

HQSYN16 - Task #3780

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

Task # 3697 (Assigned): Electromagnetic articulography (EMA) based research

Testing placement and fixing of senzors

01.03.2016 13:43 - Matura Martin

Status:	Closed	Start date:	11.02.2016
Priority:	Normal	Due date:	11.03.2016
Assignee:	Matura Martin	% Done:	100%
Category:		Estimated time:	0.00 hour
Target version:	RA3: Phonetically justified parameters for speech synthesis		
Description			

History

#1 - 01.03.2016 14:12 - Matoušek Jindřich

- Target version set to RA3: Phonetically justified parameters for speech synthesis

#2 - 01.03.2016 14:40 - Matura Martin

- % Done changed from 0 to 60

The first experiment

I tested three senzors attached to a tongue, namely to tongue tip (TT), tongue body (TB) and tongue dorsum (TD). Senzors were glued in order TD, TB and TT. The glueing took about 15 minutes, then I started to read sentences for recording. The first sensor (TD) deattached after 20 minutes of reading, the second (TT) after 45 minutes and the third (TB) after approximately one hour.

Next time:

- better drying of tongue
- bring out wires out of the mouth on both sides

The second experiment

I put more focus on the preparation of a tongue - cleaning it with ethanol and drying it with medical tampons. After attaching senzors to the tongue I put a little bit of glue on top of them. I started to read sentences for recording and this time the first sensor (TT) deattached after aprox. 30 minutes. The other two senzors endured three hours during which I was able to read about 1200 sentences.

Next time:

- be careful about friction of wires (in mouth, with teeth) and their tension

#3 - 09.03.2016 13:22 - Matura Martin

- Status changed from Assigned to Resolved

- % Done changed from 60 to 100

The third experiment

This time I glued all seven senzors. Firstly, I placed those on tongue (TD->TB->TT), then on upper (UI) and lower (LI) incisors and eventually two reference senzors behind ears. The glueing process together with handling the wires corectly to keep them from excessive friction and tension took me about 20 minutes. All senzors held for about 1,5 hour (600 sentences) then TT deattached - the main problem is constant contact with teeth during speaking. After another 45 minutes UI deattached. By that time I manage to read almost 1000 sentences. All other senzors were in perfect-stable shape.

In future:

- add glue when a sensor (most likely TT) starts deattaching
- find the way how to mark spots where we place senzors (most importantly on a tongue)

#4 - 05.04.2016 10:50 - Matura Martin

- Status changed from Resolved to Closed