- Generalized Linear Models include, as to the target variable's distibution:
  - Normal Distribution
  - Bernoulli- and Binomial distribution,
  - Poisson distribution,
  - Exponential- and Gamma distribution.

- Theory and Algorithms may be conceived for all of them
  - Maximum Likelihood Estimation
  - Iteratively Reweighted Least Squares
  - Likelihood ratio tests for comparing models

  Concept of Deviance

- Residuals are less useful, since

  they show "artificial" structure

  We need them anyway!

Messages Ordered Target Variable

- Many nominal variables are ordered
  Adequately modeled by cumulative logits (Probits, ...)

- Concept of latent variable with threshold values

- Multinomial target variable:
  Log odds w.r.t. reference category = linear prediktors
  Many parameter to be estimated!