

Appendix 6. (Multiple) Distinctive collexeme Analysis of 5 subcategories in the MOOC corpus

Appendix 6: Table 6-1. Arts-Humanity

pattern	MOOC	Arts-human	Exp.freq	ASSOC.	COLL.STR.LOGL	SIGNIF
1 ADJ n	300860	100717	78327.9	attr	9113.68836	*****
2 the N	257119	82700	66940	attr	5239.59907	*****
3 N of n	130447	44405	33961.4	attr	4286.34188	*****
4 in N	86268	30010	22459.6	attr	3321.25381	*****
5 det ADJ n	163242	52431	42499.5	attr	3170.38409	*****
6 of N	128176	41930	33370.2	attr	2951.94322	*****
7 poss N	54076	19237	14078.5	attr	2434.54474	*****
8 a N	85398	28290	22233.1	attr	2180.23033	*****
9 N in n	31947	11231	8317.3	attr	1307.99094	*****
10 with N	26644	9270	6936.7	attr	1006.1204	*****
11 from N	15276	5528	3977.1	attr	766.01639	*****
12 N about n	3599	1689	937	attr	723.16317	*****
13 to N	35772	11531	9313.1	attr	690.14938	*****
14 by N	13889	4825	3616	attr	516.14452	*****
15 on N	24177	7864	6294.4	attr	508.47396	*****
16 into N	8320	3091	2166.1	attr	496.28889	*****
17 v-link ADJ	10749	3814	2798.5	attr	467.93891	*****
18 N with n	9290	3324	2418.6	attr	429.37728	*****
19 ADJ in n	3791	1551	987	attr	396.5437	*****
20 N that	43988	13261	11452.1	attr	379.70021	*****

21	ADJ of n	4106	1599	1069	attr	326.57377	*****
22	N to n	13575	4459	3534.2	attr	312.60839	*****
23	out of N	2158	901	561.8	attr	250.74615	*****
24	N from n	5793	2038	1508.2	attr	236.3507	*****
25	N as n	5390	1852	1403.3	attr	183.10538	*****
26	N by n	2649	988	689.7	attr	161.73515	*****
27	N for n	13520	4155	3519.9	attr	150.15184	*****
28	N against n	480	250	125	attr	147.03265	*****
29	without N	841	379	219	attr	141.09948	*****
30	ADJ as n	2345	849	610.5	attr	117.45868	*****
31	ADJ from n	775	340	201.8	attr	114.8011	*****
32	at N	22655	6566	5898.2	attr	100.6349	*****
33	ADJ with n	1275	485	331.9	attr	88.04187	*****
34	N between pl-n	3476	1142	905	attr	79.9305	*****
35	N among pl-n	225	120	58.6	attr	75.39916	*****
36	it V to n that	55	45	14.3	attr	74.99445	*****
37	ADJ about n	908	348	236.4	attr	65.62136	*****
38	N on n	9683	2869	2520.9	attr	63.38254	*****
39	under N	1376	489	358.2	attr	60.39449	*****
40	N at n	6181	1876	1609.2	attr	57.97269	*****
41	it v-link ADJ that	388	170	101	attr	57.11722	*****
42	N to-inf	20294	5753	5283.5	attr	55.74893	*****
43	ADJ that	3089	983	804.2	attr	51.51491	*****
44	it v-link ADJ to-inf	1384	480	360.3	attr	50.5573	*****

45	ADJ for n	2554	814	664.9	attr	43.29475	*****
46	ADJ to-inf	9430	2697	2455.1	attr	31.6812	*****
47	there V n prep	185	80	48.2	attr	25.57505	*****
48	N behind n	303	119	78.9	attr	25.27389	*****
49	there V n	296	110	77.1	attr	17.64095	****
50	N into n	2408	718	626.9	attr	17.38922	****
51	n ADJ	11748	3251	3058.6	attr	16.21811	****
52	N towards n	241	90	62.7	attr	14.82205	***
53	ADJ by n	285	103	74.2	attr	14.09068	***
54	within N	1882	562	490	attr	13.90607	***
55	V out of n	1440	432	374.9	attr	11.40917	***
56	it v-link N to-inf	773	242	201.2	attr	10.72448	**
57	it v-link ADJ for n to-inf	120	45	31.2	attr	7.57791	**
58	ADJ -ing	1321	385	343.9	attr	6.47776	*
59	poss N be that	173	60	45	attr	6.31709	*
60	ADJ on n	633	193	164.8	attr	6.3069	*
61	the N be to-inf	536	165	139.5	attr	6.05548	*
62	there v-link nothing ADJ about n	30	14	7.8	attr	5.87578	*
63	N as to wh	46	19	12	attr	5.0521	*
64	there be det N to n	4	3	1	attr	4.17892	*
65	it v-link ADJ to n that	14	7	3.6	attr	3.65431	ns
66	it v-link det N that	9	5	2.3	attr	3.50471	ns
67	ADJ wh	734	213	191.1	attr	3.31709	ns
68	ADJ at n	554	163	144.2	attr	3.21625	ns

69	it v-link ADJ -ing	68	24	17.7	attr	2.83636	ns
70	V as adj	272	83	70.8	attr	2.73974	ns
71	it V adj if	1	1	0.3	attr	2.69148	ns
72	it v n as ADJ that	1	1	0.3	attr	2.69148	ns
73	there v-link anything ADJ in n	1	1	0.3	attr	2.69148	ns
74	there v-link nothing ADJ in -ing	1	1	0.3	attr	2.69148	ns
75	V against n	515	148	134.1	attr	1.91333	ns
76	there V n adv	36	13	9.4	attr	1.76974	ns
77	there v-link something ADJ in n	6	3	1.6	attr	1.56613	ns
78	it v-link det N to-inf	9	4	2.3	attr	1.41636	ns
79	V as to wh	12	5	3.1	attr	1.37881	ns
80	neither AUX n	12	5	3.1	attr	1.37881	ns
81	it V adj to-inf	69	22	18	attr	1.17362	ns
82	it v-link ADJ wh	42	14	10.9	attr	1.10171	ns
83	ADJ toward/towards n	29	10	7.6	attr	1.01186	ns
84	V round n	14	5	3.6	attr	0.63656	ns
85	ADJ between pl-n	45	14	11.7	attr	0.57952	ns
86	ADJ as to wh	8	3	2.1	attr	0.50517	ns
87	it V adj that	57	17	14.8	attr	0.41287	ns
88	there v-link something ADJ about n	12	4	3.1	attr	0.31477	ns
89	poss N be to-inf	260	71	67.7	attr	0.21659	ns
90	V n out of n	499	134	129.9	attr	0.17271	ns
91	it v-link a adj N that	6	2	1.6	attr	0.15739	ns
92	there v-link something ADJ with n	13	4	3.4	attr	0.14597	ns

93	v it ADJ for n to-inf	42	12	10.9	attr	0.13757	ns
94	it v-link det N -ing	3	1	0.8	attr	0.07869	ns
95	there v-link nothing ADJ with -ing	3	1	0.8	attr	0.07869	ns
96	it V n if	14	4	3.6	attr	0.04586	ns
97	there be det N in n	7	2	1.8	attr	0.02293	ns
98	it v-link ADJ about n	7	2	1.8	attr	0.02293	ns
99	V after n	532	140	138.5	attr	0.02179	ns
100	the N be that	698	183	181.7	attr	0.01214	ns
101	ADJ over n	72	19	18.7	attr	0.00468	ns
102	V n off n	114	30	29.7	attr	0.00467	ns
103	V onto n	229	60	59.6	attr	0.00328	ns
104	it v-link N -ing	139	36	36.2	rep	0.00132	ns
105	V n among pl-n	4	1	1	rep	0.00224	ns
106	so AUX n	348	89	90.6	rep	0.03838	ns
107	v it ADJ that	25	6	6.5	rep	0.0547	ns
108	V n toward n	41	10	10.7	rep	0.05839	ns
109	v it ADJ to-inf	116	29	30.2	rep	0.06506	ns
110	it v-link ADJ if	65	16	16.9	rep	0.06882	ns
111	v it det N to-inf	5	1	1.3	rep	0.10005	ns
112	it V n adj to-inf	6	1	1.6	rep	0.30048	ns
113	V n as to wh	25	5	6.5	rep	0.50024	ns
114	it v n N to-inf	34	7	8.9	rep	0.55078	ns
115	nor AUX n	47	10	12.2	rep	0.57703	ns
116	V and v	1	0	0.3	rep	0.60315	ns

117	it V n adj that	1	0	0.3 rep	0.60315 ns
118	it v-link ADJ for n that	1	0	0.3 rep	0.60315 ns
119	there v-link anything ADJ with n	1	0	0.3 rep	0.60315 ns
120	there v-link nothing ADJ in n	1	0	0.3 rep	0.60315 ns
121	V n as n	2388	605	621.7 rep	0.61107 ns
122	V as n	5053	1291	1315.5 rep	0.62196 ns
123	V n on to n	17	3	4.4 rep	0.67454 ns
124	it V n when	17	3	4.4 rep	0.67454 ns
125	there v-link nothing ADJ with n	8	1	2.1 rep	0.88519 ns
126	V between pl-n	241	56	62.7 rep	1.00426 ns
127	V n with adv	14	2	3.6 rep	1.13748 ns
128	V around	1211	299	315.3 rep	1.15 ns
129	it v-link ADJ of n that	2	0	0.5 rep	1.20629 ns
130	it v-link ADJ of n to-inf	2	0	0.5 rep	1.20629 ns
131	V n between pl-n	477	113	124.2 rep	1.39027 ns
132	it V adj -ing	3	0	0.8 rep	1.80944 ns
133	it V to n as if/though	3	0	0.8 rep	1.80944 ns
134	V on to n	428	99	111.4 rep	1.92275 ns
135	it V n n to-inf	60	11	15.6 rep	1.99129 ns
136	it V n for n to-inf	51	9	13.3 rep	2.02363 ns
137	V under n	557	128	145 rep	2.77252 ns
138	ADJ against n	13	1	3.4 rep	2.87833 ns
139	V way prep	5	0	1.3 rep	3.01574 ns
140	it V adj when	5	0	1.3 rep	3.01574 ns

141	ADJ after v	5	0	1.3 rep	3.01574 ns
142	V n against n	327	71	85.1 rep	3.29872 ns
143	it V when	47	7	12.2 rep	3.40553 ns
144	it V as if/as though	86	15	22.4 rep	3.59009 ns
145	it V n before	6	0	1.6 rep	3.61889 ns
146	V n onto n	96	16	25 rep	4.80787 *
147	it v n ADJ that	18	1	4.7 rep	5.22087 *
148	it V to n like	74	11	19.3 rep	5.39173 *
149	the N be -ing	2166	515	563.9 rep	5.85268 *
150	V n about n	2406	569	626.4 rep	7.26398 **
151	it v n ADJ to-inf	13	0	3.4 rep	7.84093 **
152	poss N be -ing	534	111	139 rep	8.01694 **
153	V of n	4315	1041	1123.4 rep	8.31693 **
154	it V like	1230	276	320.2 rep	8.52959 **
155	V n as adj	240	43	62.5 rep	8.89316 **
156	V way adv	57	5	14.8 rep	10.9371 ***
157	V n by n	865	183	225.2 rep	11.18098 ***
158	N over n	1554	341	404.6 rep	14.02032 ***
159	it V n to-inf	603	115	157 rep	16.22931 ****
160	it V prep to-inf	124	13	32.3 rep	18.71377 ****
161	V like n	2439	542	635 rep	19.06123 ****
162	V n with n	3903	889	1016.1 rep	22.15921 *****
163	it V n that	334	51	87 rep	22.48535 *****
164	it V to-inf	1525	315	397 rep	24.08945 *****

165	V off n	1000	189	260.3 rep	28.31154	*****
166	it V if	50	0	13 rep	30.15763	*****
167	it V that	916	167	238.5 rep	31.25418	*****
168	V into n	6492	1483	1690.2 rep	35.38266	*****
169	V toward/towards n	721	118	187.7 rep	38.61274	*****
170	V n over n	606	90	157.8 rep	44.27428	*****
171	V wh- to-inf	1053	181	274.1 rep	46.73635	*****
172	V n -ing	3876	810	1009.1 rep	55.7412	*****
173	V over n	1661	303	432.4 rep	56.52573	*****
174	V n at n	2749	545	715.7 rep	58.39076	*****
175	V across n	657	83	171 rep	71.14153	*****
176	V n into n	2117	382	551.2 rep	75.92583	*****
177	V by -ing	1306	191	340 rep	99.64689	*****
178	ADJ to n	6352	1307	1653.7 rep	103.56298	*****
179	V n from n	3477	615	905.2 rep	136.70323	*****
180	V in n	29565	6818	7697.1 rep	140.63303	*****
181	V from n	8179	1666	2129.4 rep	144.04033	*****
182	V through n	3715	650	967.2 rep	153.17557	*****
183	V n wh	2811	448	731.8 rep	165.17458	*****
184	V n to n	7712	1526	2007.8 rep	166.13553	*****
185	V n on n	4160	728	1083 rep	171.40392	*****
186	V n adj	4469	773	1163.5 rep	193.48344	*****
187	V for n	8354	1601	2174.9 rep	219.14645	*****
188	V by amount	653	28	170 rep	221.21485	*****

189	V n for n	6064	1089	1578.7	rep	222.66605	*****
190	V -ing	8306	1571	2162.4	rep	234.70216	*****
191	V on n	12623	2540	3286.4	rep	243.07813	*****
192	V n in n	12794	2576	3330.9	rep	245.31628	*****
193	V with n	12945	2602	3370.2	rep	251.18229	*****
194	V as if/as though/like	4045	629	1053.1	rep	257.63341	*****
195	V so/not	7129	1279	1856	rep	263.05232	*****
196	n N	171404	41585	44624.4	rep	300.22806	*****
197	V about n	12588	2432	3277.2	rep	315.29934	*****
198	it V prep that	988	38	257.2	rep	353.21035	*****
199	V to n	26073	5484	6788	rep	357.36519	*****
200	V wh	9865	1750	2568.3	rep	383.54012	*****
201	V pl-n	17558	3323	4571.2	rep	495.7872	*****
202	V adj	16797	3083	4373	rep	557.01433	*****
203	num N	43610	9202	11353.7	rep	584.46338	*****
204	V n that	12715	2041	3310.3	rep	731.29929	*****
205	V at n	14012	2236	3648	rep	822.45059	*****
206	V pron-refl	30905	5883	8046	rep	848.24404	*****
207	V n to-inf	15496	2521	4034.3	rep	851.32709	*****
208	V n adv	22558	4011	5872.9	rep	871.12962	*****
209	V that	38971	7584	10146	rep	941.67116	*****
210	V n n	27908	5079	7265.8	rep	968.16664	*****
211	V n of n	38504	6994	10024.4	rep	1352.39419	*****
212	V n prep	30989	5064	8067.9	rep	1683.29108	*****

213	V amount	8873	712	2310.1	rep	1885.2427	*****
214	V adv	75601	14193	19682.5	rep	2270.05804	*****
215	V n inf	28797	3889	7497.2	rep	2712.05014	*****
216	V prep	120158	21589	31282.7	rep	4554.52342	*****
217	V n	156083	28517	40635.7	rep	5521.96904	*****
218	V to-inf	97124	15219	25285.9	rep	6200.87751	*****
219	V	218544	41433	56897.2	rep	6500.87174	*****
220	V inf	126215	20086	32859.6	rep	7725.33244	*****

Appendix 5: Table 5.2. Computer science & Math

pattern	MOOC	Comp-sci	Exp.freq	ASSOC.	COLL.STR.LOGL	SIGNIF
1 n N	171404	63727	46431.6	attr	8786.42061	*****
2 det ADJ n	163242	54705	44220.6	attr	3448.02531	*****
3 num N	43610	17094	11813.5	attr	3046.29463	*****
4 ADJ n	300860	92268	81499.9	attr	2107.42964	*****
5 a N	85398	28197	23133.4	attr	1501.03048	*****
6 the N	257119	78106	69650.9	attr	1499.45511	*****

7 N that	43988	15449	11915.9	attr	1381.76384	*****
8 ADJ to n	6352	2797	1720.7	attr	839.0613	*****
9 V amount	8873	3576	2403.6	attr	725.33802	*****
10 v-link ADJ	10749	4139	2911.8	attr	662.32174	*****
11 N to-inf	20294	6933	5497.4	attr	493.27559	*****
12 V n inf	28797	9419	7800.8	attr	446.89462	*****
13 N of n	130447	38593	35336.7	attr	421.76903	*****
14 n ADJ	11748	4111	3182.4	attr	353.78112	*****
15 of N	128176	37477	34721.6	attr	307.84991	*****
16 to N	35772	11126	9690.3	attr	286.79994	*****
17 with N	26644	8385	7217.6	attr	253.20324	*****
18 N for n	13520	4432	3662.4	attr	214.09977	*****
19 N to n	13575	4421	3677.3	attr	199.39316	*****
20 V by amount	653	295	176.9	attr	97.63148	*****
21 ADJ -ing	1321	521	357.8	attr	94.50555	*****
22 ADJ to-inf	9430	2976	2554.5	attr	92.68598	*****
23 V as if/as though/like	4045	1354	1095.7	attr	79.99006	*****
24 N over n	1554	573	421	attr	70.70231	*****
25 N with n	9290	2814	2516.6	attr	47.24422	*****
26 ADJ that	3089	1007	836.8	attr	45.7412	*****
27 poss N be to-inf	260	120	70.4	attr	43.01832	*****
28 at N	22655	6571	6137	attr	41.80019	*****
29 by N	13889	4100	3762.4	attr	40.99421	*****
30 the N be that	698	263	189.1	attr	37.0372	*****

31	N into n	2408	782	652.3	attr	34.08382	*****
32	ADJ as n	2345	758	635.2	attr	31.38675	*****
33	V that	38971	11005	10556.8	attr	26.19348	*****
34	V wh- to-inf	1053	360	285.2	attr	25.60887	*****
35	N by n	2649	828	717.6	attr	22.63446	*****
36	ADJ on n	633	224	171.5	attr	20.88376	*****
37	N at n	6181	1834	1674.4	attr	20.52027	*****
38	N as n	5390	1601	1460.1	attr	18.32578	****
39	it v-link ADJ if	65	33	17.6	attr	16.32504	****
40	on N	24177	6819	6549.3	attr	15.22191	****
41	it v n ADJ to-inf	13	10	3.5	attr	13.97121	***
42	ADJ with n	1275	405	345.4	attr	13.65762	***
43	V n n	27908	7828	7560	attr	13.0528	***
44	it v-link ADJ -ing	68	30	18.4	attr	9.04887	**
45	ADJ by n	285	95	77.2	attr	5.38921	*
46	V n onto n	96	36	26	attr	4.92679	*
47	ADJ over n	72	28	19.5	attr	4.71264	*
48	ADJ wh	734	225	198.8	attr	4.60371	*
49	ADJ from n	775	236	209.9	attr	4.33076	*
50	N as to wh	46	19	12.5	attr	4.31882	*
51	there v-link nothing ADJ about n	30	13	8.1	attr	3.64489	ns
52	poss N be -ing	534	163	144.7	attr	3.11273	ns
53	N between pl-n	3476	987	941.6	attr	2.97446	ns
54	V by -ing	1306	380	353.8	attr	2.62637	ns

55	N on n	9683	2688	2623 attr	2.20299	ns
56	ADJ as to wh	8	4	2.2 attr	1.88544	ns
57	there V n prep	185	58	50.1 attr	1.65069	ns
58	there V n adv	36	13	9.8 attr	1.39799	ns
59	it v-link N to-inf	773	224	209.4 attr	1.37739	ns
60	the N be to-inf	536	157	145.2 attr	1.29484	ns
61	ADJ for n	2554	717	691.9 attr	1.24537	ns
62	v it ADJ that	25	9	6.8 attr	0.94765	ns
63	it v-link ADJ about n	7	3	1.9 attr	0.80299	ns
64	it v-link ADJ wh	42	14	11.4 attr	0.79413	ns
65	there v-link something ADJ with n	13	5	3.5 attr	0.79208	ns
66	it V if	50	16	13.5 attr	0.58972	ns
67	it v-link ADJ to n that	14	5	3.8 attr	0.498	ns
68	it V like	1230	344	333.2 attr	0.47762	ns
69	it v-link ADJ of n to-inf	2	1	0.5 attr	0.47136	ns
70	there v-link nothing ADJ with n	8	3	2.2 attr	0.41055	ns
71	v it det N to-inf	5	2	1.4 attr	0.38964	ns
72	ADJ after v	5	2	1.4 attr	0.38964	ns
73	it V prep to-inf	124	36	33.6 attr	0.23368	ns
74	V as to wh	12	4	3.3 attr	0.22689	ns
75	it v-link N -ing	139	40	37.7 attr	0.19802	ns
76	it v-link det N to-inf	9	3	2.4 attr	0.17017	ns
77	it V n adj to-inf	6	2	1.6 attr	0.11345	ns
78	ADJ at n	554	153	150.1 attr	0.078	ns

79	it V adj -ing	3	1	0.8	attr	0.05672	ns
80	there v-link nothing ADJ with -ing	3	1	0.8	attr	0.05672	ns
81	v it ADJ for n to-inf	42	12	11.4	attr	0.04622	ns
82	poss N be that	173	48	46.9	attr	0.03759	ns
83	v it ADJ to-inf	116	32	31.4	attr	0.01447	ns
84	N behind n	303	83	82.1	attr	0.01412	ns
85	it v-link ADJ that	388	106	105.1	attr	0.01043	ns
86	there be det N in n	7	2	1.9	attr	0.0077	ns
87	it v-link ADJ to-inf	1384	376	374.9	attr	0.00434	ns
88	ADJ toward/towards n	29	8	7.9	attr	0.00362	ns
89	it V n n to-inf	60	16	16.3	rep	0.00544	ns
90	it v n N to-inf	34	9	9.2	rep	0.00661	ns
91	V n on to n	17	4	4.6	rep	0.11232	ns
92	V n as to wh	25	6	6.8	rep	0.12388	ns
93	V way prep	5	1	1.4	rep	0.13551	ns
94	it V adj when	5	1	1.4	rep	0.13551	ns
95	there V n	296	77	80.2	rep	0.17483	ns
96	it v n ADJ that	18	4	4.9	rep	0.22497	ns
97	V n with adv	14	3	3.8	rep	0.23849	ns
98	it V n if	14	3	3.8	rep	0.23849	ns
99	N from n	5793	1552	1569.3	rep	0.26157	ns
100	it V n before	6	1	1.6	rep	0.36466	ns
101	there v-link something ADJ in n	6	1	1.6	rep	0.36466	ns
102	V and v	1	0	0.3	rep	0.63186	ns

103	it V adj if	1	0	0.3 rep	0.63186 ns
104	it V n adj that	1	0	0.3 rep	0.63186 ns
105	it v n as ADJ that	1	0	0.3 rep	0.63186 ns
106	it v-link ADJ for n that	1	0	0.3 rep	0.63186 ns
107	there v-link anything ADJ in n	1	0	0.3 rep	0.63186 ns
108	there v-link anything ADJ with n	1	0	0.3 rep	0.63186 ns
109	there v-link nothing ADJ in -ing	1	0	0.3 rep	0.63186 ns
110	there v-link nothing ADJ in n	1	0	0.3 rep	0.63186 ns
111	there v-link something ADJ about n	12	2	3.3 rep	0.72931 ns
112	it v-link ADJ of n that	2	0	0.5 rep	1.26372 ns
113	V round n	14	2	3.8 rep	1.32325 ns
114	it v-link det N that	9	1	2.4 rep	1.388 ns
115	V n by n	865	219	234.3 rep	1.39367 ns
116	it V when	47	9	12.7 rep	1.61222 ns
117	it V n that	334	80	90.5 rep	1.7076 ns
118	it V to n as if/though	3	0	0.8 rep	1.89558 ns
119	it v-link det N -ing	3	0	0.8 rep	1.89558 ns
120	ADJ between pl-n	45	8	12.2 rep	2.15493 ns
121	ADJ about n	908	226	246 rep	2.26367 ns
122	it V n when	17	2	4.6 rep	2.38693 ns
123	it V to n that	55	10	14.9 rep	2.39931 ns
124	it v-link ADJ for n to-inf	120	25	32.5 rep	2.5114 ns
125	V n among pl-n	4	0	1.1 rep	2.52744 ns
126	there be det N to n	4	0	1.1 rep	2.52744 ns

127	it V adj to-inf	69	13	18.7 rep	2.56275	ns
128	V n as adj	240	54	65 rep	2.66031	ns
129	V way adv	57	10	15.4 rep	2.87609	ns
130	V on to n	428	99	115.9 rep	3.50946	ns
131	it v-link a adj N that	6	0	1.6 rep	3.79117	ns
132	into N	8320	2175	2253.8 rep	3.81718	ns
133	it V adj that	57	9	15.4 rep	4.11565	*
134	nor AUX n	47	6	12.7 rep	5.67902	*
135	neither AUX n	12	0	3.3 rep	7.58234	**
136	V n wh	2811	696	761.5 rep	7.87419	**
137	ADJ against n	13	0	3.5 rep	8.21421	**
138	V n over n	606	133	164.2 rep	8.47772	**
139	in N	86268	22979	23369.1 rep	9.21423	**
140	V like n	2439	587	660.7 rep	11.56687	***
141	the N be -ing	2166	516	586.7 rep	12.02653	***
142	it V n for n to-inf	51	4	13.8 rep	12.10396	***
143	it V that	916	202	248.1 rep	12.28445	***
144	it V as if/as though	86	10	23.3 rep	12.31799	***
145	under N	1376	312	372.7 rep	14.09728	***
146	it V n to-inf	603	123	163.3 rep	14.50224	***
147	V n off n	114	14	30.9 rep	14.83012	***
148	V n at n	2749	649	744.7 rep	17.36627	****
149	V as adj	272	44	73.7 rep	18.23141	****
150	V n toward n	41	1	11.1 rep	18.48412	****

151	V n that	12715	3230	3444.4 rep	18.61955	****
152	V onto n	229	31	62 rep	24.5009	*****
153	V between pl-n	241	32	65.3 rep	26.8781	*****
154	N towards n	241	31	65.3 rep	28.68754	*****
155	so AUX n	348	52	94.3 rep	29.35132	*****
156	ADJ in n	3791	881	1026.9 rep	29.40724	*****
157	without N	841	159	227.8 rep	30.72712	*****
158	N in n	31947	8181	8654.1 rep	36.257	*****
159	V n as n	2388	518	646.9 rep	36.91774	*****
160	ADJ of n	4106	931	1112.3 rep	42.10705	*****
161	V after n	532	81	144.1 rep	42.65016	*****
162	it V to n like	74	0	20 rep	46.75832	*****
163	out of N	2158	447	584.6 rep	46.99275	*****
164	N about n	3599	795	974.9 rep	47.58044	*****
165	V n between pl-n	477	66	129.2 rep	48.60614	*****
166	V over n	1661	322	449.9 rep	53.51761	*****
167	within N	1882	369	509.8 rep	57.08208	*****
168	V -ing	8306	1947	2250 rep	57.83442	*****
169	N among pl-n	225	13	61 rep	68.55133	*****
170	V n into n	2117	410	573.5 rep	68.56767	*****
171	it V to-inf	1525	274	413.1 rep	69.96771	*****
172	V n out of n	499	56	135.2 rep	75.76245	*****
173	V around	1211	199	328 rep	77.18367	*****
174	V n against n	327	25	88.6 rep	79.53829	*****

175 V across n	657	80	178 rep	86.8233	*****
176 V off n	1000	147	270.9 rep	88.03883	*****
177 V n with n	3903	801	1057.3 rep	90.37846	*****
178 from N	15276	3619	4138.1 rep	92.28967	*****
179 V n adj	4469	928	1210.6 rep	95.76412	*****
180 N against n	480	43	130 rep	98.94509	*****
181 V n adv	22558	5454	6110.7 rep	99.83038	*****
182 poss N	54076	13599	14648.6 rep	106.56863	*****
183 V n about n	2406	406	651.8 rep	140.20491	*****
184 V under n	557	39	150.9 rep	146.58969	*****
185 V n for n	6064	1219	1642.7 rep	159.75552	*****
186 V n -ing	3876	711	1050 rep	162.88762	*****
187 V of n	4315	806	1168.9 rep	167.10329	*****
188 V against n	515	24	139.5 rep	178.91779	*****
189 V n from n	3477	593	941.9 rep	195.16627	*****
190 V toward/towards n	721	38	195.3 rep	233.22659	*****
191 V out of n	1440	151	390.1 rep	242.35766	*****
192 V n on n	4160	699	1126.9 rep	246.15786	*****
193 V at n	14012	2988	3795.7 rep	248.84626	*****
194 V n prep	30989	7168	8394.6 rep	256.50867	*****
195 V n to n	7712	1474	2089.1 rep	267.64291	*****
196 V pron-refl	30905	7029	8371.8 rep	309.33261	*****
197 V as n	5053	839	1368.8 rep	311.4877	*****
198 V n to-inf	15496	3243	4197.7 rep	315.72893	*****

199	V to-inf	97124	23755	26309.9 rep	358.42183	*****
200	V wh	9865	1860	2672.3 rep	366.15836	*****
201	V with n	12945	2541	3506.7 rep	391.47381	*****
202	V pl-n	17558	3578	4756.3 rep	427.0256	*****
203	V so/not	7129	1191	1931.2 rep	430.64971	*****
204	V for n	8354	1442	2263 rep	449.39126	*****
205	V on n	12623	2278	3419.4 rep	570.47459	*****
206	it V prep that	988	0	267.6 rep	624.39302	*****
207	V into n	6492	829	1758.6 rep	785.37214	*****
208	V from n	8179	1110	2215.6 rep	872.15716	*****
209	V adj	16797	2905	4550.1 rep	899.25851	*****
210	V n in n	12794	1966	3465.8 rep	1003.12162	*****
211	V about n	12588	1923	3410 rep	1003.29163	*****
212	V n of n	38504	7574	10430.3 rep	1159.81917	*****
213	V to n	26073	4203	7062.9 rep	1779.98514	*****
214	V adv	75601	15125	20479.5 rep	2092.0854	*****
215	V inf	126215	27148	34190.3 rep	2170.21213	*****
216	V n	156083	34279	42281.3 rep	2278.02882	*****
217	V through n	3715	0	1006.4 rep	2348.98674	*****
218	V prep	120158	24762	32549.6 rep	2806.06563	*****
219	V in n	29565	3889	8008.9 rep	3389.89053	*****
220	V	218544	45741	59201.3 rep	4740.22828	*****

Appendix 5: Table 5.3. Life science

pattern	MOOC	Life-sci	Exp.freq	ASSOC.	COLL.STR.	LOGL	SIGNIF
1 V	218544	47208	23395	attr	23754.26042	*****	
2 V n	156083	35328	16708.6	attr	19500.55517	*****	
3 V inf	126215	29156	13511.2	attr	16697.07507	*****	
4 V prep	120158	26523	12862.8	attr	13536.15694	*****	
5 V to-inf	97124	21762	10397	attr	11423.76799	*****	

6	V that	38971	9733	4171.8	attr	6413.14569	*****
7	V adv	75601	15526	8093	attr	6403.80505	*****
8	V n of n	38504	9464	4121.8	attr	6021.46925	*****
9	V in n	29565	7430	3164.9	attr	4941.89763	*****
10	V to n	26073	6398	2791.1	attr	4034.84068	*****
11	V n prep	30989	6886	3317.3	attr	3444.86117	*****
12	V adj	16797	4476	1798.1	attr	3341.75091	*****
13	V n to-inf	15496	4217	1658.8	attr	3279.62324	*****
14	V about n	12588	3479	1347.5	attr	2784.10873	*****
15	V pl-n	17558	4200	1879.6	attr	2492.80757	*****
16	V pron-refl	30905	6282	3308.4	attr	2471.46554	*****
17	V n in n	12794	3254	1369.6	attr	2204.35098	*****
18	V with n	12945	3214	1385.8	attr	2068.08461	*****
19	V n n	27908	5527	2987.5	attr	2011.1099	*****
20	V n that	12715	3127	1361.1	attr	1970.57262	*****
21	V from n	8179	2228	875.6	attr	1730.61831	*****
22	V n adv	22558	4503	2414.8	attr	1674.40228	*****
23	V into n	6492	1879	695	attr	1634.64988	*****
24	V wh	9865	2413	1056	attr	1500.82006	*****
25	V n to n	7712	2024	825.6	attr	1459.84367	*****
26	V on n	12623	2823	1351.3	attr	1424.56111	*****
27	V n inf	28797	5210	3082.7	attr	1409.76049	*****
28	V for n	8354	2102	894.3	attr	1389.2561	*****
29	V at n	14012	2925	1500	attr	1232.4559	*****

30	V -ing	8306	1921	889.2	attr	1050.18202	*****
31	V n from n	3477	1041	372.2	attr	960.88467	*****
32	V so/not	7129	1639	763.2	attr	882.94554	*****
33	V n for n	6064	1459	649.1	attr	873.2666	*****
34	V n adj	4469	1155	478.4	attr	806.17648	*****
35	V n about n	2406	668	257.6	attr	536.87659	*****
36	V of n	4315	990	461.9	attr	530.08172	*****
37	V through n	3715	890	397.7	attr	527.03799	*****
38	V n with n	3903	887	417.8	attr	464.04881	*****
39	V n on n	4160	885	445.3	attr	391.12346	*****
40	V n -ing	3876	840	414.9	attr	389.85079	*****
41	V n into n	2117	547	226.6	attr	381.22994	*****
42	V as n	5053	1012	540.9	attr	377.426	*****
43	V n wh	2811	645	300.9	attr	345.23086	*****
44	V across n	657	250	70.3	attr	336.59216	*****
45	it V prep that	988	290	105.8	attr	258.13947	*****
46	V n at n	2749	557	294.3	attr	214.74035	*****
47	V like n	2439	492	261.1	attr	187.2228	*****
48	it V to-inf	1525	345	163.3	attr	178.32539	*****
49	V n as n	2388	448	255.6	attr	135.98983	*****
50	V out of n	1440	302	154.2	attr	128.25317	*****
51	V as if/as though/like	4045	664	433	attr	121.03798	*****
52	V by -ing	1306	273	139.8	attr	114.88936	*****
53	V around	1211	258	129.6	attr	114.33057	*****

54	V n between pl-n	477	135	51.1	attr	112.39847	*****
55	V off n	1000	214	107	attr	95.96077	*****
56	it V that	916	189	98.1	attr	76.69275	*****
57	V after n	532	126	57	attr	72.59229	*****
58	within N	1882	324	201.5	attr	72.02047	*****
59	V n over n	606	131	64.9	attr	60.31962	*****
60	it V n to-inf	603	130	64.6	attr	59.43633	*****
61	it V as if/as though	86	35	9.2	attr	51.73656	*****
62	V over n	1661	273	177.8	attr	49.99678	*****
63	V n by n	865	162	92.6	attr	48.86682	*****
64	V onto n	229	62	24.5	attr	47.42521	*****
65	it V n that	334	80	35.8	attr	47.28675	*****
66	V n out of n	499	104	53.4	attr	43.39655	*****
67	it V like	1230	208	131.7	attr	43.00221	*****
68	V toward/towards n	721	136	77.2	attr	42.00463	*****
69	V against n	515	99	55.1	attr	32.50496	*****
70	so AUX n	348	73	37.3	attr	31.00773	*****
71	V on to n	428	78	45.8	attr	21.42724	*****
72	V n as adj	240	50	25.7	attr	20.83845	*****
73	V wh- to-inf	1053	160	112.7	attr	19.94846	*****
74	V between pl-n	241	49	25.8	attr	19.06196	****
75	V n against n	327	61	35	attr	18.15494	****
76	V as adj	272	52	29.1	attr	16.7739	****
77	V way adv	57	17	6.1	attr	15.56194	****

78	V n as to wh	25	10	2.7 attr	14.43565	***
79	V under n	557	89	59.6 attr	14.32134	***
80	it V to n that	55	16	5.9 attr	14.00873	***
81	V n off n	114	26	12.2 attr	13.69935	***
82	it V adj when	5	4	0.5 attr	13.0982	***
83	it V adj that	57	15	6.1 attr	10.84298	***
84	it V if	50	13	5.4 attr	9.1692	**
85	nor AUX n	47	12	5 attr	8.15128	**
86	it V prep to-inf	124	24	13.3 attr	8.05034	**
87	it V n for n to-inf	51	12	5.5 attr	6.80816	**
88	it V n adj that	1	1	0.1 attr	4.46894	*
89	it v-link ADJ for n that	1	1	0.1 attr	4.46894	*
90	it V when	47	10	5 attr	4.41373	*
91	V n among pl-n	4	2	0.4 attr	3.84559	*
92	it V adj to-inf	69	12	7.4 attr	2.77369	ns
93	V n toward n	41	8	4.4 attr	2.75194	ns
94	it V n before	6	2	0.6 attr	2.20549	ns
95	neither AUX n	12	3	1.3 attr	1.9488	ns
96	it V n when	17	3	1.8 attr	0.7331	ns
97	it V to n like	74	10	7.9 attr	0.5691	ns
98	V as to wh	12	2	1.3 attr	0.38888	ns
99	there V n adv	36	5	3.9 attr	0.35277	ns
100	it V n adj to-inf	6	1	0.6 attr	0.19444	ns
101	V amount	8873	962	949.8 attr	0.17396	ns

102	V n with adv	14	2	1.5	attr	0.17198	ns
103	it V n if	14	2	1.5	attr	0.17198	ns
104	there V n prep	185	21	19.8	attr	0.07949	ns
105	there V n	296	33	31.7	attr	0.06025	ns
106	V n onto n	96	11	10.3	attr	0.05587	ns
107	V n on to n	17	2	1.8	attr	0.01942	ns
108	there v-link something ADJ with n	13	1	1.4	rep	0.13538	ns
109	V and v	1	0	0.1	rep	0.22645	ns
110	it V adj if	1	0	0.1	rep	0.22645	ns
111	it v n as ADJ that	1	0	0.1	rep	0.22645	ns
112	there v-link anything ADJ in n	1	0	0.1	rep	0.22645	ns
113	there v-link anything ADJ with n	1	0	0.1	rep	0.22645	ns
114	there v-link nothing ADJ in -ing	1	0	0.1	rep	0.22645	ns
115	there v-link nothing ADJ in n	1	0	0.1	rep	0.22645	ns
116	it V n n to-inf	60	5	6.4	rep	0.37897	ns
117	it v-link ADJ of n that	2	0	0.2	rep	0.4529	ns
118	it v-link ADJ of n to-inf	2	0	0.2	rep	0.4529	ns
119	it V adj -ing	3	0	0.3	rep	0.67934	ns
120	it V to n as if/though	3	0	0.3	rep	0.67934	ns
121	it v-link det N -ing	3	0	0.3	rep	0.67934	ns
122	there v-link nothing ADJ with -ing	3	0	0.3	rep	0.67934	ns
123	ADJ between pl-n	45	3	4.8	rep	0.87391	ns
124	there be det N to n	4	0	0.4	rep	0.90579	ns
125	V way prep	5	0	0.5	rep	1.13224	ns

126	v it det N to-inf	5	0	0.5 rep	1.13224 ns
127	ADJ after v	5	0	0.5 rep	1.13224 ns
128	it v-link a adj N that	6	0	0.6 rep	1.35869 ns
129	there v-link something ADJ in n	6	0	0.6 rep	1.35869 ns
130	there be det N in n	7	0	0.7 rep	1.58513 ns
131	it v-link ADJ about n	7	0	0.7 rep	1.58513 ns
132	ADJ as to wh	8	0	0.9 rep	1.81158 ns
133	there v-link nothing ADJ with n	8	0	0.9 rep	1.81158 ns
134	it v-link det N that	9	0	1 rep	2.03803 ns
135	it v-link det N to-inf	9	0	1 rep	2.03803 ns
136	there v-link something ADJ about	12	0	1.3 rep	2.71738 ns
137	ADJ against n	13	0	1.4 rep	2.94382 ns
138	it v n ADJ to-inf	13	0	1.4 rep	2.94382 ns
139	V round n	14	0	1.5 rep	3.17027 ns
140	it v-link ADJ to n that	14	0	1.5 rep	3.17027 ns
141	it v n ADJ that	18	0	1.9 rep	4.07607 *
142	it v-link ADJ wh	42	1	4.5 rep	4.30199 *
143	N as to wh	46	1	4.9 rep	5.02374 *
144	the N be -ing	2166	199	231.9 rep	5.45552 *
145	v it ADJ that	25	0	2.7 rep	5.66121 *
146	ADJ toward/towards n	29	0	3.1 rep	6.56701 *
147	there v-link nothing ADJ about n	30	0	3.2 rep	6.79346 **
148	it v n N to-inf	34	0	3.6 rep	7.69926 **
149	v it ADJ for n to-inf	42	0	4.5 rep	9.51086 **

150	it v-link N -ing	139	5	14.9 rep	9.62066	**
151	under N	1376	112	147.3 rep	10.2387	**
152	V by amount	653	42	69.9 rep	14.33025	***
153	v it ADJ to-inf	116	2	12.4 rep	14.54616	***
154	it v-link ADJ if	65	0	7 rep	14.71925	***
155	it v-link ADJ -ing	68	0	7.3 rep	15.39861	****
156	ADJ over n	72	0	7.7 rep	16.30442	****
157	ADJ on n	633	32	67.8 rep	25.72775	*****
158	it v-link ADJ for n to-inf	120	0	12.8 rep	27.17425	*****
159	poss N be that	173	1	18.5 rep	31.11814	*****
160	N towards n	241	3	25.8 rep	35.02343	*****
161	N among pl-n	225	2	24.1 rep	36.56331	*****
162	poss N be -ing	534	17	57.2 rep	42.39343	*****
163	poss N be to-inf	260	1	27.8 rep	50.00372	*****
164	ADJ by n	285	1	30.5 rep	55.48146	*****
165	the N be to-inf	536	10	57.4 rep	64.36494	*****
166	N behind n	303	0	32.4 rep	68.61709	*****
167	the N be that	698	17	74.7 rep	70.30094	*****
168	ADJ wh	734	19	78.6 rep	70.47296	*****
169	it v-link ADJ that	388	2	41.5 rep	71.29069	*****
170	ADJ at n	554	6	59.3 rep	84.67663	*****
171	N against n	480	3	51.4 rep	84.99778	*****
172	it v-link N to-inf	773	9	82.7 rep	115.19457	*****
173	ADJ from n	775	5	83 rep	136.3275	*****

174	ADJ about n	908	8	97.2 rep	147.94247	*****
175	N into n	2408	95	257.8 rep	147.99968	*****
176	it v-link ADJ to-inf	1384	28	148.2 rep	158.38159	*****
177	without N	841	3	90 rep	163.38978	*****
178	ADJ with n	1275	12	136.5 rep	203.81603	*****
179	ADJ -ing	1321	13	141.4 rep	208.32146	*****
180	out of N	2158	42	231 rep	252.90094	*****
181	ADJ as n	2345	38	251 rep	303.69697	*****
182	N over n	1554	5	166.4 rep	305.8228	*****
183	ADJ for n	2554	44	273.4 rep	320.56535	*****
184	N by n	2649	42	283.6 rep	346.78836	*****
185	ADJ in n	3791	94	405.8 rep	376.87605	*****
186	N between pl-n	3476	61	372.1 rep	432.10383	*****
187	ADJ that	3089	28	330.7 rep	499.45404	*****
188	into N	8320	334	890.6 rep	499.84914	*****
189	ADJ of n	4106	74	439.5 rep	503.13375	*****
190	N about n	3599	43	385.3 rep	531.57565	*****
191	N from n	5793	155	620.1 rep	541.79447	*****
192	ADJ to n	6352	125	680 rep	740.1507	*****
193	N as n	5390	61	577 rep	812.18587	*****
194	N at n	6181	61	661.7 rep	974.82468	*****
195	ADJ to-inf	9430	196	1009.5 rep	1062.80053	*****
196	v-link ADJ	10749	236	1150.7 rep	1168.86623	*****
197	N to n	13575	315	1453.2 rep	1421.13066	*****

198	N on n	9683	116	1036.6 rep	1430.53602	*****
199	N with n	9290	89	994.5 rep	1479.5018	*****
200	from N	15276	381	1635.3 rep	1515.68917	*****
201	n ADJ	11748	182	1257.6 rep	1558.17029	*****
202	by N	13889	291	1486.8 rep	1558.84796	*****
203	N for n	13520	185	1447.3 rep	1896.3879	*****
204	N to-inf	20294	418	2172.5 rep	2305.94822	*****
205	on N	24177	415	2588.1 rep	3054.50273	*****
206	at N	22655	327	2425.2 rep	3111.0988	*****
207	N in n	31947	717	3419.9 rep	3438.23376	*****
208	with N	26644	274	2852.2 rep	4164.59139	*****
209	to N	35772	711	3829.4 rep	4169.85632	*****
210	N that	43988	994	4708.9 rep	4724.4538	*****
211	num N	43610	599	4668.4 rep	6145.55381	*****
212	poss N	54076	638	5788.8 rep	8107.45138	*****
213	in N	86268	1716	9234.9 rep	10164.15354	*****
214	a N	85398	1042	9141.8 rep	12726.87767	*****
215	of N	128176	2422	13721.1 rep	15713.92443	*****
216	N of n	130447	2408	13964.2 rep	16214.40673	*****
217	det ADJ n	163242	3361	17474.9 rep	19157.92335	*****
218	n N	171404	3740	18348.7 rep	19410.24432	*****
219	the N	257119	6517	27524.4 rep	26664.02741	*****
220	ADJ n	300860	5927	32206.8 rep	37452.93903	*****

Appendix 5: Table 5.4. Physical science

pattern	MOOC	Physic-sci	Exp.freq	ASSOC.	COLL.STR.LOGL	SIGNIF
1 num N	43610	12563	8749.1	attr	1925.41173	*****
2 n N	171404	41263	34387.4	attr	1741.21442	*****
3 at N	22655	6606	4545.1	attr	1070.97622	*****
4 the N	257119	57828	51583.7	attr	1002.7779	*****
5 of N	128176	28692	25714.9	attr	437.69233	*****

6	V toward/towards n	721	358	144.6	attr	313.30739	*****
7	the N be -ing	2166	749	434.5	attr	247.77084	*****
8	N on n	9683	2560	1942.6	attr	229.56415	*****
9	V adv	75601	16733	15167.2	attr	202.23382	*****
10	from N	15276	3771	3064.7	attr	194.19162	*****
11	N at n	6181	1692	1240	attr	190.7807	*****
12	N of n	130447	28018	26170.5	attr	167.41304	*****
13	V amount	8873	2265	1780.1	attr	155.88517	*****
14	on N	24177	5615	4850.4	attr	146.45615	*****
15	V at n	14012	3288	2811.1	attr	97.72667	*****
16	N over n	1554	472	311.8	attr	92.7025	*****
17	v-link ADJ	10749	2560	2156.5	attr	90.76709	*****
18	poss N	54076	11731	10848.8	attr	89.55364	*****
19	ADJ to n	6352	1573	1274.4	attr	83.18144	*****
20	V off n	1000	323	200.6	attr	82.68974	*****
21	n ADJ	11748	2739	2356.9	attr	74.89409	*****
22	V over n	1661	457	333.2	attr	53.0882	*****
23	in N	86268	18119	17307.3	attr	48.42077	*****
24	N between pl-n	3476	865	697.4	attr	47.78797	*****
25	poss N be -ing	534	173	107.1	attr	44.81691	*****
26	to N	35772	7618	7176.7	attr	33.83836	*****
27	det ADJ n	163242	33587	32749.9	attr	28.05459	*****
28	V around	1211	315	243	attr	25.03027	*****
29	it v-link N -ing	139	49	27.9	attr	17.3077	****

30 N from n	5793	1280	1162.2 attr	14.60496 ***
31 N towards n	241	73	48.3 attr	14.1502 ***
32 V by amount	653	170	131 attr	13.59197 ***
33 V that	38971	8105	7818.4 attr	13.18505 ***
34 V n adv	22558	4744	4525.6 attr	13.12104 ***
35 it V to-inf	1525	360	305.9 attr	11.47036 ***
36 V out of n	1440	334	288.9 attr	8.49658 **
37 ADJ at n	554	139	111.1 attr	8.2532 **
38 V n toward n	41	16	8.2 attr	7.75255 **
39 out of N	2158	481	432.9 attr	6.5034 *
40 by N	13889	2907	2786.4 attr	6.48537 *
41 it v-link ADJ of n that	2	2	0.4 attr	6.42534 *
42 it V prep to-inf	124	36	24.9 attr	5.66117 *
43 V n -ing	3876	835	777.6 attr	5.211 *
44 N into n	2408	528	483.1 attr	5.10953 *
45 ADJ between pl-n	45	15	9 attr	4.33906 *
46 N as n	5390	1136	1081.4 attr	3.41823 ns
47 V and v	1	1	0.2 attr	3.21267 ns
48 there v-link nothing ADJ in n	1	1	0.2 attr	3.21267 ns
49 it V to n as if/though	3	2	0.6 attr	3.05409 ns
50 it v-link det N -ing	3	2	0.6 attr	3.05409 ns
51 there v-link something ADJ about n	12	5	2.4 attr	2.8976 ns
52 it V n before	6	3	1.2 attr	2.66376 ns
53 it v-link a adj N that	6	3	1.2 attr	2.66376 ns

54	ADJ against n	13	5	2.6 attr	2.32284 ns
55	V round n	14	5	2.8 attr	1.84474 ns
56	into N	8320	1715	1669.2 attr	1.56731 ns
57	it V when	47	13	9.4 attr	1.55865 ns
58	V way adv	57	15	11.4 attr	1.29731 ns
59	N in n	31947	6479	6409.3 attr	0.9561 ns
60	V n with adv	14	4	2.8 attr	0.57754 ns
61	it V n if	14	4	2.8 attr	0.57754 ns
62	ADJ over n	72	17	14.4 attr	0.54266 ns
63	it V like	1230	257	246.8 attr	0.52587 ns
64	V n onto n	96	22	19.3 attr	0.47166 ns
65	it v-link N to-inf	773	162	155.1 attr	0.38208 ns
66	the N be to-inf	536	113	107.5 attr	0.34341 ns
67	V between pl-n	241	52	48.3 attr	0.3385 ns
68	it V adj -ing	3	1	0.6 attr	0.28927 ns
69	there be det N in n	7	2	1.4 attr	0.28877 ns
70	ADJ toward/towards n	29	7	5.8 attr	0.28665 ns
71	it V to n that	55	12	11 attr	0.10354 ns
72	V pron-refl	30905	6220	6200.2 attr	0.07962 ns
73	V prep	120158	24141	24106.3 attr	0.06478 ns
74	V n among pl-n	4	1	0.8 attr	0.05751 ns
75	V onto n	229	47	45.9 attr	0.03028 ns
76	it v n N to-inf	34	7	6.8 attr	0.00583 ns
77	v it ADJ that	25	5	5 rep	0.00006 ns

78	it V n for n to-inf	51	10	10.2 rep	0.0066 ns
79	it V n when	17	3	3.4 rep	0.06382 ns
80	it V n that	334	65	67 rep	0.07584 ns
81	it v-link ADJ about n	7	1	1.4 rep	0.15809 ns
82	it V n to-inf	603	117	121 rep	0.16479 ns
83	ADJ n	300860	60264	60359.1 rep	0.20745 ns
84	V n out of n	499	96	100.1 rep	0.21337 ns
85	V n on n	4160	822	834.6 rep	0.23872 ns
86	V from n	8179	1621	1640.9 rep	0.30323 ns
87	ADJ wh	734	141	147.3 rep	0.33623 ns
88	the N be that	698	133	140 rep	0.44782 ns
89	it V adj if	1	0	0.2 rep	0.44784 ns
90	it V n adj that	1	0	0.2 rep	0.44784 ns
91	it v n as ADJ that	1	0	0.2 rep	0.44784 ns
92	it v-link ADJ for n that	1	0	0.2 rep	0.44784 ns
93	there v-link anything ADJ in n	1	0	0.2 rep	0.44784 ns
94	there v-link anything ADJ with n	1	0	0.2 rep	0.44784 ns
95	there v-link nothing ADJ in -ing	1	0	0.2 rep	0.44784 ns
96	it V n n to-inf	60	10	12 rep	0.45145 ns
97	N behind n	303	56	60.8 rep	0.48161 ns
98	it v-link det N that	9	1	1.8 rep	0.51643 ns
99	V across n	657	123	131.8 rep	0.74932 ns
100	V n over n	606	113	121.6 rep	0.77095 ns
101	it V adj to-inf	69	11	13.8 rep	0.7726 ns

102	V n off n	114	19	22.9 rep	0.85778 ns
103	it v-link ADJ of n to-inf	2	0	0.4 rep	0.89569 ns
104	it v-link ADJ for n to-inf	120	20	24.1 rep	0.90292 ns
105	v it ADJ for n to-inf	42	6	8.4 rep	0.94857 ns
106	v it ADJ to-inf	116	19	23.3 rep	1.03111 ns
107	so AUX n	348	62	69.8 rep	1.12745 ns
108	it V if	50	7	10 rep	1.24957 ns
109	there v-link nothing ADJ with -ing	3	0	0.6 rep	1.34353 ns
110	there v-link something ADJ with n	13	1	2.6 rep	1.53586 ns
111	poss N be that	173	28	34.7 rep	1.70926 ns
112	it v-link ADJ if	65	9	13 rep	1.7123 ns
113	there be det N to n	4	0	0.8 rep	1.79137 ns
114	V way prep	5	0	1 rep	2.23922 ns
115	it V adj when	5	0	1 rep	2.23922 ns
116	v it det N to-inf	5	0	1 rep	2.23922 ns
117	ADJ after v	5	0	1 rep	2.23922 ns
118	ADJ by n	285	47	57.2 rep	2.37793 ns
119	it V adj that	57	7	11.4 rep	2.41803 ns
120	it V n adj to-inf	6	0	1.2 rep	2.68706 ns
121	there v-link something ADJ in n	6	0	1.2 rep	2.68706 ns
122	V as if/as though/like	4045	768	811.5 rep	2.96311 ns
123	it v-link ADJ -ing	68	8	13.6 rep	3.31132 ns
124	ADJ as to wh	8	0	1.6 rep	3.58275 ns
125	there v-link nothing ADJ with n	8	0	1.6 rep	3.58275 ns

126 V against n	515	86	103.3 rep	3.80022 ns
127 it v-link det N to-inf	9	0	1.8 rep	4.03059 *
128 N against n	480	78	96.3 rep	4.58074 *
129 V n into n	2117	384	424.7 rep	5.00971 *
130 V through n	3715	691	745.3 rep	5.05052 *
131 V as to wh	12	0	2.4 rep	5.37412 *
132 neither AUX n	12	0	2.4 rep	5.37412 *
133 it v-link ADJ wh	42	3	8.4 rep	5.48916 *
134 it V as if/as though	86	9	17.3 rep	5.74636 *
135 it v n ADJ to-inf	13	0	2.6 rep	5.82197 *
136 V n between pl-n	477	75	95.7 rep	5.9435 *
137 ADJ of n	4106	761	823.8 rep	6.10691 *
138 there V n adv	36	2	7.2 rep	6.20378 *
139 it v-link ADJ to n that	14	0	2.8 rep	6.26981 *
140 ADJ on n	633	102	127 rep	6.49377 *
141 V n as adj	240	33	48.1 rep	6.53026 *
142 N as to wh	46	3	9.2 rep	6.71519 **
143 nor AUX n	47	3	9.4 rep	7.02965 **
144 there v-link nothing ADJ about n	30	1	6 rep	7.43147 **
145 V n on to n	17	0	3.4 rep	7.61335 **
146 it v n ADJ that	18	0	3.6 rep	8.0612 **
147 ADJ as n	2345	416	470.5 rep	8.1352 **
148 it V that	916	150	183.8 rep	8.16129 **
149 it V prep that	988	163	198.2 rep	8.21331 **

150	N by n	2649	473	531.4 rep	8.28288	**
151	V n at n	2749	489	551.5 rep	9.13832	**
152	it V to n like	74	5	14.8 rep	10.36411	**
153	V as adj	272	34	54.6 rep	10.85507	***
154	V n as to wh	25	0	5 rep	11.19612	***
155	ADJ that	3089	545	619.7 rep	11.64468	***
156	ADJ for n	2554	444	512.4 rep	11.83837	***
157	V like n	2439	422	489.3 rep	12.02456	***
158	V by -ing	1306	213	262 rep	12.07089	***
159	V on to n	428	56	85.9 rep	14.39549	***
160	ADJ in n	3791	668	760.6 rep	14.56663	***
161	ADJ -ing	1321	211	265 rep	14.57044	***
162	ADJ about n	908	137	182.2 rep	15.0164	***
163	V n by n	865	129	173.5 rep	15.3703	****
164	ADJ with n	1275	200	255.8 rep	16.17168	****
165	N for n	13520	2521	2712.4 rep	17.2797	****
166	poss N be to-inf	260	26	52.2 rep	19.28271	****
167	it v-link ADJ that	388	45	77.8 rep	19.72471	*****
168	V n against n	327	34	65.6 rep	22.19024	*****
169	V n from n	3477	588	697.6 rep	22.47459	*****
170	V after n	532	65	106.7 rep	22.96246	*****
171	V under n	557	68	111.7 rep	24.10602	*****
172	ADJ from n	775	103	155.5 rep	24.46399	*****
173	V into n	6492	1144	1302.4 rep	24.94476	*****

174	N to n	13575	2482	2723.4 rep	27.51538	*****
175	it v-link ADJ to-inf	1384	200	277.7 rep	29.42867	*****
176	under N	1376	196	276.1 rep	31.55908	*****
177	V as n	5053	857	1013.7 rep	31.64478	*****
178	V wh	9865	1736	1979.1 rep	38.71109	*****
179	there V n	296	20	59.4 rep	41.45875	*****
180	without N	841	98	168.7 rep	42.16303	*****
181	ADJ to-inf	9430	1631	1891.9 rep	46.80788	*****
182	N among pl-n	225	9	45.1 rep	50.07574	*****
183	V n prep	30989	5714	6217.1 rep	52.50554	*****
184	V of n	4315	677	865.7 rep	54.69747	*****
185	V n wh	2811	409	563.9 rep	57.61101	*****
186	V on n	12623	2186	2532.5 rep	61.71812	*****
187	V adj	16797	2954	3369.8 rep	66.65978	*****
188	V -ing	8306	1373	1666.4 rep	67.92303	*****
189	a N	85398	16182	17132.7 rep	68.77364	*****
190	V n as n	2388	320	479.1 rep	72.84798	*****
191	there V n prep	185	1	37.1 rep	73.18302	*****
192	V n adj	4469	675	896.6 rep	73.49384	*****
193	N with n	9290	1531	1863.8 rep	78.22194	*****
194	with N	26644	4774	5345.4 rep	79.21798	*****
195	within N	1882	223	377.6 rep	89.69478	*****
196	V n for n	6064	926	1216.6 rep	92.94661	*****
197	V n with n	3903	549	783 rep	95.42842	*****

198	V wh- to-inf	1053	95	211.3 rep	96.05496	*****
199	V inf	126215	23949	25321.5 rep	98.23506	*****
200	V for n	8354	1322	1676 rep	99.36188	*****
201	V pl-n	17558	2967	3522.5 rep	114.9315	*****
202	V n of n	38504	6887	7724.8 rep	118.32928	*****
203	V n inf	28797	5039	5777.3 rep	123.16701	*****
204	N to-inf	20294	3410	4071.4 rep	141.27196	*****
205	V n about n	2406	265	482.7 rep	141.42829	*****
206	V n in n	12794	2033	2566.8 rep	147.55417	*****
207	N about n	3599	444	722 rep	150.48095	*****
208	V about n	12588	1982	2525.4 rep	155.78216	*****
209	V n that	12715	1978	2550.9 rep	171.90882	*****
210	N that	43988	7742	8825 rep	174.05629	*****
211	V so/not	7129	980	1430.2 rep	194.57904	*****
212	V with n	12945	1970	2597.1 rep	203.34261	*****
213	V in n	29565	4941	5931.4 rep	218.31866	*****
214	V n to n	7712	1016	1547.2 rep	252.86143	*****
215	V n n	27908	4434	5599 rep	323.70703	*****
216	V to n	26073	4043	5230.8 rep	362.09061	*****
217	V n to-inf	15496	2066	3108.8 rep	484.78369	*****
218	V to-inf	97124	16556	19485.2 rep	590.84798	*****
219	V	218544	39215	43844.7 rep	674.04964	*****
220	V n	156083	25344	31313.7 rep	1573.19863	*****

Table 5.5 Social science

pattern	MOOC	Sosci-sci	Exp.freq	ASSOC.	COLL.STR.LOGL	SIGNIF
1 V	218544	44947	35740.2	attr	2874.36704	*****
2 V n	156083	32615	25525.5	attr	2323.51853	*****
3 V inf	126215	25876	20640.9	attr	1558.13202	*****
4 V that	38971	9344	6373.2	attr	1509.08446	*****
5 V to-inf	97124	19832	15883.4	attr	1141.47773	*****
6 V prep	120158	23143	19650.4	attr	739.15609	*****

7 V to n	26073	5945	4263.9	attr	729.2638	*****
8 V so/not	7129	2040	1165.9	attr	671.11965	*****
9 V in n	29565	6487	4835	attr	628.59012	*****
10 V n in n	12794	2965	2092.3	attr	396.82777	*****
11 V n to-inf	15496	3449	2534.2	attr	364.50865	*****
12 V n of n	38504	7585	6296.9	attr	303.29466	*****
13 V on n	12623	2796	2064.3	attr	286.33678	*****
14 V about n	12588	2772	2058.6	attr	273.41477	*****
15 V n prep	30989	6157	5067.9	attr	268.08385	*****
16 V adv	75601	14024	12363.6	attr	264.14508	*****
17 V n n	27908	5540	4564	attr	238.85495	*****
18 V for n	8354	1887	1366.2	attr	217.6839	*****
19 V under n	557	233	91.1	attr	202.32192	*****
20 V n on n	4160	1027	680.3	attr	188.5763	*****
21 V wh	9865	2106	1613.3	attr	167.71998	*****
22 V adj	16797	3379	2746.9	attr	165.20695	*****
23 V n for n	6064	1371	991.7	attr	158.9034	*****
24 V pl-n	17558	3490	2871.4	attr	151.93377	*****
25 V n to n	7712	1672	1261.2	attr	148.38682	*****
26 V with n	12945	2618	2117	attr	134.31423	*****
27 V n against n	327	136	53.5	attr	116.72104	*****
28 ADJ to-inf	9430	1930	1542.2	attr	109.99545	*****
29 N to-inf	20294	3780	3318.8	attr	74.44161	*****
30 V as n	5053	1054	826.4	attr	70.24163	*****

31	V n inf	28797	5240	4709.4	attr	70.08815	*****
32	V n adj	4469	938	730.9	attr	65.63673	*****
33	V against n	515	158	84.2	attr	64.69056	*****
34	V n wh	2811	613	459.7	attr	56.5016	*****
35	N among pl-n	225	81	36.8	attr	50.73082	*****
36	V wh- to-inf	1053	257	172.2	attr	44.66561	*****
37	V pron-refl	30905	5491	5054.1	attr	44.58873	*****
38	V at n	14012	2575	2291.5	attr	40.81364	*****
39	V from n	8179	1554	1337.6	attr	40.29737	*****
40	V n that	12715	2339	2079.4	attr	37.68937	*****
41	ADJ for n	2554	535	417.7	attr	36.83872	*****
42	V n with n	3903	777	638.3	attr	34.19474	*****
43	within N	1882	404	307.8	attr	33.38757	*****
44	V n as n	2388	497	390.5	attr	32.5048	*****
45	without N	841	202	137.5	attr	32.46927	*****
46	V n about n	2406	498	393.5	attr	31.14268	*****
47	it v-link ADJ to-inf	1384	300	226.3	attr	26.53148	*****
48	it V that	916	208	149.8	attr	24.69106	*****
49	V n over n	606	139	99.1	attr	17.48617	****
50	V -ing	8306	1494	1358.3	attr	15.82663	****
51	V of n	4315	801	705.7	attr	14.8974	***
52	V after n	532	120	87	attr	13.6907	***
53	ADJ about n	908	189	148.5	attr	12.36714	***
54	v it ADJ to-inf	116	34	19	attr	12.07655	***

55	V n as adj	240	60	39.2 attr	11.65208	***
56	N against n	480	106	78.5 attr	10.60358	**
57	V on to n	428	96	70 attr	10.58621	**
58	V n from n	3477	640	568.6 attr	10.38532	**
59	V n out of n	499	109	81.6 attr	10.15184	**
60	V into n	6492	1157	1061.7 attr	10.01535	**
61	V way prep	5	4	0.8 attr	9.83884	**
62	ADJ against n	13	7	2.1 attr	9.54807	**
63	V n at n	2749	509	449.6 attr	9.09029	**
64	under N	1376	267	225 attr	8.93631	**
65	nor AUX n	47	16	7.7 attr	8.73067	**
66	ADJ of n	4106	741	671.5 attr	8.38772	**
67	V n adv	22558	3846	3689.1 attr	7.94754	**
68	V n into n	2117	394	346.2 attr	7.61959	**
69	V n by n	865	172	141.5 attr	7.4739	**
70	it V to n that	55	17	9 attr	7.1151	**
71	it V n for n to-inf	51	16	8.3 attr	6.99405	**
72	it V n n to-inf	60	18	9.8 attr	6.88225	**
73	V by -ing	1306	249	213.6 attr	6.73763	**
74	it v-link ADJ for n to-inf	120	30	19.6 attr	5.82579	*
75	it v n N to-inf	34	11	5.6 attr	5.24403	*
76	V as adj	272	59	44.5 attr	5.24045	*
77	V over n	1661	306	271.6 attr	5.03445	*
78	ADJ after v	5	3	0.8 attr	4.84846	*

79	there v-link nothing ADJ with n	8	4	1.3 attr	4.82394 *
80	so AUX n	348	72	56.9 attr	4.48402 *
81	V between pl-n	241	52	39.4 attr	4.45287 *
82	it V n to-inf	603	118	98.6 attr	4.33928 *
83	V n -ing	3876	680	633.9 attr	3.94249 *
84	v it ADJ for n to-inf	42	12	6.9 attr	3.91692 *
85	there v-link anything ADJ with n	1	1	0.2 attr	3.62142 ns
86	N about n	3599	628	588.6 attr	3.10634 ns
87	N in n	31947	5339	5224.5 attr	3.01095 ns
88	ADJ wh	734	136	120 attr	2.45387 ns
89	v-link ADJ	10749	1818	1757.9 attr	2.44535 ns
90	V n off n	114	25	18.6 attr	2.38963 ns
91	poss N be that	173	36	28.3 attr	2.34984 ns
92	neither AUX n	12	4	2 attr	2.06654 ns
93	V across n	657	121	107.4 attr	1.98012 ns
94	V n on to n	17	5	2.8 attr	1.79578 ns
95	v it det N to-inf	5	2	0.8 attr	1.58417 ns
96	it v-link ADJ wh	42	10	6.9 attr	1.53753 ns
97	V n between pl-n	477	88	78 attr	1.48119 ns
98	V by amount	653	118	106.8 attr	1.3695 ns
99	there V n	296	56	48.4 attr	1.36855 ns
100	it v-link ADJ of n to-inf	2	1	0.3 attr	1.20598 ns
101	it V n adj to-inf	6	2	1 attr	1.03327 ns
102	there v-link something ADJ in n	6	2	1 attr	1.03327 ns

103	ADJ that	3089	526	505.2	attr	1.01688	ns
104	it v-link N to-inf	773	136	126.4	attr	0.85211	ns
105	N towards n	241	44	39.4	attr	0.6196	ns
106	it V adj -ing	3	1	0.5	attr	0.51663	ns
107	it V to n as if/though	3	1	0.5	attr	0.51663	ns
108	there v-link nothing ADJ with - ing	3	1	0.5	attr	0.51663	ns
109	it v n ADJ to-inf	13	3	2.1	attr	0.39044	ns
110	it V as if/as though	86	16	14.1	attr	0.30755	ns
111	it V n that	334	58	54.6	attr	0.24582	ns
112	V n with adv	14	3	2.3	attr	0.24466	ns
113	v it ADJ that	25	5	4.1	attr	0.22995	ns
114	it v-link det N to-inf	9	2	1.5	attr	0.20817	ns
115	V n among pl-n	4	1	0.7	attr	0.19418	ns
116	there be det N to n	4	1	0.7	attr	0.19418	ns
117	the N be to-inf	536	91	87.7	attr	0.15098	ns
118	N for n	13520	2227	2211	attr	0.13821	ns
119	N with n	9290	1532	1519.3	attr	0.12768	ns
120	poss N	54076	8871	8843.5	attr	0.10415	ns
121	ADJ at n	554	93	90.6	attr	0.07549	ns
122	V way adv	57	10	9.3	attr	0.05791	ns
123	it v-link ADJ that	388	65	63.5	attr	0.04482	ns
124	it V n when	17	3	2.8	attr	0.02036	ns
125	it V when	47	8	7.7	attr	0.01514	ns

126	it v-link a adj N that	6	1	1 attr	0.00043	ns
127	V n as to wh	25	4	4.1 rep	0.0023	ns
128	it V if	50	8	8.2 rep	0.0046	ns
129	poss N be to-inf	260	42	42.5 rep	0.00762	ns
130	it V adj to-inf	69	11	11.3 rep	0.00861	ns
131	there be det N in n	7	1	1.1 rep	0.02268	ns
132	it v-link ADJ about n	7	1	1.1 rep	0.02268	ns
133	V like n	2439	396	398.9 rep	0.02473	ns
134	V round n	14	2	2.3 rep	0.04536	ns
135	it v-link ADJ to n that	14	2	2.3 rep	0.04536	ns
136	V n toward n	41	6	6.7 rep	0.09128	ns
137	ADJ as to wh	8	1	1.3 rep	0.09314	ns
138	ADJ toward/towards n	29	4	4.7 rep	0.14538	ns
139	it v-link det N that	9	1	1.5 rep	0.19963	ns
140	it V adj that	57	8	9.3 rep	0.23324	ns
141	V and v	1	0	0.2 rep	0.35715	ns
142	it V adj if	1	0	0.2 rep	0.35715	ns
143	it V n adj that	1	0	0.2 rep	0.35715	ns
144	it v n as ADJ that	1	0	0.2 rep	0.35715	ns
145	it v-link ADJ for n that	1	0	0.2 rep	0.35715	ns
146	there v-link anything ADJ in n	1	0	0.2 rep	0.35715	ns
147	there v-link nothing ADJ in -ing	1	0	0.2 rep	0.35715	ns
148	there v-link nothing ADJ in n	1	0	0.2 rep	0.35715	ns
149	N behind n	303	45	49.6 rep	0.5129	ns

150	V as to wh	12	1	2 rep	0.66599 ns
151	there v-link something ADJ about n	12	1	2 rep	0.66599 ns
152	it v-link ADJ of n that	2	0	0.3 rep	0.7143 ns
153	there v-link something ADJ with n	13	1	2.1 rep	0.85628 ns
154	ADJ between pl-n	45	5	7.4 rep	0.99815 ns
155	ADJ in n	3791	597	620 rep	1.02913 ns
156	it V n if	14	1	2.3 rep	1.05943 ns
157	it v-link det N -ing	3	0	0.5 rep	1.07144 ns
158	V out of n	1440	221	235.5 rep	1.08522 ns
159	there V n prep	185	25	30.3 rep	1.14704 ns
160	ADJ by n	285	39	46.6 rep	1.55608 ns
161	the N be that	698	102	114.1 rep	1.59302 ns
162	ADJ over n	72	8	11.8 rep	1.59706 ns
163	it v-link ADJ if	65	7	10.6 rep	1.64835 ns
164	it V to-inf	1525	231	249.4 rep	1.65625 ns
165	it V prep to-inf	124	15	20.3 rep	1.77604 ns
166	it V adj when	5	0	0.8 rep	1.78574 ns
167	V as if/as though/like	4045	630	661.5 rep	1.82024 ns
168	V n onto n	96	11	15.7 rep	1.84283 ns
169	there V n adv	36	3	5.9 rep	1.99798 ns
170	it V n before	6	0	1 rep	2.14289 ns
171	N as to wh	46	4	7.5 rep	2.30552 ns

172	V onto n	229	29	37.5 rep	2.43642	ns
173	there v-link nothing ADJ about n	30	2	4.9 rep	2.5472	ns
174	it v-link ADJ -ing	68	6	11.1 rep	3.28449	ns
175	ADJ -ing	1321	191	216 rep	3.58421	ns
176	poss N be -ing	534	70	87.3 rep	4.35632	*
177	ADJ on n	633	82	103.5 rep	5.68435	*
178	V through n	3715	554	607.5 rep	5.7878	*
179	it v n ADJ that	18	0	2.9 rep	6.42868	*
180	V amount	8873	1358	1451.1 rep	7.28379	**
181	ADJ with n	1275	173	208.5 rep	7.59604	**
182	V off n	1000	127	163.5 rep	10.42628	**
183	it V to n like	74	3	12.1 rep	11.11254	***
184	it v-link N -ing	139	9	22.7 rep	12.34771	***
185	ADJ from n	775	91	126.7 rep	13.12672	***
186	N on n	9683	1450	1583.5 rep	13.82253	***
187	out of N	2158	287	352.9 rep	15.54645	****
188	it V like	1230	145	201.2 rep	20.39648	*****
189	V around	1211	140	198 rep	22.24315	*****
190	V toward/towards n	721	71	117.9 rep	25.3552	*****
191	N as n	5390	740	881.5 rep	28.46697	*****
192	ADJ as n	2345	284	383.5 rep	33.37707	*****
193	in N	86268	13444	14108.1 rep	38.90308	*****
194	N into n	2408	285	393.8 rep	39.08898	*****
195	N by n	2649	318	433.2 rep	39.70806	*****

196	N from n	5793	768	947.4	rep	42.96956	*****
197	N over n	1554	163	254.1	rep	43.75526	*****
198	with N	26644	3941	4357.3	rep	49.23759	*****
199	N between pl-n	3476	421	568.5	rep	49.47311	*****
200	N to n	13575	1898	2220	rep	58.43817	*****
201	N that	43988	6542	7193.7	rep	73.38013	*****
202	on N	24177	3464	3953.9	rep	75.69385	*****
203	it V prep that	988	59	161.6	rep	98.53314	*****
204	the N be -ing	2166	187	354.2	rep	110.57295	*****
205	N at n	6181	718	1010.8	rep	110.94325	*****
206	into N	8320	1005	1360.6	rep	120.47733	*****
207	from N	15276	1977	2498.2	rep	138.81352	*****
208	n ADJ	11748	1465	1921.2	rep	139.45822	*****
209	by N	13889	1766	2271.4	rep	144.12438	*****
210	to N	35772	4786	5850.1	rep	246.52893	*****
211	ADJ to n	6352	550	1038.8	rep	322.30113	*****
212	at N	22655	2585	3704.9	rep	446.83258	*****
213	a N	85398	11687	13965.8	rep	478.16324	*****
214	of N	128176	17655	20961.6	rep	678.70655	*****
215	N of n	130447	17023	21333	rep	1148.96502	*****
216	ADJ n	300860	41684	49202	rep	1578.53626	*****
217	num N	43610	4152	7131.9	rep	1725.28992	*****
218	n N	171404	21089	28031	rep	2330.2004	*****
219	det ADJ n	163242	19158	26696.2	rep	2909.97717	*****

220 the N		257119	31968	42048.7 rep	3356.87136	*****
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