Appendix 3:
Model selection for WORDS (EXP1) in Ch. 9

Gunn Inger Lyse

19th April 2011

Content: Results from model selection (cross-validation) in Chapter 9 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).

*frisk*AJ cross-validation results (baseline: 0.683)

			W-W						
100	.402	.402	.390	.341	.317	.317	.317	.317	.317
75	.463	.427	.451	.439	.415	.366	.317	.329	.317
50	**.646**	.634	.622	**.537**	.512	.476	**.439**	.329	.317
30	.659	.646	.634	.585	.634	.671	.573	.378	.341
20	.598	.585	.610	.549	**.671**	.659	.573	.463	.366
10	**.659**	.646	.659	.573	.659	.659	**.622**	.512	.378
4	.634	**.695**	.695	.585	.671	.683	.610	.549	.415
2	.512	.512	.598	.622	.671	**.695**	**.610**	.598	.427
1	.427	.476	.610	.610	.671	.683	.598	.598	.451
	1	2	4	10	20	30	50	75	100

Table 1: friskAJ

*full*AJ cross-validation results (baseline: 0.941)

			W-W						
100	.064	061	.061	.064	.061	.064	.059	.059	.059
75	.068	.066	.064	.064	.061	.064	.059	.059	.059
50	**.230**	.211	.168	**.120**	.080	.070	**.061**	.061	.061
30	.780	.727	.689	.525	.218	.095	.066	.061	.061
20	**.791**	.780	.784	.684	.489	.216	.084	.064	.064
10	.770	.757	.745	**.730**	.716	.534	**.118**	.064	.064
4	.836	.855	.834	.761	.739	.668	.170	.068	.064
2	.775	.834	**.866**	.782	.745	.686	.207	.070	.066
1	.634	.745	.852	**.786**	.755	.716	**.225**	.070	.068
	1	2	4	10	20	30	50	75	100

Table 2: fullAJ

fyrN cross-validation results (baseline: 0.789)

W-W

	1	2	4	10	20	30	50	75	100
100	.456	.456	.439	.439	.421	.351	.316	.281	.263
75	.667	.684	.667	.614	.596	.474	.421	.351	.263
50	**.807**	.807	.789	**.825**	.825	.772	**.526**	.386	.298
30	.789	.789	.772	.860	**.895**	.860	.702	.456	.386
20	.860	.860	**.877**	.825	.860	.825	.719	.544	.421
10	.737	.754	.737	.737	.807	.842	**.719**	.561	.474
4	.649	.649	.684	**.789**	.789	.754	.702	.561	.526
2	.544	.561	**.719**	.772	.737	.737	**.737**	.596	.509
1	.368	.456	.632	.719	.737	.719	.684	.596	.509

Table 3: fyrN

galAJ cross-validation results (baseline: 0.776)

W-W

	1	2	4	10	20	30	50	75	100
100	.259	.267	.250	.233	.233	.224	.224	.224	.224
75	.371	.353	.319	.302	.259	.233	.241	.233	.224
50	.603	**.629**	.578	**.578**	.474	.371	**.250**	.233	.224
30	.629	.638	.647	.647	.655	.534	.362	.241	.224
20	.612	.612	.621	.638	.733	.690	.491	.259	.224
10	**.776**	.759	.741	.741	**.750**	.724	**.621**	.319	.241
4	.698	.724	**.767**	**.750**	.638	.672	.638	.328	.233
2	.707	.698	.690	.741	.672	.655	.664	.353	.233
1	.716	.741	.724	.716	.672	.638	**.672**	.388	.233

Table 4: galAJ

lagN cross-validation results (baseline: 0.703)

W-W

	1	2	4	10	20	30	50	75	100
100	.730	.730	.703	.703	.730	.703	.649	.568	.351
75	.811	.784	.757	.703	.730	.757	.703	.703	.459
50	**.811**	.811	.811	**.811**	.811	.730	**.703**	.703	.514
30	**.919**	.892	.919	.919	.838	.865	.757	.703	.649
20	.865	.865	.838	.919	.946	.865	.838	.703	.649
10	.784	.838	.757	.838	**.946**	.919	**.838**	.784	.676
4	.649	.703	**.730**	.784	.973	.919	.838	.811	.703
2	.514	.622	.649	.811	**.973**	.892	.838	.811	.703
1	.459	.541	.541	.784	.946	.892	**.838**	.811	.730

Table 5: lagN

livN cross-validation results (baseline: 0.981)

W-W

	1	2	4	10	20	30	50	75	100
100	.024	.024	.024	.023	.023	.019	.019	.019	.019
75	.023	.023	.024	.023	.024	.019	.019	.019	.019
50	**.051**	.046	.039	**.030**	.023	.019	**.019**	.019	.019
30	.553	.512	.432	.201	.053	.028	.023	.024	.024
20	.757	.767	.757	.633	.217	.056	.025	.025	.025
10	**.844**	.844	.821	**.800**	.636	.205	**.036**	.025	.025
4	.938	.933	.883	.832	.766	.444	.043	.025	.025
2	.929	**.950**	.919	**.844**	.782	.521	.048	.025	.025
1	.856	.917	.923	.843	.767	.551	**.051**	.025	.026

Table 6: livN

*plan*N cross-validation results (baseline: 0.872)

W-W

	1	2	4	10	20	30	50	75	100
100	.147	.147	.147	.138	.147	.138	.128	.128	.128
75	.367	.349	.312	.211	.156	.147	.119	.128	.128
50	.771	**.780**	.734	**.661**	.450	.303	**.156**	.128	.128
30	**.862**	.817	.835	.835	.835	.716	.294	.138	.128
20	.835	.826	.844	.862	.862	.817	.468	.138	.119
10	.844	.853	.844	.853	**.872**	.872	**.679**	.229	.147
4	.826	.807	.862	.844	.826	.835	.761	.321	.156
2	.725	.771	**.872**	.835	.835	**.853**	.780	.367	.156
1	.578	.670	.844	.844	.835	.844	**.817**	.367	.165

Table 7: planN

*rot*N cross-validation results (baseline: 0.804)

W-W

	1	2	4	10	20	30	50	75	100
100	.411	.375	.393	.357	.357	.286	.232	.196	.196
75	.643	.625	.589	.571	.554	.446	.321	.214	.196
50	.839	.839	**.857**	**.821**	.732	.661	**.482**	.304	.214
30	.786	.786	**.839**	.875	.875	.839	.696	.429	.286
20	.768	.804	.804	**.875**	.821	.821	.768	.429	.357
10	.714	.732	.732	.857	.821	.875	**.804**	.589	.411
4	.607	.661	.625	.714	.804	.893	.839	.625	.375
2	.518	.571	**.696**	.804	.750	**.893**	**.839**	.679	.429
1	.393	.536	.679	.839	.786	.875	.821	.696	.446

Table 8: rotN

*slag*N cross-validation results (baseline: 0.556)

W-W

	1	2	4	10	20	30	50	75	100
100	.113	.113	.105	.113	.105	.090	.090	.090	.083
75	.211	.203	.173	.143	.105	.105	.090	.090	.083
50	**.414**	.391	.383	**.376**	.278	.203	**.105**	.090	.083
30	.474	.459	**.526**	.504	.444	.346	.173	.098	.090
20	.504	.504	.504	.526	.519	.444	.226	.113	.090
10	.474	.466	.511	.519	**.534**	.459	**.376**	.128	.105
4	.414	.474	**.564**	.526	.489	.436	.368	.143	.098
2	.361	.429	.541	.579	.504	.429	.353	.158	.098
1	.346	.391	.519	**.579**	.489	.444	**.376**	.128	.098

Table 9: slagN

*stemme*N cross-validation results (baseline: 0.922)

W-W

	1	2	4	10	20	30	50	75	100
100	.084	.084	.084	.084	.081	.081	.078	.078	.078
75	.090	.090	.090	.087	.084	.081	.078	.078	.078
50	**.410**	.362	.320	**.210**	.147	.096	.078	.081	**.084**
30	.970	.970	.946	.793	.410	.204	.093	.087	.090
20	.985	.988	.988	.985	.826	.416	.117	.090	.090
10	.973	**.988**	.988	**.991**	.976	.841	**.174**	.093	.093
4	.973	.970	**.982**	.979	**.988**	.961	.287	.096	.096
2	.886	.925	.958	.970	.985	.970	.353	.096	.096
1	.772	.874	.943	.973	.985	.967	**.362**	.102	.096

Table 10: stemmeN

*tak*N cross-validation results (baseline: 0.475)

			W-W						
100	.233	.230	.226	.230	.230	.233	.233	.230	.230
75	.237	.233	.237	.233	.233	.233	.230	.230	.230
50	**.370**	.358	.350	**.323**	.265	.245	**.237**	.233	.233
30	.545	.533	.541	.490	.412	.331	.237	.233	.233
20	.556	.529	.588	**.603**	.537	.416	.253	.233	.230
10	.560	.564	**.588**	.588	.588	.529	**.331**	.237	.233
4	.661	.658	.646	**.619**	.595	.588	.354	.249	.230
2	.673	**.677**	.665	.591	.572	.580	**.377**	.253	.237
1	.584	.646	.626	.588	.572	.560	.374	.253	.233
	1	2	4	10	20	30	50	75	100

Table 11: takN

*trykke*V cross-validation results (baseline: 0.804)

			W-W						
100	.457	.435	.391	.348	.239	.217	.239	.196	.217
75	.739	.696	.674	.652	.457	.326	.217	.174	.239
50	.783	**.804**	.783	**.739**	.696	.630	**.478**	.196	.196
30	.826	.783	.804	.826	.783	.761	.630	.370	.196
20	.848	.826	.891	**.826**	.826	.826	.739	.478	.283
10	.717	.739	**.891**	.761	.761	.826	**.804**	.522	.370
4	.652	.717	**.804**	**.826**	.826	.826	.804	.609	.391
2	.370	.609	.717	.783	.783	.783	.783	.609	.391
1	.304	.587	.674	.783	.783	.783	**.804**	.609	.391
	1	2	4	10	20	30	50	75	100

Table 12: trykkeV

*utsette*V cross-validation results (baseline: 0.675)

			W-W						
100	.364	.364	.377	.364	.325	.325	.338	.338	.325
75	.506	.494	.519	.468	.390	.312	.338	.338	.325
50	.649	**.662**	.636	**.649**	.545	.519	**.390**	.338	.325
30	.805	.818	**.831**	.792	.779	.701	.597	.325	.312
20	.753	.805	.766	.701	.805	.740	.636	.351	.312
10	.740	.818	.753	.727	**.805**	.701	**.701**	.390	.338
4	.766	**.818**	.753	**.779**	.779	.662	**.662**	.403	.351
2	.714	.779	.701	.714	.779	.688	.636	.429	.338
1	.675	.714	.675	.714	.753	.714	.649	.429	.338
	1	2	4	10	20	30	50	75	100

Table 13: utsetteV

*utvalg*N cross-validation results (baseline: 0.609)

			W-W						
100	.609	.587	.609	.587	.565	.565	.522	.522	.522
75	.717	.696	.739	.717	.652	.652	.565	.522	.543
50	.891	.913	**.957**	**.935**	.804	.739	**.717**	.543	.543
30	.935	**.957**	.957	.935	.891	.913	.826	.652	.587
20	.913	.935	.935	.913	.891	**.957**	.848	.696	.630
10	.783	.783	.913	.870	.891	.935	**.935**	.739	.696
4	.717	.804	**.848**	.870	.870	.913	.935	.783	.739
2	.587	.652	.761	.870	.913	.913	.957	.783	.717
1	.478	.565	.717	.848	**.913**	.913	**.957**	.804	.717
	1	2	4	10	20	30	50	75	100

Table 14: utvalgN

*valg*N cross-validation results (baseline: 0.606)

W-W

	1	2	4	10	20	30	50	75	100
100	.404	.404	.404	.394	.394	.394	.394	.394	.394
75	.433	.442	.433	.413	.404	.404	.394	.394	.394
50	**.673**	.673	.644	**.529**	.413	.413	**.404**	.394	.394
30	.913	**.923**	.913	.875	.750	.510	.385	.394	.394
20	.837	.856	.846	.913	.798	.673	.413	.394	.394
10	.760	.779	.798	.894	**.923**	.865	**.548**	.404	.394
4	.635	.712	**.788**	.837	.904	**.933**	.644	.404	.394
2	.538	.635	.702	.808	.904	.904	.692	.404	.394
1	.442	.558	.683	.769	.885	.904	**.692**	.404	.394
	1	2	4	10	20	30	50	75	100

Table 15: valgN