losses and decision making

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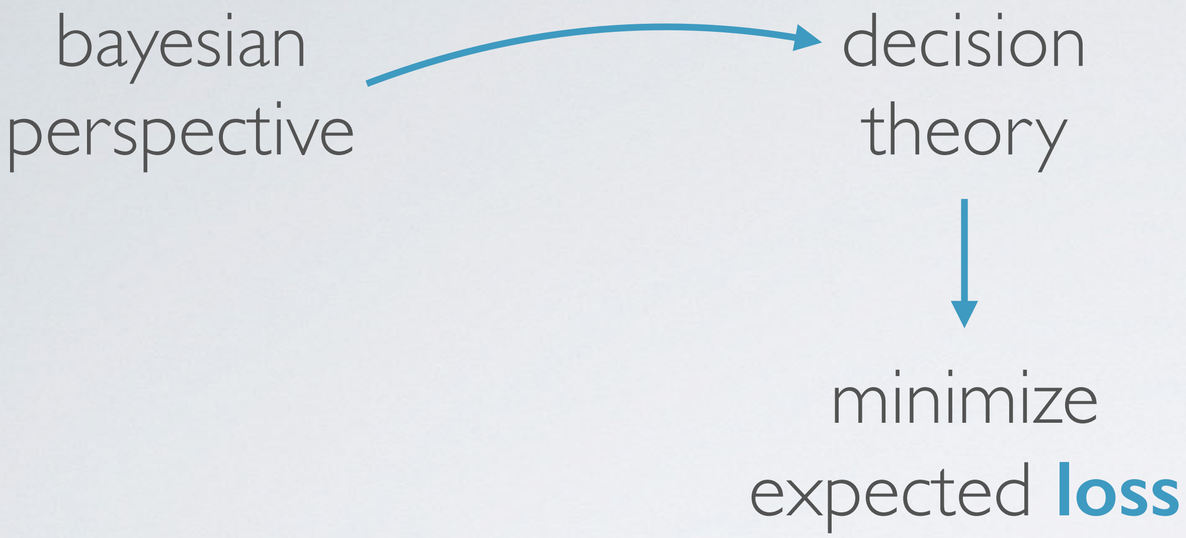
point estimates

- 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