

Appendix 4: Model selection for SEMANTIC-FEATURES (EXP2) in Ch. 9

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Content: Results from model selection (cross-validation) in Chapter 9 with knowledge source=SEMANTIC-FEATURES. The target words are ordered alphabetically. Evaluated with 5-fold cross validation and Overall Accuracy (measured as total recall). The best accuracy in each group is marked in bold-face (in case of ties, the model with the smallest context window is selected).

friskAJ cross-validation results (baseline: 0.683)

	W-SF									
100	.378	.378	.378	.354	.366	.378	.354	.366	.354	
75	.329	.329	.341	.341	.341	.354	.329	.329	.317	
50	.341	.329	.305	.305	.317	.341	.317	.329	.329	
30	.439	.415	.390	.366	.378	.317	.317	.354	.341	
20	.476	.500	.415	.415	.415	.378	.317	.341	.390	
10	.488	.451	.439	.415	.451	.390	.341	.378	.402	
4	.561	.622	.524	.451	.476	.390	.366	.378	.390	
2	.573	.561	.549	.500	.476	.415	.366	.402	.415	
1	.573	.488	.524	.463	.524	.402	.354	.402	.402	
	1	2	4	10	20	30	50	75	100	

Table 1: friskAJ

fullAJ cross-validation results (baseline: 0.941)

	W-SF									
100	.068	.068	.070	.068	.066	.061	.061	.066	.068	
75	.061	.061	.066	.061	.059	.059	.059	.059	.059	
50	.068	.066	.066	.059	.059	.059	.059	.059	.061	
30	.120	.105	.093	.073	.064	.061	.061	.059	.066	
20	.223	.177	.157	.091	.068	.066	.064	.061	.066	
10	.464	.389	.352	.193	.089	.070	.064	.064	.068	
4	.670	.552	.530	.307	.132	.091	.066	.064	.068	
2	.739	.623	.632	.393	.157	.084	.064	.061	.068	
1	.686	.623	.616	.391	.173	.102	.064	.061	.068	
	1	2	4	10	20	30	50	75	100	

Table 2: fullAJ

fyrN cross-validation results (baseline: 0.789)

W-SF									
100	.368	.368	.333	.351	.351	.333	.298	.263	.246
75	.439	.439	.421	.439	.421	.456	.386	.281	.228
50	.526	.509	.474	.421	.421	.439	.421	.386	.281
30	.544	.579	.544	.456	.526	.474	.404	.368	.386
20	.561	.561	.526	.526	.474	.368	.421	.386	.368
10	.526	.561	.526	.526	.509	.439	.404	.421	.386
4	.632	.649	.649	.509	.509	.421	.333	.368	.368
2	.596	.614	.614	.526	.544	.491	.386	.368	.368
1	.509	.596	.579	.544	.544	.491	.421	.368	.368
	1	2	4	10	20	30	50	75	100

Table 3: *fyrN*

galAJ cross-validation results (baseline: 0.776)

W-SF									
100	.310	.284	.310	.302	.310	.345	.302	.276	.267
75	.336	.310	.328	.345	.362	.379	.379	.328	.233
50	.379	.371	.379	.336	.371	.345	.397	.371	.362
30	.405	.388	.388	.397	.422	.371	.397	.397	.388
20	.509	.483	.466	.431	.422	.431	.371	.371	.422
10	.647	.672	.647	.612	.509	.405	.397	.353	.466
4	.629	.672	.664	.647	.552	.431	.388	.319	.457
2	.672	.724	.672	.681	.629	.440	.397	.345	.466
1	.716	.741	.690	.681	.595	.474	.397	.345	.466
	1	2	4	10	20	30	50	75	100

Table 4: *galAJ*

lagN cross-validation results (baseline: 0.703)

W-SF									
100	.649	.649	.622	.568	.595	.649	.703	.757	.703
75	.622	.676	.649	.622	.568	.649	.676	.730	.730
50	.622	.622	.622	.541	.514	.568	.649	.703	.730
30	.622	.676	.676	.622	.514	.432	.514	.595	.676
20	.730	.730	.730	.649	.568	.541	.568	.541	.676
10	.730	.676	.703	.595	.568	.486	.514	.595	.622
4	.622	.595	.730	.649	.595	.541	.541	.595	.649
2	.622	.541	.703	.676	.541	.541	.541	.622	.649
1	.595	.459	.676	.622	.514	.595	.568	.622	.649
	1	2	4	10	20	30	50	75	100

Table 5: *lagN*

livN cross-validation results (baseline: 0.981)

W-SF									
100	.022	.023	.023	.021	.019	.019	.019	.019	.019
75	.022	.022	.023	.021	.019	.019	.019	.019	.019
50	.022	.022	.022	.021	.019	.019	.019	.019	.019
30	.039	.038	.038	.023	.019	.019	.019	.019	.019
20	.126	.117	.092	.033	.022	.019	.021	.019	.019
10	.564	.556	.450	.140	.036	.025	.023	.023	.022
4	.756	.823	.776	.313	.051	.025	.023	.024	.023
2	.868	.925	.887	.441	.070	.031	.025	.024	.023
1	.847	.916	.897	.517	.095	.030	.025	.025	.024
	1	2	4	10	20	30	50	75	100

Table 6: *livN*

planN cross-validation results (baseline: 0.872)

W-SF									
100	.257	.257	.284	.275	.284	.294	.321	.358	.367
75	.248	.229	.229	.239	.275	.275	.303	.358	.376
50	.294	.303	.294	.193	.239	.257	.257	.257	.312
30	.459	.431	.394	.294	.248	.257	.202	.248	.266
20	.651	.550	.541	.349	.312	.275	.239	.248	.275
10	.798	.780	.725	.486	.394	.321	.202	.211	.257
4	.771	.706	.679	.541	.468	.330	.202	.193	.229
2	.789	.807	.706	.587	.505	.349	.202	.211	.229
1	.725	.761	.752	.633	.560	.385	.202	.202	.229
	1	2	4	10	20	30	50	75	100

Table 7: planN

rotN cross-validation results (baseline: 0.804)

W-SF									
100	.286	.286	.321	.250	.304	.304	.268	.304	.411
75	.286	.286	.286	.232	.232	.304	.304	.357	.446
50	.339	.321	.339	.357	.339	.339	.393	.429	.446
30	.464	.464	.482	.500	.429	.429	.411	.446	.464
20	.554	.536	.589	.554	.464	.500	.446	.464	.500
10	.625	.625	.661	.696	.625	.571	.464	.500	.536
4	.554	.607	.679	.696	.714	.714	.589	.518	.571
2	.518	.571	.714	.661	.768	.714	.571	.482	.536
1	.554	.643	.768	.679	.768	.750	.536	.446	.536
	1	2	4	10	20	30	50	75	100

Table 8: rotN

slagN cross-validation results (baseline: 0.556)

W-SF									
100	.090	.090	.075	.083	.113	.083	.120	.113	.143
75	.113	.113	.113	.113	.105	.105	.105	.120	.120
50	.098	.105	.113	.098	.105	.105	.113	.113	.120
30	.233	.226	.226	.195	.158	.105	.128	.135	.165
20	.316	.308	.308	.248	.211	.128	.128	.143	.135
10	.368	.353	.391	.338	.293	.180	.120	.143	.165
4	.376	.383	.406	.376	.346	.226	.135	.135	.143
2	.353	.383	.391	.376	.406	.226	.135	.135	.165
1	.353	.368	.459	.376	.398	.211	.150	.128	.150
	1	2	4	10	20	30	50	75	100

Table 9: slagN

stemmeN cross-validation results (baseline: 0.922)

W-SF									
100	.144	.150	.150	.159	.189	.186	.251	.278	.302
75	.153	.153	.135	.141	.195	.207	.240	.275	.335
50	.156	.159	.156	.153	.150	.168	.189	.225	.260
30	.243	.219	.204	.165	.165	.159	.171	.216	.234
20	.449	.413	.374	.240	.180	.159	.156	.204	.204
10	.907	.874	.802	.530	.323	.263	.219	.263	.281
4	.964	.961	.952	.772	.428	.293	.216	.246	.272
2	.934	.937	.955	.838	.473	.284	.213	.249	.266
1	.856	.919	.958	.871	.485	.305	.213	.257	.260
	1	2	4	10	20	30	50	75	100

Table 10: stemmeN

takN cross-validation results (baseline: 0.475)

W-SF									
100	.280	.288	.284	.292	.307	.300	.304	.288	.272
75	.272	.268	.276	.284	.311	.323	.292	.300	.272
50	.257	.261	.253	.253	.265	.272	.265	.276	.272
30	.284	.288	.276	.261	.272	.280	.268	.276	.284
20	.366	.358	.362	.304	.280	.272	.272	.265	.265
10	.490	.490	.440	.366	.315	.284	.280	.261	.284
4	.537	.556	.553	.510	.354	.319	.284	.276	.276
2	.568	.564	.560	.518	.358	.296	.292	.265	.284
1	.553	.580	.518	.541	.350	.284	.296	.261	.280
	1	2	4	10	20	30	50	75	100

Table 11: takN

trykkeV cross-validation results (baseline: 0.804)

W-SF									
100	.543	.565	.543	.630	.674	.696	.630	.435	.304
75	.565	.565	.543	.543	.587	.630	.609	.630	.522
50	.522	.522	.522	.500	.522	.565	.609	.717	.609
30	.500	.500	.522	.565	.522	.543	.522	.543	.543
20	.652	.652	.674	.696	.522	.522	.478	.522	.500
10	.652	.587	.696	.543	.565	.565	.500	.522	.500
4	.478	.587	.630	.609	.652	.609	.478	.500	.500
2	.304	.457	.543	.522	.696	.609	.500	.457	.522
1	.326	.500	.565	.543	.696	.630	.522	.457	.500
	1	2	4	10	20	30	50	75	100

Table 12: trykkeV

utsetteV cross-validation results (baseline: 0.675)

W-SF									
100	.338	.338	.338	.312	.312	.312	.364	.390	.338
75	.338	.299	.325	.325	.325	.338	.351	.351	.299
50	.364	.351	.338	.351	.351	.364	.364	.364	.377
30	.532	.532	.519	.429	.416	.416	.351	.377	.338
20	.506	.494	.506	.468	.403	.351	.338	.325	.364
10	.558	.597	.494	.416	.455	.403	.312	.338	.377
4	.597	.688	.662	.442	.545	.377	.338	.325	.390
2	.571	.610	.558	.416	.481	.403	.325	.325	.390
1	.636	.662	.545	.403	.519	.403	.325	.312	.390
	1	2	4	10	20	30	50	75	100

Table 13: utsetteV

utvalgN cross-validation results (baseline: 0.609)

W-SF									
100	.500	.500	.543	.522	.522	.543	.565	.609	.652
75	.500	.522	.543	.522	.522	.543	.543	.565	.609
50	.478	.500	.457	.413	.435	.413	.522	.565	.587
30	.609	.609	.630	.609	.500	.478	.478	.457	.543
20	.783	.739	.783	.630	.565	.522	.478	.435	.478
10	.674	.717	.717	.717	.652	.543	.478	.457	.457
4	.739	.739	.696	.739	.652	.522	.457	.457	.435
2	.543	.587	.696	.739	.652	.500	.457	.413	.435
1	.500	.500	.652	.696	.674	.500	.478	.391	.435
	1	2	4	10	20	30	50	75	100

Table 14: utvalgN

valgN cross-validation results (baseline: 0.606)

		W-SF								
	1	2	4	10	20	30	50	75	100	
100	.394	.394	.394	.394	.394	.394	.394	.394	.394	.413
75	.394	.394	.394	.394	.394	.394	.394	.394	.404	.423
50	.394	.394	.394	.394	.394	.394	.394	.394	.394	.413
30	.433	.452	.442	.442	.394	.394	.394	.394	.404	
20	.548	.529	.510	.490	.404	.394	.394	.394	.394	.394
10	.702	.731	.683	.635	.481	.413	.394	.394	.394	.394
4	.587	.635	.635	.683	.529	.433	.394	.394	.394	.394
2	.596	.577	.606	.692	.567	.452	.394	.394	.394	.394
1	.481	.519	.606	.702	.596	.471	.394	.394	.394	.394

Table 15: valgN