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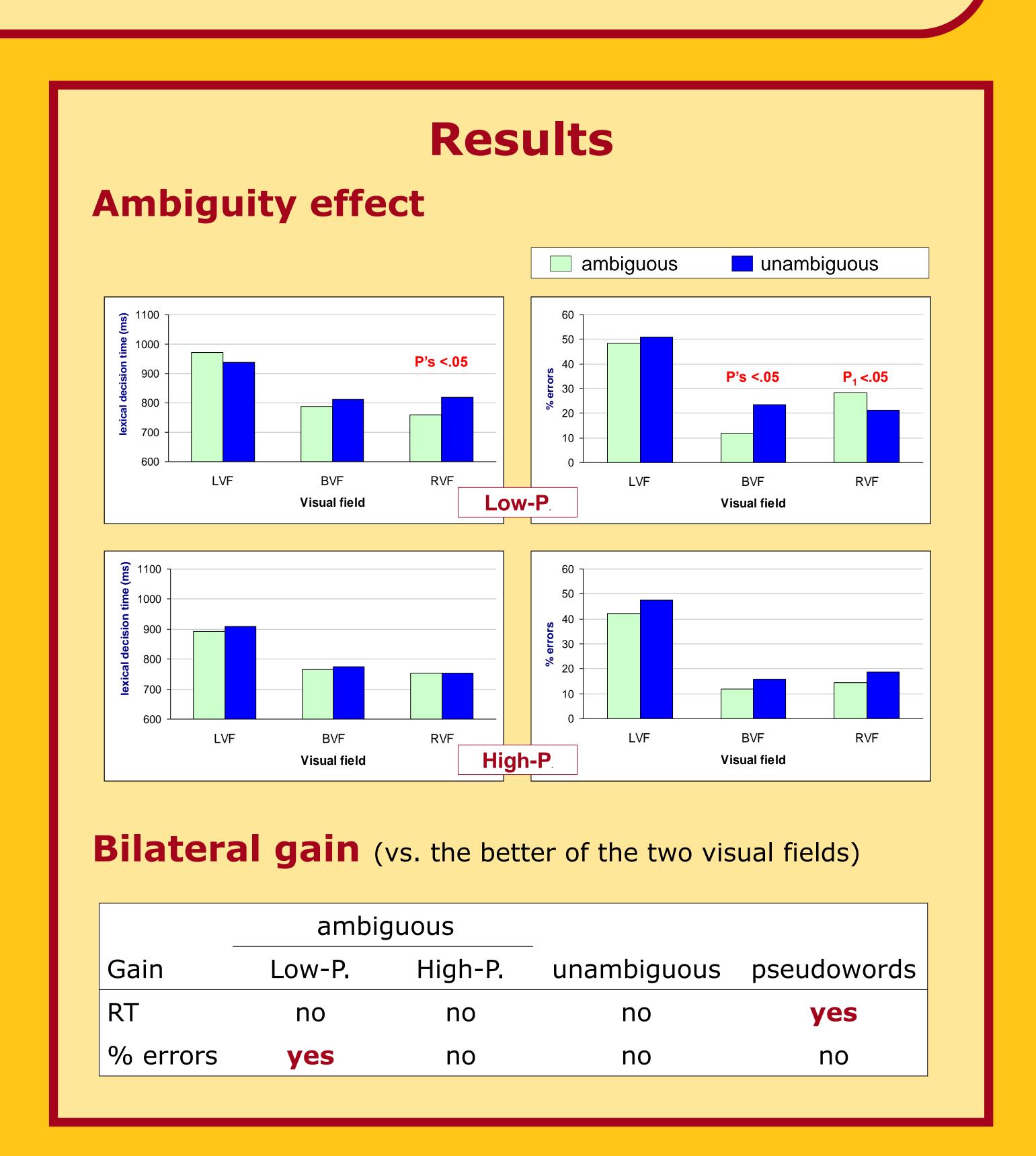
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Introduction

Several studies have shown that ambiguous words are recognized faster than unambiguous ones in central viewing conditions (Borowsky & Masson, 1996). Many accounts of this so-called ambiguity effect hypothesize an activation feedback from the different meanings to the lexical entry representing the ambiguous word. However, recent results challenged this account showing a disadvantage for ambiguous words having unrelated meanings (homonymy), and an advantage for polysemic words, having related senses (e.g., Rodd et al., 2002).

A divided visual field study was conducted to test hypotheses about the contribution of interhemispheric processing to the ambiguity effect for homonyms.

Method Material **High-polarity* Low-polarity** sinus parquet ambiguous e.g. yellow e.g. bat Matched** prairie argus unambiguous e.g. bet e.g. yarrow *dominant meaning frequency clearly higher than subordinate meaning one. **on familiarity, frequency, letters, phonemes & syllables number, orthographic & phonological unicity points, orthographical & phonological neighborhoods, 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) 500 ms 500 ms 500 ms 153 ms sinus + sinus or **153 ms** 153 ms sinus + + sinus ##### 🚣 ##### **Until answer** LVF BVF RVF



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

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