Supplementary data - Phonological Networks

anonymised for review

30/03/2022

S1: Age of production (AoP) ~ connectivity

Table 1: S1: Outputs (rho and p values) of AoP   degree Spearman's correlation tests for each infant in the dataset.

Speaker	Corpus	rho	p
Alex	English	-0.20	<0.001
Lily	English	-0.25	<0.001
Naima	English	-0.28	<0.001
Violet	English	-0.26	<0.001
William	English	-0.22	<0.001
Anais	French	-0.02	0.593
Marie	French	-0.18	<0.001
Nathan	French	-0.11	0.045
Tim	French	-0.21	<0.001
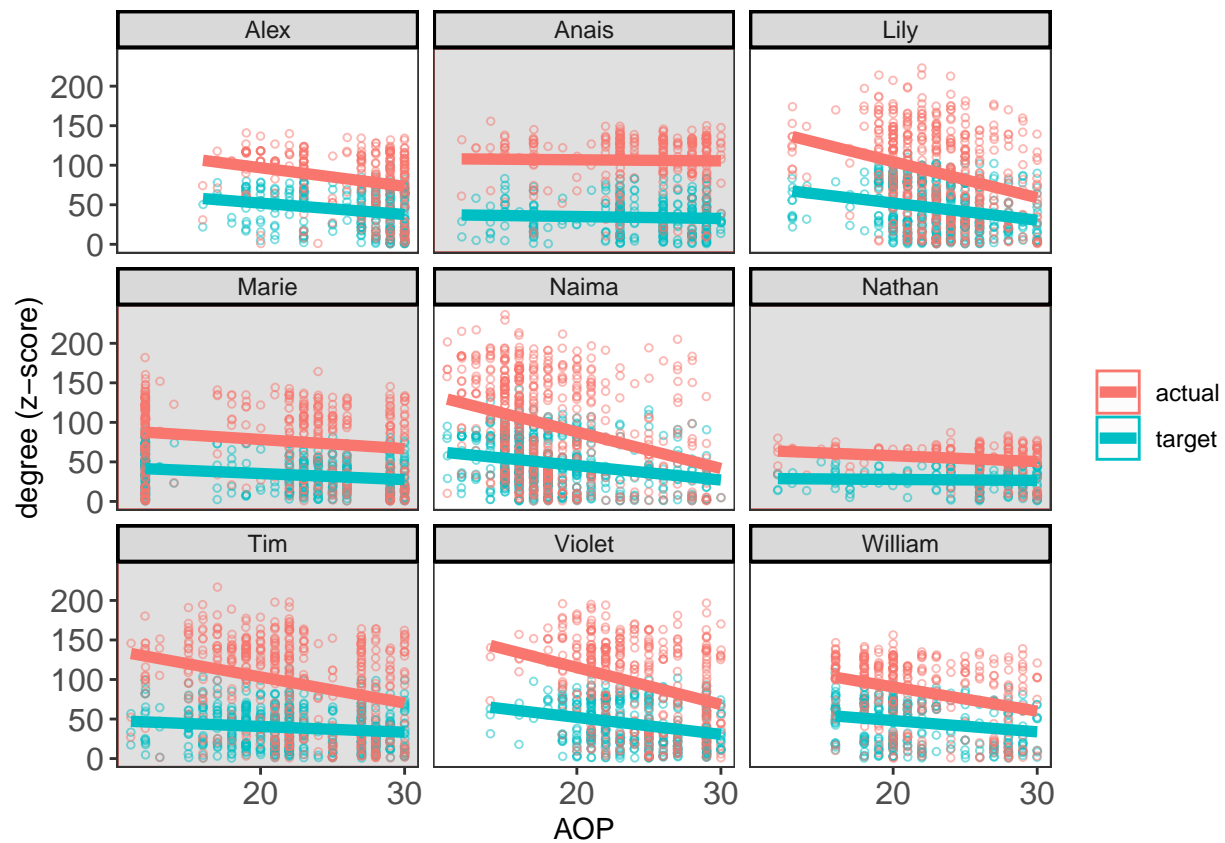
S2: Network growth models: Full model outputs

Table 2: Full results from maximal logistic regression model (model 3) testing the effects of network growth values, corpus (English as baseline), word frequency and word length to predict word acquisition. All variables were scaled and centred. Word category was defined according to word categories on the McArthur Bates CDI (Fenson et al., 1994)

Effect	Actual				Target			
	beta	SE	z	p	beta	SE	z	p
Intercept	-2.88	0.16	-17.80	<0.001	-3.00	0.18	-16.96	<0.001
Length	-0.21	0.04	-4.73	<0.001	-0.22	0.05	-4.77	<0.001
Age	1.04	0.12	8.93	<0.001	1.11	0.11	10.35	<0.001
n Tokens	0.60	0.04	16.35	<0.001	0.62	0.04	16.61	<0.001
Word frequency	-0.03	0.03	-1.06	0.287	-0.04	0.03	-1.27	0.205
Corpus	0.40	0.10	4.00	<0.001	0.68	0.14	4.74	<0.001
Categoryverbs	-0.46	0.05	-8.34	<0.001	-0.44	0.06	-7.97	<0.001
Category: connecting words	-0.62	0.21	-2.94	0.003	-0.63	0.21	-2.99	0.003
Category: adjectives	-0.18	0.08	-2.21	0.027	-0.19	0.08	-2.30	0.021
Category: games/routines	0.14	0.14	1.02	0.310	0.15	0.14	1.02	0.306
Category: prepositions	-0.37	0.20	-1.90	0.057	-0.37	0.20	-1.89	0.059
Category: pronouns	-0.29	0.12	-2.39	0.017	-0.28	0.12	-2.31	0.021
Category: quantifiers	-0.33	0.15	-2.23	0.026	-0.36	0.15	-2.46	0.014
Category: question words	-0.95	0.24	-3.92	<0.001	-0.95	0.25	-3.86	<0.001
Category: onomatopoeia	0.74	0.16	4.67	<0.001	0.75	0.16	4.69	<0.001
Category: time	-0.50	0.21	-2.34	0.019	-0.48	0.21	-2.22	0.026
Category: locations	-0.04	0.15	-0.25	0.802	-0.03	0.16	-0.16	0.869
PAQ value	0.06	0.04	1.52	0.127	0.08	0.04	1.97	0.049
PAT value	0.29	0.05	6.35	<0.001	0.30	0.06	4.75	<0.001
Age x Length	0.15	0.04	4.23	<0.001	0.14	0.04	3.95	<0.001
Age x n Tokens	0.28	0.03	8.74	<0.001	0.30	0.03	9.10	<0.001
Age x Frequency	0.11	0.03	3.72	<0.001	0.12	0.03	3.82	<0.001
Age x PAQ	0.03	0.03	0.90	0.370	0.00	0.03	0.03	0.980
Age x PAT	-0.03	0.02	-1.70	0.089	-0.01	0.03	-0.37	0.713