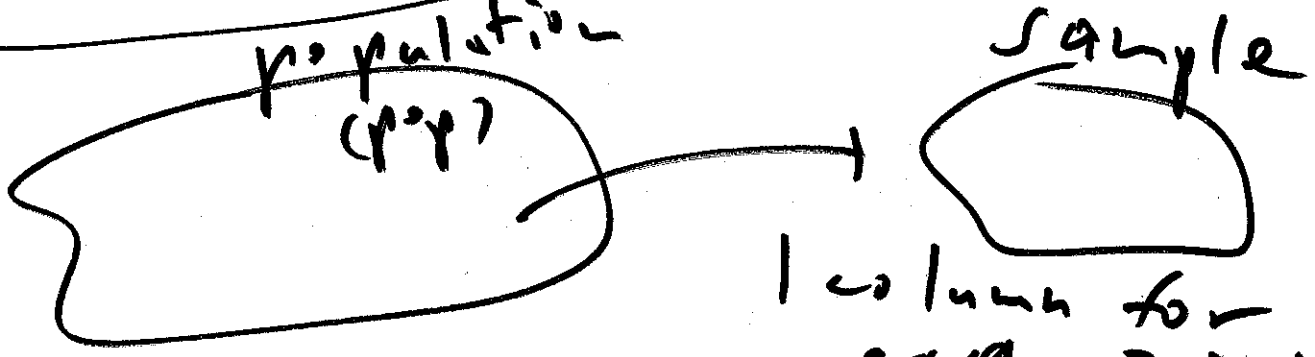
this time: descriptive methods

next time: ↓

AMS 8 Jan of 08

(1)



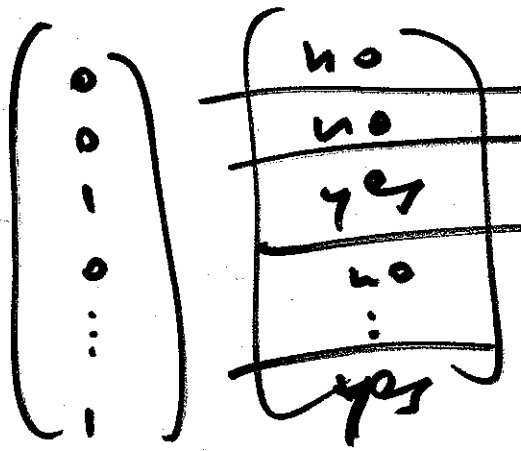
1 column for each variable

(1 column) disease?

1 row for each subject

$n = 100$

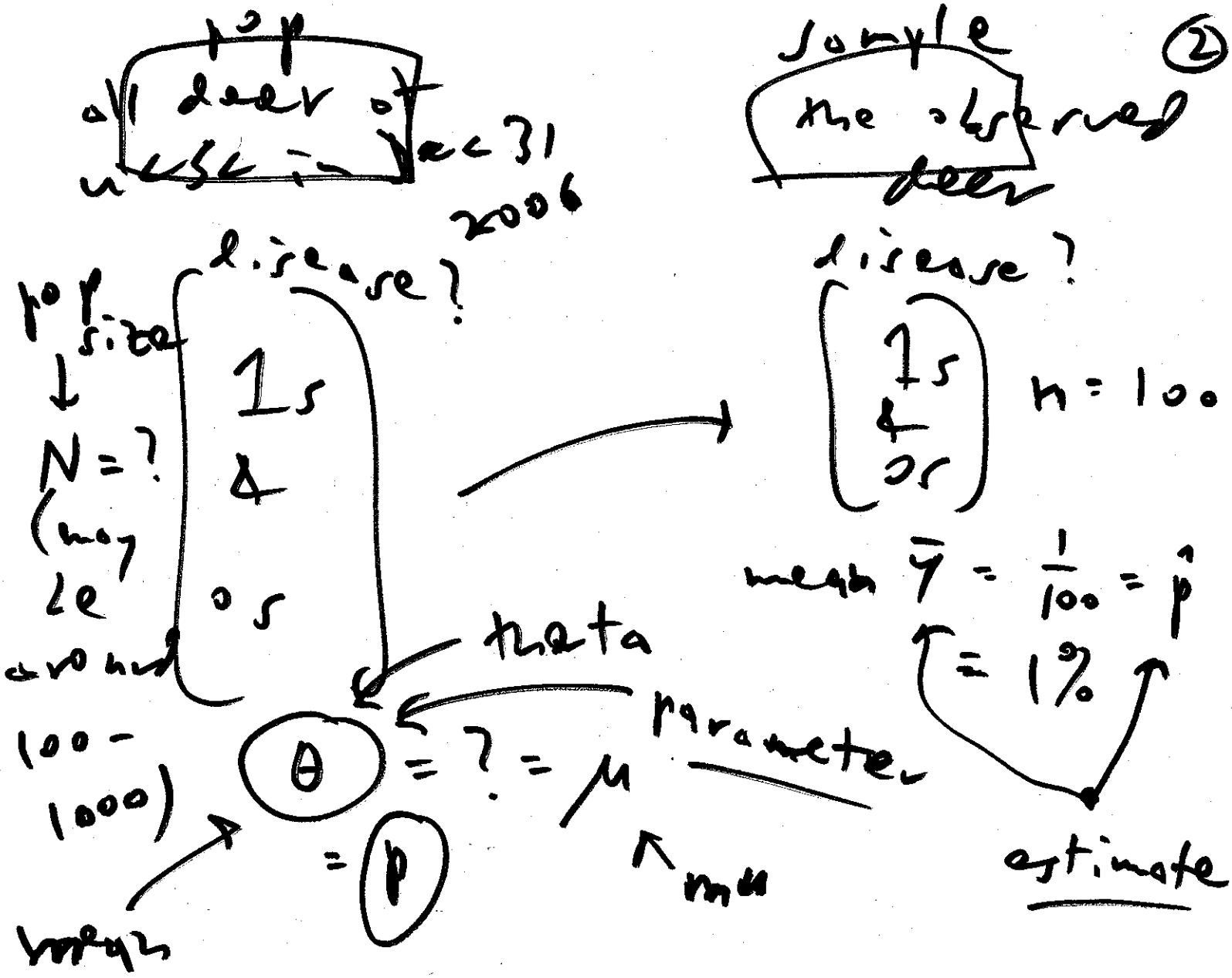
sample size

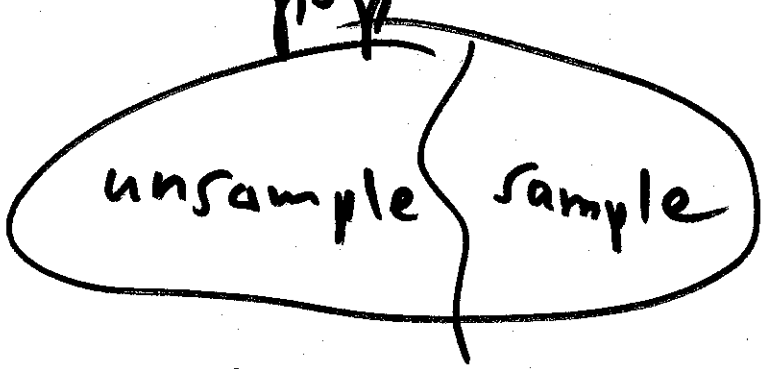


$n = 100$ rows (1 for each dog)

sum S = # of diseased dogs

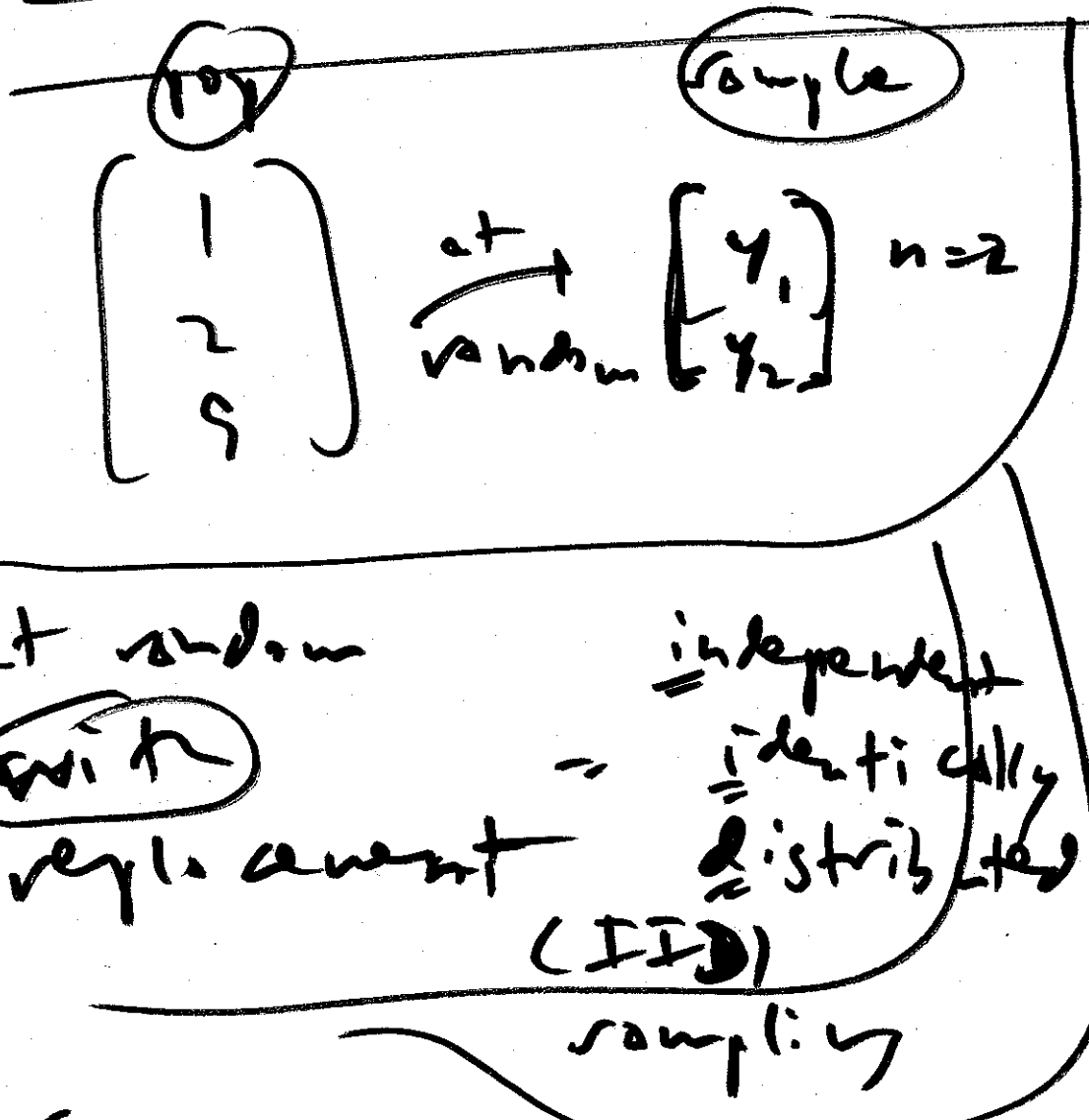
mean $\bar{y} = \frac{S}{n}$ = proportion of diseased dogs





Goal: make sample & unsample or similar as possible in all relevant ways: this is a representative sample

simple method to achieve goal: ③
choose sample elements at
random from the population



SRS more informative than IID
(so this is what people do) but
math easier with IID; when
n is a lot smaller than N

(n << N) SRS ≈ IID ⊛

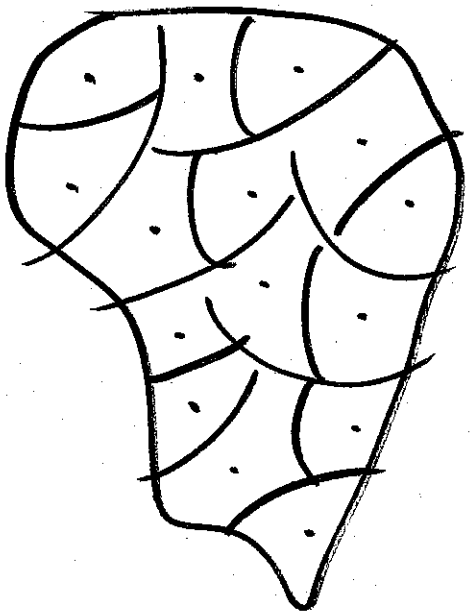
← is about the same as

so people do SRS

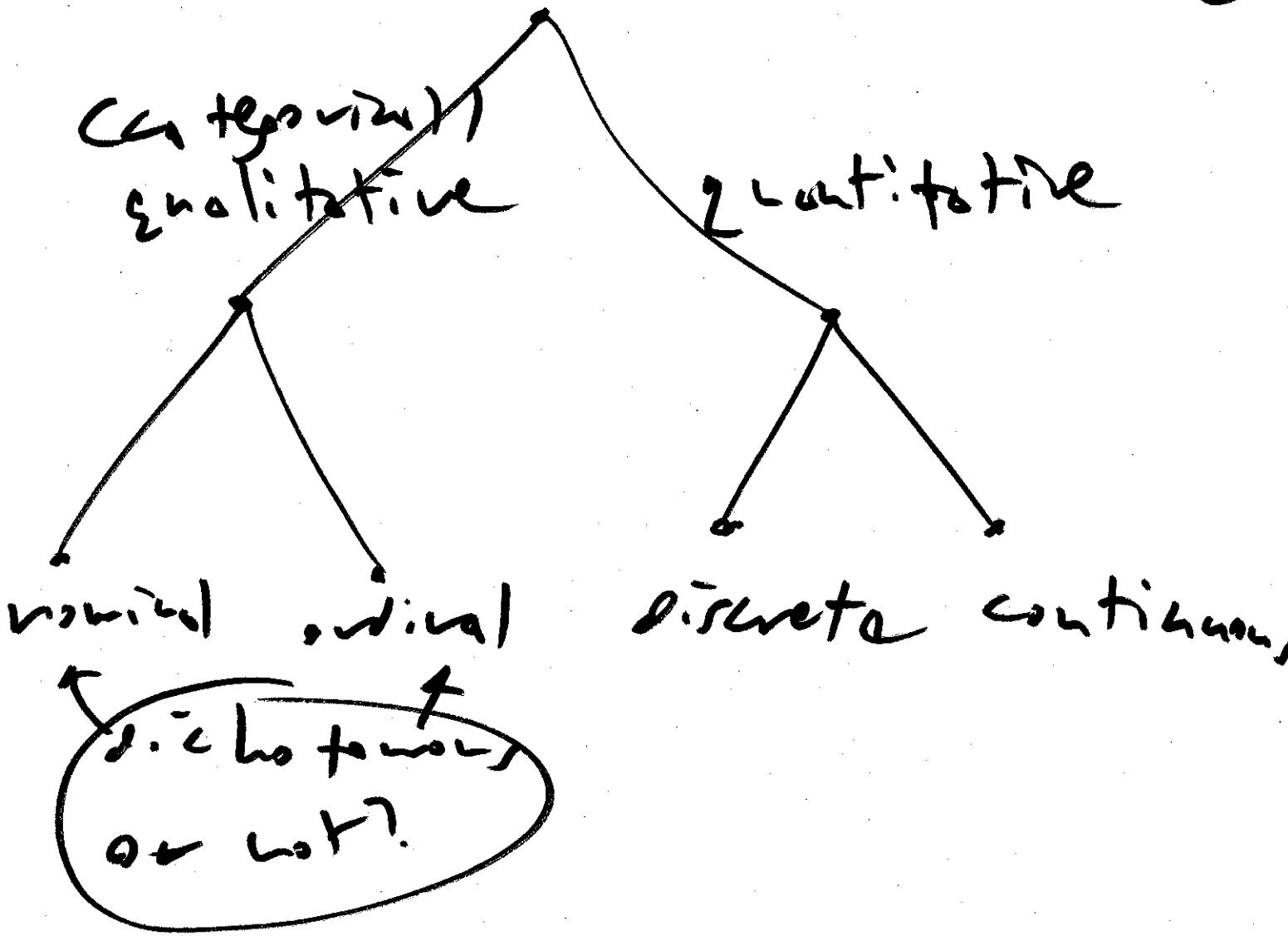
but when $n \ll N$ they use math from IID

θ parameter (unknown) p.p.

$\hat{\theta}$ ("theta-hat") = estimate of θ from sample data



variable	categorical (5) / qualitative (qual) / nominal
eye color in animal of study	→ blue, brown dichotomous
success in maze running	very slow slow moderate fast very fast qual ordinal
size of a plant: ① # of leaves ←	quant 44, 45, ... discrete
② height ←	quantitative (quant) 111.47 cm ratio continuous
growing temperature at which most bugs produced	25.240° C quant continuous interval


categorical
qualitative
quantitative
nominal
ordinal
discrete
continuous
dichotomous
or not?