Supplementary Data

Here we provide results of the response-contingent analyses. Note that for these analyses, two L2 Low subjects were excluded due to having an extremely low number of correct responses (<5) in at least one condition. There were five additional L2 Low subjects who were retained in order not to lose too many subjects, though they also had a quite low number of correct responses (<10) in at least one condition.

Below, we provide:

1. Statistical results of the response-contingent analyses. These are presented in the same format as in the paper. That is, first for semantic violations, and then for word-order violations: Figures (1-3 for semantic violations, 4-6 for word-order violations), Tables of top-level results from ANOVAs (Tables 1 and 2 for semantic violations, Tables 3 and 4 for word-order violations), and accompanying text following each Table. In this text, as for the all-trials analyses in the paper, we report all significant ($p \leq .05$) main effects and interactions with the factor Viol from each global ANOVA, as well as any group-specific or distributional Viol effects revealed at the lowest level by significant step-down analyses.
2. A summary of the differences between the results of the all-trials analyses (reported in the paper) and the response-contingent analyses (reported below); see Table 5. We report group and distributional Viol effects revealed at the lowest level by significant step-down analyses, as well the higher-level interactions that led to those effects. Note that we report only differences, not similarities, in the pattern of results.

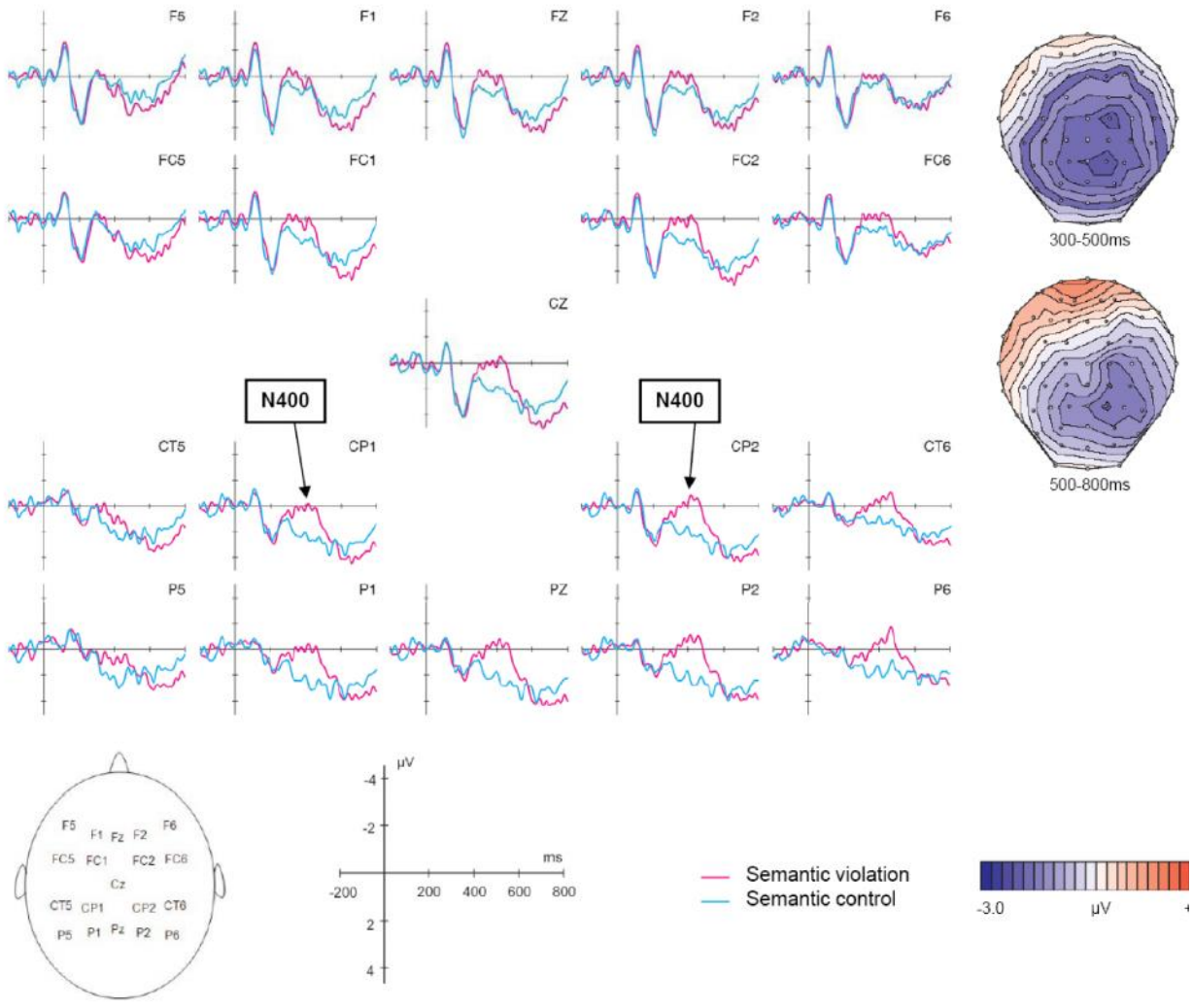

Fig. 1. Semantic violations in L1 (response-contingent analyses). Average ERP waveforms for semantic violations and correct target words, and scalp topographic maps representing difference waves (violation minus control) across the relevant time-windows.

Table 1
Semantic violations: summary of ANOVAs for the L1 Spanish group (response-contingent analyses).

Source	*df*	*F* value	
		300-500ms	500-800ms
ANOVA on lateral electrodes			
V	1,14	11.53**	1.00
V x AP	3,42	12.55**	<1
V x H	1,14	4.87*	8.05*
V x L	1,14	11.74**	<1
V x AP x H	3,42	<1	<1
V x L x AP	3,42	<1	3.18+
V x L x H	1,14	4.65*	3.99+
V x L x AP x H	3,42	<1	1.07
ANOVA on midline electrodes			
V	1,14	12.83**	1.37
V x AP	2,28	5.96*	<1

Note: V = Violation, AP = Anterior/Posterior, H=Hemisphere, L=Laterality.
+$p \leq .10$
*$p \leq .05$
**$p \leq .01$

Semantic violations in L1 Spanish

In the 300-500ms time-window, the lateral ANOVA for the L1 group in the response-contingent analyses revealed a significant main effect of Viol (p=.004), reflecting the N400 in this group, as well as several significant interactions qualifying this main effect (see Figure 1 and Table 1). There were significant Viol x Hemi (p=.027) and Viol x Lat (p<.0001) interactions, which were qualified by a three-way Viol x Lat x Hemi (p=.049) interaction. In addition, there was a significant Viol x AP (p=.001) interaction. The follow-up analyses for the Viol x AP interaction indicated a negativity that was significant in centro-posterior (F(1,14)=23.19, p=.0003) and posterior (F(1,14)=29.60, p<.0001) regions. The Viol x Lat x Hemi interaction pointed to significant negativities in left medial (F(1,14)=9.64, p=.008), right medial (F(1,14)=18.77, p=.0007) and right lateral (F(1,14)=21.84, p=.0004) regions. At the midline, the Viol x AP interaction pointed to a negativity that was significant in central (F(1,14)=10.75, p=.006) and posterior (F(1,14)=28.57, p=.0001) regions. The midline ANOVA (also see Table 1) yielded a significant main effect of Viol (p=.003), as well as a Viol x AP interaction (p=.016) that was due to significant negativities restricted to the central (F(1,14)=10.75, p=.005) and posterior F(1,14)=28.57, p=.0001) midline electrodes. Overall, the negativity in this time-window suggests an N400.

For the 500-800ms time-window, the ANOVA for the L1 lateral electrodes revealed a significant Viol x Hemi interaction (p=.013), however follow-up analyses were not significant. The midline ANOVA yielded no significant main effects or interactions involving the factor Viol.

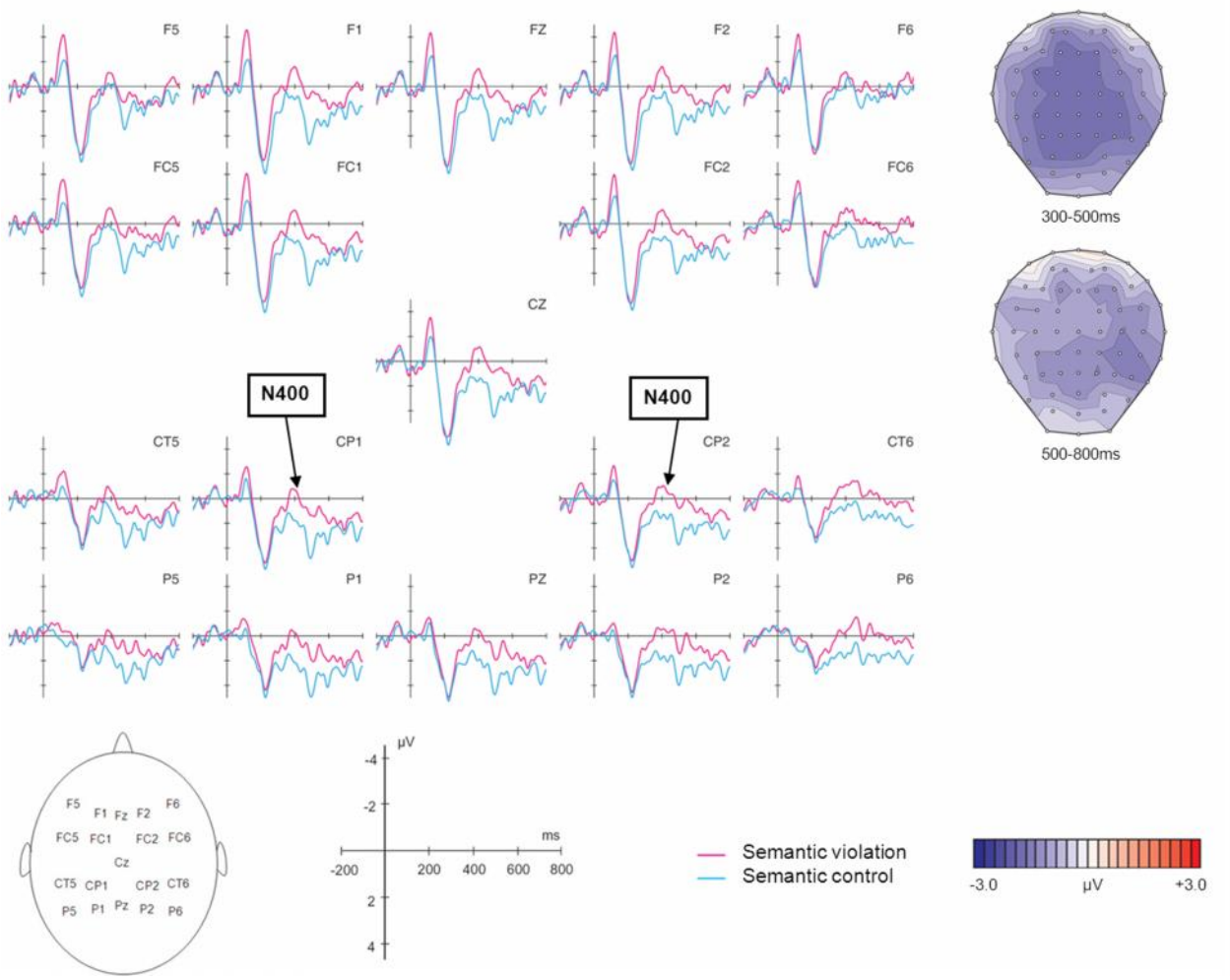

Fig. 2. Semantic violations in L2 Low (response-contingent analyses). Average ERP waveforms for semantic violations and correct target words, and scalp topographic maps representing difference waves (violation minus control) across the relevant time-windows.

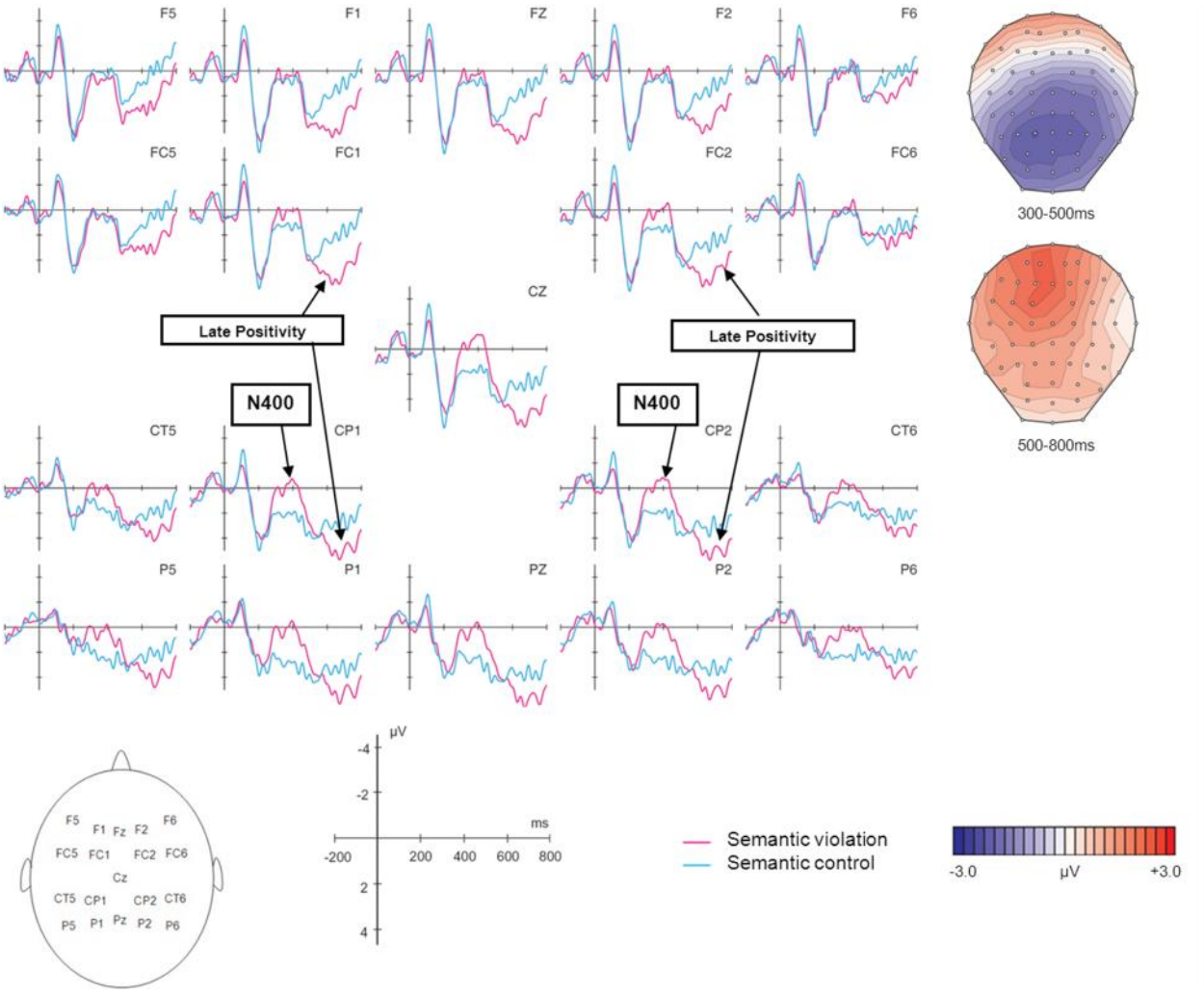

Fig. 3. Semantic violations in L2 Advanced (response-contingent analyses). Average ERP waveforms for semantic violations and correct target words, and scalp topographic maps representing difference waves (violation minus control) across the relevant time-windows.

Table 2
Semantic violations: summary of ANOVAs across L1, L2 Low and L2 advanced (response-contingent analyses).

Source	*df*	*F* value	
		300-500ms	500-800ms
ANOVA on lateral electrodes			
V	1,40	7.06*	1.51
V x G	2,40	<1	2.37
V x AP	3,120	13.75***	<1
V x H	1,40	5.29*	11.07**
V x L	1,40	20.04***	4.20*
V x AP x G	6,120	3.91*	<1
V x H x G	2,40	1.16	2.12
V x L x G	2,40	<1	6.44**
V x AP x H	3,120	<1	<1
V x L x AP	3,120	3.16*	2.03
V x L x H	1,40	3.86+	8.40**
V x AP x H x G	6,120	<1	1.47
V x L x AP x G	6,120	2.00+	3.16**
V x L x H x G	2,40	1.35	1.82
V x L x AP x H	3,120	<1	<1
V x L x AP x H x G	6,120	<1	1.18
ANOVA on midline electrodes			
V	1,40	9.71***	2.59
V x G	2,40	<1	2.71+
V x AP	2,80	5.25*	<1
V x AP x G	4,80	3.66*	<1

Note: V = Violation, AP = Anterior/Posterior, H=Hemisphere, L=Laterality.
+$p \leq .10$
*$p \leq .05$
**$p \leq .01$
***$p \leq .001$

Semantic violations across groups

In the 300-500ms time-window, the global lateral ANOVA across the three subject groups (L1, L2 Low, L2 Advanced; see Figures 1-3 and Table 2) in the response-contingent analyses yielded a significant main effect of Viol (p=.011), reflecting an N400 in all three groups, though this was qualified by several interactions. First, there was a two-way Viol x Hemi interaction across the three groups, (p=.027), which pointed to a significant negativity in the right hemisphere across the three groups (F(1,40)=11.11, p=.002; cf. left hemisphere: F(1,40)=3.89, p=.056). In addition, there was a two-way Viol x Lat interaction (p<.0001), which was in turn qualified by a three-way Viol x Lat x AP interaction (p=.045). Finally, the lateral ANOVA produced a two-way Viol x AP interaction (p=.0002), which was qualified by a three-way Viol x AP x Group interaction (p=.019). Following up on the Viol x Lat x AP interaction, step-down analyses indicated that, consistent with an N400, the

negativity was significant over the three groups in centro-posterior medial and lateral (F(1,40)=13.57, p=.0007 and F(1,40)=9.34, p=.004, respectively), and posterior medial and lateral electrodes (F(1,40)=17.37, p=.0002 and F(1,40)=15.78, p=.0003, respectively), also extending more weakly to centro-anterior medial (F(1,40)=6.10, p=.018) electrodes. Step-down analyses for the Viol x AP x Group interaction revealed a significant Viol x AP interaction for L1 (F(3,42)=12.55, p=.001) and L2 Advanced (F(3,39)=14.16, p=.001), but not L2 Low. In the L1 group, as reported above, the Viol x AP interaction pointed to significant violation effects at centro-posterior and posterior electrodes, while in the L2 Advanced group, follow-up analyses pointed to significant effects only at centro-posterior (F(1,13)=7.38, p=.018) and posterior sites (F(1,13)=14.47, p=.002). Thus, the N400 had more of a centro-posterior to posterior focus in L1 and especially L2 Advanced, whereas it was apparently broader in L2 Low. Note, however, that a different set of step-down analyses from the Viol x AP x Group interaction suggested that the amplitude of the N400s did not differ significantly among the three groups: that is, the Viol x Group interactions were not significant for any of the four AP levels for the lateral electrodes (ps>.409).

The global midline ANOVA also supported the presence of an N400 across all three groups. First, this analysis revealed a main effect of Viol (p=.003). This was qualified by a Viol x AP (p=.019) interaction, which was in turn qualified by a Viol x AP x Group interaction (p=.024). Similar to the lateral electrodes, step-down analyses for this three-way interaction yielded significant Viol x AP interactions only for L1 (F(2,14)=5.96, p=.016) and L2 Advanced (F(2,13)=9.16, p=.004), due to significant effects of Viol only at central and posterior electrodes for these two groups (L1 central: F(1,14)=10.75, p=.006; L1 posterior: F(1,14)=28.57, p=.0001; L2 Advanced central: F(1,13)=5.39, p=.037; L2 Advanced posterior: F(1,13)=6.58, p=.024). However, again as with the lateral electrodes, a different set of step-down analyses yielded no significant Viol x Group interactions at any of the three midline AP levels (ps > .306), suggesting a lack of amplitude differences in the N400 among the three groups.

In the 500-800ms time-window, the global lateral ANOVA yielded five interactions. First, it produced two two-way interactions: Viol x Hemi (p=.002) and a Viol x Lat (p=.047), both of which were qualified by a three-way Viol x Lat x Hemi (p=.006) interaction, for which step-down analyses were again not significant. Second, it yielded a Viol x Lat x Group (p=.004) interaction, which was qualified by a four-way Viol x Lat x AP x Group (p=.019) interaction. Step-down analyses for this interaction revealed a significant positivity at centro-anterior medial electrodes in the L2 Advanced group only (F(1,13)= 7.83, p=.015).

In sum, semantic violations elicited a classic N400 in all three groups (L1, L2 Low, L2 Advanced), which did not differ between the groups in amplitude, though the focus was more centro-posterior to posterior in the L1 and L2 Advanced groups as compared to the L2 Low group. Additionally, a later centro-anterior medial (possibly P600-like) positivity was found in the L2 Advanced group.

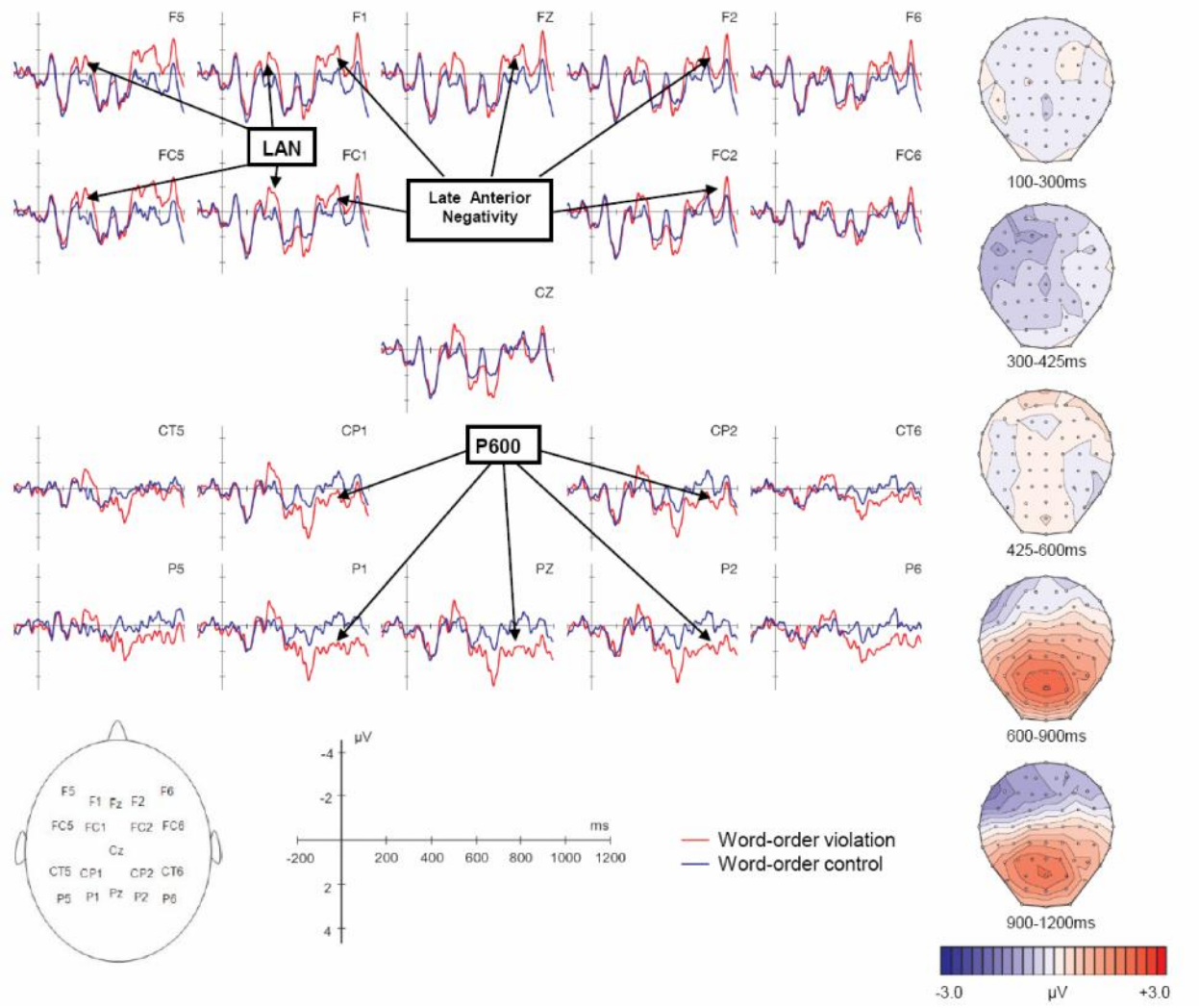

Fig. 4. Word-order violations in L1 (response-contingent analyses). Average ERP waveforms for word-order violations and correct target words, and scalp topographic maps representing difference waves (violation minus control) across the relevant time-windows.

Table 3
Word-order violations: summary of ANOVAs for the L1 Spanish group (response-contingent analyses).

Source	*df*	*F* value				
		100-300ms	300-425ms	425-600ms	600-900ms	900-1200ms
ANOVA on lateral electrodes						
V	1,14	<1	6.02*	<1	1.09	<1
V x AP	3,42	<1	2.07	<1	17.95***	43.37***
V x H	1,14	3.66^{+}	12.21**	1.01	2.51	3.57^{+}
V x L	1,14	<1	<1	1.43	4.17^{+}	1.82
V x AP x H	3,42	1.76	2.11	2.49	1.52	5.35*
V x L x AP	3,42	<1	1.43	2.39	1.99	2.74^{+}
V x L x H	1,14	<1	4.32^{+}	<1	4.67*	7.04*
V x L x AP x H	3,42	<1	<1	<1	<1	<1
ANOVA on midline electrodes						
V	1,14	1.04	6.45*	<1	1.29	<1
V x AP	2,28	<1	1.56	<1	18.95***	31.98***

Note: V = Violation, AP = Anterior/Posterior, H=Hemisphere, L=Laterality.
$^{+}p \leq .10$
$^{*}p \leq .05$
$^{**}p \leq .01$
$^{***}p \leq .001$

Word-order violations in L1 Spanish

In the 100-300ms time-window, the lateral and midline ANOVAs for the L1 Spanish group in response-contingent analyses yielded no significant main effects or interactions involving the factor Viol. See Figure 2 and Table 3.

In the 300-425ms time-window, the lateral ANOVA yielded a significant main effect of Viol (p=.028), and a significant Viol x Hemi interaction (p=.004). This two-way interaction was due to significant negativities in the left hemisphere $F(1,14)=9.12$, p=.009, suggesting a LAN. At the midline, the ANOVA produced a significant main effect of Viol (p=.024), again due to the negativity in the L1 group.

In the 425-600ms time-window, there were no significant main effects or interactions involving Viol in either the lateral or midline ANOVAs.

In the 600-900ms time-window, there were two significant interactions: a Viol x Lat x Hemi interaction (p=.049) and a Viol x AP interaction (p=.0005). The first of these did not lead to significant follow-ups. Step-down ANOVAs from the Viol x AP interaction pointed to significant positivities in centro-posterior and posterior electrodes ($F(1,14)=5.32$, p=.037 and $F(1,14)=12.50$, p=.003, respectively), consistent with a P600. The midline ANOVA also yielded a Viol x AP interaction (p<.0001), due to a positivity at the posterior electrode ($F(1,14)=14.28$, p=.002), again consistent with a P600.

In the 900-1200ms time-window, the lateral ANOVA produced a significant two-way Viol x AP interaction (p<.0001), which was qualified by a three-way Viol x AP x Hemi interaction (p=.019). In addition, it produced a Viol x Lat x Hemi interaction (p=.019). While the Viol x Lat x Hemi interaction did not yield significant follow-ups, the Viol x AP x Hemi interaction suggested a late

anterior negativity and a (continuing) posterior positivity: the negativity was significant at left anterior (F(1,14)= 15.71, p=. 001), right anterior (F(1,14)=6.55, p=.023) and left centro-anterior (F(1,14)=9.78, p=.007) sites, while the positivity was significant at right centro-posterior (F(1,14)=6.28, p=.025), left posterior (F(1,14)=13.24, p=.003) and right posterior (F(1,14)=15.35, p=.002) sites. Similarly, at the midline a Viol x AP interaction (p<.0001) pointed to a negativity restricted to the anterior electrode (F(1,14)=9.44, p=.008) and a positivity limited to the posterior electrode (F(1,14)=10.68, p=.006). Overall, these results suggest a late anterior negativity and a continuing P600 in the L1 group in the 900-1200ms time-window.

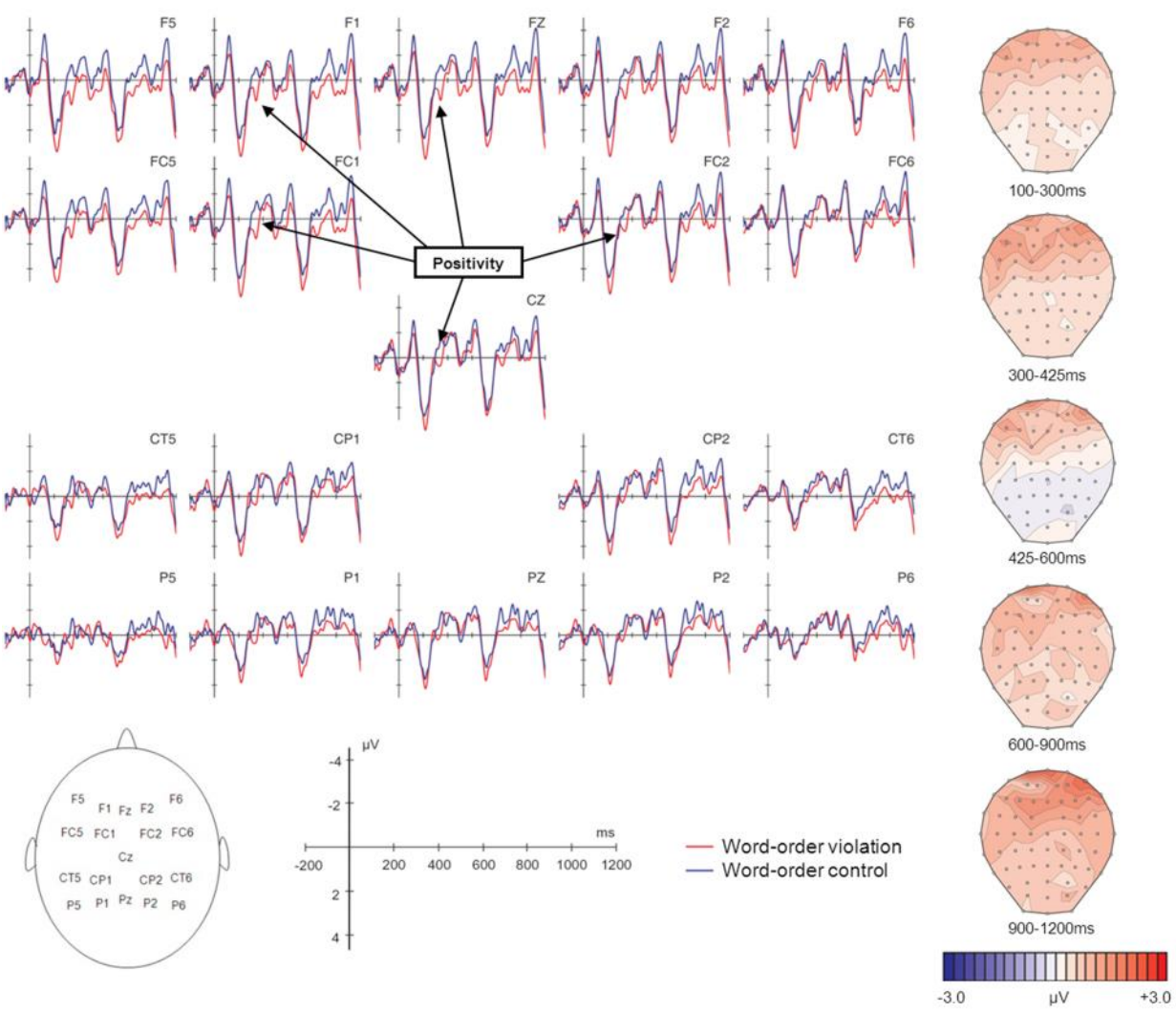

Fig. 5. Word-order violations in L2 Low (response-contingent analyses). Average ERP waveforms for word-order violations and correct target words, and scalp topographic maps representing difference waves (violation minus control) across the relevant time-windows.

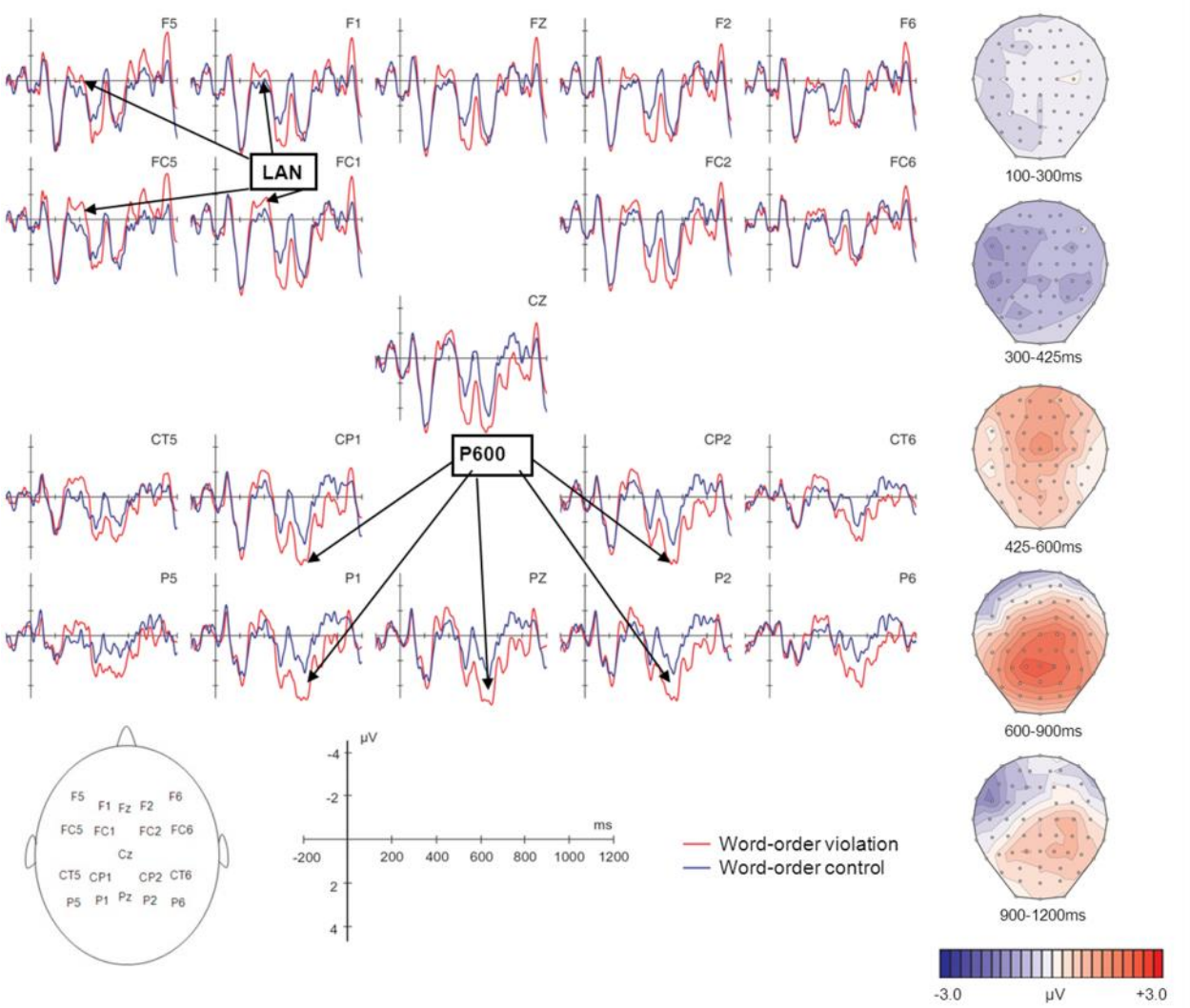

Fig. 6. Word-order violations in L2 Advanced (response-contingent analyses). Average ERP waveforms for word-order violations and correct target words, and scalp topographic maps representing difference waves (violation minus control) across the relevant time-windows.

Table 4
Word-order violations: summary of ANOVAs across L1, L2 Low and L2 Advanced (response-contingent analyses).

Source	*df*	*F* value				
		100-300ms	300-425ms	425-600ms	600-900ms	900-1200ms
ANOVA on lateral electrodes						
V	1,40	<1	<1	1.74	3.70^{+}	1.68
V x G	2,40	1.54	4.16*	<1	<1	1.45
V x AP	3,120	<1	<1	1.55	14.24***	20.12***
V x H	1,40	1.99	5.49*	<1	3.06^{+}	12.06**
V x L	1,40	<1	<1	6.26*	12.33**	5.83*
V x AP x G	6,120	<1	<1	<1	3.73*	5.68**
V x H x G	2,40	<1	<1	<1	<1	<1
V x L x G	2,40	<1	<1	3.25*	1.70	<1
V x AP x H	3,120	<1	1.17	<1	<1	1.76
V x L x AP	3,120	<1	1.44	2.81^{+}	<1	<1
V x L x H	1,40	<1	3.39^{+}	<1	<1	1.95
V x AP x H x G	6,120	1.42	2.02^{+}	1.67	2.53^{+}	1.13
V x L x AP x G	6,120	<1	<1	<1	<1	1.68
V x L x H x G	2,40	<1	<1	<1	1.16	<1
V x L x AP x H	3,120	1.14	1.17	1.39	<1	<1
V x L x AP x H x G	6,120	<1	<1	1.09	<1	<1
ANOVA on midline electrodes						
V	1,40	<1	<1	2.53	4.49*	1.89
V x G	2,40	1.77	4.29*	<1	<1	1.40
V x AP	2,80	<1	<1	<1	15.28***	13.98***
V x AP x G	4,80	<1	<1	1.55	2.86*	5.31**

Note: V = Violation, AP = Anterior/Posterior, H=Hemisphere, L=Laterality.
$^{+}p \leq .10$
$^{*}p \leq .05$
$^{**}p \leq .01$
$^{***}p \leq .001$

Word-order violations across groups

In the 100-300ms time-window, neither the lateral nor the midline global ANOVA in the response-contingent analyses yielded significant effects involving the factor Viol. See Figures 4-6 and Table 4.

In the 300-425ms time-window, the global lateral ANOVA elicited two two-way interactions: Viol x Hemi (p=.024) and Viol x Group (p=.023). While follow-up analyses for the former were not significant, follow-up analyses for the Viol x Group interaction showed main effects of Viol, which reflected negativities in the L1 and L2 Advanced groups only. At the midline, a Viol x Group interaction (p=.020) pointed to a significant main effect of Viol within only L1 and L2

Advanced groups, again reflecting the negativity present in those groups (L1: $F(1,14)=6.02$, $p=.028$; L2 Advanced: $F(1,13)=12.37$, $p=.004$).

Given the similar negativities in both L1 and L2 Advanced in the 300-425ms time-window, we performed global ANOVAs with only these two groups (see Methods). Neither the lateral nor the midline global ANOVA revealed any significant interactions involving both Viol and Group, indicating that the two groups did not differ in this time-window. Instead, there was a main effect of Viol over the two groups in both the lateral and midline ANOVAs (lateral: $F(1,27)= 18.15$, $p=.0002$; midline: $F(1,27)=14.53$, $p=.0007$), which was qualified (only for the lateral ANOVA) by three interactions: a Viol x Hemi interaction ($F(1,27)=15.21$, $p=.0006$), which was in turn qualified by both a Viol x AP x Hemi interaction ($F(3,81)=4.73$, $p=.011$) and a Viol x Lat x Hemi interaction ($F(1,27)=7.49$, $p=.011$). Step-down analyses for the Viol x Lat x Hemi interaction revealed a shared negativity that was significant at left medial ($F(1,27)=16.65$, $p=.0004$) and left lateral ($F(1,27)=23.63$, $p<.0001$) regions, as well as right medial ($F(1,27)=12.21$, $p=.0017$) and right lateral ($F(1,27)=11.38$, $p=.002$) sites. The Viol x AP x Hemi interaction indicated that the negativity was significant primarily in left anterior ($F(1,27)=26.41$, $p<.0001$) and left centro-anterior ($F(1,27)=36.23$, $p<.0001$) regions, extending more weakly (reflecting the interaction with Hemi) to right anterior ($F(1,27)=8.43$, $p=.008$) and right-centro-anterior ($F(1,27)=11.55$, $p=.002$) sites. Overall, these findings indicate a LAN in both the L1 and L2 Advanced groups, which moreover did not differ between them.

In the 425-600ms time-window, the global lateral ANOVA produced two significant interactions. It elicited a Viol x Lat interaction ($p=.016$), which was qualified by a three-way Viol x Lat x Group interaction ($p=.049$), for which step-down analyses yielded non-significant results.

In the 600-900ms time-window, the global lateral ANOVA yielded three significant interactions. There were two two-way interactions: Viol x Lat ($p=.0008$) and Viol x AP ($p=.0002$), the second of which was qualified by a three-way interaction: Viol x AP x Group ($p=.023$). The Viol x Lat interaction pointed to a shared medial positivity across the three groups ($F(1,40)=4.52$, $p=.040$). Step-down analyses for the Viol x AP x Group interaction pointed to positivities in centro-posterior and posterior regions in L1 ($F(1,14)=5.32$, $p=.037$ and $F(1,14)=12.50$, $p=.003$, respectively) and in L2 Advanced ($F(1,13)=10.27$, $p=.007$ and $F(1,13)=16.90$, $p=.001$, respectively). At the midline electrodes, there was a similar pattern of results: the global ANOVA yielded a main effect of Viol ($p=.040$), reflecting the positivity, as well as a Viol x AP interaction ($p<.0001$) Step-down analyses for this interaction revealed a central ($F(1,40)=4.51$, $p=.040$) to posterior ($F(1,40)=7.74$, $p=.008$) positivity across the three groups. This pattern of results suggests that though a positivity was shared in medial centro-posterior to posterior regions across the three groups, the positivity had a centro-posterior to posterior focus (reflected in the interactions with the AP factor in the lateral electrodes) only in the L1 and L2 Advanced groups. Thus, only these groups appeared to show a classic P600, consistent with visual inspection of Figures 4-6, while the L2 Low group showed a broad positivity only.

Given evidence of a similar positivity in L1 and L2 Advanced, we also performed global ANOVAs with only these two groups. Neither the lateral nor midline global ANOVAs yielded any significant effects involving the factors Viol and Group, indicating that the observed positivities were statistically indistinguishable between the L1 and L2 Advanced groups. Instead, the lateral ANOVA revealed a main effect of Viol ($F(1,27)=5.13$, $p=.032$), reflecting the positivity, as well three two-way interactions (Viol x Lat: $F(1,27)=19.53$, $p=.0001$, Viol x Hemi: $F(1,27)=8.11$, $p=.008$, and Viol x AP: $F(1,27)=24.25$, $p<.0001$) which were qualified by three higher-order interactions: Viol x Lat x Hemi ($F(1,27)=6.14$, $p=.020$), Viol x Lat x AP ($F(3,81)=3.93$, $p=.019$), and Viol x AP x Hemi ($F(3,81)=4.81$, $p=.016$). Step-down analyses for the Viol x Lat x Hemi interaction revealed significant positivities across the two groups in left medial ($F(1,27= 6.26$, $p=.019$), right medial

(F(1,27)=8.16, p=.008) and right lateral (F(1,27)=6.35, p=.018) regions. Step-down analyses for the Viol x Lat x AP interaction revealed a shared centro-posterior to posterior positivity significant at both medial and lateral sites (centro-posterior medial: F(1,27)=18.09, p=.0002; centro-posterior lateral: F(1,27)=11.86, p=.002; posterior medial: F(1,27)=32.88, p<.0001; posterior lateral: F(1,27)=24.55, p<.0001), though (reflecting the interaction with both Lat and AP) it was stronger at medial and posterior electrodes, consistent with a P600. Follow-up analyses for the Viol x AP x Hemi interaction signaled a significant positivity at centro-posterior and especially posterior electrodes in both the left and right hemispheres (left centro-posterior: F(1,27)= 12.15, p=.002; left posterior: F(1,27)=24.84, p<.0001; right centro-posterior: F(1,27)=18.56, p<.0001; right posterior: F(1,27)=32.59, p<.0001). Similarly, the global midline ANOVA including only the L1 and L2 Advanced groups produced a main effect of Viol (F(1,27)=6.86, p=.014) and one interaction: Viol x AP (F(2,54)=27.41, p<.0001). Step-down analyses from this interaction revealed a shared positivity at the central *(*F(1,27)=4.65, p=.040) and posterior (F(1,27)=31.05, p<.0001) electrodes, which was again more robust at the posterior electrode, reflecting the P600.

In the 900-1200ms time-window, the global lateral ANOVA yielded three significant two-way interactions: Viol x Hemi: p=.001; Viol x Lat: p=.020; and Viol x AP: p<.0001). The first two interactions yielded no significant follow-up analyses. The third (Viol x AP) was qualified by a three-way interaction: Viol x AP x Group (p=.003). Step-down analyses from the Viol x AP x Group interaction revealed, for the L1 group only, an anterior (F(1,14)=10.99, p=.005) to centro-anterior (F(1,14)=5.00, p=.042) negativity, as well as a centro-posterior (F(1,14)=4.79, p=.046) to posterior (F(1,14)=15.44, p=.002) positivity. The global midline ANOVA yielded a Viol x AP interaction (p=.0001), which was qualified by a Viol x AP x Group interaction (p=.004). Step-down analyses for this interaction revealed a significant anterior negativity and posterior positivity in L1 only (as reported above for the L1 group alone), consistent with a late anterior negativity and a continued P600 in this group.

In sum, word-order violations elicited a LAN effect, in the 300-425ms time-window in both the L1 and L2 Advanced groups, which moreover did not differ statistically between the groups, whereas the L2 Low group evidenced only a left anterior to centro-anterior *positivity*. In the 600-900ms time-window, word-order violations elicited a classic P600 for both the L1 and L2 Advanced groups, again with no statistical differences between these groups, as well as a shared centro-posterior to posterior positivity with the L2 Low group, though the positivity in this group on its own was broadly distributed rather than being limited to particular sites. In the 900-1200ms time-window, the P600 continued for the L1 group, who also showed a late anterior negativity.

Table 5
Summary of differences between all-trials analyses and response-contingent analyses.

ANOVA	Differences between all-trials analyses and response-contingent analyses
L1 Semantic 300-500ms	The Viol x AP interaction, which pointed to centro-anterior, centro-posterior, and posterior negativities in the all-trials analyses, revealed significant negativities only in centro-posterior and posterior regions in the response-contingent analyses. Thus, the N400 effect had a slightly more posterior-focused distribution in the response-contingent analyses for the L1 group.
L1 Semantic 500-800ms	No differences (between the all-trials and the response-contingent analyses)

Global Semantic 300-500ms	The Viol x Lat x Hemi interaction which pointed to left lateral, right lateral, left medial and right medial negativities across the three groups (L1, L2 Low, L2 Advanced) in the all-trials analyses was not significant in the response-contingent analyses. Instead, in the response-contingent analyses, (1) a Viol x Hemi interaction pointed to a right hemisphere negativity that was shared across the three groups, and (2) a Viol x Lat x AP interaction pointed to a negativity in centro-posterior medial and lateral, posterior medial and lateral, and (more weakly, but significant) centro-anterior medial regions, that was shared across the three groups. Thus, in the response-contingent analyses, there was a greater right-hemisphere and centro-posterior to posterior distribution to the N400 across the three groups.
Global Semantic 500-800ms	The Viol x Lat x Group interaction which pointed to a medial positivity in the L2 Advanced group in the all-trials analyses was not significant in the response-contingent analyses. Instead, there was a Viol x Lat x AP x Group interaction that pointed to a centro-anterior medial positivity in the L2 Advanced group. Thus, the late positivity in the L2 Advanced group had a somewhat more anterior distribution in the response-contingent analyses.
L1 Word-order 100-300ms	No differences
L1 Word-order 300-425ms	The Viol x Lat x Hemi interaction that pointed to a negativity in left medial and left lateral regions in the all-trials analyses was not significant in the response-contingent analyses. However, the Viol x Hemi interaction pointed to a left hemisphere negativity in the response-contingent analyses. Thus, this left-lateralized LAN effect was pointed to via a slightly different path in the response-contingent analyses.
L1 Word-order 425-600ms	No differences
L1 Word-order 600-900ms	No differences
L1 Word-order 900-1200ms	No differences
Global Word-order 100-300ms	No differences
Global Word-order 300-425ms	The Viol x AP x Hemi x Group interaction that pointed to several effects in the all-trials analyses (namely, a left anterior and left centro-anterior negativity in L1; a left anterior and left centro-anterior positivity in L2 low; and a left anterior, left and right centro-anterior, and left centro-posterior negativity in L2 Advanced) was not significant in the response-contingent analyses. Instead, a Viol x Group interaction pointed to negativities in both L1 and L2 Advanced. Thus, as in the all-trials analyses, the existence of shared negativities in this time-window for the L1 and L2 Advanced groups motivated the additional analysis of the negativity across those two groups alone (see immediately below), which revealed the same effects as in the all-trials analyses.

L1 and L2 Advanced Word-order 300-425ms	No differences. (Thus all effects pointing to a LAN effect in the all-trials analyses were also present in the response-contingent analyses.)
Global Word-order 425-600ms	The Viol x Lat x AP interaction in the all-trials analyses that pointed to a shared centro-anterior medial positivity across the three groups was not significant in the response-contingent analyses. Thus in the response contingent analyses there was no evidence of a shared positivity across the three groups in this time-window.
Global Word-order 600-900ms	The three unqualified higher-level interactions at lateral electrodes and the one at midline electrodes that pointed to positivities in the all-trials analyses were not significant in the response-contingent analyses (these were: Viol x Lat x AP, which pointed to a centro-posterior medial and lateral and posterior medial and lateral positivity across groups; Viol x Lat x Group, which pointed to a medial positivity in the L2 Advanced group; Viol x AP x Hemi x Group, which pointed to positivities in L1 and L2 Advanced groups in left and right centro-posterior and left and right posterior regions; at the midline, the Viol x AP x Group interaction, which pointed to a posterior positivity in L1 and a central and posterior positivity in L2 Advanced). However, in the response-contingent analyses, two lower-level interactions for lateral electrodes and one at midline electrodes pointed to the same positivities: Viol x Lat, which pointed to a medial positivity across the three groups; Viol x AP x Group, which pointed to centro-posterior and posterior positivities in both L1 and L2 Advanced groups; and, at the midline, Viol x AP, which pointed to a shared central and posterior positivity across the three groups. Thus, the same basic pattern of positivities was revealed (namely, centro-posterior to posterior positivities in L1 and L2 Advanced, and a shared broader positivity across the three groups), though pointed to by slightly different interactions. The shared positivities in L1 and L2 Advanced motivated the additional analysis across these two groups (see immediately below), which revealed the same effects as in the all-trials analyses (i.e., no differences).
L1 and L2 Advanced Word-order 600-900ms	No differences
Global Word-order 900-1200ms	The Viol x AP x Hemi interaction, which pointed to a shared right centro-posterior and right posterior positivity across groups in the all-trials analyses, was not significant in the response-contingent analyses. Thus, there was no evidence of a shared positivity across groups in this time window.