

## Introduction

### [ç] ('ich'-sound)

- ▶ not a phoneme in French, but in Standard German: *sprechen* ("speak"), *zwanzig* ("twenty"), *König* ("king"), the diminutive *-chen*: *Mädchen* ("girl"), but: *Chor* ("choir"): [k]
- ▶ non-existent in many West Central German dialects
- ▶ low functional load, e.g. few minimal pairs like *Kirche* ("church") - *Kirsche* ("cherry")
- ▶ however, present in the important word *ich* ("I") - *ich heiÙe...* ("my name is ...")
- ▶ correct realizations of French learners of German in a French learner corpus at a percentage of 10% (beginners) and 40-80% (advanced) only

## Method

### 2 groups of French speakers:

- ▶ Experimental group (n=10)
- ▶ Control group (n=10)
- ▶ both groups comprise balanced number of beginners, intermediate and advanced learners

### Tests:

- ▶ **Production** - 20 sentences (12 thereof containing words with [ç])
- ▶ **Perception** - 20 isolated nonsense words (10 minimal pairs): "[ç] or [ʃ]?"

### Time points:

- T1: • production and perception (total duration: 15 minutes)
- for the experimental group: training (total duration: 10 minutes)
  - for the control group: production task (not relevant for [ç])
- T2: • 1 week later: production and perception as in T1

## Training

20 slides with example sentences and the following explanations on [ç]:

- ▶ Pronunciation rules
- ▶ Acoustic and visual zooming on [ç] in sentence
- ▶ Sound samples from native German speaker
- ▶ Existence of [ç] in French, as in sentence-final "... ami"

A sample slide from the training:

### 2ème situation

On prononce "ch" après les voyelles doubles  
*ei et eu*

rule  
(2nd of 6 in total)

example sentence Exemple:

Das Kissen ist weich.



audio file

(cliquez sur le haut-parleur pour réécouter)

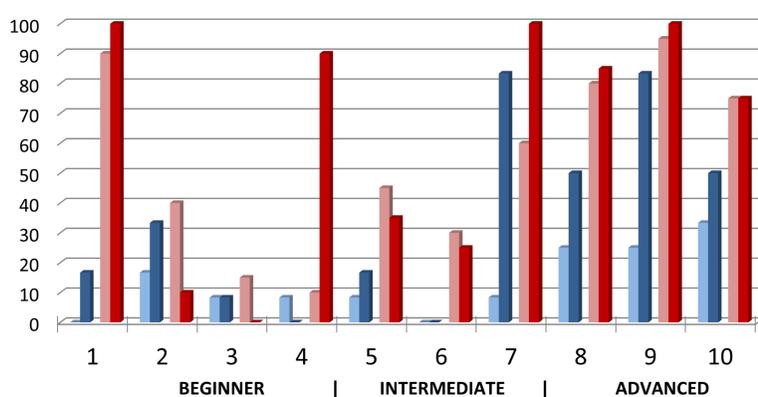
Ecoutez et répétez la phrase!

listen and repeat

## Results of experimental and control group

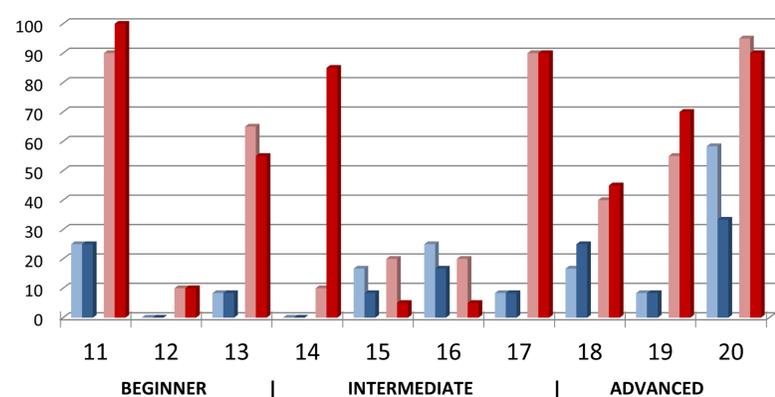
### Experimental group

% correct realizations (production) / answers (perception)



### Control group

Prod T1 Prod T2 Perc T1 Perc T2



Mean number of correctly realized items in **production** (max. 12): T1 vs. T2

	Beginner	Intermediate	Advanced
Exp. group	1.0 - 1.8 (+0.8)	0.7 - 4.0 (+3.3)	3.3 - 7.3 (+4.0)
Ctrl. group	1.3 - 1.3 (0.0)	1.5 - 1.0 (- 0.5)	3.3 - 2.7 (- 0.6)

## Discussion & Conclusion

- ▶ preliminary study
- ▶ proposed 10-minute-training helpful for some learners (subj. 4,7,9), on intermediate/advanced level
- ▶ perceptual skills generally better than production → **however**: improvement T1 vs. T2 mainly visible in production
- ▶ experimental group significantly benefits from training especially in the production task
- ▶ good perception results infrequently correlated with results in production (subj. 1,11,14,17)
- ▶ small training units have measureable effect → could be useful for other problematic speech sounds