**Model:**

**View:**

**Flow:**

**LMpredictor 🡪 LMconverter, ContextExtracter 🡪 LMCompare 🡪 Prominence, Frequency**

Questions:

* Hypothesis: Word endings (3,4) less likely to lose landmarks
* loss of initial lm at 1, accented esp. (e.g. /t/)
* Words that lose lots of lm?
* Abercrombien Foot: strong followed by weak words forms prosodic word

TO-DO:

* Alignment algorithm correctness
* Feature coverage
* Auto-naming: guarantee self-consistence
* Flexible context definition: feature selection!
* Insertion: Type, prev/succ hand lm label (where in the word),
* Time resolution!
* Finding recent frequency, and language freq
* How to put accents more accurately
* **UNDO:** [ Split lm tier by silence: 2 places in conv07 where manual labels locate in silences: 237.3102843501697 Sc, 361.15503806157983 Sc 🡪 use half of each boundary silence interval for buffering ]

**DO:** split by **WORD** (reduce unnecessary mis-alignment)

* **G = Gc+Gr (predicted)**
* Does it make sense to use absolute position? 🡪 distinguishing boundary & middle is sufficient! 🡪 Reverse indexing (position ‘f’)
* Word position in Phrase
* Phrase/subphrase/word intervals still problematic
* **Functionality/Correctness**

Comparison

* Context implementation:
  + frequency;
  + Phrase boundary: 4 / ‘%’ (🡪IP), 3/ ‘-‘ (🡪 ip), 2, 1;
    - 3-, 4-, 3p? (temporarily counting them as existent)
* Map: phn 🡪 distinctive features
* Parenthesis: ignore but keep
* multiple words in each interval?
* Anomalies 🡪 manual annotation and extract word
* **Usability/Interface**
* How to accommodate new tiers/data fields?
* Flow design
* How to select source data
* Modularize some big chunks of code
* Tier show/hide option
* Where to put reference tables?
* Input and function specification

DONE:

* Lms[0].phns[0] = Phoneme(0,0,None)
* Dialog frequency
* Stress: ‘-1’ for consonants,
* Mistake fixed: n/b-cl != n-cl/b-cl
* Split LM prediction and context extraction processes 🡪 can’t really do =.=
* Reinforce word boundary for lm alignment
* Manual labeling: only ‘+g’
* Glides: paired closure/release -> ‘G’ in middle; otherwise do nothing
* “/”-> subdelta; “,” -> delta
* LMPoint.mark = LM (single)
* Implement context:
  + LMPoint stores link to Phn points
  + In-word position: o01, o02,
  + Diphthongs: treat as single monothongs temporariry
* Manual LM ‘x’==deletion
* <…> and unrecognized words are treated as silences
* xmin, xmax are STRINGs
* Jason: read/write encoding 🡪 python version
* TGPr
* \* Finding the syllable/vowel corresponding to marked prominence, given observed landmarks and optimal alignment between predicted and observed landmarks:
* Find the closest landmarks (a, b) proceeding and succeeding the prominence mark:
  + According to given alignment L, find corresponding predicted landmarks (a’,b’)

1. situations are possible:

i. a’, b’ result from the same phoneme transition (p1, p2) and prominence is on the vowel; prompt for help when both are vowels or neither is one.

ii. a’, b’ result from adjacent phoneme transitions (p1, p2), (p2, p3) and prominence is on p2; prompt if p2 is not a vowel.

iii. It is possible that one of a’ or b’ is None, which corresponds to the situation of insertion. Treat the same way as (i) .

iv. Both a’, b’ are None. This should be rare; prompt for help.

Vowel monophthongs( tense, lax, reduced), diphthongs, syllabiliq/

Clear frequencies; loud; marked in middle

Glide (w,y), (r,l), (h)

Clear frequencies; quiet; marked in middle

Consonant nasal

fricatives f th s sh v dh z zh

stops d b g p t k

affricates jh ch

Word: onset, nucleus , coda

“okay” n a n

a – ambi-syllabic consonants “a11”, “a12”, …

n – “n11”, “n12”

word stress 🡪 1 or multiple syllable?

Try perl/python

Dictionary search time (size)? Size and completeness? Phone list?

Tuesday: dictionary (output format)

April 6, 2012

* CMU Pronouncing Dictionary 0.7a (2007) downloaded
* Moved pronlex files to template folder and modified line 45-50, in template12131.pl (missing folder “/usr/users/prosody/landmarks/source/”)
* Pronlex /x/ ?