

Contents

1	Introduction	1
2	Compounds, stress and prominence: concepts and issues	5
2.1	What is a compound?	5
2.2	Prominence patterns in compounds	8
2.3	Prominence in the autosegmental-metrical framework	11
3	The corpus	16
4	Perception of compound prominence patterns	20
4.1	Introduction	20
4.2	Pretest	23
4.3	Method	25
4.3.1	Participants	25
4.3.2	Stimuli	26
4.3.3	Procedure	26
4.4	Results	28
4.4.1	Overall results	29
4.4.2	Intrarater reliability	31
4.4.3	Perception ratings by items	40
4.4.4	Summary of results	48
4.5	Discussion	48
5	Acoustic correlates of compound prominence	57
5.1	Previous research	59
5.1.1	Pitch and fundamental frequency	60
5.1.2	Loudness, intensity and spectral balance	64
5.1.3	Duration	67
5.1.4	Non-modal phonation	69
5.1.5	Summary and research questions	70
5.2	Material and measurements	72
5.2.1	Pitch measurements	74
5.2.2	Duration	78
5.2.3	Intensity	78
5.2.4	Spectral balance	79
5.2.5	Non-modal phonation	79
5.3	Procedure	82

5.4	Results	85
5.5	Discussion	93
6	Classification and prediction of compound prominence patterns	100
6.1	Data	101
6.1.1	Automatic measurement procedure and evaluation	102
6.1.2	Vowel-intrinsic properties	105
6.1.3	Summary of acoustic measurements	107
6.2	Prediction of median prominence ratings	108
6.2.1	Predictors in the regression analysis	108
6.2.2	Regression analysis	112
6.2.3	Predictions for the Boston corpus	121
6.3	Classification of the Boston corpus	125
6.3.1	Training set	127
6.3.2	Model application and evaluation	130
7	What determines compound prominence patterns?	133
7.1	Methodology	134
7.2	Hypothesis testing with unbalanced data	137
7.3	The structural hypothesis	139
7.4	The semantic hypothesis	151
7.5	Structural and semantic hypotheses combined	158
7.6	Analogical effects	161
7.7	General discussion	169
8	Within- and across-speaker variation	174
8.1	Methodology	176
8.2	Within-speaker variability	180
8.2.1	Data	180
8.2.2	Results	181
8.2.3	Discussion	185
8.3	Across-speaker variability	188
8.3.1	Data	191
8.3.2	Results	192
8.3.3	Discussion	197
8.4	General discussion	200
9	Conclusion	202
A	Introduction to linear regression and mixed-effects models	207
B	NOUN + NOUN compounds used in the variability study	210
	References	213