Lab 4, Bootstrap

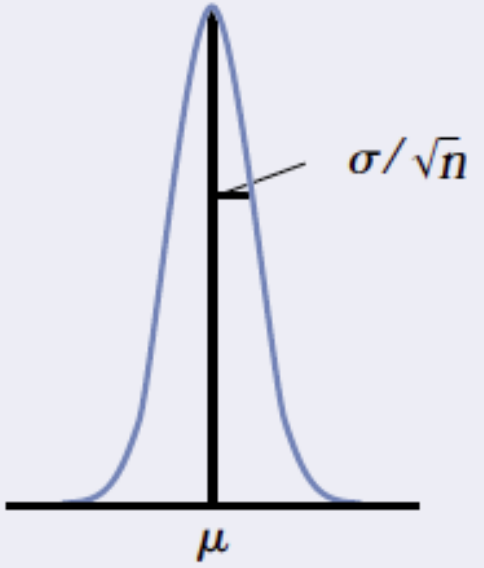
TMS150, MSG400

Pictures from “Bootstrap Methods and Permutations Tests”, Moore et al

Sometimes we know!

NORMAL POPULATION
unknown mean μ

Theory



Sampling distribution

Estimator: sample mean, $\bar{X} \sim \text{norm}(\mu, \sigma^2/n)$

How to do it if we don´t – ideal case

POPULATION
unknown mean μ

SRS of size n → $\bar{x}$

SRS of size n → $\bar{x}$

SRS of size n → $\bar{x}$

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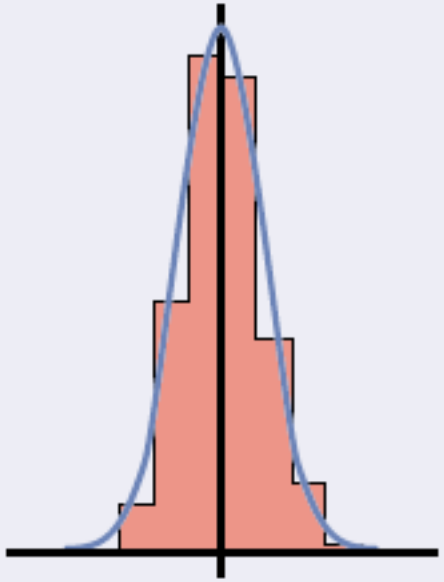
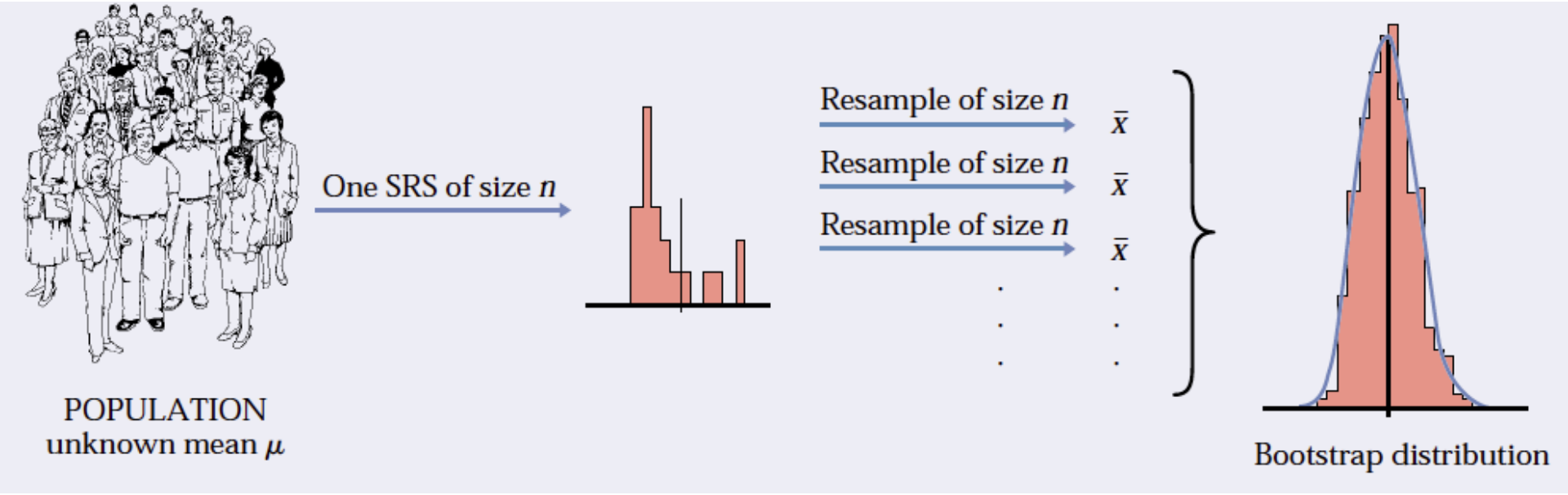


Sampling distribution

How to do it if we don´t – bootstrap