ToBI

- Tones and Break Indices
- Labeling system for intonation, following Pierrehumbert's Tone Sequence Model
- today: only the "Tones" Part
ToBI - Idea

• independent pitch accent categories associated with stressed syllables
• categories of boundary tones and phrase accents associated with phrase-final syllables
• categories consist of (sequences of) high and low targets, H and L
Hierarchy of prosodic phrases (1)

all ToBI variants assume hierarchical prosodic structure

\[
\begin{align*}
\text{utterance} & \quad \text{Intonation Phrases} \\
\text{IP} & \quad \text{IP} \\
\text{IP} & \quad \ldots \\
\text{IP} & \quad \text{IP} \\
\text{ip} & \quad \text{ip} \\
\text{ip} & \quad \ldots \\
\text{ip} & \quad \text{ip} \\
\end{align*}
\]
Hierarchy of prosodic phrases (2)

- each **IP** contains one or more **ips**
- each **ip** contains one or more pitch accents
  - nuclear accent = most prominent accent
  - some claim: last accent always nuclear
- **IP** boundaries are associated with **boundary tones**
- **ip** boundaries are associated with **phrase accents**
Pitch in Prosodic Phrases

Pitch range decreases in the course of an utterance
GToBI(S)

• Mayer (1995)
• ToBI-based labeling system used in Stuttgart
• builds on Fery's (1993) analysis of German intonation and on ToBI
• similar to "popular" GToBI as used in Cologne
• pitch accent and phrase accent inventory simplified in GToBI(S)
• motivation: use only events that are clearly different perceptually
Differences to GToBI

  no + diacritic for trailing and leading tones
  tritonal accents, M target
- three **allotonic variants** for H*L and L*H
  prenuclear H*L can be realized as
  \[ \begin{align*}
  & \text{H* ..L (partial linking)} \\
  & \text{H* (complete linking)}
  \end{align*} \]
  prenuclear L*H
  \[ \begin{align*}
  & \text{L* ..H (partial linking)} \\
  & \text{L* (complete linking)}
  \end{align*} \]
- phrase accent inherited from preceding target
  (underspecification obligatory)
- boundary tone: underspecification optional
GToBI (S)

• described in Mayer (1995, manuscript)

• Examples discussed today: from the Cologne GToBI site
  http://www.gtobi.uni-koeln.de/index.html