

# P L W N+1 M , P W E W N+2 C R

M Y R K  
P U U P U P

H S J P X Z  
B N U P U

P w (PB) w w (., w N + 2) T  
C  
N + 2-w w w- w N + 1.T w ()  
PB w N + 2 w () w w N + 1 w (.,  
w N + 1 w N + 1 PB w N + 2), ()  
w N + 1 w N.W  
C w

T w .I  
w (R & B , 1979). S  
3 4 14 15  
(M C & R ,  
1975); w , 10 11  
(M C & R , 1975) 7 8  
(R , W , P , & B , 1982)  
D C 1  
2 3  
C (T & M C , 1995; I & L , 1998). I  
w w w  
N, w (.,  
w N + 2) M  
(H & F , 1990). H w

w N + 1 C  
R N + 2 w R , J , B w  
(2007) w w w  
S (SAS)  
E-Z R (R , P , F , & R , 1998; E  
& K , 2001, SAS , R , L , &  
P , 2007 , C )  
w w N + 2  
w w N + 1  
w N + 2 w w  
N.I , w N + 1  
w N + 2. O  
(GAG) SWIFT (E , N ,  
, R , & K , 2005) G (R & R , 2006)  
A  
GAG w  
w N + 1 w  
F N + 2 w w  
SAS N + 2 w  
w GAG (., A , S , Y , K ,  
& R , 2008; D ). B  
w N + 2

M Y , D P , P U , D  
P U P R K , D  
P U P ; H S J P , S K  
L C N , L B N U  
; X Z , D P , P U  
T w N , S F  
C (60435010, 30770712) M S T  
C (2010CB8339000) X Z , D F  
(KL 955/8, KL955/15) R K R E  
C P S F (20080440008) M Y W  
w K R , E R , F  
V , J Y  
C R  
K , D P , U P K -L  
S . 24-25, 14476 P G E : @

## Experimental Evidence for and Against Processing of Word N + 2

E W

$w_{N+1} ($   
 $: N + 2) w$   
 (R , 1975). I ,  $w$  ,  $w$   $N$   
 $w$  ;  $w$  ,  
 $w$   $w$  . D.  $w$   $N$   
 $w$   $N + 1$   $N + 1 ($   
 $: N + 2) w$   $w$  . S  
 $w$   $w$  (PB). PB  
 $w$   $N + 1$  (  
 R , 1998  $w$ )  
 C ( , ,  $w$  Y , R , S , & K , 2009;  
 Y , W , X , & R , 2009; Y , R , T , H , &  
 T , 2009).  
 I PB  $w$   $N + 1$  ,  $w$   
 $w$  PB  $w$   $N + 2$  . R  
 (2007 ) A . (2008) , PB  $w$   
 N

C... T... w... N + 2.

Method

Subjects

S... B... N... U... w... C...

Material

Word N + 2. F... w... N + 2... F... w... A... w... T... w... [...];... : 5.0, 4.8, 5.5, 4.9, ...; (3, 188) = 1.1, ... > .1] ... (B... L... I... P... 1986) [... : 1150, 1154, 1164, ... 1163, ...; (3, 188) < 1]. I... (. = 18, ...) ... (. = 16) ... w... w... w... w... 4.1, 3.8, ... 1.7. Word N + 1. T... 32 w-... N + 1... w... w... 48 w... T... w... [... : 38657, 1451, ... w... w... N + 1, ...; (1, 94) = 550.6, ... < .001] ... [... : 7.5, 7.1, ... w... w... N + 1, ...; (1, 94) = 1.8, ... > .1].

Sentence frames. Tw... N + 1... N + 2 w... S... w... w... 20... 29... (M = 23.9, ... = 2.4). T... w... w... T... w... w... N + 1. W... (w... N)... w... w... w... w... E... w... w... A... w... F... 1.

Apparatus

E... w... E L II... (500 H). S... w...

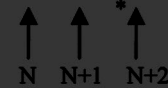
Low parafoveal load, identical preview  
他建议当地政府应注意的户籍管理方面的问题已经得到解决。

Low parafoveal load, orthographically related preview  
他建议当地政府应注意的广籍管理方面的问题已经得到解决。

Low parafoveal load, semantically related preview  
他建议当地政府应注意的户籍管理方面的问题已经得到解决。

Low parafoveal load, unrelated preview  
决。他建议当地政府应注意的丹籍管理方面的问题已经得到解决。

Low parafoveal load, target.  
决。他建议当地政府应注意的户籍管理方面的问题已经得到解决。



High parafoveal load, identical preview  
他建议当地政府应注意非户籍学生接受义务教育的权利。

High parafoveal load, orthographically related preview  
他建议当地政府应注意非广籍学生接受义务教育的权利。

High parafoveal load, semantically related preview  
他建议当地政府应注意非户籍学生接受义务教育的权利。

High parafoveal load, unrelated preview  
他建议当地政府应注意非丹籍学生接受义务教育的权利。

High parafoveal load, target  
他建议当地政府应注意非户籍学生接受义务教育的权利。



I. A... C... T... w... (广, 丹) (户) w... N (注意) w... N + 1 (的) w... w... N + 1 (非).

21- D T... M... (1280 x 1024... ; ... 100 H). T... 16...

<sup>1</sup>F... w... w...

( = 25 ; = 7 )

T S 40 w , w 0.9  
 T w P4  
 2.8 GH , W w XP  
 S w 80  
 A w

**Procedure**

S w w  
 T w  
 w  
 E , 1,  
 w N w N + 1,  
 w N + 2. D  
 w w O 26  
 w w S  
 w 91% ( = 7%). F  
 A  
 w w w  
 A 131 ( , 96  
 35 ). A  
 w  
 w ( = 4, =  
 3), w w.

**Data Analysis**

D w 74 , T w  
 (E & K , 2003). S  
 w ( , 5%). A w  
 F  
 w GD w FFD 60 600  
 w (2% ). F  
 w  
 w ; GD  
 w  
 I  
 w  
 w E (LMM)  
 (GLMM)  
 w  
 4 (B , M , & D ,  
 2008) R  
 (R-C D T , 2008). W  
 A  
 ;

**Results**

**Word N + 2 Region-Preview Benefits**

Tw C ( ) w  
 w N + 2 ( ) w  
 A 5903  
 R w , w  
 7 ( = .029, = .010, = 2.9)  
 FFD 12 ( = .040, = .013, = 3.0) GD w  
 N + 2. T w N + 2 ,  
 w w ( = 0.22, =  
 0.11, = 2.0, < .05). W w  
 w N + 2 .H w ,  
 w  
 ( , < 1).  
 A w ( ,  
 < 1.2), w w  
 w N + 1 FFD ( = .013,  
 = .006, = 2.3). D w N + 1  
 w N + 2 ( T 1  
 F , 2). S , I  
 w w N + 1 w w (12  
 ; = .042, = .013, = 3.2) , w w  
 (3 ; = .016, = .015, = 1.1). T

T 1

*Handwritten notes:*  
 ( )  
 + 2, + 1, + 1  
 ( + 2) + 1

	T P w			
F	I	O	S	C
( ) W N + 2				
FFD-HF	269 (49)	284 (51)	278 (45)	282 (43)
FFD-LF	280 (46)	285 (53)	288 (49)	283 (50)
GD-HF	306 (63)	329 (66)	321 (70)	326 (60)
GD-LF	328 (77)	335 (82)	333 (75)	337 (75)
Sr -HF	.13 (.14)	.11 (.12)	.11 (.13)	.10 (.12)
Sr -LF	.13 (.13)	.14 (.12)	.14 (.14)	.12 (.14)
( ) W N + 1				
FFD-HF	246 (48)	261 (59)	252 (55)	260 (83)
FFD-LF	290 (62)	297 (61)	296 (66)	301 (63)
GD-HF	249 (53)	263 (60)	253 (55)	264 (86)
GD-LF	293 (63)	303 (62)	300 (66)	307 (63)
Sr -HF	.58 (.18)	.63 (.17)	.61 (.17)	.60 (.16)
Sr -LF	.50 (.18)	.50 (.17)	.43 (.18)	.46 (.19)
( ) W N				
FFD-HF	263 (46)	257 (42)	258 (39)	261 (46)
FFD-LF	264 (45)	261 (42)	263 (43)	268 (44)
GD-HF	289 (71)	287 (60)	291 (58)	288 (60)
GD-LF	303 (71)	295 (64)	305 (69)	306 (75)
Sr -HF	.18 (.18)	.14 (.14)	.15 (.14)	.14 (.14)
Sr -LF	.14 (.13)	.13 (.13)	.15 (.15)	.13 (.12)

HF = ; LH = w- w . M

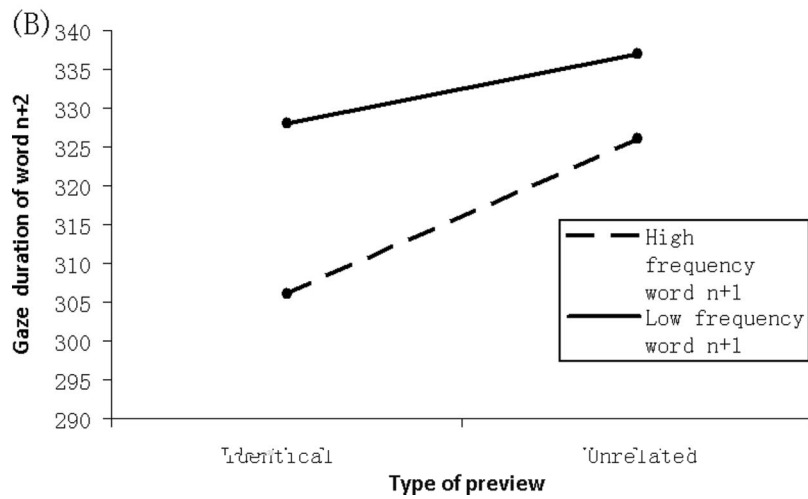
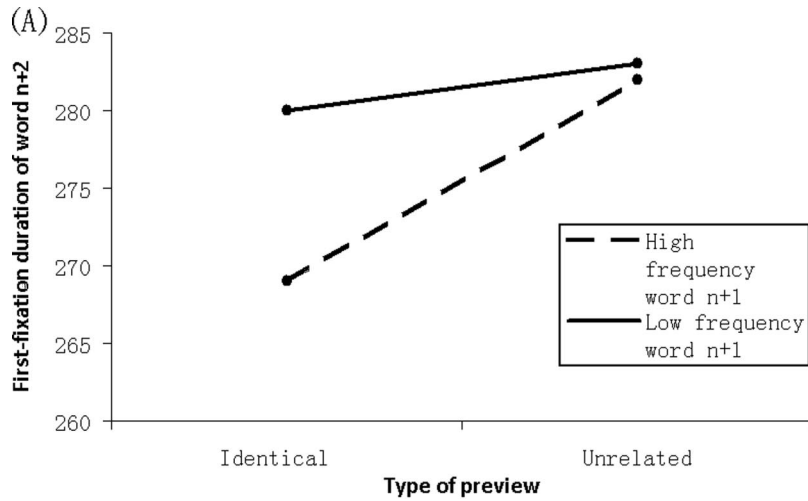


Figure 2. D. (A) (B).

GD PB (18.4) = (.033, = .029, = 1.2) = .066, = .039, = 1.7, .059, = .019, = 3.2) w N + 1, (6.4) = .024, = FFD GD, .020, = 1.2) w N + 1, w S, w w ( = 1.7).

T w 20% ( ), ( , )

( ) FFD GD w w

w N + 1. 4700 T w PB

F, (89%) w N + 2 ( = .029, = .011, = 2.5) = .049, = .015, = 3.2, FFD GD, ),

.D w 22 r, w w N + 1 w

w, 22 r, . ( = .041, = .015, = 2.7) = .072, =

.F, w PB w .020, = 3.6, FFD GD, ),

N + 2 ( = .037, = .019, = 2.0) = .065, = .026, w w w ( = .018, = .017, = 1.1

= 2.5, FFD GD, ), PB w = .030, = .023, = 1.3, FFD GD,

.024, = 1.9) = .066, = .034, = 2.0, FFD GD F, w w

, ) w w w, w

T 2

*(Handwritten notes in German, partially obscured by a large black scribble)*

	T	P	w	
F	I	O	S	C
(A)				
FFD-HF	276 (39)	302 (43)	289 (30)	287 (29)
FFD-LF	284 (33)	296 (43)	307 (54)	289 (33)
GD-HF	326 (61)	347 (68)	353 (85)	342 (57)
GD-LF	332 (69)	363 (62)	365 (81)	353 (66)
(B)				
FFD-HF	264 (41)	276 (46)	274 (42)	276 (40)
FFD-LF	270 (38)	279 (42)	281 (47)	272 (42)
GD-HF	301 (59)	325 (69)	322 (75)	323 (59)
GD-LF	320 (72)	334 (76)	332 (75)	328 (75)
(C)				
FFD-HF	265 (41)	278 (45)	274 (41)	277 (39)
FFD-LF	273 (40)	278 (43)	281 (46)	276 (42)
GD-HF	302 (57)	323 (63)	316 (68)	320 (57)
GD-LF	321 (69)	328 (73)	325 (71)	329 (71)

HF = ... ; LH = ... M  
 ... (3461  
 5903 ...),  
 ... N + 2 ( = .035, = .013, = 2.7 ) = .046,  
 = .019, = 2.4, FFD GD , )  
 ... PB w N + 1 , ( = .019, = .008,  
 = 2.5 = .019, = .011, = 1.8, FFD GD ,  
 ) .

Word N + 1 Region

**Frequency effect.** T ... FFD, GD,  
 ... w N + 1 ... T 1 . D,  
 (54%)  
 3105 ... T ...  
 FFD (39 ... ; = .037, = .007, = 5.3),  
 GD (41 ... ; = .037, = .008, = 4.5),  
 ( = 0.17, = 0.04, = 4.2,  $t < .01$ ). T

**Relatedness effect.** W  
 ...  
 ( = 0.15, = 0.07, = 2.1,  $t < .05$ ),  
 ...  
 (  $t < 2$ ).

**Preview benefit.** O w N + 1, FFD ... (13  
 ... ; = .024, = .014, = 1.8) GD ... (14 ... ;  
 = .029, = .014, = 2.1),  
 ... w N + 2 ... T  
 ... K ... (2007).

Word N Region-Parafoveal-on-Foveal Effects

A ...  
 ... w N + 2 ...  
 w N.  
**Fixation durations.** W N w  
 ... T ... ( ) FFD GD ( 5752  
 ... )  
 ... w N  
 T w ... w N + 1- ... FFD (5  
 ... ; = .006, = .002, = 2.9) GD (14 ... ; = .011,  
 = .004, = 2.6) w N.H w ,  
 ... w  
 (  $t < 1.7$  ).  
**First-fixation landing position.** P  
 ... w  
 ... w N + 1 ( ... , D ... , R ... , & P ... , 2008,  
 W ... , I ... , & R ... , 2009). I  
 POF ... w ... w w  
 N w N + 1. U ...  
 ... w 0.9  
 w ... ( ... w ... w  
 N w w - w ) ,  
 (  $t < 1.3$  ).

Discussion

T ... w  
 ... w w w ... (w N + 2)  
 C ... T ... w ( ) PB  
 w N + 2 w ( ) w w N +  
 1 w ... ( ... w  
 w N + 1 PB w N + 2), ( )  
 w N. T  
 ... w  
 (Y ... , 2009). M  
 ... W

Preview Benefit for Word N + 2

T PB w N + 2  
 ... w ... (A ... , 2008; K ...  
 ... , 2007; M D ... , 2006; R ... , 2007 ). W w  
 PB w N + 2  
 ... C ... P ...  
 ... w ...  
 N + 2- ... w ... P ... C  
 ... PB w N + 1 (L ... , 2002; T ... ,  
 2004; Y ... , 2009; Y ... , 2009). Y ... (2009)  
 ... w N + 2 w ( ...  
 ) FFD ... GD  
 ) PB w N + 2. T  
 ... C  
 /w N + 2 ...

W  
P  
N + 1. S  
GD (L  
PB  
H w  
N + 2. A  
C  
W  
T  
PB w N + 2 w  
(R  
SAS  
E-Z  
PB w N + 2  
(R  
2007 ; R  
1998). H w  
w  
N  
N +  
1  
w N. I  
PB w N + 2  
w N + 1 w  
SAS  
. O  
w N + 2 PB  
GAG  
SWIFT  
(R  
E  
& K  
, JTJ  
-235.8( )-235.88.2(S  
FT)-  
-235.8( 22  
-235.8( 5.8( )JT)-400.2( )-3285(9(w  
))JTJ5  
)-2845(

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R ... A ... 15, 2009  
 R ... D ... 15, 2009  
 A ... D ... 29, 2009 ■