

## Appendix 6: Model selection for WORDS (EXP5) in Ch. 10

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**Content:** Results from model selection (cross-validation) in Chapter 10 with knowledge source=WORDS. 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)

		SF-W								
		1	2	4	10	20	30	50	75	100
100		.476	.476	.451	.439	.415	.378	.329	.305	.305
75		.524	.537	.537	.537	.488	.451	.378	.305	.329
50		.659	.683	<b>.707</b>	<b>.646</b>	.598	.561	<b>.451</b>	.366	.341
30		.671	.659	.695	.671	.707	.671	.549	.427	.402
20		.622	.622	<b>.695</b>	.671	<b>.707</b>	.671	.585	.500	.427
10		.634	.561	.622	.659	.622	.695	<b>.646</b>	.573	.463
4		<b>.695</b>	.573	.634	.659	.646	.695	.622	.598	.500
2		.476	.549	.598	.646	.634	.695	.659	.598	.512
1		.402	.451	.598	.646	.659	<b>.707</b>	<b>.671</b>	.585	.524

Table 1: friskAJ

*fullAJ* cross-validation results (baseline: 0.941)

		SF-W								
		1	2	4	10	20	30	50	75	100
100		.068	.068	.066	.068	.068	.068	.066	.061	.059
75		.093	.091	.086	.075	.070	.068	.064	.061	.061
50		<b>.343</b>	.320	.257	<b>.168</b>	.105	.084	<b>.068</b>	.061	.061
30		.800	.800	.773	.670	.366	.170	.075	.061	.064
20		.816	.786	.791	<b>.820</b>	.641	.370	.107	.066	.061
10		<b>.850</b>	.816	.786	.793	.789	.657	<b>.216</b>	.068	.064
4		<b>.861</b>	.852	.823	.805	.789	.755	.295	.080	.066
2		.786	.834	.825	.825	.786	.766	.336	.080	.068
1		.643	.752	.825	<b>.834</b>	.791	.782	<b>.370</b>	.080	.068

Table 2: fullAJ

*fyrN* cross-validation results (baseline: 0.789)

SF-W									
100	.544	.544	.526	.526	.421	.421	.404	.351	.263
75	.614	.632	.614	.632	.579	.596	.456	.491	.421
50	<b>.737</b>	.737	.737	.754	<b>.772</b>	.754	<b>.684</b>	.509	.474
30	<b>.842</b>	.772	.789	.825	.772	.789	.772	.614	.439
20	.772	.825	.789	<b>.842</b>	.754	.719	<b>.807</b>	.649	.474
10	.702	.807	.825	.737	.684	.649	.772	.667	.509
4	.702	.754	.807	<b>.737</b>	.684	.684	.737	.667	.509
2	.632	.772	<b>.842</b>	.719	.632	.684	.737	.667	.509
1	.456	.596	.772	.719	.614	.649	<b>.737</b>	.649	.474
	1	2	4	10	20	30	50	75	100

Table 3: *fyrN*

*galAJ* cross-validation results (baseline: 0.776)

SF-W									
100	.276	.284	.267	.259	.241	.241	.250	.233	.233
75	.517	.483	.491	.414	.388	.371	.284	.267	.241
50	<b>.681</b>	.664	.672	<b>.664</b>	.647	.526	<b>.379</b>	.259	.233
30	.664	.647	.655	.655	.690	.690	.534	.328	.259
20	.672	.681	.647	.647	.793	.681	.621	.371	.276
10	<b>.741</b>	.733	.741	<b>.741</b>	.767	.733	<b>.716</b>	.448	.267
4	<b>.733</b>	.716	.707	.690	<b>.741</b>	.690	.690	.491	.310
2	.672	.690	.733	.672	.733	.698	.698	.517	.302
1	.681	.698	.716	.672	.716	.690	<b>.724</b>	.526	.328
	1	2	4	10	20	30	50	75	100

Table 4: *galAJ*

*lagN* cross-validation results (baseline: 0.703)

SF-W									
100	.730	.703	.730	.703	.676	.622	.622	.486	.459
75	.892	.892	.892	.811	.784	.730	.649	.595	.568
50	<b>.946</b>	.946	.946	<b>.919</b>	.919	.811	<b>.784</b>	.703	.622
30	.865	.919	<b>.946</b>	<b>.946</b>	.919	.946	.892	.757	.730
20	.838	.838	.892	.892	.892	.919	.919	.730	.730
10	.757	.784	.784	.784	.865	.919	<b>.946</b>	.784	.730
4	.514	.568	<b>.703</b>	.811	.838	.865	.946	.838	.730
2	.405	.486	.676	.811	<b>.865</b>	.838	.946	.865	.757
1	.378	.459	.595	.757	.838	.811	<b>.946</b>	.865	.757
	1	2	4	10	20	30	50	75	100

Table 5: *lagN*

*livN* cross-validation results (baseline: 0.981)

SF-W									
100	.025	.025	.025	.025	.025	.025	.019	.019	.019
75	.025	.024	.024	.024	.024	.025	.019	.019	.019
50	<b>.120</b>	.097	.069	<b>.043</b>	.030	.025	.022	.022	<b>.023</b>
30	.706	.665	.616	.380	.124	.052	.026	.027	.027
20	.799	.794	.781	.757	.374	.129	.029	.026	.027
10	<b>.847</b>	.839	.826	<b>.803</b>	.758	.400	<b>.044</b>	.029	.028
4	<b>.938</b>	.924	.893	.819	.803	.662	.080	.028	.027
2	.915	.933	.923	<b>.839</b>	.810	.720	.102	.028	.027
1	.835	.919	.924	.838	.797	.744	<b>.111</b>	.028	.027
	1	2	4	10	20	30	50	75	100

Table 6: *livN*

*planN* cross-validation results (baseline: 0.872)

SF-W									
100	.174	.174	.165	.156	.183	.174	.156	.128	.128
75	.495	.459	.450	.321	.229	.174	.156	.128	.128
50	<b>.826</b>	.807	.807	<b>.798</b>	.615	.450	<b>.248</b>	.156	.147
30	.862	<b>.872</b>	.853	.835	.862	.807	.413	.202	.138
20	.817	.835	.807	.826	.853	.826	.587	.229	.147
10	.835	.817	.798	.835	<b>.890</b>	.881	<b>.780</b>	.294	.174
4	.725	.771	.798	.862	.853	.872	.817	.422	.174
2	.596	.706	.817	<b>.908</b>	.881	.881	.844	.486	.183
1	.459	.606	<b>.817</b>	.881	.862	.872	<b>.862</b>	.486	.193
	1	2	4	10	20	30	50	75	100

Table 7: *planN*

*rotN* cross-validation results (baseline: 0.804)

SF-W									
100	.607	.554	.536	.536	.518	.357	.304	.250	.232
75	.732	.732	.714	.679	.607	.500	.357	.268	.250
50	<b>.804</b>	.786	.804	<b>.821</b>	.821	.732	<b>.411</b>	.286	.268
30	<b>.839</b>	.804	.786	.804	.875	.821	.714	.393	.321
20	.750	.750	.732	.768	<b>.839</b>	.839	.786	.625	.375
10	.821	.786	.804	.768	.768	.821	<b>.786</b>	.714	.554
4	.589	.643	.643	.696	.750	.804	.768	.804	.536
2	.500	.607	.679	.714	.750	.839	.821	.821	.554
1	.357	.518	<b>.679</b>	.750	.768	<b>.839</b>	<b>.821</b>	.786	.571
	1	2	4	10	20	30	50	75	100

Table 8: *rotN*

*slagN* cross-validation results (baseline: 0.556)

SF-W									
100	.143	.143	.143	.135	.120	.113	.105	.113	.098
75	.286	.301	.256	.218	.150	.128	.120	.113	.098
50	.526	<b>.541</b>	.534	<b>.504</b>	.338	.263	<b>.150</b>	.113	.105
30	.489	.489	<b>.526</b>	<b>.541</b>	.474	.459	.241	.135	.105
20	.451	.489	.504	.459	.474	.534	.301	.135	.105
10	.436	.421	.451	.459	.444	.504	<b>.414</b>	.143	.098
4	.459	<b>.489</b>	.466	.511	.481	<b>.556</b>	<b>.459</b>	.211	.105
2	.293	.361	.406	.496	.474	.519	.444	.203	.120
1	.233	.316	.414	.541	.496	.496	.444	.248	.120
	1	2	4	10	20	30	50	75	100

Table 9: *slagN*

*stemmeN* cross-validation results (baseline: 0.922)

SF-W									
100	.105	.102	.102	.096	.096	.090	.084	.081	.084
75	.150	.141	.135	.114	.102	.093	.090	.087	.084
50	<b>.593</b>	.548	.500	<b>.329</b>	.219	.144	<b>.108</b>	.099	.096
30	.985	.982	.970	.904	.641	.371	.144	.105	.096
20	.991	<b>.994</b>	.991	.991	.886	.620	.174	.108	.096
10	.979	.976	.982	<b>.991</b>	.988	.919	<b>.362</b>	.132	.099
4	.958	.967	<b>.970</b>	.979	<b>.994</b>	.976	.515	.147	.105
2	.874	.919	.949	.979	.991	.979	.575	.153	.102
1	.763	.862	.943	.970	.979	.982	<b>.587</b>	.153	.108
	1	2	4	10	20	30	50	75	100

Table 10: *stemmeN*

takN cross-validation results (baseline: 0.475)

SF-W									
100	.237	.230	.230	.233	.230	.230	.233	.233	.230
75	.288	.284	.276	.257	.230	.230	<b>.233</b>	.233	.230
50	<b>.451</b>	.444	.451	<b>.401</b>	.292	.233	.230	.230	.230
30	.572	.572	.580	.580	.506	.385	.241	.237	.241
20	.588	.584	<b>.611</b>	<b>.603</b>	.580	.482	.296	.241	.245
10	.572	.595	.572	.584	.584	.568	<b>.374</b>	.241	.245
4	.638	.646	.646	.607	.584	.560	.424	.265	.245
2	.599	.630	<b>.654</b>	.603	.553	.537	.412	.276	.257
1	.580	.650	.650	<b>.607</b>	.556	.518	<b>.455</b>	.284	.253
	1	2	4	10	20	30	50	75	100

Table 11: takN

trykkeV cross-validation results (baseline: 0.804)

SF-W									
100	.674	.674	.652	.630	.522	.413	.370	.283	.239
75	.826	.826	.804	.739	.717	.630	.478	.326	.261
50	.848	.848	<b>.870</b>	.804	<b>.870</b>	.826	<b>.587</b>	.391	.326
30	<b>.739</b>	.717	.717	.696	.783	<b>.826</b>	.826	.587	.348
20	.717	.674	.674	.696	.783	.804	.870	.696	.457
10	.565	.630	.652	.652	.652	.761	<b>.870</b>	.739	.565
4	.522	.543	.543	.674	.630	.696	.804	.826	.587
2	.370	.478	.609	<b>.696</b>	.674	.674	.826	<b>.848</b>	.587
1	.217	.500	<b>.609</b>	.674	.674	.652	.826	.826	.565
	1	2	4	10	20	30	50	75	100

Table 12: trykkeV

utsetteV cross-validation results (baseline: 0.675)

SF-W									
100	.494	.506	.442	.442	.364	.312	.312	.338	.338
75	.610	.610	.610	.506	.481	.351	.312	.325	.312
50	<b>.688</b>	.649	.662	<b>.662</b>	.571	.519	<b>.403</b>	.351	.312
30	.662	.688	.675	.727	.701	.675	.636	.416	.325
20	.662	.688	.714	.740	.727	.675	.662	.494	.338
10	<b>.753</b>	.753	.701	<b>.766</b>	.740	.649	<b>.688</b>	.506	.338
4	.714	<b>.727</b>	.701	.675	.662	.662	.662	.519	.351
2	.584	.636	.623	.662	.662	.649	.662	.558	.351
1	.481	.519	.545	.675	<b>.688</b>	.649	<b>.662</b>	.584	.338
	1	2	4	10	20	30	50	75	100

Table 13: utsetteV

utvalgN cross-validation results (baseline: 0.609)

SF-W									
100	.804	.804	.804	.739	.696	.652	.630	.587	.565
75	.935	<b>.957</b>	.957	.870	.870	.804	.717	.696	.630
50	.935	.935	.935	<b>.935</b>	.913	.870	<b>.848</b>	.783	.674
30	.891	.891	.891	.935	.957	.913	.935	.870	.761
20	<b>.913</b>	.913	.891	<b>.957</b>	.957	.957	<b>.957</b>	.891	.804
10	.783	.783	.848	.870	.870	.935	.913	.957	.891
4	<b>.783</b>	.761	.761	.717	.935	.957	.891	.978	.913
2	.565	.609	.783	.826	.935	<b>.957</b>	.891	.957	.913
1	.413	.457	.739	.848	.913	.935	.891	<b>.978</b>	.891
	1	2	4	10	20	30	50	75	100

Table 14: utvalgN

valgN cross-validation results (baseline: 0.606)

		SF-W								
	1	2	4	10	20	30	50	75	100	
100	.500	.510	.490	.462	.452	.481	.442	.442	.423	
75	.654	.635	.596	.538	.510	.510	.481	.481	.462	
50	<b>.856</b>	.846	.846	<b>.798</b>	.673	.587	.481	<b>.490</b>	.471	
30	.904	.904	<b>.913</b>	<b>.923</b>	.913	.846	.635	.500	.481	
20	.856	.856	.846	.894	.913	.885	.702	.538	.481	
10	.731	.760	.788	.894	.885	.885	<b>.817</b>	.587	.490	
4	.615	.673	<b>.712</b>	.827	.885	.865	.837	.625	.490	
2	.519	.587	.654	.788	<b>.885</b>	.875	<b>.837</b>	.606	.490	
1	.404	.529	.644	.788	.865	.846	.827	.625	.490	

Table 15: valgN