

Phonetic data collection and analysis

Speech is a complex dynamic phenomenon

⇒ How to collect phonetic data in the various phases of the speech process?

Neuromuscular

EMG (Respiration) + Lips (contact electrodes)
DEMO

Articulatory

EGG (state of the glottis, phonation types)	<u>DEMO</u>
X-Ray	FILM
MRI static and real-time	FILM
EMA	DEMO? Not necessary cf. Kahil and Ioana
Palatography (static)	DOCS + FILM
EPG	DOCS
Video (face/profile + high speed)	DEMO + FILM
Ultrasound	DOCS? Not necessary cf. Ioana and Alice

Aerodynamic

PS, Po, Oaf, Naf DEMO

Acoustics

-Production DOCS
Recording in the lab and in the field

-Perception DEMO
Elementary tests

⇒ How to analyse quantitative phonetic data?

Experimental design and statistics: an overview;
Difficulties in applying current statistical models to laboratory collected data.

⇒ How to analyse qualitative phonetic/phonological data?

Nominal phonetic/phonological data that can be mined from text;
Sample size and statistical power considerations;
Non-parametric statistics: an overview.