

Impact of the Vocabulary Independence in the Detection of Paralinguistic Aspects of Speech: supplementary material

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Table 1: Lexical information of the read sentences of Emo-DB database. **Avg.:** Average, **Std.:** Standard deviation, **phon.:** phonemes, **V.:** voiced, **U.:** unvoiced.

Num.	Sentence	Avg. Dur.	Std. Dur.	Num. words.	Num. phon.	Num. V phon.	Num. U phon.	Num. plosives	Num. fricatives	Num. nasals	Num. laterals	Num. vowels
1	Der Lappen liegt auf dem Eisschrank	1.9	0.4	6	25	18	7	7	2	4	2	7
2	Das will sie am Mittwoch abgeben	1.9	0.4	6	23	19	4	8	1	3	1	9
3	Heute abend könnte ich es ihm sagen	2.0	0.5	7	25	19	6	6	1	4	0	11
4	Das schwarze Stück Papier befindet sich da oben neben dem Holzstück	3.7	0.8	11	51	35	16	16	4	5	1	19
5	In sieben Stunden wird es soweit sein	2.3	0.5	7	24	17	7	8	2	4	0	8
6	Was sind denn das für Tüten, die da unter dem Tisch stehen?	2.7	0.5	12	40	27	13	12	5	6	0	14
7	Sie haben es gerade hochgetragen und jetzt gehen sie wieder runter.	3.3	1.0	11	47	38	9	13	1	5	0	19
8	An den Wochenenden bin ich jetzt immer nach Hause gefahren und habe Agnes besucht.	4.2	1.1	14	57	49	8	12	2	10	0	23
9	Ich will das eben wegbringen und dann mit Karl was trinken gehen.	3.2	0.9	12	48	38	10	14	2	9	2	17
10	Die wird auf dem Platz sein, wo wir sie immer hinlegen.	2.7	0.6	11	36	30	6	9	1	5	2	14

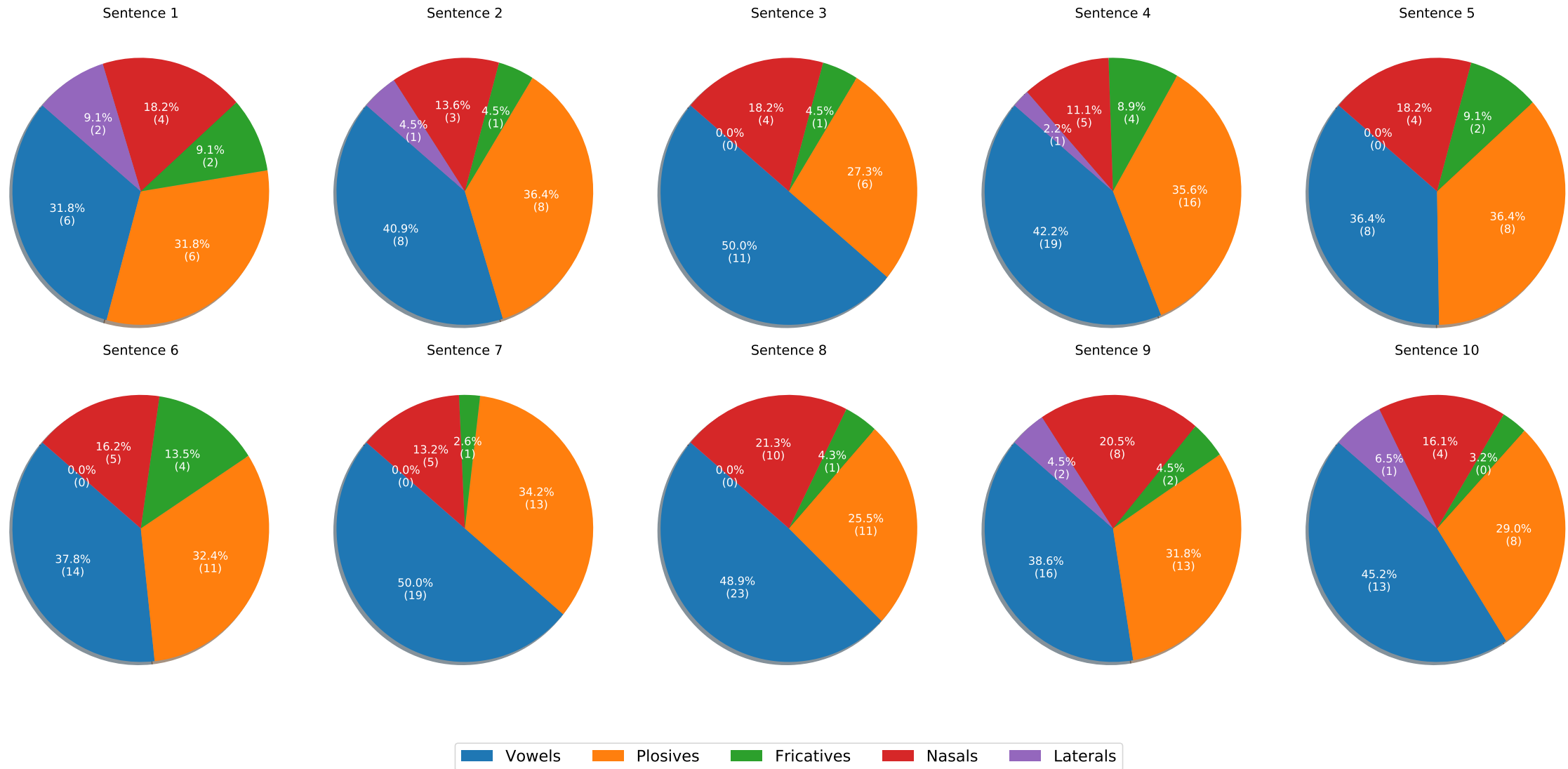


Figure 1: Distribution of phonemes for the different sentences of Emo-DB database

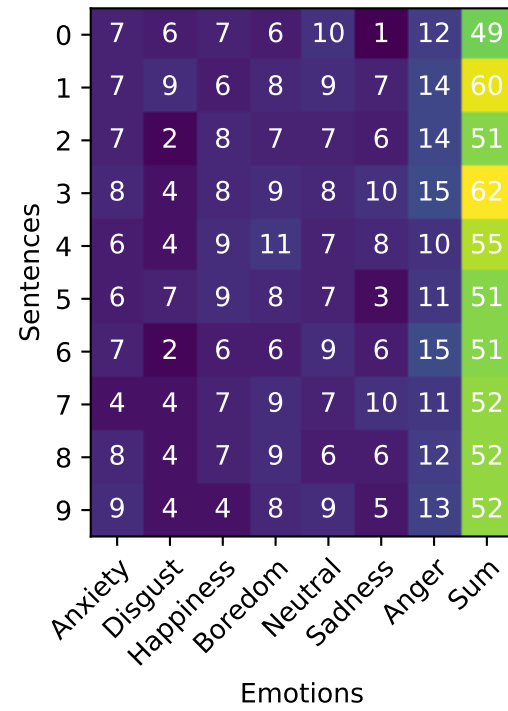


Figure 2: Number of utterances per sentence and emotion in the Emo-DB database

Table 2: Lexical information of the read sentences of PC-GITA database. **Avg.:** Average, **Std.:** Standard deviation, **phon.:** phonemes, **V.:** voiced, **U.:** unvoiced.

Num.	Sentence	Avg. Dur.	Std. Dur.	Num. words	Num. phon.	Num. V phon.	Num. U phon.	Num. plosives	Num. fricatives	Num. nasals	Num. laterals	Num. vowels
1	Mi casa tiene tres cuartos	1.9	0.4	5	20	10	8	5	3	2	0	8
2	Omar, que vive cerca, trajo miel	2.6	0.7	6	22	16	4	4	2	2	1	10
3	Laura sube al tren que pasa	2.2	0.5	6	19	13	4	3	2	1	2	9
4	Los libros nuevos no caben en la mesa de la oficina	3.4	1.0	11	39	30	7	3	6	6	4	18
5	Rosita Niño, que pinta bien, donó sus cuadros ayer	4.3	1.2	9	37	27	9	7	5	5	0	17
6	Luisa Rey compra el colchón duro que tanto le gusta	4.0	1.2	10	38	28	7	7	3	4	4	17
7	Viste las noticias? Yo vi GANAR la medalla de plata en pesas. ¡Ese muchacho tiene mucha fuerza!	7.9	2.2	17	67	51	13	10	13	10	2	31
8	Juan se ROMPIÓ una PIERNA cuando iba en la MOTO.	3.2	0.9	10	34	28	6	6	2	7	1	16
9	Estoy muy triste, ayer vi MORIR a un amigo.	3.3	0.8	9	32	25	4	4	3	4	0	16
10	Estoy muy preocupado, cada vez me es más difícil HABLAR!	4.3	1.1	10	41	29	9	7	6	3	1	20

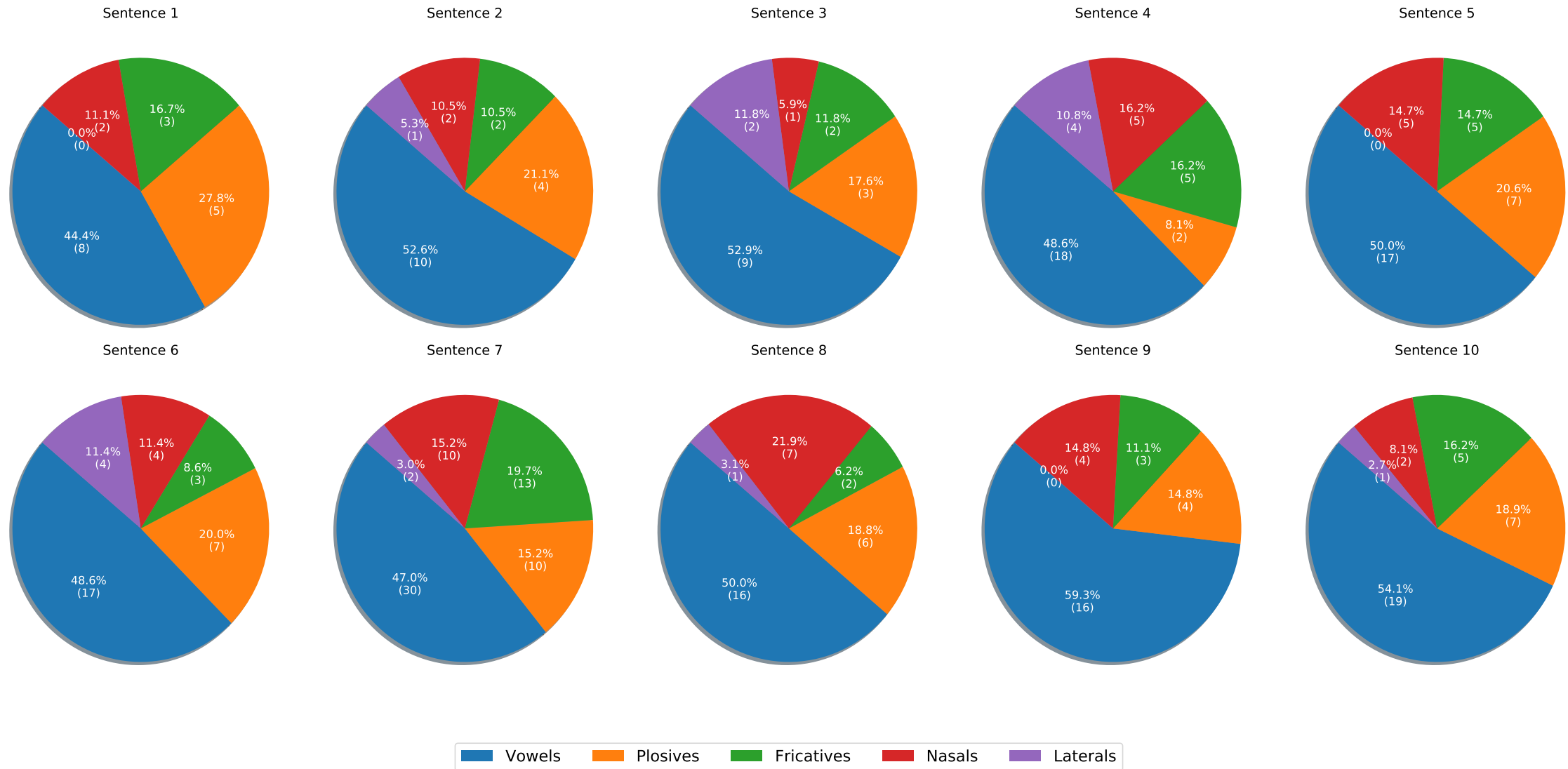


Figure 3: Distribution of phonemes for the different sentences of PC-GITA database

Table 3: Spearman’s correlation between the ranking of the sentences of Emo-DB database and phonetic aspects of the sentences.

Aspect	ρ
Avg. duration	0.067
Std. Duration	0.074
Num. words	-0.074
Num. phonemes	0.085
Num. different phonemes	0.123
Num. voiced phonemes	0.248
Num. different voiced phonemes	0.611
Num. unvoiced phonemes	-0.188
Num. different unvoiced phonemes	-0.142
Num. plosives	0.148
Num. fricatives	-0.362
Num. nasals	-0.155
Num. laterals	0.171
Num. vowels	0.231

Table 4: Spearman’s correlation between the ranking of the sentences of PC-GITA database and phonetic aspects of the sentences.

Aspect	ρ
Avg duration	0.31
Std Duration	0.267
Num. words	0.167
Num. phonemes	0.394
Num. different phonemes	-0.025
Num. voiced phonemes	0.292
Num. different voiced phonemes	-0.049
Num. unvoiced phonemes	0.451
Num. different unvoiced phonemes	0.202
Num. plosives	0.086
Num. fricatives	0.486
Num. nasals	0.177
Num. laterals	-0.006
Num. vowels	0.36