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**BRAIN  
RESEARCH**

Short Communication

# Neural correlates of within-level and across-level attention to multiple compound stimuli

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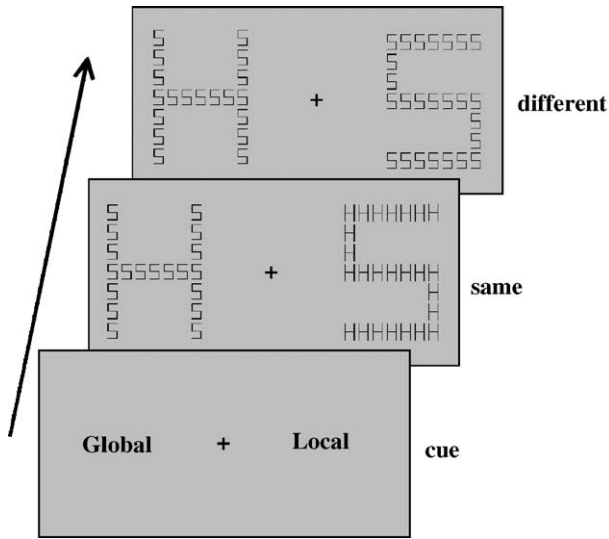
**Keywords:**  
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**Abbreviations:**  
G'

**C**  
... ( ) ...  
... 100 140 ( 1) ...  
... 320 560 ( 3) ...  
... 2006 ...

... ( 2) ...  
... ( , 1997) ...  
... ( , 1977) ... ( , 1996; , 2002) ...  
... 1, ... 80 ...  
... 120 ( 1) ... ( , 1997) ...

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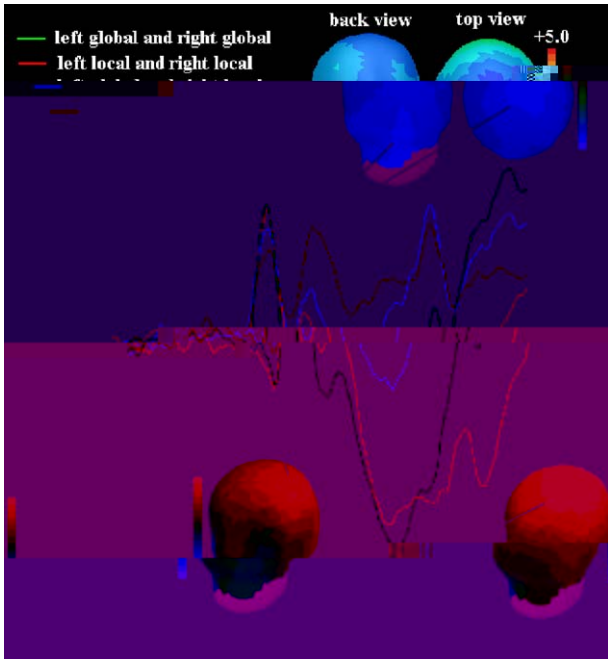
**Fig. 1** – Illustration of the compound stimuli and experimental procedures of the current study. This figure shows the condition when subjects were asked to identify whether the global letter in the LVF was the same as the local letters in the RVF. Subjects should make a “yes” response to the first stimulus display but a “no” response to the second stimulus display.

(... .., 1996; ... .., 2000), ... .. / ... .. ( ... .., 1996; ... .., 1997; ... .., 1993; ... .., 1998). ... .. J ... .. ( ... .., 1988; ... .., 1992). ... .. ( ... .., 2000) 1 2 ... .. ( ... .., 2004). ... .. J ... .. ( ... .. ) ... .. ( ... .. ) ... .. ( ... .. ) ... .. ( ... .. )

( ... .. ) .. 1 (F(1,13) = 53.39, P < 0.001). (F(1,13) = 16.77, P < 0.005). (F(1,13) = 108.42, P < 0.001). (F(1,13) = 1.19, P > 0.3). (P > 0.5). (F(1,13) = 30.22, P < 0.001). (F(1,13) = 12.06, P < 0.005). (F(1,13) = 36.95, P < 0.001). (F(1,13) = 1.55, P > 0.2). (F(1,13) = 26.25, P < 0.001). (F(1,13) = 9.49, P < 0.001). “ ” “ ” (F(1,13) = 28.09, P < 0.001). 2 C 90 140 ( 1) 150 200 ( 1) 240 300 ( 2) ( 2) 320 520 ( 3) 1 100–140

**Table 1 – Mean RTs (ms) and % correct under each conditions**

	G <sub>+</sub> G <sub>-</sub>	G <sub>-</sub> G <sub>-</sub>	G <sub>+</sub> G <sub>+</sub>	G <sub>-</sub> G <sub>+</sub>
RTs				
“ ”	526	635	779	772
“ ”	547	626	752	798
% correct				
“ ”	88.4	84.0	50.2	53.9
“ ”	89.1	80.5	38.5	44.9



**Fig. 2 – Illustration of ERPs at an electrode over the occipito-parietal area in different attention conditions. The voltage topographies show locations of the maximum**

( $F(1,13) = 5.1, P < 0.04$ ).

1

( $F < 1$ ).

240 300

( $F(3,39) = 7.15, P < 0.001$ )

2

3 320-480

( $F(1,13) = 15.88, P < 0.001$ ).

3

(, 1977).

(, 1999);

50%

(, )

(, )

(, 2 3 )

( )

(, 1999),

(, 1999),

1

(, 2001)

( )

1 1

(, 1994), 1

( )

3

3

3

(, 1987).

G

(, )

J

(, 1996; , 2002; , 1999; , 1997).

(, 1986; , 1983),

G

(, 1999), 2 /.

( ) J  
 ( )  
 ( ) ( , )  
 ( ) J  
 ( )  
 ( )  
 ( )

**Acknowledgments**

C ( J 30225026 C 30328016),  
 2002<sup>CC</sup> 01000).  
 55455, 75 G  
 C  
 C, 2000.  
 G 38, 225-239. C  
 1996.  
 C ? 382, 626-628.  
 1997.  
 C  
 G, 686-697.  
 1999.  
 25,  
 1411-1432.  
 2000.  
 37, 817-830.  
 2002.

17,  
 1290-1299.  
 G , 2004.  
 /  
 22, 321-328.  
 , 1993.  
 G 31, 841-852.  
 C  
 , 1994.  
 372, 543-546.  
 , 1987.  
 ( ), : 1,  
 5, : 2.  
 C , 519-584.  
 C , 1999.  
 ( ).  
 1997.  
 8, 1685-1689.  
 , 2001.  
 C  
 . 112, 1980-1998.  
 G 1986.  
 G C G ( ),  
 J . 175-198.  
 1977. C  
 353-383.  
 , 1992. G  
 J :  
 , 18, 512-529.  
 , 1988. G  
 J  
 14, 89-100.  
 , 1998.  
 C  
 G . 6, 321-334.  
 , 1983.  
 G  
 C ( ).  
 C :  
 , 143-158.