

Appendix 5: Model selection for RELATED-WORDS (EXP3) in Ch. 9

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Content: Results from model selection (cross-validation) in Chapter 9 with knowledge source=RELATED-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)

	W-DEN									
	0	4	5	10	15	20	30	40	50	
(30.30)	.476	.537	.512	.451	.537	.476	.549	.561	.549	
(20.20)	.598	.488	.500	.573	.549	.598	.561	.598	.537	
(4.30)	.683	.671	.683	.671	.707	.683	.646	.598	.585	
(4.4)	.671	.695	.695	.683	.646	.671	.646	.646	.598	
(4.2)	.634	.598	.598	.598	.610	.634	.646	.622	.622	
(2.30)	.683	.683	.671	.659	.707	.683	.646	.622	.598	
(2.20)	.622	.622	.622	.561	.622	.622	.549	.585	.549	
(1.30)	.671	.659	.671	.610	.683	.671	.610	.622	.610	
(1.20)	.622	.646	.659	.524	.598	.622	.537	.524	.512	

Table 1: friskAJ

fullAJ cross-validation results (baseline: 0.941)

	W-DEN									
	0	4	5	10	15	20	30	40	50	
(20.4)	.743	.698	.711	.761	.741	.748	.730	.716	.709	
(20.1)	.773	.757	.766	.793	.793	.782	.777	.770	.757	
(4.4)	.777	.786	.784	.784	.780	.773	.780	.786	.784	
(4.2)	.811	.784	.777	.805	.800	.802	.791	.793	.791	
(4.1)	.855	.816	.816	.848	.848	.855	.848	.861	.852	
(2.4)	.789	.802	.802	.784	.786	.784	.805	.814	.830	
(2.2)	.789	.750	.745	.766	.775	.786	.807	.814	.811	
(1.10)	.739	.743	.736	.745	.741	.739	.727	.748	.743	
(1.4)	.791	.814	.818	.809	.800	.786	.798	.809	.814	

Table 2: fullAJ

*fyr*N cross-validation results (baseline: 0.789)

W-DEN									
(50.10)	.684	.737	.737	.684	.737	.684	.754	.789	.825
(30.30)	.719	.702	.737	.772	.754	.719	.772	.772	.807
(30.20)	.754	.789	.772	.789	.754	.754	.825	.807	.789
(30.10)	.772	.825	.825	.842	.754	.772	.825	.789	.789
(20.20)	.737	.789	.789	.789	.754	.737	.772	.719	.737
(20.4)	.789	.754	.754	.789	.772	.789	.825	.754	.754
(20.2)	.754	.737	.737	.772	.737	.754	.737	.754	.737
(20.1)	.789	.719	.719	.772	.772	.789	.772	.737	.719
(10.30)	.684	.754	.754	.684	.684	.667	.684	.667	.719
	0	4	5	10	15	20	30	40	50

Table 3: *fyr*N

*gal*AJ cross-validation results (baseline: 0.776)

W-DEN									
(10.20)	.552	.621	.629	.603	.603	.552	.543	.552	.560
(10.10)	.638	.638	.638	.629	.612	.638	.603	.586	.638
(10.4)	.638	.681	.690	.664	.638	.638	.672	.664	.681
(10.2)	.664	.707	.698	.716	.698	.664	.690	.664	.681
(10.1)	.664	.716	.690	.698	.698	.664	.698	.647	.681
(4.10)	.638	.672	.681	.672	.672	.638	.681	.655	.638
(4.4)	.690	.690	.690	.707	.681	.690	.690	.707	.707
(2.10)	.655	.698	.698	.647	.655	.655	.681	.690	.681
(1.2)	.724	.724	.716	.716	.716	.724	.733	.750	.759
	0	4	5	10	15	20	30	40	50

Table 4: *gal*AJ

*lag*N cross-validation results (baseline: 0.703)

W-DEN									
(30.10)	.838	.946	.919	.919	.865	.838	.811	.784	.811
(30.1)	.892	.892	.892	.892	.892	.892	.892	.865	.865
(20.20)	.865	.892	.865	.892	.892	.892	.811	.865	.838
(20.10)	.865	.838	.838	.892	.892	.865	.811	.811	.811
(10.30)	.811	.865	.865	.865	.811	.811	.838	.838	.811
(10.20)	.784	.838	.838	.838	.838	.784	.811	.811	.811
(4.20)	.784	.838	.838	.838	.811	.784	.811	.838	.838
(2.20)	.757	.811	.811	.838	.811	.757	.730	.784	.838
(1.20)	.757	.811	.811	.838	.811	.757	.730	.784	.811
	0	4	5	10	15	20	30	40	50

Table 5: *lag*N

*liv*N cross-validation results (baseline: 0.981)

W-DEN									
(4.4)	.846	.779	.781	.800	.827	.847	.894	.891	.895
(4.2)	.883	.860	.859	.870	.880	.882	.925	.922	.918
(4.1)	.898	.886	.884	.905	.900	.898	.927	.929	.924
(2.4)	.914	.861	.861	.869	.891	.915	.930	.931	.929
(2.2)	.925	.908	.903	.914	.919	.925	.940	.940	.940
(2.1)	.918	.904	.906	.909	.917	.918	.929	.930	.931
(1.4)	.923	.892	.896	.892	.907	.923	.938	.943	.945
(1.2)	.924	.904	.907	.915	.918	.924	.938	.940	.945
(1.1)	.871	.817	.822	.851	.865	.871	.896	.900	.901
	0	4	5	10	15	20	30	40	50

Table 6: *liv*N

planN cross-validation results (baseline: 0.872)

W-DEN									
(30.1)	.771	.725	.725	.771	.807	.771	.771	.761	.716
(20.20)	.780	.817	.807	.789	.789	.789	.798	.789	.798
(20.10)	.761	.771	.789	.761	.798	.761	.743	.716	.743
(10.30)	.771	.817	.807	.826	.761	.780	.789	.780	.743
(10.20)	.743	.835	.817	.771	.771	.743	.780	.771	.780
(10.10)	.761	.780	.761	.752	.780	.761	.734	.743	.743
(10.2)	.844	.817	.807	.826	.807	.844	.835	.826	.789
(4.4)	.743	.716	.716	.716	.716	.743	.743	.706	.734
(2.4)	.752	.716	.725	.725	.734	.752	.780	.780	.789
	0	4	5	10	15	20	30	40	50

Table 7: planN

rotN cross-validation results (baseline: 0.804)

W-DEN									
(50.4)	.732	.696	.696	.750	.732	.732	.714	.714	.696
(30.20)	.839	.768	.768	.804	.786	.839	.804	.679	.661
(30.10)	.750	.750	.750	.804	.804	.750	.768	.696	.696
(20.10)	.804	.786	.786	.786	.786	.804	.839	.786	.786
(10.30)	.821	.732	.750	.821	.839	.821	.821	.786	.768
(10.10)	.786	.750	.750	.786	.821	.786	.750	.732	.714
(4.30)	.857	.768	.768	.839	.839	.857	.786	.768	.714
(2.30)	.839	.768	.768	.821	.821	.839	.768	.750	.786
(1.30)	.839	.768	.768	.804	.804	.839	.750	.804	.768
	0	4	5	10	15	20	30	40	50

Table 8: rotN

slagN cross-validation results (baseline: 0.556)

W-DEN									
(30.4)	.519	.511	.526	.519	.526	.519	.549	.579	.541
(20.10)	.534	.496	.504	.496	.534	.526	.556	.549	.571
(10.20)	.541	.534	.534	.526	.526	.541	.534	.511	.511
(10.10)	.451	.466	.451	.444	.436	.451	.451	.466	.466
(4.10)	.466	.489	.474	.459	.421	.466	.511	.511	.511
(4.4)	.511	.489	.466	.474	.474	.511	.504	.481	.489
(2.10)	.451	.436	.429	.406	.429	.451	.481	.519	.519
(2.4)	.436	.391	.391	.391	.429	.436	.444	.489	.526
(1.10)	.451	.406	.406	.421	.414	.451	.489	.496	.496
	0	4	5	10	15	20	30	40	50

Table 9: slagN

stemmeN cross-validation results (baseline: 0.922)

W-DEN									
(20.10)	.832	.808	.781	.781	.793	.832	.904	.928	.946
(20.4)	.988	.967	.952	.970	.976	.988	.982	.988	.988
(20.2)	.991	.982	.976	.982	.991	.991	.988	.988	.988
(20.1)	.991	.979	.979	.991	.991	.991	.982	.988	.985
(10.10)	.985	.991	.988	.994	.991	.985	.970	.970	.973
(10.4)	.967	.973	.979	.979	.976	.967	.967	.973	.979
(10.2)	.970	.982	.979	.979	.976	.970	.973	.976	.979
(4.20)	.967	.958	.949	.979	.973	.967	.982	.973	.976
(1.20)	.970	.970	.970	.979	.973	.970	.979	.976	.976
	0	4	5	10	15	20	30	40	50

Table 10: stemmeN

takN cross-validation results (baseline: 0.475)

W-DEN									
(4.10)	.545	.591	.568	.572	.533	.545	.549	.541	.533
(4.4)	.607	.630	.626	.588	.599	.607	.553	.560	.560
(4.2)	.595	.619	.619	.615	.591	.595	.549	.549	.560
(4.1)	.564	.615	.611	.599	.588	.564	.553	.560	.572
(2.4)	.615	.646	.642	.638	.619	.615	.572	.564	.560
(2.2)	.603	.658	.661	.669	.619	.603	.556	.576	.576
(2.1)	.595	.619	.615	.634	.623	.595	.568	.564	.572
(1.4)	.588	.619	.611	.588	.572	.588	.576	.564	.584
(1.2)	.595	.615	.619	.603	.591	.595	.607	.584	.580
	0	4	5	10	15	20	30	40	50

Table 11: takN

trykkeV cross-validation results (baseline: 0.804)

W-DEN									
(30.10)	.739	.739	.717	.783	.826	.739	.739	.783	.783
(20.30)	.826	.870	.848	.848	.870	.826	.826	.848	.826
(20.20)	.783	.804	.826	.848	.848	.783	.804	.848	.826
(20.10)	.717	.826	.804	.826	.761	.717	.717	.783	.761
(20.4)	.783	.804	.783	.826	.848	.783	.674	.717	.804
(20.2)	.739	.739	.739	.804	.804	.739	.696	.696	.717
(20.1)	.761	.739	.739	.826	.783	.761	.696	.674	.739
(10.30)	.826	.783	.826	.826	.848	.826	.826	.826	.804
(10.4)	.783	.783	.783	.783	.783	.783	.609	.674	.717
	0	4	5	10	15	20	30	40	50

Table 12: trykkeV

utsetteV cross-validation results (baseline: 0.675)

W-DEN									
(30.10)	.649	.688	.714	.701	.701	.649	.649	.727	.688
(30.4)	.675	.649	.662	.701	.701	.688	.649	.662	.688
(30.2)	.701	.623	.623	.662	.688	.714	.662	.714	.714
(30.1)	.740	.636	.636	.688	.740	.753	.675	.727	.714
(20.20)	.714	.727	.740	.727	.753	.714	.740	.753	.779
(20.2)	.727	.675	.675	.714	.701	.740	.688	.688	.688
(10.20)	.714	.714	.740	.740	.714	.714	.779	.753	.740
(10.2)	.701	.701	.701	.714	.688	.701	.662	.636	.610
(4.2)	.714	.753	.753	.714	.688	.714	.701	.714	.714
	0	4	5	10	15	20	30	40	50

Table 13: utsetteV

utvalgN cross-validation results (baseline: 0.609)

W-DEN									
(50.10)	.783	.870	.870	.848	.891	.783	.870	.870	.848
(50.4)	.870	.891	.913	.870	.913	.870	.870	.848	.848
(30.4)	.848	.891	.913	.870	.848	.848	.870	.804	.804
(30.2)	.826	.913	.913	.913	.848	.826	.870	.804	.804
(20.30)	.826	.870	.957	.891	.891	.826	.870	.804	.783
(10.50)	.739	.739	.739	.696	.739	.761	.739	.826	.783
(10.30)	.891	.891	.913	.913	.957	.891	.935	.848	.870
(2.50)	.761	.804	.848	.826	.848	.761	.804	.848	.848
(1.50)	.804	.848	.848	.848	.870	.804	.804	.783	.848
	0	4	5	10	15	20	30	40	50

Table 14: utvalgN

valgN cross-validation results (baseline: 0.606)

	W-DEN									
	0	4	5	10	15	20	30	40	50	
(30.4)	.865	.846	.817	.808	.837	.865	.827	.837	.875	
(30.2)	.875	.865	.856	.885	.856	.875	.837	.837	.865	
(30.1)	.894	.865	.837	.856	.865	.894	.837	.846	.865	
(20.10)	.885	.837	.837	.894	.885	.885	.904	.894	.894	
(10.20)	.798	.846	.837	.837	.798	.808	.856	.885	.894	
(4.30)	.769	.808	.788	.740	.788	.779	.788	.788	.788	
(2.30)	.798	.808	.788	.769	.788	.798	.788	.846	.837	
(2.20)	.798	.856	.865	.846	.817	.798	.827	.837	.846	
(1.30)	.808	.827	.808	.760	.760	.808	.798	.837	.837	

Table 15: valgN