Method

Material

<table>
<thead>
<tr>
<th></th>
<th>Low-polarity</th>
<th>High-polarity*</th>
</tr>
</thead>
<tbody>
<tr>
<td>ambiguous</td>
<td>sinus</td>
<td>e.g. bat</td>
</tr>
<tr>
<td>Matched**</td>
<td>argus</td>
<td>e.g. prairie</td>
</tr>
<tr>
<td>unambiguous</td>
<td>e.g. bat</td>
<td>e.g. yarrow</td>
</tr>
</tbody>
</table>

*Dominant meaning frequency clearly higher than subordinate meaning one.
**on familiarity, frequency, letters & syllables number, orthographic & phonological unicity points, orthographical & phonological neighbors, bigram frequency.

Procedure

1. Edinburgh test (subjects - N=26 - were right-handed)
2. Alouette test (subjects were not dyslexic)
3. Lexical decision (eyes at 60 cm from the screen)

Discussion

Only low-polarity ambiguous words exhibited a bilateral gain (Pulvermüller, 1999): Lexical decisions on these words were more accurate in the BVF condition than in the RVF condition. In addition, the ambiguity effect was only evidenced in bilateral presentation for low-polarity ambiguous words. Surprisingly, responses on pseudowords in the BVF condition were faster and more accurate than in the RVF condition: This bilateral gain is interpreted in the "horse race" model framework (Raab, 1962).

Our study confirms the ambiguity effect for homonyms, but this effect seems restricted to moderately polarized ambiguous words (e.g., bat) in BVF condition. Therefore, semantic feedback provided by bilateral activation of the two meanings (e.g., bat: animal; bat: baseball) to the lexical processing adequately explains the ambiguity effect.

To conclude, our results suggest cooperative interhemispheric processing for words and competitive one for pseudowords (see Collins, 2002, for a different view).

References