

# SEX DIFFERENCES IN SIMULTANEOUS INTERPRETING: A CORPUS-BASED STUDY

## Introduction

### Why sex differences?

**Women have a better memory than men.**

They perform better in memory tasks (Maitland, 2004).

As memory is believed to be a key component of interpreting (Darò, 1994), **is this difference observable in simultaneous interpreting?**

### Which variables?

#### Ear-Voice-Span

EVS is the time a concept is stored in memory and its length depends on the interpreter's memory-capacity.

#### Disfluencies

Disfluencies, such as false starts and filled pauses, are generally regarded as a consequence of cognitive load.

#### Interpretation of figures

Interpreting figures is believed to be particularly challenging (Braun & Clarici, 1996).

#### Position of the verb

The midfield length in German and Dutch subordinate clauses can be considered as an indicator of memory capacity (Bevilacqua, 2009)

## Research Questions

Given the sex differences in memory skills and assuming interpreters make full use of their cognitive capacities (Gile's tight-rope hypothesis, 1995),

- Do women have a longer EVS?
- Do women produce fewer disfluencies?
- Do women render more figures?
- Do women place fewer items in the afterfield?

## Methodology

### European Parliament Interpreting Corpus Ghent (EPICG)

#### Time-aligned corpus

Aligned and annotated in EXMARALDA Partitur.

#### 180 interpretations

90 women and 90 men.

#### European Parliament Interpreters

Naturalistic data and metadata.

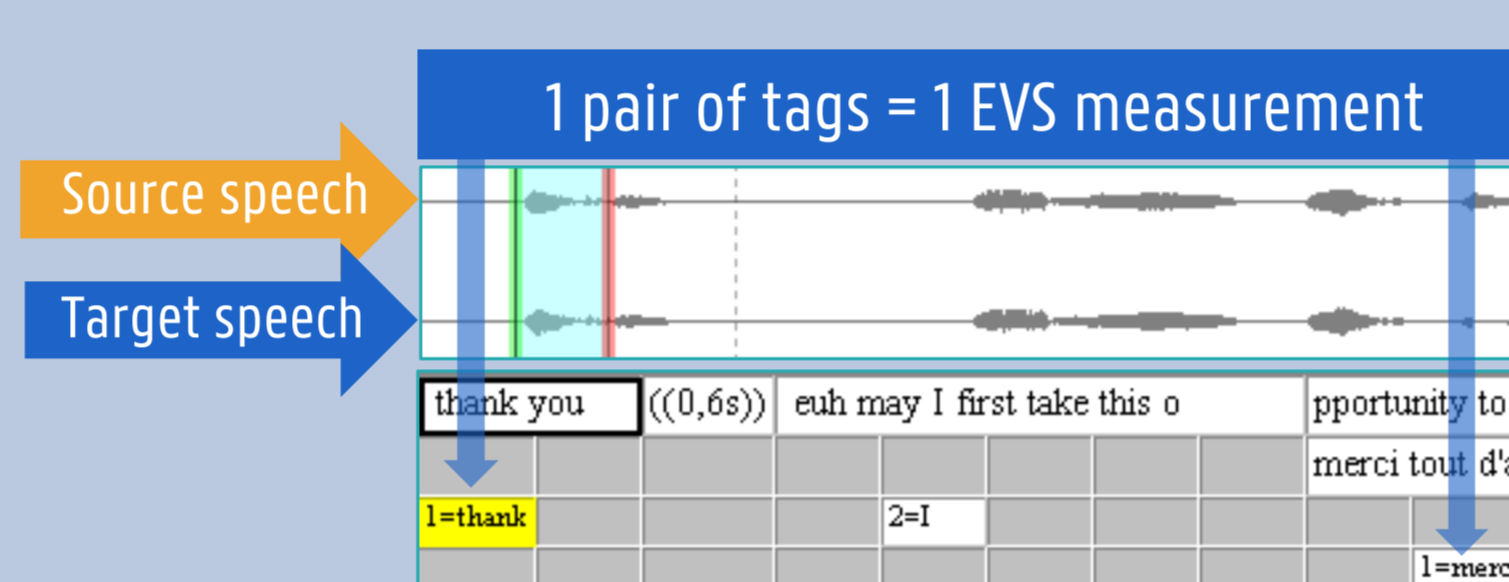
#### 6 language combinations

From and into English, French and Dutch.

### Variables

#### EVS

Pairs of tags linking up lexical equivalents in the source and target text.



#### Disfluencies

Number of filled pauses (uhm) and false starts per minute.

#### Position of the verb

Length of the real midfiled compared to the theoretical midfiled.

#### Interpretation of figures

Number of correctly interpreted figures.

### Metadata

#### Interpreters' and original speakers' disfluencies

Number of false starts and filled pauses.

#### Language combination

FR>EN, FR>NL, EN>FR, EN>NL, NL>FR and NL>EN.

#### Speech duration

Duration of the original speech in minutes.

#### Interpreters' and original speakers' delivery rate

Number of words per minute.

#### Original speakers' delivery type

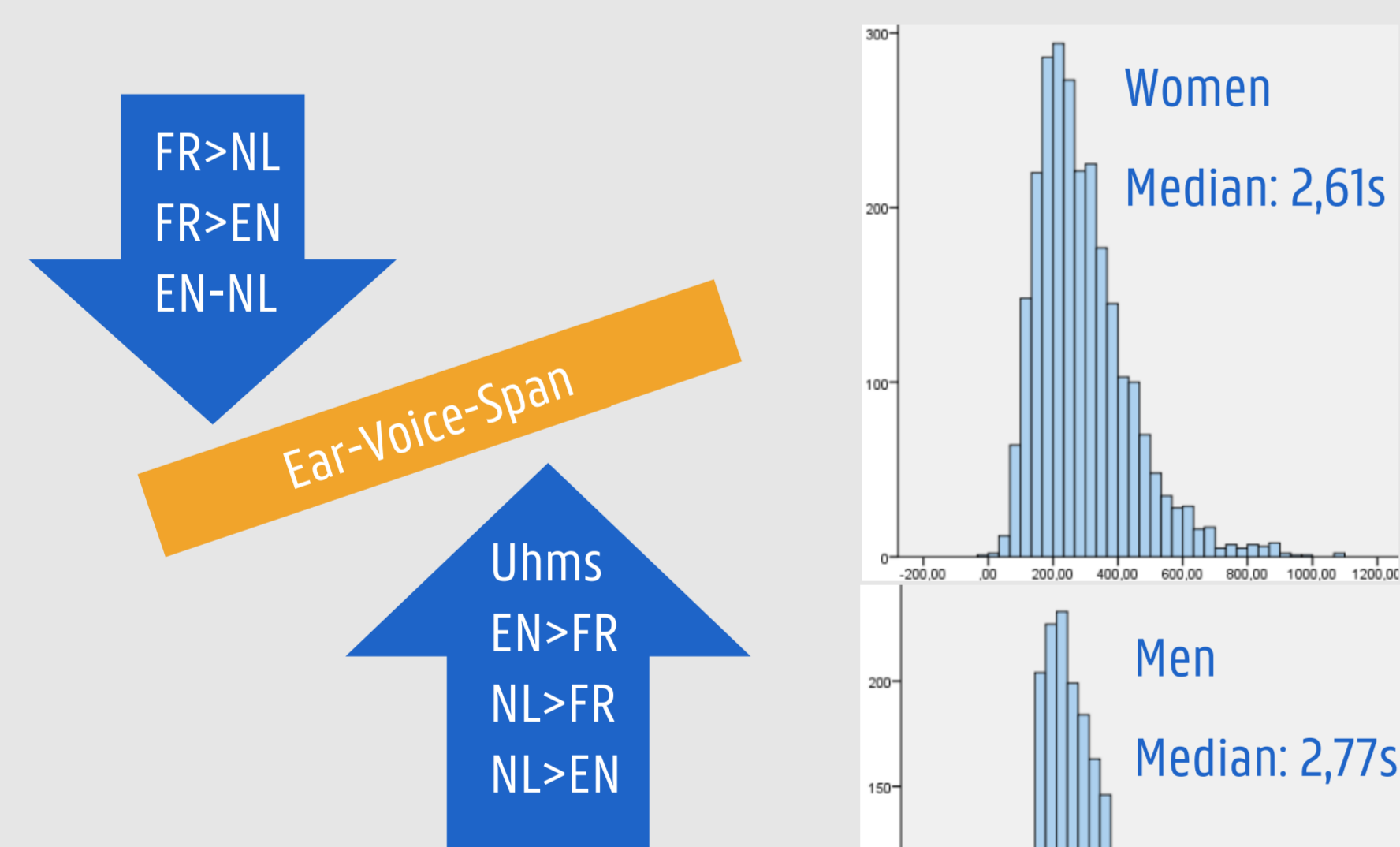
Impromptu, mixed or read speeches.

## Results

### Ear-Voice-Span

**The average EVS is 2,68 seconds**

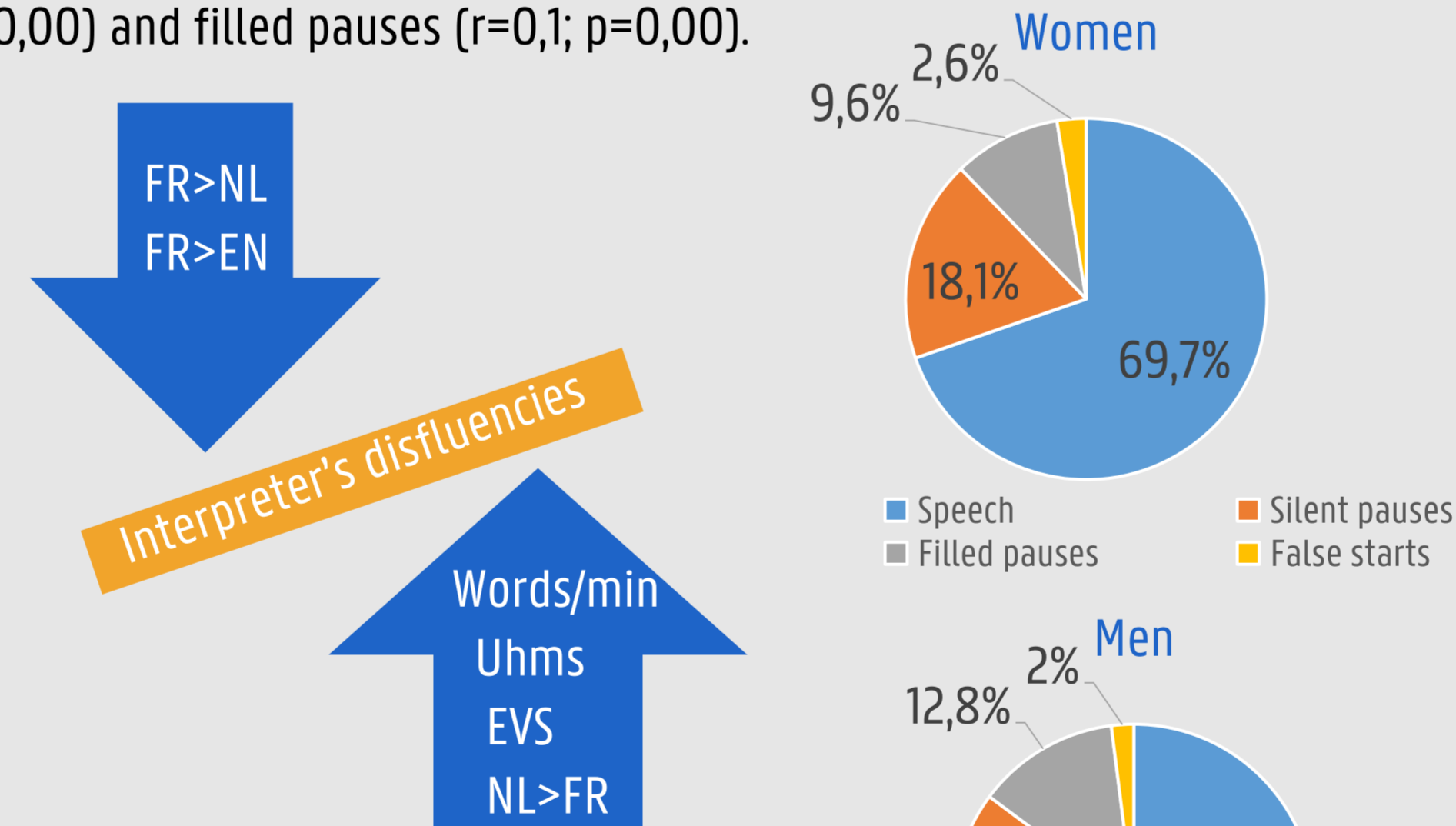
Two variables have a significant impact on EVS: language combination ( $p=0,00$ ) and interpreter's filled pauses ( $r=0,19$ ;  $p=0,00$ ).



Metadata that have no influence on EVS: delivery rate, delivery type, speech duration and original speaker's disfluencies.

### Disfluencies

**The average number of filled pauses is 4,91 per minutes and the average number of false starts is 0.** Five variables have a significant impact: EVS, language ( $p=0,00$ ), original speaker's delivery rate ( $p=0,00$ ) and filled pauses ( $r=0,1$ ;  $p=0,00$ ).



Metadata that have no influence on disfluencies: interpreter's delivery rate, delivery type and speech duration.

## Conclusions

### Do women have a longer EVS?

**No.** Men have a longer EVS than women in general ( $U=8324579,500$ ,  $p=0,00$ ,  $r=0,04$ ). However when relevant metadata are taken into account, it appears that this difference only exists in the EN booth, while other language combinations show no sex difference or a slightly longer EVS for women (EN>NL).

### Do women produce fewer disfluencies?

**Yes and no.** When the influence of relevant metadata is taken into account, women do produce between 10 and 15 percent fewer filled pauses than men but there is no difference for false starts.

### Do women render more figures?

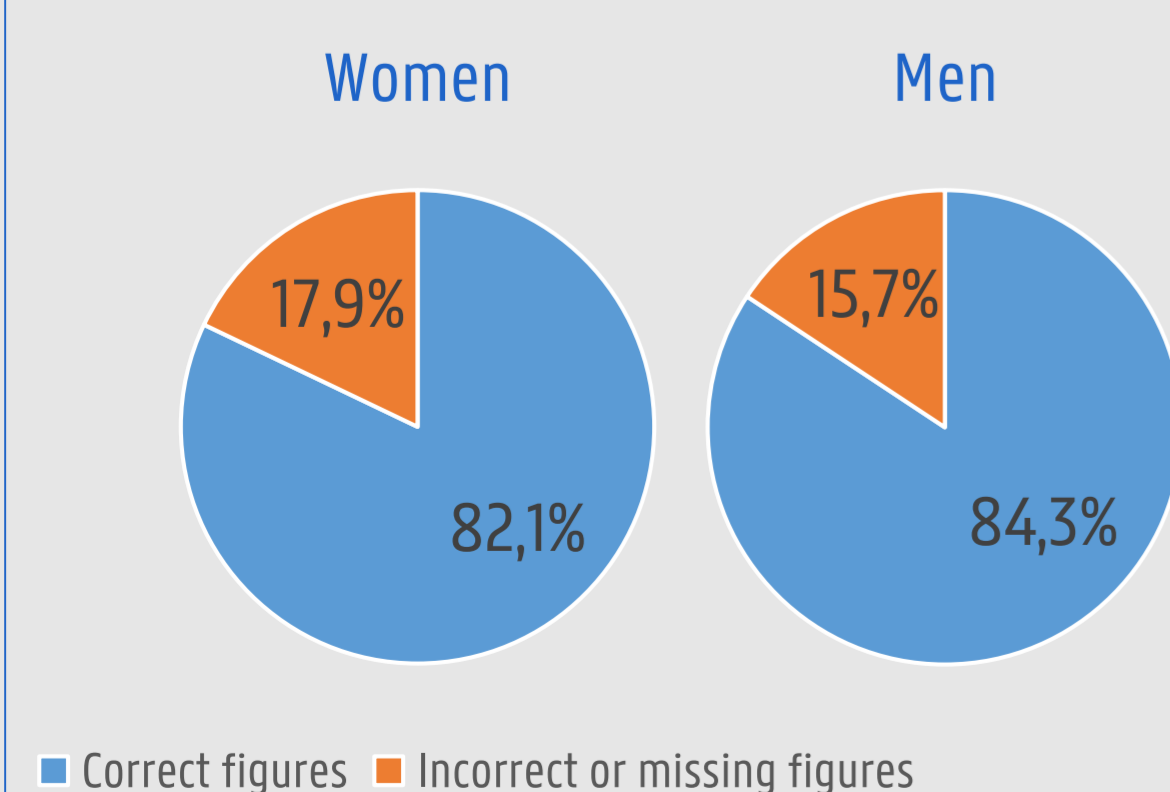
**No.** There seems to be no significant difference between men and women.

### Do women place fewer items in the afterfield?

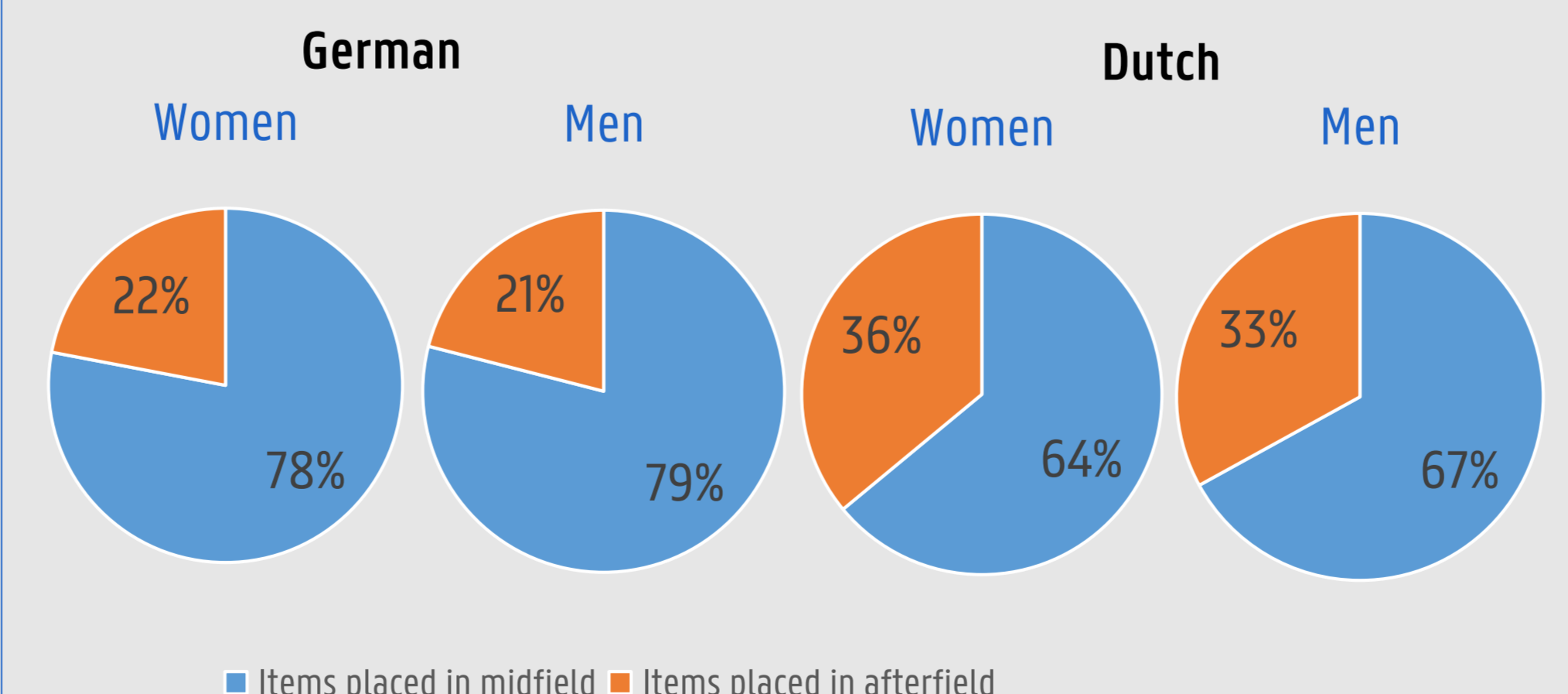
**No.** There seems to be no significant sex difference.

**The findings of the present study point towards the absence of sex differences in simultaneous interpreting, and the language combination seems to be the most relevant variable.**

### Interpretation of figures



### Position of the verb



### Contact

camille.collard@ugent.be

Universiteit Gent

@ugent

Ghent University

### References

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- Braun, S. & Clarici, A. (1996). Inaccuracy for numerals in simultaneous interpretation: neurolinguistic and neuropsychological perspectives. *The Interpreters' Newsletter* 7, 85-102.
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