HQSYN16 - Task #4249

Task # 3677 (New): RA3b - Phonetically justified parameters (spectral tilt, ...)

Task # 3970 (Closed): Formant-based join cost computation

Spectral tilt for join cost

21.09.2017 08:25 - Matoušek Jindřich

Status:	Closed		**Start date:**	21.09.2017
Priority:	Normal		**Due date:**	31.12.2017
Assignee:	Tihelka Dan		**% Done:**	0%
Category:			**Estimated time:**	0.00 hour
Target version:	RA3: Phonetically justified parameters for speech synthesis			

Description

Consider spectral tilt in join cost computation.

Compare MFCC- and formant-based join cost with the spectral tilt included:

- MFCC + spectral tilt
- formants + spectral tilt
- MFCC + formants + spectral tilt

History

#1 - 27.11.2017 13:56 - Tihelka Dan

I have just started experiment with:

- spectral tilt (static) + MFCC (classic)
- spectral tilt (static) + formants (SLOPE)
- spectral tilt (static) + formants (ABS)
- spectral tilt (static) + formants (ABS) + MFCC (classic)

where:

- **MFCC (Eucl)** is the "classic" MFCC distance computation using Euclidean distance between MFCC vectors (see *MFCC-cost* equation at wiki)
- **spectral tilt (static)** is the use of Euclidean distance of spectral tilt coefficients (computed at #4211), handled exactly as the MFCC coefficients
- **formants (ABS)** is the *mean absolute difference of the formant contour (ABS)*, as described in wiki
- **formants (SLOPE)** is the *absolute difference of formants and their slopes (SLOPE)*, as described in wiki

The data to synthesize are shorter phrases (5 words or 40 chars max), from which the difference logs will be collected and (as usual) the most differing phrases will be compared by listening tests.

If you have another suggestions, especially regarding the tests data, just write a note here ...

#2 - 20.01.2020 08:50 - Tihelka Dan

- Status changed from New to Resolved

#4 - 20.01.2020 08:50 - Tihelka Dan

- Status changed from Resolved to Closed