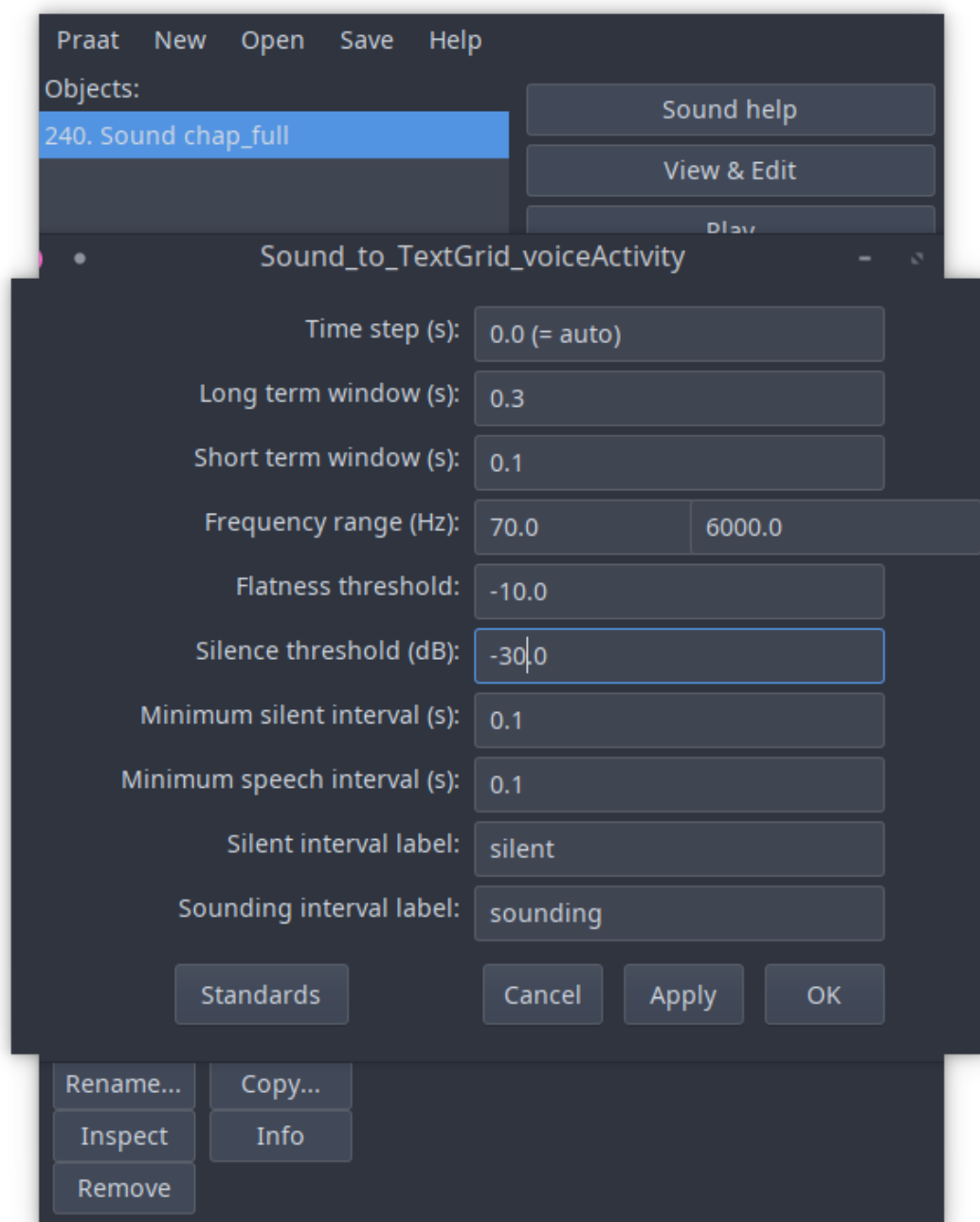


Aligning a french audiobook 2

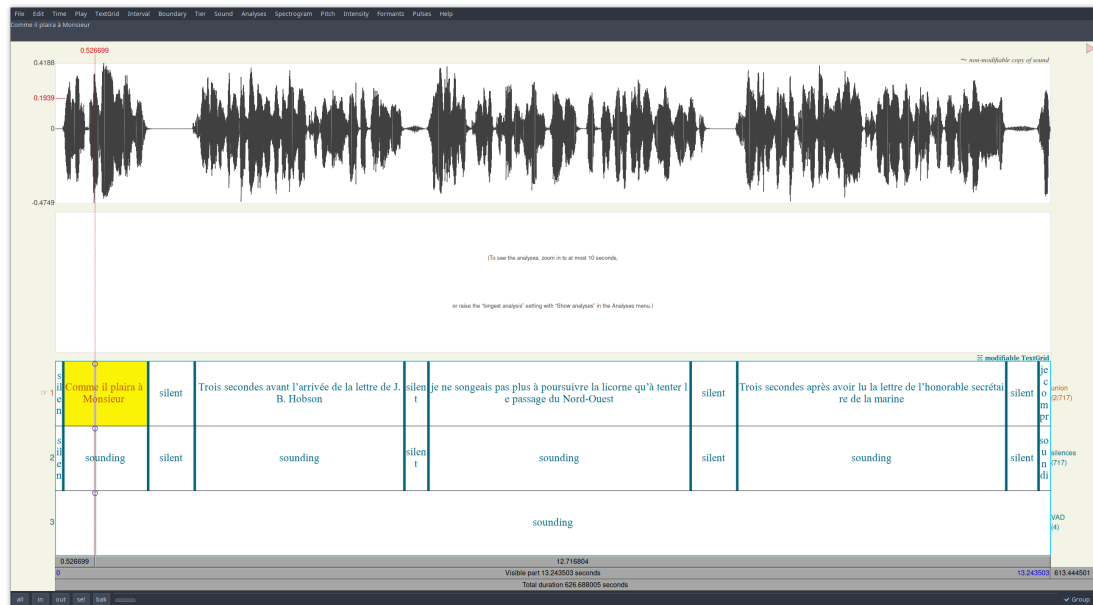
In this notebook we will align an audio book using Praat or Audacity for pre-segmentation and the MFA for forced alignment.

First, download the SIWIS_audiobook.zip from Google drive in the Sessino 2 folder. We see there is an audio file and the corresponding text. Use now either Praat or Audacity workflow for a pre-segmentation and annotation as outlined in Audacity_PRAAT_useful_functions.

I will show here the workflow for Praat as an example. Here I used mostly the standard settings for the detection of voiced regions, but the threshold was set to -30 dB.



In this example, I entered the text of the first couple of sentences:



Then I run the MFA_corpus_preparation Praat script and extract all files in a folder "mfa_ready".

```
File Edit Search Convert Font Run Help
clearinfo

# this script extracts the utterances of all audio + TextGrid files in a dire

# modify input and output directory
input_dir$ = "/home/philipp/Workspace/audiobook/"

output_dir$ = "/home/philipp/Workspace/mfa_ready/"

utterance_tier = 1

Create Strings as file list: "FileList", "'input_dir$*.TextGrid"
number_of_files = Get number of strings
file_counter = 0
```

In this case, 16 utterances were extracted. The MFA can then be used for the alignment:

```
In [1]: ! mfa align ~/Workspace/mfa_ready/ french_mfa french_mfa ~/Workspace/au
```

```

INFO - Setting up corpus information...
INFO - Loading corpus from source files...
100%|████████████████████████████████████████| 16/16 [00:01<00:00, 1
5.35it/s]
INFO - Found 1 speaker across 16 files, average number of utterances pe
r
        speaker: 16.0
INFO - Initializing multiprocessing jobs...
WARNING - Number of jobs was specified as 3, but due to only having 1 s
peakers,
        MFA will only use 1 jobs. Use the --single_speaker f
lag if
        you would like to split utterances across jobs regar
dless of
        their speaker.
INFO - Normalizing text...
100%|████████████████████████████████████████| 16/16 [00:07<00:00,
2.01it/s]
INFO - Creating corpus split for feature generation...
100%|████████████████████████████████████████| 32/32 [00:01<00:00, 3
0.46it/s]
INFO - Generating MFCCs...
100%|████████████████████████████████████████| 16/16 [00:01<00:00, 1
3.15it/s]
INFO - Calculating CMVN...
INFO - Generating final features...
100%|████████████████████████████████████████| 16/16 [00:01<00:00, 1
5.42it/s]
INFO - Creating corpus split with features...
100%|████████████████████████████████████████| 16/16 [00:02<00:00,
7.22it/s]
INFO - Compiling training graphs...
100%|████████████████████████████████████████| 16/16 [00:01<00:00, 1
4.58it/s]
INFO - Performing first-pass alignment...
INFO - Generating alignments...
100%|████████████████████████████████████████| 16/16 [00:01<00:00, 1
1.00it/s]
INFO - Calculating fMLLR for speaker adaptation...
100%|████████████████████████████████████████| 1/1 [00:01<00:00,
1.20s/it]
INFO - Performing second-pass alignment...
INFO - Generating alignments...
100%|████████████████████████████████████████| 16/16 [00:01<00:00, 1
1.28it/s]
0%|████████████████████████████████████████| 0/16 [00:00
<?, ?it/s]
INFO - Collecting phone and word alignments from alignment la
ttices...
100%|████████████████████████████████████████| 16/16 [00:03<00:00,
4.43it/s]
INFO - Exporting alignment TextGrids to
        /home/philipp/Workspace/audiobook_alignments...
100%|████████████████████████████████████████| 16/16 [00:02<00:00,
7.85it/s]
INFO - Finished exporting TextGrids to
        /home/philipp/Workspace/audiobook_alignments!
Exception ignored in atexit callback: <bound method ExitHooks.history_s
ave_handler of <montreal_forced_aligner.command_line.mfa.ExitHooks obje
ct at 0x7fe55ea949a0>>
Traceback (most recent call last):

```

```
File "/home/philipp/anaconda3/envs/mfaligner/lib/python3.10/site-pack
ages/montreal_forced_aligner/command_line/mfa.py", line 95, in history_
save_handler
    raise self.exception
File "/home/philipp/anaconda3/envs/mfaligner/bin/mfa", line 11, in <m
odule>
    sys.exit(mfa_cli())
File "/home/philipp/anaconda3/envs/mfaligner/lib/python3.10/site-pack
ages/click/core.py", line 1130, in __call__
    return self.main(*args, **kwargs)
File "/home/philipp/anaconda3/envs/mfaligner/lib/python3.10/site-pack
ages/click/core.py", line 1055, in main
    rv = self.invoke(ctx)
File "/home/philipp/anaconda3/envs/mfaligner/lib/python3.10/site-pack
ages/click/core.py", line 1657, in invoke
    return _process_result(sub_ctx.command.invoke(sub_ctx))
File "/home/philipp/anaconda3/envs/mfaligner/lib/python3.10/site-pack
ages/click/core.py", line 1404, in invoke
    return ctx.invoke(self.callback, **ctx.params)
File "/home/philipp/anaconda3/envs/mfaligner/lib/python3.10/site-pack
ages/click/core.py", line 760, in invoke
    return __callback(*args, **kwargs)
File "/home/philipp/anaconda3/envs/mfaligner/lib/python3.10/site-pack
ages/click/decorators.py", line 26, in new_func
    return f(get_current_context(), *args, **kwargs)
File "/home/philipp/anaconda3/envs/mfaligner/lib/python3.10/site-pack
ages/montreal_forced_aligner/command_line/align.py", line 158, in align
_corpus_cli
    aligner.cleanup()
File "/home/philipp/anaconda3/envs/mfaligner/lib/python3.10/site-pack
ages/montreal_forced_aligner/abc.py", line 620, in cleanup
    sqlalchemy.orm.session.close_all_sessions()
File "/home/philipp/anaconda3/envs/mfaligner/lib/python3.10/site-pack
ages/sqlalchemy/orm/session.py", line 4977, in close_all_sessions
    sess.close()
File "/home/philipp/anaconda3/envs/mfaligner/lib/python3.10/site-pack
ages/sqlalchemy/orm/session.py", line 2380, in close
    self._close_impl(invalidate=False)
File "/home/philipp/anaconda3/envs/mfaligner/lib/python3.10/site-pack
ages/sqlalchemy/orm/session.py", line 2422, in _close_impl
    transaction.close(invalidate)
File "<string>", line 2, in close
File "/home/philipp/anaconda3/envs/mfaligner/lib/python3.10/site-pack
ages/sqlalchemy/orm/state_changes.py", line 137, in _go
    ret_value = fn(self, *arg, **kw)
File "/home/philipp/anaconda3/envs/mfaligner/lib/python3.10/site-pack
ages/sqlalchemy/orm/session.py", line 1327, in close
    transaction.close()
File "/home/philipp/anaconda3/envs/mfaligner/lib/python3.10/site-pack
ages/sqlalchemy/engine/base.py", line 2559, in close
    self._do_close()
File "/home/philipp/anaconda3/envs/mfaligner/lib/python3.10/site-pack
ages/sqlalchemy/engine/base.py", line 2697, in _do_close
    self._close_impl()
File "/home/philipp/anaconda3/envs/mfaligner/lib/python3.10/site-pack
ages/sqlalchemy/engine/base.py", line 2683, in _close_impl
    self._connection_rollback_impl()
File "/home/philipp/anaconda3/envs/mfaligner/lib/python3.10/site-pack
ages/sqlalchemy/engine/base.py", line 2675, in _connection_rollback_imp
l
```

