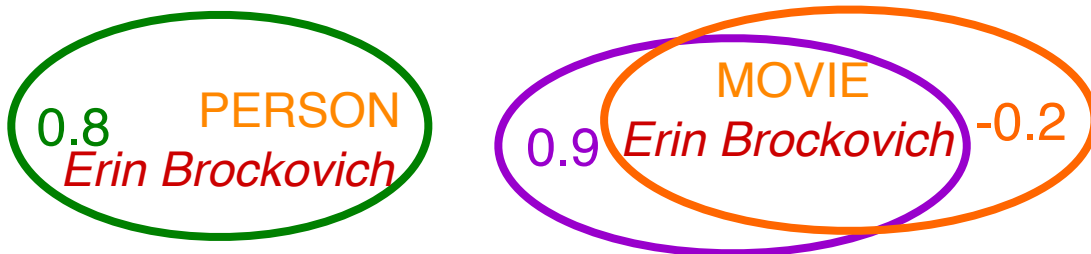# 4.3 RAT

1. In the following sentences, the entities are marked with brackets, and the class of these entities is location. Which of the following entities would be picked out by the following feature?

   - Let freedom ring from the [Rockies] of [Colorado]!

   - Let freedom ring from the [fields] of [Tennessee]!

   $Feature(c, d) = \{c = \text{LOCATION} \ \& \ IsCapitalized(w_i) \ \& \ w_{i-1} = \text{"the"}\}$

   ($w_i$ is the first word of an entity)

2. Given the following features and classes, compute the score ($=\Sigma \ \lambda_i f_i(c,d)$) for class Movie.

   0.8 PERSON
   *Erin Brockovich*

   0.9 MOVIE -0.2
   *Erin Brockovich*

3. Which of the following is correct about maxent (logistic regression) models?
   a) Features should be carefully picked so that they don't overlap
   b) Adding overlapping features to the model does not affect the classification decision
   c) N overlapping features provide stronger evidence for classification than one overlapping feature
   d) None of the above