# Lecture Notes II – Maximum Likelihood Estimation for Discrete Distributions

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Max Likelihood Principle

ML estimation for arbitrary discrete distributions

Other ML estimation examples

ML estimate as a random variable

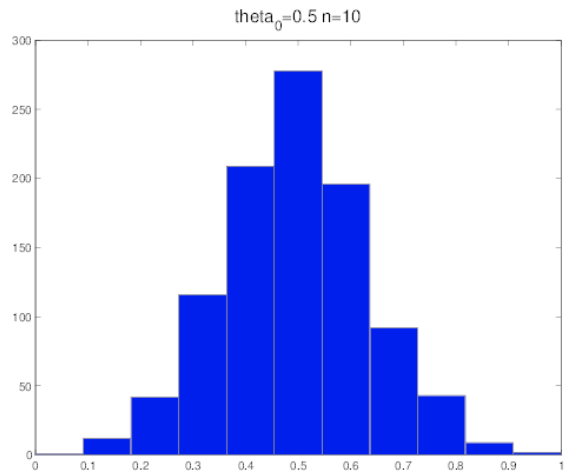
**Reading**: Ch. 4.1, 4.2

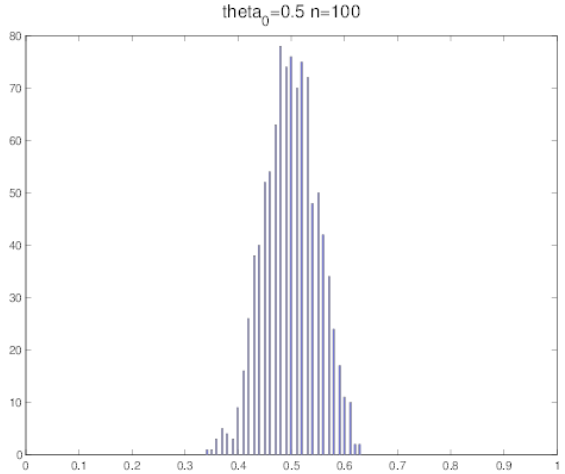
# Maximum Likelihood Principle

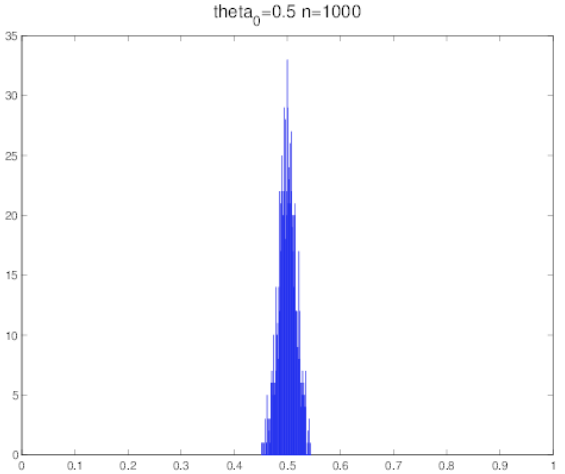
# ML estimation for arbitrary discrete distributions

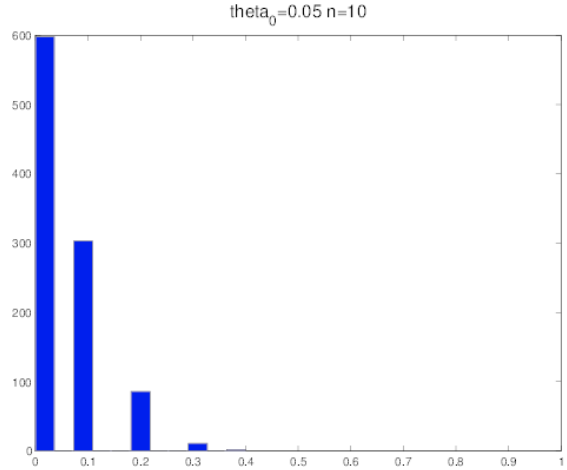
# Other ML estimation examples

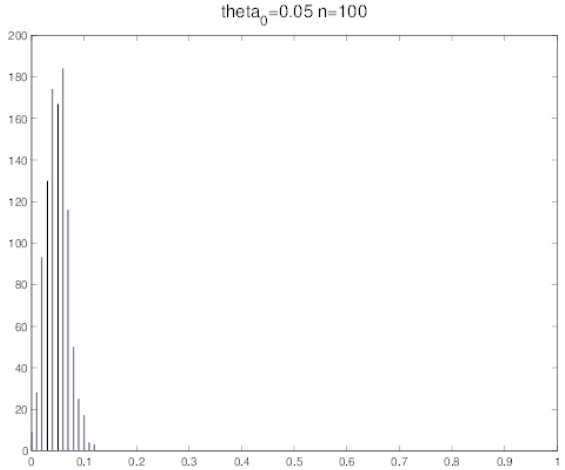
# ML estimate as a random variable

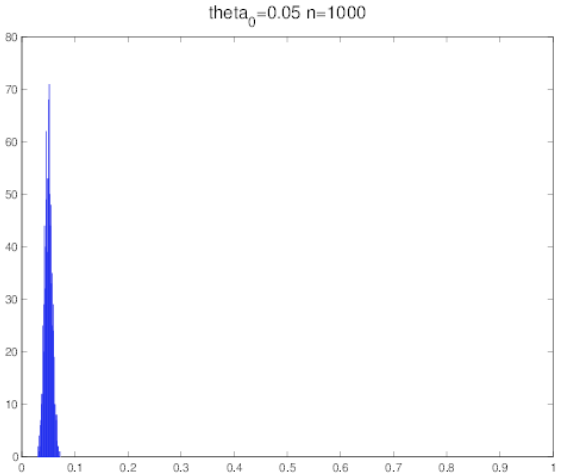


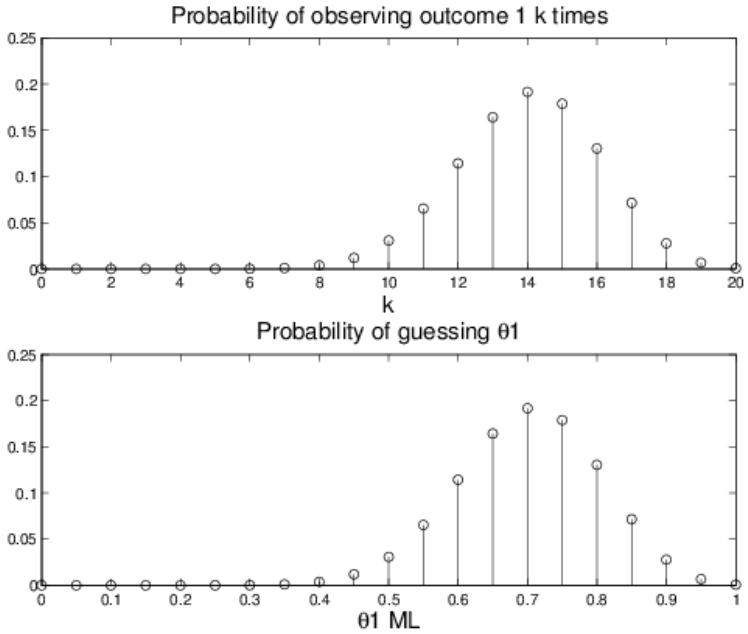



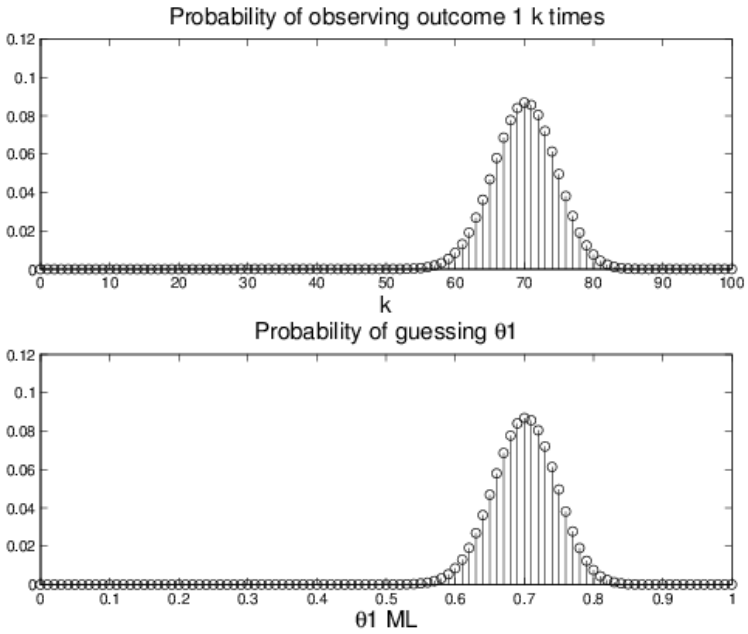



# ML estimate as a random variable

$$\binom{n}{n_0\ n_1\ \ldots n_{m-1}} = \frac{n!}{n_0!n_1!\ldots n_{m-1}!}$$



# ML estimate as a random variable