

losses and decision making

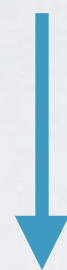
point estimates

- ▶ posterior distribution is informative:
integrates prior + data
- ▶ but posterior is not always sufficient
- ▶ credible intervals can be useful:
 - ▶ 95 percent certain the probability of an RU-486 pregnancy lies between some number L and some number U
- ▶ points estimates can also be useful
 - ▶ average payoff for an insurance claim or
 - ▶ how much longer a patient has to live

bayesian
perspective



decision
theory



minimize
expected **loss**

loss functions

loss	best estimate
linear	median
squared	mean
0/1	mode

summary

- ▶ how Bayesians make point estimates of unknown parameters
- ▶ make choices that minimize the loss
- ▶ best estimate depends upon the kind of loss function one is using