

Radboud University Nijmegen





Behavioral Science Institute



Mean

$\mu \longrightarrow \mu_{\text{pop}}$



More Data

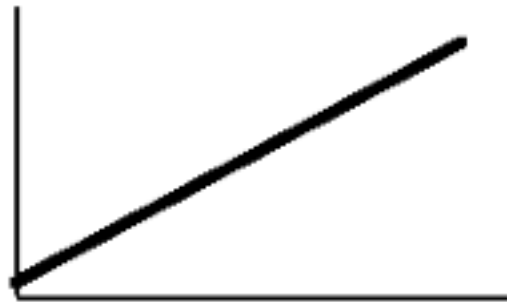


Independent observations of
random variables

$\mu \pm \sigma$ are sufficient to characterise
absence of dependencies in the data:
e.g. Expected value of μ for $N = 100$, given σ
 N = ensemble size

Scaling phenomena: Time scales

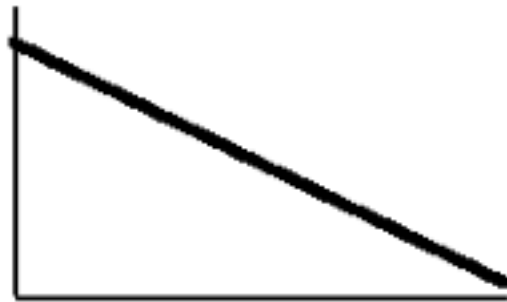
Log (sample means)



Log (amount of data)

Log (sample means)

or



Log (amount of data)

Interdependent observations across different scales

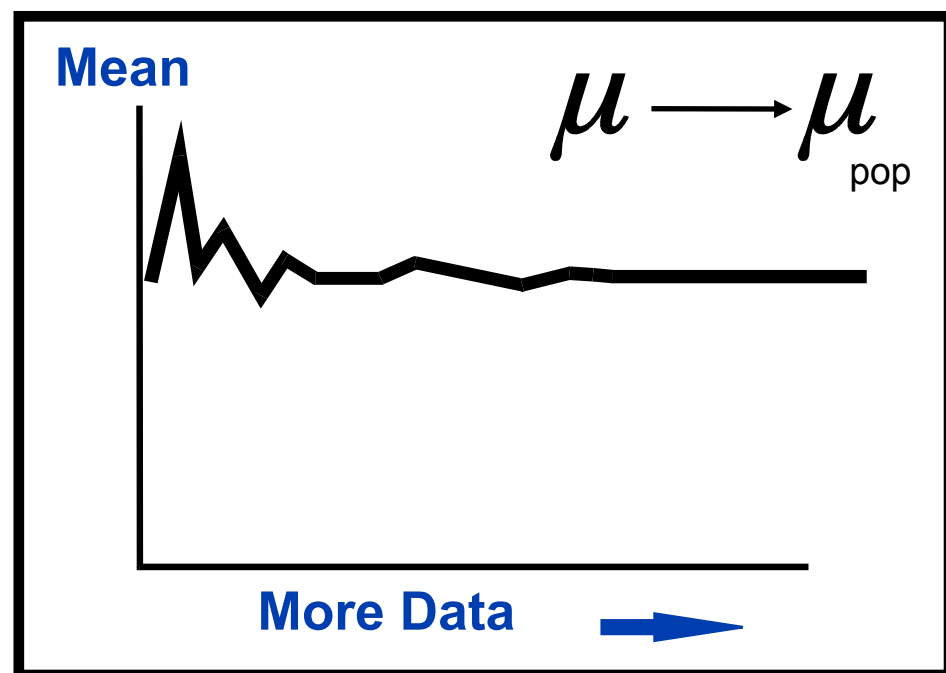
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e.g. Sample estimates of μ change with N
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Interdependent observations
across different scales

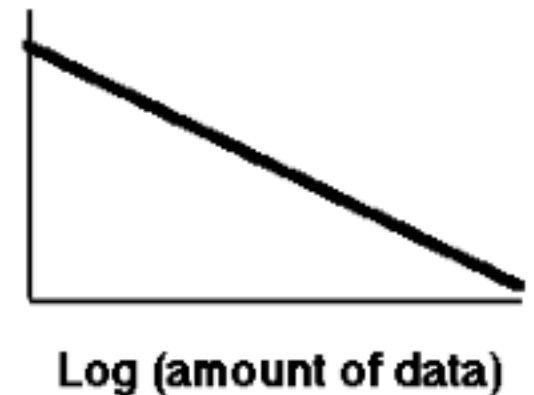
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e.g. Sample estimates of μ change with N
 N = observation time

Log (sample means)



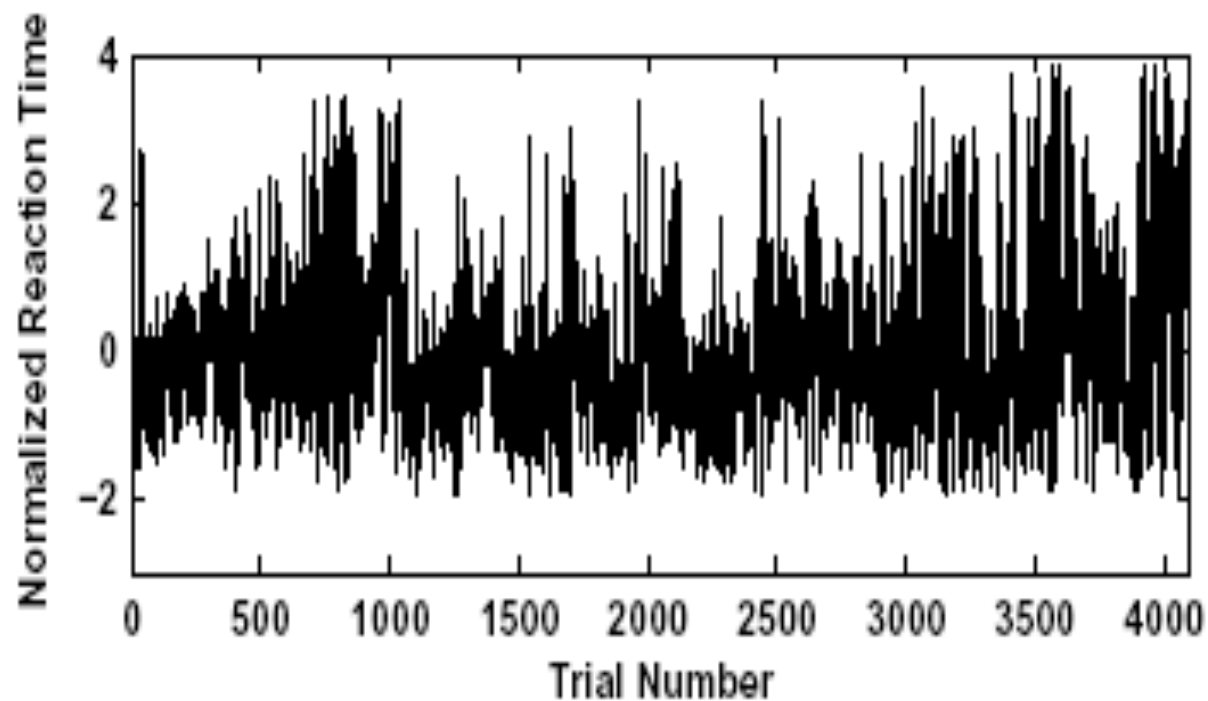
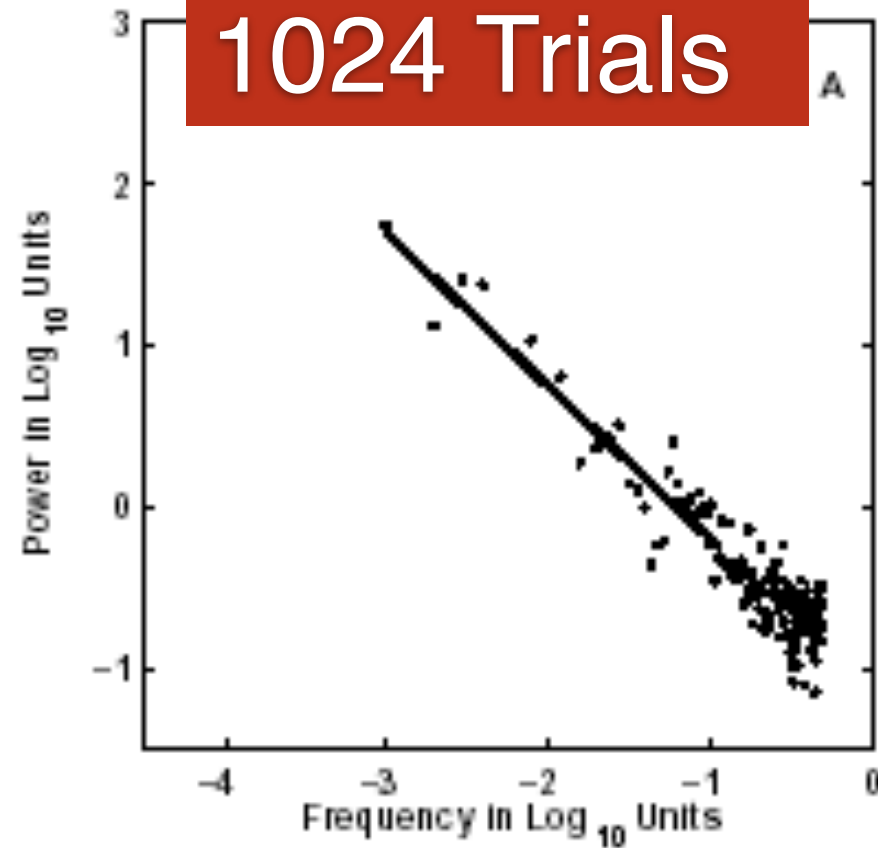
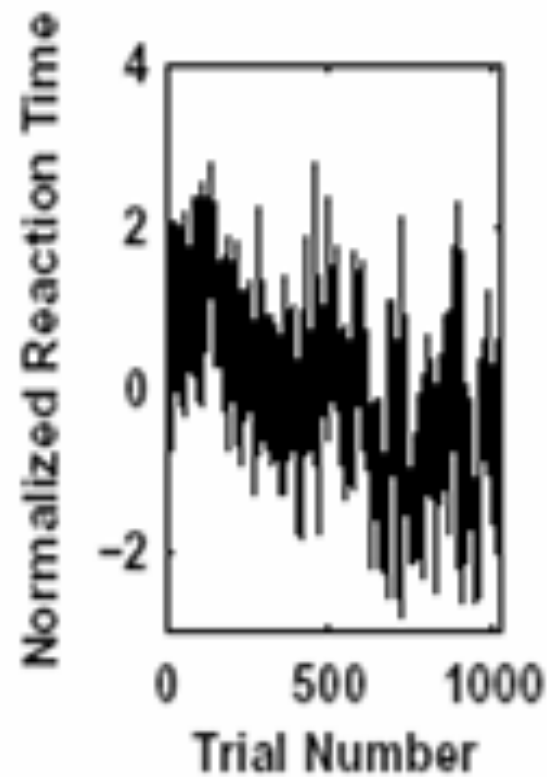
Log (sample means)

or



“Statistics”: More data = more variance

1024 Trials



4096 Trials

