

# Motivation: Rating Prediction

- Input: An opinionated text document  $\mathbf{d}$
- Output: Discrete rating  $\mathbf{r} \in \{1, 2, \dots, k\}$
- Using regular text categorization techniques
  - Doesn't consider the order and dependency of the categories
  - The features distinguishing  $r=2$  from  $r=1$  may be the same as those distinguishing  $r=k$  from  $r=k-1$  (e.g., positive words generally suggest a higher rating)
- Solution: Add order to a classifier (e.g., ordinal logistic regression )