

Appendix J: The WordSimilarity-353 Test Collection

This appendix presents The WordSimilarity-353 Test Collection (Finkelstein *et al.*, 2002; Gabrilovich 2002) and the semantic similarity scores for the *ELKB* as well as the *WordNet*-based measures. They are correlated to Finkelstein *et al.*'s results.

Word Pair	Gabr.	ELKB	WN Edges	Hirst St.O.	Jiang Con.	Lea. Chod.	Lin	Res.
<i>tiger – tiger</i>	10.00	16.00	30.00	24.00	1.00	3.47	1.00	12.18
<i>fuck – sex</i>	9.44		28.00	3.00	0.18	2.37	0.78	8.27
<i>journey – voyage</i>	9.29	16.00	29.00	4.00	0.17	2.77	0.70	6.05
<i>midday – noon</i>	9.29	16.00	30.00	16.00	1.00	3.47	1.00	10.57
<i>dollar – buck</i>	9.22	16.00	30.00	16.00	1.00	3.47	1.00	10.31
<i>money – cash</i>	9.15	16.00	28.00	5.00	0.19	2.37	0.74	7.14
<i>coast – shore</i>	9.10	16.00	29.00	4.00	0.65	2.77	0.97	8.96
<i>money – cash</i>	9.08	16.00	28.00	5.00	0.19	2.37	0.74	7.14
<i>money – currency</i>	9.04	16.00	29.00	5.00	0.41	2.77	0.90	7.14
<i>football – soccer</i>	9.03	16.00	29.00	4.00	0.27	2.77	0.88	10.17
<i>magician – wizard</i>	9.02	14.00	30.00	16.00	1.00	3.47	1.00	9.70
<i>type – kind</i>	8.97	16.00	29.00	4.00	0.62	2.77	0.95	5.60
<i>gem – jewel</i>	8.96	16.00	30.00	16.00	1.00	3.47	1.00	12.87
<i>car – automobile</i>	8.94	16.00	30.00	16.00	1.00	3.47	1.00	6.33
<i>street – avenue</i>	8.88	16.00	29.00	4.00	0.21	2.77	0.81	8.09
<i>asylum – madhouse</i>	8.87	14.00	29.00	4.00	0.66	2.77	0.98	11.26
<i>boy – lad</i>	8.83	16.00	29.00	5.00	0.23	2.77	0.82	7.76
<i>environment – ecology</i>	8.81	14.00	29.00	4.00	0.17	2.77	0.74	7.14
<i>furnace – stove</i>	8.79	14.00	23.00	5.00	0.06	1.39	0.24	2.45
<i>seafood – lobster</i>	8.70	16.00	28.00	5.00	0.24	2.37	0.84	8.08
<i>mile – kilometer</i>	8.66	14.00	27.00	4.00	0.10	2.08	0.55	5.34
<i>Maradona – football</i>	8.62							
<i>OPEC – oil</i>	8.59	4.00	17.00	0.00	0.05	0.83	0.00	0.00
<i>king – queen</i>	8.58	16.00	28.00	5.00	0.27	2.37	0.89	11.49
<i>murder – manslaughter</i>	8.53	14.00	28.00	5.00	0.17	2.37	0.76	7.84
<i>money – bank</i>	8.50	16.00	24.00	0.00	0.10	1.52	0.47	4.11
<i>computer – software</i>	8.50	14.00	16.00	0.00	0.06	0.76	0.00	0.00
<i>Jerusalem – Israel</i>	8.46		20.00	4.00	0.06	1.07	0.31	3.71
<i>vodka – gin</i>	8.46	14.00	28.00	5.00	0.12	2.37	0.70	8.43
<i>planet – star</i>	8.45	14.00	28.00	5.00	0.35	2.37	0.88	6.84
<i>calculation – computation</i>	8.44	16.00	30.00	16.00	1.00	3.47	1.00	8.88
<i>money – dollar</i>	8.42	16.00	26.00	3.00	0.18	1.86	0.73	7.14
<i>law – lawyer</i>	8.38	12.00	21.00	0.00	0.06	1.16	0.00	0.00
<i>championship – tournament</i>	8.36	6.00	22.00	0.00	0.04	1.27	0.00	0.00
<i>seafood – food</i>	8.34	14.00	29.00	16.00	0.29	2.77	0.83	5.69
<i>weather – forecast</i>	8.34	14.00	17.00	0.00	0.05	0.83	0.00	0.00
<i>FBI – investigation</i>	8.31	14.00	19.00	0.00	0.05	0.98	0.00	0.00
<i>network – hardware</i>	8.31	6.00	27.00	4.00	0.06	2.08	0.32	3.44
<i>nature – environment</i>	8.31	4.00	24.00	0.00	0.06	1.52	0.07	0.71

Word Pair	Gabr.	ELKB	WN Edges	Hirst St.O.	Jiang Con.	Lea. Chod.	Lin	Res.
<i>man – woman</i>	8.30	16.00	27.00	4.00	0.13	2.08	0.59	4.81
<i>money – wealth</i>	8.27	16.00	29.00	4.00	0.96	2.77	1.00	8.87
<i>psychology – Freud</i>	8.21		12.00	0.00	0.04	0.52	0.00	0.00
<i>news – report</i>	8.16	16.00	29.00	5.00	0.83	2.77	0.99	6.99
<i>vodka – brandy</i>	8.13	14.00	28.00	5.00	0.14	2.37	0.73	8.43
<i>war – troops</i>	8.13	12.00	22.00	0.00	0.06	1.27	0.00	0.00
<i>Harvard – Yale</i>	8.13		28.00	5.00	0.17	2.37	0.79	10.17
<i>bank – money</i>	8.12	16.00	24.00	0.00	0.10	1.52	0.47	4.11
<i>physics – proton</i>	8.12	12.00	13.00	0.00	0.05	0.58	0.00	0.00
<i>planet – galaxy</i>	8.11	12.00	23.00	4.00	0.05	1.39	0.17	2.17
<i>stock – market</i>	8.08	16.00	24.00	4.00	0.10	1.52	0.40	3.04
<i>psychology – psychiatry</i>	8.08	16.00	24.00	2.00	0.11	1.52	0.62	6.51
<i>planet – moon</i>	8.08	16.00	27.00	4.00	0.25	2.08	0.82	6.84
<i>planet – constellation</i>	8.06	12.00	27.00	4.00	0.13	2.08	0.57	4.50
<i>credit – card</i>	8.06	16.00	25.00	2.00	0.07	1.67	0.37	4.41
<i>hotel – reservation</i>	8.03	6.00	20.00	0.00	0.05	1.07	0.07	0.71
<i>planet – sun</i>	8.02	12.00	27.00	4.00	0.28	2.08	0.84	6.84
<i>tiger – jaguar</i>	8.00	16.00	28.00	5.00	0.21	2.37	0.84	9.74
<i>tiger – feline</i>	8.00	14.00	28.00	6.00	0.25	2.37	0.85	8.41
<i>closet – clothes</i>	8.00	12.00	24.00	0.00	0.08	1.52	0.31	2.45
<i>planet – astronomer</i>	7.94	12.00	24.00	0.00	0.06	1.52	0.23	2.45
<i>soap – opera</i>	7.94	16.00	20.00	0.00	0.06	1.07	0.20	1.96
<i>movie – theater</i>	7.92	16.00	23.00	0.00	0.06	1.39	0.00	0.00
<i>planet – space</i>	7.92	12.00	23.00	3.00	0.07	1.39	0.19	1.96
<i>treatment – recovery</i>	7.91	6.00	24.00	0.00	0.08	1.52	0.28	2.25
<i>liquid – water</i>	7.89	16.00	29.00	6.00	0.99	2.77	1.00	6.19
<i>life – death</i>	7.88	16.00	28.00	5.00	0.23	2.37	0.81	6.95
<i>baby – mother</i>	7.85	14.00	26.00	3.00	0.22	1.86	0.76	6.01
<i>aluminum – metal</i>	7.83		29.00	4.00	0.21	2.77	0.79	7.09
<i>cell – phone</i>	7.81	6.00	26.00	3.00	0.13	1.86	0.68	7.21
<i>lobster – food</i>	7.81	14.00	27.00	3.00	0.15	2.08	0.67	5.69
<i>dollar – yen</i>	7.78	14.00	27.00	3.00	0.11	2.08	0.63	6.85
<i>wood – forest</i>	7.73	14.00	30.00	16.00	1.00	3.47	1.00	8.28
<i>money – deposit</i>	7.73	16.00	28.00	6.00	0.16	2.37	0.72	6.82
<i>television – film</i>	7.72	16.00	26.00	3.00	0.22	1.86	0.80	7.23
<i>psychology – mind</i>	7.69	16.00	24.00	0.00	0.09	1.52	0.41	3.39
<i>game – team</i>	7.69	12.00	23.00	0.00	0.07	1.39	0.00	0.00
<i>admission – ticket</i>	7.69	16.00	22.00	0.00	0.06	1.27	0.27	2.88
<i>Jerusalem – Palestinian</i>	7.65		16.00	0.00	0.04	0.76	0.06	0.71
<i>Arafat – terror</i>	7.65							
<i>dividend – payment</i>	7.63	14.00	28.00	6.00	0.15	2.37	0.71	7.09
<i>profit – loss</i>	7.63	14.00	25.00	3.00	0.33	1.67	0.86	6.54
<i>computer – keyboard</i>	7.62	14.00	27.00	2.00	0.08	2.08	0.43	4.29
<i>boxing – round</i>	7.61	14.00	24.00	0.00	0.13	1.52	0.67	6.85
<i>century – year</i>	7.59	14.00	28.00	4.00	0.13	2.37	0.52	3.72
<i>rock – jazz</i>	7.59	16.00	28.00	5.00	0.17	2.37	0.78	8.67
<i>computer – internet</i>	7.58		23.00	5.00	0.06	1.39	0.31	3.44

Word Pair	Gabr.	ELKB	WN Edges	Hirst St.O.	Jiang Con.	Lea. Chod.	Lin	Res.
<i>money – property</i>	7.57	14.00	28.00	6.00	0.34	2.37	0.88	6.96
<i>tennis – racket</i>	7.56	6.00	22.00	0.00	0.06	1.27	0.27	3.12
<i>announcement – news</i>	7.56	14.00	26.00	3.00	0.10	1.86	0.47	3.84
<i>canyon – landscape</i>	7.53	6.00	19.00	0.00	0.05	0.98	0.17	1.96
<i>day – dawn</i>	7.53	14.00	28.00	5.00	0.08	2.37	0.38	3.72
<i>food – fruit</i>	7.52	12.00	24.00	0.00	0.11	1.52	0.33	1.96
<i>telephone – communication</i>	7.50	14.00	21.00	0.00	0.08	1.16	0.00	0.00
<i>currency – market</i>	7.50	14.00	23.00	0.00	0.06	1.39	0.00	0.00
<i>psychology – cognition</i>	7.48	12.00	25.00	3.00	0.13	1.67	0.46	2.89
<i>Marathon – sprint</i>	7.47	14.00	20.00	0.00	0.05	1.07	0.19	2.25
<i>seafood – sea</i>	7.47	6.00	23.00	0.00	0.06	1.39	0.09	0.71
<i>book – paper</i>	7.46	16.00	28.00	5.00	0.12	2.37	0.58	5.18
<i>book – library</i>	7.46	16.00	24.00	2.00	0.07	1.52	0.28	2.45
<i>Mexico – Brazil</i>	7.44		26.00	3.00	0.08	1.86	0.53	6.05
<i>media – radio</i>	7.42	16.00	19.00	0.00	0.04	0.98	0.00	0.00
<i>psychology – depression</i>	7.42	12.00	21.00	0.00	0.06	1.16	0.28	2.80
<i>jaguar – cat</i>	7.42	14.00	29.00	4.00	0.33	2.77	0.91	9.74
<i>fighting – defeating</i>	7.41	4.00		0.00				
<i>movie – star</i>	7.38	12.00	27.00	0.00	0.07	1.39	0.31	2.88
<i>bird – crane</i>	7.38	14.00	18.00	5.00	0.14	2.08	0.66	5.97
<i>hundred – percent</i>	7.38		20.00	0.00	0.07	0.90	0.21	1.81
<i>dollar – profit</i>	7.38	16.00	29.00	0.00	0.06	1.07	0.18	1.81
<i>tiger – cat</i>	7.35	14.00	28.00	4.00	0.36	2.77	0.92	9.74
<i>physics – chemistry</i>	7.35	14.00	23.00	2.00	0.23	2.37	0.81	7.04
<i>country – citizen</i>	7.31	12.00	27.00	5.00	0.07	1.39	0.10	0.71
<i>money – possession</i>	7.29	12.00	14.00	5.00	0.17	2.08	0.63	4.11
<i>jaguar – car</i>	7.27	6.00	30.00	0.00	0.06	0.63	0.08	0.71
<i>cup – drink</i>	7.25	14.00	27.00	5.00	0.19	2.08	0.77	7.08
<i>psychology – health</i>	7.23	12.00	20.00	0.00	0.05	1.07	0.00	0.00
<i>museum – theater</i>	7.19	6.00	24.00	2.00	0.06	1.52	0.24	2.45
<i>summer – drought</i>	7.16	6.00	27.00	4.00	0.07	2.08	0.36	3.72
<i>phone – equipment</i>	7.13	6.00	28.00	2.00	0.24	2.37	0.80	6.04
<i>investor – earning</i>	7.13	4.00		0.00				
<i>bird – cock</i>	7.10	12.00	29.00	6.00	0.16	2.77	0.69	5.97
<i>company – stock</i>	7.08	14.00	25.00	2.00	0.12	1.67	0.46	3.35
<i>tiger – carnivore</i>	7.08	14.00	27.00	5.00	0.18	2.08	0.74	6.78
<i>stroke – hospital</i>	7.03	12.00	20.00	0.00	0.06	1.07	0.06	0.71
<i>liability – insurance</i>	7.03	8.00	26.00	3.00	0.19	1.86	0.79	8.28
<i>game – victory</i>	7.03	14.00	24.00	0.00	0.12	1.52	0.50	3.78
<i>doctor – nurse</i>	7.00	12.00	27.00	5.00	0.25	2.08	0.83	7.28
<i>tiger – animal</i>	7.00	14.00	27.00	2.00	0.12	2.08	0.55	4.32
<i>psychology – anxiety</i>	7.00	12.00	21.00	0.00	0.08	1.16	0.33	2.80
<i>game – defeat</i>	6.97	14.00	24.00	0.00	0.10	1.52	0.46	3.78
<i>FBI – fingerprint</i>	6.94	4.00	16.00	0.00	0.04	0.76	0.00	0.00
<i>money – withdrawal</i>	6.88	6.00	21.00	0.00	0.06	1.16	0.00	0.00
<i>street – block</i>	6.88	14.00	25.00	2.00	0.08	1.67	0.30	2.46
<i>opera – performance</i>	6.88	12.00	24.00	2.00	0.08	1.52	0.34	2.88

Word Pair	Gabr.	ELKB	WN Edges	Hirst St.O.	Jiang Con.	Lea. Chod.	Lin	Res.
<i>drink – eat</i>	6.87			5.00				
<i>drug – abuse</i>	6.85	14.00	22.00	0.00	0.06	1.27	0.00	0.00
<i>tiger – mammal</i>	6.85	14.00	25.00	3.00	0.14	1.67	0.64	5.43
<i>psychology – fear</i>	6.85	6.00	21.00	0.00	0.08	1.16	0.33	2.80
<i>cup – tableware</i>	6.85		28.00	6.00	0.58	2.37	0.95	7.60
<i>student – professor</i>	6.81	14.00	23.00	0.00	0.07	1.39	0.28	2.45
<i>football – basketball</i>	6.81	14.00	28.00	5.00	0.16	2.37	0.76	8.45
<i>concert – virtuoso</i>	6.81	14.00	20.00	0.00	0.05	1.07	0.00	0.00
<i>computer – laboratory</i>	6.78	6.00	21.00	0.00	0.05	1.16	0.08	0.71
<i>love – sex</i>	6.77	12.00	29.00	4.00	0.18	2.77	0.78	8.27
<i>television – radio</i>	6.77	16.00	28.00	5.00	0.33	2.37	0.90	9.51
<i>Problem – challenge</i>	6.75	14.00	25.00	2.00	0.08	1.67	0.37	3.84
<i>Arafat – Peace</i>	6.73							
<i>movie – critic</i>	6.73	12.00	20.00	0.00	0.06	1.07	0.00	0.00
<i>bed – closet</i>	6.72	6.00	28.00	4.00	0.15	2.37	0.70	6.74
<i>psychology – science</i>	6.71	14.00	29.00	4.00	0.24	2.77	0.81	6.51
<i>fertility – egg</i>	6.69	12.00	20.00	0.00	0.04	1.07	0.00	0.00
<i>bishop – rabbi</i>	6.69	12.00	26.00	3.00	0.16	1.86	0.74	7.52
<i>lawyer – evidence</i>	6.69	6.00	20.00	0.00	0.06	1.07	0.00	0.00
<i>precedent – law</i>	6.65	16.00	28.00	6.00	0.17	2.37	0.74	6.94
<i>football – tennis</i>	6.63	16.00	25.00	2.00	0.17	1.67	0.76	8.09
<i>minister – party</i>	6.63	16.00	25.00	2.00	0.07	1.67	0.26	2.45
<i>professor – doctor</i>	6.62	14.00	24.00	0.00	0.20	1.52	0.77	6.55
<i>psychology – clinic</i>	6.58	12.00	17.00	0.00	0.05	0.83	0.00	0.00
<i>cup – coffee</i>	6.58	14.00	25.00	2.00	0.11	1.67	0.61	6.12
<i>water – seepage</i>	6.56	6.00	22.00	0.00	0.05	1.27	0.00	0.00
<i>government – crisis</i>	6.56	6.00	23.00	0.00	0.06	1.39	0.00	0.00
<i>space – world</i>	6.53	16.00	26.00	4.00	0.07	1.86	0.19	1.96
<i>Japanese – American</i>	6.50		25.00	2.00	0.09	1.67	0.54	6.27
<i>dividend – calculation</i>	6.48	6.00	21.00	0.00	0.05	1.16	0.00	0.00
<i>victim – emergency</i>	6.47	6.00	23.00	0.00	0.05	1.39	0.07	0.71
<i>luxury – car</i>	6.47	8.00	18.00	0.00	0.05	0.90	0.00	0.00
<i>tool – implement</i>	6.46	16.00	29.00	4.00	0.55	2.77	0.94	5.99
<i>competition – price</i>	6.44	2.00	23.00	0.00	0.08	1.39	0.25	2.65
<i>street – place</i>	6.44	16.00	25.00	3.00	0.07	1.67	0.30	3.35
<i>psychology – doctor</i>	6.42	16.00	18.00	0.00	0.06	0.90	0.00	0.00
<i>gender – equality</i>	6.41	2.00	23.00	0.00	0.06	1.39	0.30	3.25
<i>listing – category</i>	6.38	4.00	23.00	0.00	0.07	1.39	0.00	0.00
<i>discovery – space</i>	6.34	12.00	23.00	0.00	0.06	1.39	0.00	0.00
<i>oil – stock</i>	6.34	14.00	22.00	0.00	0.09	1.27	0.43	5.19
<i>video – archive</i>	6.34		23.00	0.00	0.06	1.39	0.22	2.45
<i>governor – office</i>	6.34	17.00	22.00	0.00	0.06	1.27	0.24	2.45
<i>train – car</i>	6.31	16.00	25.00	4.00	0.18	1.67	0.71	5.50
<i>record – number</i>	6.31	14.00	29.00	6.00	0.32	2.77	0.84	5.87
<i>shower – thunderstorm</i>	6.31	16.00	24.00	0.00	0.08	1.52	0.56	6.85
<i>brother – monk</i>	6.27	14.00	29.00	4.00	0.29	2.77	0.90	10.48
<i>nature – man</i>	6.25	14.00	27.00	4.00	0.08	2.08	0.30	2.40

Word Pair	Gabr.	ELKB	WN Edges	Hirst St.O.	Jiang Con.	Lea. Chod.	Lin	Res.
<i>production – crew</i>	6.25	8.00	24.00	0.00	0.06	1.52	0.00	0.00
<i>family – planning</i>	6.25	16.00	23.00	0.00	0.06	1.39	0.00	0.00
<i>disaster – area</i>	6.25	16.00	22.00	0.00	0.08	1.27	0.37	3.35
<i>skin – eye</i>	6.22	16.00	25.00	2.00	0.10	1.67	0.50	4.21
<i>food – preparation</i>	6.22	16.00	27.00	3.00	0.12	2.08	0.47	3.21
<i>bread – butter</i>	6.19	12.00	27.00	5.00	0.12	2.08	0.61	5.69
<i>movie – popcorn</i>	6.19	0.00	18.00	0.00	0.05	0.90	0.00	0.00
<i>game – series</i>	6.19	12.00	28.00	5.00	0.21	2.37	0.75	5.67
<i>lover – quarrel</i>	6.19	8.00	21.00	0.00	0.05	1.16	0.07	0.71
<i>preservation – world</i>	6.19	12.00	24.00	0.00	0.06	1.52	0.00	0.00
<i>dollar – loss</i>	6.09	6.00	21.00	0.00	0.07	1.16	0.19	1.81
<i>weapon – secret</i>	6.06	14.00	21.00	0.00	0.06	1.16	0.00	0.00
<i>precedent – antecedent</i>	6.04	16.00	25.00	4.00	0.05	1.67	0.30	3.84
<i>shower – flood</i>	6.03	16.00	26.00	3.00	0.09	1.86	0.60	7.56
<i>registration – arrangement</i>	6.00	4.00	25.00	2.00	0.07	1.67	0.32	3.12
<i>arrival – hotel</i>	6.00	2.00	21.00	0.00	0.05	1.16	0.07	0.71
<i>announcement – warning</i>	6.00	16.00	25.00	2.00	0.08	1.67	0.40	3.84
<i>baseball – season</i>	5.97	4.00	17.00	0.00	0.06	0.83	0.00	0.00
<i>game – round</i>	5.97	16.00	26.00	4.00	0.16	1.86	0.72	7.23
<i>drink – mouth</i>	5.96	12.00	24.00	0.00	0.07	1.52	0.25	2.40
<i>energy – crisis</i>	5.94	14.00	24.00	0.00	0.06	1.52	0.30	3.35
<i>grocery – money</i>	5.94		20.00	0.00	0.06	1.07	0.00	0.00
<i>life – lesson</i>	5.94	6.00	21.00	0.00	0.07	1.16	0.29	2.88
<i>cucumber – potato</i>	5.92	14.00	27.00	4.00	0.11	2.08	0.64	7.50
<i>king – rook</i>	5.92	16.00	28.00	5.00	0.20	2.37	0.85	10.93
<i>reason – criterion</i>	5.91	4.00	23.00	0.00	0.09	1.39	0.37	2.89
<i>equipment – maker</i>	5.91	6.00	22.00	0.00	0.07	1.27	0.10	0.71
<i>cup – liquid</i>	5.90	12.00	25.00	3.00	0.16	1.67	0.69	5.97
<i>deployment – withdrawal</i>	5.88	6.00	22.00	0.00	0.05	1.27	0.21	2.25
<i>tiger – zoo</i>	5.87	6.00	23.00	0.00	0.04	1.39	0.06	0.71
<i>journey – car</i>	5.85	12.00	17.00	0.00	0.07	0.83	0.00	0.00
<i>precedent – example</i>	5.85	16.00	29.00	4.00	0.23	2.77	0.83	7.81
<i>smart – stupid</i>	5.81	8.00	18.00	3.00	0.04	0.90	0.00	0.00
<i>plane – car</i>	5.77	16.00	24.00	3.00	0.21	1.52	0.75	5.55
<i>planet – people</i>	5.75	4.00	23.00	4.00	0.07	1.39	0.00	0.00
<i>lobster – wine</i>	5.70	12.00	21.00	0.00	0.07	1.16	0.33	3.21
<i>money – laundering</i>	5.65		21.00	0.00	0.05	1.16	0.00	0.00
<i>Mars – scientist</i>	5.63	4.00	20.00	0.00	0.06	1.07	0.09	0.71
<i>decoration – valor</i>	5.63	4.00	19.00	0.00	0.06	0.98	0.18	1.81
<i>OPEC – country</i>	5.63	2.00	24.00	5.00	0.08	1.52	0.35	3.34
<i>summer – nature</i>	5.63	6.00	22.00	0.00	0.07	1.27	0.22	1.81
<i>tiger – fauna</i>	5.62	12.00	27.00	2.00	0.12	2.08	0.55	4.32
<i>psychology – discipline</i>	5.58	4.00	28.00	6.00	0.22	2.37	0.77	6.01
<i>glass – metal</i>	5.56	16.00	26.00	3.00	0.09	1.86	0.40	3.21
<i>alcohol – chemistry</i>	5.54	2.00	20.00	0.00	0.06	1.07	0.00	0.00
<i>disability – death</i>	5.47	6.00	24.00	0.00	0.08	1.52	0.38	3.35
<i>change – attitude</i>	5.44	16.00	25.00	2.00	0.08	1.67	0.30	3.25

Word Pair	Gabr.	ELKB	WN Edges	Hirst St.O.	Jiang Con.	Lea. Chod.	Lin	Res.
<i>arrangement</i>	–							
<i>accommodation</i>	5.41	14.00	27.00	4.00	0.08	2.08	0.43	4.92
<i>territory – surface</i>	5.34	6.00	25.00	2.00	0.16	1.67	0.56	3.39
<i>credit – information</i>	5.31	6.00	27.00	4.00	0.12	2.08	0.50	4.78
<i>size – prominence</i>	5.31	14.00	25.00	2.00	0.08	1.67	0.35	3.35
<i>exhibit – memorabilia</i>	5.31	4.00	21.00	0.00	0.05	1.16	0.24	2.88
<i>territory – kilometer</i>	5.28	4.00	22.00	0.00	0.06	1.27	0.00	0.00
<i>death – row</i>	5.25	6.00	24.00	0.00	0.06	1.52	0.22	2.25
<i>man – governor</i>	5.25	14.00	26.00	3.00	0.09	1.86	0.32	3.44
<i>doctor – liability</i>	5.19	6.00	21.00	0.00	0.06	1.16	0.00	0.00
<i>impartiality – interest</i>	5.16	6.00	22.00	0.00	0.05	1.27	0.00	0.00
<i>energy – laboratory</i>	5.09	14.00	20.00	0.00	0.06	1.07	0.00	0.00
<i>secretary – senate</i>	5.06	6.00	18.00	0.00	0.05	0.90	0.00	0.00
<i>death – inmate</i>	5.03	4.00	22.00	0.00	0.05	1.27	0.00	0.00
<i>monk – oracle</i>	5.00	12.00	23.00	0.00	0.06	1.39	0.23	2.45
<i>cup – food</i>	5.00	14.00	25.00	3.00	0.14	1.67	0.61	4.99
<i>doctor – personnel</i>	5.00	14.00	21.00	0.00	0.07	1.16	0.00	0.00
<i>travel – activity</i>	5.00	14.00	25.00	2.00	0.19	1.67	0.51	2.25
<i>journal – association</i>	4.97	4.00	24.00	0.00	0.05	1.52	0.22	2.65
<i>car – flight</i>	4.94	12.00	23.00	0.00	0.07	1.39	0.28	2.45
<i>street – children</i>	4.94	12.00	22.00	0.00	0.07	1.27	0.10	0.71
<i>space – chemistry</i>	4.88	6.00	26.00	3.00	0.06	1.86	0.23	2.88
<i>situation – conclusion</i>	4.81	4.00	25.00	0.00	0.10	1.67	0.32	2.25
<i>tiger – organism</i>	4.77	6.00	28.00	2.00	0.10	2.37	0.32	2.17
<i>peace – plan</i>	4.75	12.00	22.00	0.00	0.08	1.27	0.34	2.80
<i>word – similarity</i>	4.75	14.00	22.00	0.00	0.09	1.27	0.26	1.81
<i>consumer – energy</i>	4.75	6.00	21.00	0.00	0.06	1.16	0.00	0.00
<i>ministry – culture</i>	4.69	4.00	21.00	0.00	0.06	1.16	0.29	3.04
<i>hospital – infrastructure</i>	4.63	6.00	18.00	2.00	0.04	0.90	0.00	0.00
<i>smart – student</i>	4.62	6.00	18.00	0.00	0.05	0.90	0.00	0.00
<i>investigation – effort</i>	4.59	4.00	27.00	4.00	0.17	2.08	0.65	4.48
<i>image – surface</i>	4.56	16.00	26.00	3.00	0.11	1.86	0.37	3.39
<i>life – term</i>	4.50	14.00	28.00	5.00	0.11	2.37	0.48	3.72
<i>computer – news</i>	4.47	8.00	20.00	0.00	0.06	1.07	0.00	0.00
<i>board – recommendation</i>	4.47	6.00	17.00	0.00	0.06	0.83	0.00	0.00
<i>start – match</i>	4.47	6.00	24.00	4.00	0.09	1.52	0.42	3.78
<i>lad – brother</i>	4.46	14.00	26.00	3.00	0.07	1.86	0.27	2.45
<i>food – rooster</i>	4.42	12.00	18.00	0.00	0.06	0.90	0.09	0.71
<i>coast – hill</i>	4.38	4.00	26.00	2.00	0.15	1.86	0.69	6.36
<i>observation – architecture</i>	4.38	4.00	25.00	2.00	0.06	1.67	0.29	3.12
<i>attempt – peace</i>	4.25	8.00	24.00	0.00	0.06	1.52	0.00	0.00
<i>deployment – departure</i>	4.25	6.00	23.00	0.00	0.06	1.39	0.21	2.25
<i>benchmark – index</i>	4.25	12.00	27.00	4.00	0.07	2.08	0.50	6.15
<i>consumer – confidence</i>	4.13	4.00	21.00	0.00	0.05	1.16	0.00	0.00
<i>start – year</i>	4.06	6.00	27.00	4.00	0.11	2.08	0.49	3.72
<i>focus – life</i>	4.06	14.00	25.00	2.00	0.08	1.67	0.37	3.35
<i>development – issue</i>	3.97	12.00	27.00	4.00	0.16	2.08	0.61	4.18

Word Pair	Gabr.	ELKB	WN Edges	Hirst St.O.	Jiang Con.	Lea. Chod.	Lin	Res.
<i>day – summer</i>	3.94	16.00	27.00	4.00	0.11	2.08	0.48	3.72
<i>theater – history</i>	3.91	6.00	24.00	0.00	0.06	1.52	0.00	0.00
<i>situation – isolation</i>	3.88	6.00	26.00	3.00	0.10	1.86	0.43	3.35
<i>media – trading</i>	3.88	16.00	23.00	0.00	0.05	1.39	0.21	2.25
<i>profit – warning</i>	3.88	8.00	20.00	0.00	0.06	1.07	0.18	1.81
<i>chance – credibility</i>	3.88	14.00	25.00	2.00	0.06	1.67	0.19	1.81
<i>precedent – information</i>	3.85	6.00	28.00	6.00	0.14	2.37	0.63	5.21
<i>architecture – century</i>	3.78	2.00	21.00	0.00	0.06	1.16	0.18	1.81
<i>population – development</i>	3.75	6.00	25.00	0.00	0.11	1.67	0.57	5.60
<i>stock – live</i>	3.73	16.00		0.00				
<i>cup – object</i>	3.69	14.00	26.00	4.00	0.14	1.86	0.38	1.96
<i>atmosphere – landscape</i>	3.69	12.00	22.00	0.00	0.07	1.27	0.32	3.27
<i>minority – peace</i>	3.69	14.00	25.00	2.00	0.06	1.67	0.29	3.35
<i>peace – atmosphere</i>	3.69	6.00	26.00	3.00	0.08	1.86	0.41	4.26
<i>morality – marriage</i>	3.69	8.00	24.00	0.00	0.06	1.52	0.00	0.00
<i>report – gain</i>	3.63	4.00	22.00	0.00	0.08	1.27	0.23	1.81
<i>music – project</i>	3.63	14.00	26.00	3.00	0.10	1.86	0.41	3.12
<i>seven – series</i>	3.56	4.00	21.00	0.00	0.06	1.16	0.20	1.81
<i>experience – music</i>	3.47	12.00	23.00	0.00	0.08	1.39	0.35	2.89
<i>school – center</i>	3.44	16.00	28.00	2.00	0.12	2.37	0.59	5.33
<i>announcement – production</i>	3.38	4.00	23.00	0.00	0.08	1.39	0.33	2.88
<i>five – month</i>	3.38	4.00	23.00	0.00	0.08	1.39	0.35	2.97
<i>money – operation</i>	3.31	6.00	23.00	0.00	0.08	1.39	0.00	0.00
<i>delay – news</i>	3.31	8.00	22.00	0.00	0.07	1.27	0.21	1.81
<i>morality – importance</i>	3.31	2.00	26.00	3.00	0.13	1.86	0.57	4.23
<i>governor – interview</i>	3.25	4.00	18.00	0.00	0.05	0.90	0.00	0.00
<i>practice – institution</i>	3.19	16.00	28.00	6.00	0.21	2.37	0.82	8.52
<i>century – nation</i>	3.16	6.00	22.00	0.00	0.07	1.27	0.00	0.00
<i>coast – forest</i>	3.15	16.00	24.00	0.00	0.06	1.52	0.20	1.96
<i>shore – woodland</i>	3.08	6.00	25.00	2.00	0.06	1.67	0.21	1.96
<i>drink – car</i>	3.04	6.00	22.00	0.00	0.10	1.27	0.31	1.96
<i>president – medal</i>	3.00	4.00	16.00	0.00	0.05	0.76	0.00	0.00
<i>prejudice – recognition</i>	3.00	6.00	22.00	0.00	0.07	1.27	0.30	2.89
<i>viewer – serial</i>	2.97	4.00	20.00	0.00	0.06	1.07	0.23	2.45
<i>Mars – water</i>	2.94	12.00	23.00	0.00	0.07	1.39	0.24	1.96
<i>peace – insurance</i>	2.94	4.00	27.00	4.00	0.15	2.08	0.74	8.28
<i>cup – artifact</i>	2.92	0.00	27.00	5.00	0.15	2.08	0.45	2.45
<i>media – gain</i>	2.88	6.00	22.00	0.00	0.05	1.27	0.00	0.00
<i>precedent – cognition</i>	2.81	4.00	27.00	5.00	0.11	2.08	0.41	2.89
<i>announcement – effort</i>	2.75	4.00	20.00	0.00	0.06	1.07	0.00	0.00
<i>crane – implement</i>	2.69	0.00	26.00	3.00	0.09	1.86	0.39	3.44
<i>line – insurance</i>	2.69	6.00	26.00	3.00	0.11	1.86	0.51	4.79
<i>drink – mother</i>	2.65	16.00	25.00	2.00	0.09	1.67	0.34	3.21
<i>opera – industry</i>	2.63	6.00	18.00	0.00	0.06	0.90	0.18	1.81
<i>volunteer – motto</i>	2.56	0.00	17.00	0.00	0.04	0.83	0.00	0.00
<i>listing – proximity</i>	2.56	6.00	19.00	0.00	0.07	0.98	0.27	2.65
<i>Arafat – Jackson</i>	2.50							

<i>Word Pair</i>	<i>Gabr.</i>	<i>ELKB</i>	<i>WN Edges</i>	<i>Hirst St.O.</i>	<i>Jiang Con.</i>	<i>Lea. Chod.</i>	<i>Lin</i>	<i>Res.</i>
<i>precedent – collection</i>	2.50	6.00	27.00	5.00	0.13	2.08	0.61	5.21
<i>cup – article</i>	2.40	6.00	26.00	3.00	0.55	1.86	0.95	7.52
<i>sign – recess</i>	2.38	8.00	26.00	5.00	0.07	1.86	0.25	2.45
<i>problem – airport</i>	2.38	4.00	20.00	0.00	0.05	1.07	0.00	0.00
<i>reason – hypertension</i>	2.31	4.00	23.00	0.00	0.06	1.39	0.37	4.26
<i>direction – combination</i>	2.25	6.00	24.00	0.00	0.08	1.52	0.27	3.12
<i>Wednesday – news</i>	2.22	4.00	18.00	0.00	0.07	0.90	0.21	1.81
<i>cup – entity</i>	2.15	0.00	25.00	3.00	0.13	1.67	0.16	0.71
<i>cemetery – woodland</i>	2.08	6.00	21.00	0.00	0.05	1.16	0.07	0.71
<i>glass – magician</i>	2.08	4.00	22.00	0.00	0.05	1.27	0.08	0.71
<i>possibility – girl</i>	1.94	6.00	22.00	0.00	0.06	1.27	0.00	0.00
<i>cup – substance</i>	1.92	6.00	25.00	2.00	0.13	1.67	0.44	3.21
<i>forest – graveyard</i>	1.85	6.00	21.00	0.00	0.05	1.16	0.07	0.71
<i>stock – egg</i>	1.81	14.00	24.00	2.00	0.10	1.52	0.53	4.99
<i>energy – secretary</i>	1.81	4.00	20.00	0.00	0.06	1.07	0.00	0.00
<i>month – hotel</i>	1.81	0.00	20.00	0.00	0.06	1.07	0.00	0.00
<i>precedent – group</i>	1.77	6.00	26.00	4.00	0.10	1.86	0.35	2.46
<i>production – hike</i>	1.75	2.00	23.00	0.00	0.07	1.39	0.24	2.25
<i>stock – phone</i>	1.62	12.00	24.00	2.00	0.09	1.52	0.41	4.29
<i>holy – sex</i>	1.62	6.00	22.00	0.00	0.05	1.27	0.00	0.00
<i>stock – CD</i>	1.31		25.00	2.00	0.07	1.67	0.40	4.29
<i>drink – ear</i>	1.31	6.00	23.00	0.00	0.07	1.39	0.21	1.96
<i>delay – racism</i>	1.19	4.00	24.00	0.00	0.05	1.52	0.21	2.25
<i>stock – jaguar</i>	0.92	12.00	25.00	2.00	0.09	1.67	0.52	5.47
<i>stock – life</i>	0.92	12.00	24.00	2.00	0.09	1.52	0.39	3.35
<i>monk – slave</i>	0.92	6.00	26.00	3.00	0.06	1.86	0.25	2.45
<i>lad – wizard</i>	0.92	4.00	26.00	3.00	0.07	1.86	0.27	2.45
<i>sugar – approach</i>	0.88	6.00	23.00	0.00	0.07	1.39	0.24	1.96
<i>rooster – voyage</i>	0.62	2.00	13.00	0.00	0.04	0.58	0.00	0.00
<i>chord – smile</i>	0.54	0.00	20.00	0.00	0.07	1.07	0.29	2.88
<i>noon – string</i>	0.54	6.00	19.00	0.00	0.05	0.98	0.00	0.00
<i>professor – cucumber</i>	0.31	0.00	18.00	0.00	0.05	0.90	0.19	2.17
<i>king – cabbage</i>	0.23	12.00	21.00	0.00	0.06	1.16	0.27	3.21
<i>Correlation</i>	1.00	0.54	0.27	0.34	0.35	0.36	0.36	0.37

Table J1: Comparison of semantic similarity measures using the WordSimilarity-353 Test Collection