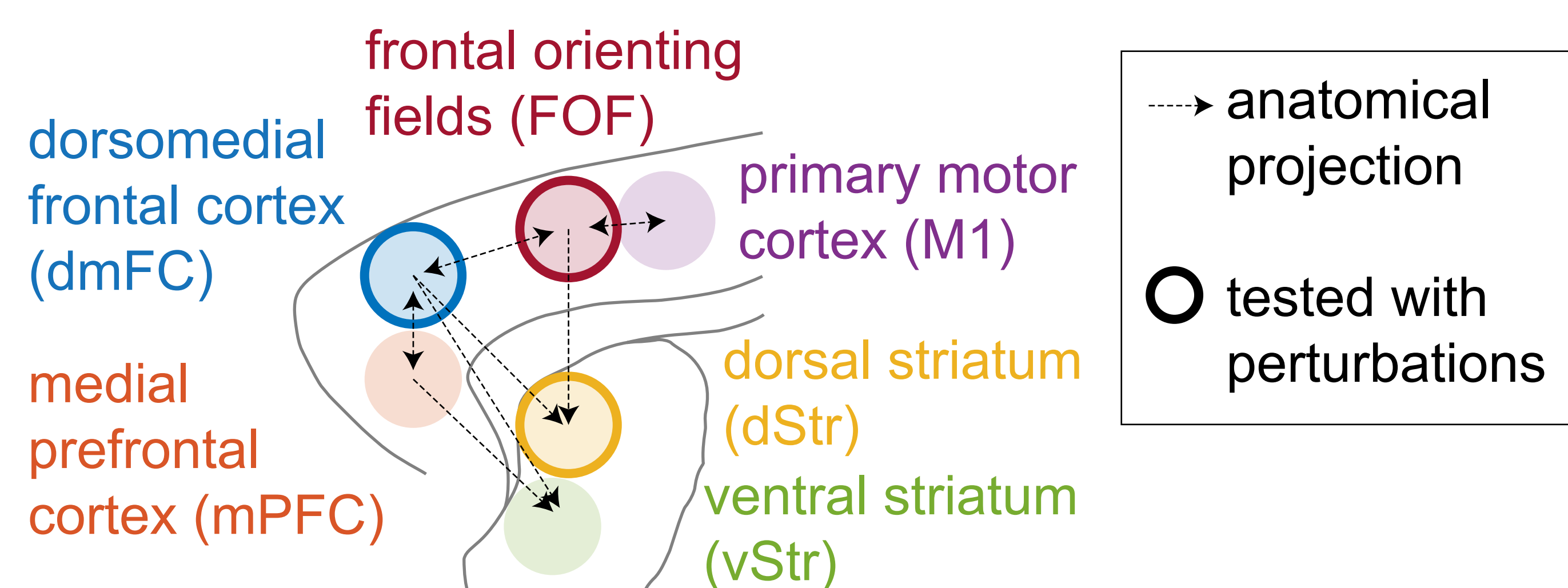
DDM line attractor
(e.g., Bogacz et al., 2006)

**h**

non-normal, line attractor
(e.g., Mante et al., 2013)

**i**

unsupervised discovery
(this study)

**j****k**

Neuropixels recording (2-3 regions/rat; 12 rat total)

