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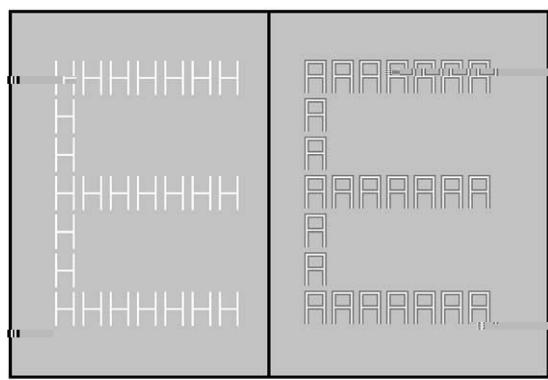
200

Abstract

Objective ()

Methods () 1 ()

Results



a b

1. $\left(\frac{1}{2}, 1, 2002 \right)$.

$$\left(\begin{array}{cc} 0 & 1 \\ 1 & 0 \end{array} \right)^n = \left(\begin{array}{cc} 1 & 0 \\ 0 & 1 \end{array} \right)$$

$$\text{Therefore, } \left(\begin{matrix} 1 & 0 \\ 0 & 1 \end{matrix} \right) = \left(\begin{matrix} 1 & 0 \\ 0 & 1 \end{matrix} \right).$$

1. $\frac{1}{2}, \frac{1}{3}, \frac{1}{4}, \dots, \frac{1}{2000}$ (), $\left(\frac{1}{2}, \frac{1}{3}, \dots, \frac{1}{2000} \right)$.

1. *Leucanthemum vulgare* L. (Fig. 1) - Common Dandelion. A large, hairy, yellow-flowered composite. The leaves are deeply lobed and deeply toothed.

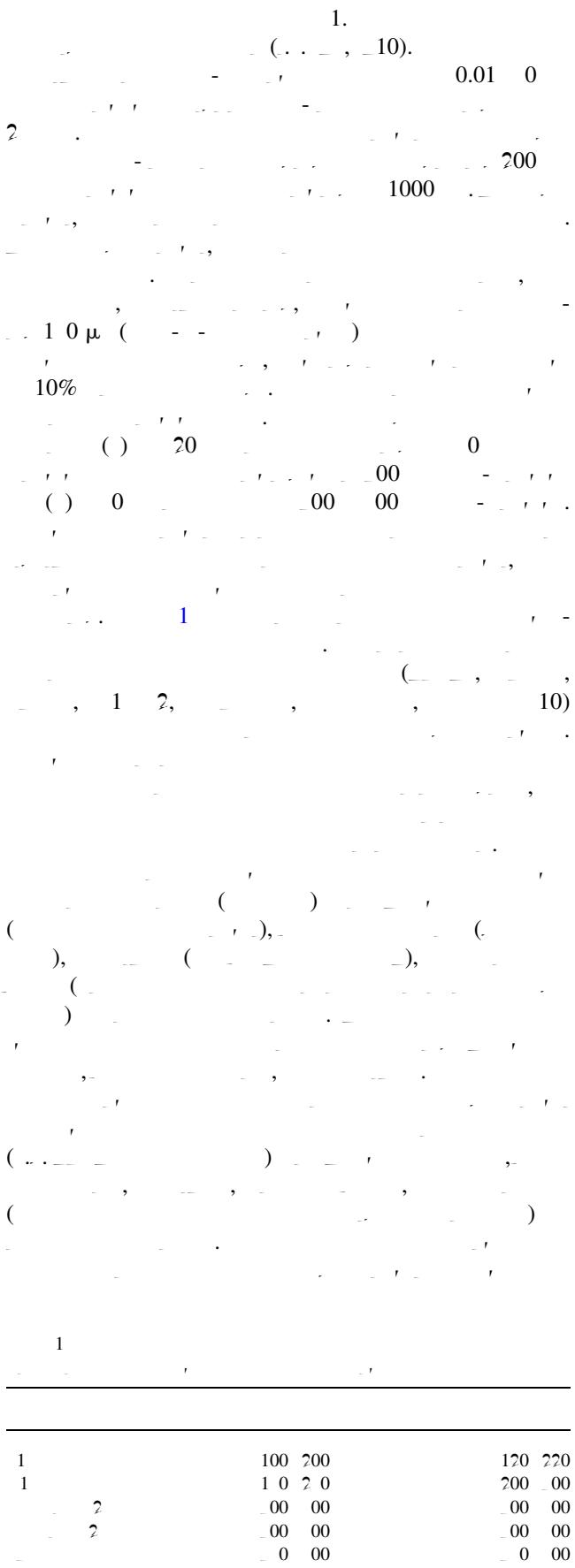
$$1 = \left(\begin{array}{cc} 0 & -1 \\ 1 & 0 \end{array} \right) \cdot \left(\begin{array}{cc} 1 & 0 \\ 0 & 1 \end{array} \right) = \left(\begin{array}{cc} 0 & -1 \\ 1 & 0 \end{array} \right)^{-1} \cdot \left(\begin{array}{cc} 1 & 0 \\ 0 & 1 \end{array} \right)^{-1}.$$

$$\therefore (1 \quad 0)$$

2. Methods

2.1. Subjects

2.2. *Stimuli*

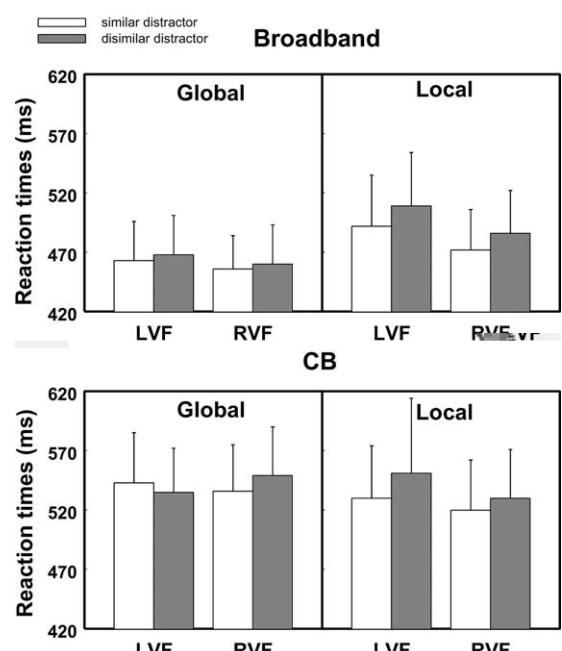


3. Results

3.1. Behavioral performance

3.1.1. RTs

Reaction times (RTs) were analyzed using a 2 (distractor type) \times 2 (CB) \times 2 (global vs local) ANOVA. There was a significant interaction between distractor type and CB ($F(1,1) = 20.0$, $p < 0.001$), and between CB and global/local ($F(1,1) = 1.2$, $p < 0.001$). There was also a significant interaction between distractor type and global/local ($F(1,1) = 1.2$, $p < 0.001$). The main effect of CB ($F(1,1) = 20.0$, $p < 0.001$), and the main effect of global/local ($F(1,1) = 1.2$, $p > 0.1$) were not significant.



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$$\times \quad (F(1,1) = .1, p < 0.02)$$

$$\times \quad (F(1,1) = .1, p < 0.00).$$

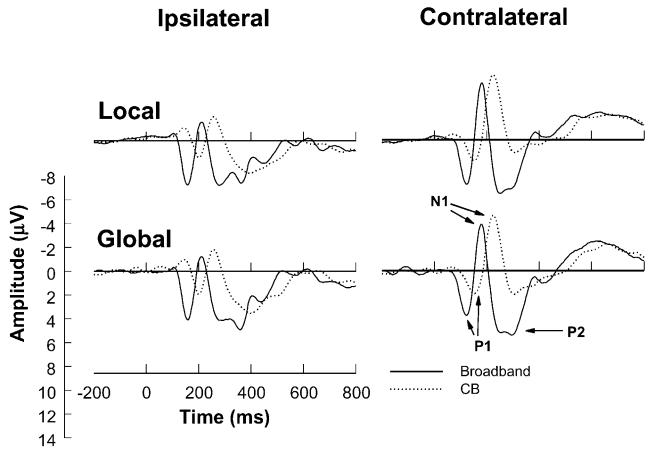
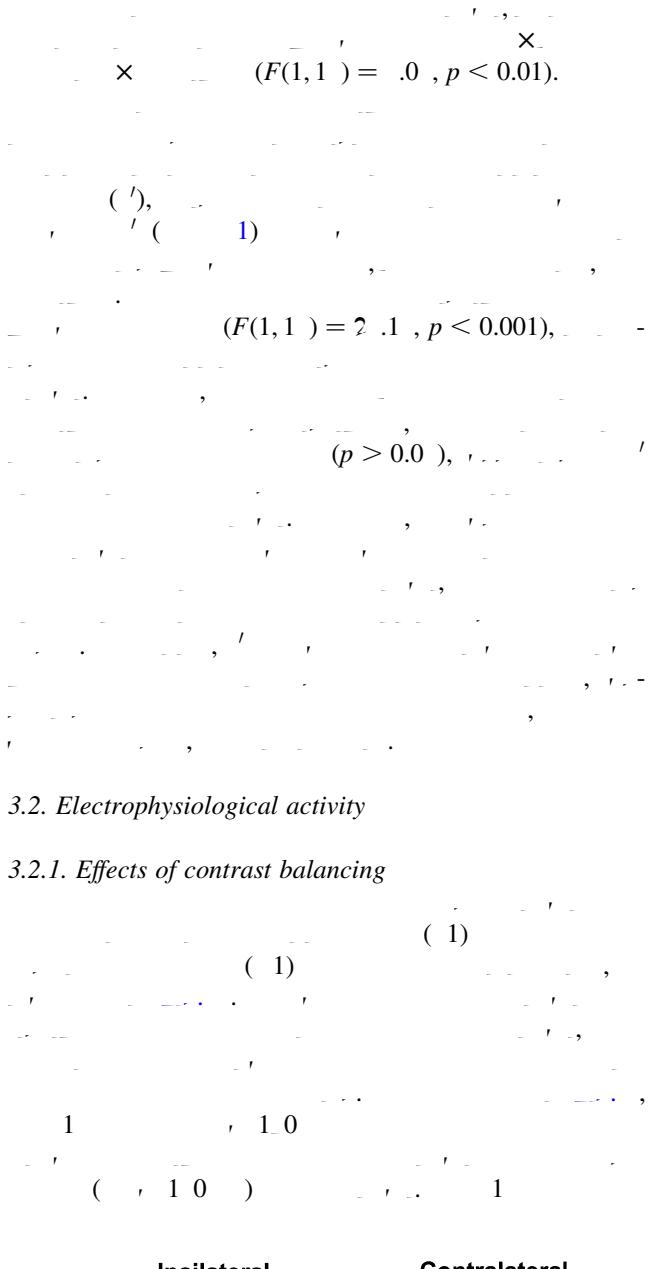
$$(F(1,1) = 2.10, \quad \times, \quad p < 0.00).$$

$$(\times \quad (F < 1), \quad \times \quad (F < 1),$$

$$(F(1,1) = .2 \quad \times, \quad p < 0.0).$$

$$(F(1,1) = 10.2, \quad \times, \quad p < 0.00).$$

$$(\quad F(1,1) = 1.0, \quad p > 0.2 \quad F < 1). \\ (\times \quad (F < 1), \quad \times \quad (F < 1),$$



$(F(1,1) = 1.0, p < 0.001)$. 1 $(F(1,1) = 2.0, p \leq 0.001)$. 1

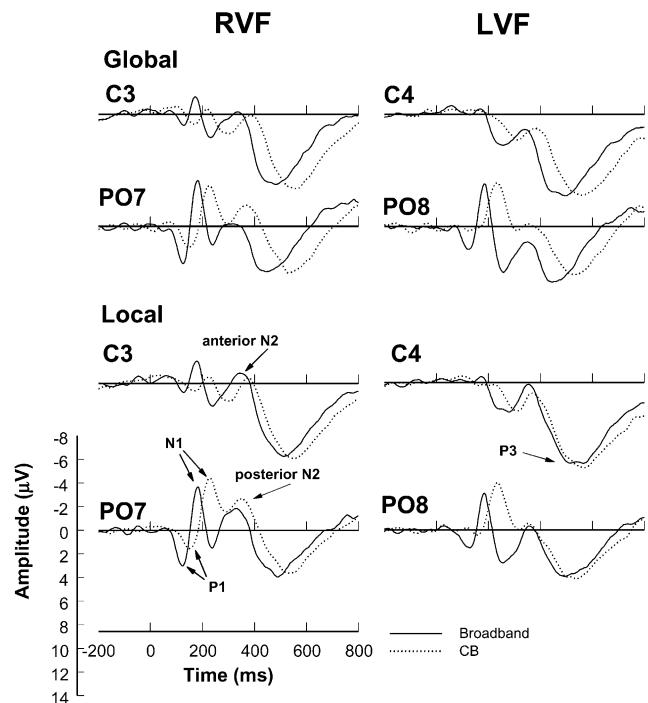
($F(1, 1) = 2.7, p < 0.001$). 1

$$(F(1, 1) = 202, \quad 12, \quad p < 0.001)$$

(2) $F(1, 1) = 1.2$, $p < 0.001$.
 1, 1, 2
 $p > 0.2$).

„12K“ „2000“ („1“).

2). (E(1,1) = 1, 0



$p < 0.01$ $(F(1,1) = .10, p < 0.12, p < 0.02).$

$p < 0.00$ $(F(1,1) = 1.2, p < 0.00).$

$(F(1,1) = .10, p < 0.02).$

$(F(1,1) = .12, p < 0.00).$

$(F(1,1) = .10, p < 0.00).$

$$(F(1,1) = 12.1, p < 0.00).$$

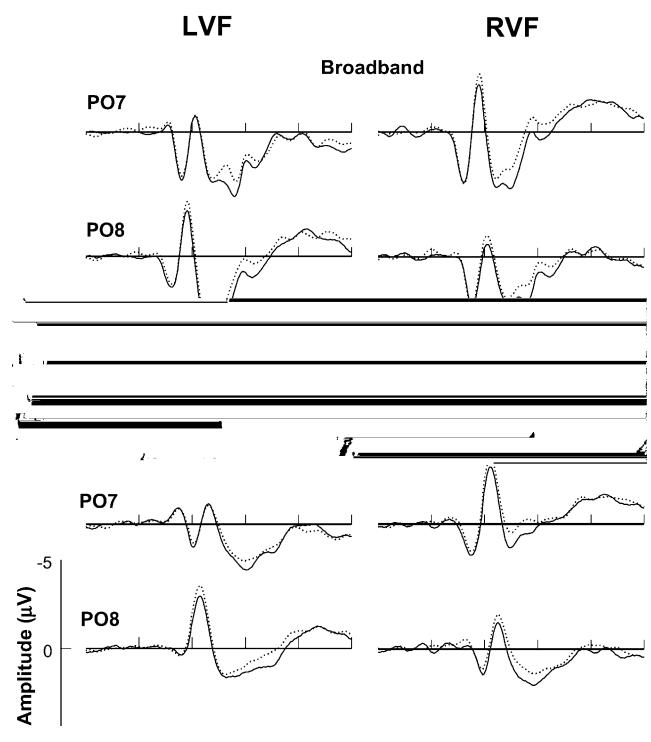
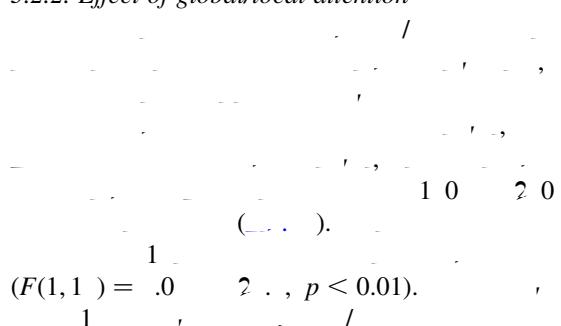
$$(F(1,1) = 1.1, p > 0.2).$$

$$p < 0.001, \dots).$$

$$(F(1,1) = 12.1,$$

$$(F(1,1) = 1.1, p < 0.00).$$

3.2.2. Effect of global/local attention



$$\times \quad (F(1,1) = 1, p < 0.0).$$

$$2000 \quad (F(1,1) = 11.1 \\ , p < 0.00).$$

$$10 \quad 120 \\ (\dots). \\ 1 \\ (F(1,1) = 21. , p < 0.02).$$

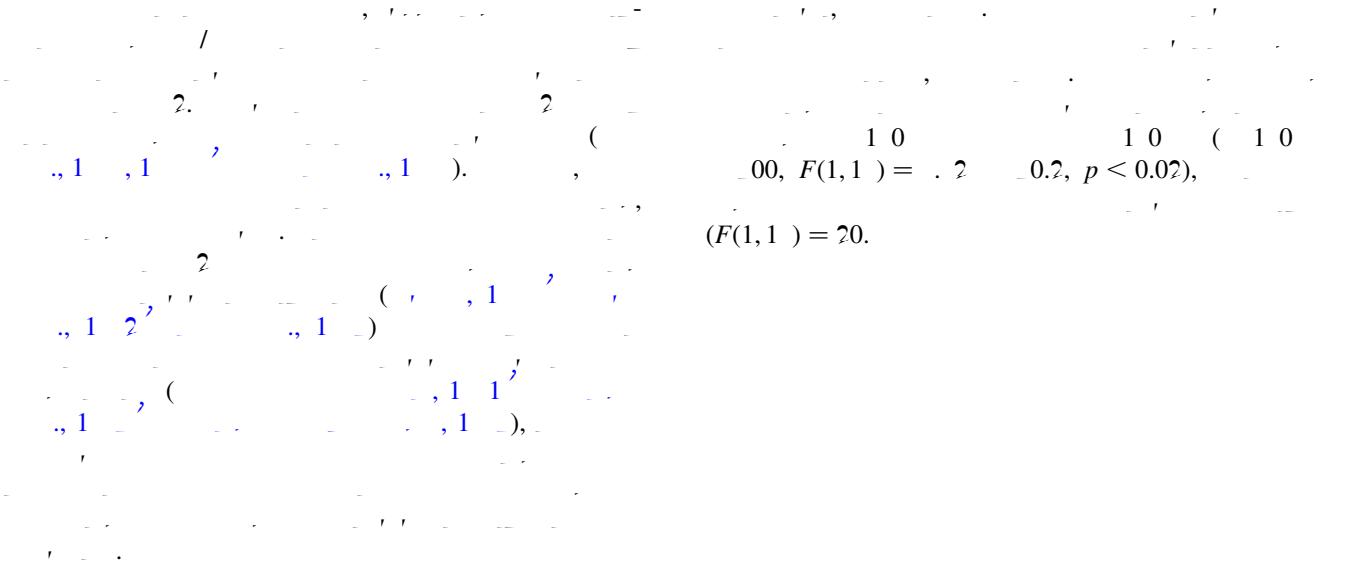
$$(F(1,1) = 2 , p < 0.00).$$

$$0000 \quad 00 \\ \times \quad 00 \\ (F(1,1) = 1, p < 0.0).$$

$$(\dots).$$

$$10 \quad 200 \\ (\dots). \\ 1 \\ (F(1,1) = 2 , p < 0.02),$$

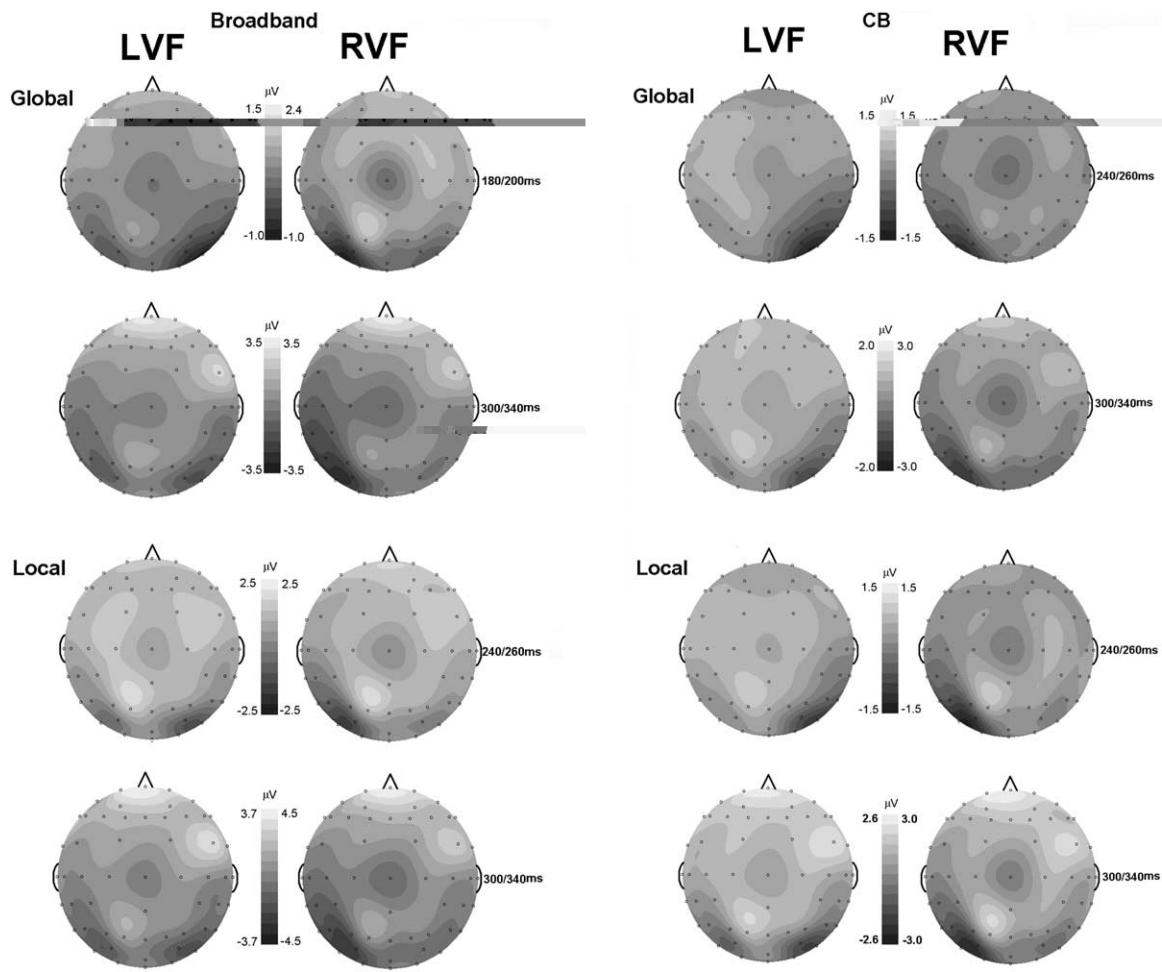
$$(F(1,1) = 1 , p < 0.001), \\ (F(1,1) = 1 , p < 0.001), \\ (F(1,1) = 1 , p < 0.001), \\ (F(1,1) = 1 , p < 0.001),$$



3.2.3. Target specific difference waves

Figure 3 shows the target specific difference waves. The target specific difference waves were significant for the first and second target conditions ($F(1,1) = 10.0, p < 0.00, F(1,1) = 10.2, p < 0.02$), but not for the third target condition ($F(1,1) = 2.0$).

The target specific difference waves were significant for the first and second target conditions ($F(1,1) = 10.0, p < 0.00, F(1,1) = 10.2, p < 0.02$), but not for the third target condition ($F(1,1) = 2.0$).



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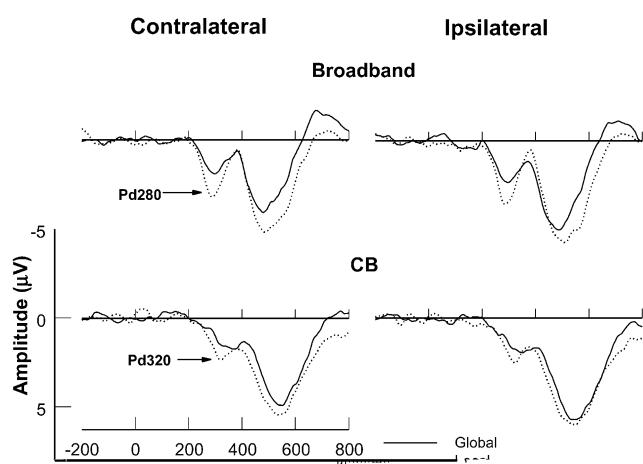
() () - t - . - - -

$$(F(1,1) = \dots,$$

$p > 0.0$).

$$\cdots, 1, 0, 1, 1, 1, \cdots),$$

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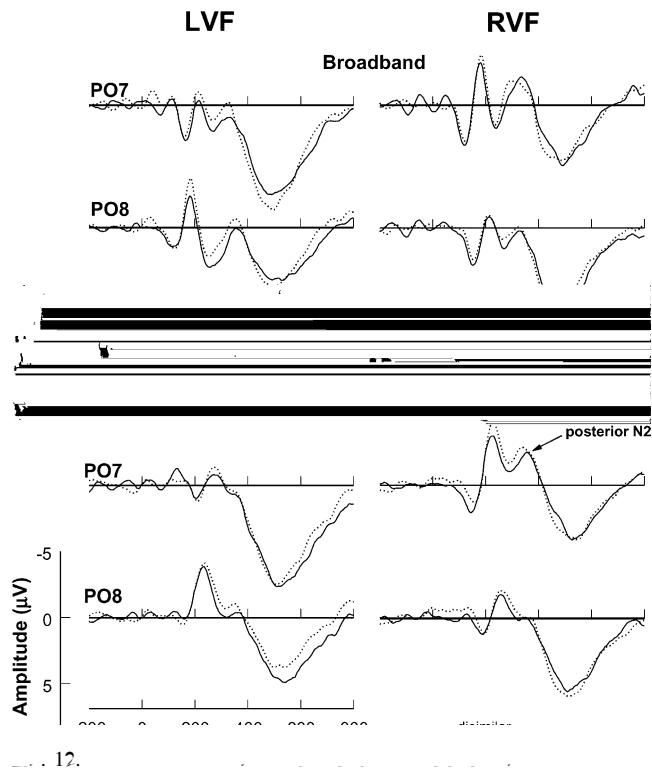


1

3.2.4. Interference effects

(12)

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$(F(1,1) = .0, p < 0.02)$, 1

$(F(1,1) = .0, p < 0.0),$

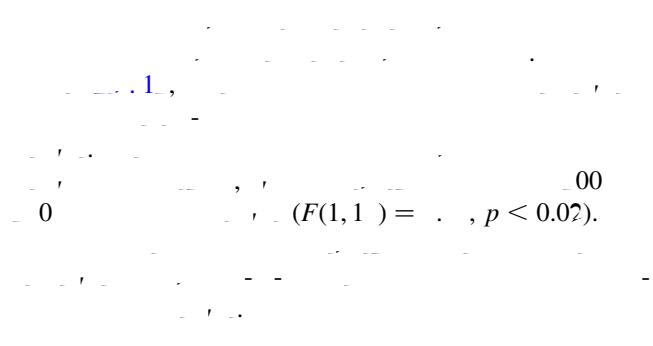
$(F(1,1) = .1, p < 0.01)$,
 $(F < 1)$.

\times
 $(F(1,1) = .20, p < 0.02, p < 0.0)$.

$(F(1,1) = 12.1, p < 0.00),$
 $(F < 1)$.

200
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 $(F(1,1) = .0, p < 0.0).$

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 $(F(1,1) = .1, p < 0.0),$
 $(p > 0.2)$.



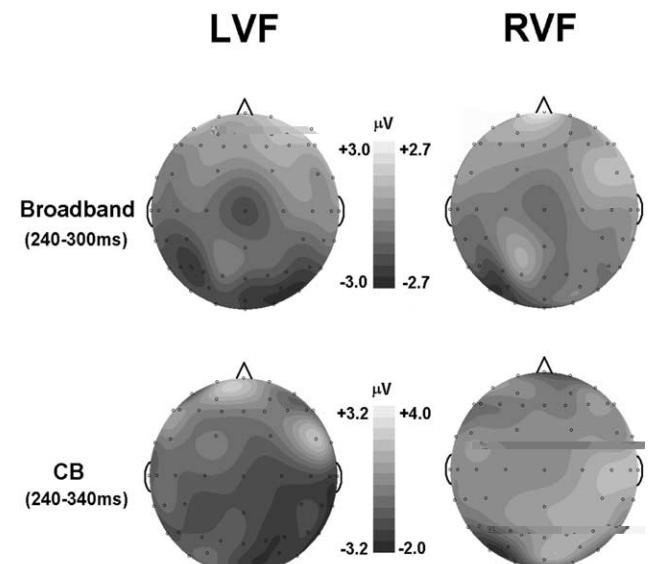
4. Discussion

4.1. The role of low SFs in the global precedence effect

Figure 1 shows that the posterior N2 component was significantly larger for the RVF condition than for the LVF condition at electrode site PO8. This finding is consistent with previous studies (e.g., Hillyard et al., 1978; Hillyard et al., 1984; Hillyard et al., 1998; Hillyard et al., 2000; Hillyard et al., 2002). The posterior N2 component is thought to reflect the processing of low spatial frequency information (Hillyard et al., 1978; Hillyard et al., 1984; Hillyard et al., 1998; Hillyard et al., 2000; Hillyard et al., 2002). Therefore, the results of the present study support the hypothesis that the posterior N2 component reflects the processing of low spatial frequency information.

Figure 2 shows that the posterior N2 component was significantly larger for the RVF condition than for the LVF condition at electrode site PO8. This finding is consistent with previous studies (e.g., Hillyard et al., 1978; Hillyard et al., 1984; Hillyard et al., 1998; Hillyard et al., 2000; Hillyard et al., 2002).

Figure 2 shows that the posterior N2 component was significantly larger for the RVF condition than for the LVF condition at electrode site PO8. This finding is consistent with previous studies (e.g., Hillyard et al., 1978; Hillyard et al., 1984; Hillyard et al., 1998; Hillyard et al., 2000; Hillyard et al., 2002).



($\begin{pmatrix} 1 & 0 \\ 0 & 0 \end{pmatrix}$, $\begin{pmatrix} 0 & 0 \\ 0 & 1 \end{pmatrix}$), ($\begin{pmatrix} 0 & 0 \\ 1 & 0 \end{pmatrix}$, $\begin{pmatrix} 1 & 0 \\ 0 & 0 \end{pmatrix}$), ($\begin{pmatrix} 0 & 1 \\ 0 & 0 \end{pmatrix}$, $\begin{pmatrix} 0 & 0 \\ 1 & 0 \end{pmatrix}$), ($\begin{pmatrix} 0 & 0 \\ 0 & 1 \end{pmatrix}$, $\begin{pmatrix} 1 & 0 \\ 0 & 0 \end{pmatrix}$), ($\begin{pmatrix} 0 & 0 \\ 0 & 0 \end{pmatrix}$, $\begin{pmatrix} 1 & 0 \\ 0 & 1 \end{pmatrix}$), ($\begin{pmatrix} 1 & 0 \\ 0 & 0 \end{pmatrix}$, $\begin{pmatrix} 0 & 1 \\ 0 & 0 \end{pmatrix}$), ($\begin{pmatrix} 0 & 1 \\ 0 & 0 \end{pmatrix}$, $\begin{pmatrix} 0 & 0 \\ 1 & 0 \end{pmatrix}$), ($\begin{pmatrix} 0 & 0 \\ 1 & 0 \end{pmatrix}$, $\begin{pmatrix} 0 & 1 \\ 0 & 0 \end{pmatrix}$), ($\begin{pmatrix} 0 & 0 \\ 0 & 1 \end{pmatrix}$, $\begin{pmatrix} 0 & 1 \\ 0 & 0 \end{pmatrix}$), ($\begin{pmatrix} 0 & 0 \\ 0 & 0 \end{pmatrix}$, $\begin{pmatrix} 0 & 0 \\ 1 & 0 \end{pmatrix}$), ($\begin{pmatrix} 0 & 0 \\ 0 & 0 \end{pmatrix}$, $\begin{pmatrix} 0 & 0 \\ 0 & 1 \end{pmatrix}$).

Thus, the global-to-local interference effect is observed in the case of the two-qubit system with the initial state $\rho_0 = \frac{1}{2}(\mathbb{I}_2 \otimes \mathbb{I}_2)$.

4.2. Mechanisms of global-to-local interference effect

Let us consider the mechanism of the global-to-local interference effect in the case of the two-qubit system with the initial state $\rho_0 = \frac{1}{2}(\mathbb{I}_2 \otimes \mathbb{I}_2)$. The mechanism of the global-to-local interference effect is based on the fact that the two-qubit system with the initial state $\rho_0 = \frac{1}{2}(\mathbb{I}_2 \otimes \mathbb{I}_2)$ is in the state of complete entanglement.

The two-qubit system with the initial state $\rho_0 = \frac{1}{2}(\mathbb{I}_2 \otimes \mathbb{I}_2)$ is in the state of complete entanglement. This means that the two-qubit system is in a superposition of all possible states. The superposition of all possible states is called the state of complete entanglement. The state of complete entanglement is represented by the following expression:

$$\rho_0 = \frac{1}{2}(\mathbb{I}_2 \otimes \mathbb{I}_2) = \frac{1}{2} \left(\begin{pmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 0 & 0 \\ 0 & 0 & 1 & 0 \\ 0 & 0 & 0 & 1 \end{pmatrix} \otimes \begin{pmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 0 & 0 \\ 0 & 0 & 1 & 0 \\ 0 & 0 & 0 & 1 \end{pmatrix} \right) = \frac{1}{2} \begin{pmatrix} 1 & 0 & 0 & 0 & 0 & 0 & 0 & 0 \\ 0 & 1 & 0 & 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 1 & 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 1 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 1 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 & 1 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & 1 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & 0 & 1 \end{pmatrix}.$$

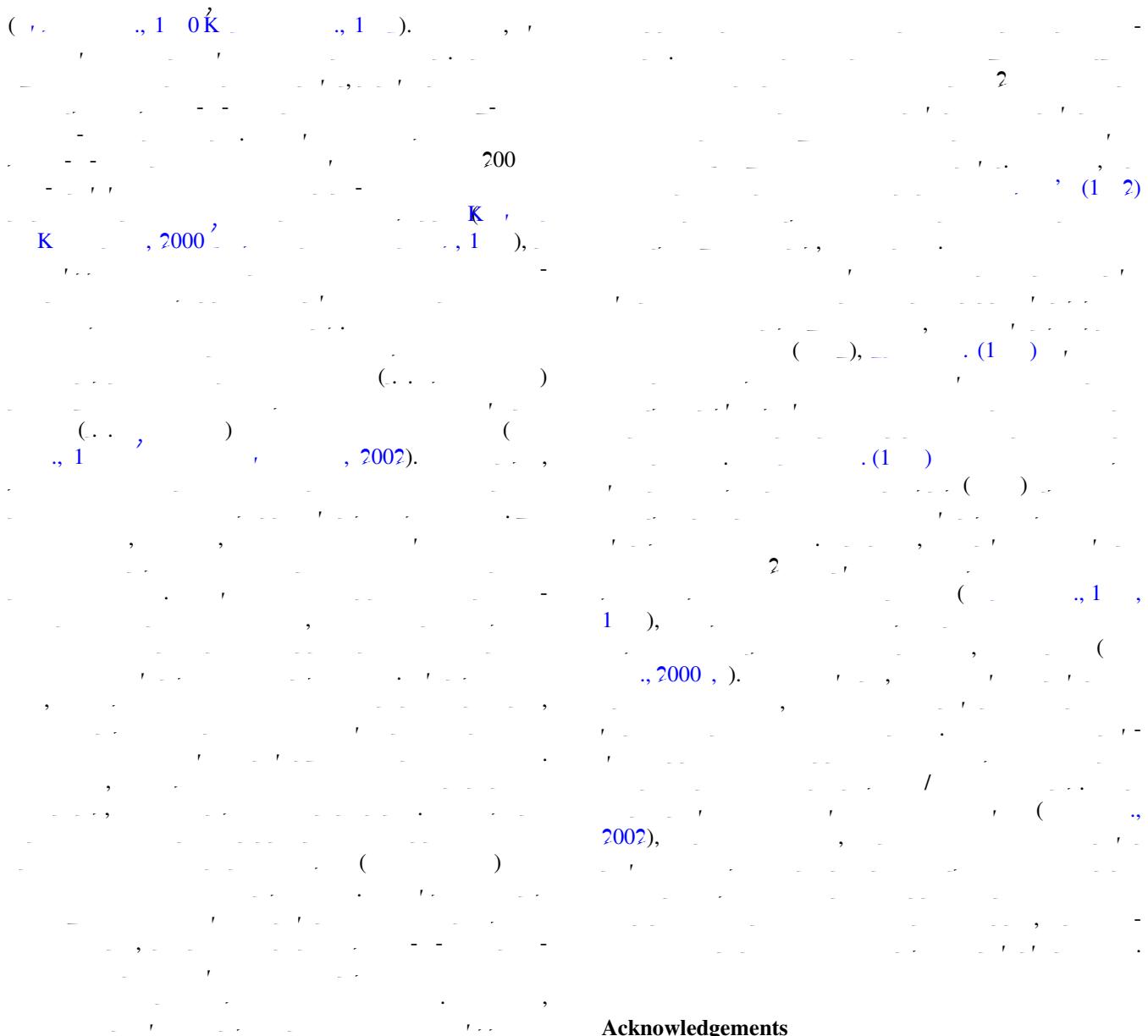


Fig. 4. Hemispheric organization of global/local processing.

4.3. Hemispheric organization of global/local processing

Acknowledgements

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References

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