





#### BACKGROUND

## OPTIMAL TRANSPORT



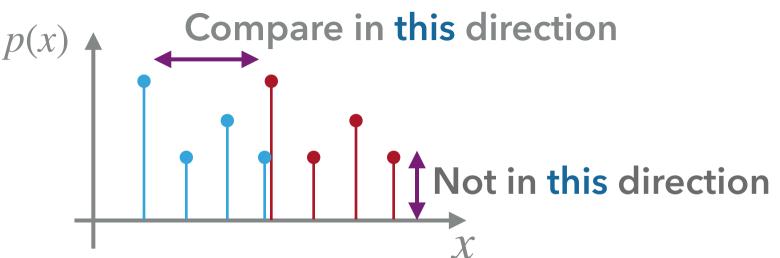
# The big idea behind OT:

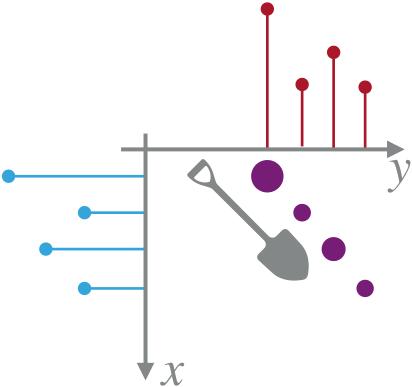


Distance between distributions = cost to move mass between them

### Cost to move mass m from x to y:

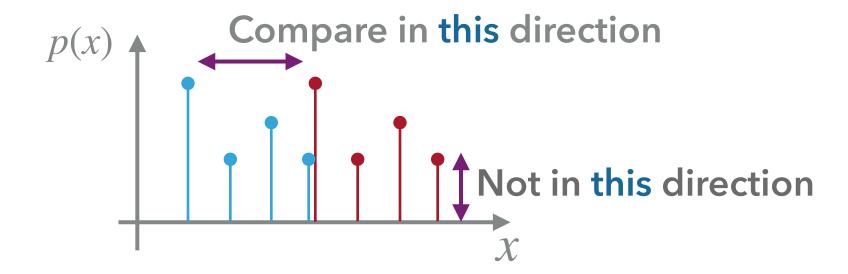
 $m \cdot d(x,y)$ 



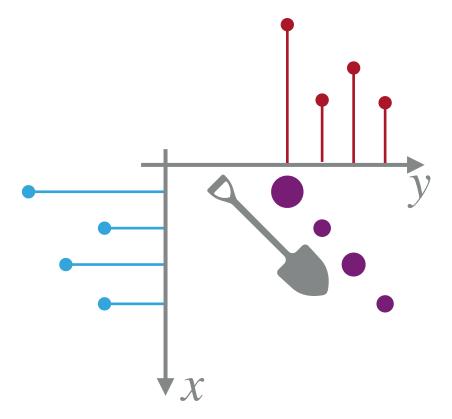


### OPTIMAL TRANSPORT

- ▶ Geometric framework to compare probability distributions
- The big idea behind OT:



Distance between distributions = cost to move mass between them



Cost to move mass *m* from *x* to *y*:

$$m \cdot d(x, y)$$





# OPTIMAL TRANSPORT



