

SUPPLEMENTARY MATERIAL

“Semantic access to ambiguous word roots cannot be stopped by affixation—not even in sentence contexts: Evidence from eye tracking and the maze task”

Table S1. Summary of linear regressions for gaze duration, go-past reading time, and total reading time eye-tracking measures in the prime region of the sentence, in Experiment 1.

Gaze Duration: Prime					Null Comparison
Predictor	β	SE β	t-value	95% CI of β	
Intercept	270.44	11.10	24.42	[248.60, 292.30]	
Target Type: Control (<i>fail</i>)	-3.88	7.90	-0.49	[-19.40, 11.60]	$\chi^2(3) = 3.69$, $p = 0.30$
Target Type: Root+affix related (<i>dog</i>)	9.83	8.00	1.23	[-5.90, 25.50]	
Target Type: Root-related (<i>tree</i>)	0.76	8.00	0.10	[-14.90, 16.40]	
Dominance: Subordinate	9.97	11.90	0.84	[-13.60, 33.50]	$\chi^2(1) = 0.29$, $p = 0.59$
Target Type: Control x Dominance	-0.68	10.10	-0.07	[-20.50, 19.10]	$\chi^2(3) = 1.47$, $p = 0.69$
Target Type: Root+affix related x Dominance	-10.46	10.30	-1.02	[-30.60, 9.70]	
Target Type: Root-related x Dominance	-7.14	10.20	-0.70	[-27.10, 12.80]	
Go-Past Reading Time: Prime					Null Comparison
Predictor	β	SE β	t-value	95% CI of β	

Intercept	274.69	10.90	25.21	[253.20, 296.20]	
Target Type: Control (<i>fail</i>)	-6.45	7.60	-0.85	[-21.40, 8.50]	$\chi^2(3) = 2.26,$ $p = 0.52$
Target Type: Root+affix related (<i>dog</i>)	5.73	7.70	0.74	[-9.40, 20.90]	
Target Type: Root-related (<i>tree</i>)	-3.14	7.70	-0.41	[-18.20, 12.00]	
Dominance: Subordinate	4.90	11.70	0.42	[-18.20, 28.00]	$\chi^2(1) = 0.30,$ $p = 0.58$
Target Type: Control x Dominance	6.34	9.70	0.65	[-12.70, 25.40]	$\chi^2(3) = 1.39,$ $p = 0.71$
Target Type: Root+affix related x Dominance	-5.10	9.90	-0.51	[-24.50, 14.30]	
Target Type: Root-related x Dominance	0.97	9.80	0.10	[-18.30, 20.20]	

Total Reading Time: Prime

Predictor	β	SE β	t-value	95% CI of β	Null Comparison
Intercept	394.60	23.00	17.23	[349.00, 439.90]	
Target Type: Control (<i>fail</i>)	20.10	14.00	1.45	[-7.00, 47.20]	$\chi^2(3) = 6.98,$ $p = 0.07$
Target Type: Root+affix related (<i>dog</i>)	10.80	14.00	0.77	[-17.00, 38.30]	
Target Type: Root-related (<i>tree</i>)	40.70	14.00	2.90	[13.00, 68.20]	
Dominance: Subordinate	26.00	25.00	1.03	[-24.00, 75.90]	$\chi^2(1) = 0.47,$ $p = 0.49$
Target Type: Control x Dominance	-4.50	18.00	-0.25	[-39.00, 30.20]	$\chi^2(3) = 6.60,$ $p = 0.09$

Target Type: Root+affix related x Dominance	0.70	18.00	0.04	[-35.00, 36.00]
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Target Type: Root-related x Dominance	-38.60	18.00	-2.16	[-74.00, -3.50]
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Table S2. Summary of descriptive statistics for semantic dominance as a function of target type for gaze duration, go-past reading time, and total reading time eye-tracking measures in the prime region of the sentence, in Experiment 1.

First Fixation: Prime				
Target Type	Dominance Suffixed	M	SE	95% CI
Cloze (<i>night</i>)	Dominant	222	5.8	[211, 233]
Control (<i>fail</i>)	Dominant	220	5.8	[208, 231]
Root+affix (<i>dog</i>)	Dominant	228	5.8	[217, 240]
Root-related (<i>tree</i>)	Dominant	224	5.8	[213, 236]
Cloze (<i>night</i>)	Subordinate	224	4.9	[214, 233]
Control (<i>fail</i>)	Subordinate	224	4.8	[214, 233]
Root+affix (<i>dog</i>)	Subordinate	221	4.9	[211, 230]
Root-related (<i>tree</i>)	Subordinate	222	4.9	[212, 231]
First Fixation: Target				
Target Type	Dominance Suffixed	M	SE	95% CI
Cloze (<i>night</i>)	Dominant	216	6.0	[204, 228]
Control (<i>fail</i>)	Dominant	236	5.9	[225, 248]
Root+affix (<i>dog</i>)	Dominant	227	6.0	[215, 238]
Root-related (<i>tree</i>)	Dominant	234	6.0	[222, 246]
Cloze (<i>night</i>)	Subordinate	227	5.0	[217, 236]
Control (<i>fail</i>)	Subordinate	244	4.9	[234, 254]
Root+affix (<i>dog</i>)	Subordinate	237	4.9	[227, 247]
Root-related (<i>tree</i>)	Subordinate	233	4.9	[224, 243]
Gaze Duration: Prime				
Target Type	Dominance Suffixed	M	SE	95% CI
Cloze (<i>night</i>)	Dominant	270	11.1	[249, 292]
Control (<i>fail</i>)	Dominant	267	11.1	[245, 288]
Root+affix (<i>dog</i>)	Dominant	280	11.1	[258, 302]
Root-related (<i>tree</i>)	Dominant	271	11.2	[249, 293]
Cloze (<i>night</i>)	Subordinate	280	9.4	[262, 299]
Control (<i>fail</i>)	Subordinate	276	9.3	[257, 294]
Root+affix (<i>dog</i>)	Subordinate	280	9.4	[261, 298]
Root-related (<i>tree</i>)	Subordinate	274	9.4	[256, 292]
Gaze Duration: Target				
Target Type	Dominance Suffixed	M	SE	95% CI
Cloze (<i>night</i>)	Dominant	241	9.1	[223, 259]

Control (<i>fail</i>)	Dominant	290	9.2	[272, 308]
Root+affix (<i>dog</i>)	Dominant	266	9.2	[248, 284]
Root-related (<i>tree</i>)	Dominant	275	9.3	[257, 293]
Cloze (<i>night</i>)	Subordinate	248	7.6	[233, 263]
Control (<i>fail</i>)	Subordinate	294	7.4	[279, 309]
Root+affix (<i>dog</i>)	Subordinate	276	7.5	[261, 291]
Root-related (<i>tree</i>)	Subordinate	272	7.4	[257, 287]

Go-Past Reading Time: Prime

Target Type	Dominance Suffixed	M	SE	95% CI
Cloze (<i>night</i>)	Dominant	275	10.9	[253, 296]
Control (<i>fail</i>)	Dominant	268	10.9	[247, 290]
Root+affix (<i>dog</i>)	Dominant	280	11.0	[259, 302]
Root-related (<i>tree</i>)	Dominant	272	11.0	[250, 293]
Cloze (<i>night</i>)	Subordinate	280	9.3	[261, 298]
Control (<i>fail</i>)	Subordinate	279	9.2	[261, 298]
Root+affix (<i>dog</i>)	Subordinate	280	9.2	[262, 298]
Root-related (<i>tree</i>)	Subordinate	277	9.2	[259, 296]

Go-Past Reading Time: Target

Target Type	Dominance Suffixed	M	SE	95% CI
Cloze (<i>night</i>)	Dominant	240	9.0	[222, 258]
Control (<i>fail</i>)	Dominant	288	9.0	[270, 306]
Root+affix (<i>dog</i>)	Dominant	263	9.0	[246, 281]
Root-related (<i>tree</i>)	Dominant	271	9.1	[253, 289]
Cloze (<i>night</i>)	Subordinate	250	7.5	[235, 264]
Control (<i>fail</i>)	Subordinate	292	7.3	[278, 307]
Root+affix (<i>dog</i>)	Subordinate	274	7.3	[259, 288]
Root-related (<i>tree</i>)	Subordinate	271	7.3	[257, 286]

Total Reading Time: Prime

Target Type	Dominance Suffixed	M	SE	95% CI
Cloze (<i>night</i>)	Dominant	395	22.9	[349, 440]
Control (<i>fail</i>)	Dominant	415	23.0	[369, 460]
Root+affix (<i>dog</i>)	Dominant	405	23.0	[360, 451]
Root-related (<i>tree</i>)	Dominant	435	23.1	[390, 481]
Cloze (<i>night</i>)	Subordinate	421	19.3	[382, 459]
Control (<i>fail</i>)	Subordinate	436	19.2	[398, 474]
Root+affix (<i>dog</i>)	Subordinate	432	19.2	[394, 470]
Root-related (<i>tree</i>)	Subordinate	423	19.2	[385, 461]

Total Reading Time: Target				
Target Type	Dominance Suffixed	M	SE	95% CI
Cloze (<i>night</i>)	Dominant	285	20.1	[246, 325]
Control (<i>fail</i>)	Dominant	496	20.2	[456, 536]
Root+affix (<i>dog</i>)	Dominant	388	20.3	[348, 428]
Root-related (<i>tree</i>)	Dominant	410	20.4	[370, 450]
Cloze (<i>night</i>)	Subordinate	298	16.9	[265, 332]
Control (<i>fail</i>)	Subordinate	512	16.7	[479, 545]
Root+affix (<i>dog</i>)	Subordinate	436	16.7	[403, 470]
Root-related (<i>tree</i>)	Subordinate	431	16.7	[398, 464]

Proportion of Regressions into Prime				
Target Type	Dominance Suffixed	M	SE	95% CI
Cloze (<i>night</i>)	Dominant	0.30	0.04	[0.22, 0.37]
Control (<i>fail</i>)	Dominant	0.30	0.04	[0.22, 0.37]
Root+affix (<i>dog</i>)	Dominant	0.30	0.04	[0.23, 0.38]
Root-related (<i>tree</i>)	Dominant	0.35	0.04	[0.28, 0.42]
Cloze (<i>night</i>)	Subordinate	0.31	0.03	[0.25, 0.37]
Control (<i>fail</i>)	Subordinate	0.32	0.03	[0.26, 0.38]
Root+affix (<i>dog</i>)	Subordinate	0.34	0.03	[0.28, 0.40]
Root-related (<i>tree</i>)	Subordinate	0.34	0.03	[0.28, 0.40]

Proportion of Regressions into Target				
Target Type	Dominance Suffixed	M	SE	95% CI of M
Cloze (<i>night</i>)	Dominant	0.25	0.04	[0.17, 0.32]
Control (<i>fail</i>)	Dominant	0.57	0.04	[0.50, 0.65]
Root+affix (<i>dog</i>)	Dominant	0.42	0.04	[0.34, 0.49]
Root-related (<i>tree</i>)	Dominant	0.39	0.04	[0.32, 0.46]
Cloze (<i>night</i>)	Subordinate	0.26	0.03	[0.20, 0.32]
Control (<i>fail</i>)	Subordinate	0.55	0.03	[0.49, 0.61]
Root+affix (<i>dog</i>)	Subordinate	0.43	0.03	[0.37, 0.49]
Root-related (<i>tree</i>)	Subordinate	0.42	0.03	[0.36, 0.48]

Table S3. Summary of descriptive statistics for semantic dominance as a function of target type for accuracy and lexical choice response times at the maze juncture, in Experiment 2.

Accuracy				
Target Type	Dominance Suffixed	M	SE	95% CI
Control (<i>fail</i>)	Dominant	0.005	0.003	[0.002, 0.01]
Root+affix (<i>dog</i>)	Dominant	0.009	0.004	[0.004, 0.02]
Root-related (<i>tree</i>)	Dominant	0.005	0.003	[0.002, 0.01]
Control (<i>fail</i>)	Subordinate	0.005	0.002	[0.002, 0.01]
Root+affix (<i>dog</i>)	Subordinate	0.01	0.005	[0.007, 0.03]
Root-related (<i>tree</i>)	Subordinate	0.008	0.003	[0.002, 0.01]

Lexical Choice Response Times				
Target Type	Dominance Suffixed	M	SE	95% CI
Control (<i>fail</i>)	Dominant	7.0	0.03	[6.9, 7.0]
Root+affix (<i>dog</i>)	Dominant	7.0	0.03	[7.0, 7.1]
Root-related (<i>tree</i>)	Dominant	7.0	0.03	[6.9, 7.0]
Control (<i>fail</i>)	Subordinate	6.9	0.03	[6.9, 7.0]
Root+affix (<i>dog</i>)	Subordinate	7.0	0.03	[7.0, 7.1]
Root-related (<i>tree</i>)	Subordinate	7.0	0.03	[6.9, 7.0]

Table S4. Summary of descriptive statistics for semantic dominance for lexical choice response times at the maze juncture as a function of distractor type, in Experiment 2.

Response Times				
Distractor Type	Dominance Suffixed	M	SE	95% CI
Verb distractors (<i>fail</i>)	Dominant	6.9	0.05	[6.8, 7.0]
Adjective distractors (<i>dumb</i>)	Dominant	7.0	0.05	[6.9, 7.1]
Noun distractors (<i>cat</i>)	Dominant	7.0	0.04	[6.9, 7.0]
Root+affix (<i>dog</i>)	Dominant	7.0	0.03	[7.0, 7.1]
Root-related (<i>tree</i>)	Dominant	7.0	0.03	[6.9, 7.0]
Verb distractors (<i>fail</i>)	Subordinate	6.9	0.04	[6.8, 7.0]
Adjective distractors (<i>dumb</i>)	Subordinate	7.0	0.04	[6.9, 7.1]
Noun distractors (<i>cat</i>)	Subordinate	6.9	0.03	[6.9, 7.0]
Root+affix (<i>dog</i>)	Subordinate	7.0	0.03	[6.9, 7.1]
Root-related (<i>tree</i>)	Subordinate	7.0	0.03	[6.9, 7.0]