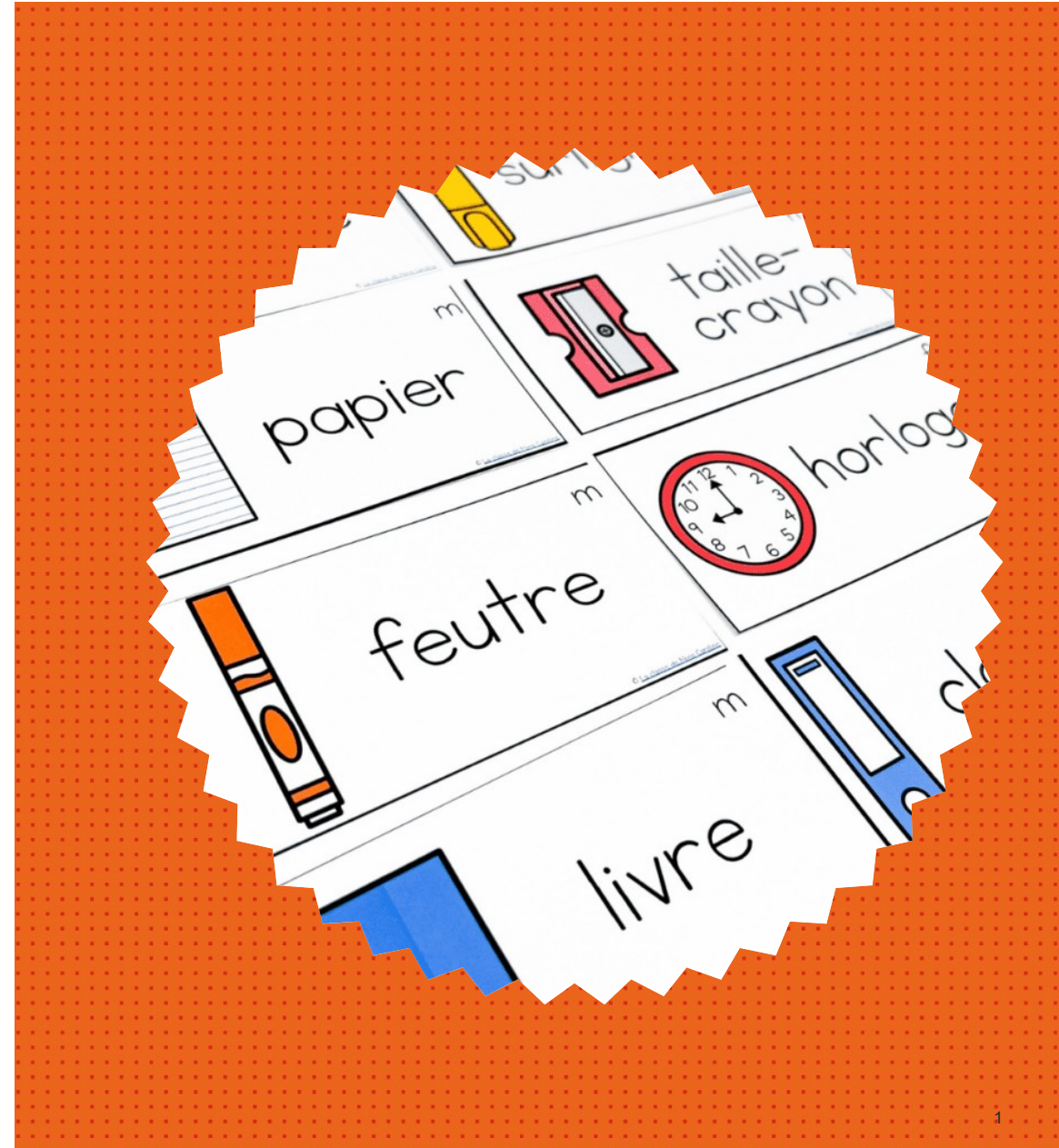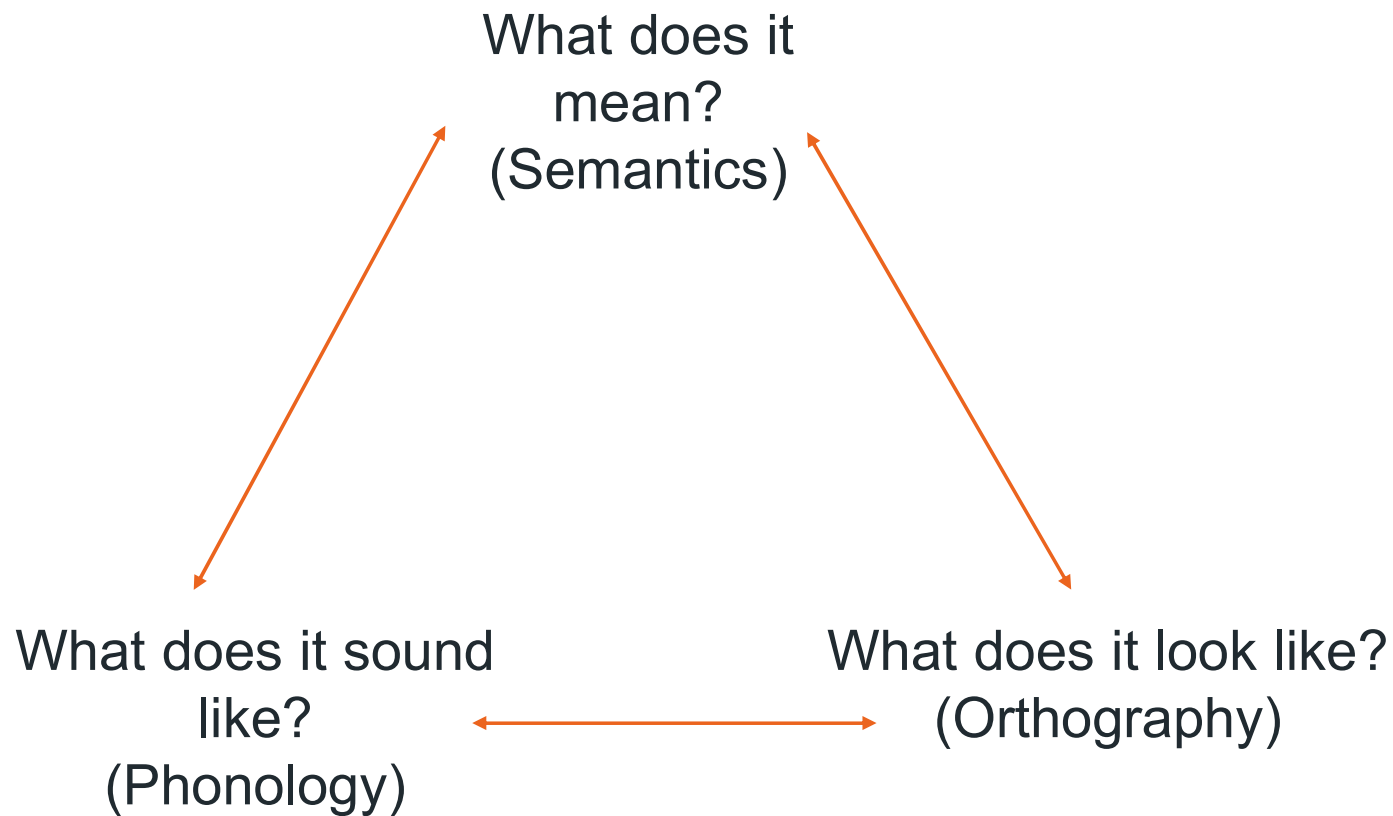# Should we show written words when teaching new foreign vocabulary?
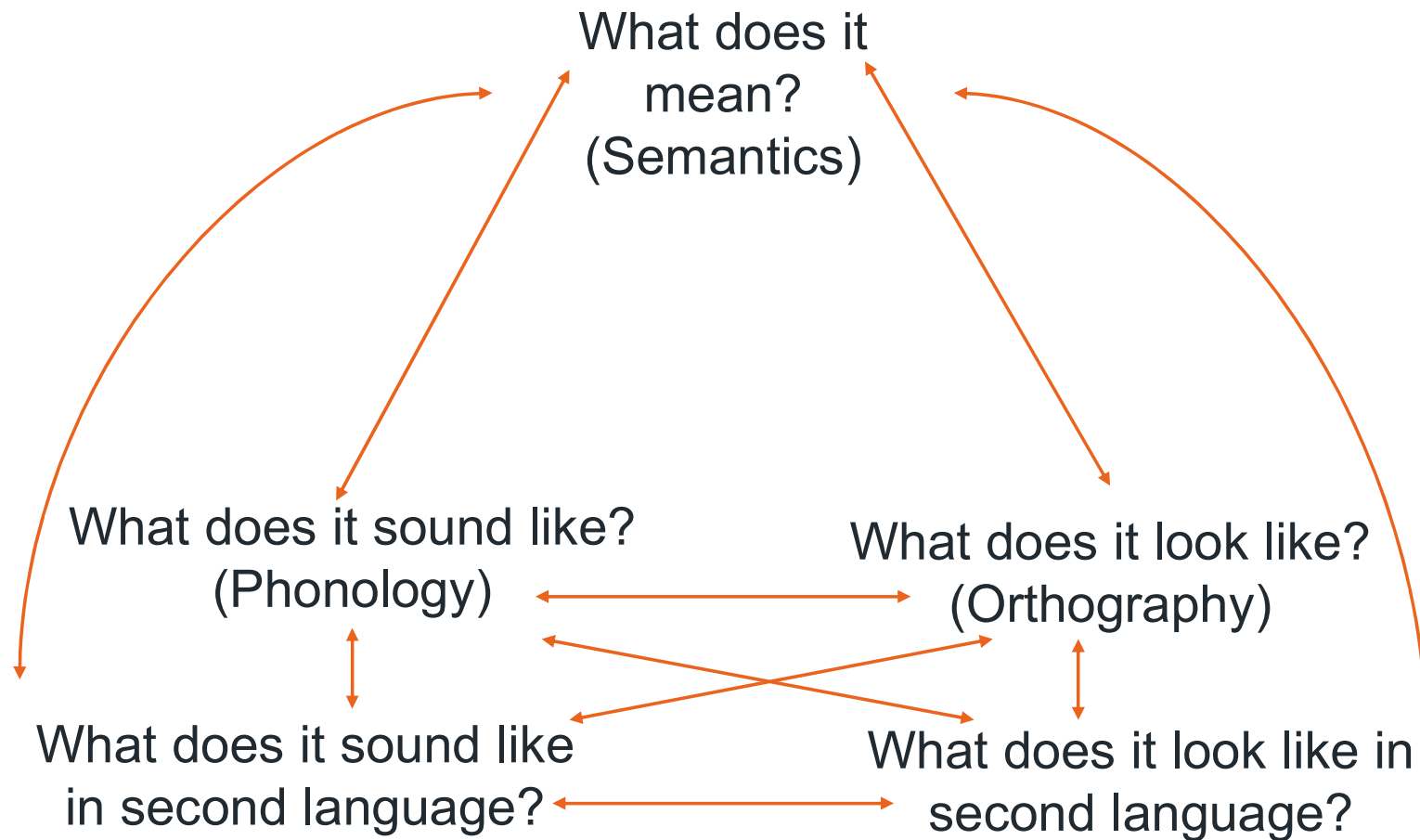
Courtney Hooton
PhD candidate, Department of Psychology

WHAT DOES IT MEAN TO KNOW A WORD?

What does it
mean?
(Semantics)

What does it sound
like?
(Phonology)

What does it look like?
(Orthography)

WHAT DOES IT MEAN TO KNOW A WORD IN A SECOND LANGUAGE?

What does it mean? (Semantics)

What does it sound like? (Phonology)

What does it look like? (Orthography)

What does it sound like in second language?

What does it look like in second language?

HOW CAN WE MAKE THIS EASIER?

- Orthographic facilitation (Ricketts et al., 2009; Rosenthal & Ehri., 2008)
  - Emphasising the written word form leads to better word learning
  - Many studies that show that this is the case in native language word learning (Colenbrander et al., 2019)
  - Only a handful of studies that look at this in second language learning (Krepel et al., 2021; Salome et al, 2024; Zhang et al., 2020)
    - None that look at English as first language, nor in context of primary school

CONTEXT

- In 2014, it became compulsory for KS2 students (years 3-6) to learn a language in school

- Language Trends Survey 2020 (Collen, 2020)
  - Lack of implementation framework means variation across schools
  - Teachers want more guidance on:
    - how much time to spend on language teaching
    - what content to teach
    - subject-specific professional development
   - research-informed resources

WHERE DOES THIS PROJECT FIT IN?

- Teachers want more guidance on:
  - how much time to spend on language teaching
  - what content to teach
  - subject-specific professional development
  - research-informed resources

- Providing empirical evidence to support research-informed resources

- How can the written word support foreign language teaching and learning in the primary school classroom?

METHODS

- Participants:
  - 87 Year 4 children (Aged 8-9)

- Items:
  - Taught 12 French words over 4 weeks
  - Ensured there was no prior French knowledge

- Conditions:
  - 3 conditions
  - Manipulated between classes
  - Orthography present, orthography present and symbol condition

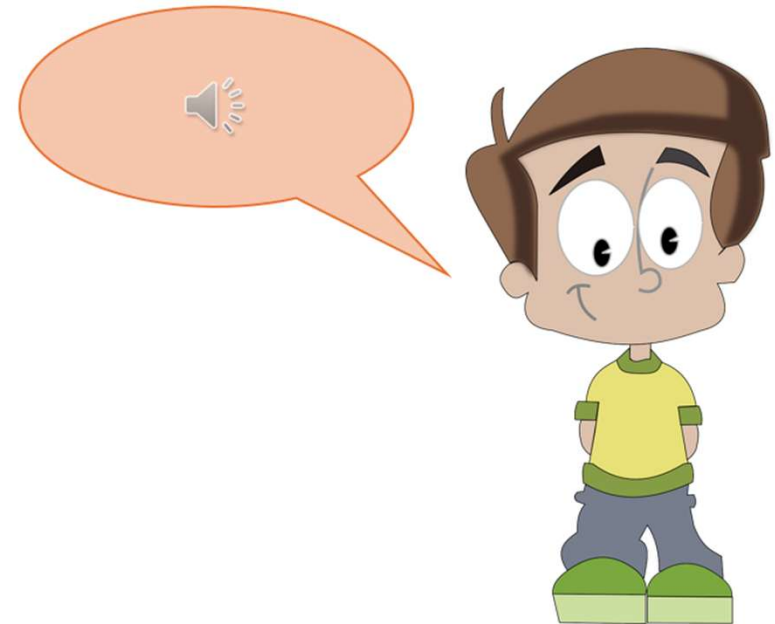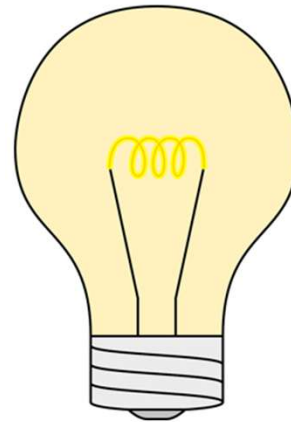ampoule
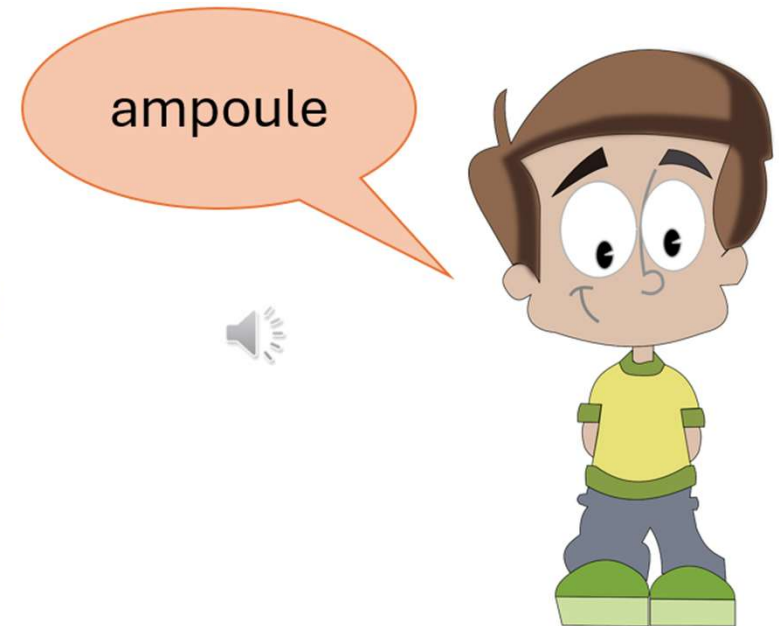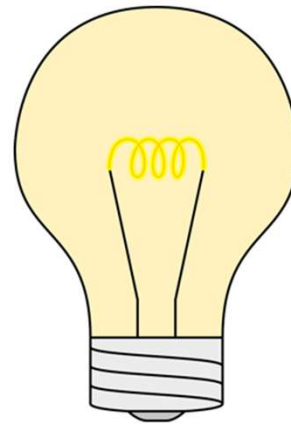
Orthography present

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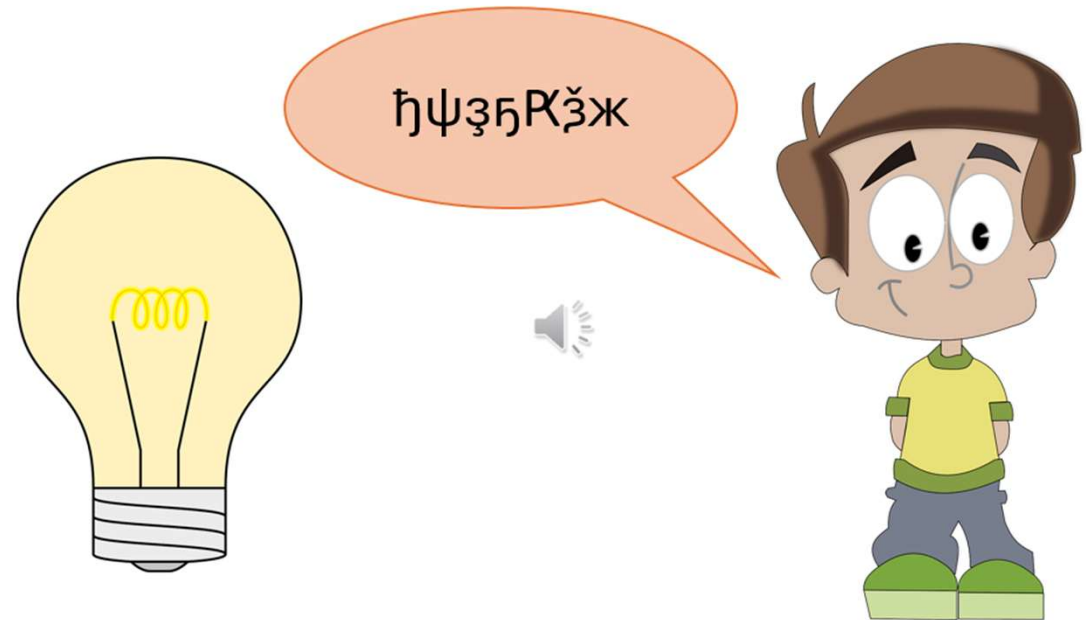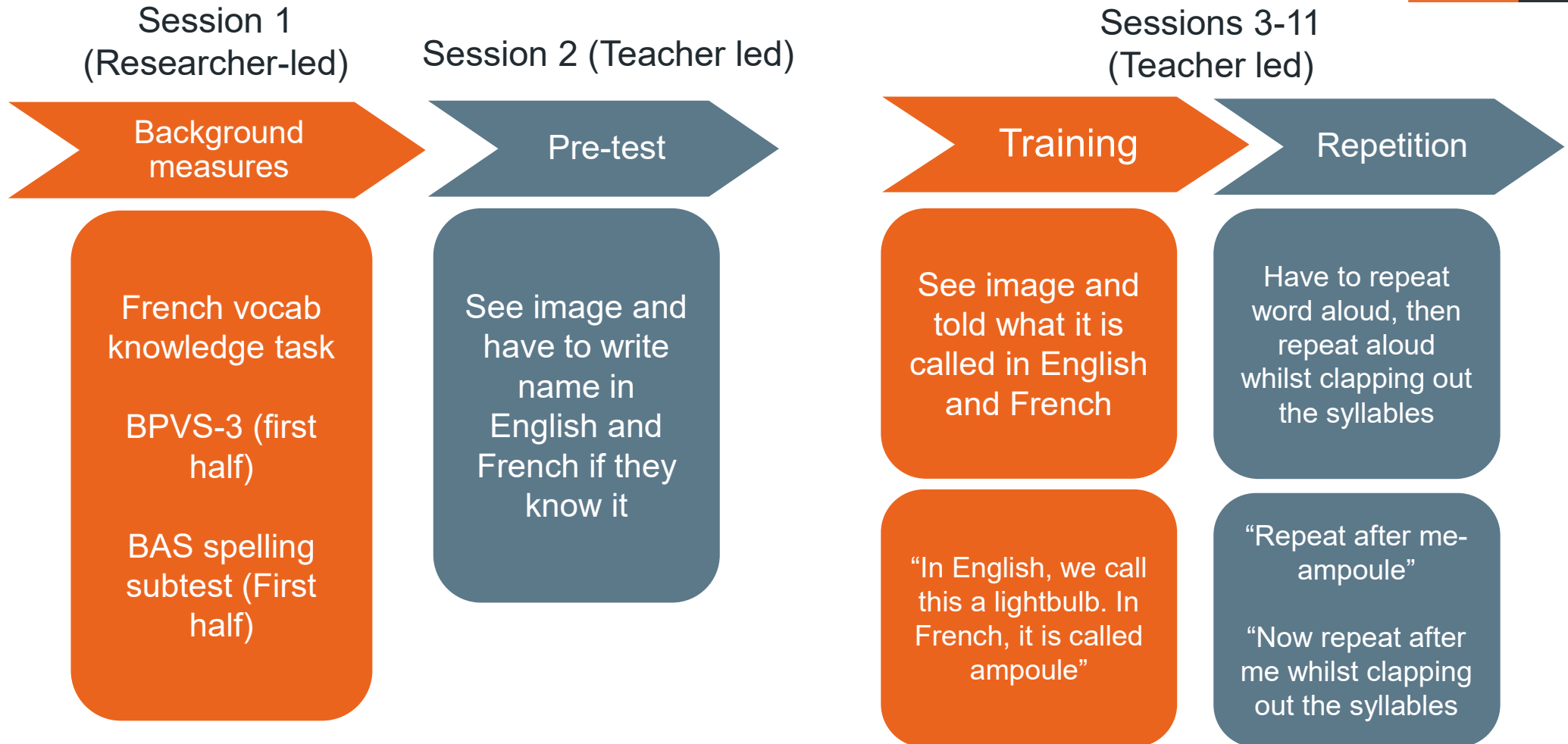
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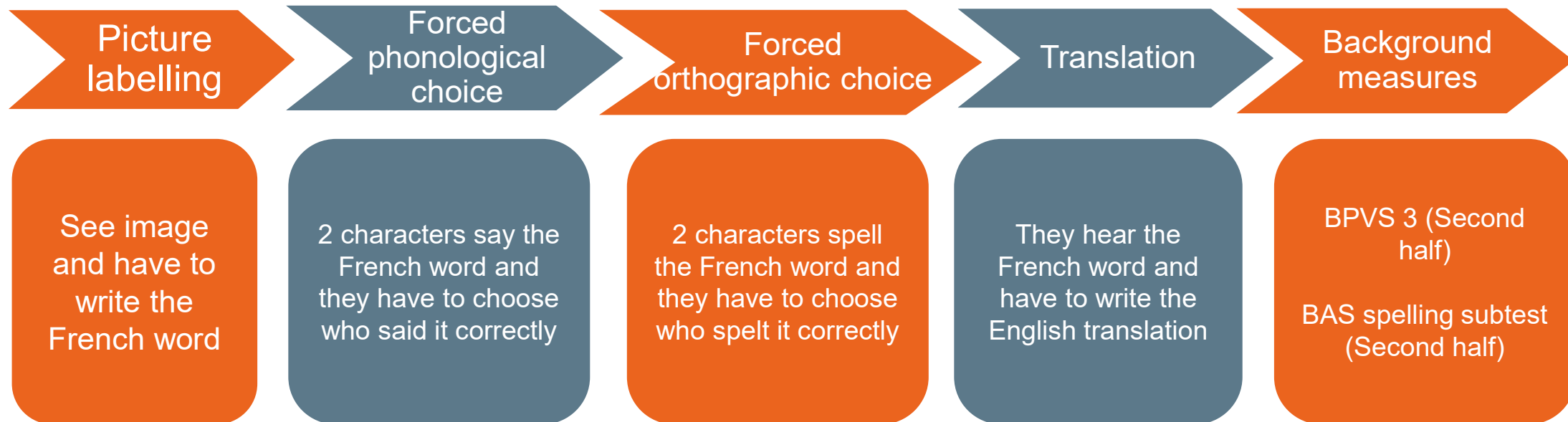
Symbol condition

METHODS

Session 1 (Researcher-led)

Background measures

French vocab knowledge task

BPVS-3 (first half)

BAS spelling subtest (First half)

Session 2 (Teacher led)

Pre-test

See image and have to write name in English and French if they know it

Sessions 3-11 (Teacher led)

Training

See image and told what it is called in English and French

"In English, we call this a lightbulb. In French, it is called ampoule"

Repetition

Have to repeat word aloud, then repeat aloud whilst clapping out the syllables

"Repeat after me- ampoule"

"Now repeat after me whilst clapping out the syllables

METHODS

Session 12 (Researcher led)

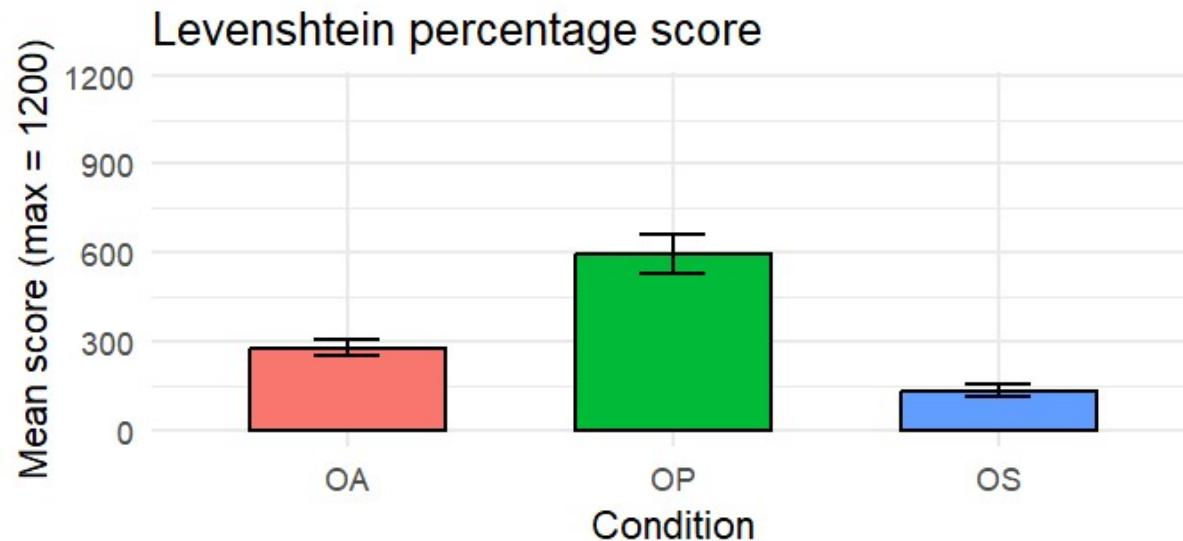| Picture labelling	Forced phonological choice	Forced orthographic choice	Translation	Background measures
See image and have to write the French word	2 characters say the French word and they have to choose who said it correctly	2 characters spell the French word and they have to choose who spelt it correctly	They hear the French word and have to write the English translation	BPVS 3 (Second half) BAS spelling subtest (Second half)

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PRELIMINARY RESULTS- PICTURE LABELLING (LEVENSHTEIN)


- Requires them to produce French written word

- Measure accounts for partial word learning

- OP > OA > OS

- Performance low as a whole

PRELIMINARY RESULTS- PICTURE LABELLING (BINARY)
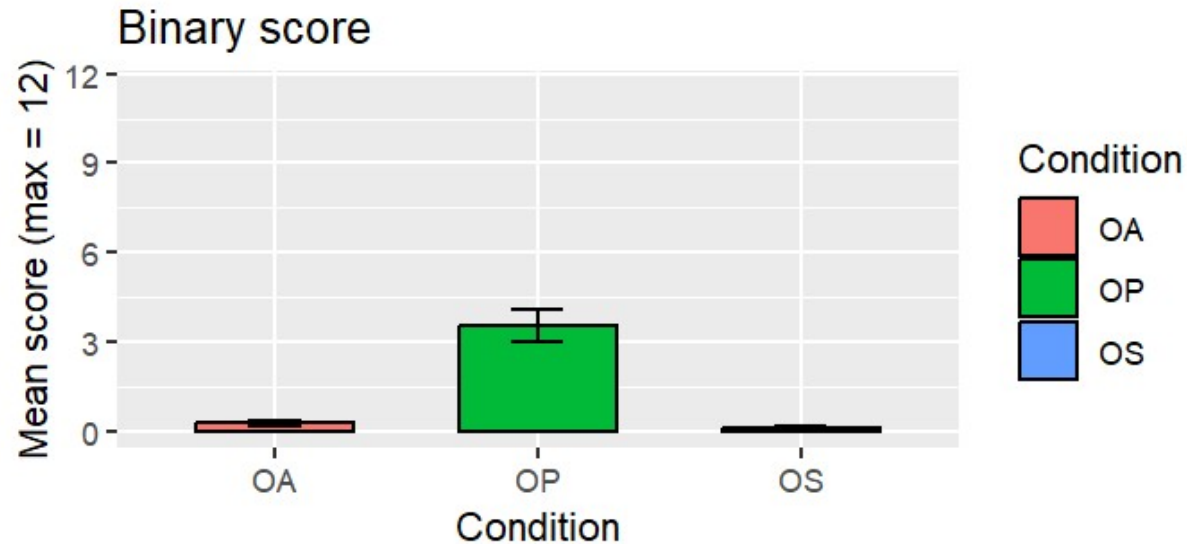
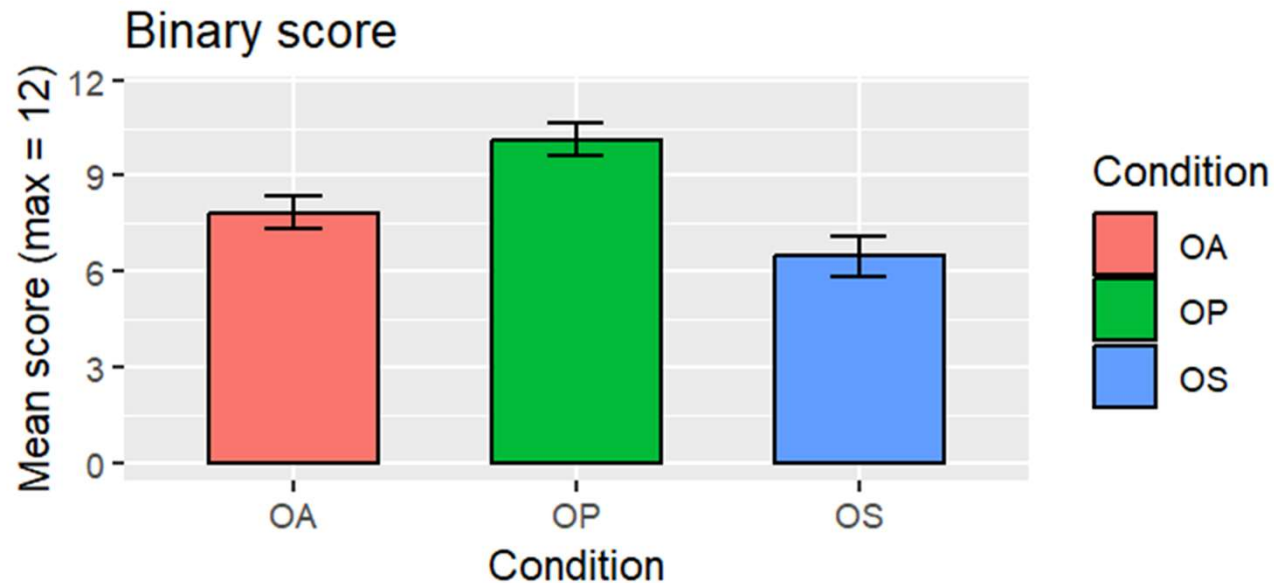

- Requires them to produce French written word

- Binary measure (correct/incorrect)

- OP > OA > OS- still same pattern

- Performance still low as a whole

- Without orthography, performance at floor

# PRELIMINARY RESULTS- PHONOLOGICAL CHOICE

Binary score
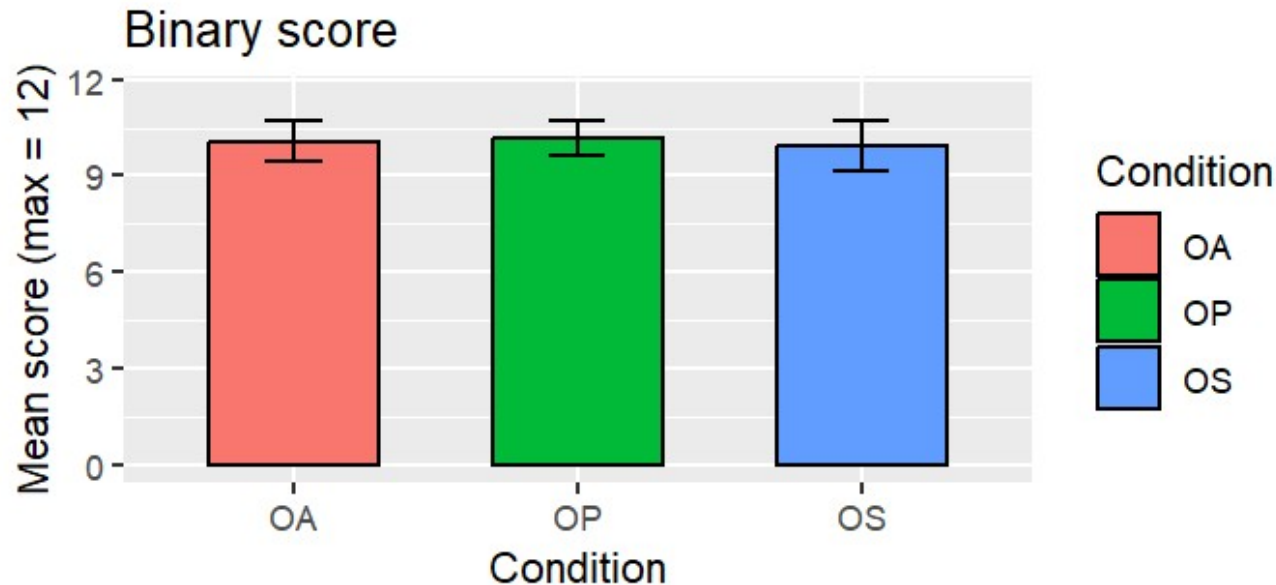
- Requires them to choose between correct and incorrect pronunciation

- Binary measure (correct/incorrect)

- At ceiling

- Learn phonology regardless of orthographic input

PRELIMINARY RESULTS- ORTHOGRAPHIC CHOICE

Binary score

- Requires them to choose between correct and incorrect spelling

- Binary measure (correct/incorrect)

- OP > OA > OS- still same pattern

- With orthography, performance at ceiling

PRELIMINARY RESULTS- TRANSLATION
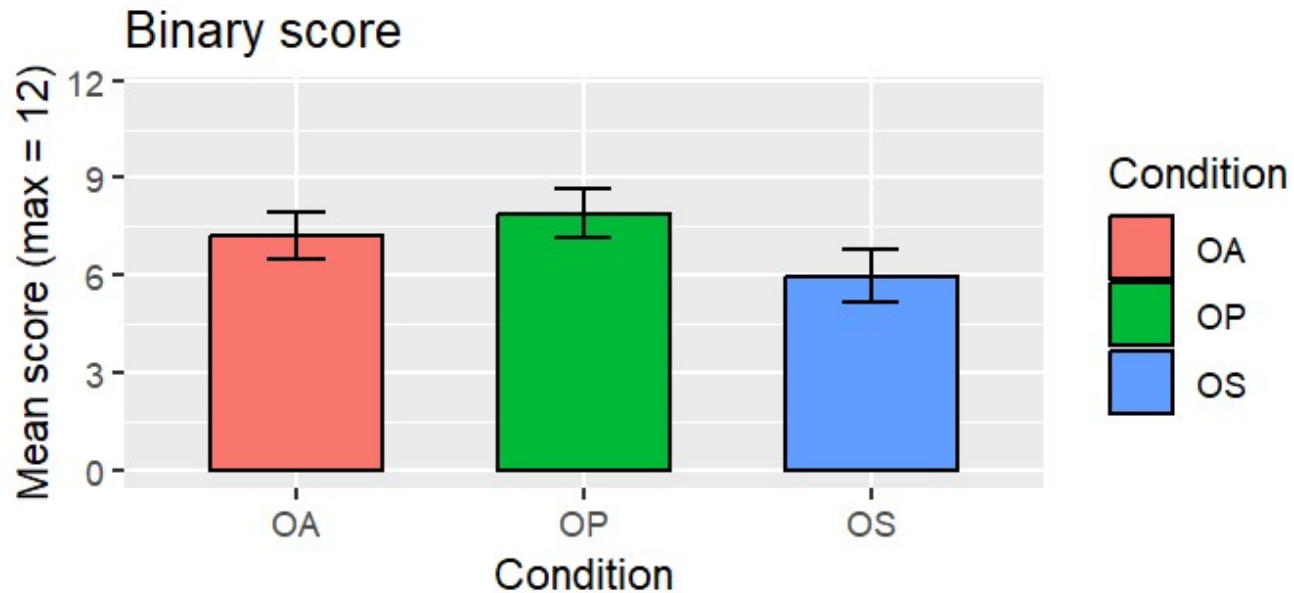
Binary score

- Requires them to produce English translation

- Binary measure (correct/incorrect)

- OP > OA > OS

DISCUSSION

- Overall:
  - Benefit of orthography when foreign words are taught in primary school classroom
  - Benefit of orthography when words are taught and assessed at whole class level

- OP> OA> OS
  - Stronger support for OP > OS than OP > OA
    - Relevant to word mats/knowledge organisers

- Next steps:
  - Run full analyses
  - 2 tests were at floor/ceiling level → Explore measures of phonological and orthographic learning that are more/less sensitive at whole class level

ANY QUESTIONS?

Thank you!

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