1. French Verbs
French verbal inflection is a rich morphology system where we can identify different degrees of stem regularity:

(1) Regular: \textbf{ent-	extit{r-e}, ent-	extit{r-i-}ons}
(2) Morphophonological: \textbf{jet-	extit{t-e}, jet-	extit{i-}ons}
(3) Irregular: \textbf{moqu-	extit{e}, moqu-	extit{i-}ons}

Despite stem change suffixes represent mode/tense and number/person in a regular manner while prefixes change the stem meaning.

2. What Kind of Representation?
In order to explore stem representation and verbal decomposition, we tested the influence of the stem regularity degree and of the number of morphological operations on written word recognition.

3. Method

**Subjects:** 32 subjects, 16 females, mean age of 20 years.

**Task:** visual lexical decision task: accuracy and RT.

**Design:** manipulation of the a) surface frequency, b) base frequency and c) morphological operations.

**Stimuli:** 20 verbal pairs per condition matched in number of letters and surface or base frequencies.

<table>
<thead>
<tr>
<th>Operation</th>
<th>+BF</th>
<th>-BF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regular</td>
<td>+SF</td>
<td>-SF</td>
</tr>
<tr>
<td>Morph. /e/</td>
<td>répét-	extit{e-t}</td>
<td>répét-	extit{e}-ez</td>
</tr>
<tr>
<td>Morph. /o/</td>
<td>ador-	extit{a-i-s}</td>
<td>ador-	extit{e}-ent</td>
</tr>
<tr>
<td>Irregular</td>
<td>buv-	extit{a-i-ent}</td>
<td>boiv-	extit{e}-ent</td>
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</table>

Table 1: Sample of stimuli.

**Operation:** the number of affixes systematically influenced on the RT and confirm verb decomposition. The prefix seems to have a heavier cost than suffixes while TME has a heavier cost than PNE.

\[ +P+O > +P-O > -P+O > -P-O \]

4. Results

✓ All verbs presented a significant effect of surface frequency reflecting a) the base and affixes recombination or b) the whole word access.

✓ \textbf{Regular and irregular}: the effect of base frequency indicate the verb decomposition and different representations for irregular allomorphs.

✓ \textbf{Morphophonological}: the lack of effect between allomorphs and the effect of total base frequency suggest an abstract phonological representation of the stem.

5. Discussion
Decomposition and representation of French verbs depends on their decomposability. These results can be explained by an obligatory decomposition model\(^2\) or a revised dual-route model\(^3,4\). The different morphological operations influence the time recognition and will be further explored.

References