## ToBI

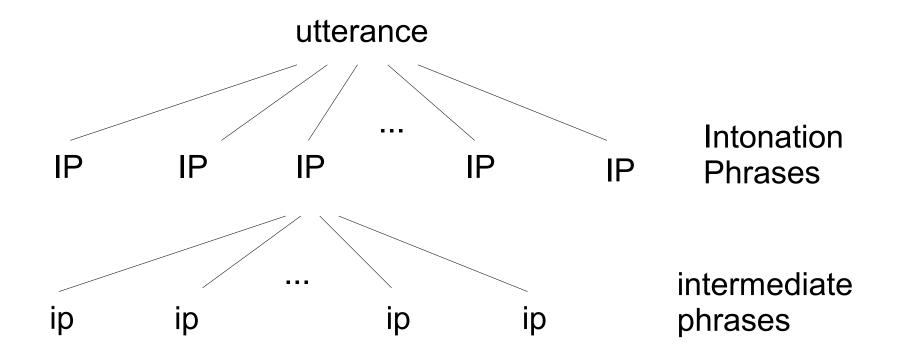
- Tones and Break Indices
- Labeling system for intonation, following Pierrehumbert's Tone Sequence Model
- today: only the "Tones" Part

#### 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)

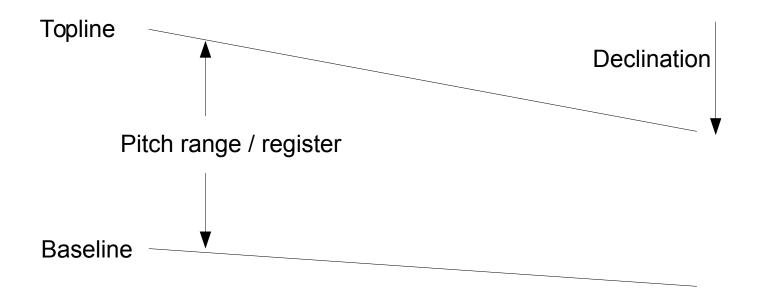
# all ToBI variants assume hierarchical prosodic structure



## 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

- inventory: H\*L, L\*H, HH\*L, L\*HL, H\*M 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

H\* ..L (partial linking)

H\* (complete linking)

prenuclear L\*H

L\* ...H (partial linking)

- L\* (complete linking)
- phrase accent inherited from preceding target (underspecification obligatory)
- boundary tone: underspecification optional

## GToBI (S)

• described in Mayer (1995, manuscript)

http://www.ims.unistuttgart.de/institut/arbeitsgruppen/phonetik/papers/STGTsystem.pdf

 Examples discussed today: from the Cologne GToBI site

http://www.gtobi.uni-koeln.de/index.html