# Roadmap

## release stoppers

- · decent debugging information on play problems
  - find how to capture exceptions from PyAudio
- · check that every reference to updatestatus as appropriate updatestatuslift call
- · check name changes on groups and frame names
- decide where to put self.db.write()
  - any function that called self.db.updatemoddatetime()
    - \* updateexfieldvalue
    - \* modverificationnode
    - \* addexamplefields
    - \* addtoneUF
    - \* rmexfields

## Things to Test

• check that changes to S regexs don't break too much.

# In Process (fix)

- add mini keyboard of common symbols (class, to add to Entry)
- · make verify window go away when last button is clicked
- · Set up schema to test line expenses on boot time, for each line
  - this-then, store then = this
  - determine costliest lines, which can be threaded
- Set up schema on largest (time) expenses, to do any of (to test real world difference, as well as to have available for quick changes, if needed later):
  - as is
  - threaded
  - multiprocessed
- freeze header on status scroll (not currently practicable, without serious reworking of the table/scroll)
- don't write ps = 'Invalid' to profiles by sense
- · make settonevariablesbypsprofile take arguments ps, profile
- · Frame object has no attribute 'skip'
- reduce unnecessary self.gettonegroups() calls
- · make "next frame" do checkcheck
- · test for table content before starting it; if all zeros, skip
- · Don't die on no count for table
- · fix analang detection problem?
- · make recordbuttons pass recordcheck, which verifies that settings are plausible.
- · include checks on empty or repeated XLP nodes

- · convert basic report to XLP table function
- set up function to change tone sort group names (to transcriptions/meaningful names)
  - give buttons for each tone letter, plus back and enter
  - give scrolling frame of buttons for framed words in the group, clickable to play to make the transcription
- make status table scroll (in both directions?)
- Look at tkinter tabs (for status page?)
- · add progress of recording (on its own tab?)

#### **For Future Versions**

- · add interpretation of glottal stop into sdistinctions.
- fix zip problem on Windows: "OSError: [Errno 22] Invalid argument: 'log\_-:.7z'"
- extra space being added for None forms in Frame construction
- · Sort out why not all nouns show in ad hoc selection list.
- · functions that depend on a slice of data:
  - require renewal of certain variables before running
  - careful iterating over them
  - distinct from other functions, which iterate over multiple slices
- make nextps and nextprofile (and nextframe?) reference most popular unfinished ps-profile combo
- · fix skip button
- · reduce calls to gettonegroups; just after check name is set
- confirm that all variable calls that are only set on frame/ps-profile switch are stored, and available on open.
- · don't write blanks to verification file
- for next ps/profile, move to modified settings (if there), rather than re-figuring each time (this costs nontrivial time).
  - if nothing has changed, there's no reason to waste that time.
  - we can refigure once per ps change? To hold it longer we would need to store it in a dict keyed by ps.
- · propagate exitFlag to the rest of the check
- · better document skip function
- · improve status table with buttons
  - make 'next' buttons on the end of each axis in the table.
  - make "hide" buttons for each header (x and y)
  - make "show all" button at the origin
- · commit diffs to hg on closing (or when?)!
  - think through which settings should be shared:
    - \* profile data?
    - \* verification status
    - \* ad hoc groups?
  - and which shouldn't
    - \* check defaults

- fix windows minimization problem (new with availxy)
- consider adding ps = None, profile = None, and name = None to scripts used in iterating across these variables, so they can be sent as variables, rather than changing self.{ps,profile,name}, given that these changes will now come at a greater cost.
  - all changes to self.{ps,profile,name} should come through self.set()
  - avoid unforeseen effects of self.x = y calls
  - We need to distinguish between user changes to these variables, and changes from iteration under the hood, which should be through arguments of local variables
  - search for any script wrapped by psori = self.ps type statements, amend.
    - \* settonevariablesbypsprofile
    - \* updatestatus
    - \* makestatusdict
    - \* makeadhocgroupsdict (done)
    - \* sortingstatus
    - \* gettonegroups
    - \* getframestodo
- move all ad hoc changes by attribute (e.g., self.ps = x) into set (to generalize it)
- Make function to manually refresh status file, don't do it otherwise
  - this is getting cumbersome, like the profile data
- · Remove None from status list of profiles -this should never go there.
  - define self.profile before writing to status?
- Reduce checkcheck calls, and/or separate table refresh from northwest status?
  - or make sorting add to stats files, so we don't need to recompile them but when changing ps-profile or frame
  - make wait window work in the mean time
- Find out how Chorus decides what files to pick up, make sure our config files are getting in.
- · move config files to aztconfig directory?
- · look at how to generalize tone sorting, joining, etc. process.
- bring new documentation pages:
  - What A→Z+T will and won't do for you
  - The Cyclical process of analysis
    - \* incremental
    - \* complete cycles
- · get dependencies offline for pyaudio
- · don't crash on invalid sample rate; clear if not valid.
  - use is\_format\_supported on parameters, reset, or limit options?
- · When making record button:
  - remove links to the wrong sound file
  - test for presence of currently linked file (i.e., not recorded in AZT), give play buttons
  - widen "Do" menu item (give all a minimum width)

### For some time

- · set up mail of bug report (better than WeSay)
- · look into having hg commit changes to verification status file
  - don't track checkdefaults? (make per user file?)
- · Set means for user to check verification stage again.
  - Once done, there is currently no AZT way to redo it.
- Look up how to get real required heights and widths, availablexy isn't working correctly.
- fix reconfigure scrolling window frame problem (remove need for if self.configured < 1:)</li>
- · constrain frames with less data, to only scroll as needed.
- · add test for resolutionsucks, implement smaller font theme
- include test to see if a tone analysis has been run since latest triage;
  - if not run the report
  - For verification window, if last example is selected (all gone), exit
    - \* don't ask for nonsensical "these are all the same".
- ways to change a frame after the fact... this seems to be a common problem
- · ?put next undone buttons in dictionary recording pages, too
- for addframe, add button/menu to allow viewing all frames already done, to help with consistency across frames.
- ?cycle through tone groups to record based on volume of the group.
- done? Update regex functions a=to allow for  $C(V)C\setminus 1$ ,  $CVC(V)C\setminus 1$ , and  $C(V)C\setminus 1C\setminus 1$ , for vowel and consonant reports and checks

## **Next Features**

- add C and V sorting (and CV?)
- model form construct with fields for CV info and tone info, which may contain variables (HAB,CONT) in addition to H, L, etc.
- proper modeling of the relationship between lx and lc
  - show pronounceable words only
  - build words on the basis of roots —should some frames use lc, e.g., if affixes are unpredictable?

### Some Day, if possible

- transition to gloss only (no definition references)
  - make docs specify gloss should be populated (maybe instructions to bulk copy?)
- · Look into tkinter tabs to separate out different task sets, like
  - sorting v recording
  - PS1 v PS2
  - C v V v T

- this ps-profile slice, v whole database work
- · rectify (scrolling) Frame redundant windowsize fn
- have automatic choice of ps-profile go through all defined frames, then next most populous ps-profile
- · include tone grouping in recording pages?
- XLP export (these are not likely to happen)
  - run dotexpdf (once you figure out where that is) to generate pdf?
  - run script to generate html?
  - figure out window specific variations (with Andy?)
- set tone report to ignore NA, if there is only one other value in that position (given the other values for the other frames).
- Fix 'ŋ' display problem in entry fields in MS windows (working fine in Linux) [x] noted issue in USAGE.md
- Make Wait window show background color and label message in MS Windows (working fine in Linux)
- put setdefaults.py into Check class
- · distinguish between lc and lx
  - make CV report only reference lx field
  - make docs specify the difference, start with lc references (maybe instructions to bulk copy?)

### For specific databases

- fix key 7 problem for sxw
- -? figure out why multiple fun entries aren't showing for recording on bfj
  - '6e2a67cb-6695-4536-bc55-423fad4f019b',<+
  - '7cdcddfc-5b9f-44bf-bfe5-d5ce164720cd',

#### **Documentation**

Add what and why pages in different places, with rationales and instructions specific to context?