

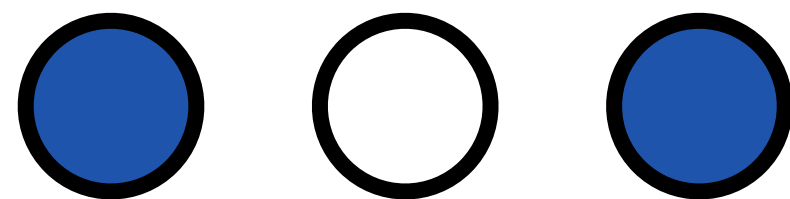
# Likelihood as counting

- An evil statistician created an urn that contain 4 white or blue balls

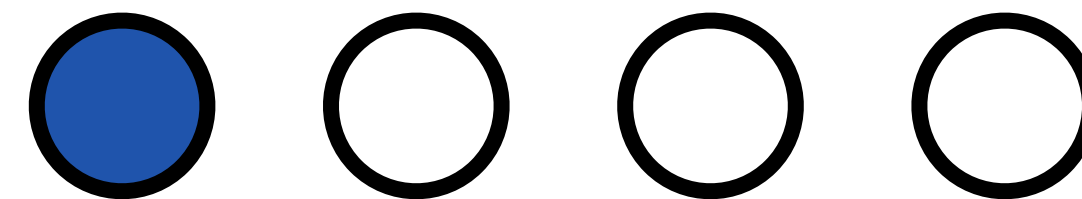
Five possible configurations (worlds)

(1) [○○○○], (2) [●○○○], (3) [●●○○], (4) [●●●○], (5) [●●●●]

- We observe 3 observations with replacement:



Assume the urn has the composition:



These are the 4 possible outcome of a draw:



# Likelihood as counting

These are the  $4^2$  possible outcomes of 2 draws:

