

**PROCESSING LINGUISTIC FOCUS IN DISCOURSE: EYE MOVEMENTS IN READING
MANDARIN CHINESE**

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While linguistic focus is known to play a crucial role in communication and representation of information [3], its exact function during language processing remains unsettled. Linguistic focus has been reported to be read longer, reflecting deeper and costlier processing, whereas it also has been shown to be read quicker, suggesting that it eases processing (reviewed in [1,4]). Reconciliation of this inconsistency is limited as most previous works have mainly compared two focus categories and other linguistic factors might confound the results [4].

To address this issue, we compared effects of a range of focus types in Chinese (Mandarin) discourse comprehension, using the eye-tracking technique. We adopted a three-sentence passage in four conditions. As in Table 1, the same target sentence (S3) was used across conditions while the preceding discourse (S2) was varied to set up the information status of the target word (心辰 **Xinchen** in S3): (i) **Contrastive Focus** (encoding corrective/contrastive information), (ii) **Information Focus** (encoding new information), (iii) **Defocus** (repeating given information) and (iv) **Wide Focus** (giving new information) ((i) and (ii) the informative part of a sentence, (iii) uninformative, and (iv) neutrally informative). Forty-eight sets of such passages were constructed and arranged in a Latin Square design, along with 110 fillers. Eye-tracking data collected from 41 native speakers during silent reading were analyzed.

The results (Table 2) showed that while narrowly focused items (information and contrastive), as compared to a defocused or a widely focused item, were read longer in early processing (i.e., first-fixation duration and first-pass duration), information focus was read faster whereas contrastive focus was read slower in later processing (i.e., rereading and regression). We interpret this reversed pattern by suggesting that information focus attracts extra attention [1, 2] which facilitates later meaning integration [5]. Meanwhile, contrastive focus requires additional processing in revising an existent discourse representation [1].

Our results suggest that the processing of linguistic focus may involve an early processing in which focused items tend to attract more attention than nonfocused items and a later meaning integrative processing related to mental model updating. We discuss this hypothetical model of focus processing as a framework to reconcile previous inconsistencies. Table 1. Example experimental passages. Texts were displayed in 24-point regular SimSun.

S1	背景：心辰，伟丽，爱婧一起学乒乓球，要配对练习。 <i>Background: Xinchen, Weili and Aijing were in the same Ping-Pong class, and they were required to pair up for practicing.</i>	
S2	Condition of Contrastive Focus	Condition of Information Focus
	甲：爱婧挑了伟丽？ A: <i>Aijing picked Weili?</i>	甲：爱婧挑了谁？ A: <i>Who did Aijing pick?</i>
	Condition of Defocus	Condition of Wide Focus
	甲：谁挑了心辰？ A: <i>Who picked Xinchen?</i>	甲：发生了什么事？ A: <i>What happened?</i>
S3	乙：爱婧挑了心辰，但是乒乓教练没有同意。 <i>B: Aijing picked Xinchen, but the coach disapproved.</i>	

Table 2. Means (SEs) of eye-tracking measurements for the target word region

Condition	1st fixation duration	1st pass duration	Rereading	Reg. out	Total time
ContrFoc	236(5.6)	275(7.8)	426(37.2)	0.33(0.02)	490(18.9)
InfoFoc	236(5.3)	278(7.8)	251(27.4)	0.21(0.02)	412(18.2)
DeFoc	211(4.5)	226(5.9)	374(48.8)	0.21(0.03)	317(14.0)
WdFoc	222(4.6)	245(6.0)	402(31.8)	0.33(0.02)	429(18.3)

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