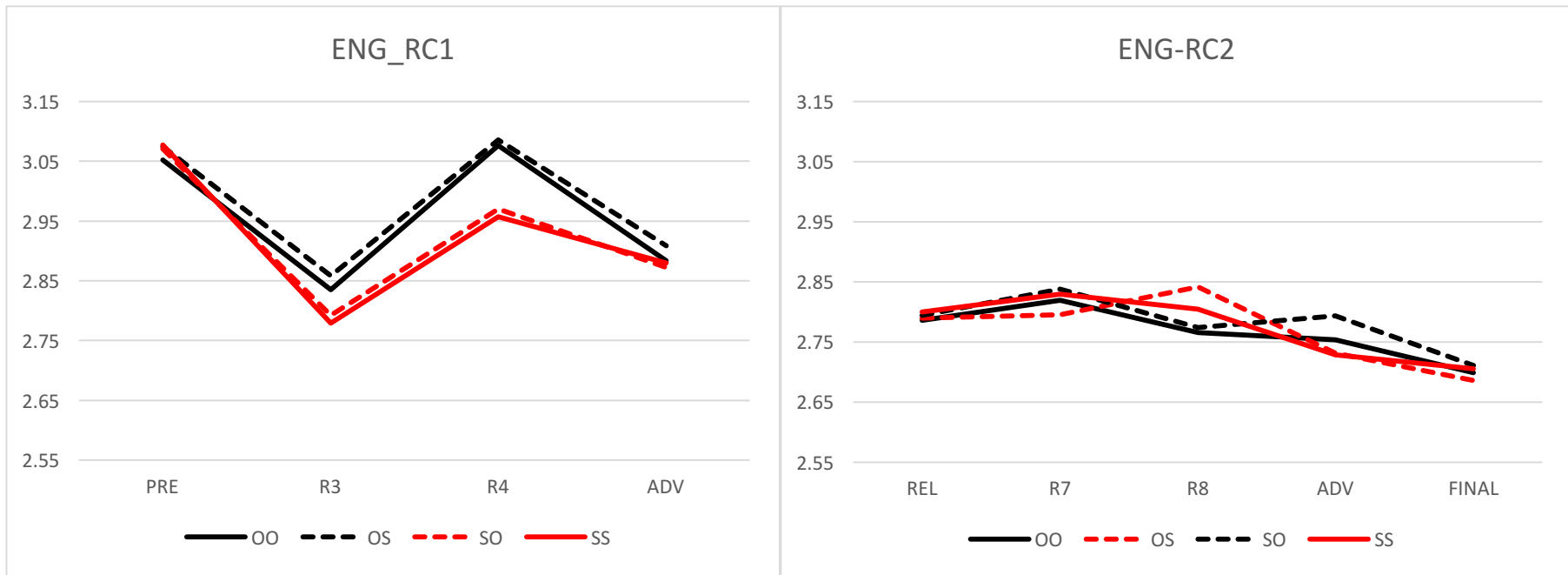


ENGLISH

Type	R1	R2	R3	R4	R5	R6	R7	R8	R9	R10
SS	The horse	that	<i>e</i> kicked	the wolf	on Tuesday	that	<i>e</i> patted	the lion	just now	went home.
OS	The horse	that	the wolf	kicked <i>e</i>	on Tuesday	that	<i>e</i> patted	the lion	just now	went home.
SO	The horse	that	<i>e</i> kicked	the wolf	on Tuesday	that	the lion	patted <i>e</i>	just now	went home.
OO	The horse	that	the wolf	kicked <i>e</i>	on Tuesday	that	the lion	patted <i>e</i>	just now	went home.

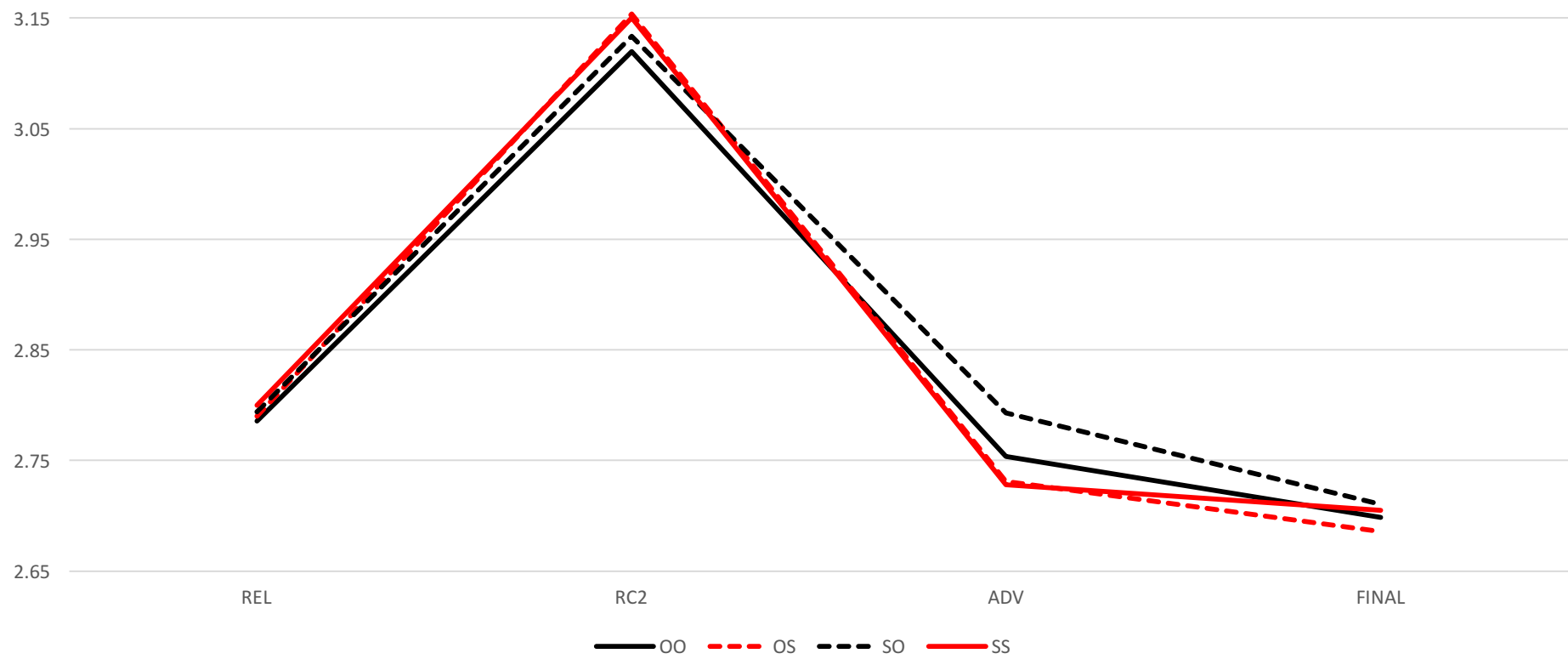


- All stats are done with lmer4.0 package in R.
 Model: $m_RegionX = \text{lmer}(\log_RX \sim \log_R4 * RC1fac * RC2fac + (1 * \log_R4 * dprimeT | Participant) + (1 * \log_R4 * dprimeT | Item), \text{dataset})$
 $m_RegionX_Parallelism = \text{lmer}(\log_RX \sim ParFac * RC2fac + (1 * dprimeT * ParFac * RC2fac | Participant) + (1 | Item), \text{wholeENG})$
- In RC 1, there is a robust **SRC advantage**.
- Notation: **A* << B** means A is processed significantly faster than B (intuitively A takes less time); **A* >> B** means A is significantly slower than B. **A << B** means A is only numerically processed faster than B; **A >> B** means A is only numerically processed slower than B.

	Main Effects		Main Interactions (OO, SS)	Rank Main effects	Parallelism	Parallelism Interactions (OS, SS)
R3	RC1S	t = -5.155, p < .001		R1O *>> R1S		
R4	RC1S	t = -8.253, p < .001		R1O *>> R1S		
R7	RC1S	t = 2.228, p < .05		R1O *<< R1S	Not sig.	t = 2.228, p < .05
R8	RC2S	t = 4.831, p < .001	RC1S:RC2S t = -2.048, p < .05	R2O *<< R2S	Par t = -2.048, p < .05 RC2S t = 4.831, p < .001	Not sig.
R9	RC2S	t = -4.489, p < .001	RC1S:RC2S t = -2.143, p < .05	R2O *>> R2S	Par t = -2.143, p < .05 RC2S t = -4.489, p < .001	Not sig.
R10	RC1S	t = 2.164, p < .05		R1O *<< R1S	Not sig.	t = 2.164, p < .05
R78	RC2S	t = 2.584, p < .05		R2O *<< R2S	Not sig.	Not sig.
R789	Not sig.				Not sig.	Not sig.

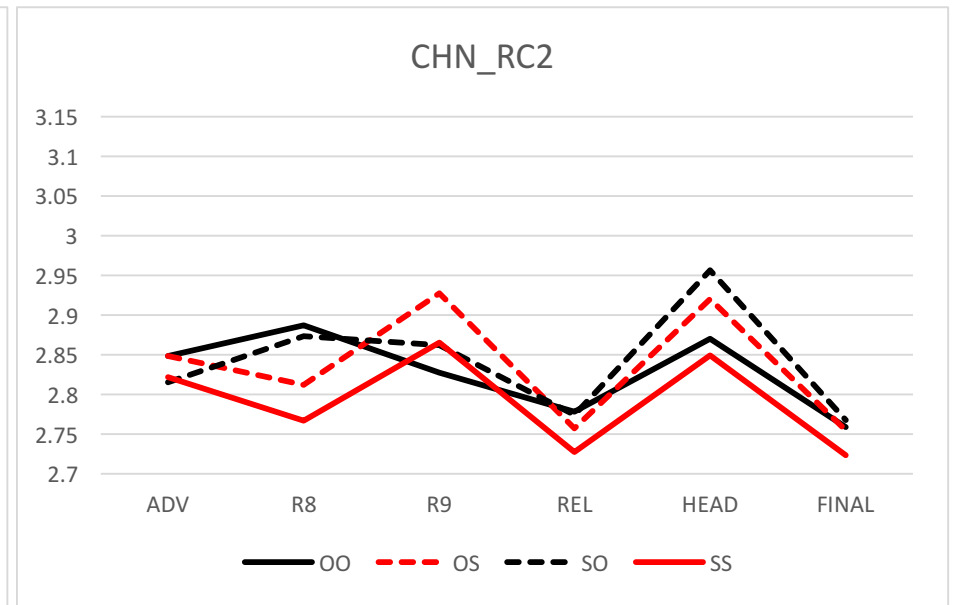
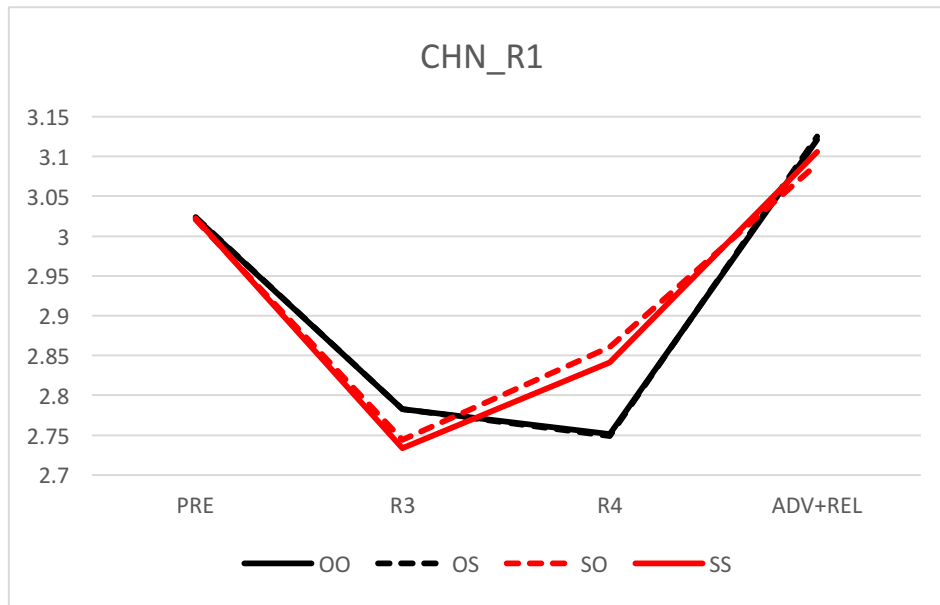
Regions	Rankings	Pairwise significance	Possible explanations
R7	OS *<< SS	Not sig.	
	OO, SO		
R8	OS *>> SS	S *<< O	Parallelism. R8 is the region to show effects due to spillover for S as RC2.
	OO, SO		
R9	OS, SS	S *>> O	Parallelism. R9 is the region to show effects due to spillover for O as RC2.
	OO *<< SO		
R10	OS, SS	Not sig.	
	OO, SO		
R78	OO, SO *<< SS, OS	(2 levels)	RC2S main effect is driven by OO being very fast (not for SO).
	OO << SO << SS << OS	(4 levels)	
	OO *<< SS		
	OO *<< OS		

ENG_RC2



CHINESE

Type	R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12
SS	Dem	on Tuesday	e kicked	the wolf	many times	de	just now	e patted	the lion	de	horse	went home.
OS	Dem	on Tuesday	the wolf	e kicked	many times	de	just now	e patted	the lion	de	horse	went home.
SO	Dem	on Tuesday	e kicked	the wolf	many times	de	just now	the lion	patted e	de	horse	went home.
OO	Dem	on Tuesday	the wolf	e kicked	many times	de	just now	the lion	patted e	de	horse	went home.



- Same stats as the English dataset.
- In RC 1, there is a robust ORC advantage. This is to the opposite of English.
- Notation: A*<<B means A is processed significantly faster than B (intuitively A takes less time); A*>>B means A is significantly slower than B. A<<B means A is only numerically processed faster than B; A>>B means A is only numerically processed slower than B.

	Main Effects		Interactions (OO, SS)	Rank Main effects	Parallelism	Parallelism Interaction (OS, SS)
R3	RC1S	t = -3.607, p < .001		R10 *>> R1S		
R4	RC1S	t = 8.961, p < .001		R10 *<< R1S		
R5	RC1S	t = 2.863, p < .01		R10 *<< R1S		
R7	RC1S	t = -2.289, p < .05		R10 *>> R1S	Not sig.	t = -2.289, p < .05
R8	RC1S	t = -2.557, p < .05		R10 *>> R1S	Par Not sig.	t = -2.557, p < .05
	RC2S	t = -7.876, p < .001		R20 *>> R2S	RC2S t = -7.876, p < .001	
R9	RC2S	t = 4.397, p < .001	RC1S:RC2S t = -4.103, p < .001	R20 *<< R2S	Par t = -4.103, p < .001 RC2S t = 4.397, p < .001	Not sig.
R10	RC2S	t = -3.134, p < .01		R20 *>> R2S	RC2S t = -3.134, p < .01	Not sig.
R11	Almost RC2S	Not sig. t = 1.856, p = 0.0675	RC1S:RC2S t = -5.121, p < .001		Par t = -5.121, p < .001	Not sig.
R12	RC2S	t = -2.836, p < .01	RC1S:RC2S t = -2.361, p < .05	R20 *>> R2S	t = -2.361, p < .05 RC2S t = -2.836, p < .01	Not sig.
R89	RC1S	t = -2.315, p < .05	RC1S:RC2S t = -3.815, p < .001	R10 *>> R1S	t = -3.815, p < .001	t = -2.315, p < .05
	RC2S	t = -2.327, p < .05		R20 *>> R2S	RC2S t = -2.327, p < .05	
R8910	RC1S	t = -2.595, p < .01	RC1S:RC2S t = -4.227, p < .001	R10 *>> R1S	t = -4.227, p < .001	t = -2.595, p < .01
	RC2S	t = -3.180, p < .01		R20 *>> R2S	RC2S t = -3.180, p < .01	

Regions	Rankings	Pairwise significance	Conclusion:
R7	OS, SS	Not sig.	<u>ENG-postnominalRC (V/NP (i.e. RC2))</u>→ 1. Single RC has S advantage. 2. Parallelism is mainly shown on OO. 3. OS, SS, SO have no distinction. 4. There is a latency in main effects, possibly due to retrieval of the head.
	OO *>> SO		
R8	OS *>> SS	S *<< O	
	OO, SO		
R9	OS *>> SS	S *>> O	<u>CHN-prenominalRC (V/NP (i.e. RC2))</u>→ 1. Single RC has O advantage; 2. Parallelism is mainly shown on SS; 3. SO, OS, OO have no distinction. 4. There is no latency in main effects, since there is no retrieval.
	OO *<< SO		
R10	OS *>> SS	S *<< O	
	OO, SO		
R11	OS *>> SS	Almost S *<< O	<u>CHN (V in RC2)</u>→ SS * << OS << OO *<< SO <u>CHN (HEAD)</u> → SS << OO *<< OS << SO
	OO, SO		
R12	OS *>> SS	S *<< O	
	OO, SO		
R89/R8910	SS *<< OO << OS << SO	(4 levels)	
HEAD	SS << OO *<< OS << SO	(4 levels)	

CHN_RC2

