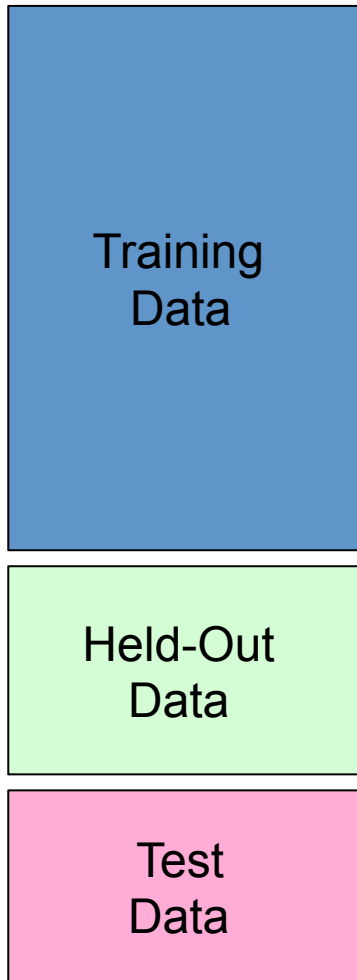


Three Views of Classification

(more to come later in course!)



- Naïve Bayes:
 - Parameters from data statistics
 - Parameters: probabilistic interpretation
 - Training: one pass through the data
- Logistic Regression:
 - Parameters from gradient ascent
 - Parameters: linear, probabilistic model, and discriminative
 - Training: gradient ascent (usually batch), regularize to stop overfitting
- The perceptron:
 - Parameters from reactions to mistakes
 - Parameters: discriminative interpretation
 - Training: go through the data until held-out accuracy maxes out