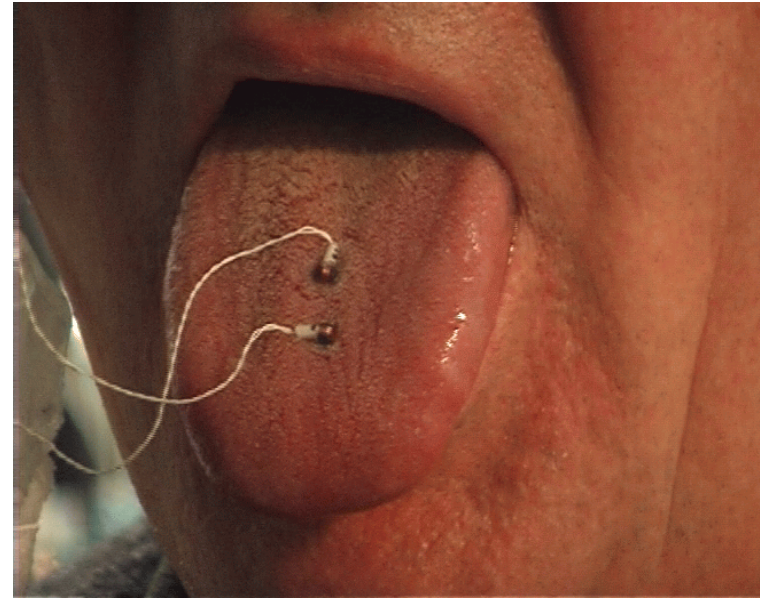
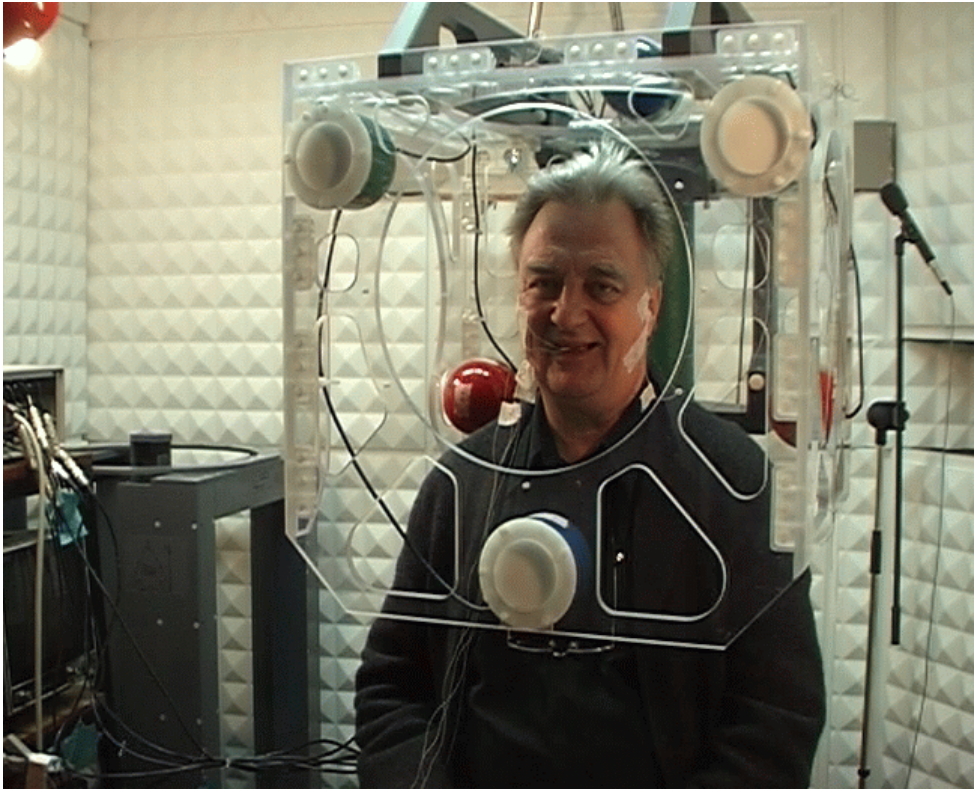
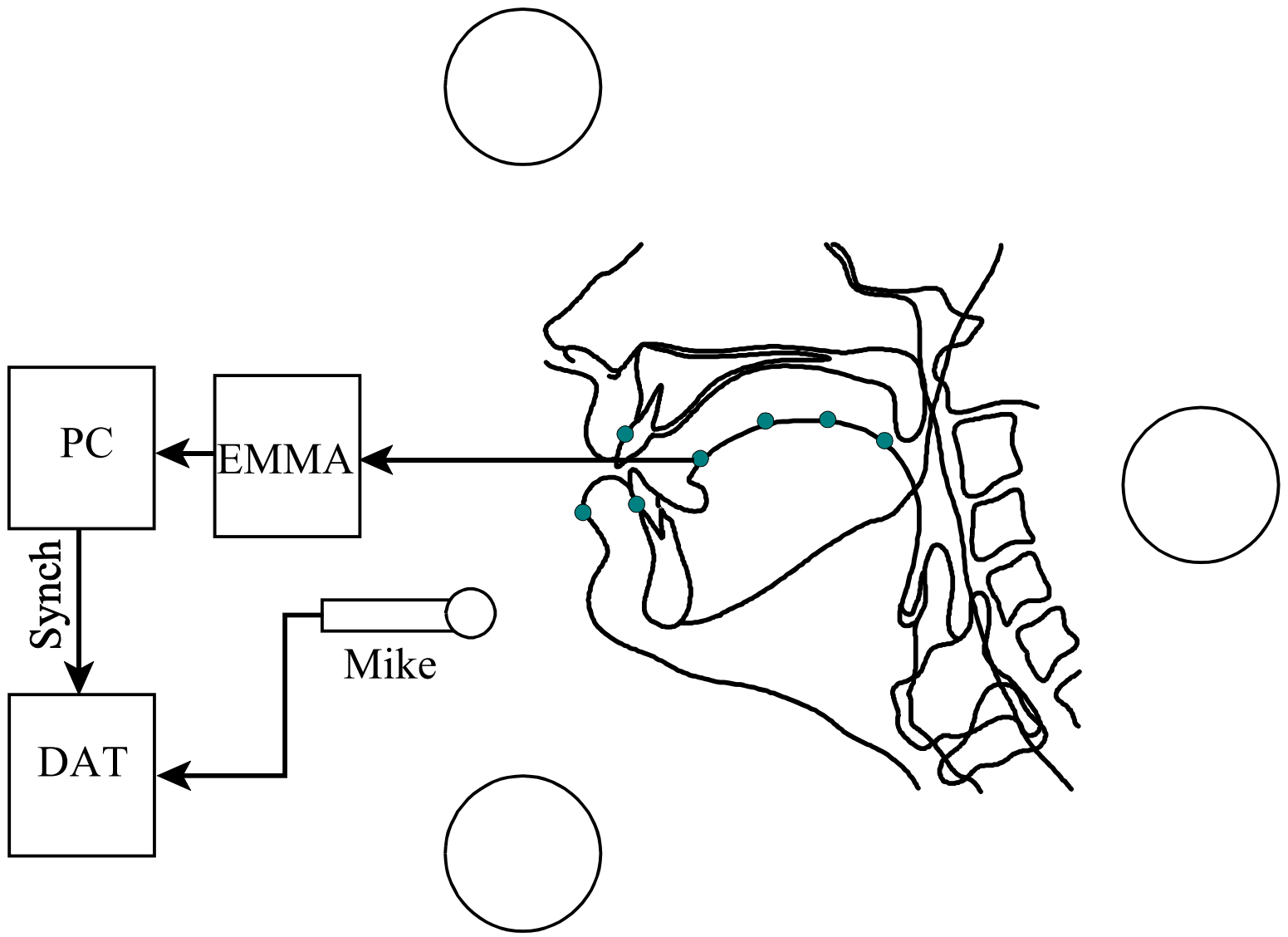


Electromagnetic Articulography





Modification of sounds in running speech



The films in this demo use the German sound /o:/ to contrast the articulation of a sound when spoken in isolation with its articulation in a fluently spoken sentence. The intention is not to illustrate specific coarticulation effects systematically, but simply to give an idea of the variation that can occur.

An interesting exercise is to try and decide simply by listening how the the articulation of the fluently spoken utterance will differ from the isolated utterance. Even for trained ears this is extremely difficult.

Reference utterance

/o:/ spoken in isolation. The position of the tongue during this utterance is included as a reference contour in the other films.

For the first three examples two films are available, one of the complete sentence, and one just of the target word containing /o:/

Example 1. *“Der tote Däne hatte sieben junge Töchter”*

Complete sentence

Target word “tote”

Notes: Tongue quite a bit higher and not quite so far back as in the reference utterance. In this case it may possible to hear that the quality of the /o:/ shifts towards (roughly) /u:/

Example 2. *“Wieviel dünne Kissen liegen denn auf dem Sofa?”*

Complete sentence

Target word “Sofa”

Notes: Back of tongue never quite as far back as in the reference utterance

Example 3. *“Der nette Schotte hat eine schwarze Socke verloren”*

Complete sentence

Target word “verloren”

Notes: The /r/ after /o/ is vocalized to a low schwa; between /l/ and /n/ the back of the tongue never rises as high as in the reference utterance.

Example 4. *“flogen”*

Target word “flogen”

Notes: Although /o:/ is a long vowel it is not possible to observe any kind of stationary “hold” phase, i.e there is continuous movement from the /l/ through to the /g/.

Example 5. *“sofort”*

Target word “sofort”

Notes: In all the previous examples the /o/ was in a syllable with lexical stress. The present example shows by way of contrast the very large changes that can occur in unstressed, reduced syllables, i.e the first syllable of “sofort”.

Again, unlike the previous examples this kind of change should be easy to hear.

(Note that the ‘o’ in the second syllable is an open /ɔ/, and so not comparable with the other examples.)