SUPPLEMENTARY MATERIALS

Kuperberg G.R. & Clegg, L.

'It Hurts Less the Second Time Around: Reduced Neurocognitive Costs in processing Neutral Words referring back to Emotional Concepts in Discourse.'

Examples of stimuli

The critical word in the first sentence, indicated with italics, was unpleasant, pleasant or neutral in valence. The NP anaphor at the beginning of the second sentence is indicated with an underline.

Scenarios with adjective critical words in sentence 1
The students gave the professor *terrible/enthusiastic/periodic* evaluations. Their feedback was read by him.
The soccer coach offered his team *unreasonable/constructive/miscellaneous* suggestions. His advice was received by them.
Jeff invited some friends over and prepared a(n) *inedible/delectable/outdoor* meal. His cooking was tasted by them.
The lawyer asked the nurse *painful/helpful/relevant* questions. His inquiries were answered by her.
Charles wrote Sally a *vicious/loving/typical* note. His letter was read by her.
Bill and his girlfriend rented a *boring/amazing/Moroccan* film. The movie was viewed by them.
The seamstress created the bride a *hideous/gorgeous/formal* grown. The dress was examined by her.
The guest speaker told a(n) *offensive/hilarious/introductory* story. His speech was absorbed by everyone.
Juan brought his girlfriend to a *dingy/romantic/downtown* café. The restaurant was appraised by her.
Tristan's fortune teller made several *horrible/exciting/unrelated* predictions. Her prophecy was believed by him.

Scenarios with verb critical words in sentence 1
The poet's words *traumatized/inspired/affected* the schoolgirl. Their impact was remembered by her.
The owner of the coal pit *exploited/protected/employed* the miners. His treatment was reported by them.
After the presentation, the executive director *fired/promoted/acknowledged* her employee. This act was anticipated by him.
The tutor *discouraged/encouraged/instructed* his students. His words were heard by them.
The driver looked at the pedestrians and made a(n) *obscene/courteous/ambiguous* gesture. His signal was seen by them.
The old cowboys *ridiculed/complimented/addressed* the newcomer. Their words were absorbed by him.
Samantha walked in and *punched/hugged/recognized* her cousin. Her greeting was reciprocated by him.
At the party, a clown *scared/enthralled/counted* the toddlers. His act was watched by them.
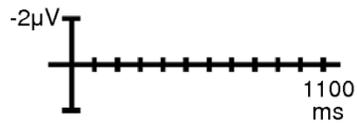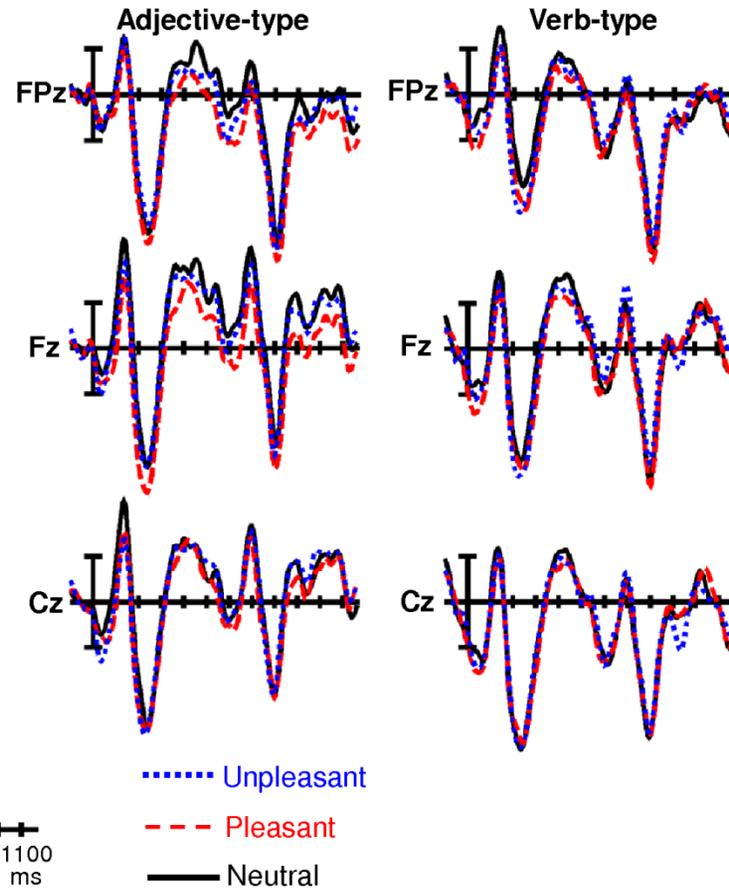The teenager *intimidated/cuddled/texted* his girlfriend. His meaning was intuited by her.
The beauty pageant judges *disqualified/congratulated/introduced* the contestant. Their announcement was anticipated by her.

Supplementary Figure
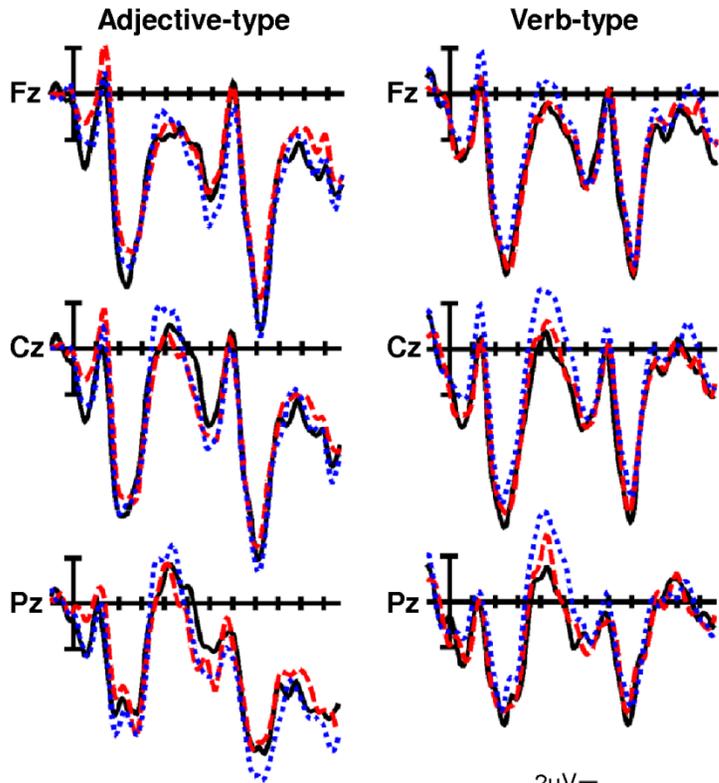
Grand-averaged waveforms examining electrophysiological responses in unpleasant, pleasant and neutral adjective-type and verb-type scenarios separately. ERPs are shown (A) to the critical adjectives and verbs in the first sentence, and (B) to neutral NP anaphors in the second sentence referring back to critical adjectives and verbs in the first sentence.

Supplementary Table

Results of statistical analyses to (1) critical verbs of sentence 1, between 400-450ms (at the peak of the N400); (2) critical adjectives of sentence 1, between 500-600ms; and (3) the neutral NP anaphors of sentence 2 following critical adjectives, between 500-700ms.

Electrode column	Critical Verbs of Sentence 1 400-450ms			Critical Adjectives of Sentence 1 500-600ms			NP Anaphors in sentence 2 following Critical Adjectives, 500-700ms		
	Unpleasant vs Neutral	*Pleasant vs Neutral*	*Unpleasant vs Pleasant*	*Unpleasant vs Neutral*	*Pleasant vs Neutral*	*Unpleasant vs Pleasant*	*Unpleasant vs Neutral*	*Pleasant vs Neutral*	*Unpleasant vs Pleasant*
Midline	E: 14.63*** ExAP: 3.79*	ExAP: 2.66^	E: 5.59*	*NS*	E: 3.53*	*NS*	ExAP: 3.08	ExAP: 5.82**	*NS*
Medial	E: 15.47*** ExAP: 5.12*	ExAP: 2.92^	E: 8.77**	E: 3.9^	ExAP: 6.06*	*NS*	ExAP: 5.96*	ExAP: 13.99*** ExAPxH: 3.17^	*NS*
Lateral	E: 14.36*** ExAP: 5.92*	ExH: 3.02^	E: 8.17**	E: 3.68^ ExH: 3.69^	ExAP: 5.92**	*NS*	ExAP: 7.41**	ExAP: 8.76**	*NS*
Peripheral	E: 6.25* ExAP: 5.76**	*NS*	*NS*	ExH: 5.12*	ExAP: 3.91*	ExH: 3.19^	ExAP: 6.77**	ExAP: 7.23**	ExAPxH: 3.37*

E: Main effect of Emotion. Degrees of Freedom: $(1, 23)$.

E x AP : Emotion by AP Distribution interaction. Degrees of Freedom at midline column: $(4, 92)$; at medial column: $(2, 46)$; at lateral column: $(3, 69)$; at peripheral column: $(4, 92)$.

E x H: Emotion by Hemisphere interaction. Degrees of Freedom: $(1, 23)$.

E x AP x H: Emotion by AP Distribution by Hemisphere interaction. Degrees of Freedom at midline column: $(4, 92)$; at medial column: $(2, 46)$; at lateral column: $(3, 69)$; at peripheral column: $(4, 92)$.

F values are given. ^: $0.05 \leq p < 0.1$; *: $p < 0.05$; **: $p < 0.01$; ***$p < 0.001$; ****$p < 0.0001$