Appendix A: Outputs from statistical models reported in *Results* section.

Table 1: *Core effects of number length (as a scaled continuous variable) on speech onset latencies of single-phrase utterances.*

	Speech onset latency to:							
	French (L1) trials				**English (L2) trials**			
Fixed Effects	*b*	*SE*	*t*	*p*	*b*	*SE*	*t*	*p*
Intercept	635.520	24.980	25.44	***< 0.0001***	642.880	24.190	26.57	***< 0.0001***
Number length	62.980	12.520	5.03	***< 0.0001***	59.060	12.070	4.9	***< 0.0001***
Random Effects	Variance				Variance			
	Intercept		Slope[1]		Intercept		Slope[1]	
Participants	9 426.0		1 280.0		8 195.2		1 187.5	
Items	2 656.0		-		949.3		-	
Residual	18 259.0				29 828.0			

[1.] Random Slope adjustments were done on Number length across participants.

Table 2: *Effect of current L2 exposure level and number length (as scaled continuous variables) on speech onset latencies of single-phrase utterances.*

	Speech onset latency to:							
	French (L1) trials				**English (L2) trials**			
Fixed Effects	*b*	*SE*	*t*	*p*	*b*	*SE*	*t*	*p*
Intercept	642.683	25.616	25.09	***< 0.0001***	651.067	23.115	28.17	***< 0.0001***
Number length	64.053	9.142	7.01	***< 0.0001***	60.978	8.882	6.87	***< 0.0001***
Current L2 exposure	22.445	24.481	0.92	0.375	32.360	22.253	1.45	0.170
Number length x Current L2 exposure	13.716	3.925	3.50	***< 0.0005***	17.290	6.557	2.64	***0.009***
Random Effects	Variance				Variance			
	Intercept		Slope		Intercept		Slope	
Participants	9 349.0		-		6 798.5		-	
Items	2 651.0		-		982.6		-	
Residual	20 191.0				32 638.5			

Table 3: *Core effects of phrase length (as a scaled continuous variable) on speech onset latencies of multi-phrase utterances.*

	Speech onset latency to:							
	French (L1) trials				**English (L2) trials**			
Fixed Effects	*b*	*SE*	*t*	*p*	*b*	*SE*	*t*	*p*
Intercept	618.098	27.022	22.87	***< 0.0001***	722.372	34.780	20.77	***< 0.0001***
Length of first phrase	-16.970	5.352	-3.17	***0.005***	-4.945	9.858	-0.50	0.623
Length of second phrase	3.542	3.955	0.89	0.372	-3.090	10.631	-0.29	0.775
Length of first phrase x Length of second phrase	0.912	3.961	0.23	0.818	-11.494	9.694	-1.19	0.254
Random Effects	Variance				Variance			
	Intercept		Slope[1]		Intercept		Slope[2]	
Participants	12 146.6		220.5		18 663.1		> 804.5	
Items	490.4		-		0		-	
Residual	16 180.1				29 109.8			

[1.] Random Slope adjustments were done on Length of first phrase across participants.

[2.] Random Slope adjustments were done on the Length of the first and second phrases across participants, as well as the interaction between both phrase length.

Table 4: *Effect of current L2 exposure level and phrase length (as scaled continuous variables) on speech onset latencies of multi-phrase utterances*.

	Speech onset latency to:							
	French (L1) trials				**English (L2) trials**			
Fixed Effects	*b*	*SE*	*t*	*p*	*b*	*SE*	*t*	*p*
Intercept	626.210	28.018	22.35	***< 0.0001***	729.987	32.115	22.73	***< 0.0001***
Length of first phrase	-17.142	4.133	-4.15	***< 0.0001***	-2.214	7.193	-0.31	0.758
Length of second phrase	3.759	4.130	0.91	0.364	-3.596	7.189	-0.50	0.617
Current L2 exposure	17.904	27.963	0.64	0.532	69.699	32.006	2.18	***0.049***
Length of first phrase x Length of second phrase	1.637	4.136	0.40	0.693	-12.304	7.226	-1.70	0.089
Length of first phrase x Current L2 exposure	-2.662	3.742	-0.71	0.477	-7.796	7.258	-1.07	0.283
Length of second phrase x Current L2 exposure	-3.550	3.731	-0.95	0.342	-16.745	7.197	-2.33	***0.020***
Length of first phrase x length of second phrase x Current L2 exposure	-3.578	3.719	-0.96	0.336	-10.965	7.264	-1.51	0.132
Random Effects	Variance				Variance			
	Intercept		Slope		Intercept		Slope	
Participants	12 284.8		-		14 700.0		-	
Items	460.3		-		0.0		-	
Residual	17 298.0				32 540.0			

Appendix B: Follow-up analyses investigating the role of historical consistency of L2 exposure

Table 1: *Self-reported and objective measures of language preference and proficiency of participants as a function of historical consistency of L2 exposure.*

	Historically consistent group				*Recent L2 increase group*			
	M	*SD*	*Min*	*Max*	*M*	*SD*	*Min*	*Max*
Preference to speak L1 (% time choose to speak L1 over L2) *	66	27	25	100	74	24	40	100
Relative word retrieval efficiency (1-5) **	2.2	1.4	1	5	1.7	0.5	1	2
Current French (L1) exposure (% time spent)	61	17.3	35	90	49	16.8	30	70
Current English (L2) exposure (% time spent)	37	17	10	65	49	16.9	30	70
Self-reported L2 proficiency ratings (1-7) ***								
Speaking	5.3	1	4	7	5.7	0.8	5	7
Fluency	4.7	1.5	2	7	5.6	1.1	4	7
Overall	5.5	1	4	7	5.6	0.8	5	7
Semantic judgement task								
French								
Accuracy (proportion correct)	0.94	0.03	0.90	0.98	0.96	0.02	0.93	0.98
RT (ms)	598	76	519	753	712	138	629	1 012
English								
Accuracy (proportion correct)	0.95	0.02	0.91	0.97	0.95	0.04	0.89	1
RT (ms)	578	59	500	665	706	180	543	1 080
English / French ratio								
Accuracy	1	0.03	0.95	1	1	0.03	0.96	1
RT	0.97	0.07	0.85	1.1	0.99	0.14	0.82	1.1

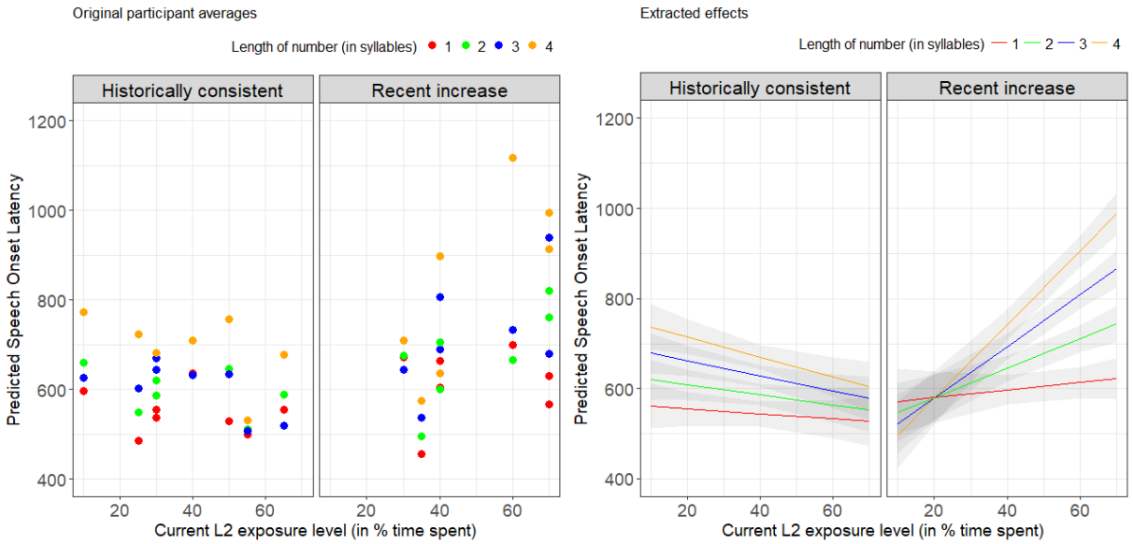
* "*When choosing a language to speak with a person who is equally fluent in all your languages, what percentage of time would you choose to speak French?*"
** "*How easy is it for you to find the words you want to use, when speaking normally, in French compared to English.* (Scale of 1 to 5, where 1 = easier in French, and 5 = easier in English)"
*** "*Please rate your linguistic ability in English according to a 1 to 7 scale, where 1 = limited, and 7 = native-like*."

Table 2: *Independent sample t-tests comparing "historically consistent" group to "recent L2 increase" group on self-reported and objective measures of language dominance and L2 proficiency.*

	t
Current English (L2) exposure (% time spent)	-1.41
Preference to speak L1	-0.66
Relative word retrieval efficiency	1.02
Self-reported L2 proficiency	
Speaking	-0.9
Fluency	-1.37
Overall	-0.17
Semantic judgement task ratio	
Accuracy	0.36
RT	-0.31

*$p < .05$, **$p < .01$

Figure 1: *Scatter plot of mean speech onset latency (per participant) as a function of current L2 exposure for each isolated number length of English (L2) single-phrase utterances (left panel) and partial effects plot from individual differences model including historical consistency of L2 exposure (as a two-level deviation-coded categorical variable: "recent L2 increase" vs "historically consistent"; right panel)*



* This figure suggests that the effect of current L2 exposure on speech onset latency found in the recent L2 increase subgroup are consistent across participants and not caused by outliers or very influential data points.

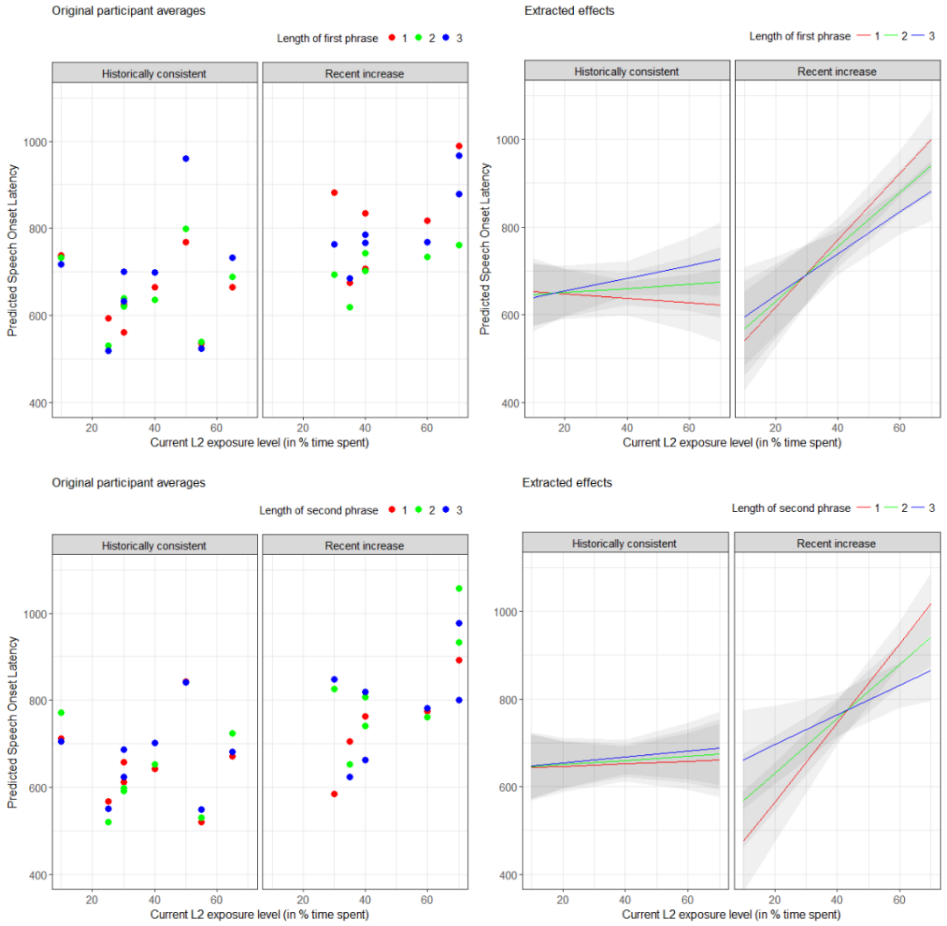
Table 3: *Effects of current L2 exposure level, number length (as scaled continuous variables) and historical consistency of L2 exposure levels (as a two-level deviation-coded categorical variable: "recent L2 increase" vs "historically consistent") on speech onset latencies of single-phrase utterances.*

	Speech onset latency to:							
	French (L1) trials				**English (L2) trials**			
Fixed Effects	*b*	*SE*	*t*	*p*	*b*	*SE*	*t*	*p*
Intercept	633.617	28.626	22.13	***< 0.0001***	638.211	18.030	35.40	***< 0.0001***
Number length	66.952	9.301	7.20	***< 0.0001***	52.556	9.122	5.76	***< 0.0001***
Current L2 exposure	25.596	27.572	0.93	0.372	25.044	16.979	1.48	*0.168*
Historical consistency in L2 exposure	-0.801	55.244	-0.01	0.989	78.098	33.878	2.31	***0.042***
Number length x Current L2 exposure	8.642	4.262	2.03	***0.043***	17.776	6.910	2.57	***0.010***
Number length x Historical consistency in L2 exposure	26.106	8.539	3.06	***0.002***	16.417	13.710	1.20	*0.232*
Current L2 exposure x Historical consistency in L2 exposure	50.762	55.143	0.92	0.375	96.140	33.954	2.83	***0.016***
Number length x Current L2 exposure x Historical consistency in L2 exposure	-5.919	8.520	-0.70	0.487	56.369	13.819	4.08	***< 0.0001***
Random Effects	Variance				Variance			
	Intercept		Slope		Intercept		Slope	
Participants	10 182.0		-		3 173.1		-	
Items	2 655.0		-		980.3		-	
Residual	20 072.0				31 899.4			

Table 4: *Effects of current L2 exposure level and number length (isolated numbers; as scaled continuous variables) on speech onset latencies of single-phrase English (L2) utterances; analysis performed separately for participants with "recent increase" in L2 exposure and "historically consistent" L2 exposure levels.*

	Speech onset latency to: **English (L2) trials**							
	Historically consistent L2 exposure levels				Recent increase in L2 exposure			
Fixed Effects	*b*	*SE*	*t*	*p*	*b*	*SE*	*t*	*p*
Intercept	606.740	16.315	37.19	***< 0.0001***	702.020	31.040	22.62	***< 0.0001***
Number length	46.795	9.797	4.78	***< 0.001***	77.610	13.540	5.73	***< 0.0001***
Current L2 exposure	-22.385	15.043	-1.49	0.188	65.900	29.720	2.22	0.077
Number length x Current L2 exposure	-9.976	7.652	-1.30	0.193	42.320	10.730	3.94	***< 0.0001***
Random Effects	Variance				Variance			
	Intercept		Slope		Intercept		Slope	
Participants	1 348.0		-		5 440.0		-	
Items	1 016.0		-		1 791.0		-	
Residual	24 359.0				40 123.0			

Figure 2: *Scatter plots of mean speech onset latency (per participant) as a function of current L2 exposure and phrase length of English-L2 multi-phrase utterances (left panels), and partial effects plots from individual differences models including historical consistency of L2 exposure (as a two-level deviation-coded categorical variable: "recent L2 increase" vs "historically consistent"; right panels)*



* These figures suggest that the effect of current L2 exposure on speech onset latency found in the recent L2 increase subgroup are consistent across participants and not caused by outliers or very influential data points.

Table 5: *Effects of current L2 exposure level, phrase length (as scaled continuous variables) and historical consistency in L2 exposure levels (as a two-level deviation-coded categorical variable: "recent L2 increase" vs "historically consistent") on speech onset latencies of multi-phrase utterances.*

	Speech onset latency to:							
	French (L1) trials				**English (L2) trials**			
Fixed Effects	*b*	*SE*	*t*	*p*	*b*	*SE*	*t*	*p*
Intercept	627.404	32.639	19.22	***< 0.0001***	718.495	28.529	25.19	***< 0.0001***
Length of first phrase	-20.923	4.366	-4.79	***< 0.0001***	2.396	7.581	0.32	0.752
Length of second phrase	4.030	4.379	0.92	0.359	3.175	7.586	0.42	0.676
Current L2 exposure	14.910	32.576	0.46	0.655	57.241	28.570	2.00	0.070
Historical consistency in L2 exposure	16.729	65.197	0.26	0.802	114.468	57.058	2.01	0.070
Length of first phrase x Length of second phrase	4.772	4.387	1.09	0.278	-7.920	7.627	-1.04	0.299
Length of first phrase x Current L2 exposure	2.303	4.038	0.57	0.569	-3.201	7.686	-0.42	0.677
Length of second phrase x Current L2 exposure	-4.548	4.041	-1.13	0.261	-18.375	7.647	-2.40	***0.017***
Length of first phrase x Historical consistency in L2 exposure	-23.781	8.106	-2.93	***0.003***	-37.598	15.162	-2.48	***0.013***
Length of second phrase x Historical consistency in L2 exposure	5.609	8.138	0.69	0.491	-7.482	15.173	-0.49	0.622
Current L2 exposure x Historical consistency in L2 exposure	-0.379	65.155	-0.01	0.995	98.423	57.140	1.72	0.113
Length of first phrase x length of second phrase x Current L2 exposure	-6.955	4.035	-1.72	0.085	-12.689	7.725	-1.64	0.101
Length of first phrase x length of second phrase x Historical consistency in L2 exposure	14.767	8.156	1.81	0.070	2.824	15.253	0.19	0.853
Length of first phrase x Current L2 exposure x Historical consistency in L2 exposure	14.265	8.097	1.76	0.078	-33.702	15.373	-2.19	***0.029***
Length of second phrase x Current L2 exposure x Historical consistency in L2 exposure	-0.467	8.103	-0.06	0.954	-42.036	15.294	-2.75	***0.006***
Length of first phrase x length of second phrase x Current L2 exposure x Historical consistency in L2 exposure	-13.447	8.088	-1.66	0.097	-24.219	15.451	-1.57	0.118

Random Effects	Variance		Variance	
	Intercept	Slope	Intercept	Slope
Participants	14 326.0	-	10 070.0	-
Items	419.0	-	0.0	-
Residual	17 174.0		31 690.0	

Table 6: *Effects of current L2 exposure level and phrase length (as scaled continuous variables) on speech onset latency of English (L2) multi-phrase utterances; analysis performed separately for participants with "recent L2 increase" in L2 exposure and "historically consistent" L2 exposure levels.*

	Speech onset latency to: **English (L2) trials**							
	Historically consistent L2 exposure levels				Recent increase in L2 exposure			
Fixed Effects	*b*	*SE*	*t*	*p*	*b*	*SE*	*t*	*p*
Intercept	658.691	37.856	17.40	***< 0.0001***	813.950	37.880	21.49	***< 0.0001***
Length of first phrase	16.975	7.608	2.23	***0.026***	-23.950	12.570	-1.91	0.058
Length of second phrase	6.062	7.588	0.80	0.425	-14.730	12.580	-1.17	0.242
Current L2 exposure	7.763	37.640	0.21	0.843	95.930	37.530	2.56	**0.051**
Length of first phrase x Length of second phrase	-9.143	7.629	-1.20	0.232	-15.620	12.650	-1.23	0.218
Length of first phrase x Current L2 exposure	13.284	7.689	1.73	0.085	-18.590	12.660	-1.47	0.143
Length of second phrase x Current L2 exposure	2.547	7.545	0.34	0.736	-35.730	12.720	-2.81	***0.005***
Length of first phrase x length of second phrase x Current L2 exposure	-0.568	7.634	-0.07	0.941	-22.440	12.860	-1.74	0.082
Random Effects	Variance				Variance			
	Intercept		Slope		Intercept		Slope	
Participants	11 005.0		-		8936.0		-	
Items	0.0		-		0.0		-	
Residual	19 433.0				45 968.0			

Figure 3: *Bar graphs representing mean speech onset latency and utterance duration as a function of second phrase length in English-L2 trials for four participants with extreme speech onset latencies (shortest and longest speech onset latencies among "historically consistent" and "recent L2 increase" group)*

* Looking at these graphs, one notices that utterance duration (orange bars) increases with the number of syllables in the second phrase across all participants. One also notices that speakers from the recent L2 increase group present duration patterns *similar to* or *longer than* those of historically consistent speakers. This pattern of results renders unlikely the alternative interpretation according to which participants from the recent L2 increase group might use a different speech planning strategy altogether (leading to longer onset time but shorter execution times).

Interestingly, even if speakers 9 and 15 are both classified as “recent L2 increase” bilinguals, their overall pattern of results are quite different. This difference is probably due to their different current L2 exposure. That is, speaker 15 (who had the shortest speech onset latencies) has the lowest current L2 exposure level of the recent L2 increase participants, while speaker 9 (who had the longest speech onset latencies) has the highest level of current L2 exposure in the same group. This further suggests that we are observing an interference effect related to the level of current L2 exposure that specifically affects speakers who experienced a recent change in L2 exposure. Namely, speakers from the recent L2 increase group seem to experience more cross-language interference if their current L2 exposure is high (speaker 9) than if it is low (speaker 15).