

Supplementary Materials

We analyzed the formant transitions of F1 and F2 of the vocalic part of the fragments (i.e., the audio files used as primes without the final s) with Praat's LPC-analysis (burg algorithm) in 21 steps along the lengths of the vowels (i.e., from 0% to 100% in 5% steps), with a 10ms Gaussian window (25.6ms window would often allow not sufficient independent windows for shorter vowels, staying completely with a vowel), with 5kHz maximal frequency and 5 formant extraction. The formant frequencies were then fed into an ANOVA with FRAGMENT TYPE (*oral vowel, nasalized vowel, nasal vowel*) as independent factor and a post-hoc contrastive analysis between *oral vowel~nasal vowel* and *oral vowel~nasalised vowel* of each vowel (which would have different F1 and F2) for the last 50% of the vowels (where a transition could be expected). Significant differences would indicate that there are different formant transitions for the three vowel groups. The results indicate that there are many differences for F1 (as indicator of manner of articulation) between *oral vowels* and *nasal vowel* for the low vowel /a/ (which would show the largest amount of coarticulation and constitutes 67% of all data). For F2, there are only few differences, often for high vowels. **That is, the coarticulation points to different manners of articulation, whereas places of articulation do not show up in this formant analysis** (see Tables 1 and 2).

Additionally, we analyzed how often a word (with what final consonant) was selected for a given input fragment. Table 3 shows a contingency table (with number of cases and percentages against (inaudible) input consonants). Cases on the diagonal (perfect match) which are below 50% are highlighted with yellow, percentages above 10% outside the diagonal are highlighted with a faint blue, and numbers of same places of articulation in the target selection as the input are in red. The lack of very high percentages in the diagonal indicates that often no 'perfect match' was achieved. The high number of selections of words ending in [n] reflects the CVN words in the material (there are less words in Bengali with final [m] or [ŋ]) when a CVN word was selected by participants. The red numbers (higher number of choices) **indicate that the participants choose alternative words mostly on basis of the manner of articulation rather than based on the place information. This is contradicting the information available from the formant transitions.**

Table 1: Probabilities of pairwise comparisons of F1 frequencies between oral (reference) and nasal or nasalised vowels of the final half of the vowels.

F1	Ci		Cu		Co		Cɔ		Ca	
	Ci	Ci(N)	Cū	Cu(N)	Cö	Co(N)	Cõ	Cɔ(N)	Cã	Ca(N)
55%	0.4591	0.5993	0.1318	0.2597	0.8492	0.7164	0.7123	0.0455	< 0.0001	< 0.0001
60%	0.5318	0.5261	0.3485	0.3175	0.7157	0.3962	0.4702	0.0146	< 0.0001	< 0.0001
65%	0.1019	0.2981	0.2037	0.6034	0.7637	0.8162	0.6543	0.6700	< 0.0001	< 0.0001
70%	0.9391	0.3059	0.2195	0.1417	0.9162	0.6234	0.4129	0.4092	< 0.0001	< 0.0001
75%	0.3808	0.5392	0.4716	0.5564	0.7392	0.8272	0.3711	0.1136	< 0.0001	< 0.0001
80%	0.5617	0.0917	0.1562	0.4531	0.9354	0.8650	0.5417	0.0183	< 0.0001	< 0.0001
85%	0.7725	0.6716	0.8619	0.8080	0.9956	0.7245	0.9618	0.5955	0.0002	0.1675
90%	0.7259	0.7977	0.5229	0.7634	0.9979	0.7903	0.9834	0.6097	0.0004	0.1922
95%	0.9299	0.4841	0.6500	0.6953	0.7222	0.9566	0.8474	0.3872	0.0163	0.3647

Table 2: Probabilities of pairwise comparisons of F2 frequencies between oral (reference) and nasal or nasalised vowels of the final half of the vowels.

F2		Ci		Cu		Co		Cɔ		Ca	
		Ci	Ci(N)	Cū	Cu(N)	Cö	Co(N)	Cõ	Cɔ(N)	Cã	Ca(N)
55%	p _≧ t	0.0001	0.9851	0.0603	0.0009	0.0867	0.3667	0.3475	0.7792	0.001	0.0859
60%	p _≧ t	< 0.0001	0.0734	0.0272	0.0001	0.1159	0.4388	0.4333	0.392	0.0004	0.0786
65%	p _≧ t	0.5142	0.0327	0.3162	0.1769	0.1293	0.6258	0.7472	0.6187	0.001	0.4358
70%	p _≧ t	< 0.0001	0.1441	0.3124	0.9773	0.4001	0.6625	0.7322	0.7256	0.0042	0.3545
75%	p _≧ t	0.2897	0.004	0.4938	0.1638	0.6214	0.9072	0.8956	0.9318	0.0219	0.4062
80%	p _≧ t	0.1036	0.2255	0.3573	0.0997	0.5657	0.982	0.9903	0.9536	0.0005	0.1998
85%	p _≧ t	0.3291	0.0081	0.4399	0.4833	0.7591	0.9015	0.8837	0.7491	0.0519	0.7357
90%	p _≧ t	0.0948	0.0093	0.0535	0.1696	0.8397	0.8562	0.9973	0.7421	0.0544	0.5322
95%	p _≧ t	0.1607	0.1969	0.028	0.8241	0.9722	0.667	0.9482	0.6183	0.3198	0.0362

Table 3: Contingency table of fragments from words with a final (inaudible) consonant on the vertical axis and selected words with final consonants on the horizontal axis (number of cases and percentages of selected words per presented word). Red numbers indicate selection of words with the same place of articulation as the acoustic stimuli, yellow highlighting marks correct matching of segments below 50%, and blue highlights selections of words above 10% that are not a perfect match.

n %	p	b ^h	m	t	d	ʃ	tʃ	ɟʒ	n	l	r	ʈ	ɖ	ɳ	k	k ^h	ŋ	Tot
p	155 72.43		19 8.88						13 6.07	5 2.34					22 10.28			214
b ^h		29 60.42	19 39.58															48
m	23 4.77	14 2.90	273 56.64	35 7.26	40 8.30	35 7.26				18 3.73	44 9.13							482
t			52 4.51	622 53.99	56 4.86	94 8.16	58 5.03		242 21.01		28 2.43	17 1.48			30 2.60			1152
d			40 8.73	43 9.39	260 56.77	27 5.9			63 13.76	25 5.46								458
ʃ			70 11.16	103 16.43	25 3.99	262 41.79			121 19.30		58 9.25	15 2.39			4 0.64		22 3.51	627
tʃ				62 9.81			266 42.09		203 32.12	35 5.54	53 8.39	13 2.06						632
ɟʒ								30 58.82			21 41.18							51
n	26 1.12			351 15.08	151 6.49	93 4.43	152 6.53		954 40.98	194 8.33	123 5.28	58 2.49		58 2.49	158 6.79			2328
l	19 2.11		23 2.55		61 6.76		27 2.99		288 31.93	418 46.34								902
r			65 8.00	87 10.70		39 4.80	44 5.41	16 1.97	175 21.53		342 42.07				45 5.54			813
t				24 5.01		30 6.26	36 7.52		62 12.94	56 11.69		237 49.48		26 5.43	8 1.67			479
ɖ													28 52.83	25 47.17				53
ɳ				43 13.44	14 4.38				68 21.25		9 2.81	18 5.63	24 7.50	144 45.00				320
k	11 1.42			16 2.07					191 24.68		57 7.36	30 3.88			443 57.24	26 3.36		774
k ^h															20 18.87	66 62.26	20 18.87	106
ŋ						7 6.54										25 23.36	75 70.09	107
Tot	234	43	561	1433	607	559	583	46	2380	751	726	454	52	283	700	117	117	9646